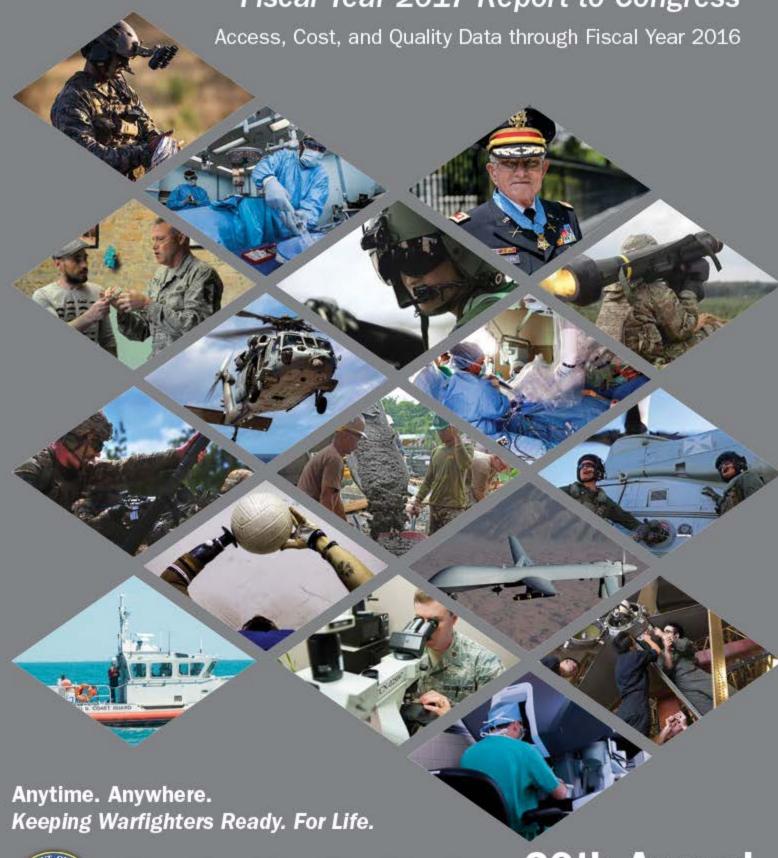
# **Evaluation of the TRICARE Program:**

Fiscal Year 2017 Report to Congress

















**20th Annua** 

# **Evaluation of the TRICARE Program:**

# Fiscal Year 2017 Report to Congress

### Access, Cost, and Quality Data through Fiscal Year 2016

### May 2017

The Evaluation of the TRICARE Program: Fiscal Year 2017 Report to Congress is provided by the Defense Health Agency (DHA), Decision Support Division, in the Office of the Assistant Secretary of Defense (Health Affairs) (OASD[HA]). Once the Report has been sent to Congress, an interactive digital version with enhanced functionality and searchability will be available at: <a href="http://www.health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Health-Care-Program-Evaluation/Annual-Evaluation-of-the-TRICARE-Program">http://www.health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Health-Care-Program-Evaluation/Annual-Evaluation-of-the-TRICARE-Program</a>.



Front cover photo descriptions:

- A A reconnaissance Marine with the Maritime Raid Force secures his parachute after an air insert into a reconnaissance and surveillance mission. (May 2016)
- B A U.S. Navy Hospital Corpsman 1st Class fills a syringe with saline during an operation aboard hospital ship USNS Mercy (T-AH 19) during Pacific Partnership 2016. (August 2016)
- C A retired Army officer is awarded the Medal of Honor at the White House in Washington, D.C. for actions during a battle near Duc Pho, South Vietnam in 1967. (July 2016)
- D A U.S. Air Force Senior Master Sergeant discusses electrical issues with the staff of a local after-school program for at-risk students in Chisinau, Moldova. (June 2016)

- E A U.S. Air Force Captain performs preflight checks of equipment inside a UH-1N Huey at Joint Base Andrews, Md. (August 2016)
- F A U.S. Army Soldier fires an FGM-148 Javelin during a Combined Arms Live Fire Training Exercise for Saber Strike 16 near Tapa, Estonia. (June 2016)
- G A U.S. Navy MH-60S Seahawk from the USS Bonhomme Richard (LHD 6) maneuvers during a vertical replenishment at sea over the Pacific Ocean. (September 2016)
- H Medical personnel at William Beaumont Army Medical Center (WBAMC) perform the first robotic surgery in the Department of Defense using the latest state-of-the-art robotic surgical system at WBAMC. (May 2016)
- I A mortarman simulates firing an M224 60mm mortar during a Combined Arms Live Fire Training Exercise at Fort Bragg, N. Car., in preparation for battalion-level fire exercises later in the year. (August 2016)
- J A U.S. Navy Builder 1st Class and an engineer from the Armed Forces of the Philippines fill a wheelbarrow with wet concrete to move to the Bongloy Elementary School in Panay for concrete placement. (August 2016)
- K A Staff Sergeant and Lance Corporal refuel a UH-1Y Venom at Marine Corps Base Camp Pendleton, Calif. (February 2016)
- L A retired Staff Sergeant tosses a volleyball while conducting ab exercises during the Air Force-hosted Northeast Regional Warrior Care event at Joint Base Andrews, Md. (November 2015)
- M A U.S. Air Force MQ-1 Predator is part of an increase to the Service's remotely piloted aircraft pilot bonus. (August 2016)
- N A boat crew from Coast Guard Station Port Canaveral, Fla. enforces a safety and security zone during a rocket launch off the coast of Cape Canaveral. (June 2016)
- O A U.S. Air Force Major looks through a microscope to study a patient's tissue at Eglin Air Force Base, Fla. (April 2016)
- P Sailors perform maintenance on a landing craft air cushion aboard the amphibious assault ship USS Wasp (LHD 1) in the Mediterranean Sea. (September 2016)
- Q An OB/GYN looks through a 3D imaging system while operating on a patient using a state-of-the-art robotic surgical system at WBAMC. (May 2016)

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# A MESSAGE FROM DAVID J. SMITH, M.D., PERFORMING THE DUTIES OF THE ASSISTANT SECRETARY OF DEFENSE FOR HEALTH AFFAIRS



I am honored to provide the Congress the Department of Defense's (DoD) Fiscal Year (FY) 2017 Evaluation of the TRICARE Program Report. The enclosed annual report responds to the requirement in Section 717 of the National Defense Authorization Act (NDAA) for

FY 1996 (Public Law 104-106), and Section 714 of the NDAA for FY 2013 (Public Law 112-239) expanding the evaluation to all other beneficiary groups by reporting access and health care usage for Prime enrollees and non-enrollees, as well as examining the extent of severe disabilities or chronic conditions. This year's report has been further expanded to respond in part to Section 713 of the NDAA for FY 2016 (Public Law 114-92) requiring an assessment with respect to each military treatment facility (MTF), information on the accreditation status, relevant policies and procedures, and data on patient safety, access to care, and quality of care, including data on appointment wait times and surgical and maternity outcomes.

Similar to the FY 2016 report, this evaluation is expanded from prior year submissions to further meet the requirements of Section 713. The report addressed each of the requirements of Section 713 by reporting an assessment of the data at the Military Health System (MHS) enterprise level, but not with respect to each MTF worldwide. We have included a supplemental assessment by each of the Services (including the National Capital Region [NCR] Medical Directorate) reviewing progress to date since the 2014 MHS review. and addressing variation in MTF-level performance. The FY 2017 report also capitalizes on our compliance with the requirements of Section 712 of NDAA 2016 by providing hyperlinks in this document to the Office of the Assistant Secretary of Defense for Health Affairs (OASD[HA]) MHS publicly available website, which went live on May 20, 2016, ahead of the Section 712 required deadline. This portal links Internet users to extensive data on accreditation, access, quality, safety, and associated policy guidance across the MHS, and down to the MTF level.

Our funded \$52.6 billion Unified Medical Program (UMP), presented in the FY 2017 President's Budget, includes over \$10 billion in estimated outlays for the care for our dual-Military Medicare-eligible beneficiaries, and slightly under \$2 billion

supporting wounded, ill, or injured programs across the Department. Overall, UMP costs were moderated in FY 2016 by almost \$1 billion collected in pharmacy retail refunds, by over \$350 million in program integrity (anti-fraud/abuse) claims recoveries and recaptured payments, and by encouraging the use of the less costly pharmacy home delivery program as well as generic drugs.

In terms of three-year trends, while the overall MHS-eligible population declined from FY 2014 to FY 2016 by about 110,000, or a little over 1 percent, the population decline has been moderated by more than 370,000 reservists and their families opting to purchase the premium-based TRICARE Reserve Select and TRICARE Retired Reserve benefits rather than purchasing private insurance, and over 38,000 young adults signing up for TRICARE Young Adult coverage, developed in response to the Affordable Care Act. Enrollment in the TRICARE Prime option similarly decreased, commensurate with the decline in the eligible population.

Total MHS workload declined from FY 2014 to FY 2016 (direct and purchased care combined, excluding TRICARE for Life) for inpatient care (–1 percent), outpatient care (–1 percent), and prescription drugs (less than 1 percent).

Beginning the journey toward becoming a High Reliability Organization (HRO), the DHA reached full operational capability on October 1, 2015, two years after standing up, promoting organizational change toward health system modernization. Our goal remains the same: to ensure the medical readiness of our Service members, and to provide a ready medical force able to deliver the best medical services anywhere in the world, under any conditions, to all our beneficiaries. I am proud of the accomplishments of MHS and the TRICARE program, and inspired by the focus of leadership on critical appraisal and efforts to continuously improve the TRICARE program and the delivery of care. Once this report has been sent to the Congress, an interactive digital version with enhanced functionality and searchability will be available at: http://www.health.mil/Military-Health-Topics/ Access-Cost-Quality-and-Safety/Health-Care-Program-Evaluation/Annual-Evaluation-of-the-TRICARE-Program.

-David J. Smith, M.D.

### MHS PURPOSE, MISSION, VISION, AND STRATEGY

The purpose, mission, vision, and overall strategy of senior Department of Defense (DoD) and Military Health System (MHS) leadership are focused on the core business of creating an integrated medical team that provides optimal health services in support of our nation's military mission—anytime, anywhere. We are ready to go into harm's way to meet our nation's challenges at home or abroad, and to be a national leader in health care delivery, education, training, research, and technology.

Our ability to provide the continuum of health services across the range of military operations is contingent upon the ability to create and sustain a healthy, fit, and protected force. Key MHS mission elements of research and innovation, medical education and training, and a uniformed sustaining base and platform are interdependent and cannot exist alone. A responsive capacity for research, innovation, and development is essential to achieve improvements in operational care and evacuation.

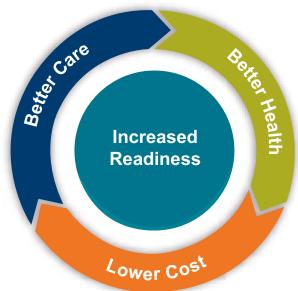
MHS is a global system delivering health services—anytime, anywhere. In everything we do, we adhere to common principles that are essential for accomplishing our mission and achieving our vision.

### MHS QUADRUPLE AIM-STRATEGIC DIRECTION AND PRIORITIES

The MHS Quadruple Aim has served as the MHS strategic framework since the fall of 2009, and continues to remain relevant in describing our overarching priorities and strategies for the coming years. This framework was adopted from the unifying construct of the Triple Aim from the Institute for Healthcare Improvement (IHI; <a href="http://www.ihi.org/offerings/Initiatives/TripleAim/Pages/default.aspx">http://www.ihi.org/offerings/Initiatives/TripleAim/Pages/default.aspx</a>). Senior MHS leaders modified the Quadruple Aim in FY 2013 by explicitly emphasizing the desired direction of improvement: toward increased readiness, better care, better health in our population, and at lower costs to the Department.

- Increased Readiness: Readiness means ensuring that the total military force is medically ready to deploy and that the medical force is ready to deliver health care anytime, anywhere in support of the full range of military operations, including humanitarian missions.
- Better Care: We are proud of our track record, but there is more to accomplish. We will provide a care experience that is safe, timely, effective, efficient, equitable, and patient- and family-centered.
- Better Health: Our goal is to reduce the frequency of visits to our military hospitals and clinics by keeping the people we serve healthy. We are moving "from health care to health" by reducing the generators of ill health, by encouraging healthy behaviors, and by decreasing the likelihood of illness through focused prevention and the development of increased resilience.
- Lower Cost: To lower costs, we will create value by focusing on quality, eliminating waste, and reducing unwarranted variation; we will consider the total cost of care over time, not just the cost of an individual health care activity. There are both near-term opportunities to become more agile in our decision making and longer-term opportunities to change the trajectory of cost growth through a healthier population.

### MHS QUADRUPLE AIM



### DHA VISION AND MISSION

**Defense Health Agency:** A joint, integrated, premier system of health, supporting those who serve in defense of our country.

"A premier workplace delivering world-class customer service."

"Provide the foundation for the mission success of the Defense Health Agency by delivering enterprise-wide customer-focused support services."



# The DHA Mission and Objectives Align with the MHS Quadruple Aim and Joint Concept for Health Services in Support of the Secretary of Defense's Agency Strategic Plan

The DHA is a Combat Support Agency supporting the Military Services and Combatant Commanders. The DHA supports the delivery of integrated, affordable, and high-quality health services to beneficiaries of MHS, and executes responsibility for shared services, functions, and activities of MHS and other common clinical and business processes in support of the Military Services. The DHA serves as the program manager for the TRICARE health plan and medical resources, and as market manager for the National Capital Region (NCR) enhanced Multi-Service Market (eMSM). The

DHA manages the execution of policy as issued by the Assistant Secretary of Defense for Health Affairs and exercises authority, direction, and control over the inpatient facilities and their subordinate clinics assigned to the DHA in the NCR Medical Directorate.

**Goal 1:** Strengthen Our Role as a Combat Support Agency.

**Goal 2:** Strengthen Our Partnership with the Services.

**Goal 3:** Optimize DHA Operations.

### EXECUTIVE SUMMARY: KEY FINDINGS FOR FY 2016

### **MHS Worldwide Summary**

- ◆ The \$52.55 billion Unified Medical Program (UMP) presented in the FY 2017 President's Budget, including estimated outlays from the Medicare-Eligible Retiree Health Care Fund (MERHCF), is 2 percent higher than the FY 2016 actual expenditures in FY 2016, and is 8.4 percent of total estimated DoD outlays (ref. pages 20–21).
- ◆ The number of beneficiaries eligible for Department of Defense (DoD) medical care fell from 9.52 million in FY 2014 to 9.42 million in FY 2016. The number of Primeenrolled beneficiaries has been decreasing annually since 2011, falling to just under 5 million in FY 2016. The drop in enrollees has accompanied a corresponding drop in the eligible population (ref. pages 12, 17).
- TRICARE Young Adult (TYA): Over 38,000 young adults under age 26 enrolled in TYA in FY 2016, down from 45,000 in FY 2015, with almost half (49 percent) selecting the Prime option (ref. page 140).
- ♠ Reserve Component (RC) Enrollment in TRICARE Plans: In FY 2016, enrollment for Selected Reserve members and their families in TRICARE Reserve Select (TRS) increased to almost 137,000 plans and almost 364,000 covered lives, while retired Reservists and their families in TRICARE Retired Reserve (TRR) reached nearly 2,600 plans, with close to 7,000 covered lives (ref. pages 138–139).

#### MHS Workload and Cost Trends<sup>1</sup>

- The percentage of beneficiaries using MHS services remained about the same between FY 2014 and FY 2016, at between 85–86 percent (ref. page 18).
- Excluding TRICARE for Life (TFL), total MHS workload (direct and purchased care combined) fell from FY 2014 to FY 2016 for inpatient care (-1 percent), outpatient care (-1 percent), and prescription drugs (less than 1 percent) (ref. pages 23, 24, 26).
- From FY 2014 to FY 2016, direct care workload decreased for inpatient care (-1 percent) and prescription drugs (-1 percent), but increased slightly for outpatient care (less than 1 percent). Over the same period, direct care costs rose by 4 percent (ref. pages 23, 24, 26, 31).
- Excluding TFL, purchased care workload fell for inpatient care (-1 percent) and outpatient care (-2 percent), and increased slightly for prescription drugs (less than 1 percent). Overall, purchased care costs were unchanged (ref. pages 23, 24, 26, 31).
- The purchased care portion of total MHS health care expenditures decreased slightly from 53 percent in FY 2014 to 52 percent in FY 2016 (ref. page 31).
- ◆ In FY 2016, out-of-pocket costs for MHS beneficiary families under age 65 were between \$4,800 and \$5,500 lower than those for their civilian counterparts, while out-of-pocket costs for MHS senior families were \$3,300 lower (ref. pages 171, 173, 176).

### **Lower Cost**

 MHS estimated savings include almost \$1 billion in retail pharmacy refunds in FY 2016 and \$70 million in Program Integrity (PI) activities in calendar year 2015 (ref. pages 153–154).

#### **Increased Readiness**

 Force Health Protection: In FY 2016, the medical readiness of the total force overall was at 86 percent (as well as the Active Component and Reserve Component, separately), exceeding the strategic goals of 85 percent Total Force medically ready to deploy. Dental readiness remained high in FY 2016, at 95 percent (ref. pages 33–34).

#### **Better Care**

- Access to Care: In FY 2016, about 84 percent of Prime enrollees reported at least one outpatient visit, comparable to the civilian benchmark, while administrative data reflect 88 percent of non-Active Duty had at least one recorded primary care visit. Patient-Centered Medical Home (PCMH) primary care administrative measures indicate MTF enrollees saw their primary care provider 59 percent of the time, and a PCMH team member 92 percent of the time; days to third next 24-hour or acute appointments declined to 1.5 days (a half day higher than target), and continued to meet the seven-day standard for future appointments. Beneficiary enrollment in and usage of secure messaging continued to increase in FY 2016. Dispositions and bed-days per 1,000 enrollees in FY 2016 continued to improve from 2013, decreasing 5 percent from FY 2015. DHA and Service surveys of beneficiary outpatient experience generally show strong and stable ratings of access to care (ref. pages 89-108).
- Quality of Care—Hospital Quality of Care: MTFs and MHS-supporting civilian hospitals report results comparable to many Joint Commission national hospital quality measures and consistent with the national Joint Commission benchmarks in the Surgical Care Improvement Project (ref. pages 109–112).
- ◆ Outpatient Care: MTF HEDIS® rates exceed the national standards at the 90th percentile for colorectal cancer screening, mental health follow-up visits post hospitalization, and asthma-appropriate medications, and exceed the national 75th percentile for breast and cervical cancer screenings and treating children for upper respiratory infection (ref. pages 113–115).
- Beneficiary Ratings of Inpatient Care: Overall, MHS beneficiaries receiving medical care at MTFs rated both their inpatient care and willingness to recommend the hospital higher than those who were treated in civilian facilities; although beneficiaries receiving obstetric care reported lower overall hospital ratings than those receiving medical or surgical care, there was a steady upward trend in obstetrics ratings (ref. pages 124–125).
- Patient Safety: MTF leaders are focusing on promoting a culture of safety to increase reporting to learn from errors, resulting in a 30 percent increase in reporting of all potential harmful events between FY 2013 and FY 2016, while the number of unintended retained foreign objects remained the same during this period (ref. pages 130–134).
- MHS Provider Trends: The number of TRICARE network providers increased by 19 percent from FY 2012 to FY 2016. The total number of participating providers increased by 10 percent over the same time period (ref. page 141).
- Access for TRICARE Standard/Extra Users: Results from a four-year study indicate eight of 10 physicians accept new TRICARE Standard patients, a higher acceptance than reported for behavioral health providers (ref. page 142).

All workload trends in this section refer to intensity-weighted measures of utilization (relative weighted products [RWPs] for inpatient, relative value units [RVUs] for outpatient, and days supply for prescription drugs). These measures are defined on the referenced pages.

### WHAT IS TRICARE?

TRICARE is the DoD health care program serving 9.5 million Active Duty Service members (ADSMs), National Guard and Reserve members, retirees, their families, survivors, and certain former spouses worldwide (<a href="http://www.tricare.mil/Welcome.aspx?sc\_database=web">http://www.tricare.mil/Welcome.aspx?sc\_database=web</a>). As a major component of the Military Health System (MHS; <a href="https://www.health.mil">www.health.mil</a>), TRICARE brings together the worldwide health care resources of the Uniformed Services (often referred to as "direct care," usually in military treatment facilities, or MTFs) and supplements this capability with network and non-network participating civilian health care professionals, institutions, pharmacies, and suppliers (often referred to as "purchased care") to provide access to high-quality health care services while maintaining the capability to support military operations. In addition to providing care from MTFs, where available, TRICARE offers beneficiaries a family of health plans, based on three primary options:

- ◆ TRICARE Standard is the non-network benefit, formerly known as the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), open to all eligible DoD beneficiaries, except ADSMs. Beneficiaries who are eligible for Medicare Part B are also covered by TRICARE Standard for any services covered by TRICARE but not covered by Medicare. An annual deductible (individual or family) and cost shares are required.
- ◆ TRICARE Extra is the network benefit for beneficiaries eligible for TRICARE Standard. When non-enrolled beneficiaries obtain services from TRICARE network professionals, hospitals, and suppliers, they pay the same deductible as TRICARE Standard; however, TRICARE Extra cost shares are reduced by 5 percent. TRICARE network providers file claims for the beneficiary.
- ▼ TRICARE Prime is the health maintenance organization-like benefit offered in many areas. Each enrollee chooses or is assigned a primary care manager (PCM), a health care professional who is responsible for helping the patient manage his or her care, promoting preventive health services (e.g., routine exams, immunizations), and arranging for specialty provider services as appropriate. Access standards apply to waiting times to get an appointment and waiting times in doctors' offices. A point-of-service (POS) option permits enrollees to seek care from providers other than the assigned PCM without a referral, but with significantly higher deductibles and cost shares than those under TRICARE Standard.
- Other plans and programs: Some beneficiaries may qualify for other benefit options depending on their location, Active/Reserve status, and/or other factors. These plans and programs provide additional benefits or offer benefits that are a blend of the Prime and Standard/ Extra options with some limitations. Some examples are:
  - The premium-based TRICARE Young Adult (TYA) Program available to qualified dependents up to the age of 26;
  - Dental benefits (military dental treatment facilities, claims management for Active Duty using civilian

- dental services, as well as the premium-based TRICARE Dental Program [TDP] and the TRICARE Retiree Dental Program [TRDP]);
- Pharmacy benefits in MTFs, via TRICARE retail network pharmacies, and through the TRICARE Pharmacy
   Home Delivery program (formerly called TRICARE Mail Order Pharmacy);
- Overseas purchased care and claims processing services;
- Programs supporting the Reserve Components (RCs), including the premium-based TRICARE Reserve Select (TRS) or TRICARE Retired Reserve (TRR) for those who are retired from Reserve status but not yet eligible for the TRICARE benefits as a military retiree;
- Supplemental programs including TRICARE Prime Remote (TPR) in the United States and overseas, DoD-Veterans Affairs (VA) sharing arrangements, and joint services;
- Designated Provider/Uniformed Services Family Health Plan (USFHP), which provides the full TRICARE Prime benefit, including pharmacy, under capitated payment to non-Active Duty MHS enrollees at six statutorily specified locations: Washington, Texas, Maine. Massachusetts. Maryland. and New York:
- Clinical and educational services demonstration programs (e.g., chiropractic care, autism services, and TRICARE Assistance Program); and
- Other programs, including the premium-based Continued Health Care Benefit Program, providing a Consolidated Omnibus Budget Reconciliation Act-like benefit, and the Transitional Assistance Management Program, which allows RC members who have served more than 30 consecutive days in support of a Contingency Operation, or certain Active Component members separating from Active Duty, continued access to the TRICARE benefit for 180 days after release from Active Duty.

### HOW TRICARE IS ADMINISTERED

TRICARE is administered on a regional basis, with three regional contractors in the United States and an overseas contractor working with their TRICARE Regional Offices (TROs) to manage purchased care operations and coordinate medical services available through civilian providers with the MTFs. The TROs do the following:

- Provide oversight of regional operations and health plan administration,
- Manage the contracts with regional contractors,
- Support MTF Commanders, and
- Develop business plans for areas not served by MTFs (e.g., remote areas).

The MHS continues to meet the challenge of providing the world's finest combat medicine and aeromedical evacuation, while supporting the TRICARE benefit to DoD beneficiaries at home and abroad. Since its inception more than a decade ago, TRICARE continues to offer an increasingly comprehensive health care plan to Uniformed Services members, retirees, and their families. Even as MHS aggressively works to sustain the TRICARE program through good fiscal stewardship, it also refines and enhances the benefits and programs in a manner consistent with the industry standard of care, best practices, and statutes to meet the changing health care needs of its beneficiaries.

### **Contracts and Organizational Change**

# Assistant Secretary of Defense for Health Affairs Steps Down

After serving as the leader and senior medical official of the MHS since 2010, Dr. Jonathan Woodson stepped down from his position in May 2016. During his tenure, Dr. Woodson focused on six lines of effort: (1) modernize the MHS, (2) define and deliver the medical capabilities and manpower needed in the 21st century, (3) balance the force structure, (4) invest in and expand strategic partnerships, (5) transform TRICARE, and (6) expand the global health engagement strategy. Dr. Woodson also led efforts to modernize the MHS' electronic health record system.

### **New Director of the Defense Health Agency (DHA)**

In November 2015, Vice Admiral (VADM) Raquel Bono succeeded retiring Air Force Lt. Gen. Douglas Robb, who had led the agency since its establishment in October 2013, as director of the DHA. VADM Bono has served as director of DHA's National Capital Region Medical Directorate, as a surgeon deployed in wartime, as a hospital commander, and as chief of staff at the former TRICARE Management Activity (TMA).

# TRICARE Regional Offices Reduced from Three to Two to Manage New Support Contracts

In July 2016, DoD announced its award of the next generation of TRICARE Managed Care Support Contracts. The new contracts, which go into effect nine months after the award, establish two TRICARE regions in the United States—East and West—instead of the current three (North, South, and West). In advance of the pending award, the North and South TRICARE Regional Offices had already been consolidated into a single region—TRICARE East—while TRICARE West continued as before. The new East Region contract was awarded to Humana Government Business, Inc., and the West Region contract to Health Net Federal Services, LLC. The contracts will be a cost-plusfixed-fee contract with a nine-month base period (transition-in) and five one-year option periods for health care delivery, plus a transition-out period, with the vast majority of the spending passed through to the thousands of private-sector health care providers who take part in the TRICARE system.

### **KEPRO Awarded Contract as TRICARE Quality Monitoring Contractor**

In July 2016, DHA awarded its Quality Monitoring Contract to KEPRO. Since 2011, KEPRO has assisted DHA, TMA, and the TRICARE Regional Offices by providing an independent, impartial evaluation of health care provided to MHS beneficiaries. KEPRO measures and identifies superior health care services and provides comprehensive and timely reviews to ensure appropriate levels of health care for all beneficiaries. Under the new contract, KEPRO will conduct comprehensive health care facility reviews at 54 MTFs worldwide.

### Dental Care—New TRICARE Dental Program Contractor for 2017

United Concordia will be the next TRICARE Dental contractor for Active Duty families and National Guard and Reserve members and their families beginning May 1, 2017. Under the new five-year contract, covering 1.8 million beneficiaries and worth \$2.9 billion, the annual maximum benefit for users will rise from \$1,300 to \$1,500 and selected benefits will be expanded.

# DHA Releases Phase Three of MHS Transparency Initiative

The transparency initiative is designed to comply with the FY 2016 NDAA by keeping beneficiaries informed about the health care system, and by making sure MHS leaders and medical staff understand transparency and can speak to the performance of their organizations. In 2014, the MHS Review identified a need for greater transparency across the domains of access, quality, and safety. In response, the MHS developed a fourphase transparency strategy. Phase one consolidated health information on the MHS website. Phase two involved listening sessions and gathering of feedback from internal staff, subject matter experts, and external stakeholders. Phase three, implemented in May 2016, allows patients to see metrics that the MHS uses to measure performance in the areas of patient satisfaction and access to care, health outcomes, patient safety, and quality of care by visiting the website www.health.mil/transparency. Phase four will include continued engagement with the beneficiary community for feedback, additional measures, and improvement in the visual display of data.

### **Quadruple Aim: Readiness**

### **Maintaining the Skills of Military Surgeons**

MHS leaders are evaluating a wide-ranging set of options to afford military medical personnel additional opportunities to maintain the clinical skills they will need in an operational environment. Convincing beneficiaries who are located within driving distance of an MTF to seek care there first is chief among those solutions. It will help provide military surgeons with an active clinical practice to sustain skills, and lowers costs for the entire system by more efficiently using military hospitals and clinics. Other options to ensure surgeons have access to clinically complex care include greater sharing of patients among Department of Defense and Department of Veterans Affairs facilities, as well as increased partnerships between military and civilian hospitals.

### **Quadruple Aim: Better Care**

### MHS to Launch New Electronic Health Record (EHR) System

MHS GENESIS, the name for the MHS's new EHR, is a single, integrated medical and dental system for use across the MHS. The initial deployment of MHS GENESIS took place at Fairchild Air Force Base, Wash., in February 2017. Deployment at additional inpatient facilities in the Pacific Northwest is scheduled to start as early as July 2017, with full deployment targeted for 2022.

### **DoD Meets EHR Interoperability Requirements**

The Defense Department has met the interoperability requirements for EHRs as called for in the FY 2014 NDAA, which required that all data in DoD's Armed Forces Health Longitudinal Technology Application outpatient system be shared in compliance with existing national standards. DoD and the Department of Veterans Affairs have two goals in integrating patient records: to create a seamless health record accessible by both agencies and to modernize the software that clinicians and analysts in both agencies use. By seeing a patient's combined record, doctors in both agencies will have a complete picture of the patient's medical treatment, allowing clinicians to make the best choices for the patient.

The MHS also established the Virtual Lifetime Electronic Record (VLER) Health Information Exchange (HIE) Initiative, which enables providers in the MHS to share TRICARE beneficiary medical data with other federal and private health care providers through an HIE, and is designed to ensure continuity of care regardless of where it is received. Beneficiaries are able to opt out of this system, which means the MHS will not be able to share information, even in emergencies.

### New Medical Benefits Extended to Transgender Individuals

DoD announced in June 2016 that transgender individuals are now able to openly serve in the U.S. Armed Forces and established policies and standards for their care, such as gender reassignment surgery.

# Improved Mental Health and Substance Use Disorder (SUD) Benefits

Beginning October 3, 2016, non-Active Duty dependent beneficiaries, retirees, their family members, and survivors will generally pay lower copayments and cost shares for mental health care (e.g., \$12 for outpatient mental health and SUD visits rather than the current rate of \$25). Copays and cost shares for inpatient mental health services will also be the same as for inpatient medical/surgical care.

As of February 2016, inpatient mental health hospital services, regardless of length or quantity, may be covered as long as the care is considered medically or psychologically necessary and appropriate. Previously, the limit was 30 days per year for adults and 45 days for children or adolescents. The 150-day limit on residential treatment care for those under 21 was also removed.

Changes that require new or more detailed revision of TRICARE policy manuals, such as TRICARE authorization criteria for institutional mental health providers, will be rolled out in early 2017. Once additional changes are put into effect in early 2017, the process for facilities to become TRICARE-authorized will become easier and faster as TRICARE seeks to make its regulations consistent with industry standards. The expanded programs are expected to increase government costs by about \$58 million annually, according to an independent cost estimate.

Transcranial magnetic stimulation (TMS) is now covered as a treatment for major depressive disorder. Research shows that only half of the patients treated for depressive disorder with medication and talk therapy achieve any success. When those fail, alternative treatments like TMS may be used. It is noninvasive, using an electromagnetic pulse to stimulate nerve cells in the region of the brain controlling mood and depression, and treatments are typically done in an outpatient setting without anesthesia. This benefit became effective May 24, 2016, and is not a part of a pilot or demonstration program, but a part of the basic TRICARE benefit.

### **DoD-VA Interagency Care Coordination**

The effort comes as a result of the work of the DoD-VA Interagency Care Coordination Committee (IC3), established in 2012 to implement a joint, standard model of collaboration for the most complex cases of

care. The IC3 is a cooperative partnership between the DoD, VA, and the private sector, which includes more than 50 programs that serve wounded warriors, and helps all agencies better coordinate to solve the physical, mental, and emotional problems of those hurt on the battlefield. It is expected that 1,500 DoD and 1,200 VA people will serve as lead coordinators, who will offer personal guidance and assist Service members and their families in understanding the benefits and services to which they are entitled. This is designed to ease the burden for Service members and Veterans, who have suffered injuries or illnesses so severe as to require the expertise provided by multiple care specialties throughout both departments. That way, individuals have one comprehensive treatment plan that stays with them wherever they go.

Surgical Treatment for Hip Condition Added as a Benefit Starting in January 2016, TRICARE beneficiaries with a diagnosis and referral became eligible for surgical treatment of a hip condition called femoroacetabular impingement, or FAI. This hip condition can occur when the bones of the hip are abnormally shaped and rub against each other and cause damage. The FY 2015 NDAA provisional coverage program allows TRICARE to provide coverage for emerging treatments and technologies, and the FAI surgery was the first treatment to be evaluated and approved. Starting on January 1, 2016, eligible beneficiaries with FAI were able to get the surgery from any TRICARE-authorized orthopedic surgeon if preauthorized by the beneficiary's regional contractor.

### **Vision Changes Resulting from Concussion**

A concussion can cause changes to vision that are sometimes overlooked during an initial medical evaluation. The Vision Center of Excellence has created a clinical recommendation and support tools for eye problems following a traumatic brain injury (TBI) to help eye care providers diagnose and treat eye problems associated with a concussion. Vision experts stress that eye exams should be part of the diagnosis and treatment of mild TBI; these tools help identify patients with mild TBI who may benefit from further assessment and care. Because a patient's vision may not be affected at first, and issues such as bumping into objects or having double vision may seem subtle, providers and patients may not realize vision is a problem. The Vision Center of Excellence website has information for Service members, families, and health care providers to help recovery after an eye injury.

### PCM Referral Requirement Waived for Beneficiaries Evacuated from Turkey

With the ordered departure of about 700 family members of Active Duty Service members from the

region due to security concerns, the 180-day waiver (March 30–September 30) helped them get medical care while away from their homes and doctors. Relocated to various overseas locations and in the U.S., evacuated beneficiaries were able to contact the MTF closest to them to get care. If remaining overseas, but not close to an MTF, beneficiaries could contact International SOS, the TRICARE Overseas Program (TOP) contractor, for help. If in the U.S. and not close to an MTF, they could contact a TOP Regional Call Center or the appropriate regional contractor.

# **DoD Launches Urgent Care Pilot Program for TRICARE Prime Beneficiaries**

Prior to the Urgent Care Pilot, TRICARE Prime beneficiaries who sought care from a provider other than their primary care manager (PCM) or an emergency medicine facility were required to obtain a preauthorization. Otherwise, the care was covered under the point-of-service (POS) option at a greater out-of-pocket cost to the beneficiary. Section 725 of the FY 2016 NDAA required DoD to implement an urgent care pilot within 180 days of enactment that eliminated the need for a preauthorization for up to two visits annually. The pilot began on May 23, 2016, and continues until May 23, 2019. Under the pilot, urgent care services can be rendered by a TRICARE network provider or TRICARE-authorized urgent care clinic (including convenience clinics). Active Duty Service members (ADSMs) enrolled in TRICARE Prime are not eligible for this program as their care is managed by their Service, and the pilot also excludes Uniformed Services Family Health Plan (USFHP) enrollees. There are no POS deductibles or cost shares for these two urgent care visits, but network copayments still apply. If unsure of the type of care needed, beneficiaries can call the Nurse Advice Line (NAL). If the NAL recommends an urgent care visit, and a referral is submitted, that visit will not count against the two preauthorized visits allowed under the Urgent Care Pilot.

### **Pharmacy**

New Law Requires All TRICARE Beneficiaries, Except Active Duty, to Get Select Brand Name Maintenance Drugs through Either TRICARE Pharmacy Home Delivery or from a Military Pharmacy

As of October 1, 2015, beneficiaries who filled an affected drug at a retail pharmacy received a letter from Express Scripts reminding them of the change. After that, they were allowed one final "courtesy" fill at a retail pharmacy, before being charged the full cost the next time. For these medications, beneficiaries save up to \$208 in copays a year (in 2016) for each brand name drug filled through home delivery rather than at a retail pharmacy. The change applies only to

select maintenance drugs taken for chronic conditions, not to prescriptions for medications taken only for a short time.

### **Drug Shortages in Home Delivery Program**

Drug shortages affected some TRICARE beneficiaries trying to fill their prescriptions through the home delivery program. TRICARE officials say the problem stems from drug shortages that are an "increasing problem across the industry," which peaked around the time DoD began requiring Medicare-eligible retirees and military family members to fill their longterm prescriptions by mail or at a military pharmacy. The shortages are exacerbated within the military system because, by law, DoD is allowed to buy pharmaceuticals only from certain manufacturers. When the home delivery system is unable to fill the prescription, TFL beneficiaries can fill the prescription through a TRICARE network pharmacy, but may only obtain 30-day prescriptions and are charged a copayment of \$8.

### **Flu Vaccine**

As of October 2015, 2.6 million TRICARE beneficiaries had gotten a free flu vaccine under the TRICARE Retail Vaccination program since it began in 2010. Beneficiaries who choose to get flu vaccines in a retail pharmacy must have the vaccine administered by the pharmacist. If given by a nurse, doctor, or physician's assistant, for example, TRICARE may not cover the cost. TRICARE also covers vaccines when given by the beneficiary's primary care doctor, though there may be a copay for the office visit.

Due to several studies showing it was not effective in preventing the H1N1 strain of influenza among children ages 2 to 17 during some recent flu seasons, the Centers for Disease Control and Prevention (CDC) recommended against using FluMist for the 2016–2017 flu season. As a result of that recommendation, the DoD's entire supply of flu vaccine will be injectable and is expected to reach its goal of 90 percent of the total force immunized by December 15, 2016.

### **Prescription Drug Copay Increases**

The 2016 NDAA required TRICARE to change its prescription copays. Effective February 1, 2016, most copays for prescription drugs at home delivery and retail network pharmacies increased slightly. Drugs at military pharmacies, and generic drugs through home delivery, are still available at no cost. Copays for brand name drugs through home delivery increased from \$16 to \$20, for up to a 90-day supply. At retail pharmacies, generic drug copays rose from \$8 to \$10, and brand name drug copays rose from \$20 to \$24, for up to a 30-day supply. Copays for nonformulary

drugs and for drugs at non-network pharmacies also changed.

Formerly a demonstration program, the over-the-counter (OTC) program was updated to bring it in line with other TRICARE pharmacy coverage. Starting February 1, 2016, beneficiaries must pay the usual generic copays for covered OTC drugs, and prescriptions are still required. One exception is Levonorgestrel Emergency (also known as Plan B), a contraceptive used to prevent pregnancy, and for which there are no age restrictions or costs and no prescription is needed. There were also changes to which drugs are available under the OTC benefit.

### **Smartphone App for Preventing Prescription Medication Misuse**

In an effort aimed at prevention, researchers at the Naval Health Research Center are part of a collaborative effort funded by the National Institute on Drug Abuse (NIDA) to develop a mobile tool to educate Service members about prescription medications and assess the potential for misuse. The app supports patients in situations where they do not have immediate access to their health care providers but have questions about appropriate use of their prescription medication. Phase one tested usability and included feedback from Sailors and Marines who were asked to perform specific tasks in each of the app's modules. Phase two will work on enhancements based on the user feedback received during phase one.

### **Walgreens Becomes Part of TRICARE Pharmacy Network**

Effective December 1, 2016, Walgreens became part of the TRICARE pharmacy network. The network will have roughly 58,000 locations, with 98 percent of TRICARE beneficiaries living within five miles of a network store. All CVS pharmacies, including those inside Target stores, are no longer considered in network. This means for all prescriptions filled at a CVS store, beneficiaries will have to pay the full cost of their medication up front and file a claim with TRICARE for partial reimbursement. Other retail pharmacies not affiliated with CVS will remain in the network, including Rite Aid.

### **Quadruple Aim: Better Health**

### **Tobacco Cessation**

In March 2016, a new program was initiated to help beneficiaries quit smoking. The Freedom Smoking Quitline is a National Institutes of Health–funded research study, co-sponsored by the 59th Medical Wing and University of Tennessee Health Science Center. The study is enrolling qualified TRICARE beneficiaries who are motivated to quit smoking. Participants receive four smoking cessation counseling sessions by phone,

along with eight weeks of free nicotine replacement therapy (NRT). After three months, participants receive a follow-up call to ensure they are still smoke free; if they have relapsed, they can try the program again. In addition to the benefit of a free premium cessation program, they are also helping researchers gather critical data to improve programs for the military community.

### **Combating the Zika Virus**

Today, as in years past, U.S. military doctors are on the front line treating Uniformed Services personnel and developing breakthroughs in a wide variety of medical areas that will have long-range implications for civilian health care. As of August 2016, the Zika virus had been reported in 65 countries and territories, including those where U.S. troops are active. Both military and civilian researchers at the U.S. Army Medical Research Institute of Infectious Diseases and at Walter Reed Army Institute of Research's Pilot Bioproduction Facility are being sought out for their expertise, which includes developing a new Zika vaccine candidate that is now in Phase I trials.

### **Quadruple Aim: Lower Cost**

Premium Increases for TRICARE Young Adult (TYA)
The TYA program provides health benefits for the
"adult children" (between 21 and 25 years old) of
TRICARE beneficiaries. Premiums for the TYA program
increased on January 1, 2016. The increase is due to
the requirement in the FY 2011 NDAA that TRICARE
set TYA premiums to cover the full cost of health care
received by the program's beneficiaries. This year
marks the first time TRICARE has had enough actual
cost data to set the premiums based on actual costs

rather than predicted cost. Monthly fees will be \$306 for TYA Prime and \$228 for TYA Standard, up from the 2015 fees of \$208 for Prime and \$181 for Standard.

TRICARE Provides a Convenient Online Two-Page Summary of Beneficiary Premiums and Cost Shares For a complete list of current premiums and cost shares, see <a href="https://www.tricare.mil/Costs/HealthPlanCosts.aspx">www.tricare.mil/Costs/HealthPlanCosts.aspx</a> and click on the "Costs and Fees Sheet" link to access the PDF.

### **Autism**

### Autism Care Demonstration Updated to Reduce Potential Financial Burden

The Comprehensive Autism Care Demonstration (ACD) was updated to reduce the financial burden of applied behavior analysis (ABA) services for non-Active Duty families. As of October 1, 2015, all ACD cost shares matched TRICARE Prime and Standard cost shares. This allowed cost shares to contribute to the annual catastrophic cap for families and eliminates the 10 percent cost share for assistant behavior analyst and behavior technician (BT) services, significantly reducing the potential financial burden of ABA services for non-Active Duty families.

To enhance quality and safety, ABA providers must now be trained in Basic Life Support (BLS), as those with autism spectrum disorder (ASD) also typically have other medical conditions. Additionally, all BTs are required to obtain BT certification from an accredited organization. The TRICARE ACD covers all eligible beneficiaries diagnosed with ASD under a single benefit. There are currently almost 13,000 beneficiaries receiving ABA through the ACD, which runs through December 31, 2018.

### BENEFICIARY TRENDS AND DEMOGRAPHICS

**System Characteristics** 

### TRICARE FACTS AND FIGURES-PROJECTED FOR FY 2017

	PROJECTED FOR FY 2017 <sup>a</sup>	FY 2016 (AS PROJECTED LAST YEAR)
Total Beneficiaries	9.4 million worldwide <sup>b</sup>	9.4 million worldwide
MILITARY FACILITIES—DIRECT CARE SYSTEM <sup>C</sup>	or riminon workawa	
	EA (A4 := 11 C )	FF (44 in H.C.)
Inpatient Hospitals and Medical Centers	54 (41 in U.S.)	55 (41 in U.S.)
Ambulatory Care and Occupational Health Clinics	377 (312 in U.S.)	373 (315 in U.S.)
Dental Clinics	250 (202 in U.S.)	251 (201 in U.S.)
Veterinary Facilities	251 (206 in U.S.)	253 (198 in U.S.)
Military Health System (MHS) Defense Health Program–Funded Personnel	147,165	149,116
Military	84,167	84,104
	31,444 Officers	31,396 Officers
	52,723 Enlisted	52,708 Enlisted
Civilian	62,998	65,012
CIVILIAN RESOURCES—PURCHASED CARE SYSTEM <sup>d</sup>		
Network Primary Care, Behavioral Health, and Specialty Care Providers (i.e., individual, not institutional, providers)	570,507	554,439
Network Behavioral Health Providers (shown separately, but included in above)	83,701	81,780
TRICARE Network Acute Care Hospitals	3,777	3,789
Behavioral Health Facilities	812	803
Contracted (Network) Retail Pharmacies	58,312	58,142
Contracted Worldwide Pharmacy Home Delivery Vendor	1	1
TRICARE Dental Program (TDP) (for Active Duty families, Reservists and their families)	Almost 1.8 million covered lives in over 764,000 contracts	Over 1.8 million covered lives in almost 790,000 contracts
TDP Network Dentists	Over 99,000 total dentists including: 79,000 general dentists 20,000 specialists	Over 95,000 total dentists including: 76,000 general dentists 19,000 specialists
TRICARE Retiree Dental Program (for retired Uniformed Services members and their families)	Over 1.56 million covered lives in almost 793,000 contracts	Over 1.4 million covered lives in over 758,000 contracts
Total Unified Medical Program (UMP)	\$52.55 billion°	\$51.5 billion
Projected Receipts from MERHCF Trust Fund	\$10.27 billion	\$10.14 billion

<sup>&</sup>lt;sup>a</sup> Unless specified otherwise, this report presents budgetary, utilization, and cost data for the Defense Health Program (DHP)/UMP only, not those related to deployment or funded by the "Line" of the Services.

b Department of Defense (DoD) health care beneficiary population projected for mid–fiscal year (FY) 2017 is 9,406,000, rounded to 9.4 million, and is based on Director, Defense Health Agency (DHA) Memo dated November 3, 2016, "Estimate of Beneficiaries Eligible for Health Care in Fiscal Year 2017."

Military treatment facility (MTF) data include 13 Occupational Health Clinics and Active Duty (AD) troop clinics, and excludes leased/contracted facilities and Aid Stations; MTF counts are consistent with DHA Budget and Execution and Programming Divisions. Source: DHA Resources Management, 11/15/2016.

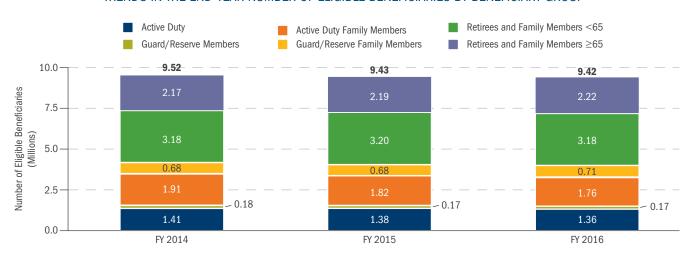
d As reported by TRICARE Regional Offices (TROs) for contracted network provider and hospital data (10/30/2016), and by TRICARE Dental Office, Health Plan Execution and Operations for dental provider data (12/31/2016).

UMP presented here includes direct and private-sector care funding, military personnel, military construction, and the Medicare-Eligible Retiree Health Care Fund (MERHCF) ("Accrual Fund"). Change in reporting for FY 2017: presenting actual and projected MERHCF receipts from the Trust Fund instead of DoD Normal Cost Contribution. Budget and Expense data from DHA/Resources & Management Directorate, as of 12/6/2016.

### Number of Eligible and Enrolled Beneficiaries Between FY 2014 and FY 2016

The number of beneficiaries eligible for DoD medical care (including TRICARE Reserve Select [TRS], TRICARE Young Adult [TYA], and TRICARE Retired Reserve [TRR]) fell from 9.52 million at the end of FY 2014 to 9.42 million¹ at the end of FY 2016. The decline was due to a drawdown in the number of Active Duty Service Members, with a consequent decline in the number of family members.² Compensating somewhat for the downturn in the Active Duty population was an increase in the number of retirees and family members (RETFMs) age 65 and older. Other beneficiary population group sizes remained roughly the same.

### TRENDS IN THE END-YEAR NUMBER OF ELIGIBLE BENEFICIARIES BY BENEFICIARY GROUP

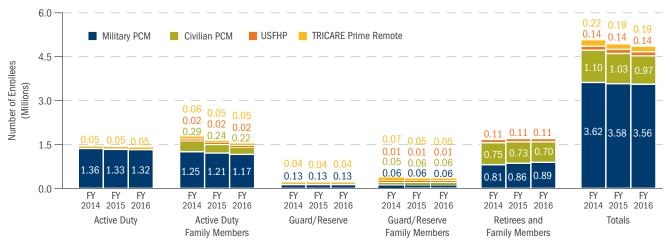


Source: Defense Enrollment Eligibility Reporting System (DEERS), 1/5/2017

Note: The "Retirees and Family Members" groups include survivors and others not explicitly identified elsewhere.

- Declines in Prime and TRICARE Prime Remote (TPR) enrollment are due primarily to corresponding declines in the Active Duty and Guard/Reserve populations and their family members.
- Retirees and family members continue to shift their enrollments from civilian to military primary care managers (PCMs).
- Uniformed Services Family Health Plan (USFHP) enrollment remained about the same from FY 2014 to FY 2016.

### TRENDS IN THE END-YEAR NUMBER OF ENROLLED BENEFICIARIES BY BENEFICIARY GROUP



Source: DEERS, 1/5/2017

<sup>&</sup>lt;sup>1</sup> This number should not be confused with the one displayed under TRICARE Facts and Figures on page 11. The population figure on page 11 is a projected FY 2017 total, whereas the population reported on this page is the actual for the end of FY 2016.

<sup>&</sup>lt;sup>2</sup> Both inactive Guard/Reserve members and their families are included under Guard/Reserve Family Members because their benefits are similar to those of family members.

### **Beneficiary Plan Choice by Age Group and Beneficiary Category**

Although Prime and Standard/Extra are the primary choices for most TRICARE beneficiaries, several other options are available to those who do not qualify for those benefits. Plan choice varied by age group and beneficiary category.

PLAN CHOICE BY AGE GROUP (END OF FY 2016)										
PLAN TYPE	0-17	18-24	25-44	45-64	≥65	TOTAL <sup>a</sup>				
Prime Enrolled	1,303,706	882,788	1,520,122	1,094,307	2,526	4,803,449				
Prime	1,273,684	859,417	1,500,397	1,051,070	2,247	4,686,815				
TYA Prime	0	15,742	4,581	0	0	20,323				
USFHP	30,022	7,629	15,144	43,237	279	96,311				
Non-Enrolled	646,174	259,284	493,737	926,853	5,563	2,331,611				
Standard/Extra	496,136	206,575	320,404	873,124	4,689	1,900,928				
TYA Standard	0	16,420	3,854	0	0	20,274				
TRS	142,027	33,484	165,445	32,623	145	373,724				
TRR	1,807	1,030	556	4,100	16	7,509				
Plus	6,204	1,775	3,478	17,006	713	29,176				
Medicare-Eligible	1	26	497	3,472	2,360,370	2,364,366				
TFL	0	0	0	0	2,141,258	2,141,258				
Plus	0	6	109	1,216	173,182	174,513				
USFHP	1	20	388	2,256	45,930	48,595				
DC Only/Multiple Plans <sup>b</sup>	3,383	6,290	18,110	24,943	-142,984	-90,258				
Total	1,953,264	1,148,388	2,032,466	2,049,575	2,225,475	9,409,168				

Source: DEERS, 4/24/2017

- About one-third of USFHP enrollees are seniors (age  $\geq$ 65), and one-fifth are children (age 0–17).
- The vast majority of those age 65 and above are enrolled in Medicare Part B and are covered by TRICARE for Life (TFL) as their supplemental plan. About 8 percent of seniors covered by TFL are also enrolled in

TRICARE Plus, the primary care-only plan available at selected MTFs.

Beneficiaries aged 45-64 had the lowest TRICARE Prime enrollment rate, at 54 percent. Enrollment rates for the other age groups were 67 percent for 0–17, 77 percent for 18–24, and 75 percent for 25–44. Beneficiaries age 65 and older predominately use TFL.

PLAN CHOICE BY BENEFICIARY CATEGORY (END OF FY 2016)									
PLAN TYPE	AD/GRD	ADFM/GRDFM°	RET/RETFM <65	RET/RETFM ≥65 <sup>d</sup>	TOTAL <sup>a</sup>				
Prime Enrolled	1,535,486	1,627,598	1,638,538	1,827	4,803,449				
Prime	1,535,407	1,594,497	1,555,363	1,548	4,686,815				
TYA Prime	0	2,337	17,986	0	20,323				
USFHP	79	30,764	65,189	279	96,311				
Non-Enrolled	369	831,014	1,495,358	4,870	2,331,611				
Standard/Extra	0	453,599	1,442,853	4,476	1,900,928				
TYA Standard	0	2,839	17,435	0	20,274				
TRS	342	372,011	1,371	0	373,724				
TRR	7	0	7,486	16	7,509				
Plus	20	2,565	26,213	378	29,176				
Medicare-Eligible	0	692	3,799	2,359,875	2,364,366				
TFL	0	0	0	2,141,258	2,141,258				
Plus	0	605	1,206	172,702	174,513				
USFHP	0	87	2,593	45,915	48,595				
DC Only/Multiple Plans <sup>b</sup>	0	19,561	35,716	-145,535	-90,258				
Total	1,535,855	2,478,865	3,173,411	2,221,037	9,409,168				

Source: DEERS, 4/24/2017

- Only 2 percent of RETFMs under the age of 65 are enrolled in plans other than Prime or Standard/Extra (including USFHP, TYA Prime, and Standard).
- Sixteen percent of ADFM/GRDFMs are enrolled in plans other than Prime or Standard/Extra. The vast majority are inactive Guard/Reserves and family members enrolled in TRS.
- The large majority of beneficiaries enrolled in TYA are children of retirees under the age of 65 (most
- Active Duty members are not old enough to have children in the requisite age group). TYA enrollment is equally distributed across the Prime and Standard plans, representing a shift from FY 2015 when most TYA beneficiaries were enrolled in Prime.
- About 80 percent of beneficiaries enrolled in the USFHP are RETFMs, most of whom are under age 65. The USFHP is available at only six sites nationwide, so enrollment is low relative to Prime.

The totals in the right-hand columns of the above tables may differ slightly from ones shown in other sections of this report. Reasons for differences may include different data pull dates, end-year vs. average populations, and different data sources.

Positive numbers in this row indicate beneficiaries who are eligible for direct care (DC) only. To avoid double-counting when summing beneficiary counts over plan types, the numbers with multiple plans are displayed as negatives so that the totals equal the number of unique beneficiaries.

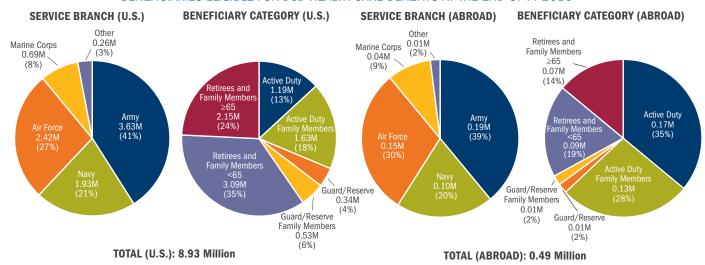
Inactive Guard/Reserve and their family members eligible for TRICARE are included in the Active Duty family member (ADFM)/Guard/Reserves and Family Members (GRDFM) group.

d This column total does not match the "≥65" total in the top table because the latter includes a small number of Active Duty family members age 65 and older.

### **Eligible Beneficiaries in FY 2016**

- Of the 9.42 million eligible beneficiaries at the end of FY 2016, 8.93 million (95 percent) were stationed or resided in the United States (U.S.), and 0.49 million were stationed or resided abroad. The Army has the most beneficiaries eligible for Uniformed Services health care benefits, followed (in order) by the Air Force, Navy, Marine Corps, and other Uniformed Services (Coast Guard, Public Health Service, and the National Oceanic and Atmospheric Administration). Although the proportions are different, the Service rankings (in terms of eligible beneficiaries) are the same abroad as they are in the U.S.
- Whereas retirees and their family members constitute the largest percentage of the eligible population (59 percent) in the U.S., Active Duty personnel (including Guard/Reserve Component [RC] members on Active Duty for at least 30 days) and their family members make up the largest percentage (67 percent) of the eligible population abroad. The U.S. MHS population is presented at the state level on page 19, reflecting those enrolled in the Prime benefit and the total population, enrolled and non-enrolled.
- Mirroring trends in the civilian population, MHS is confronted with an aging beneficiary population.

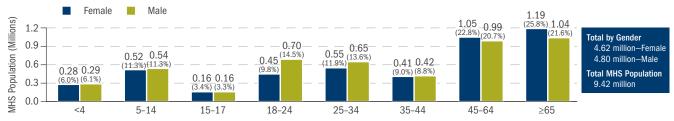
### BENEFICIARIES ELIGIBLE FOR DOD HEALTH CARE BENEFITS AT THE END OF FY 2016



Source: DEERS, 1/5/2017

Note: Percentages may not sum to 100 percent due to rounding.

### FY 2016 MHS END-YEAR POPULATION BY AGE GROUP AND GENDER

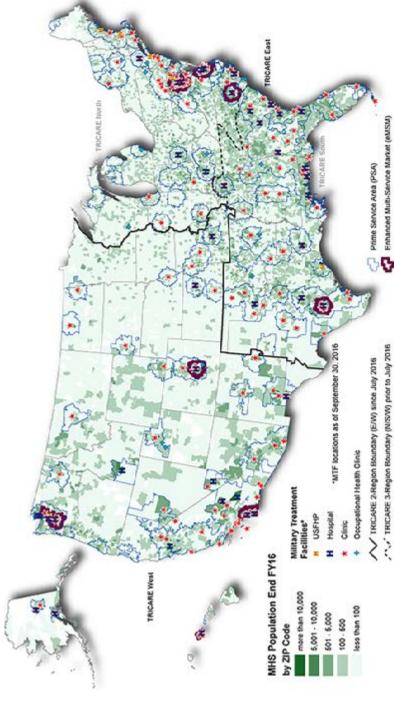


Source: FY 2016 actuals from DEERS as of 1/5/2017

PROJECTED END-YEAR MHS POPULATIONS (MILLIONS) BY BENEFICIARY CATEGORY										
BENEFICIARY CATEGORY	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
Active Duty	1.35	1.34	1.34	1.34	1.34	1.34	1.34	1.34		
Active Duty Family Members	1.73	1.71	1.71	1.71	1.71	1.71	1.71	1.71		
Guard/Reserve	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18		
Guard/Reserve Family Members	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26		
Inactive Guard/Reserve	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17		
Inactive Guard/Reserve Family Members	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27		
Retirees	2.20	2.21	2.22	2.23	2.24	2.25	2.26	2.27		
Retiree Family Members	2.56	2.57	2.57	2.58	2.58	2.59	2.60	2.60		
Survivors	0.61	0.61	0.62	0.62	0.63	0.63	0.63	0.64		
Other	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06		
Total	9.39	9.39	9.41	9.42	9.44	9.46	9.48	9.50		

 $Source: FYs\ 2017-2024\ estimates\ from\ DHA\ Projections\ of\ Eligible\ Population\ (PEP)\ model\ as\ of\ 10/15/2016$ 

MHS POPULATION DISTRIBUTION IN THE U.S. RELATIVE TO MTFs AT THE END OF FY 2016



F FY 2016 <sup>a</sup>	% IN MTF SERVICE AREAS  % IN eMSM:	92.8% 39.1%	54.2% 13.2%	64.1% 20.4%	72.2% 25.6%				42.3% 6.8%	62.4% 18.4%	45.7% 8.8%		
ACILITIES, END O	% IN PRISMs   SERVIC	88.3%	39.4%	20.0%	61.0%				23.7% 42	49.0%	28.0%		
RY TREATMENT E	% IN CATCHMENTS	%9.69	24.3%	35.9%	45.4%				15.9%	34.6%	19.1%		
O MILITAF	% IN PSAs	95.5%	68.7%	76.3%	81.6%				29.0%	74.8%	61.7%		
PROXIMITY T	POPULATION IN PSAs	2,687,614	592,702	4,009,657	7,289,973				4,295,360	1,108,145	5,403,505		
SIBLE BENEFICIARY	POPULATION TOTAL (FY 2016)	2,813,645	862,656	5,253,293	8,929,594	483,895	9,413,489		7,281,330	1,481,303	8,762,633	203,289	8,965,922
MILITARY HEALTH SYSTEM ELIGIBLE BENEFICIARY PROXIMITY TO MILITARY TREATMENT FACILITIES, END OF FY 2016	BENEFICIARY GROUP®	Active Duty and Their Families	Guard/Reserves and Their Families <sup>c</sup>	Retirees, Their Families, Survivors, and Other Eligibles	Total MHS Eligibles, U.S.	MHS Eligibles, Overseas	Total MHS Eligibles, Worldwide	VETERANS HEALTH ADMINISTRATION PRIORITY BENEFICIARIES	Eligible Veterans without TRICARE Eligibility	Dual TRICARE-Eligible and VHA-Eligible Veterans	Total VHA Priority Veterans U.S.	VHA Veterans Overseas	Total VHA Worldwide

Sources: DHA/Decision Support Division, 12/5/2016; MHS population as of 9/30/2016, pulled 11/3/2016; and VHA population as of 9/30/2015, provided 11/18/2015

# Notes:

Eligible MHS beneficiary data from

- the MHS Data Repository (MDR)
  DEERS, effective September 2016.
  For Active Duty and Guard/Reserve
  members, unit ZIP code was
  used for location; for all other
  beneficiaries, residential ZIP code
  was used.
  - Location information determined by DHA Catchment Area Directory (CAD) database, September 2016.
     TDIADE madically alicitals
- TRICARE medically eligible Guard/Reserve beneficiaries, including those who have enrolled in TRS, TRR, or TYA; does not include all Select Reserve.

# Definitions:

- Catchment Area: Includes ZIP codes in the 40-mile circle around an inpatient MTF, subject to overlap rules, barriers, and other policy
- overrides.

   Provider Requirement Integrated Specialty Model (PRISM) Area: Includes ZIP codes in the 20-mile circle around an active MTF (inpatient or outpatient), subject to overlap rules, barriers, and other polity apprehens.
- policy overrides.

  MTF Service Area: Includes
  ZIP codes in the 40-mile circle
  around an active MTF (inpatient or
  outpatient), subject to overlap rules,
  barriers, and other policy overrides.
  - Prime Service Areas (PSAs) are those in effect in 2016, defined as the 40-mile area around existing MTEs, as well as previously closed MTFs (Base Realignment and Closure [BRAC] sites).
    - Enhanced multi-Service market (eMSM) areas used here are the six eMSMs used in the MHS strategy and market management (National Capital Region, Hawaii, Puget Sound, Colorado Springs, San Antonio, and Tidewater), as well as two densely populated multiple-market areas in San Diego and Fort Bragg.

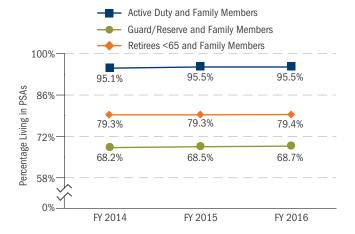
### Locations of MTFs (Hospitals and Ambulatory Care Clinics) at the End of FY 2016

The map on the previous page shows the geographic dispersion of the almost 9 million beneficiaries eligible for the TRICARE benefit residing within the United States (95 percent of the 9.4 million eligible beneficiaries described on the previous pages). An overlay of the major DoD MTFs (medical centers and community hospitals, as well as medical clinics) reflects the extent to which the MHS population has access to TRICARE Prime. A beneficiary is considered to have access to Prime if he or she resides within a PSA. PSAs are geographic areas in which the TRICARE managed care support contractors (MCSCs) offer the TRICARE Prime benefit through established networks of providers. TRICARE Prime is available at MTFs, in areas around most MTFs ("MTF PSAs"), in areas where an MTF was eliminated in the Base Realignment and Closure (BRAC) process ("BRAC PSAs"), and by designated providers through the USFHP as of October 1, 2013. The overlay of MTF and BRAC PSAs on the map on the previous page shows the eligible beneficiary population.

### **Beneficiary Access to Prime**

Effective October 1, 2013, DoD reduced the number of locations designated as PSAs to those within a 40-mile radius of existing MTFs or designated BRAC locations (closed MTFs). The left chart below shows the effect of the reduction on the percentage of beneficiaries living in PSAs (defined only in the U.S.). The right chart below shows the percentage of the eligible population in the U.S. with access to MTF-based Prime. The latter is defined as the percentage living in both a PSA and an MTF Service Area (see the notes to the right of the map on the previous page for the definition of an MTF Service Area).

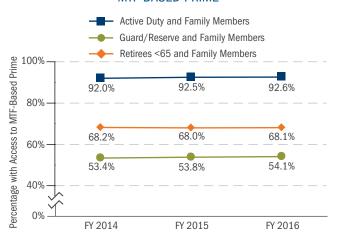
# TREND IN ELIGIBLE POPULATION LIVING IN PSAs



Source: DEERS, 1/5/2017

◆ The reduction in the number of PSAs in FY 2014 had no effect on the access to Prime by Active Duty members and their families. However, the percentage of Guard/Reserve and family members (including those in a pre- and post-mobilization status) and retirees and family members living in PSAs each declined substantially in FY 2014. Since FY 2014, the percentage living in PSAs has remained about the same for all beneficiary groups.

# TREND IN ELIGIBLE POPULATION WITH ACCESS TO MTF-BASED PRIME



- As determined by residence in an MTF PSA, access to MTF-based Prime increased slightly from FY 2014 to FY 2016 for Active Duty, Guard/Reserve, and their family members. Access remained about the same for retirees and family members under age 65.
- As expected, Active Duty and their families have the highest level of access to MTF-based Prime, whereas Guard/Reserve members and their families have the lowest. Retirees, some of whom move to locations near an MTF to gain access to care in military facilities, fall in between.

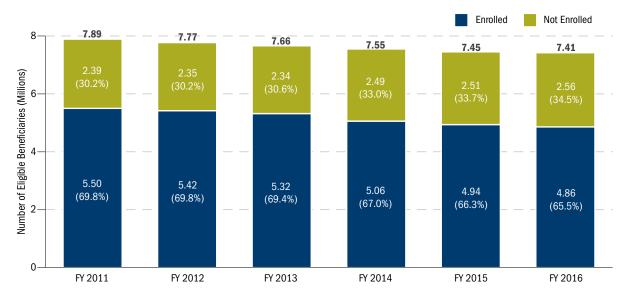
### **Eligibility and Enrollment in TRICARE Prime**

Eligibility for and enrollment in TRICARE Prime was determined from DEERS. For the purpose of this report, all Active Duty personnel are considered to be enrolled. The eligibility counts exclude most beneficiaries age 65 and older, but include beneficiaries living in remote areas where Prime may not be available. The enrollment rates displayed below may, therefore, be somewhat understated.

Beneficiaries enrolled in TPR (including Global Remote), TYA Prime, and the USFHP are included in the enrollment counts below. Beneficiaries enrolled in TRICARE Plus (a primary care enrollment program offered at selected MTFs), TRS, TYA Standard, and TRR are excluded from the enrollment counts below; they are included in the non-enrolled counts.

- ◆ The number of beneficiaries enrolled in TRICARE Prime has continued to drop since FY 2011. As a percentage of the beneficiary population, TRICARE Prime enrollment remained level from FY 2011 to FY 2013 but dropped significantly in FY 2014, largely due to a reduction in Active Duty end-strength.
- By the end of FY 2016, about 66 percent of all eligible beneficiaries were enrolled (4.86 million enrolled of the 7.41 million eligible to enroll).

#### HISTORICAL END-YEAR ENROLLMENT NUMBERS



Source: DEERS, 1/5/2017

Note: Numbers may not sum to bar totals due to rounding. Detailed MHS enrollment data by state can be found on page 19.

### Recent Three-Year Trend in Eligibles, Enrollees, and Users

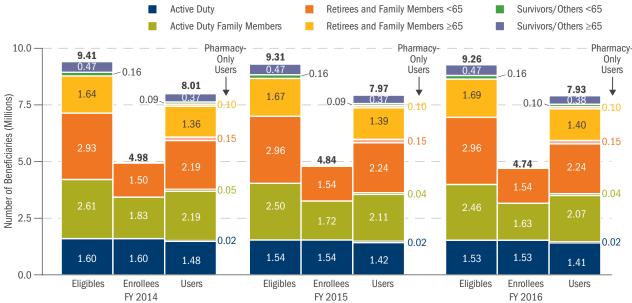
This section compares the number of users of MHS services with the numbers of eligibles and enrollees. Because beneficiaries eligible for any part of the year can be users, average (rather than end-year) beneficiary counts were used for all calculations.

The average numbers of eligibles and TRICARE Prime enrollees by beneficiary category¹ from FY 2014 to FY 2016 were determined from DEERS data. The eligible counts include all beneficiaries eligible for some form of the military health care benefit and, therefore, include those who may not be eligible to enroll in Prime. TRICARE Plus and Reserve Select enrollees are not included in the enrollment counts. USFHP enrollees are excluded from both the eligible and enrollment counts because information about users of that plan was not available.

Two types of users are defined in this section: (1) users of inpatient or outpatient care, regardless of pharmacy utilization; and (2) users of pharmacy only. No distinction is made here between users of direct and purchased care. The union of the two types of users is equal to the number of beneficiaries who had any MHS utilization.

- ◆ The number of Active Duty and eligible family members declined by 5 percent between FY 2014 and FY 2016. The number of RETFMs under age 65 increased by 1 percent, while the number of RETFMs age 65 and older increased by 3 percent. The number of survivors and others (SRV/OTHs) under age 65 declined by 1 percent, while the number of SRV/OTHs age 65 and older increased by 1 percent.
- ◆ The percentage of ADFMs enrolled in TRICARE Prime declined from 70 percent in FY 2014 to 66 percent in FY 2016. The percentage of RETFMs under age 65 enrolled in Prime increased slightly from 51 to 52 percent and the percentage of SRV/OTHs under age 65 enrolled in Prime increased slightly from 26 to 27 percent over the same time interval.
- ◆ The overall user rate remained about the same between FY 2014 and FY 2016 at between 85 and 86 percent. The user rates increased for all beneficiary groups except Active Duty, but such changes were too slight to affect the overall user rate.
- RETFMs under age 65 constituted the greatest number of MHS users, but had the second lowest user rate. Their MHS user rate was lower than all but SRV/OTHs (a much smaller beneficiary group) because some RETFMs had other health insurance (OHI).

#### AVERAGE NUMBERS OF FYS 2014-2016 ELIGIBLES, ENROLLEES, AND USERS BY BENEFICIARY CATEGORY



Sources: DEERS and MHS administrative data, 1/5/2017

Note: Numbers may not sum to bar totals due to rounding. The bar totals reflect the average number of eligibles and enrollees, not the end-year numbers displayed in previous charts, to account for beneficiaries who were eligible or enrolled for only part of a year.

<sup>&</sup>lt;sup>1</sup> Inactive Guard/Reserves and their family members are grouped with ADFMs because their TRICARE benefits are similar. For the first time in this year's report, survivors and others are broken out separately from retirees and family members.

### MHS POPULATION: ENROLLEES AND TOTAL POPULATION BY STATE

				.ED			
STATE	TOTAL POPULATION	TRS ENROLLED	ACTIVE DUTY AND GUARD/RESERVE ON ACTIVE DUTY	DEPENDENTS OF ACTIVE DUTY AND GUARD/RESERVE ON ACTIVE DUTY	RETIRED	RETIRED FAMILY MEMBERS/OTHERS	TOTAL
AK	82,778	1,415	21,901	26,528	5,155	8,770	62,354
AL	207,003	8,732	12,896	25,083	18,326	30,646	86,951
AR	87,831	4,662	6,570	9,367	5,303	9,657	30,897
AZ	204,024	8,310	22,122	27,804	17,561	28,772	96,259
CA	805,822	22,991	168,476	155,167	46,834	86,353	456,830
CO	247,548	8,764	42,977	49,112	20,364	35,543	147,996
CT	48,609	2,063	8,896	7,925	1,984	3,259	22,064
DC	22,552	543	11,836	3,021	931	888	16,676
DE	33,353	1,606	4,195	4,763	2,794	4,109	15,861
FL	704,952	21,539	72,989	92,738	63,237	100,800	329,764
GA	432,592	14,199	71,598	79,438	39,740	66,642	257,418
HI	161,126	1,992	50,116	53,784	5,793	9,261	118,954
IA	45,334	4,858	2,693	4,113	727	1,306	8,839
ID	52,245	3,646	4,894	6,748	3,027	5,047	19,716
IL	146,142	8,709	22,829	18,435	9,566	15,912	66,742
IN	89,981	9,091	4,488	7,439	4,047	7,355	23,329
KS	124,827	5,961	25,288	29,771	6,594	12,028	73,681
KY	141,863	6,367	35,823	21,597	8,091	13,924	79,435
LA	126,093	8,411	19,381	23,045	7,425	12,880	62,731
MA	69,701	5,623	6,728	7,300	6,317	8,996	29,341
MD	246,339	6,323	40,852	48,522	29,606	42,392	161,372
ME	39,198	2,438	1,565	3,566	7,561	10,400	23,092
MI	97,858	6,413	5,136	7,926	3,470	5,830	22,362
MN	67,036	10,606	4,226	4,839	169	370	9,604
MO	153,034	11,492	18,372	19,950	8,501	14,965	61,788
MS	110,071	7,338	15,236	14,259	6,780	11,267	47,542
MT	35,666	2,281	4,368	4,908	1,045	1,799	12,120
NC	504,099	13,180	105,687	109,729	27,650	47,076	290,142
ND	33,000	2,445	8,322	7,939	1,394	2,279	19,934
NE	61,965	4,348	7,611	9,225	3,516	6,476	26,828
NH	30,863	1,804	2,491	2,360	4,799	6,517	16,167
NJ	83,515	4,824	11,445	13,527	5,116	8,416	38,504
NM	85,297	1,851	13,624	15,628	6,562	10,593	46,407
NV	104,072	3,194	12,381	15,535	9,031	14,165	51,112
NY	177,372	7,070	31,930	30,966	9,211	15,475	87,582
ОН	165,686	11,810	11,955	16,772	7,689	13,330	49,746
OK	155,281	6,377	24,182	24,801	11,499	20,472	80,954
OR	67,494	3,798	3,446	5,064	944	1,662	11,116
PA	161,454	10,073	8,621	12,141	7,578	12,468	40,808
RI	24,486	1,146	4,490	4,026	1,547	2,243	12,306
SC	243,052	10,168	40,870	33,314	17,534	28,885	120,603
SD	34,225	4,520	4,148	4,924	1,593	2,734	13,399
TN	195,766	11,650	5,607	30,703	11,540	19,937	67,787
TX	889,976	33,424	131,005	154,350	79,935	141,802	507,092
UT	75,736	8,296	7,145	11,642	4,619	8,998	32,404
VA	748,275	13,080	133,014	149,676	60,331	93,087	436,108
VT	13,081	1,200	862	1,236	1,243	1,888	5,229
WA	351,556	8,540	63,678	73,500	29,686	48,854	215,718
WI	71,202	7,662	3,592	5,548	1,093	1,939	12,172
WV	35,406	2,445	2,083	2,101	985	1,438	6,607
WY	23,149	1,401	3,877	4,111	1,341	2,139	11,468
Subtotal	8,919,586	370,679	1,348,517	1,495,966	637,384	1,062,044	4,543,911
Overseas	498,121	3,037	187,411	120,542	510	4,639	313,102
0.0000000	100,121	9,001	201,711	120,012	010	1,000	910,102

Source: MHS administrative data systems, as of 1/5/2017 for end of FY 2016

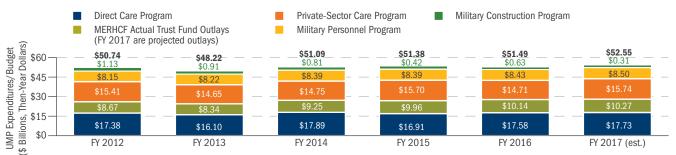
Note: "Prime Enrolled" includes Prime (military and civilian primary care managers), TRICARE Prime Remote (and Overseas equivalent), TYA Prime, and Uniformed Services Family Health Plan; and excludes members in TFL, TRICARE Plus, TYA Standard, and TRS.

### **UMP FUNDING**

The UMP, estimated at \$52.55 billion for FY 2017 in the FY 2017 President's Budget, is slightly more than 2 percent higher than the \$51.49 billion in actual expenditures in FY 2016 (unadjusted, then-year dollars). The UMP displayed here includes the actual Trust Fund outlays from the Medicare-Eligible Retiree Health Care Fund (MERHCF, or the "Accrual Fund"). This fund (effective October 1, 2002) pays the cost of DoD health care programs (both direct and purchased care) for Medicare-eligible retirees, retiree family members, and survivors. The majority of Accrual Fund payments for health care provided to Medicare-eligible beneficiaries are for purchased care, pharmacy, and outpatient care.

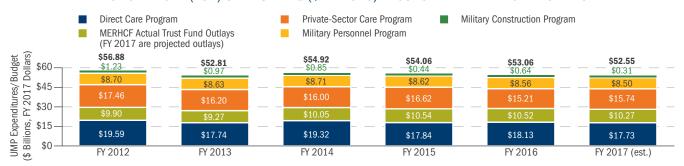
At \$17.73 billion estimated for FY 2017, direct care expenditures represent the largest sector of the UMP (34 percent), followed by the private sector program (\$15.74 billion, 30 percent). Outlays from the Accrual Fund have increased from \$8.67 billion in FY 2012 to \$10.27 billion estimated for FY 2017.

### FYs 2012-2017 (EST.) UMP FUNDING (\$ BILLIONS) IN UNADJUSTED, THEN-YEAR DOLLARS



In constant FY 2017 dollar funding, when actual expenditures or projected funding are adjusted for inflation as estimated by the Department, the FY 2017 \$52.55 billion estimated budget in purchasing value is currently programmed to be \$0.5 billion (almost 1 percent) less in purchasing value than actual expenditures in FY 2016 and almost \$4.33 billion (almost 8 percent) less than the peak in FY 2012 of \$56.9 billion.

### FYS 2012-2017 (EST.) UMP FUNDING (\$ BILLIONS) IN CONSTANT FY YEAR 2017 DOLLARS

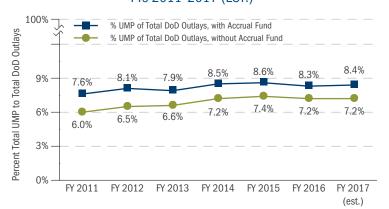


Source: Cost and budget estimates, DHA Resources and Management Directorate, 12/6/2016 Notes:

- FYs 2012–2016 reflect Comptroller Information System actual execution.
- FY 2017 reflects the FY 2017 President's Budget.
- Source of data for deflators (MILPERS, DHP, Procurement, RDT&E, and MILCON) is Table 5-5, Department of Defense Deflators—TOA, National Defense Budget Estimates for FY 2017 (Green Book).
- FY 2012 includes \$1.2 billion OCO supplemental funding for Operations and Maintenance (O&M) and reductions for Department of Defense efficiency initiatives. FY 2012 OCO includes \$452 million in private sector, \$765 million in direct care.
- FY 2013 includes \$966.022 million in OCO supplemental funding for O&M; reflects reductions for sequestration, NDAA Sections 3001, 3004, and 8123.
- FY 2014 includes \$715.484 million in OCO supplemental funding for O&M, as well as congressional additions and statutory reductions as reflected in Public Law 113-76.
- FY 2015 includes \$300.531 million in OCO supplemental funding for O&M, as well as congressional additions and statutory reductions as reflected in Public Law 113-64.
- FY 2016 includes \$272.704 million in OCO supplemental funding for O&M, as well as congressional additions and statutory reductions as reflected in Public Law 114-113.
- FY 2017 reflects the amended request of \$334.311 million in OCO.

### UMP FUNDING (CONT.)

# UMP EXPENDITURES AS A PERCENTAGE OF TOTAL DoD OUTLAYS: FYs 2011-2017 (EST.)



Source: UMP cost and budget estimates, DHA Resources and Management Directorate, 12/6/2016

Note: Percentages are estimates of total DoD outlays reflected in the FY 2017 President's Budget.

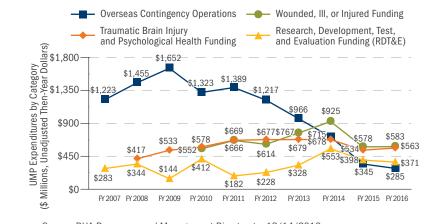
# COMPARISON OF CHANGE IN ANNUAL UMP (FY) AND NHE (CY) EXPENDITURES OVER TIME: 2010-2017 (EST.)



Sources: DHA Resources and Management Directorate, 12/6/2016, 12/8/2016 using CMS, Office of the Actuary, Table 2, National Health Expenditure Amounts and Annual Percent Change by Type of Expenditure: Calendar Years 2009–2025. NHE Projections 2015–2025—table modified 7/12/16, accessed 11/1/16. <a href="http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html">http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html</a>

Note: CMS data are in calendar years (CY), and DoD's UMP data are in fiscal years (FY).

# MEDICAL COST OF WAR—CARING FOR OUR WOUNDED, ILL, OR INJURED



Source: DHA Resources and Management Directorate, 12/14/2016 Notes:

- TBI and PH expenditures shown for FY 2008 include FYs 2007 and 2006.
- The Wounded, III, or Injured Funding line is included in overall OCO funding from FYS 2007–2009 but is identified separately beginning in FY 2010.

### **UMP Share of Defense Budget**

UMP expenditures as a percentage of total DoD expenditures (outlays, which include DoD normal cost contributions to the MERHCF in both the UMP and DoD expenditures) has gradually increased from 7.6 percent since FY 2011, to an estimated 8.4 percent in FY 2017, or from 6 percent to 7.2 percent during the same period if the Accrual Fund normal cost contributions are excluded from the UMP. These proportions may increase in the future as the FY 2017 DoD budget is fully appropriated and/or to the extent that medical costs (i.e., the numerator) to care for returning forces continue to increase due to inflationary pressures, and the Department's overall budget (i.e., the denominator) is constrained or reduced due to fiscal pressures and the return of operationally deployed forces to U.S. bases.

### Comparison of UMP and National Health Expenditures (NHE) Over Time

As noted in the middle chart at left, the annual rate of growth in the UMP (in then-year dollars) declined from just under 7 percent in FY 2010 to 2.1 percent estimated for FY 2017, except for a steep decline in FY 2013 (–5 percent) followed by a spike in FY 2014. In comparison, the Centers for Medicare & Medicaid Services (CMS) estimates that annual percentage changes in National Health Expenditures (NHE) have fluctuated by between 4 and 5 percent since CY 2008 (not shown), with expenditures projected to reach an estimated \$3.5 trillion in CY 2017 (ref. source notes at left).

# Medical Cost of War—Caring for Our Wounded, III, or Injured

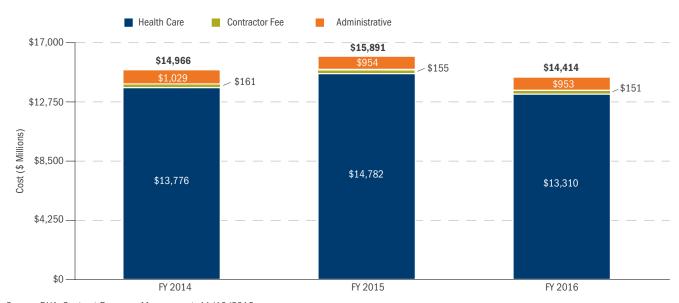
The graph at left reflects the total actual DHP funding for Overseas Contingency Operations (OCO) and resultant care for wounded, ill, or injured since FY 2007. Total annual DHP expenditures have ranged from a low of \$1.51 billion in FY 2007, to a high of \$2.9 billion in FY 2011 in thenyear dollars. FY 2016 expenditures totaled \$1.8 billion. These overall expenses are the sum of OCO operations; care for traumatic brain injury (TBI); wounded, ill, or injured; and psychological health (PH), as well as research and development shown as separate expense lines in the chart. These funds are within the DHP (O&M) funding line and are reflected in the earlier budget charts.

### PRIVATE-SECTOR CARE ADMINISTRATIVE COSTS

The Private-Sector Care Budget Activity Group (PSC BAG) includes underwritten health, pharmacy, Active Duty supplemental, dental, and overseas care; the USFHP; funds received and executed for OCO; and other miscellaneous expenses. It excludes costs for non-DoD beneficiaries and MERHCF expenses. The totals in the chart below differ from the PSC BAG because the former exclude settlements paid for in prior years, undefinitized change-order costs, and certain DoD internal/overhead costs, but include funds authorized and executed under the DHP carry-over authority.<sup>1</sup>

- ◆ Total private-sector care costs decreased from \$14,966 million in FY 2014 to \$14,414 million in FY 2016, a drop of almost 4 percent. The large intervening increase in FY 2015 was due to runaway compound drug prices. The subsequent large decline in FY 2016 was due to DoD's efforts to get compound drug prices under control.
- Private-sector health care costs decreased by 3 percent, again due to DoD's efforts to get compound drug prices under control.
- As a result of the new pharmacy contract that began processing on May 1, 2015, administrative costs declined by 7 percent in that year and remained about the same in FY 2016.
- Excluding contractor fees, administrative expenses decreased from 7.0 percent of total private-sector care costs in FY 2014 (\$1,029 million of \$14,805 million) to 6.7 percent in FY 2016 (\$953 million of \$14,263 million). Including contractor fees (in both administrative and total costs), administrative expenses decreased from 8.0 percent of total private-sector care costs in FY 2014 (\$1,190 million of \$14,966 million) to 7.7 percent in FY 2016 (\$1,104 million of \$14,414 million).
- Contractor fees decreased by 6 percent from FY 2014 to FY 2016.

### TREND IN PRIVATE-SECTOR CARE COSTS



Source: DHA, Contract Resource Management, 11/10/2016

<sup>&</sup>lt;sup>1</sup> DHA has congressional authority to carry over 1 percent of its 0&M funding into the following year. The amounts carried forward from the prior-year appropriation were \$308 million in FY 2014 and \$307 million in FY 2015. There was no funding carried over from FY 2015 to FY 2016.

### MHS WORKLOAD TRENDS (DIRECT AND PURCHASED CARE)

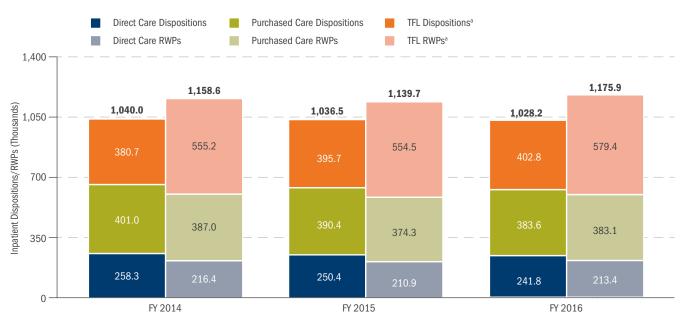
### **MHS Inpatient Workload**

Total MHS inpatient workload is measured two ways: as the number of inpatient dispositions and as the number of relative weighted products (RWPs). The latter measure, relevant only for acute care hospitals, reflects the relative resources consumed by a single hospitalization as compared with the average of those consumed by all hospitalizations. It gives greater weight to procedures that are more complex and involve greater lengths of stay.

Total inpatient dispositions (direct and purchased care combined) declined by 5 percent and total RWPs declined by 1 percent between FY 2014 and FY 2016, excluding the effect of TRICARE for Life (TFL).<sup>1</sup>

- Direct care inpatient dispositions decreased by 6 percent and RWPs by 1 percent over the past three years.
- Excluding TFL workload, purchased care inpatient dispositions decreased by 4 percent, while RWPs decreased by 1 percent between FY 2014 and FY 2016.
- Including TFL workload, purchased care dispositions increased by 1 percent, while RWPs increased by 2 percent between FY 2014 and FY 2016.
- Although not shown, about 7 percent of direct care inpatient workload (dispositions) was performed abroad in FY 2016. Purchased care and TFL inpatient workload performed abroad accounted for about 2 percent of the worldwide total.

#### TRENDS IN MHS INPATIENT WORKLOAD



<sup>&</sup>lt;sup>a</sup> Purchased care only

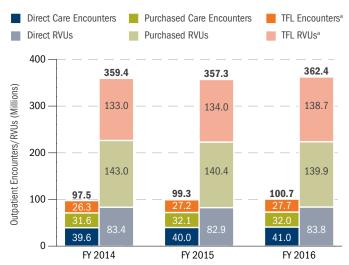
<sup>&</sup>lt;sup>1</sup> Although TFL claims are not technically MHS workload (i.e., MHS does not deliver the care, it just acts as second payer to Medicare), it would give an incomplete picture of the services provided by MHS if they were excluded.

### MHS WORKLOAD TRENDS (DIRECT AND PURCHASED CARE) (CONT.)

### **MHS Outpatient Workload**

Total MHS outpatient workload is measured two ways: as the number of encounters (outpatient visits and ambulatory procedures) and as the number of relative value units (RVUs). Because encounters do not appear on purchased care claims, they are calculated using a DHA-developed algorithm. RVUs reflect the relative resources consumed by a single encounter as compared with the average of those consumed by all encounters. In FY 2010, TRICARE developed an enhanced measure of RVUs that accounts for units of service (e.g., 15-minute intervals of physical therapy) and better reflects the resources expended to produce an encounter. In FY 2016, some additional enhancements were made to the RVU measure that resulted in a slightly lower direct care RVU total and a substantially higher purchased care RVU total. The changes were retrofit to earlier years of data so that RVUs are measured consistently over time. See the Appendix for a more detailed description of the RVU measure.

### TRENDS IN MHS OUTPATIENT WORKLOAD



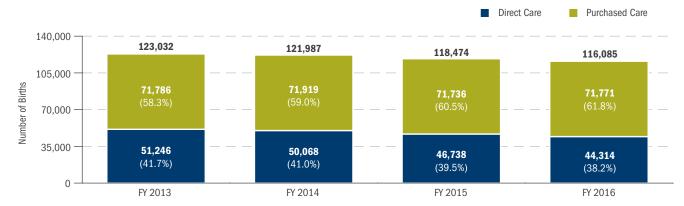
Source: MHS administrative data, 1/18/2017

- Total outpatient encounters (direct and purchased care combined) increased by 3 percent, while RVUs decreased by 1 percent between FY 2014 and FY 2016, excluding the effect of TFL.<sup>1</sup>
- Direct care outpatient encounters increased by 4 percent and RVUs by 1 percent over the past three years.
- Excluding TFL workload, purchased care outpatient encounters increased by 2 percent while RVUs decreased by 2 percent. Including TFL workload, encounters increased by 3 percent and RVUs by 1 percent.
- Although not shown, about 8 percent of direct care outpatient workload (encounters) was performed abroad. Purchased care and TFL outpatient workload performed abroad accounted for less than 1 percent of the worldwide total.

#### **MTF Market Share for Childbirths**

A 2011–2012 DHA survey of MTF obstetric (OB) patients measured satisfaction with various aspects of their care. Moderate correlations were found between some survey satisfaction levels and MTF market shares for childbirths (i.e., the percentage of total OB workload [direct plus purchased] performed in direct care facilities). MTF OB market shares in the U.S. ranged from 7 percent to 88 percent. From the chart below, overall MTF OB market share decreased from 42 percent to 38 percent between FY 2013 and FY 2016, but that is due in part to the reduction in Active Duty end-strength and the consequent reduction in the number of Active Duty family members. There is nothing to suggest that the reduction in MTF market share is a result of declining satisfaction with MTF OB care.

### TREND IN MTF MARKET SHARE FOR CHILDBIRTHS



<sup>&</sup>lt;sup>a</sup> Purchased care only

<sup>&</sup>lt;sup>1</sup> Although TFL claims are not technically MHS workload (i.e., MHS does not deliver the care; it just acts as second payer to Medicare), it would give an incomplete picture of the services provided by MHS if they were excluded.

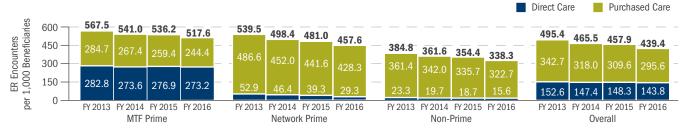
### MHS WORKLOAD TRENDS (DIRECT AND PURCHASED CARE) (CONT.)

### **Emergency Room Utilization**

Emergency room (ER) utilization is sometimes used as an indirect measure of access to care, particularly for Prime enrollees. Using data from the National Health Interview Survey, the National Center for Health Statistics reports that almost 80 percent of civilians who use the ER do so because of lack of access to other providers. Although not equivalent, it is reasonable to ask whether a similar situation occurs in MHS, in particular whether Prime enrollees make excessive use of ERs as a source of care because they cannot get timely access to their primary care managers (PCMs) under the normal appointment process. To provide a preliminary evaluation of this issue, direct and purchased care ER utilization rates were compared across three enrollment groups: MTF enrollees, network enrollees, and non-enrollees. The rate for each enrollment group was calculated by dividing ER encounters<sup>2</sup> by the average population in that group. The rates were then adjusted to reflect the age/sex distribution of the overall MHS population. To avoid biasing the comparisons, seniors were excluded from the calculations because they are almost exclusively non-enrollees.

- ER utilization per capita declined for Prime enrollees from FY 2013 to FY 2016 (15 percent for network Prime enrollees and 9 percent for MTF Prime enrollees). The rate for non-Prime enrollees declined by 12 percent over the same time period.
- ◆ In FY 2016, MTF Prime enrollees had an ER utilization rate 13 percent higher than that of network Prime enrollees and 53 percent higher than that of non-enrollees. Network Prime enrollees had an ER utilization rate 35 percent higher than that of non-enrollees.
- For MTF Prime enrollees, 53 percent of ER encounters were in purchased care facilities (not necessarily in-network).
- Children under five years old had the highest ER utilization rate for all enrollment groups (not shown).
- Although the MHS ER utilization rate has been falling, the FY 2016 rate of 439 encounters per 1,000 beneficiaries is 4 percent higher than the civilian rate of 424 per 1,000 reported in calendar year (CY) 2012, the most recent year for which data are available.<sup>3</sup>

### ER UTILIZATION BY ENROLLMENT STATUS AND SOURCE OF CARE (ENCOUNTERS PER 1,000 BENEFICIARIES)

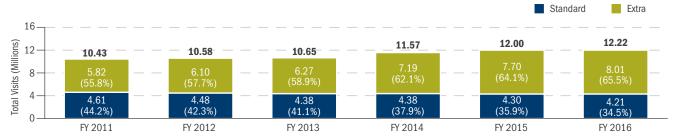


Source: MHS administrative data, 1/18/2017

### **Extra vs. Standard Non-Prime Visits**

For beneficiaries not enrolled in Prime, the ratio of Extra to Standard visits has been steadily increasing. In FY 2008, Extra visits accounted for only 46 percent of all non-Prime visits. By FY 2009, the number of Extra visits exceeded the number of Standard visits for the first time (51 percent). In FY 2016, 66 percent of all non-Prime visits were to Extra providers. One reason for the increasing usage of Extra providers is the expansion of the TRICARE provider network (see page 141).

### TRENDS IN EXTRA VS. STANDARD VISITS



<sup>&</sup>lt;sup>1</sup> Gindi, R. M., et al., "Emergency Room Use Among Adults Aged 18–64: Early Release of Estimates from the National Health Interview Survey, January–June 2011," National Center for Health Statistics, May 2012, http://www.cdc.gov/nchs/nhis/releases.htm.

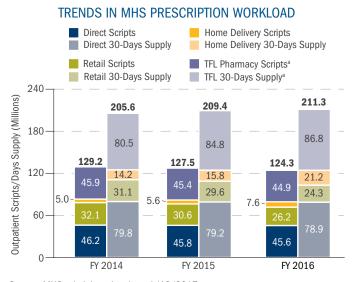
<sup>&</sup>lt;sup>2</sup> ER encounters were calculated using an enhanced methodology in this year's report. This resulted in higher ER counts than shown in previous years' reports.

<sup>&</sup>lt;sup>3</sup> Centers for Disease Control and Prevention, "National Hospital Ambulatory Medical Care Survey: 2012 Emergency Department Summary Tables," Table 1, http://www.cdc.gov/nchs/data/ahcd/nhamcs\_emergency/2012\_ed\_web\_tables.pdf.

### MHS WORKLOAD TRENDS (DIRECT AND PURCHASED CARE) (CONT.)

### **MHS Prescription Drug Workload**

TRICARE beneficiaries can fill prescription medications at MTF pharmacies through home delivery (mail order), at TRICARE retail network pharmacies, and at non-network pharmacies. Total outpatient prescription workload is measured two ways: as the number of prescriptions and as the number of days supply (in 30-day increments). Total prescription drug workload (all sources combined) decreased between FY 2014 and FY 2016 (prescriptions decreased by 5 percent and days supply by less than 1 percent), excluding the effect of TFL purchased care pharmacy usage.



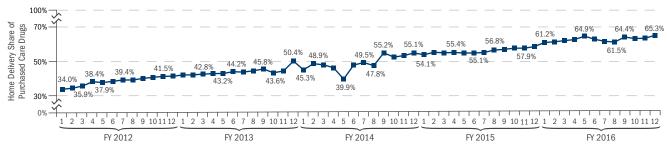
- Source: MHS administrative data, 1/18/2017
- <sup>a</sup> Home delivery workload for TFL-eligible beneficiaries is included in the TFL total.

- Direct care prescriptions and days supply each decreased by 1 percent between FY 2014 and FY 2016.
- Purchased care prescriptions (retail and home delivery combined) decreased by 9 percent while days supply increased by 1 percent from FY 2014 to FY 2016, excluding TFL utilization. Including TFL utilization, purchased care prescriptions decreased by 5 percent but days supply increased by 5 percent. The discrepancy in trends between purchased care prescription counts and days supply is due to increased beneficiary utilization of home delivery services, which are dispensed for up to a 90-day supply.
- Although not shown, about 5 percent of direct care prescriptions were issued abroad. Purchased care prescriptions issued abroad accounted for less than 1 percent of the worldwide total.

Although TRICARE pharmacy home delivery services have been available to DoD beneficiaries since the late 1990s, they have not been heavily used until recently. Home delivery of prescription medications offers benefits to both DoD and its beneficiaries, because DoD negotiates prices that are considerably lower than those for retail drugs and the beneficiary receives up to a 90-day supply for the same copay as a 30-day supply at a retail pharmacy. In November 2009, DoD consolidated its pharmacy services under a single contract (called TPharm) and launched an intensive campaign to educate beneficiaries on the benefits of home delivery services. As an additional incentive for beneficiaries to use home delivery services, effective October 1, 2011, TRICARE eliminated home delivery beneficiary copayments for generic drugs while at the same time increasing retail pharmacy copayments. Furthermore, the NDAA for FY 2013 mandated that DoD implement a five-year pilot program requiring TFL beneficiaries to obtain all refill prescriptions for select non-generic maintenance medications from the TRICARE home delivery program or MTF pharmacies. The pilot program went into effect on February 14, 2014. The NDAA for FY 2015 ended the pilot program on September 30, 2015, and expanded the program to all non-Active Duty beneficiaries beginning October 1, 2015.

The home delivery share of total purchased care utilization has been on the rise since DoD changed the copayment structure for retail/home delivery drugs at the beginning of FY 2012. Since that time, retail drug copayments have further increased relative to home delivery. As a result, the home delivery share of purchased care pharmacy utilization (as measured by days supply) has increased almost linearly, from 42 percent at the end of FY 2012 to 65 percent at the end of FY 2016.

### TREND IN HOME DELIVERY UTILIZATION (DAYS SUPPLY) AS A SHARE OF TOTAL PURCHASED CARE UTILIZATION<sup>b</sup>

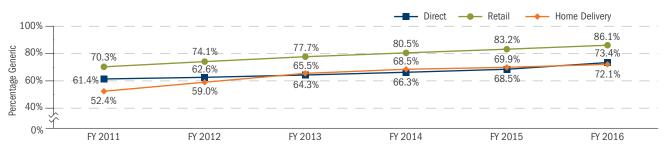


<sup>&</sup>lt;sup>b</sup> The large and sudden dip in February 2014 was due to a computer system problem in Express Scripts' auto-refill program, which resulted in a reduced volume of home delivery prescriptions.

### COST SAVINGS EFFORTS IN DRUG DISPENSING

- ◆ The rate of generic drug dispensing has been increasing for all sources: direct, retail, and home delivery. Home delivery pharmacies have seen the greatest increase, from 52 percent in FY 2011 to 72 percent in FY 2016. However, retail pharmacies dispensed the highest percentage of generic drugs in FY 2016 (86 percent).
- The retail generic drug dispensing rate in FY 2016 is almost identical to that of the private sector (86 percent).¹ However, the direct care rate (73 percent) is well below that of the private sector.²
- ◆ The average cost to DoD for a 30-day supply of a brand versus generic drug in FY 2016 was \$57 versus \$15 for direct care, \$197 (net of manufacturer refunds) versus \$18 for retail pharmacies, and \$98 versus \$19 for home delivery (costs are not adjusted for differences in drug types between brand and generic). Therefore, all other factors being equal, the trend toward greater generic drug dispensing is likely to lower DoD costs for prescription drugs.

### TRENDS IN GENERIC DRUG DISPENSING



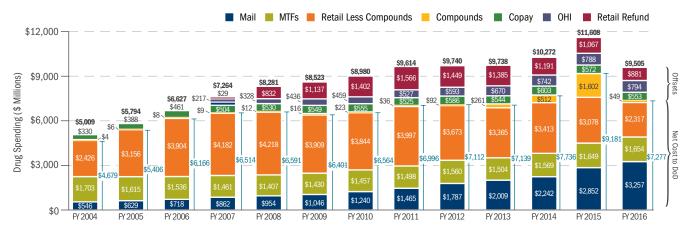
Source: MHS administrative data, 1/18/2017

The NDAA for FY 2008 mandated that the TRICARE retail pharmacy program be treated as an element of DoD and, as such, be subject to the same pricing standards as other federal agencies. As a result, beginning in FY 2008, drug manufacturers began providing refunds to DoD on most brand-name retail drugs.

Although total drug costs have consistently increased over the past decade, retail drug refunds have stemmed the increase in the cost to DoD. In FY 2016, the refunds are estimated to have saved DoD almost \$1 billion. After rising an average of only 2.7 percent per year from FY 2008 to FY 2014, net

DoD costs rose by 19 percent in FY 2015 alone, driven largely by a threefold increase in expenditures for compound drugs. Once DoD got compound drug prices under control, net DoD costs fell by 21 percent in FY 2016, to a level 6 percent below that of FY 2014.

### MHS OUTPATIENT DRUG SPENDING, FYs 2004-2016



Sources: Pharmacy Data Transaction Service (PDTS) Data Warehouse; DHA Pharmacy Operations Division (refunds) as of 12/6/2016

Notes: Net cost to DoD represents total prescription expenditures minus copers, coverage by other health insurance (OHI), and retail

Notes: Net cost to DoD represents total prescription expenditures minus copays, coverage by other health insurance (OHI), and retail refunds invoiced. It does not include an MHS-derived dispensing fee as in the charts on pages 31–32. Mail Order dispensing fees are included; however, other retail/mail contract costs and MTF cost of dispensing are not included. Retail refunds are reported on an accrual rather than a cash basis, corresponding to the original prescription claim data and updated refund adjustments. Retail Compound spending, broken out separately, is not adjusted for any recoveries or settlements with compound pharmacies outside of claims reversals.

<sup>&</sup>lt;sup>1</sup> CVS/Caremark, "Insights Executive Briefing," Issue 17, 2016, <a href="http://insights.cvshealth.com/sites/default/files/cvs-health-insights-executive-briefing-2016-midyear-gross-trend-declines-sept-2016.pdf">http://insights.cvshealth.com/sites/default/files/cvs-health-insights-executive-briefing-2016-midyear-gross-trend-declines-sept-2016.pdf</a>.

<sup>&</sup>lt;sup>2</sup> The direct care generic dispensing rate may be lower than in the private sector because MHS can frequently buy a branded drug at a lower cost, either under contract or at federal pricing, than the generic drug (this occurs during the 180-day exclusivity period when there is only one generic drug competing against the branded drug). This is not the case for most commercial plans. MHS is also forbidden by law to purchase generic drugs from countries that do not comply with the requirements established by the Trade Agreements Act.

### COST SAVINGS EFFORTS IN DRUG DISPENSING (CONT.)

### **DoD/VA Pharmacy Contracting Initiatives**

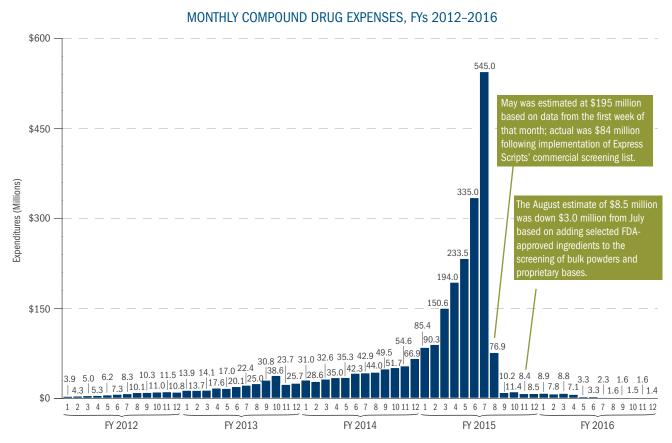
The Departments continued to maximize efficiencies through joint efforts when possible. National contracts are at an all-time high with 186 existing contracts, of which 58 were new in FY 2016. There are currently 17 joint contracts pending at the National Acquisition Center and 12 pending at the Defense Logistics Agency. The DoD/VA pharmacy team identified 41 commonly used pharmaceutical products and manufacturers for potential joint contracting action and continued to seek new joint contracting opportunities where practicable. In FY 2016, VA spent \$526 million on joint national contracts, and DoD spent \$195 million. Over the same time period, VA joint national contract prime vendor purchases represented 8.86 percent of total prime vendor purchases; DoD purchases represented 4.03 percent, an increase from 3.8 percent the previous year.

### COMPOUND DRUG COST TRENDS

Compound drugs are a combination of two or more drugs prepared by a pharmacist for a patient's individual needs. Unlike traditional medications, compounded products are not regulated by the U.S. Food and Drug Administration (FDA), and therefore lack evidence of safety, efficacy, strength, quality, or purity. Intense marketing and drastic increases in compound ingredient costs led to significant increases in retail compound drug spending and utilization in FY 2015.

From FY 2012 to FY 2015, the average cost for a compounded prescription increased from \$170 to \$2,135. Compound utilization peaked in April 2015, with 95,228 prescriptions, at a cost of \$545 million per month. As a result of nefarious and questionable compound pharmacy practices, DoD costs for compounds rose tenfold in two years. In response to this dramatic increase in compound spending, on May 1, 2015, TRICARE began actively screening all compound prescriptions. Had DoD not implemented corrective action, which included partnering with the Department of Justice, compound drug spending would have exceeded \$2 billion in FY 2015.

Additional enhancements to the screening process were implemented in FY 2016 to continue the alignment of DoD practices with those of commercial health plans. Total FY 2016 compound drug spending was \$49.1 million, representing a return to pre-FY 2012 spending and utilization levels. Efforts to manage spending and utilization of compound drugs are ongoing.



Source: Pharmacy Data Transaction Service (PDTS) Data Warehouse, 10/15/2016

 $Note: Detailed information regarding the compound approval process can be found at $$\frac{\text{http://tricare.mil/CoveredServices/Pharmacy/Drugs/CompoundDrugs.aspx.}$$ 

 $<sup>^{\</sup>rm a}$  Express Scripts is the Pharmacy Benefit Manager under contract with DoD.

### SPECIALTY DRUG COST TRENDS

Specialty drugs are prescription medications that often require special handling, administration, or monitoring. Although the cost of specialty drugs is high, some represent significant advances in therapy and may be offset by decreases in future medical costs.

Although the definition of a specialty drug varies across insurers, the DoD has adopted the following guidelines in order to designate a medication as a specialty drug: (1) cost is greater than or equal to \$500 per dose or greater than or equal to \$6,000 per year, (2) has difficult or unusual process of delivery, (3) requires patient management beyond traditional dispensing practices, or (4) as defined by DoD.

By spending, the top five specialty classes as defined by the Pharmacy & Therapeutics (P&T) committee are oncological agents, targeted immunological biologics (TIBs), multiple sclerosis (MS) agents, antiretroviral agents, and Hepatitis C agents. The DoD P&T committee continually monitors specialty pharmaceutical utilization.

	TOP 20 SPECIALTY CLASSES (\$ MILLIONS), AS DEFINED BY P&T COMMITTEE									
FY 2016 RANK	SPECIALTY CLASS	FY 2014	FY 2015	FY 2016	FYs 2014-2016 % CHANGE					
1	ONCOLOGICAL AGENTS	\$375	\$451	\$531	41%					
2	TIBs	\$271	\$296	\$307	13%					
3	MS	\$190	\$216	\$192	_					
4	ANTIRETROVIRALS	\$76	\$88	\$102	35%					
5	HEPATITIS C	\$108	\$191	\$86	-21%					
6	PULMONARY ARTERIAL HYPERTENSION (PAH) AGENTS	\$62	\$69	\$76	23%					
7	ANTIHEMOPHILIC FACTORS	\$62	\$89	\$69	12%					
8	ENDOCRINE AGENTS MISC (corticotropin, cinacalcet)	\$48	\$56	\$59	24%					
9	IMMUNOLOGICAL AGENTS MISC (ibatibant acetate [Firazyr])	\$29	\$50	\$51	80%					
10	NEUROLOGICAL AGENTS MISC (botulinum toxin, Xenazine)	\$23	\$30	\$49	88%					
11	PULMONARY MISC	-	\$24	\$47	_					
12	OSTEOPOROSIS (teriparatide, denosumab)	\$26	\$25	\$27	_					
13	GROWTH STIMULATING	\$28	\$29	\$26	-6%					
14	ANTICOAGULANTS (low-molecular-weight heparin [LMWH])	\$39	\$34	\$26	-33%					
15	CYSTIC FIBROSIS AGENTS	\$3	\$9	\$26	769%					
16	ADHD-WAKEFULNESS (Xyrem)	\$20	\$23	\$26	20%					
17	ACNE AGENTS	\$17	\$29	\$23	36%					
18	OPHTHALMIC AGENTS MISC (Eylea)	\$15	\$23	\$22	46%					
19	EXCLUDED FROM THE PHARMACY BENEFIT (multiple drugs)	\$18	\$21	\$21	13%					
20	RESPIRATORY AGENTS MISC (dornase alfa, Prolastin, Synagis)	\$16	\$17	\$20	24%					

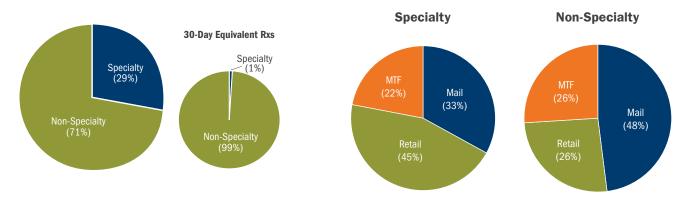
Source: Pharmacy Data Transaction Service (PDTS) Data Warehouse, 10/15/2016

Note: FY 2016 Q4 Specialty Agent Reporting List applied to all data; total costs adjusted for retail refunds (FY 2016 Q3 refund per unit applied to FY 2016 Q4 data), MTF PV cost per unit, Mail PV cost per unit

### MHS SPENDING: SPECIALTY VS. NON-SPECIALTY DRUG SPENDING (EXCLUDING COMPOUNDS, OHI, PAPER CLAIMS)



#### **FY 2016 TOTAL SPENDING BY POINT OF SERVICE**



Source: Pharmacy Data Transaction Service (PDTS) Data Warehouse, 10/15/2016

### SPECIALTY DRUG COST TRENDS (CONT.)

TOTAL ESTIMATED SPENDING BY QUARTER, FYs 2013-2016											
	FY 2013 (	MILLION)	FY 2014 (	MILLION)	FY 2015 (	MILLION)	FY 2016 (\$ MILLION)				
	Q2	Q4	Q2	Q4	Q2	Q4	Q2	Q4			
Non-Specialty	\$1,349	\$1,388	\$1,335	\$1,364	\$1,430	\$1,350	\$1,319	\$1,155			
Specialty	\$304	\$332	\$372	\$425	\$488	\$491	\$494	\$490			
Percentage Specialty <sup>a</sup>	18.4%	19.3%	21.8%	23.8%	25.4%	26.7%	27.2%	29.8%			

Source: FYs 2013 and 2014 based on FY 2014 Q4 Specialty Agent Reporting List; FY 2015 on FY 2015 Q4 list; FY 2016 on FY 2016 Q4 list; totals adjusted for retail refunds (FY 2016 Q3 refund per unit applied to FY 2016 Q4 data), copays, and against PV cost per unit for MTF and mail. 10/15/2016

- As a percentage of total drug costs, specialty drug costs increased from FY 2013 to FY 2016.
- Total specialty cost in FY 2016 was similar to FY 2015; however, this is primarily due to a substantial decline in use and cost for Hepatitis C medications compared to FY 2015, offset by increases in utilization and cost of drugs in other categories (predominantly oncology agents).
- ◆ This decrease in total cost for Hepatitis C is likely due to a return to steady state following the large bolus of previously diagnosed patients treated with new Hepatitis C medications (which offer increased effectiveness, shorter treatment periods, and reduced side effects) during FY 2015, as well as negotiated decreases in unit cost for Hepatitis C agents as a result of Uniform Formulary review.
- In FY 2016, specialty drugs accounted for approximately 1 percent of total MHS prescription drug utilization (30-day equivalents), but for 29 percent of total spending.
- As a potential cost-saving effort, the Services are able to leverage DHA-generated reports to identify and recapture high-cost specialty medications from retail and benefit from more advantageous pharmaceutical pricing at MTFs.
- ◆ The DoD P&T Committee considers the clinical and cost effectiveness of reviewed specialty agents with the end goal of selecting safe, efficacious, and cost-effective treatments for beneficiaries.

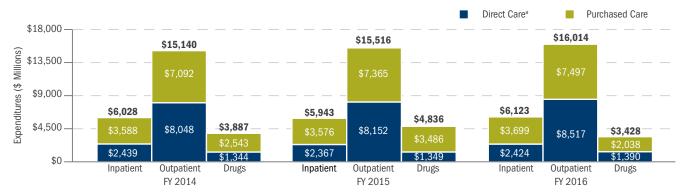
<sup>&</sup>lt;sup>a</sup> "Percentage Specialty" excludes compounds, paper claims, and OHI.

### MHS COST TRENDS

Net of MERHCF costs, total DoD expenditures for health care increased by 2 percent between FY 2014 and FY 2016. Increases in inpatient and outpatient expenses (2 percent for inpatient and 6 percent for outpatient) were largely offset by a decline in prescription drug expenses (12 percent).

- The decline in prescription drug expenses is largely an anomaly, as FY 2015 saw a drastic increase in retail pharmacy compound drug prices. The costs for FY 2016 reflect DoD's efforts to get compound drug prices back under control. In addition, the 2015 NDAA required beneficiaries to move selected maintenance medication refills out of retail to either home delivery or MTF pharmacies.
- The share of DoD expenditures for outpatient care relative to total expenditures for inpatient and outpatient care remained at about 72 percent from
- FY 2014 to FY 2016. For example, in FY 2016, DoD expenses for inpatient and outpatient care totaled \$22,137 million, of which \$16,014 million were for outpatient care, for a ratio of \$16,014/\$22,137 = 72 percent.
- Purchased care drug costs shown below have been reduced by manufacturer refunds for retail name brand drugs accrued to the years in which the drugs were dispensed.
- In FY 2016, DoD spent \$2.62 on outpatient care for every \$1 spent on inpatient care.

### TRENDS IN Dod EXPENDITURES FOR HEALTH CARE (EXCLUDING MERHCF)

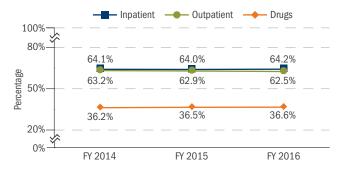


Source: MHS administrative data, 1/18/2017

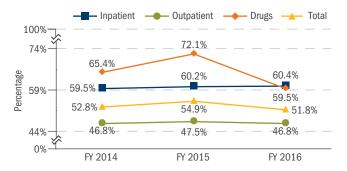
The purchased care share of total inpatient utilization remained about the same from FY 2014 to FY 2016. The purchased care share of prescription drug utilization increased slightly, while the purchased care share of outpatient utilization dropped slightly over the same time period.

### The purchased care share of total MHS costs dropped by one percentage point between FY 2014 and FY 2016. The purchased care share of inpatient and outpatient costs remained about the same, but dropped by six percentage points for prescription drugs.

# TRENDS IN PURCHASED CARE UTILIZATION<sup>a</sup> AS PERCENTAGE OF MHS TOTAL BY TYPE OF SERVICE



# TRENDS IN PURCHASED CARE COST AS PERCENTAGE OF MHS TOTAL BY TYPE OF SERVICE



Direct care prescription costs include an MHS-derived dispensing fee. Note: Numbers may not sum to bar totals due to rounding.

<sup>&</sup>lt;sup>a</sup> Utilization is measured as RWPs for inpatient care (acute care hospitals only), RVUs for outpatient care, and days supply for prescription drugs. Purchased care drugs include both retail and home delivery.

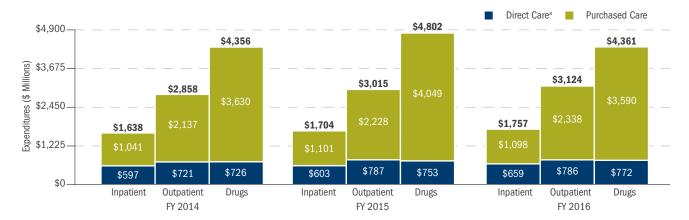
### MHS COST TRENDS (CONT.)

### **MERHCF Expenditures for Medicare-Eligible Beneficiaries**

The MERHCF covers Medicare-eligible retirees, retiree family members, and survivors only, regardless of age or Part B enrollment status. The MERHCF is not identical to TFL, which covers Medicare-eligible non-Active Duty beneficiaries age 65 and above enrolled in Part B. For example, the MERHCF covers MTF care and USFHP costs, whereas TFL does not. Total MERHCF expenditures increased from \$8,852 million in FY 2014 to \$9,242 million in FY 2016 (4 percent), including manufacturer refunds on retail prescription drugs. The percentage of TFL-eligible beneficiaries who filed at least one claim remained at about 83 percent.

- Total DoD direct care expenses for MERHCF-eligible beneficiaries increased by 9 percent from FY 2014 to FY 2016. Inpatient and outpatient costs grew by 11 percent and 9 percent, respectively, while prescription drug costs increased by 6 percent.
- From FY 2014 to FY 2016, TRICARE Plus enrollees accounted for 73 percent of DoD direct care inpatient and outpatient expenditures on behalf of MERHCF-eligible beneficiaries.
- Including prescription drugs, TRICARE Plus enrollees accounted for between 58 and 59 percent of total DoD direct care expenditures on behalf of MERHCFeligible beneficiaries from FY 2014 to FY 2016.
- ◆ Total purchased care MERHCF expenditures increased by 3 percent from FY 2014 to FY 2016. Inpatient expenditures increased by 5 percent, outpatient expenditures increased by less than 1 percent, and prescription drug expenditures decreased by 1 percent.

### MERHCF EXPENDITURES FYS 2014-2016 BY TYPE OF SERVICE



<sup>&</sup>lt;sup>a</sup> Direct care prescription costs include an MHS-derived dispensing fee.

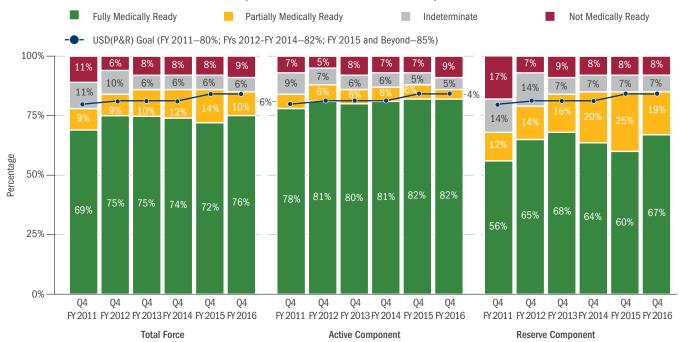
#### MEDICAL READINESS OF THE FORCE

The Department of Defense (DoD) Individual Medical Readiness (IMR) program assesses the medical readiness of an individual Service member or larger cohort (e.g., unit or Service component) against established readiness requirements and metrics of key elements to determine medical deployability in support of military operations. The DoD began tracking IMR status in 2003 to help ensure that Service members, both Active Component (AC) and Reserve Component (RC), were medically ready to deploy when required. The six requirements tracked include: Satisfactory Dental Health, Completion of Periodic Health Assessments, Free of Deployment-Limiting Medical Conditions, Current Immunization Status, Completion of Required Medical Readiness Laboratory Tests, and Possession of Required Individual Medical Equipment.



The IMR chart below shows that by the end of fiscal year (FY) 2016, the medical readiness of the total force overall, the AC, and the RC (all at 86 percent; shown as the sum of the percentages in the green and yellow sections) surpassed the Under Secretary of Defense for Personnel and Readiness (USD[P&R]) goal of 85 percent. Similarly, by the end of FY 2015, the total force overall (at 86 percent), the AC (at 88 percent), and the RC (at 85 percent) met or exceeded the 85 percent goal for that year. The total force medically ready measure reflects continued DoD efforts to improve the overall readiness of the entire force. As it has improved, the USD(P&R) medical readiness goal has increased, from 80 percent in FY 2011, to 82 percent from FY 2012 to FY 2014, to 85 percent in FY 2015 to present. The IMR status is a component of the MHS Partnership for Improvement (P4I) dashboard and is monitored by the Surgeons General and the Office of the Assistant Secretary of Defense (Health Affairs), in the Quarterly metrics Review and Analysis Forum.

# OVERALL INDIVIDUAL MEDICAL READINESS STATUS: FY 2011 Q4 TO FY 2016 Q4 (ALL COMPONENTS NOT DEPLOYED)



Source: Defense Health Agency (DHA), Healthcare Operations Directorate, Public Health Division, 10/26/2016 Note: Percentages may not sum to 100 percent due to rounding.

# HEALTHY, FIT, AND PROTECTED FORCE

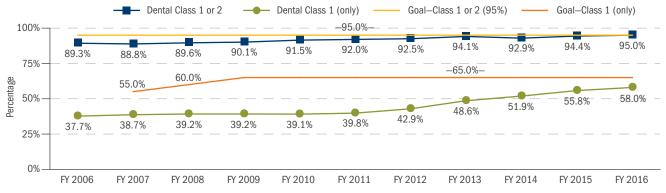
Key among the measures of performance related to providing an efficient and effective deployable medical capability and offering force medical readiness are those related to how well we (1) maintain the worldwide deployment capability of our Service members, as in dental readiness and immunization rates presented below; and (2) measure the success of benefits programs designed to support the RC forces and their families, such as TRICARE Retired Reserve (TRR) and TRICARE Reserve Select (TRS), presented in the Better Care section.

# **DENTAL READINESS**

The MHS Dental Corps Chiefs established in 1996 the goal of maintaining at least 95 percent of all Active Duty personnel in Dental Class 1 or 2. Patients in Dental Class 1 or 2 have a current dental examination, and do not require dental treatment (Class 1), or require non-urgent dental treatment, or re-evaluation for oral conditions that are unlikely to result in dental emergencies within 12 months (Class 2—see note below chart). This goal also provides a measure of Active Duty access to necessary dental services.

- Overall MHS dental readiness in the combined Classes 1 and 2 remains high. Following a generally steady annual increase since FY 2007, the combined Classes 1 and 2 percentage rose again in FY 2016 to 95 percent, up from 94.4 percent in FY 2015, meeting the long-standing MHS goal of 95 percent.
- The rate for Active Duty personnel in Dental Class 1 has increased in the past few years, from about 49 percent in FY 2013 to 58 percent in FY 2016— or seven percentage points short of the MHS goal of 65 percent. The MHS goal of 65 percent was increased in FY 2009 from the 55 percent goal established in FY 2007.

#### ACTIVE DUTY DENTAL READINESS: PERCENT CLASS 1 OR 2



Source: The Services' Dental Corps–DoD Dental Readiness Classifications, 10/26/2016 Definitions:

- Dental Class 1 (Dental Health or Wellness): Patients with a current dental examination who do not require dental treatment or re-evaluation. Class 1 patients are worldwide deployable.
- Dental Class 2: Patients with a current dental examination who require non-urgent dental treatment or re-evaluation for oral conditions that are unlikely to result
  in dental emergencies within 12 months. Patients in Dental Class 2 are worldwide deployable.

# BETTER CARE: ACCESS, QUALITY, SAFETY, AND PATIENT ENGAGEMENT

As noted in last year's report, since the Secretary of Defense (SECDEF)—directed comprehensive review of the Military Health System (MHS) in 2014, MHS has focused on (1) improving access to medical care to meet defined standards, (2) ensuring that the quality of its health care meets or exceeds defined benchmarks, and (3) creating a culture of safety with effective processes for ensuring safe and reliable care of beneficiaries. The MHS met all SECDEF-directed deadlines and continues to implement actions to improve



access to care, ensure quality of care meets or exceeds benchmarks, and enhance patient safety. To date, out of 41 action plans developed to achieve the SECDEF's vision of the MHS as a preeminent high-reliability health care system, 22 have been completed and 19 are in progress. Examples of MHS-wide initiatives follow.

- ◆ Access to Care (ATC): "First Call Resolution" policies ensure direct care enrollees' medical needs are addressed on the first call; Simplified Appointing policies have reduced appointment-type variance, increasing the number of available appointments. Since May 2014, ATC performance on all current measures has improved and variance has decreased, and success is attributed to multiple ATC initiatives.
- Quality/Safety: Expanded National Surgical Quality Improvement Project (NSQIP) participation from 17 to 36 military treatment facilities (MTFs), with a goal of 45, providing more MTFs with surgical quality data to target improvements; purchased Post-partum Hemorrhage Operative Simulators, and developed standardized training on high-risk obstetrical events; developed a Leadership Engagement Strategies Toolkit, providing leaders with strategies to foster a culture of safety. Numerous quality and safety initiatives have laid the groundwork for enhanced patient safety and quality of care.
- ◆ Transparency: Published data on quality, access, and patient satisfaction on <u>health.mil</u> in December 2014; greatly expanded public data in May 2016, including patient safety and health outcomes data.

The MHS has begun the journey of transforming into a high reliability organization (HRO) by developing or refining internal processes and structures; collaborating with, and learning from, noted civilian health system leaders who have progressed in their own HRO journeys. This journey has resulted in a governance structure for leadership and execution; has established a performance management system to assess and improve MHS performance at the individual MTF levels as well as the Services and enterprise level; and has emphasized transparency of information with visibility internally, externally, especially to Department of Defense (DoD) beneficiaries.

An MHS performance management system, Partnership for Improvement, or P4I, was operational in January 2015, presented to MHS leadership in March 2015, and has been formally reviewed by the Assistant Secretary of Defense for Health Affairs (ASD[HA]), Surgeons General, and supporting leaders on a quarterly basis since. A subset of these measures has been presented to senior non-medical DoD leadership. Data in P4I are provided at the MTF level, allowing leadership at all levels of the MHS to monitor progress and identify opportunities for improvement on an ongoing basis. This performance management system has revealed improvements in performance in several of the measures supporting the Quadruple Aim; has shown progress in reducing variance, particularly in primary care access; and has identified further opportunities to reduce variance within the Services and National Capital Region—Military District (henceforth called Services), and across the system. The P4I dashboard, and related dashboards for higher levels of leadership, with support from senior leadership, has both established accountability for performance improvement at every level of the organization and identified those areas where continued improvements are needed.

In addition to the assessment of MTF and aggregate performance through the dashboards, results of these and other measures are presented on the ASD(HA) public-facing website. The website presents, with respect to each MTF, the MHS collaborative assessment of data on accreditation and findings; patient safety, quality of care, and satisfaction; health outcome measures; and relevant Service policies. Publication of these data in May 2016 complied with National Defense Authorization Act (NDAA) 2016 Section 712 requirements, and supported compliance with NDAA 2016 Section 713 as well, as promised in the FY 2016 Evaluation of the TRICARE Program report.

# BETTER CARE: ACCESS, QUALITY, SAFETY, AND PATIENT ENGAGEMENT (CONT.)

Extensive data and analysis on the quality of care in MHS have been provided in previous reports to Congress. This report has been expanded to address the 2014 Secretary of Defense–directed MHS review and subsequent October 1, 2014 Secretary's Action Plan with corrective strategies. This report also responds to data required in Section 713 of NDAA 2016, with data in this section presented at the MHS level, in support of the data presented in the preceding pages in the Service Supplements assessing the data and performance at the MTF and Service levels.

In response to Section 713 of NDAA 2016:

- Reporting to the National Practitioner Data Bank (NPDB): In FY 2016, 129 practitioners providing health care in MTFs worldwide were reported to the NPDB (reported by the Services to the DoD Risk Management Committee). The activities that gave rise to the reports include the following: paid tort claims (malpractice claims), adverse privilege actions, government administrative actions, Active Duty death cases, adverse practice actions, judgments or convictions, and Active Duty disability cases. As noted in last year's report, 127 practitioners were reported in FY 2015 (FY 2016 report, page 47).
- 2. With respect to each military MTF, as assessment of:
  - The current accreditation status, including recommendations for corrective action. Accreditation Status of MTFs: As noted in the FY 2016 report (page 47), DoD Instruction 6025.13 requires all MTFs, as well as hospitals and other facilities used by managed care support contractors, to meet or exceed the standards of appropriate external accrediting bodies. Military hospitals and clinics are accredited by several external, independent health care quality and accreditation organizations. All DoD military hospitals (inpatient facilities) are accredited by The Joint Commission (TJC). An independent, not-forprofit organization, TJC accredits and certifies more than 20,500 health care organizations and programs in the United States. TJC accreditation and certification are recognized nationwide as symbols of quality that reflect an organization's commitment to meeting health care performance standards. Accredited hospitals, including inpatient MTFs, can be found on TJC's website at: http://www. qualitycheck.org/consumer/searchQCR.aspx. All uniquely governed, free-standing ambulatory clinic MTFs are accredited by either TJC (same site as above) or the Accreditation Association for Ambulatory Health Care (AAAHC; http://www.aaahc.org/). Air Force clinics began transitioning to TJC accreditation beginning in FY 2016 and will continue when accreditation requires renewal. All other clinics are subordinate to MTF hospitals and included in TJC accreditation. As a result of the MHS Review and

- HRO task force, and in response to Section 712 of NDAA 2016, MTF-specific hospital and clinic accreditation status, accreditation organization (TJC or AAAHC), survey dates, and requirements for improvement to meet full accreditation are displayed at the OASD(HA) public-facing Web portal <a href="https://www.health.mil/AccreditationandPolicy">www.health.mil/AccreditationandPolicy</a>. This transparency is consistent with standardized management across an enterprise journeying toward an HRO, and supports the Section 713 requirements.
- Any policies or procedures implemented during the year by the Secretary of the military department concerned, designed to improve patient safety, quality of care, and access to care. While the FY 2016 reported cited the March 12, 2015, ASD(HA) policy memorandum regarding Medical Quality Assurance and Clinical Quality Management, a consolidated summary of relevant Health Affairs and Service policies is provided at <a href="https://www.health.mil/AccreditationandPolicy">www.health.mil/AccreditationandPolicy</a> and they are also provided in their associated subject areas related to access, patient safety, and quality of care at www.health.mil.
- Data on surgical and maternity care outcomes during the year. MHS-level data were presented in the FY 2016 Report (pages 50-51), and again presented in the following pages. MTF-level data over time are publicly presented at www.health.mil in the "Health Outcomes" section, showing at each relevant MTF the number of deliveries, percentage of deliveries to full term, and complications related to surgery (the latter compared to the top 10 percent of American College of Surgeons' national Quality Surgical Improvement Program [SCIP] rates among 600 leading hospitals in the U.S. The MHS initiated participation in the American College of Surgeons (ACS) NSQIP to validate the quality of surgical care and identify opportunities to enhance surgical outcomes. The ACS NSQIP evaluates outcome measures associated with surgical mortality and morbidity, and is a nationally benchmarked, clinical, risk-adjusted, and outcomes-based program. During FY 2016, 17 MTFs participated in NSQIP. The MHS 90-day Review included a recommendation to expand participation in ACS NSQIP to include all inpatient MTFs.
- Data on appointment wait times during the year. MHS-level appointment and other access to care data were presented in last year's report (pages 35–46), and again this year (see "Access to Care" section beginning on page 89). MTF-level data over time are publicly available at <a href="www.health.mil">www.health.mil</a> in the "Patient Satisfaction and Access" section, showing more detailed results for primary care manager continuity, access to acute and primary care appointments, and patient engagement and

# BETTER CARE: ACCESS, QUALITY, SAFETY, AND PATIENT ENGAGEMENT (CONT.)

self-reported access to care data. Data presented for each MTF on the public website depict unique measures of access, and are compared to the MHS-stated established standards.

 Data on patient safety, quality of care, and access to care, as compared with standards established by DoD. In addition to the MHS-level data presented in this report, and the individual MTF-level data presented in the health.mil public-facing website, the MHS performance management system (P4I) also presents data at the MTF level. P4I users can aggregate the data to higher levels relevant for leadership review at each level (e.g., the MTF level for local commanders and their subject matter expert staff, or the Service Intermediate Command level [Army's Regional Health Command-C or Navy Medicine-East]), or the multi-service market area level, all the way to the Service and MHS levels. These data are routinely monitored and assessed by the Service staff and their MTF leadership, as well as in relevant Tri-Service working groups

for assessment of policies or processes of highperforming MTFs that might be shared across the Services and/or standardized across the MHS. Measures have established expected targets of performance based on relevant and applicable civilian standards where relevant (e.g., comparing MHS results of the outcomes measure of complications related to surgery compared to the top 10 percent of the NSQIP reporting hospitals in the nation, or MHS beneficiary ratings of their willingness to recommend a hospital to others compared to the HCAHPS 50th percentile. Where there are no relevant external benchmarks or standards, the MHS uses either legislated standards (such as appointment availability) or targets based on improvement from prior year results (such as patient reports of their ability to get care when needed). Data are presented on the health, mil public-facing website to help our beneficiaries and constituency understand their health care capability in their local areas.

The Health Affairs public-facing website at <a href="www.health.mil">www.health.mil</a> provides a central portal for MHS beneficiaries and constituency to access key MTF-level data on patient access, quality, and safety. The initial Web page presents as shown in Figure 1 below, and, after clicking on the "MHS Transparency" hyperlink, the user is brought to the various transparency domains (Figure 2): patient satisfaction and access to care, health outcomes, patient safety, and quality of care (to include accreditation status of every MTF and a summary of key policies relevant to access, quality, and safety). This and additional Information on individual MTFs may also be reviewed by going to each MTF's home Web page.

FIGURE 1. MHS PUBLIC-FACING TRANSPARENCY PORTAL (WWW.HEALTH.MIL)



# BETTER CARE: ACCESS, QUALITY, SAFETY, AND PATIENT ENGAGEMENT (CONT.)

FIGURE 2. MHS PUBLIC FACING TRANSPARENCY PORTAL (WWW.HEALTH.MIL)



Feedback" box to tell us how we are doing and, more importantly, how we can improve.

New to the report this year is a supplement provided by the Surgeons General of the Army, Navy, and Air Force, as well as by the Director of the National Capital Region Medical Directorate (hereafter referred to as "the Services"). As exemplified in the following Service supplements to this report, leveraging what the MHS has learned from top-performing civilian health care systems, the Services have embraced high reliability as the next step in their long-standing commitment to high-quality health care and safe patient care. Each Service has committed to promoting the principles of high reliability and advancing the imperatives of change necessary for the MHS to achieve high reliability:

leadership commitment to zero harm, embedding principles and practice of a safety culture, supporting continuous process improvement, enhancing teamwork, and adopting a patient-centered culture. Consistent with the overarching MHS HRO Framework, the Services highlight in the sections that follow, numerous activities and initiatives in support of HRO transformation, building the foundation for eliminating harm, decreasing variance, and improving performance across the system. To the extent that information in this report contains medical quality assurance data or other information, it has been reported in the aggregate to comply with the requirements of 10 U.S.C. 1102.

#### ARMY SURGEON GENERAL SUPPLEMENT

The Army Surgeon General (TSG) communicates her imperatives through the Army Medicine Campaign Plan 2017, establishing Readiness as the #1 priority and articulating how the primary performance domains of our healthcare system – Access to Care, Patient Satisfaction, Quality of Care and Patient Safety – comprise the foundation of that priority. In the nearly 200 metrics evaluated in the Military Health System (MHS) Review of 2014, outlier Military Treatment Facilities (MTFs) were identified and significant variation in performance within Army Medicine and across the MHS was evident. Since



then, Army Medicine has taken corrective action to meet the action plan requirements set by the SECDEF, and has largely improved outlier MTF performance to the standard or better. Through the aggressive adoption of high reliability principles/imperatives, reorganization of the MEDCOM service line structure, creation of a quality and safety Deputy Chief of Staff position/section, implementation of innovative access to care initiatives, and redesign of a review and analysis and incentive systems for performance management, Army Medicine performance has made great strides in CY2016.

#### MANEUVER TO HIGH RELIABILITY

Since 1775, Army Medicine has been a reliable capability for our Nation, the Joint Force, our Army, and all those entrusted to our care. In 2012, Army Medicine began working to implement the tenets of the "High Reliability Organization" (HRO) to continue to evolve our understanding of patient safety. The following imperatives for change were adopted in its mission: (1) leadership commitment to zero preventable harm; (2) creation of a culture of safety; and (3) implementation of robust process improvement (RPI). The MHS Review of 2014 resulted in a mandate that the MHS transform into a HRO. In order to better address Quality and Safety, all MEDCOM Quality and Safety elements of the headquarters staff were realigned under the leadership of a single general officer (the Deputy Chief of Staff for Quality and Safety (DCS-QS)). Additionally, the command-level leader structure for MTFs was revised to include a Deputy to the Commander for Quality & Safety. The TSG, in her capacity as Commanding General of MEDCOM, led summits in all Regional Commands and Major Subordinate Commands in order to demonstrate leadership commitment and raise the HRO literacy of our senior leaders. These measures enhanced

the emphasis placed on quality and safety within the command channels and increased our ability to accelerate patient safety and quality initiatives in our commitment to the goal of "Zero Preventable Harm."

The DCS-QS incorporated quality elements into the MTF performance plans through the Integrated Revenue Incentive System (IRIS). This enabled MEDCOM-wide emphasis for specific clinical quality outcomes and focus on MTF efforts to improve the quality of care delivery. The DCS-QS works closely with the Service Lines and Strategy Management, integrating clinical quality measures into monthly regional review and analysis briefings chaired by the Deputy Commanding General for Operations, thus ensuring emphasis and guidance from senior MEDCOM leadership. The data include eight strategic clinical quality measures that align with those of the MHS. The DCS-QS hosts a monthly multidisciplinary quality forum to develop a common operating picture for clinical quality and includes discussion of quality improvement initiatives in the Service Lines and focused effort to achieve in depth understanding of quality data. The MEDCOM Quality and Safety Strategy identified two lines of effort and 12 objectives to focus and align HRO efforts.

#### **HRO Directorate, Learning Organization, and Transparency efforts**

The HRO Directorate, Learning Organization, and Transparency efforts were established under the DCS-QS to inculcate HRO principles across the MEDCOM, enable the MEDCOM to become a more effective Learning Organization and assist in Army HRO transformation. The addition of this entity has enhanced the efforts of the Army Patient Safety Program (PSP) to streamline the enterprise "Lessons Learned" recommendations into MEDCOM policy. Since early 2016, the PSP has rewritten and/or published policies that positively influence standards such as universal protocols, surgical counts, root cause analysis (RCA) process policy, surgical fires, falls prevention, colorcoded wristbands, and clinical alarms policies.In FY16,

six MTFs conducted Oro 2.0™ HRO self-assessments as a result of the MEDCOM partnership with The Joint Commission Center for Transforming Healthcare. The MTFs completed and implemented action plans in order to execute their HRO efforts. The principles of HRO have been incorporated into a variety of professional leader and clinical development opportunities across the MEDCOM, including: most programs of instruction at the Army Medical Department Center and School (AMEDDC&S); a HRO Short Course at AMEDDC&S to better prepare Deputies to Commanders for Quality/ Safety to inculcate high reliability efforts within the MTFs; Quality/Safety training in the MEDCOM Decision Science program for MTF leaders, service line

# MANEUVER TO HIGH RELIABILITY (CONT.)

staff, dental leaders, etc.; a monthly HRO 101 "basics" course conducted at MEDCOM headquarters to raise the level of understanding of high reliability within the MEDCOM HQ staff; and a monthly HRO quality/safety manager and champions phone forum to discuss updates across MEDCOM and MHS and to share lessons learned. HRO concepts have recently been introduced as a regular element of Team Strategies and Tools to Enhance Performance and Patient Safety

(TeamSTEPPS®) training, which is mandated for all clinical and non-clinical staff at all MTFs.

Since May 2015, and in concert with Sister Components and the Defense Health Agency (DHA), all Army MTFs now publicly display a series of measures on the home pages of their external-facing websites in order enhance transparency to the beneficiaries and the public. Army Medicine is a partner in the MHS in the next phase of enhancement of transparency in order to increase the value of the information to the patient.

#### **Continuous Process Improvement (CPI)**

Army Medicine's CPI Program was established in accordance with Army guidance and DoDI 5010.42. It is centrally managed at the OTSG/MEDCOM level with decentralized execution, resulting in over 600 improvement projects completed since 2006, 58 of which were completed in FY2016. Process improvement (PI) at the MTF level is facilitated by PI managers. Regional Health Commands have a Directorate of Strategy and Innovation (DSI), which includes a Lean Six Sigma (LSS) Deployment Director (DD), Master Black Belt (MBB), Black Belt (BB) and Analyst. These regional offices specialize in robust process improvement (RPI) and advise leaders and PI managers at both the region and MTF levels. The Directorate of Strategy Management at OTSG/MEDCOM provides guidance,

training, coaching, and certification for all of MEDCOM. The MEDCOM program was recognized by the Under Secretary of the Army for winning the Office of Business Transformation 2015 Army LSS Excellence Awards Program (LEAP) Army Regulation (AR) 10-87 Command Level category for the third time since the award's inception in 2008. With the renewed emphasis on RPI, MEDCOM also developed a new one-week Lean Leader course to better enable our culture of everyday improvement. This Lean training supplements current Army LSS Programs of Instruction in LSS as we continue to grow and sustain the inventory of personnel with the necessary skills to constantly improve efficiency and effectiveness, with a focus on readiness, quality, safety, access and satisfaction.

# **QUALITY**

Overall, the Army has made significant progress on Healthcare Effectiveness Data and Information Set (HEDIS®) quality of care measures since the 2014 MHS Review when comparing baseline data to data through 3QFY16. The Army has demonstrated performance in the top 10% of organizations nationally when compared to the civilian HEDIS® benchmarks in the areas of Colon Cancer screening, Chlamydia screening, and Mental Health follow-up 7 and 30 days after hospitalization. Four areas identified by Army as low performing are measures related to annual Diabetes Hemoglobin A1C screening, Low Back Pain Imaging, Appropriate Testing for Children with Pharyngitis, and Antidepressant Medication Management. In response to low performing HEDIS® measures, the Primary Care Service Line requires Population Health Nurses to demonstrate utilization of multiple electronic resources including the MHS Population Health Portal within CarePoint® to utilize patient information and clinical data to generate action lists to ensure beneficiaries receive clinical preventive services appropriate to age, gender, and condition in a timely manner.

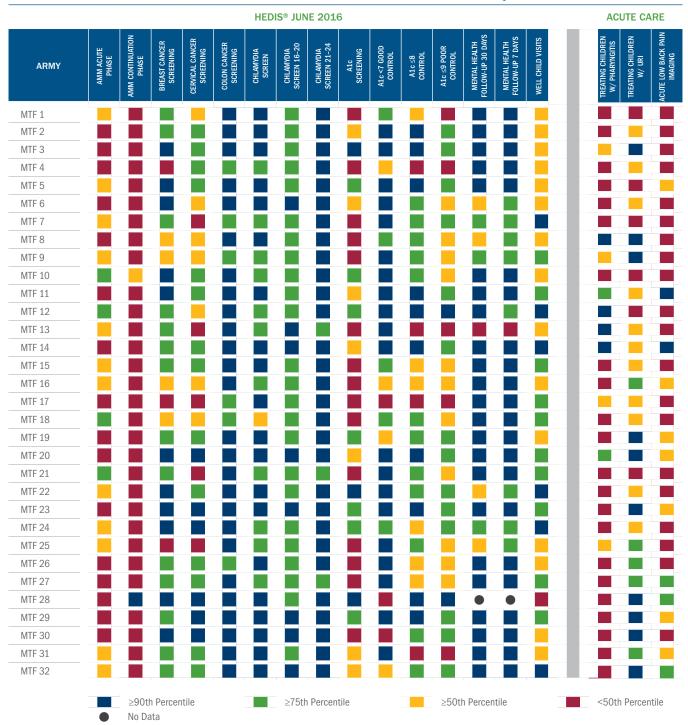
The Army tracks performance of low performing facilities and engages in performance improvement activities to effect positive movement in low performing measures. Clinical communities are engaged in

performance improvement activities in work through the use of summits. Performance improvement summits are designed to bring together clinical and process improvement experts to identify drivers of performance and to provide a change package for all Army MTFs. Change packages are created to aid MTFs in improving HEDIS® scores and clinical outcomes for enrolled beneficiaries.

In response to the 2014 MHS Review, Army representatives have been actively participating in working groups to perform a study and analysis of HEDIS® measures for prioritization and recommendation for future development and implementation. Prioritization is based on relevance to safety, quality, access; the applicability to the enrolled population; and feasibility based on current data sources. In May 2016 it was recommended to initially implement seven new HEDIS® measures, which is likely to take between 12-24 months to program, test run, and quality check with an anticipated final implementation date sometime in FY 2017.

In 4QFY16, Army Medicine was recognized as having the "Most Improved Quality Composite" as calculated in the CarePoint® portal. The period of performance was Jan 16-Sep 16.

#### ARMY HEDIS® MEASURES HEAT MAP STATUS AT END OF 3QTR16



Source: Office of the Surgeon General, Army, 1/10/2017

# **QUALITY** (CONT.)

#### **ORYX®** Measures

Army MTFs have made significant improvement in The Joint Commission (TJC) ORYX measures since the review of quality measures in the 2014 MHS Review when comparing 2014 baseline data to through 1QFY16. All Army inpatient facilities are meeting TJC's 85% composite score on selected core measures as required. Across the board, Army facilities are meeting or exceeding the national average for ORYX measures. Two core measure sets, Childhood Asthma and Immunizations, have been identified by the enterprise as low performing measures.

In response to low performing ORYX measures, the MEDCOM Clinical Performance Assurance Directorate (CPAD), in collaboration with DHA, conducted a concentrated review of abstracted records reports in 2014 and early 2015. The review demonstrated that low abstracted volumes (i.e., few patients met measure criteria for abstraction) and lack of documentation in the electronic health record (EHR) contributed to low measure performance. Army CPAD tracks all ORYX measures and works in conjunction with regional staff to ensure individualized MTF action plans are in place to improve performance. The Childhood Asthma and Immunizations measures have been incorporated into

MEDCOM's IRIS to support MTF cost management while maximizing the value of patient care services.

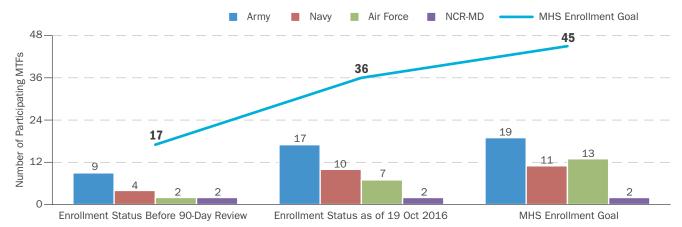
CPAD worked collaboratively with the Essentris Content Advisory Group (ECAG) to develop EHR content to better support the clinical documentation of patient care, which in turn supports the measure compliance. Furthermore, some documentation fields were turned into forced function fields which require an entry into the designated field in order to save content in the EHR. CPAD and regional representatives attend the ORYX Exit Conference for each MTF. Fall-out data are reviewed with each MTF and strategies are discussed with process owners for improving measure performance. Since early 2015, each MTF has had access to Encore (formerly Indigo) to track measure performance on a monthly basis versus waiting for 3 to 6 months for vendor aggregated data. In addition, quarterly communities of practice calls are conducted with Army regional and MTF quality personnel to share lessons learned, build process measure maps to codify activities of high performing Army MTFs, and hear from industry leaders in healthcare on developing and improvement of performance measurement systems.

#### **National Surgical Quality Improvement Program (NSQIP)**

The American College of Surgeons (ACS) National Surgical Quality Improvement Program (NSQIP) is the nationally validated, risk-adjusted, outcomesbased program to measure and improve the quality of surgical care. As of today, 776 facilities worldwide are participating (~25% of hospitals nationwide). Nine Army MTFs use NSQIP to look at surgical quality data in aggregate and benchmark that data. Army MTF performance on most NSQIP measures is on par with civilian counterparts and all-case morbidity appears to be slightly better. One Army MTF, Dwight D. Eisenhower Army Medical Center (DDEAMC), was recognized by the

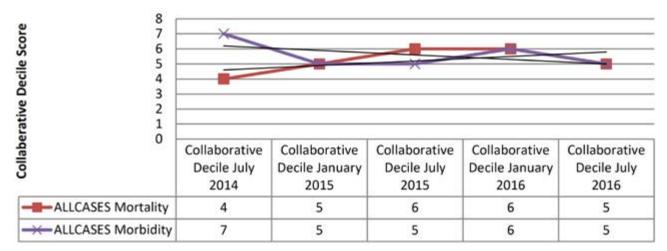
ACS for meritorious outcomes in their composite quality score. This is the second year in a row that DDEAMC ranked in the top 10% in the nation in surgical quality (of the small percentage of US hospitals willing to submit their quality data). The NSQIP will be expanded to all 22 Army surgical sites in the next fiscal year roll-out. Army Medicine participates in a surgical collaborative with the Institute for Healthcare Improvement called the Surgical Quality Learning Program, enhancing process improvement at the MTF level as measured by NSQIP metrics.

#### NSQIP ENROLLMENT STATUS FOR THE MHS



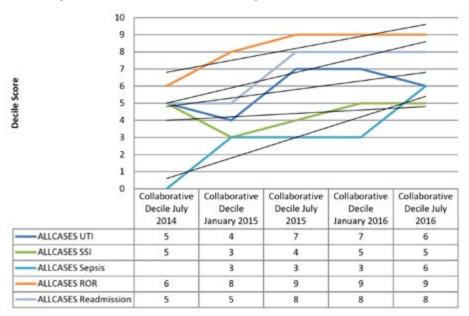
Source: Office of the Surgeon General, Army, 1/10/2017

#### ARMY NSQIP MORTALITY AND MORBIDITY OVER TIME



NSQIP Mortality for the Army Collaborative has a slight upward trend since 2014. NSQIP All Cases morbidity has a slight downward trend since 2014 based on NSQIP Decile Score. 1/10/2017

#### ARMY NSQIP COLLABORATIVE FIVE MOST FREQUENT MORBIDITY EVENTS OVER TIME



The five most frequent complications experience by patients included in the Army NSQIP collaborative sample all exhibit an upward trend since 2014 based on decile scores. 1/10/2017

#### National Perinatal Information Center (NPIC) Measures on Maternal Morbidity and Mortality

The rate of deliveries across the MEDCOM has remained steady at a rate of approximately 2,000 deliveries each month. The Direct Care System provides obstetric care to approximately 93% of the eligible beneficiaries. The report below is a comparative analysis for the Army MTFs for CY16Q1. The quality measures are reported through the National Perinatal Information Center. The measures presented include the key quality outcome measures tracked by the Army Office of The Surgeon General (OTSG). These measures include the incidence of postpartum hemorrhage, newborn birth trauma as a result of shoulder dystocia

with vaginal deliveries, and unexpected newborn complications.

For the postpartum hemorrhage measure, the Army has consistently displayed a lower incidence than the NPIC data base average (national benchmark) which includes civilian organizations with similar services. For the incidence of shoulder dystocia with associated birth trauma in Army MTFs, the rate is lower this quarter for both the MHS average as well as the NPIC database average.

# QUALITY (CONT.)

MTF	CY16 Q1 QUARTERLY BIRTH	POSTPARTI	JM HEMORRHAGE		R DYSTOCIA ED BIRTH TRAUMA
MTF 1	62	•	3.23%	•	2.38%
MTF 2	128	•	0.00%	•	0.00%
MTF 3	122		1.64%	•	2.17%
MTF 4	393	•	1.78%	•	2.50%
MTF 5	411		1.70%	•	1.35%
MTF 6	546	•	1.10%	•	2.29%
MTF 7	384		1.56%	•	1.93%
MTF 8	107	•	1.87%	•	3.23%
MTF 9	50		2.00%	•	2.38%
MTF 10	202	•	0.99%	•	3.79%
MTF 11	33		3.03%	•	0.00%
MTF 12	193	•	1.55%	•	4.41%
MTF 13	480		3.33%	•	0.51%
MTF 14	205	•	4.88%	•	3.80%
MTF 15	94		1.06%	•	1.45%
MTF 16	624	•	2.40%	•	1.31%
MTF 17	55		1.82%	•	0.00%
MTF 18	350	•	1.14%	•	1.08%
MTF 19	253		0.00%	•	1.73%
MTF 20	612		0.33%	•	1.37%
NPIC Data Base Average (Civilian Benchmark)	862		3.41%		2.02%

Data Source: NPIC Exec Summary CY 2016 Q1, 1/10/2017

# **The Joint Commission Accreditation**

All Army MTFs are accredited.

#### **ARMY PATIENT SAFETY**

The mission of the PSP is to promote a culture of safe, high-quality patient care to end preventable patient harm by engaging, educating and equipping patient-care teams to put evidence-based safe practices in place across the organization. The Army PSP regularly monitors, measures and identifies trends in patient safety data and safety event reports, which are leveraged to prioritize areas of focus for patient safety improvement in collaboration with the other Services and DHA. The Army PSP then develops targeted tools and solutions, disseminates them to frontline care teams through the Regional Health Commands, and evaluates their impact for continuous improvement.

The comprehensive May 2014 MHS Review reinvigorated the organization's commitment to the delivery of safe, high-quality health care with the adoption of high reliability principles to reduce variability and improve performance. The Army PSP is integral to this effort in its continued support for advancing a culture of safe healthcare system and establishing data-driven, standardized processes to promote safe and reliable care for every patient, every time.

#### **Assessing Data to Identify Patient Safety Needs**

Reporting patient safety events is one of the key components in the MHS effort to achieve high reliability, to continuously improve, and to provide the safest patient care possible. The reporting of patient safety events, including those that did not reach the patient (i.e., near miss events), allows Army PSP to analyze the sequence of events that potentially lead to an error, identify trends in patient harm across the direct care system, and share lessons learned across the enterprise to prevent future harm events reaching the patient. The Patient Safety Reporting (PSR) system is a standardized, anonymous, voluntary web-based reporting system that was implemented across the MHS direct care system in FY2011 to capture patient safety events. Since Army Medicine promotes reporting of all adverse events, an increase in reports is generally a desirable trend, indicative of the MEDCOM's progress as a non-punitive and transparent learning culture.

Army leadership has directed MTF commanders and staff to report all patient safety events reaching the patient and encourages the reporting of near misses to the greatest extent possible. The table below compares FY2013-FY2016 patient safety reporting stratified by harm classification. Note that the PSR system stood up in CY12 and rolled out in CY13 as reflected in the low numbers of PSRs submitted for that year. In CY2016, a total of 38,572 patient safety event reports were submitted from our direct care system, which includes 19 hospitals, 14 ambulatory clinics, 28 dental clinics, and the operational environment. Near miss safety events accounted for 45% of all patient safety events reported in CY2015 and 43% in CY2016, while the percentage of harm events remained virtually the same at 14% for both CY2015 and CY2016.

Harm Group	CY2	013	CY2	014	CY2	015	CY2	016
	#	%	#	%	#	%	#	%
Harm	10*	43%	649	18%	4,922	14%	5,466	14%
No Harm	5*	22%	1,489	42%	14,342	41%	16,417	43%
Near Miss	8*	35%	1,438	40%	15,424	45%	16,689	43%
Total	23*	100%	3,576	100%	34,688	100%	38,572	100%

Harm = event reached patient, harm experienced by patient; No Harm = event reached patient, but no harm was evident; Near Miss = event did not reach patient, and no harm experienced by patient.

Source: Office of the Surgeon General, Army, 1/10/2017

In addition to capturing patient safety events reported through PSR, Army PSP receives root cause analyses (RCAs), which are required from MTFs for every Sentinel Event (SE) that occurs within a facility. Services can also voluntarily submit "Internal" RCAs for safety events that are not regarded as Sentinel, but for which an RCA would still be beneficial by promoting learning and system improvements. Of the RCAs received in FY2016, the leading event categories included: Wrong

Site/Person/Procedure Surgery (WSS), Unintended Retention of Foreign Object (URFO), Delay in Treatment, Intraoperative/Post-Operative Complications, and Maternal. There was an 11% increase in the number of RCAs in CY2016, compared to CY2015. The leading root cause categories have remained steady over time, and include management systems, work direction, communication, training, and procedures.

<sup>\*</sup> The PSR system stood up in CY12 and rolled out in CY13; the low numbers of PSRs submitted for that year reflect this.

# ARMY PATIENT SAFETY (CONT.)

#### **Patient Safety Priorities**

Army Medicine leadership and the Army PSP have prioritized four safety event categories to focus on improvement. These include: (1) WSS SEs, (2) URFO SEs, (3) Central Line-Associated Bloodstream Infections (CLABSI), and (4) Catheter Associated Urinary Tract Infections (CAUTI).

#### **WSS and URFO**

WSSs are wrong-site, wrong-side, wrong-procedure, or wrong-patient errors, and are relatively rare, preventable patient safety events. The MHS has adopted TJC definition of a WSS SE as an "invasive procedure, including surgery, on the wrong patient, at the wrong site, or that is the wrong (unintended) procedure." All WSS SEs, regardless of the patient outcome or procedure type, are considered TJC reviewable and must be reported appropriately. The MHS goal for WSS SEs is zero since these "never events" are considered preventable.

The table below shows the number of direct care URFO and WSS SEs that were reported to Army Patient Safety Analysis Center (PSAC) from CY2013 to CY2016. The number of URFO SEs reported increased from 14 in CY2015 to 23 in CY2016, representing a 64% increase, while the overall trend for URFO events from 2013 to present also shows an increase. The number of WSS SEs reported increased from 35 in CY2015 to 69 in CY2016, representing a 97% increase. The overall trend of WSS from 2013 to present reflects an increase in reporting as a result of transparency efforts and inculcation of HRO concepts. Inclusion of Dental WSSs and URFOs also accounts for the increase in the number of SEs reported. Army Medicine promotes reporting in a non-punitive climate, thus an increase in SE reports over time is considered a desirable trend with positive benefit.

	CY2013	CY2014	CY2015	CY2016
Number of URFO Sentinel Events	10	9	14	23
Number of WSS Sentinel Events	6	11	35	69

Source: Office of the Surgeon General, Army, 1/10/2017

#### **CLABSI and CAUTI**

CLABSIs and CAUTIs are healthcare-associated infections that occur after placement of a central line or catheter, respectively. These infections are associated with increased morbidity, mortality, health care costs, and length of stay per the CDC; however, they can be prevented when recommended infection control measures are followed. There are five specific ICU types within the MHS that are required to report to CDC's National Healthcare Safety Network (NHSN), including Medical, Pediatric Medical/Surgical, Medical/Surgical, Surgical, and Trauma.

The Army has made significant strides to reduce healthcare-associated infections as reflected in a downward trend of CAUTI and CLABSI. This was compared using with the national benchmarking methodology from the NHSN. The Army standardized practices in all the MTFs with written policies reflecting current evidence based guidelines. The policies are updated every two years to reflect changes in national research. The most recent update was in the CAUTI policy in late 2016.

The most reliable way to track CLABSI and CAUTI is through the use of the Standardized Infection Ratio (SIR). This measure compares the number of infections (CLABSI and CAUTI) that occurred in MHS direct care ICUs to the number of infections that were predicted in these settings by a statistical model that adjusts for patient characteristics that may increase the risk of infection. These methods were developed by the Centers for Disease Control and Prevention (CDC) and are the current benchmarks used for performance comparisons by Medicare. The CDC SIR benchmark is SIR <1. Army Medicines SIR is < 1 for both CLABSI and CAUTI. To ensure continued success in these measures, the Army Medical Command has hired an Infection Preventionist and ensured that all applicable MTFs submit data to the NHSN.

# ARMY PATIENT SAFETY (CONT.)

#### **Patient Safety Culture**

In 2016, the Army PSP participated in the MHS Patient Safety Culture Survey, which is adapted from the nationally-recognized Hospital Survey on Patient Safety Culture developed by the Agency for Healthcare Research and Quality (AHRQ) and designed to assess staff perceptions of patient safety at their MTF. All Army Inpatient, Outpatient, and Dental treatment facilities were surveyed or eligible to participate. The overall response rate for this survey was 39%. The last survey prior to this was in 2011.

Army Medicine's Patient Safety Grade of 76% is comparable to the AHRQ national benchmark.

Nationally, the dimension of Non-Punitive Response to Errors is an opportunity for improvement for both civilian and MTFs. Army Medicine improved 5% (statistically significant) on this dimension when compared to the 2011 survey and exceeds the AHRQ benchmark by 1%. Army Medicine's score for Communication Openness improved by 4% since 2011 and is comparable to the MHS and AHRQ benchmarks. In general, overall Army results of the 2016 survey remained stable or have improved since 2011. Implementation and inculcation of HRO principles/imperatives and a culture of accountability and fairness throughout Army Medicine will likely drive improvements in patient safety culture for future surveys.

	Army Percent Positives Scores					
Army Results by Survey Dimension	MEDCOM 2016	MEDCOM 2011	2016 Overall MHS	2016 AHRQ Benchmarks		
Teamwork within Units	74%	73%	76%	82%		
Teamwork Access Units	58%	58%	59%	61%		
Management Support for Patient Safety	71%	70%	72%	72%		
Supervisor/Manager Expectations & Actions Promoting Patient Safety	73%	71%	74%	78%		
Communication Openness	64%	60%	64%	64%		
Feedback & Communication About Error	63%	60%	65%	68%		
Organizational Learning- Continuous Improvement	67%	64%	69%	73%		
Handoffs & Transitions	48%	48%	50%	48%		
Staffing	47%	48%	46%	54%		
Nonpunitive Response to Errors	46%	41%	46%	45%		
Overall Perceptions of Patient Safety	64%	64%	65%	45%		
Frequency of Events Reported	66%	63%	66%	67%		

Meets AHRQ Benchmark

1% from AHRQ Benchmark

Below AHRQ Benchmark

Exceeds AHRQ Benchmark

Source: Office of the Surgeon General, Army, 1/10/2017

# ARMY PATIENT SAFETY (CONT.)

# **Developed Targeted Solutions to Engage, Educate, and Equip**

The Army PSP offers the Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS®) program, which is a system whose purpose is to improve communication techniques within health care teams. The Army PSP supports enterprise learning by assisting TeamSTEPPS® Service coordinators in facilitating TeamSTEPPS® conference sessions to share best practices, providing infrastructure for continuing education, providing one-on-one coaching and evaluating the program's effectiveness. Throughout the Army direct care system, more than 55,000 medical and dental staff members (CY2010 - September 2016) from all over the world are TeamSTEPPS® trained. Over 4,500 Army medical and dental staff members are certified to be Master Trainers for TeamSTEPPS®. Of note, Army data were used by AHRQ to validate the Teamwork Perceptions Questionnaire (T-TPQ) tool employed by Team STEPPS® program to evaluate team culture.

# **Patient Safety Professional Course and Support**

Targeted PS training is offered for Patient Safety Managers (PSMs), who serve as local champions within MTFs. MEDCOM PSP provides instructors to the DoD Patient Safety Professional Course (PSPC) to provide new PSMs with standardized knowledge, skills, and tools to implement patient safety initiatives at their facility. The PSPC offers an award-winning, state-of-the-art learning system with a pre-work module, five days of face-to-face training, and 12 months of post-training virtual coaching, and opportunities for continued development through a PSM Ongoing Learning Certificate.

In early 2016, the Army PSP designed and implemented a pilot program to refine the Army PSP. As a result, MEDCOM PSP support to the RHCs and MTFs has increased the quality of the RCA's Corrective Actions and RCA packets. Of note, the Army PSP also assisted PSMs and staff members in understanding their 2016 Patient Safety Culture survey results by hosting group coaching sessions. In the future, all MTFs will submit at least one Patient Safety Culture goal which will be embedded in their safety and occupational health

plans that are briefed to TSG. Currently, the Army PSP is organizing a MEDCOM-wide URFO/WSS Summit. Employing the concepts of HRO, the URFO/WSS Summit is intended to enable a multi-disciplinary collaboration amongst Army subject matter experts to identify specific actions to drive reductions in harm events across the Enterprise.

In addition to educating frontline workers and PSMs, Army PSP also undertakes actions to develop tools and resources to engage leadership and staff in advancing quality and patient safety by providing them with innovative best practices and resources to facilitate large-scale change. In 2016, the Army PSP worked with the other Services and DHA to develop a Leadership Engagement Toolkit, RCA Resource Guide, and a Guidebook for Eliminating URFOs. In collaboration with The DHA Patient Safety Analysis Center (PSAC), the Army PSP has designed and is operationalizing a web-based RCA Tracker to analyze the quality and timeliness of the RCA submissions.

#### **MEDCOM Quality and Safety Center and the RESET**

In order to improve systemic learning and move to a more predictive posture in the pursuit of zero preventable harm, Army Medicine operationalized the MEDCOM Quality and Safety Center concept in July 2016 and established the deployable Root Cause Analysis Engagement and Support Team (RESET), a quick-response multidisciplinary adverse event assistance capability (which includes human systems integration and environmental safety experts) designed to help MTFs and Regional Health Commands in the investigation of serious medical errors such as WSS and URFO. The Center's goal is to centralize investigations, and to collect, analyze, consolidate and communicate findings and lessons learned through MEDCOM Safety Messages for enterprise-wide action. The fact-finding and analytic methodology is patterned after that of the National Transportation Safety Board and the Army Combat Readiness Center. To date, the RESET has identified specific areas for improvement that have led to organization-wide policy modification and enforcement of procedure compliance as well as strong recommendations for leadership engagement and communication enhancement.

#### PATIENT SATISFACTION

The Army monitors patient satisfaction using the Joint Outpatient Experience Survey (JOES) and the TRICARE Inpatient Satisfaction Survey (TRISS). Additionally, certain items from the surveys are displayed on the MHS Dashboard, as well as Army-specific performance monitoring systems (such as the Strategic Management System and the Command Management System). Since 2014, the Army has shown significant improvement in both inpatient (Recommend Hospital) and outpatient satisfaction (overall satisfaction with healthcare and able to see provider when needed). The Army is continuing to make a significant positive impact on the quality of care delivered to beneficiaries. The excellent work epitomizes the highest standards of Army Medicine and advances us on our mission of being a HRO. Training on how to improve the patient experience and exposure to the different measurement tools is done at all levels of the organization. Patient Experience is part of the Medical Command's Decision Science Camps, Executive Skills, Pre-Command Course and the Fiscal Accountability and Recovery Mission (FARM). Finally, the Army provides fiscal incentives for high patient experience scores through the Integrated Resourcing and Incentive System (IRIS).

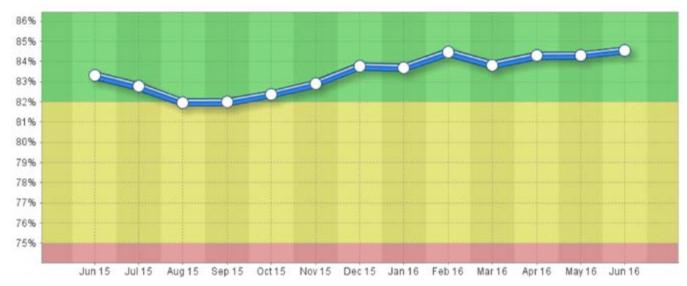
The 2014 MHS review re-emphasized the Army's commitment to providing an outstanding patient experience and safe, high-quality care. Since the Review, the Army has joined the other Services in adopting the recommendation of a joint, standardized outpatient satisfaction survey – JOES. This survey combined the Services' long-standing outpatient satisfaction surveys, while continuing the focus on the beneficiary experience with care in MTFs. Prior to JOES, the Army used the Army Provider Level Satisfaction Survey (APLSS) to measure outpatient satisfaction. In July 2016, the Army fully transitioned to JOES. Similar to APLSS, the new JOES survey provides results down to the individual provider level, allowing the MTFs to make targeted improvement.

#### **Outpatient Satisfaction: Able to See Provider When Needed**

In 2014, the Army's score on this measure was 82%. In FY16Q3, the Army's score was 84.5%. The graph below illustrates the Army's improvement on this measure. In addition to patient experience training, the Army developed the Primary Care Empanelment Tool (PCE) and the Demand Management Tool (DMT). The PCE Tool

is a contract between the MTF and Region that defines primary care empanelment, given mission requirements and resources. The DMT monitors performance against clinical availability. Additionally, the Army has focused on First-Call Resolution and closely monitors the "asked to call back" item on JOES.

#### ABLE TO SEE PROVIDER WHEN NEEDED (DATA REPORTED AS OF JUNE, 2016)



Source: Army Provider Level Satisfaction Survey, 1/10/2017

# PATIENT SATISFACTION (CONT.)

#### **Outpatient Satisfaction: Overall Satisfaction with Healthcare**

In 2014, the Army's score on this measure was 91%. In FY16Q3, the Army's score was 93%. The graph below illustrates the Army's improvement on this measure. Provider Communication is the top driver of Outpatient

Satisfaction with Healthcare. The MTFs closely monitor provider performance – many include patient satisfaction scores on Support Forms and OERs.

#### OVERALL SATISFACTION WITH HEALTHCARE (DATA REPORTED AS OF AUGUST, 2016)



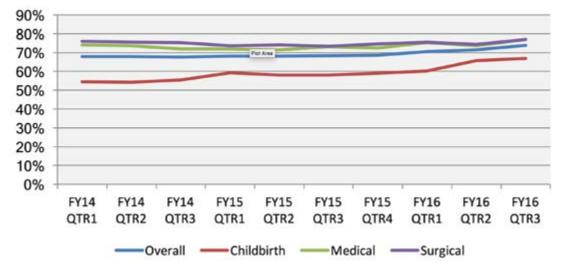
Source: Army Provider Level Satisfaction Survey and Joint Outpatient Experience Survey, 1/10/2017

#### **Inpatient Satisfaction: Recommend Hospital**

In 2014, the Army's score on this measure was 67% (all product lines). In Q3FY16, the Army's score was 74% (The civilian benchmark is 71%). The graph below illustrates improvement on this measure. A significant driver of improvement on this measure was inpatient childbirth. The Army improved from 54% in 2014 to 67% in Q3FY16. There has been a focus on multi-disciplinary rounds, bedside shift reporting and post-discharge

phone calls in all MTFs. In addition, the Women's Health Service Line (WHSL) created a monthly teleconference in March 2016 with multidisciplinary teams (OB Provider, Pediatric Provider, Maternal Child Nurse OIC from each MTF with inpatient and outpatient OB care) to distribute information from the WHSL and share information across the enterprise.

#### INPATIENT: RECOMMEND THE HOSPITAL (DATA REPORTED AS OF JUNE, 2016)



Source: TRICARE Inpatient Satisfaction Survey, 1/10/2017

# **ACCESS TO CARE**

#### **Access to Care Overview**

Over the last 12-18 months Army Medicine's intense focus on Access to Care (ATC) has led to vast improvements. In February 2016, TSG set goals to improve readiness and access to care in all 32 medical treatment facilities (MTFs) by decreasing variation.

#### **ATC System Improvements**

- **1.** In March 2016, a prescriptive ATC OPORD was published. It directed several important process changes aimed at increasing ATC for the 1.3M enrolled beneficiaries:
- Patients at Army MTFs can now make an appointment six months out.
- Providers must see patients for seven hours out of the eight-hour workday and 90% of that time (6 hours and 20 minutes) will be face-to-face encounters with patients.
- Primary care is now available during every training holiday in 100% of Army Military Treatment Facilities (MTF). This mandate provided an additional 230,000 annual appointments.

These system changes resulted in increases in the number of annual primary care appointments by 680,000, which directly correlates to the 37% improvement in acute appointment availability (1.9 days to 1.3 days). Army Medicine will achieve the standard of 1.0 days in "Average Days to 3rd Next Available 24HR appointment" by March 2017.

- 2. Nurse Advice Line (NAL). The NAL provides quality professional medical advice, often times resulting in the avoidance of a face-to-face appointment. Army Medicine beneficiaries account for 170,000 NAL calls annually. In CY15, the NAL increased available appointments by 55,000 through beneficiaries choosing self-care and not the ER, which also equates to \$6.6M network cost avoidance. Most importantly this healthcare portal provides convenient access to healthcare resources 24 hours a day.
- **3. Community Based Medical Homes (CBMH).** Army Medicine aggressively increased capacity and enrolled approximately 150,000 beneficiaries into 20 CBMHs. There is a plan for the addition of seven more CBMHs and eight expansions. Then Army Medicine will be able to enroll approximately 70,000 more enrollees for a total of 220,000 beneficiaries enrolled to CBMHs. This capability not only makes more care available but also makes it more convenient to our beneficiaries.
- 4. Increase the use of Extended Hours/Urgent Care Clinic (UCC). Army Medicine now offers appointments that are more convenient for patients' schedules. A demand analysis, using NAL data, indicates 20-30% of patients want care between 1600-2000 hours. Currently, 85% of all Army MTFs offer appointments either before 0800 or after 1600 hours or on the weekends and 44% of Army MTFs now have either a

- UCC or a "fast track" clinic inside the MTF ER. These patient-centered access initiatives produced great results. The No-Show rate over the last three years decreased to 5% (AD) and 6% (Others). This decrease in no-shows increased access by 145,000 annual appointments across Army Medicine. Also, over the three years, the network cost for recapturable ER visits decreased 26%. These results are further validated by the marked increase in patient satisfaction mentioned above.
- **5. Demand Management Tool (DMT).** All RHC and MTF Commanders, plus over 2,000 personnel were trained on this analytical tool, which provides simple, easy to read information. This tool provides Commanders keen awareness of exactly how many appointments they must schedule to satisfy the healthcare needs of their enrolled population. Other pertinent information that the DMT provides includes number of available providers and how the appointments are being utilized. It brings complete transparency of demand and RHC and MTF performance to the forefront.
- **6. Accountability.** TSG engages the RHC Commanders through monthly accountability briefs and requires the Commanders to brief on the progress on ATC directives and metrics. In September 2016, all RHC Commanders were directed to achieve ATC metric compliance. ATC is assessed, as well as the workload, to ensure that quality access is truly provided. HEDIS® compliance and Patient Satisfaction are also measured and reported monthly.
- **7. First-Call Resolution Policy.** The modified policy was implemented in April 2016 and ensures that 100% of enrolled beneficiaries will receive an appointment. If an appointment is not available in the MTF, the call center clerk will offer the beneficiary the opportunity to be seen in a network UCC and will help the beneficiary find the nearest network UCC.
- 8. Specialty Care Referral Accountability and Business Rules Policy. This policy will be implemented by January 2017. This patient-centered policy ensures a patient receives a specialty care appointment either as they leave the primary care appointment or within 24 hours. It mandates that the Specialist makes the decision to book the patient to the MTF or defer the patient to the TRICARE network within 24 hours. To the maximum extent possible, the specialty care appointment will be booked before the patient leaves the MTF when the care is retained within the MTF. Additionally, Army Medicine implemented the Referral

# ACCESS TO CARE (CONT.)

Management Suite (RMS), which is an MHS designated tool for tracking and reporting all referral data from the MTF level. This will ensure 100% of all referrals are tracked and dispositioned through the RMS Mega Report, which is an Enterprise Level tool. It provides data that include referrals from time ordered to book and percent results received.

9. Consistent Patient Experience/Enterprise
Appointing System. Since August of 2015, the project team increased MEDCOM's rolling 12-month overall satisfaction with phone service average from 78.4% to 83.8%. This is the highest satisfaction rate for MEDCOM in over six years. The team reduced the rolling 12-month call abandonment rate average, from 9.03% to 7.85%. This is the lowest call abandonment rate in MEDCOM in over 24 months. The team deployed standardized appointing scripts, as well as Front Desk and Medical Service Account Training programs, across the enterprise and developed 44 functional requirements as the baseline for procurement of future Automatic Call Distribution (ACD) Systems, ensuring

that future ACD procurements meet or exceed the specifications necessary to deliver reliable and quality service.

**10. Virtual Health (VH).** Army VH currently provides clinical services across 18 time zones in over 30 countries and territories across all RHCs and in the operational environment. Army VH accounts for over 90% of all clinical VH encounters in the DoD. In FY15, Army clinicians provided over 40,000 provider-patient encounters and provider-to-provider consultations in garrison and operational environments in over 30 specialties via VH.

**11.** Army Secure Messaging Service (ASMS). The Army consistently has seen improvement in the use of Secure Messaging. Almost 500,000 users are now enrolled in ASMS. As of October of 2016, over 40% of Prime enrollees are users. We are also seeing improvement in the number of ASMS users who have sent at least one message to their provider in the last 30 days.

#### **2014 MHS Review Outliers**

In 2014, Army Medicine identified four MTFs that were outliers in one or more MHS Review access to care measures (Average Days to 3rd Next Available, Average Days to 3rd Next Future, and Average Days to a 24HR appointment). Current MTF performance measures compared to the MHS review are contained in the tables below.

All four MTFs are in compliance with the MHS standards for Average Days to 3rd Next Available Future (FTR) and Average Days to 24HR appointment. With respect to the Average Days to 3rd Next Available metric, only one MTF improved enough to meet the MHS Standard, but it is noteworthy that two of the MTFs achieved a 72%

and 26% improvement. Only one MTF saw a significant decrease in Average Days to 3rd Next Available 24HR appointments, but the Average Days to get a 24HR appointment did improve and indicates patients are getting an acute appointment in less than one day.

TABLE 1: AVG DAYS TO 3RD NEXT 24 HOUR APPT.

MTF				
DAYS TO 3RD NEXT 24HR	MHS REVIEW OUTLIER	16-0CT		
MTF #1	2.2	0.9		
MTF #2	0.7	1.5		
MTF #3	5.8	1.6		
MTF #4	2.3	1.7		

TABLE 2: AVG DAYS TO NEXT 24 HOUR APPT.

MTF		
DAYS TO NEXT 24HR	MHS REVIEW OUTLIER	16-0CT
MTF #1	1.0	0.4
MTF #2	0.7	0.6
MTF #3	5.8	0.6
MTF #4	2.3	0.6

TABLE 3: AVG DAYS TO 3RD NEXT FUTURE APPT.

MTF		
DAYS TO 3RD NEXT FUTURE	MHS REVIEW OUTLIER	16-0CT
MTF #1	4.4	4.6
MTF #2	3.4	5.9
MTF #3	8.7	6.9
MTF #4	2.3	6.9

Source: Office of the Surgeon General, Army, 1/10/2017

# CONCLUSION

This report details how Army Medicine has made significant strides to reconcile outliers in measures as identified by the MHS Review of 2014, meeting national benchmarks or surpassing them in most metrics, particularly in quality and access to care. The way ahead includes continuing to inculcate HRO concepts throughout the organization, building awareness of these concepts among leadership at all levels, creating a change management plan, and shoring up gaps in process improvement knowledge, infrastructure and spread in the MTFs and throughout the MEDCOM. New tools and initiatives, such as Virtual Health and the Global Trigger Tool (an evidence-based, soon to be launched tool that will allow for the detection of errors through chart review and analysis), are expected to advance the MEDCOM in the domains of access, quality, patient safety and satisfaction. The MEDCOM Quality and Safety Center holds great promise for adding depth to enterprise learning while supporting the MTFs, and is potentially an MHS-wide asset once the Center has matured. As there is no endpoint in the drive toward learning and high reliability, Army Medicine will continue to strengthen its partnership and collaboration with Service Components and the DHA.

#### NAVY SURGEON GENERAL SUPPLEMENT

**Enterprise Introduction:** On May 28, 2014, the Secretary of Defense (SECDEF) ordered a 90-day comprehensive review of access to care, quality of care, and patient safety within the military health system (MHS). This review was conducted by a Department of Defense (DoD) working group, with substantial input from individual experts outside of DoD, and resulted in a final report that summarized findings and recommendations, and proposed action items to achieve these recommendations. The major recommendations in this report were directed at system enhancements to address areas of concern and to drive change that will foster creation of a high reliability health system.



Based on the final MHS 90 Day Review report, the 1 October 2014 SECDEF memorandum directed essential measures and deadlines for the MHS to advance a culture of excellence, strengthen the system of care and adopt the principles of a high reliability organization (HRO) as the framework to achieve excellence in quality of care, patient safety, access and patient satisfaction.

This Supplemental report describes the results of an ongoing evaluation, mandated per NDAA FY 2016 Section 713, of the effectiveness of actions within the MHS to decrease process variance and improve patient safety, quality of care, and access to care at military treatment facilities.

Navy Medicine Introduction: On an enterprise level, Navy Medicine is an active participant in the MHS HRO working group and the MHS High Reliability Coordination Board. At the component level, Navy convened a task force to drive HRO execution throughout Navy Medicine. This resulted in the establishment of a Chief Medical Officer (CMO) position at the Bureau of Medicine and Surgery (BUMED), in each Regional Command, and at the individual Navy Medical Treatment Facilities. Navy Medicine developed a framework for high reliability where improvement is emphasized at the deck plate and continuous learning is spread throughout the organization to ensure enterprise success. The CMO position at all levels provided the clinical leadership to deliver care that is high-value by optimizing quality, safety, patient experience and cost across the continuum of care, with the aim to: 1) improve the health status of the populations served by Navy Medicine, and 2) improve the organizati on through maximizing efficient clinical operations and driving robust process improvement capabilities. In support of our renewed focus on leadership-driven safety awareness, the Chief Medical Officer (CMO) position has been formalized as a career milestone position throughout the Enterprise. Every MTF across the organization will have a designated CMO. Although patient safety is everyone's responsibility, the CMO will facilitate the collaboration between patient safety programs and performance improvement resources. The CMO will work with clinical staff, the MTF leadership, Regional counterparts and BUMED to monitor patient safety issues and disseminate emerging best practices and solutions. The establishment of the CMO and the new enterprise-wide operating model has been key to our transformation efforts.

Navy Medicine has developed the supportive infrastructure through redefining our operating model to improve pathways of communication, review how the Enterprise responds to failures and finds new solutions, increase transparency and break down information silos, that emphasizes shared ownership and

accountability throughout the Enterprise. Each MTF has access to additional resources to analyze patient safety data and develop process improvement projects. These resources have allowed the organization to effectively identify, target, and develop solutions to patient safety challenges at the MTF level.

Quality efforts focused on reorganizing BUMED and the Regional Commands to develop Regional Quality Councils and to appoint a CMO (physician) at each Region, and within each MTF, to support quality and high reliability efforts. Navy rolled out a HRO Operating Model that integrates quality, patient safety, and robust performance improvement across the enterprise. In support of that effort, BUMED developed formal Change Plans addressing High Reliability, Patient Safety, and Perinatal Care. Navy also created a Clinical Community construct to foster enterprisewide collaboration and deck plate-driven innovation. These Clinical Communities are multidisciplinary groups comprised of stakeholders from each level of the Enterprise organized around a specific clinical area. The initial Clinical Communities - Women's Health, Surgical Services, and Dental Services were stood up within the Product Lines and are in process of transitioning to the new construct.

Navy Medicine has implemented and monitored action plans to address the MHS 90 Day Review recommendations at each military treatment facility (MTF), with overall positive results. In addition, Navy has initiated a number of enterprise and organizational changes designed to further the journey to high reliability.

Navy Medicine leveraged the MHS performance management system (Performance Improvement Dashboard) to evaluate and monitor performance using multiple dimensions. Transparent communication regarding performance improvement priorities is consistent across the enterprise to ensure a clear understanding of what is important and where to focus efforts. Utilizing the performance management system,

# NAVY SURGEON GENERAL SUPPLEMENT (CONT.)

Navy Medicine manages key performance indicators across diverse aspects of healthcare delivery, from business metrics to patient safety measures, in order to monitor quality and consistency of care. Navy Medicine tracks performance relative to both internal and external benchmarks, and engages in evidence-based decision making for implementing action plans.

The MHS review identified MTFs with access, quality, or patient safety concerns based on Fiscal Year 2013 outlier data. Action plans at each designated MTF were immediately put into place and tracked by the Regional

Commanders, who provided monthly updates to BUMED and quarterly updates to the Deputy Surgeon General.

Ninety-nine percent (99%) of the outlier metrics are resolved. The Regional Command is engaged in supporting and addressing strategies to reach the target for the remaining metrics. In addition, to the outlier metrics, BUMED continues to monitor all of the current metrics and works with the Regional Commands and the MTFs to continuously improve and share successes and challenges.

# **QUALITY**

Accreditation: All Navy MTFs are fully accredited by The Joint Commission (TJC) and are in compliance with TJC standards. BUMED reviews all triennial MTF TJC surveys and the findings are analyzed and shared for transparency and improvements across the enterprise. The five areas that resulted in significant findings for Navy MTFs, in descending order, are Environment of Care, Life Safety, Provision of Care, Infection Control and Medication Management. Environment of Care, the area with the most findings, resulted in 25 findings from nine MTF surveys. The remainder of the content areas resulted in 10 findings or fewer. This pattern is consistent over a five-year period. MTFs have 30-60 days to submit action plans and demonstrate resolution or improvement of each survey finding.

Navy stresses continuous readiness for TJC compliance. A trained Joint Commission Fellow (JCF) at BUMED oversees the program, reviews survey findings, and provides ongoing support to the Regions

and the MTFs. Each Navy Region and the two Navy Medical Centers have a JCF who conducts MTF assistance visits to identify areas of improvement and provides ongoing education and training. Navy quality, safety, and physician champions attend an annual JCF education and training program. This education consolidates information, allows for lessons learned, sharing of best practices, and assures that key staff across the enterprise are consistent in meeting requirements, successes, and challenges of continuous TJC compliance.

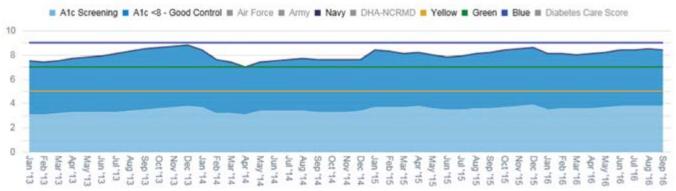
**Policy Review:** BUMED released a memo addressing the American College of Surgeons (ACS) Quality Improvement Program (NSQIP) (January 2015) that expanded the Program to eleven inpatient sites. BUMED is currently evaluating the seven remaining sites for enrollment in either the Ambulatory Surgery Center benchmarking program or NSQIP program.

#### **Data Analysis**

- ◆ The Joint Commission ORYX: All Navy MTFs are monitored for ORYX measures and are at or above target for all but the two noted below. Both measures are in the "need for improvement" category and have been referred to the Regions to evaluate strategies for improvement with the identified MTFs and share leading practices from high performing MTFs.
- In FY 2015, Quarter 4, nine MTFs did not meet the IMM-2 Immunization measure, surveyed twice a year. However, three out of nine MTFs showed trending improvement over FY 2015 Quarter 1 results.
- The VTE-5 Venous Thromboembolism Discharge Instruction metric is a challenge for five of our MTFs due to the low volume of patients (one or two incidents per year). Despite standardized notes within the electronic health record documentation remains a challenge.
- National Committee for Quality Assurance (NCQA): Healthcare Effectiveness and Information Set (HEDIS) CY 2016, Quarter 3: All Navy MTFs have shown improvement toward meeting targets for fourteen measures. Since the introduction of the MHS Performance for Improvement Dashboard and composite quality indices, Navy MTFs have shown significant progress in the two composite quality index measures. The Regions monitor the metrics on a continuous basis and share successful approaches and leading practices with the MTFs. The focus for the coming year is in reducing metric variation across facilities.
- Overall, Navy Medicine is at 84% for the Diabetes Composite Index (Figure 1) and 98% for the Acute Condition Composite Index (Figure 2). The Defense Health Agency (DHA) target for both indexes is 70%. Seven MTFs are below target for the Diabetes Index.

# QUALITY (CONT.)

FIGURE 1: HEALTHCARE EFFECTIVENESS DATA AND INFORMATION SET (HEDIS) DIABETES CARE-NAVY



Source: MHS Dashboard

- All MTFs are at target for the Acute Conditions Index
- The Antidepressant Acute and Continuous measures have proved challenging to a few MTFs but improvement is demonstrated toward reaching the target.
- American College of Surgeons (ACS) National Surgical Quality Improvement Program (NSQIP) 2015 data: Data review includes five sites originally enrolled in NSQIP and an additional eleven Navy sites enrolled as a result of the MHS NSQIP Expansion effort. All sites are performing as expected. The focus for next year is to share lessons learned from the collaborative deep dives.
  - All sites are members of the MHS Surgical Quality Consortium.
  - Four sites are engaged in the Institute for Healthcare Improvement Surgical Quality Learning Partnership.

- National Perinatal Information Center (NPIC) CY 2016. All sixteen Navy MTFs with inpatient obstetric services are monitored for performance. The BUMED Women's Health Advisory Board engages in collaborative efforts with the Regions and the MTFs to define and develop the way forward for patient safety and quality improvement activities. Comprehensive analyses are conducted as warranted. The areas of focus for evaluation in the next year will be birth trauma, unexpected newborn complications, and newborn readmissions.
  - Postpartum hemorrhage rates and Primary C-section rates are consistent with or surpass the NPIC benchmark in a positive direction.
  - Although we have three MTFs that are below the NPIC benchmark for shoulder dystocia rates, no MTFs are outliers in rates of shoulder dystocia linked with newborn birth trauma.

FIGURE 2: HEALTHCARE EFFECTIVENESS DATA AND INFORMATION SET (HEDIS) MHS ACUTE CONDITIONS COMPOSITE—NAVY



Source: MHS Dashboard

# PATIENT SAFETY

**Policy Review:** Navy released the following enterprise wide memos designed to improve patient safety at the MTFs: The Culture of Safety Memo Phase I (January 2014); The Culture of Safety Memo Phase II (April 2016); and the Surgeon General Good Catch

Recognition Award Process (January 2016). Two additional policies were issued relative to surgical safety: Prevention of Retained Surgical Items Standard Operating Procedures (January 2016) and the Surgical Pause Standard Operating Procedure (February 2016).

#### **Data Analysis**

- Agency for Healthcare Research and Quality (AHRQ) Survey on Patient Safety Culture (Hospital and Ambulatory). Navy MTFs voluntary participation in the MHS 2016 Culture Survey exceeded overall MHS scores for participation. Navy scored higher than the MHS in ten of twelve dimensions, and in the overall Patient Safety score (79%).
  - Navy demonstrated a 5% improvement compared to the 2011 MHS AHRQ survey but scored lower than the MHS on overall patient safety events.
  - Navy also showed a 3% improvement in the two dimensions targeted by the Navy Patient Safety Culture initiative that focused on reporting and open communication.
- National Health Safety Network (NHSN): Healthcare Associated Infections (HAI), particularly Catheter Associated Urinary Tract Infections (CAUTI), Central Line-Associated Bloodstream Infections (CLABSI). Navy monitors CLABSI and CAUTI rates monthly at all inpatient MTFs and provides updates to the Regions.
  - CLABSI data are between the 25th and 50th percentile annually. CLABSI events represent small numbers and no clusters. In addition, the Navy Standardized Infection Ratio (SIR) is at or below the National Standard Infection Ratio of one/year. MTF Infection Preventionists monitor all CLABSI and CAUTI devices, and perform monthly tracers on these devices.
  - The two medical centers use a clinical surveillance system to identify patients at risk and are in the process of implementing the Comprehensive Unit-Based Safety Program (CUSP). This approach is consistent with HRO principles.

- ◆ Sentinel Event (SE) Reporting and Root Cause Analysis (RCA): Navy MTFs report all reviewable Sentinel Events (SE) and complete Root Cause Analysis (RCA) within the designated time frame. BUMED reviews and submits all RCAs to the Patient Safety Analysis Center (PSAC). Information on the event types and findings are shared with the MTFs. BUMED uses a consistent format for all reporting and analysis. Navy SE reporting trends have remained constant over the past two years. MTFs also submit all internal RCAs for review and submission to the PSAC. These RCAs are reviewed and findings shared in the same manner as the SEs.
- Performance Improvement (PI) RCA: Navy monitors time between events as well as types of events, and the location of the events for improvement purposes.
  - Use of role-based scripts for the surgical time out successfully increased the interval between negative outcomes in the operating room setting.
  - Use and monitoring of the surgical pause or "60 Seconds for Safety" to prevent unintentionally retained foreign objects.
- Patient Safety (PS) Reporting (distribution by degree of harm) for the 12 months preceding: Navy near misses (35%), no harm events (47%), mild harm to death (18%) and severe harm and death (1%). The PS Culture initiative has emphasized near miss reporting and command recognition of good catches on a monthly basis. In addition, the Surgeon General will be recognizing one good catch from each Region during National Patient Safety Week.

#### **Access and Patient Satisfaction**

Policy Review: Trust and a positive patient experience are built by consistently delivering on our promise of unparalleled access to high quality healthcare. Since the Military Health System (MHS) review in 2014, Navy Medicine has worked diligently, in conjunction with the other Services, to develop standardized processes to improve access to both primary and specialty care. Additionally, Navy Medicine continues to implement the reforms that were included in the National Defense Authorization Act for Fiscal Year 2016, including ensuring that access standards are met, implementation of the urgent care pilot, and

transparency in performance data on access, quality, patient safety, and beneficiary satisfaction. These and other actions lay the foundation for future improvements in care delivered through the MHS.

Nearly all of Navy Medicine's 790,000 MTF enrollees are receiving care in a National Committee for Quality Assurance (NCQA) recognized Medical Home Port (MHP). These patients have seen an improvement in same-day health care access with their MHP team, augmented by virtual access via e-mail communications with providers and access to a 24/7/365 Nurse Advice

# PATIENT SAFETY (CONT.)

Line (NAL). Over the last year, there has been a 10% increase in the number of beneficiaries connected on secure messaging and a 30% increase in messages sent by patients to their healthcare teams, while 97% of all Primary Care visits for MTF enrollees were supplied in the direct care system.

Collaborating with our Tri-Service partners, Navy Medicine worked to ensure that a large percent of primary care appointments, specifically same-day appointments, were available for on-line booking through TRICARE Online (TOL).

In the first half of FY 2016, 62% of patients who called the NAL expressed a desire to go to the ED or UCC. After nurse triage and provision of self-care advice, only 23% of patients went to the ED or UCC. 78% of callers were ultimately cared for in the MTF or rendered self-care at home. Additionally, Navy Medicine is participating in a Tri-Service "PCM On-Call" pilot, whereby beneficiaries triaged to Urgent Care Center (UCC) care outside of MTF business hours are offered the option to speak with an MTF-based clinician for further management that may reduce trips to the UCC. Navy Medicine continues our campaign to educate beneficiaries about the options available to them including Navy Medicine's robust secure messaging program, TOL, and the Nurse Advice Line.

The lack of a standardized assessment of patient satisfaction was noted in the MHS Review. As a result, the MHS developed a standardized survey instrument based on scientific survey principles, the Joint Outpatient Experience Survey (JOES), which will allow comparable and fully transparent satisfaction data to be gathered across the Services. In May 2016, Navy Medicine became the first Service to begin surveying patients with the new instrument.

**Data Analysis:** All Navy Medicine MTFs have implemented First Call Resolution and Simplified Appointing Policies. Additionally, despite a 3.7 percent increase in enrollment, Navy Medicine has sustained access to care improvements. With respect to each MTF, an assessment of FY 2016 data on access as compared to standards established by the Department of Defense are as follows:

- Primary Care Manager (PCM) Continuity: 40% of MTFs are currently meeting the target for this measure, with active initiatives ongoing to raise this bar.
- ◆ Third Next Available 24 hour Appointment: 85% of MTFs are meeting the less than 1 business day target for this measure. The average 3rd next 24HR has decreased by 0.26 days, and variability in performance has decreased across Navy Medicine's 27 MTFs.

FIGURE 3: AVERAGE NUMBER OF DAYS TO THIRD NEXT AVAILABLE 24-HOUR APPOINTMENT—NAVY



Source: MHS Dashboard

FIGURE 4: AVERAGE NUMBER OF DAYS TO THIRD NEXT AVAILABLE FUTURE APPOINTMENT—NAVY



Source: MHS Dashboard

# PATIENT SAFETY (CONT.)

- ◆ Third Next Available Future Appointment: 91% of MTFs are meeting the target of access within 7 business days. Across Navy Medicine, 3rd next FTR has decreased by 0.6 days, a 10% improvement.
- Third Next Available Specialty: 100% (27) of MTFs met the target of care within 28 days, and consistently maintained third next available for specialty care at less than two weeks.
- Prior to May 2016 with the deployment of JOES, patient satisfaction with outpatient care was assessed using the Navy Patient Satisfaction Survey (PSS). Overall satisfaction was consistent over time with performance over 90% for all MTFs. Performance was maintained from FY 2015 through FY 2016, Quarter 1.
- For FY 2016, Quarters 1 and 2, utilizing the JOES instrument, Navy Medicine averaged over 82% patient satisfaction with "Get Care When Needed." 25 MTFs scored over 80% for satisfaction on this measure and 5 of these reached over 90% patient satisfaction. Two outliers achieving just below 80% in FY 2016 Quarter 4, are now employing strategies aimed at improving access overall such as the Nurse Advice Line, booking through TRICARE Online, and the Urgent Care Project. The facilities are actively promoting secure messaging to ensure patients have access to their providers and appointment scheduling "anytime and anywhere."
- A comparison of patient satisfaction measures between Navy PSS and JOES is not appropriate due to a change in survey methodology. Trends

- in performance on patient satisfaction with the JOES instrument will be monitored in future quarters. The JOES reporting website will be used as a decision support tool to identify areas that need improvement.
- For the MHS Review. "Get Care When Needed" was reported using the TRICARE Outpatient Satisfaction Survey (TROSS). This survey, based on the Consumer Assessment of Healthcare Providers and Systems (CAHPS), has been replaced by the JOES-C, which utilizes the same CAHPS methodology. However, there is no civilian benchmark for this item. On the TROSS, Navy Medicine maintained a satisfactory level of performance that exceeded two of the other Components during the MHS Review. However, a gap remains between access to care measures of "third next available appointment for same day and future appointments" and the patients' perception of access as measured through "Get Care When Needed." To analyze the gap, Navy Medicine has implemented a project to capture the "voice of the patient" as it pertains to the two CAHPS questions, addressing patient perception with access to routine care and urgent care.
- ◆ TRICARE Inpatient Satisfaction Survey (TRISS) assesses the patient's experience with the care received during an inpatient stay. TRISS is based on the Hospital Consumer Assessment for Healthcare Providers and Systems (HCAHPS) and national benchmarks are available for comparison. For "Willingness to Recommend Hospital," in FY16

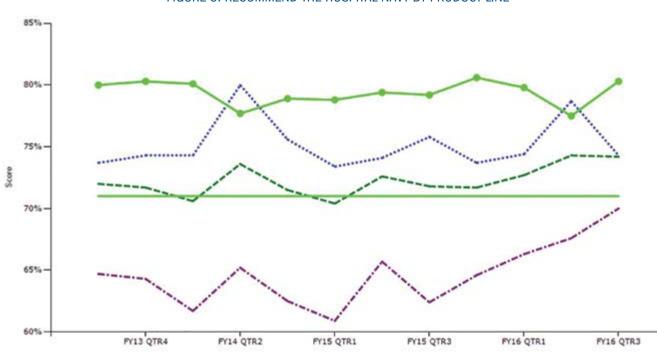


FIGURE 5: RECOMMEND THE HOSPITAL NAVY BY PRODUCT LINE

Source: TRISS

# PATIENT SAFETY (CONT.)

- Quarter 3, two Navy MTFs achieved scores above the 75th percentile. Three MTFs scores above the 50th percentile and an additional five were above the 25th percentile. Only two MTFs fell below the 25th percentile but scores were just below the cut off for the 25th percentile. There has been a positive upward trend for the two MTFs with regard to willingness to recommend the hospital. Positive patient comments concerning obstetric care have been received for the two MTFs, which is reflected in an improvement in scores in the obstetric product line (Figure 5). Outstanding performance (above the 75th percentile) across Navy MTFs is noted for other TRISS questions related to communication with doctors, responsiveness of the hospital staff, communication about medications, discharge information, and care transitions.
- ♠ Robust customer relations programs are present in all Navy MTFs. Initiatives and programs include focused customer relations training at point of service, recognition and awards for outstanding performance in customer service, regular customer service forums to communicate important information from headquarters and the field, and to share best practices regarding customer service programs and initiatives.
- In 2015, Navy Medicine implemented the "Best of Best" report based on patient satisfaction data to highlight outstanding customer service among clinics and providers in specialty care and primary care. Navy Medicine has long recognized the importance of the frontline personnel as a cornerstone to a positive patient experience. As a result, the "Best of the Best" for front desk staff and receptionists was developed to promote and encourage excellence in customer service among frontline staff.
- Navy Medicine has developed an app that enables beneficiaries to access the Medical Treatment Facility (MTF) resources and services through their mobile devices. The app provides patients with links to phone directories, appointment lines, the Nurse Advice Line, Medical Home Port teams, pharmacy refills, secure messaging, TRICARE Online, wellness, Customer Evaluation, facility maps, and other educational programs, products, and services.

Navy Medicine Next Steps: Navy Medicine remains committed to the goal of providing the best care our nation can offer to Sailors, Marines, and their families. To ensure success with the overarching goal, several supporting goals and initiatives have been identified:

- Support for the three pillars of an HRO Leadership,
   Culture of Safety and Robust Process Improvement.
  - Each MTF will have either an interim or a full-time CMO in place by January 30, 2017. A CMO core competency model was developed to augment and formalize training and professional development for prospective CMOs. This Navy Medicine Leadership Quality Collaborative will begin in February 2017.
  - Navy Perinatal Subject Matter Experts developed a Post-Partum Hemorrhage Bundle to assist with reducing variation in the response to these emergency obstetrical situations. The bundle was piloted in eight inpatient MTFs with positive results. This is being evaluated for implementation throughout the Navy enterprise.
  - BUMED surgical safety group is engaged in refining the "60 seconds for safety" surgical pause to expand its applicability outside of the operating room setting.
- Provide Enhanced Patient/Family Experience and Enhanced Access to Care
  - Establish a 90% benchmark for "One-Call Resolution"
  - Increase Virtual Patient Care Utilization
  - Increase secure messaging Connections
  - Utilize Navy Medicine Standard App
- Eliminate Patient Harm by anticipating, identifying, resolving, and sharing sources of errors rapidly and transparently throughout Navy Medicine
  - Improvement in processes that tracks patient harm measures
  - Multi-disciplinary rapid response approach to Root Cause Analysis
  - Deployment of new knowledge management system to share and apply best practices and lessons learned across the enterprise
- Implement Naval Hospital Jacksonville Value Based Care Pilot Project:
  - Increased health outcomes as defined by the patient
  - Increased patient satisfaction
  - Increased provider satisfaction
  - Decreased costs
- Improve active management of Limited Duty (LIMDU) population

- The Department of the Navy is in the final stage of LIMDU SMART integration and is implementing the new Temporary Limited Duty Operations (TEMPO) Program to actively manage the care of our service members. Projected to be operational at all Navy MTFs by the end of FY 2017.
  - LIMDU SMART is a Navy Medicine IT solution to track and monitor service members assigned to temporary medically restricted duty. As the system of record, LIMDU SMART provides workflow automation, system integration and comprehensive real-time visibility, active population management, analytical metrics, reports and dashboards, and a Common Operating Picture (COP) for all key stakeholders including Operational Commands. Benefits for the Service member include a less burdensome administrative process while also providing
- real-time medical status updates to the parent Command. The Command benefits from the automation of the paper process and electronic notification when there is a change in the Service member's duty status.
- Navy Medicine implemented a pilot to actively manage Sailors and Marines on medical restricted duty. The Temporary Limited Duty Operations Program (TEMPO) started as a four month pilot at Naval Health Clinic (NHC) Cherry Point in June 2015 and resulted in an average reduction of 2.5 months on limited duty per Sailor. This program is currently being implemented across Navy Medicine. In addition to improved quality of care and earlier decisions on outcomes, this also reduces health care service consumption. On average, there are approximately 10,000 Sailors and Marines on limited duty at any given time.

# AIR FORCE SURGEON GENERAL SUPPLEMENT



# QUALITY IN THE AIR FORCE MEDICAL SERVICE

The mission of the Air Force Medical Service (AFMS) is to "Ensure medically fit forces, provide expeditionary medics, and improve the health of all we serve to meet our Nation's needs." Moving towards the Vision of the AFMS, "Our supported population is the healthiest and highest performing segment of the United States by 2025" requires us to focus efforts on Air Force Surgeon General (AF/SG) priorities. To meet the Mission and Vision, the AF/SG has focus areas within the AFMS strategy: Full Spectrum Readiness, Integrated Operational Support, AF Medical Home (AFMH) and Trusted Care. The AFMS has aligned with the Military Health System Quadruple Aim in Quality and Safety by establishing AF objectives under our AFMS Strategic Goal of Better Care. These include Cultivating the AFMH as a Cornerstone to Trusted Care, Transforming Access, and Providing Safe and Reliable Care.

The comprehensive May 2014 MHS Review reinvigorated the AFMS's commitment to the delivery of safe, high-quality health care by adopting the principles of High Reliability in order to reduce variability and improve performance. Collaboration with Defense Health Agency leadership is integral to our efforts in ensuring continued support toward advancing a culture of safe healthcare systems and establishing data-driven, standardized processes to promote safe and reliable care for every patient, every time.

Quality of Care Governance: Oversight of Quality of Care in the AFMS has substantially improved since the MHS Review due to a reshaping of the Performance Management System and adoption of core metrics in access, quality, and patient safety. Leadership engagement is reflected at all levels with AF/SG sitting on the Senior Military Medical Advisory Committee (SMMAC), the Deputy Surgeon General (DSG) sitting on the Medical Deputies Action Group (MDAG), and the Air Force Medical Operations Agency (AFMOA) Commander and Vice Commander leading the Performance Management Group and Performance Management Cells.

The Air Force Performance Management Cell (PMC) identifies, prioritizes, evaluates, and monitors AF-wide metrics. Response to the MHS review included development of Progress Updates (PUs) for monthly trending and updates by subject matter experts (SMEs), development of annual schedule for review of metrics in various forums, and reviews and updates of performance metrics weekly. The Performance Management Group ensures accountability and data transparency while sharing leading practices across the AFMS enterprise.

Prior to the MHS Review, MTF Performance Plans (MTF-specific annual plans that translate AFMS strategic priorities, goals, and targets into MTF-specific targets with approval through the AF/SG) only included targeted business processes. The AFMS has expanded the MTF Performance Plans to include clinical measures in quality and patient safety. The AFMS monitors underperformers in clinical quality, access and patient safety, and when indicated requires Action Plan approval and monitoring through the AFMS governance process.

**Policy Review:** Air Force Instruction (AFI) 1-2, Commander's Responsibilities, provides updated policy and guidance for strategy, process, and data-driven decisions through each military treatment facility. Additional policies and guidance specific to the AFMS from 2014-2016 include nine AFMOA/SG Notice to Airmen (NOTAMS) on safe and reliable care. The Air Force has updated 15 of its instructions directly and indirectly related to improving access, clinical quality and patient safety.

# QUALITY IN THE AIR FORCE MEDICAL SERVICE (CONT.)

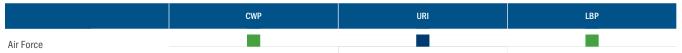
Review of Internal and External Studies on Quality of Care; Data Analysis

**Outpatient Healthcare Effectiveness Data Information Set (HEDIS®):** The MHS Review showed that the average AFMS performance was at or above the 75th percentile for 7 out of 18 outpatient HEDIS measures with only 27 percent of the measures improving statistically from 2012 to 2013. During CY2016, 14 out of 18 measures tracked on the MHS Population Health Portal demonstrate average AFMS performance at or above the 75th percentile through Sept 2016. There has been a steady performance increase for 6 measures in CY2016, with the AFMS as the best MHS performer in 4 measures. Only two measures remain below the 50th percentile (antidepressant medication management continuous, breast cancer screening). Below is a screen shot showing current AFMS performance in the 18 HEDIS measures for Sept 2016. Note: blue color represents performance at or above the national 90th percentile; green shows performance at or above the 75th percentile but below the 90th percentile; yellow is performance at or above the 50th percentile but below the 75th percentile; and red shows performance below the 50th percentile.

#### AIR FORCE MEDICAL SERVICE (AFMS) HEDIS MEASURES (SEPT 2016)



#### AIR FORCE MEDICAL SERVICE (AFMS) HEDIS MEASURES (SEPT 2016)



#### **ORYX®**—National Hospital Quality Measures:

Air Force had 11 MTFs during the MHS review that were denoted as outliers in 13 ORYX® measures. There has been sustained improvement in all except 2 measures where the denominators are too low to substantiate sustainability. The AF is exceeding the NPIC benchmarks in Perinatal Care (PC), hospital-based inpatient psychiatry services (HBIPS), and venous thromboembolism (VTE) measures.

**Prevention Quality Indicators (PQI):** A review of MTF performance on the PQI measures from 2014 to 2016 demonstrates very good performance with 92.8 percent of AFMS PQI measures meeting or exceeding the national AHRQ benchmarks for the PQI 90 composite. The only measure with significantly low performance in 7 of 76 MTFs was PQI 13-Angina without Procedure Rate. It was noted that overseas MTFs had the greatest difficulty in meeting this measure requirement due to coding differences in host nation hospitals. PQI 13 is scheduled for retirement in 2017 based on Agency for Health Research and Quality (AHRQ) methodology validation updates. Blue is exceeding the benchmark and yellow is performing as expected.

#### AFMS PREVENTION QUALITY MEASURES (SEPT 2016)



# QUALITY IN THE AIR FORCE MEDICAL SERVICE (CONT.)

#### **National Perinatal Information Center (2014-2016)**

**Descriptive Measures:** During the past two years the number of deliveries in the AFMS has remained stable around 5,500 annual deliveries. The percent of Cesarean sections (C-section) in AF MTFs is lower than the NPIC average (25% in the MTFs in 2016QTR1 as compared to 35% for NPIC average), however the rate of obstetrical forceps deliveries has been higher than the NPIC average for the past 2 years at 1.5% (NPIC average is 1.2%).

**Shoulder Dystocia:** The AFMS rate of vaginal deliveries with coded shoulder dystocia linked to an inborn greater than or equal to 2500 grams with birth trauma has decreased from 28% during the MHS Review to 13.6% in 2015QTR3, below the NPIC rate of 14.1%.

**Postpartum Hemorrhage (PPH):** The AFMS decreased postpartum hemorrhage from 5.4% to 3.0% by 2015QTR3 and has remained significantly lower than the NPIC average over the past two years.

Air Force improvements in perinatal care include standardized checklists for decreasing variation, development of an Obstetric (OB) dashboard for near real-time performance and safety indicators to counter the data lag from NPIC, 100% review of all cases involving harm in delivery of the infant and care of the mother, and standardized simulation training to improve response to unpredictable events such as shoulder dystocia and postpartum hemorrhage.

#### **Postpartum and Infant Readmission to Delivery Site:**

The AFMS has had higher readmission rates than the NPIC benchmark over the past two years. Out of the last 5,500 births, 2.4% have resulted in readmission. Of these, 81.5% were related to management of hyperbilirubinemia. Currently, AF MTFs do not provide outpatient phototherapy (via lights or bilirubin blankets). AFMOA is looking into why MTFs do not provide this home health treatment regimen and ways to provide this service in the immediate future.

Agency for Healthcare Research and Quality (AHRQ)

**PSI 17:** AF direct care average annual rate of injury to neonates has remained higher than the NPIC average from 2010 to 2013. A closer look at data from 2015 illustrates coding issues associated with this metric although the AFMS is trending toward a decrease in harm. Efforts in improving coding accuracy on birth trauma and implementation of simulation training to prepare for high risk events are helping to drive performance thresholds below the AHRQ benchmark of 0.19.

**Infant Mortality:** The AFMS average for infant mortality has been lower than NPIC averages from 2014 to 2016. The AF does not currently have any level 3 NICUs. The lower AFMS rate is reflected by timely transfer of preterm and high-risk patients to a higher level of care.

National Surgical Quality Improvement Program—NSQIP®: Participation in NSQIP allows the AFMS to compare MTFs' performance on surgical-specific morbidity and mortality measures against more than 700 hospitals currently enrolled in the program. It also provides actionable data that have helped focus our process improvement efforts and moved the AFMS forward in attaining our Trusted Care goal of zero patient harm.

Facilities receive NSQIP® data via a comprehensive Semi-Annual Report (SAR). Risk adjusted morbidity and mortality outcomes are computed for each hospital and reported as odds ratios. The ratio represents the estimated odds of a complication or event occurring in a specific hospital compared to the odds of that complication or event occurring in all NSQIP participating hospitals. The odds ratios are then translated to deciles. Performance in the first decile is rated as "Exemplary", in the second to ninth deciles as the "As Expected" range, and in the tenth decile as "Needs Improvement."

At the time of the MHS Review, two AFMS facilities were enrolled in NSQIP, one of which was rated as "Exemplary" (and continues to remain in this category), while the other was rated as needing improvement on 2 metrics in the MHS Review report. This MTF is currently performing in the "As Expected" range on all measures and has conducted process improvements now being emulated by other facilities.

NSQIP is being expanded across the DoD with all AF hospitals enrolled by the end of the calendar year. The first SARs are expected in Feb 17.

# QUALITY IN THE AIR FORCE MEDICAL SERVICE (CONT.)

#### **Inpatient Mortality Measures**

Inpatient Quality Indicators (IQI) Condition Specific Mortality Measures: AFMS is monitoring 4 mortality indicators for Acute Myocardial Infarction (AMI), Heart Failure (HF), Pneumonia, and Stroke. The denominators for patients presenting with these conditions at our AF hospitals is low, and as such, a single death may lead to rates that are much higher than the AHRQ benchmark. Of note, MTFs with less than 20 cases of Stroke, Pneumonia, AMI, or Congestive Heart Failure per year were excluded from this analysis due to lack of statistical validity. Only Medical Centers had data for IQI AMI, Stroke and Congestive Heart Failure mortality whereas a number of our hospitals had data for the IQI Pneumonia mortality. AFMS overall performance for 2015QTR3 indicates all IQIs performing as expected and IQI 20 Pneumonia, better than expected mortality outcomes.

Two facilities are performing less than expected in two separate mortality categories: Congestive Heart Failure (CHF) and Stroke. Of the two facilities, one facility was an outlier due to a low denominator for Stroke (1 stroke death resulted in a rate much higher than the benchmark). Both facilities completed comprehensive mortality reviews in order to identify areas of potential harm and process improvement opportunities in order to improve patient outcomes.

#### AFMS INPATIENT QUALITY MEASURES (Q3 2015)



Assessment of Direct Care Risk Adjusted Mortality: Using regression analysis, a statistical model was developed that calculated expected deaths based on the case-mix of an MTF's population for a cohort of large hospitals. This initial study only looked at the year 2013, comparing the predicted number of deaths for an MTF against the observed number of deaths to define a Standardized Mortality Ratio (SMR). An SMR above 1.0 indicated a higher number of deaths than predicted. An SMR below 1.0 indicated fewer deaths at the facility than predicted. Confidence intervals were calculated to assess the degree of accuracy and vary based on risk adjustment, the number of cases included in the analysis and number of discharges. The outlier threshold for mortality has been defined as having a lower confidence interval greater than 1.

After the MHS Review, the AFMS implemented use of an evidence based mortality review tool to analyze all inpatient deaths for investigation of systems based factors that may have contributed to a death or preventable harm that occurred during the inpatient stay, and opportunities for mitigation and improvement.

The results of risk adjusted mortality for 2014 and 2015 indicate 11 of 13 AF hospitals with better-than-expected Risk Adjusted Standardized Mortality ratios and 2 of 13 MTFs with ratios that are within the expected range. Currently none of our hospitals are outliers in mortality.

**Accreditation:** All Air Force MTFs maintain accreditation through either The Joint Commission (TJC) or Ambulatory Association for Accreditation of Health Care (AAAHC).

# SATISFACTION IN THE AIR FORCE MEDICAL SERVICE

AFMOA created a Patient Advocate Program Manager position to provide expert guidance and mentorship to MTF Patient Advocates and standardize the program. The Patient Advocate Program Manager partners with MTFs to provide 1:1 database training to help identify areas of improvement.

Experience of Care Summary: Health Care Survey of DoD Beneficiaries (HCSDB) is sent quarterly to an annual sample of approximately 200,000 eligible beneficiaries. The survey is emailed to active duty personnel and mailed to other MHS beneficiaries with responses sent in by mail or Internet. HCSDB survey data describe the ratings of the patient's perception of their health plan, health care, personal physician, and specialty care. All benchmarks for HCSDB are based on the CAHPS 50th percentile. Sampled beneficiaries may or may not have used or tried to use healthcare at the time of the survey. Response rates among the surveys, and among subpopulations within surveys, vary significantly.

The Air Force telephone-based Service Delivery Assessment (SDA) obtains data from approximately 170,000 beneficiaries a year. The survey is designed to gather patient feedback in multiple areas of concern. SDA quarterly data from FY16 rating for "Satisfaction with Getting Care When Needed" indicates 41 of 74 (55%) MTFs rated 90% or greater. This is an improvement of 13% when compared to the FY13 data. The SDA 'Overall Satisfaction' rating for FY16 was 96%, 1% above FY13 rating of 95%. The FY16 rating indicates 100% (74/74) of AFMS MTFs met or exceeded 90% rating in this measure. AFMS has implemented the MHS Joint Outpatient Experience Survey (JOES). JOES will allow for a standardized, consistent survey

and methodology for assessing experience of care throughout the MHS.

TRICARE Inpatient Satisfaction Survey (TRISS): Willingness to Recommend the Facility [Q1, Q2, & Q3 FY2016; Q4 TRISS data not available at this time], shows AFMS at 77% (6% above HCAHPS benchmark of 71%). Of AFMS facilities that met requirement for minimal number of survey responses received, 100% (8/8) of these MTFs rated above the HCAHPS benchmark (FY16 Q1, Q2, & Q3 averages).

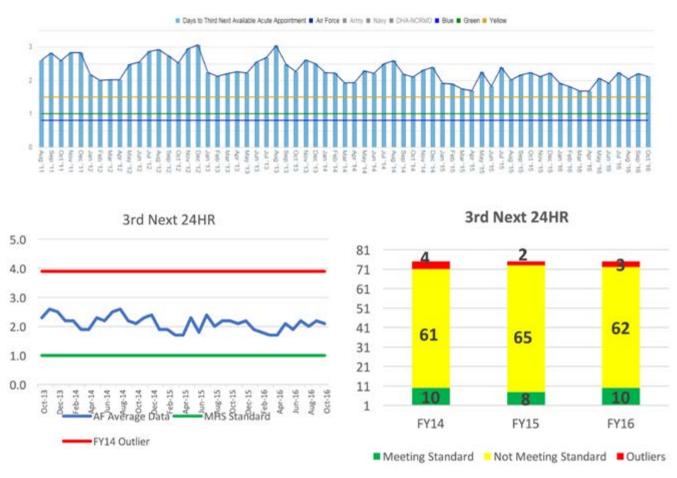
The AFMS has been active in Patient Satisfaction Process Improvements (PI) to ensure we are meeting the needs of our patients. The AFMOA Experience of Care Cell partnered with MTF staff and patients to identify potential patient barriers from clinic arrival to initial face-to-face encounter of an appointment (from parking lot to front desk) by utilizing a Mystery Patient tool. The cell also encourages PI initiatives developed by our MTFs such as the "Text Me Now" Program which supports real time intervention. Additional efforts to improve satisfaction include: participation of 8 MTFs in the Patient and Family Engagement Coordinator demonstration, and leadership engagement at Air Force Medical Service Agency (AFMSA), AFMOA, MAJCOM, and MTF levels to advance Patient and Family Advisory Councils throughout the AFMS.

# ACCESS IN THE AIR FORCE MEDICAL SERVICE

**Primary Care Manager Continuity:** Overall, PCM continuity in the Air Force Direct Care System has been variable and cyclic since the FY 2012 average of 55.4 percent. Drops to PCM Continuity generally happen every summer in the AFMS due to transition/permanent change of station (PCS) of providers from one installation to another. Implementation of the "First Call Resolution and No Call Back" policy in June of 2016 in the Air Force encouraged MTFs to keep patients within the MTF for their care; this decreased primary care leakage and improved MTF continuity of care, but decreased PCM continuity. Moreover, the AF had significant Family Health Physician manning gaps starting in April 2016, reaching an all-time low of 55% manning in July. This caused PCM continuity to drop even further to the low mark of 49.16% in July. Since that date, PCM continuity has been on the rise. The AFMS is working to improve enterprise staffing and local template management, to better utilize the Continuity List Patient Process, and to ensure proactive leadership engagement.

Average Number of Days to Third Next Acute Appointment in Primary Care: The average number of days to third next appointment is a *prospective* health care industry standard measure and is considered an excellent measure of overall appointment availability. In FY 2014 the average number of days to the third next acute appointment in MHS was 1.86 days, down 11 percent from 2.09 days in FY 2012. The overall range of observations was 0.44 days to 5.62 days, with 38 AF MTFs performing better than the overall average of 1.86 days. In FY 2015 AF had 47 MTFs performing better than 1.86 days and in FY 2016 AF had 51 MTFs. In FY 2015 AF average number of days to the third next 24HR appointment was 2.1 days and in FY 2016 it was 2.0 days. MTFs with access over 3.9 days became an outlier in FY 2014. AF had 4 MTFs with access over 3.9 days in FY 2014, 2 MTFs in FY 2015 and 3 MTFs in FY 2016. Thirty-nine AF MTFs improved access in FY 2015 vs FY 2014 and 49 MTFs improved their access in FY 2016 but still didn't meet their goal of 1 day. In October 2015 AF switched to a new Simplifying Appointing Systems and it is taking time to find a correct number of 24HR appointments vs FTR. In addition, to see significant improvement in access within the AFMS, we must improve staffing gaps, improving local template management and proactive leadership engagement.

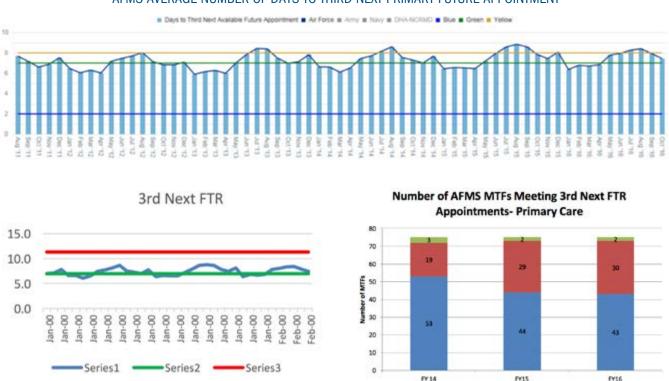
#### AFMS AVERAGE NUMBER OF DAYS TO THIRD NEXT 24-HOUR (ACUTE) APPOINTMENT



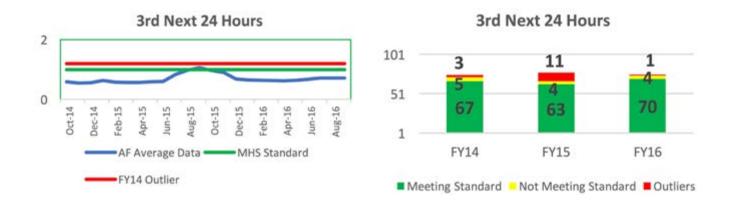
# ACCESS IN THE AIR FORCE MEDICAL SERVICE (CONT.)

**Average Number of Days to Third Next FTR Appointment in Primary Care:** The FY 2014 average number of days to the third next FTR appointment was 5.6 days for the Navy, 5.8 days for the Army, 6.9 days for the Air Force and 9.2 days for the NCR MD. In FY 2015 average number of days to the third next FTR appointment in the AF was 7.4 days and in FY 2016 it was 7.5 days. MTFs with access over 11.3 days became an outlier in FY 2014. AF had 4 MTFs with access over 11.3 days in AF 14, 2 MTFs in FY 2015 and 2 MTFs in FY 2016. Thirty AF MTFs improved access in FY 2015 vs FY 2014, and 29 MTFs improved their access in FY 2016 but still didn't meet their goal of 7 days.

#### AFMS AVERAGE NUMBER OF DAYS TO THIRD NEXT PRIMARY FUTURE APPOINTMENT

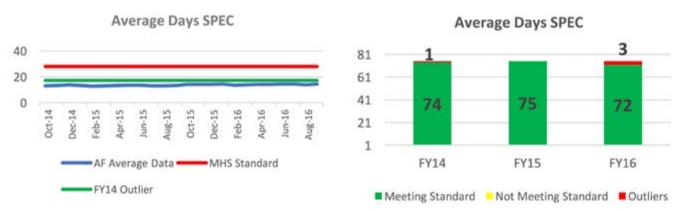


**Average Number of Days to 24HR in Primary Care:** The FY 2014 average number of days to 24HR was 0.57 days, in FY 2015 it was 0.68 days and in FY 2016 it was 0.71 days. MTFs with access over 1.2 days became outliers in FY 2014. AF had 3 MTFs with access over 1.2 days in 2014, 11 MTFs in FY 2015, and 1 MTF in FY 2016. Nineteen AF MTFs improved access in FY 2015 vs FY 2014 and 19 MTFs improved their access in FY 2016 but still didn't meet their goal of 1 day.

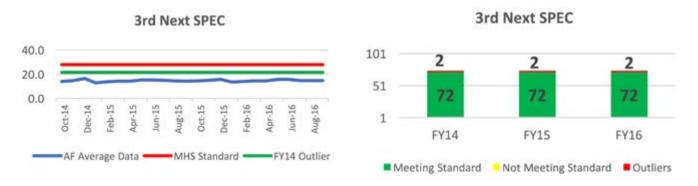


# ACCESS IN THE AIR FORCE MEDICAL SERVICE (CONT.)

**Average Number of Days to Specialty Care:** The FY 2014 average number of days to Specialty Care was 11.80 days, in FY 2015 it was 13.32 days and in FY 2016 it was 14.13 days. MTFs with access over 17.2 days became an outlier in FY 2014. AF had 1 MTF with access over 17.2 days in 2014, zero MTFs in FY 2015 and 3 MTFs in FY 2016. The MHS standard is 28 days; all MTFs met the MHS goal of 28 days in FY 2014, FY 2015 and FY 2016.



**Average Number of Days to Third Next Specialty Care:** The FY 2014 average number of days to Specialty Care was 14.1 days, in FY 2015 it was 14.6 days and in FY 2016 it was 14.6 days. MTFs with access over 21.5 days became an outlier in FY 2014. AF had 2 MTFs with access over 21.5 days in 2014, 2 MTFs in FY 2015 and 2 MTFs in FY 2016. The MHS standard is 28 days; one MTF did not meet this standard in FY 2014, while all MTFs met the MHS goal of 28 days in FY 2015 and FY 2016.



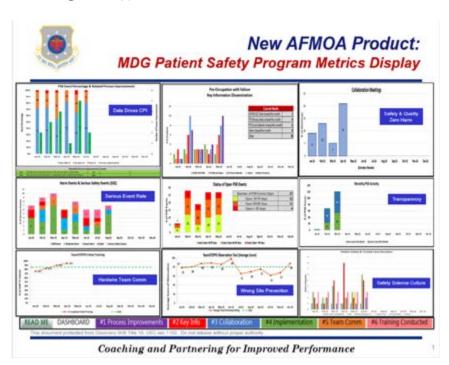
In 2015, the PSP Focused on Leadership Commitment, Establishing a Culture of Safety, Implementing CPI Initiatives, and Driving All Results Toward Zero Harm

The 90-day review acted as a catalyst for the AFMS "High Reliability Summit" in February 2015, where approximately 200 senior AFMS & Major Command (MAJCOM) leaders attended and trained on their pivotal roles in advancing safety. In addition to discussing the current state of safety and quality at the summit, these leaders also introduced a new partner, Healthcare Performance Improvement (HPI), who provided new process improvement initiatives as well as safety classification systems. From the inspired work at the High Reliability Summit, the concept of operations known as Trusted Care was implemented six months later with the goal of Zero Harm. We are now on track to provide safety science training for leaders at all 76 MTFs by the end of 2017, and to develop Patient Safety focused leaders to drive culture changes in support of Trusted Care and HRO.

Communication of Significant Events via Forums and Tools: Performance Management Forums to highlight key metrics and "way-ahead" strategies with follow-up action plans to MAJCOM/MTF leadership in a two-way dialogue; led by AFMOA/CC.

Created 4 products to communicate critical information to all 76 MTFs, MAJCOMS and AFMS leaders:

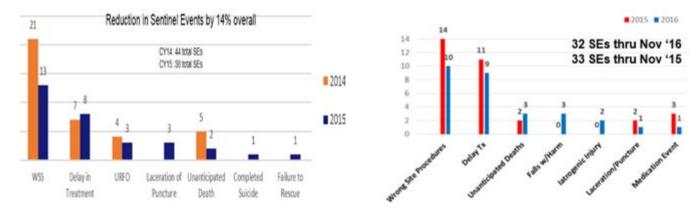
- PS Minute; a PS story/data summary; kicks off various AFMS leadership meetings
- (2) PS Safety Event Debrief (RCA lessons learned for MTF to share widely)
- (3) Patient Safety Alerts; a quick initial synopsis from a sentinel event to cross-flow information and create awareness to prevent repeat of harm
- (4) PS Program Metrics Display (MTF Decision Support Tool)



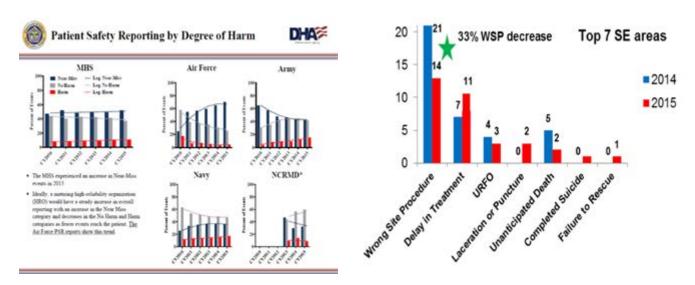


**Sentinel Events and Root Cause Analysis (RCA) Activities 2014-2016:** We have continued to focus on transparency of reporting with DHA and TJC, frequent cross-checking of data, focused data analysis, creating actionable data and widely sharing lessons learned across the AFMS and DoD from our RCA Cell and MTF RCA investigations to prevent the next harm event. There has been a consistent reduction of Sentinel Events from 2014-2016.

Overall event reporting has continued to increase which is consistent with organizations on the journey to High Reliability. We continue to evaluate and learn from our near misses and unsafe conditions in ways that can be applied to preventing future harm.



Wrong Site Surgery/Procedures (WSS) on a Trusted Care Journey to Zero Harm: There was a 33% decrease in WSS from CY14 to CY15. The majority of these events were dental WS procedures: 17/22 in CY14, 10/14 in CY15. The Air Force Dental Service (AFDS) identified a significant need to improve reporting, awareness, and communication. As a result of Safety Culture improvement efforts, AFDS has decreased Wrong Site Surgery (WSS) events by 20% and Wrong Site Anesthesia (WSA) events by 46% between 2014 and 2015. In CY 2016, we have continued a relentless focus on WSS prevention and have achieved a further 29% reduction in events from 14 to 10 by 15 Dec 2016.



**Central Line Associated Blood Stream Infections (CLABSI):** We are committed in Trusted Care to drive CLABSI to sustained Zero Harm levels. CLABSI data accuracy has improved through leadership awareness, training and reporting. AFMOA formed a CLABSI prevention working group which adapted an evidence based prevention toolkit. This kit incorporates the CLABSI prevention bundle which includes training modules, insertion and maintenance checklists, documentation of line necessity, investigation aides if infection occurs, and compliance monitoring. The need for full-time Infection Preventionists (IP) at our hospitals, regional IPs to assist with outpatient facilities and a HQ level IP for program oversight was codified. Current CLABSI data are as follows for the AF: Calculated rate per 1000 line days: Q1 2014 = 4.76 to Q4 2015 = 1.43; a positive improvement toward our goal of zero infections.

**Unidentified Retained Foreign Objects (URFOs):** The AF focused its attention on reducing URFOs in OB/GYN cases by incorporating simulation and implementation of TeamSTEPPS principles along with attentive use of checklists. With these actions and other items listed in a URFO driver diagram, the improvements in communication, handoffs, and compliance has led to sustained elimination of vaginal sponge retention events since 2015. Additionally as a further impact of our URFO CPI efforts, the AFMS decreased its URFO by 75% since 2014, with 3 events in 2015 followed by a period of 307 days without a URFO from 2015-2016. As of 15 Dec 2016, there has been one reported URFO (retained guide wire) at one of our deployed MTFs. As of 9 Dec 16, it has been 240 days since the last URFO.

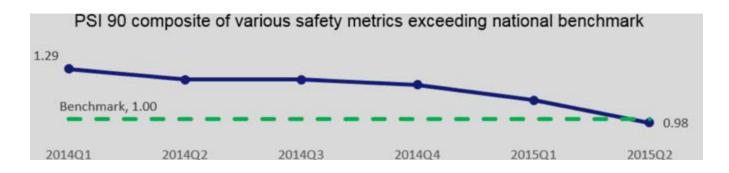
ALL SENTINEL EVENTS  Current as of 9 December 2016  (Last Reported Sentinel Event 2 December 2016)  Failure to Rescue	CUMUL Y/D	# DAYS SINCE LAST EVENT	
☐ 45 Days Since Last Sentinel Event☐ 7-44 Days Since Last Reported Sentinel Event☐ 1-6 Days Sentinel Event Occurred☐	33	7	
Birth Injury	1	154	
Death, Unanticipated	3	90	
Delay in Dx/Tx	9	112	
Failure to Rescue	1	7	
Fall	3	108	
Fire (Operating Room)	1	287	
latrogenic Injury	2	127	
Medication Error	1	273	
Unintended Puncture	1	211	
URFO	1	240	
WSS/Procedure	10	57	

AFMS established a safety campaign with multiple metrics to include a goal of 500+ URFO Free Days in 2016-2017

Excluding 1 deployed location, AFMS has gone 550 days without a URFO. AFMS is on the right path to zero harm and HRO in 2016.

Patient Safety Indicators (AHRQ): There was one AF MTF listed as an MHS review outlier in AHRQ PSI 90 Composite. A deep dive was conducted with 100% case reviews associated with the metric and an action plan for improvement was developed. Additionally, the AFMS hosted monthly Defense Connect On-Line (DCO) meetings, VTCs and teleconferences to ensure on-going dialog between AFMOA, MTFs and MAJCOM/SGs for other PSIs with increased rates. AFMOA tracked progress on any outliers in our quarterly Performance Management Forums and established monthly working groups with subject matter experts to standardize processes and disseminate lessons learned for sustained improvement.

AFMS has trended positively with a majority of MTFs below the AHRQ benchmark of 1.0. In 2015 Q3, 77% or 10/13 of our MTFs were successful in sustaining positive performance below the threshold.



**Patient Safety Culture Survey 2016:** Deloitte Consulting LLP and Zogby Analytics fielded the surveys from February to April 2016, with an Air Force response rate of 46% (16,974 respondents of 37,236). Survey data obtained from 75 Air Force hospitals, clinics, and

dental clinic/DENTACs were analyzed to help understand the current state of patient safety culture and to identify the leading strengths and areas for improvement. The AFMS results are divided between Hospital and Medical Office categories.

# **Patient Safety Culture Survey 2016 Key Findings**

#### Hospital

In 2016, Overall Air Force results remained stable or decreased from their 2011 levels. Seventy-nine percent of respondents reported that their work area has a positive patient safety grade, down three percent from 2011. AFMS strengths since 2011 include teamwork within units and supervisor/manager expectations with actions dimensions receiving the highest percentage of positive scores. Three dimensions meet AHRQ's criteria as an area of weakness: staffing, handoffs & transitions, and non-punitive response to errors. The staffing dimension decreased by three percentage

points compared to 2011 and open-ended comments from respondents point to staffing as a top-of-mind concern. Further, survey questions regarding staffing rank at the lower level of responses (34%-54% positive), this represents an area for needed improvement going forward. Responses regarding handoffs & transitions have also seen a downward trend since 2011. The dimension score decreased from 48% in 2011 to 46% in 2016. On the other hand, Non-punitive Response to Error/Mistakes improved by one percentage point in the survey.

#### **Medical Office**

Overall Air Force results for the Medical Office Survey remained stable or improved since 2011. Sixty-seven percent of respondents gave their work area a positive patient safety grade, up one percentage point since 2011. Nine out of thirteen dimension scores have increased or remained the same since 2011. Dimensions identified as areas of strength are the same as in 2011 and include patient care

tracking/follow-up (84% positive), teamwork (83% positive), organizational learning (81% positive), and overall perceptions of patient safety (75% positive). Work pressure & pace (38% positive) is the only dimension with a score below 50%. This dimension scores considerably lower than the next lowest scoring dimension, leadership support for patient safety (63% positive), and has not changed since 2011.

PATIENT SAFETY DIMENSION	AIR FORCE MEDICAL SERVICE	AFMS 2016 VS. 2011	OVERALL MHS	MHS 2016 VS. 2011	MHS 2016 VS. AHRQ 2016
Teamwork within Units	78%	-	76%	↑1pt	√6pts**
Supervisor/Manager Expectations and Actions Promoting Patient Safety	77%	√2pts	74%	↑1pt	√4pts
Management Support for Patient Safety	72%	√2pts	72%	=	=
Organizational Learning—Continuous Improvement	70%	-	69%	↑2pts	√4pts
Frequency of Events Reported	69%	↑3pts	66%	↑2pts	√1pt
Overall Perceptions of Patient Safety	64%	√5pts	65%	√1pt	√1pt
Feedback and Communication About Error	68%	√1pt	65%	↑3pts	√3pts
Communication Openness	65%	↑1pt	64%	↑3pts	=
Teamwork Across Units	58%	√2pts	59%	=	√2pts
Handoffs & Transitions	46%	√2pts	50%	↑1pt	↑2pts
Nonpunitive Response to Error	45%	↑1pt	46%	↑4pts	↑1pt
Staffing	43%	√3pts	46%	√2pts	√8pts**

**Health Care Personnel Communications:** Transitions in care and hand-off communication between health care personnel are frequently cited as primary factors contributing to patient safety events across the nation. The Air Force utilizes the Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS®), a system whose purpose is to improve communication techniques within health care settings. TeamSTEPPS is an evidence-based teamwork development system designed to produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes. The Air Force Medical Service (AFMS) has TeamSTEPPS program management at the Air Force Medical Operations (AFMOA) level and TeamSTEPPS coordinators are assigned at each of 76 Medical Treatment Facilities (MTF). The AFMS participates in the annual DoD TeamSTEPPS conference session to share MTF level best practices. Nationally, the AFMS has been consistently selected annually by the Agency for Healthcare Research and Quality (AHRQ) for poster presentations at the National TeamSTEPPS conference and in 2016, Altus AFB, was selected by the Association of Military Surgeons of the United States, on their TeamSTEPPS program which focused on 'Access to Care.' Currently the AFMS has 80% of medics educated in TeamSTEPPS with a fresh focus of Trusted Care which includes evidenced based

TeamSTEPPS tools and a refocus on effective safety behaviors that lead to a highly reliable organization and zero harm. Non-traditional methods of learning were added to the AFMS TeamSTEPPS program this year with a partnership between AFMOA and the Air Force Medical Modeling and Simulation Training Program (AFMMAST). This partnership highlighted a recently developed serious gaming product called Safe Surgery Trainer (SST). The SST's immersive environment lets players engage directly with patient safety objectives through a series of scenarios set in the operating room. Moreover, the training program promotes knowledge, skills, and abilities on TeamSTEPPS concepts of teamwork, cross monitoring, psychological safety, and most importantly, communication. Results from the study demonstrated a 32% increase in safety language knowledge. The AFMS partnered with the Air Force Safety Center (AFSEC) to develop a patient safety culture and climate survey that provides actionable data approximately 2-4 weeks after survey completion. The data are provided via a one-on-one debriefing to the MTF Commander and executive staff. They are also housed on the Air Force Combined Mishap Reduction System (ACRMS) website. The AFSEC has conducted surveys throughout the Air Force, touching every Major Command and provides an additional avenue in assessing the strengths, weakness and barriers of the Air Force patient safety program at the AFMS, Wing and MTF Commander levels.

# NATIONAL CAPITAL REGION MEDICAL DIRECTORATE SUPPLEMENT

The Defense Health Agency's (DHA) National Capital Region Medical Directorate (NCR MD) exercises authority, direction, and control over the Walter Reed National Military Medical Center (WRNMMC), Fort Belvoir Community Hospital (FBCH), and the Joint Pathology Center (JPC), with their subordinate clinics: DiLorenzo TRICARE Health Clinic, Tri-Service Dental Clinic, Fairfax Health Center, and Dumfries Health Center. NCR MD also is the backbone of the National Capital Region enhanced Multi-Service Market (NCR eMSM).



The NCR eMSM is a system of military treatment facilities from all four components: the DHA, Army, Navy and Air Force. With a unique mission and co-location with the Uniformed Services University of Health Sciences (USUHS) and several Federal healthcare providers (e.g., Veterans Affairs, National Institute of Health, etc.), the NCR is an Academic Health System (AHS) focused on leveraging its resources on generating and sustaining a ready medical force for the nation. The intent of the NCR AHS is to become the preeminent integrated academic health system in America, connecting every federal hospital and clinic in the region by:

 Building and sustaining a high reliability culture of quality that permeates throughout our organization and has the paramount goal of zero harm to patients and staff,

- Infusing input from our patients, caregivers, and staff into high velocity learning and rapid cycle innovation in order to put the NCR AHS at the vanguard for improving caregiver wellbeing, patient experience, quality and safety, and
- Enhancing the professional operational readiness of our personnel and teams through the active holistic management of both the direct and purchased care sectors of the TRICARE marketplace across the NCR.

By leveraging all four components and their inherent strengths, the NCR AHS will become the healthcare system of choice for beneficiaries in the National Capital Region, and the employer of choice for our total workforce - active duty, civil service and contractors. The NCR AHS will lead the Military Health System in delivering the Quadruple Aim – the best experience of care at the best value resulting in the best health and maximized readiness.

# **QUALITY**

# **Accreditation**

All five military treatment facilities (MTFs) in the NCR MD are accredited by the Joint Commission, as noted below in Table 1, and as required by DoD Instruction 6025.13 which stipulates that MTFs meet or exceed the standards of appropriate external accrediting bodies. Additional accreditations are also noted as applicable. Any corrective actions noted have been addressed by the individual MTF and are monitored for compliance internally on an ongoing basis.

TABLE 1: NATIONAL CAPITAL REGION MEDICAL DIRECTORATE FACILITY LEVEL ACCREDITATION STATUS

FACILITY	JOINT COMMISSION ACCREDITATION	JOINT COMMISSION CORRECTIVE ACTIONS NOTED	ADDITIONAL ACCREDITATIONS	
WRNMMC	Yes, effective 2/28/2015	Recommendations for Hospital Program:	<ul> <li>NCQA Patient-Centered Medical Home, Level 3 Recognition</li> </ul>	
DiLorenzo		None	<ul> <li>NCQA Patient-Centered Medical Home, Level 3 Recognition</li> </ul>	
			<ul> <li>NCQA Patient-Centered Medical Home, Level 3 Recognition</li> </ul>	
		None	<ul> <li>Baby-Friendly, USA, Inc. (BFI) Awarded in July 2014.</li> </ul>	
			<ul> <li>The Virginia Maternity Center</li> <li>Breastfeeding-Friendly Designation (VA</li> <li>MCBFD) Received May 2016</li> </ul>	
FBCH			Lab – College of American Pathology (CAP)	
	Yes, effective 3/21/2015		<ul> <li>American College of Radiologists</li> <li>Certification – Breast Imaging</li> </ul>	
				<ul> <li>American College of Radiologists</li> <li>Certification - Rad/Onc.</li> </ul>
			<ul> <li>Mammography Quality Standards Act (FDA) Facility Inspection</li> </ul>	
Dumfries Health Center		None	NCQA Patient-Centered Medical Home, Level 3 Recognition	
Fairfax Health Center		None	<ul> <li>NCQA Patient-Centered Medical Home, Level 3 Recognition</li> </ul>	

# **QUALITY** (CONT.)

#### **Policy Review**

Within the NCR MD, quality is governed by the Clinical Quality Management Manual (6025.01), which outlines the policy guidance, procedures, and responsibilities for the administration of a Clinical Quality Management Program (CQMP), under the guidance of DoD Instruction 6025.13 and Army Regulation 40-68. This document outlines the processes and policies for privileging, credentialing, peer review, risk management, and organizational performance improvement, among other topics. The NCR MD also employs a Quality Work Group (5003.02), which facilitates discussion and information sharing across all facilities throughout the larger NCR eMSM, and helps to align processes and share best practices.

# **Data Analysis**

# The Joint Commission (TJC): ORYX [Q1 CY2016]

ORYX is a set of measures used by TJC in its hospital accreditation process, in which both NCR MD inpatient facilities participate. In the 2014 MHS 90-Day Review, ten ORYX measures were identified as outliers at one or both of the NCR MD facilities, identified below in Table 2. Since 2014, corrective actions have been implemented and improvement has been seen across nearly all metrics. The NCR MD continues to monitor progress internally on an ongoing basis through its QWG, and data also are reviewed regularly though various DHA-level working groups.

TABLE 2: NATIONAL CAPITAL REGION MEDICAL DIRECTORATE ORYX MEASURE PERFORMANCE

PATIENT SAFETY DIMENSION	WRNMMC		FBCH	
	90-DAY REVIEW	CY16 Q1	90-DAY REVIEW	CY16 Q1
CAC3: Asthma HMPC	50.0%	100%	0.0%	0.0%*
HF1: Discharge Instructions			95.83%	Retired
HBIPS6a: Psych Discharge Plan Created			77.97%	93.65%
HBIPS7a: Psych D/C Plan Transmission	94.12%	86.51%+	72.88%	90.48%
PC2: C-section Rate (Nulliparous)			39.03%	75.76%^
PC3: Perinatal Antenatal Steroids	100%	100%		
PC5: Exclusive Breast Milk Feeding	68.49%	73.21%	62.79%	79.22%
PN6a: Antibiotics for Community Acquired Pneumonia in ICU			ND	ND
SCIP2a: Appropriate Perioperative antibiotics administered			97.73%	ND
SCIPCard2: Rec'd Perioperative Beta-Blocker as indicated			100%	ND

<sup>\*</sup>FBCH had only one case eligible for this metric, for which the numerator was not met.

<sup>+</sup> WRNMMC had 17 observed failing cases (out of 126): 15 cases did not document transmission of care plans, and 2 cases failed to document medication indications at D/C. This particular abstraction period was below the normal observed rate (CY1504=97.6%).

<sup>^</sup>Chart review identified that these C-sections were for legitimate medical reasons other than the ones recommended by TJC guidelines (arrest of descent, arrest of dilation, failed induction, NRFHRT, history of HSV, intolerance to labor, failed vacuum delivery, and patient request due to back pain), and thus the reason for the shown measure compliance rate.

# **QUALITY** (CONT.)

# National Committee for Quality Assurance (NCQA): Healthcare Effectiveness and Information Set (HEDIS) [Q3 CY2016]

NCQA developed and maintains HEDIS®, a tool used by more than 90 percent of U.S. health plans to measure performance on important dimensions of care and service using 81 measures across 5 domains of care. HEDIS measures are reported as the percentage of eligible patients receiving a service and then compared to the NCQA benchmark percentiles. In the 2014 MHS 90-Day Review, no HEDIS measures were identified as outliers within the NCR MD. The NCR MD continues to monitor progress internally on an ongoing basis.

# American College of Surgeons (ACS): National Surgical Quality Improvement Program (NSQIP)— Specifically Assess Data on Surgical Care Outcomes During Such Year [CY2015]

The NSQIP (30 Day) All Cause Morbidity Index examines complications and deaths occurring within 30 days of the procedure. NSQIP extracted data are selected from a sample of approximately 20% of all cases, and provide a comparison of MHS surgical performance against more than 500 NSQIP participating hospitals.

In the 2014 MHS 90-Day Review, WRNMMC was identified as a low-performing outlier on this metric, with a 1.51 odds ratio (OR); the OR that represents the estimated odds of a complication or event occurring in a specific hospital compared to the estimated odds of that event occurring in all participating NSQIP hospitals. Since that time, a corrective action plan was implemented and performance, as of CY2015, is now meeting standards (0.94 OR). The NCR MD continues monitor progress internally on an ongoing basis.

# National Perinatal Information Center (NPIC)— Specifically Assess Data on Maternity Care Outcomes During Such Year [Q1 CY2016]

The NPIC utilizes MHS direct care data to compare the quality of care provided to pregnant women and newborns against averages of metrics derived from data submitted by 86 participating hospitals. In the 2014 MHS 90-Day Review, four NPIC measures were identified as outliers at NCR MD facilities, identified below in Table 3. Since 2014, corrective actions have been implemented and improvement has been seen across all metrics where data are available. The NCR MD continues to monitor progress internally on an ongoing basis.

TABLE 3: NATIONAL CAPITAL REGION MEDICAL DIRECTORATE NPIC MEASURE PERFORMANCE

NPIC MEASURE	WRNMMC		FBCH	
	90-DAY REVIEW	CY16 Q1	90-DAY REVIEW	CY16 Q1
Postpartum Hemorrhage	6.6%	2.9%		
PSI 17: Trauma to Infant During Birth			1.3%	0.0%
PSI 18: OB Trauma—Vaginal Delivery with Instrument			25.9%	ND
PSI 19: OB Trauma—Vaginal Delivery w/o Instrument	3.0%	ND		

# PATIENT SAFETY

#### **Policy Review**

Patient Safety in the NCR MD is governed by the Clinical Quality Management Manual (6025.01), Enclosure 13. This policy is designed to ensure that all NCR MD facilities: (1) align processes to lessen variability; (2) establish and update memorandums of agreement

(MOAs) with other Services to ensure support for patient safety activities; and (3) ensure close review of individual Service level policies to find best practices and lessen variability among the Services in the NCR.

#### **Data Analysis**

# AHRQ: Survey on Patient Safety Culture (Hospital and Ambulatory) [CY2016]

The AHRQ Surveys on Patient Safety Culture enable health care organizations to assess how their staffs perceive various aspects of patient safety culture. In the 2014 MHS 90-Day Review, WRNMMC was identified as a low-performing outlier on the overall dimension score for the 2011 survey, having achieved an overall dimension score of 54.5% (compared to the MHS average of 63.1%).

The most recent survey, conducted in 2016, saw a modest improvement in this score to 56.8%. The NCR MD's QWG is continuing to identify areas of opportunity for improving staff perceptions of patient safety, and will conduct pulse surveys to monitor performance though the interim period in advance of the next AHRQ survey.

# National Health Safety Network (NHSN): Healthcare Associated Infections (HAI), Particularly Catheter Associated Urinary Tract Infections (CAUTI), Central Line-Associated Bloodstream Infections (CLABSI) [Q2 CY2016]

The CDC's NHSN is the nation's most widely used healthcare-associated infection tracking system. In the 2014 MHS 90-Day Review, two NHSN metrics were identified as outliers at one NCR MD facility. FBCH was identified as a high-performing outlier for CLABSI, but a low performing outlier for VAP/VAE. Since that time, Infection Prevention and Control (IPaC) and ICU teams continue to monitor compliance with adherence

to evidence based practice bundles for CLABSI and VAP/VAE, and as a result, no new cases of CLABSI or VAP/VAE have been reported. The NCR MD continues to

# Sentinel Event (SE) Reporting and Root Cause Analysis (RCA) [Q3 CY2016]

monitor progress internally on an ongoing basis.

The process and policy for SE Reporting and RCAs is outlined in 6025.01, Enclosure 13. The NCR MD has adopted the Joint Commission list of reviewable SEs, and in FY2013, 37 SEs were reported. These reports and RCA results are captured and shared among the NCR MD QWG not only to share information, but to seek out lessons learned and share best practices with other facilities in the NCR eMSM.

#### Performance Improvement (PI) RCA [Q3 CY2016]

The process and policy for performance improvement is outlined in 6025.01, Enclosure 4. Each inpatient MTF and Center in the NCR MD maintains a single written plan that includes all departments/services/functions and defines how each of its established CQM processes and PI activities will be implemented.

# Patient Safety Reporting (Distribution by Degree of Harm) [Q2 CY2016]

The process and policy for patient safety (PS) reporting is outlined in 6025.01, Enclosure 13. PS Reports are submitted through NCR MD to the DoD PS Data Analysis Center, with the data, information, and format in accordance with DoD PSP guidance.

# ACCESS AND PATIENT SATISFACTION

#### **Policy Review**

The NCR MD follows access policies defined in the Simplified Appointing Guidance policy signed by ASD/HA in July 2015 and the NCR MD First Call Resolution and Expeditious Reply to Patient Policy signed by NCR MD Director in April 2015.

These policies are designed to work together to provide a highly patient-centric appointment process in primary care and specialty care settings. Their combined objective is to increase and improve access to care and simplify the process by which patients receive the right care, at the right time, in the right setting, and with the right provider.

#### **Data Analysis**

#### **Primary Care Manager (PCM) Continuity**

Throughout FY2016, the NCR MD saw PCM Continuity—the total number of appointments where the MTF

enrollee was seen by his or her assigned PCM divided by the total number of planned appointments — fluctuate between 50.43% and 57.00%.

#### **Third Next Available 24-Hour Appointment**

Performance on the Third Next Available 24 hour Appointment has demonstrated significant improvement in the NCR MD over the last two years; both in overall performance and elimination of variation (see Figure 1). As of October 2016, the average number of days to the third next available acute appointment was 0.93 days. Significant efforts have been made in particular at FBCH, where a highly active template management program for Primary Care has been implemented. This system includes both centralized schedule management, as well as active schedule monitoring at 0830 and 1330 daily. The system is currently undergoing an external review, and will be fine-tuned accordingly. As lessons learned emerge, these practices will be adapted throughout the NCR MD.

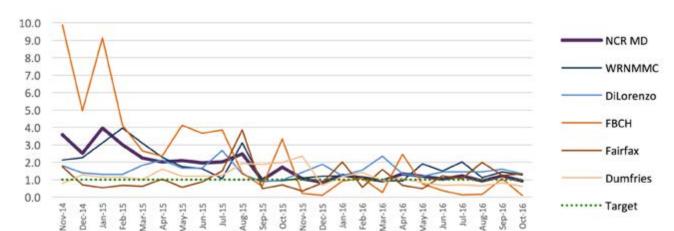


FIGURE 1: THIRD NEXT AVAILABLE 24-HOUR APPOINTMENT IN PRIMARY CARE

# **Third Next Available Future Appointment**

The Third Next Available Future Appointment has consistently been a challenge for NCR MD facilities (see Figure 2). As of October 2016, the average number of days to the third next available future appointment was 8.73 with a target of 7.0 or lower. An analysis is currently underway to adapt lessons learned from the FBCH efforts to improve 24 hour access gains from future appointments.

These data also currently include non-primary care activities (e.g., Pediatric Subspecialties); within the PCMH clinics, the third available future appointment is 6.9 days as of October 2016.

25.0

20.0

WRNMMC

15.0

10.0

DiLorenzo

FBCH

Fairfax

Dumfries

91-yev

91

FIGURE 2: THIRD AVAILABLE FUTURE APPOINTMENT IN PRIMARY CARE

#### **Days to 24-Hour Appointment**

In September 2016, the average days to 24 hour appointment was 1.2 days within the NCR MD. In implementing its strategies for the Third Next Available Appointment for 24 Hour access, the NCR MD experienced staffing shortages that have been subsequently corrected. In Figure 3, the trend has been toward a reduction in variance among the facilities and overall higher performance. As the NCR eMSM pursues strategies related to primary care access and the optimization of the specialty care referral process, performance on this measure will both improve and variance among facilities will decrease.

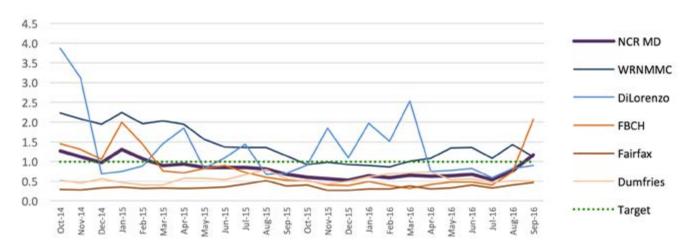


FIGURE 3: AVERAGE DAYS TO ACUTE CARE APPOINTMENT

# **Days to Specialty Appointment**

In September 2016, the average days to specialty appointment was 16.4 in the NCR MD (see Figure 4). While this is within the target threshold of 28 days, the NCR eMSM is continuing an optimization strategy to increase the availability of specialty services throughout the market. The market is simultaneously focused on increasing the quality of referrals and reducing the time required to review each referral.

30.0 NCR MD 25.0 WRNMMC 20.0 DiLorenzo 15.0 **FBCH** 10.0 Fairfax 5.0 **Dumfries** 0.0 ····· Target Sep-15 Oct-15

FIGURE 4: AVERAGE DAYS TO SPECIALTY CARE APPOINTMENT

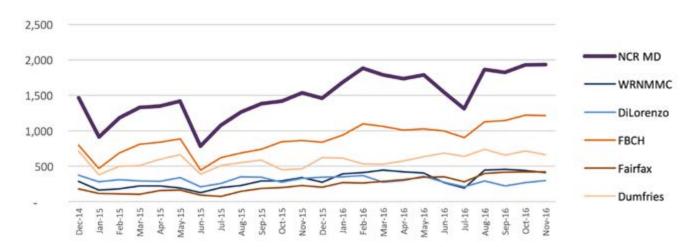
#### Patient-Centered Medical Home Appointments Web Enabled for TRICARE Online Booking

In November 2016, 9.61% of appointments were booked using TRICARE Online Booking in PCMH Clinics across the NCR MD. The NCR is committed to providing multiple venues for patients to access care, including TRICARE Online. Overall the usage of TRICARE Online is increasing across the market in both volume (Figure 6) and percentage of total appointments (Figure 5).



FIGURE 5: PERCENT OF PCMH APPOINTMENTS BOOKED ON TRICARE ONLINE

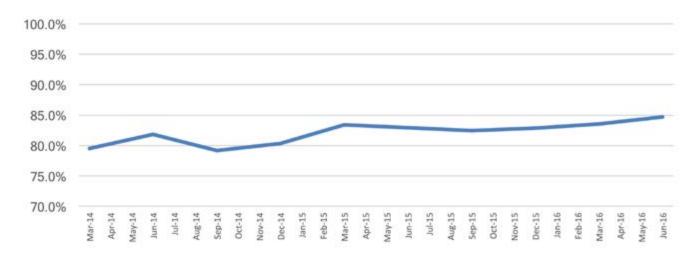
FIGURE 6: PCMH APPOINTMENTS BOOKED ON TRICARE ONLINE



#### **TROSS: Patient Satisfaction with Getting Care When Needed**

As of June 2016, 84.7% of patients in the NCR MD reported their satisfaction with getting care when needed. Over the last two years, satisfaction scores have improved (Figure 7). As a barometer of patient satisfaction with access and the overall accessibility of health care, the NCR MD continues to monitor progress internally and expects additional improvement as further improvements to access and the patient experience are implemented as described above. The recent shift to the Joint Outpatient Experience Survey (JOES) will also provide additional comparative data for the market by standardizing the survey across all components.

FIGURE 7: SATISFACTION WITH GETTING CARE WHEN NEEDED (TROSS)

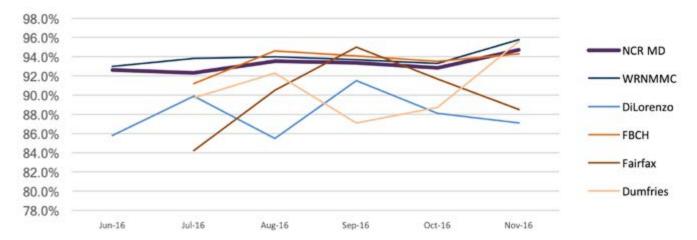


# TRISS/JOES: Willingness to Recommend the Facility

As of November 2016, 94.7% of patients in the NCR MD would recommend their outpatient facility (Figure 9), and in April 2016, 80.7% would recommend their inpatient facility (Figure 8). The NCR MD continues to monitor progress internally on an ongoing basis while paying particular attention to quality and access as drivers of patient satisfaction.

FIGURE 8: WILLINGNESS TO RECOMMEND INPATIENT FACILITIES

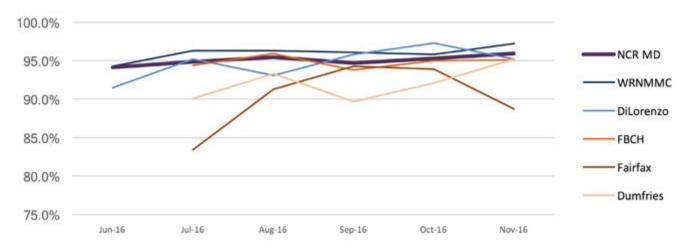




# **JOES: Overall Satisfaction with Care**

In November 2016, 95.9% of patients in the NCR MD reported they were satisfied with their outpatient care (Figure 10). The NCR MD continues to monitor progress internally on an ongoing basis and continues its focus on the patient experience, quality and overall access.

FIGURE 10: JOES: OVERALL SATISFACTION WITH CARE



# COMPONENT CLOSING, IDENTIFICATION OF NEXT STEPS

Quality, access, and patient safety continue to be the leading drivers of the NCR MD and the eMSM as the organization strives towards becoming a culture of high reliability. Maturing as a high reliability culture of quality will allow the NCR to provide the best care to every patient, every day. As one of the Director's top priorities, the NCR MD continues to build and sustain a high reliability culture of quality that permeates throughout the organization with a paramount goal of zero harm to patients and staff.

Over the next three years, the NCR MD and eMSM have established four broad initiatives to maintain and build on the achievements of the last few years – aimed at achieving the vision of becoming the preeminent integrated academic health system in America:

◆ Maturing a High Reliability Culture of Quality: The NCR eMSM will continue the journey in maturing its High Reliability Culture of Quality through various mechanisms geared towards solidifying a culture of trust, transparency and standardization by 2019, to include: development of an informed, standardized PSR mechanism and coordinated practice of safe Patient Hand-Offs/Transitions of Care; creation of a fully integrated and robust PI system; establishment of a Regional IHI Chapter and finally, improving transparency of the market to its stakeholders by providing real-time information regarding their healthcare providers and facilities in which they obtain care.

- ◆ Seamless Patient and Team Experience: Within the next three years, this Strategic Initiative seeks to improve access through improved referral guidelines and standardized credentialing; improve patient experience and satisfaction through sharing of best practices and single information points for patients and team members; and improve access and reduce leakage through Urgent/Minute clinic implementation.
- ◆ Optimizing a Fully Engaged Direct Care System:

  Over the next three years, the Optimizing a Fully Engaged Direct Care System Initiative intends to improve access to care and decrease network deferral costs by standardizing, integrating, and coordinating the delivery of efficient care across the market. This work includes projects focused on product line optimization, direct booking of referrals, regional delivery of services, and predictive analytics to deliver targeted care.
- ◆ Establish an Academic Health System: Over the next three years, this Strategic Initiative seeks to establish an Academic Health System that drives innovation in clinical care, research, and education in support of Readiness in order to become the patient's destination of choice by: establishing a clear brand for patient recognition, expanding strategic partnerships, establishing a supporting governance structure, defining curriculum for career advancement, defining market wide population health metrics, and enforcing Readiness guidelines.

# ACCESS TO MHS CARE: SELF-REPORTED MEASURES OF AVAILABILITY AND EASE OF ACCESS

#### **Overall Outpatient Access**

Access to Military Health System (MHS) care is measured in multiple ways: by survey, asking beneficiaries about their experience in obtaining needed care or an appointment; by examining institutionally recorded data indicating whether appointments were offered within certain access standards; or by administrative data recording the number of successful visits to providers over time. In addition to face-to-face visits by walk-in or appointment, provider access can be enhanced for both provider and patient through sometimes more convenient means, including telephone or secure e-mail.

Since 2013, the direct care system has made progress in improving performance and reducing variance, particularly in primary care. Direct care system efforts gained momentum after the Secretary of Defense–directed 2014 MHS Review of Quality, Safety, and Access through robust Tri-Service governance, development of standard processes, and implementation of an MHS performance management system. The direct care system has implemented several initiatives to ensure a consistent patient experience among military treatment facilities (MTFs), including a Patient-Centered Medical Home (PCMH) model of primary care at all MTFs; use of standard referral and clinical practice guidelines in the Tri-Service Workflow templates in the MHS electronic health record; and implementation of enhanced access initiatives, including secure messaging and the nurse advice line (NAL). The direct care system also has codified standard processes in Tri-Service guidance, including: (1) First Call Resolution policies to ensure patients' needs are met when they call for an appointment; (2) Simplified Appointing in Primary Care to reduce template complexity and ensure appointments are either within 24 hours or in the future; (3) Specialty Appointing and Referrals Business Rules to ensure patients receive a specialty appointment before they leave the MTF or within 24 hours; and (4) a standard primary care manager (PCM) definition and business rules to calculate enrollment capacity.

The Tri-Service PCMH working group evaluates changes in appointment performance across the MHS each month, following a number of measures, a subset of which are reported in the performance management system, or Partnership for Patients (PfP), and associated MHS Dashboard. These measures are monitored and presented through MHS governance to the Surgeons General and Assistant Secretary of Defense (Health Affairs) in the quarterly Review and Analysis in the Senior Military Medical Advisory Council. Subject matter experts (SMEs) evaluate progress on every measure, relative to past performance and to stated targets for reduced variability per MHS review, and present these select measures through SME working groups (Pt Access, Pt Sat), up through governance and reported in the MHS Dashboard at the MTF level and aggregated higher, with quarterly reporting to the SGs in the R&As. The access working group also identifies outliers (all using interquartile range [IQR]) each month and remand to the Services for action. Finally, Section 730 of the 2016 National Defense Authorization Act (NDAA) Report to Congress presented efforts to improve performance, enhance patient experience, and reduce variance, and also identified additional direct care system initiatives to ensure better care.

The following summarizes key Tri-Service initiatives accomplished by the direct care system in FY 2016 and those underway for FY 2017.

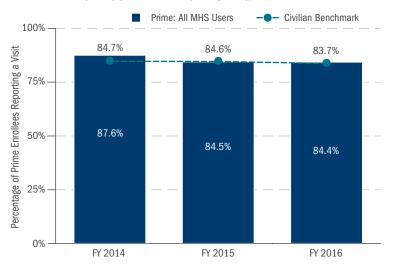
FY 2016	FY 2017
Complete Simplified Appointing Implementation	Deploy NAL Globally
Develop Standard Appointing Processes in Primary Care	Implement New MHS GENESIS (Electronic Health Record) in Waves
Re-design TRICARE Online (TOL) Patient Portal	Implement Direct Access Reporting Tool
Implement Joint Outpatient Experience Survey (JOES)	Implement New Specialty Appointing and Referral Policy
Implement Patient Experience Working Group	Optimize Standard Appointing Processes
Measure First Call Resolution Compliance	Leverage and Integrate Telehealth Capabilities
Identify Standard Performance Measures and Goals	Optimize Patient Engagement Strategies
Embed Specialists in Primary Care	Develop Standard Tri-Service Access and Customer Service Curriculum

Beginning with last year's report, the following sections address many aspects of MHS access to care, modified in response to the current legislation.

# ACCESS TO MHS CARE: SELF-REPORTED MEASURES OF AVAILABILITY AND EASE OF ACCESS (CONT.)

 The ability to see a doctor reflects one measure of successful access to the health care system. Prime enrollees were asked whether they had at least one outpatient visit during the past year. As shown in the chart at right, access to and use of outpatient services remain high among Prime enrollees (with either a military or civilian primary care manager [PCM]), with over 84 percent reporting at least one visit in FY 2016, a decrease from almost 88 percent in FY 2014. MHS results are statistically comparable to the civilian benchmark of 83.7 percent in FY 2016. Actual administrative data demonstrate 88 percent of direct care system enrollees had at least one primary care encounter in FY 2016.

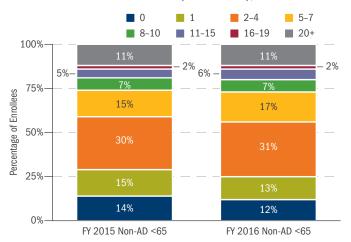
# TRENDS IN PRIME ENROLLEES HAVING AT LEAST ONE OUTPATIENT VISIT DURING THE YEAR



Note: DoD data were derived from the FYs 2014–2016 Health Care Survey of DoD Beneficiaries (HCSDB), as of 11/9/2016, and adjusted for age and health status. "All MHS Users" applies to survey respondents in the 50 United States. See Appendix (General Method and Data Sources) for a more detailed discussion of the HCSDB methodology. Rates are compared with the most recent benchmarks of the same Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey version available at the beginning of the MHS survey year. Civilian benchmarks for the composites and numeric ratings are taken from CAHPS Version 5.0 for the fiscal year 2014 to 2016 surveys. CAHPS results come from micro data submitted to the National Committee for Quality Assurance (NCQA) by commercial plans. Benchmarks used in 2014 and 2015 come from NCQA's 2013 data, while the benchmarks used in 2016 come from NCQA's 2015 data. In this and all discussions of the HCSDB results, the terms "increasing," "decreasing," "stable," or "comparable" (or "equaled" or "similar") reflect the results of statistical tests for significance of differences or trends.

◆ Based on administrative utilization data shown in the chart at right, 88 percent of all non-Active Duty MTF enrollees had at least one recorded outpatient visit for primary care reasons in FY 2016 (i.e., through August 2016, all but 12 percent had at least one visit), while most (44 percent) had between one and four visits in FY 2016, 27 percent had eight or more visits, and 11 percent had 20 or more visits.

# PERCENTAGE OF MTF NON-ACTIVE DUTY <65 BY NUMBER OF ANNUAL VISITS (ANY VENUE), FYS 2015–2016



Source: MHS Administrative Data Systems (M2), Defense Health Agency (DHA) Operations/Clinial Support Division/PCMH, 12/3/2016

Note: The term "primary care visits" in this calculation includes all outpatient encounters related to primary care reported in the medical record, including scheduled episodes of repetitive care such as physical therapy, prenatal care, and behavioral health.

As of September 2016, all direct care system primary care clinics, enrolling almost 3.6 million beneficiaries, had transformed to the PCMH model of primary care. The direct care system's long-standing PCMH strategies include: supporting patients with serious or chronic diseases to achieve their health goals; giving patients 24-hour access to care and health information through secure messaging; delivering preventive care facilitated with embedded national screening guidelines; engaging patients and their families in their own care; and working together with hospitals and other clinicians, including traditional and PCMH-embedded specialists, to provide better coordinated care. Direct care PCMHs also work to maximize the value of each patient visit. For example, if a patient is seen for an acute medical need, the PCMH also addresses needed preventive services, renews medications, and meets as many of the patient's other medical needs as possible during the same visit. In support of medical readiness, the Uniformed Services continue to implement operational medical homes through the Marine Centered, Soldier Centered, Fleet Centered, and Submarine Centered Medical Home programs.<sup>1</sup>

#### **Access to Care: PCM and PCMH Team Continuity**

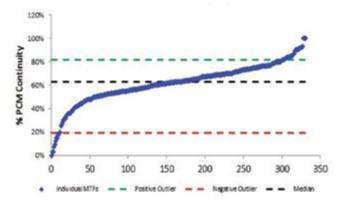
The PCM-patient relationship continues to be the driving force to improve quality and better health outcomes for MTF-enrolled beneficiaries. A continuous relationship between an enrollee and his/her PCM leads to higher quality, more integrated/coordinated care, a more proactive, preventive focus on health, lower unnecessary health care utilization, and reduced health care costs. In the direct care system, high PCM continuity is statistically correlated with higher patient satisfaction with access to care, better performance in access to care, and reduced unnecessary inpatient utilization by enrollees. Based on MTF administrative appointment tracking (consolidated in the TRICARE Operations Center), in FY 2016, enrollees saw their own PCMs during primary care visits 59 percent of the time, and 92 percent of the time saw their own PCM or a fellow PCMH team provider (tables to the right). Median PCM continuity was 63 percent, and performance variance among individual MTFs decreased 17 percent from FY 2014 to FY 2016. Due to reduced variance, negative MTF outliers in FY 2014 had PCM continuity of less than or equal to 19 percent, based on the interquartile range (IQR) method. Due to stronger

overall performance in FY 2016, negative MTF outliers had PCM continuity less than or equal to 35 percent. Stated differently, as depicted in the lower two charts, in 2014 an MTF was identified as a negative outlier if its average PCM continuity was less than or equal to 19 percent; however, by 2016 the same MTF would be a negative outlier if its average PCM continuity had increased to or was under 35 percent. Similarly, an MTF considered high achieving, or a positive outlier, had to improve its PCM continuity for the year from 82 percent to 92 percent, against a median that stayed the same over the period of time, at 63 percent.

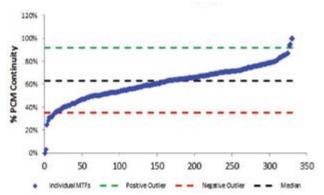
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
PCM Continuity	55%	58%	60%	60%	59%
PCMH Team Continuity	86%	90%	91%	91%	92%

	FY 2014	FY 2016
Median	63%	63%
Negative Outlier	≤19%	≤35%
Positive Outlier	≥82%	≥92%

#### FY 2014 PCM CONTINUITY BY MTF



#### FY 2016 PCM CONTINUITY BY MTF



Source: MHS Administrative Data (M2); Tri-Service Primary Care PCMH Advisory Board, DHA Operations/Clinical Support Division/PCMH, 12/2/2016

¹ Tri-Service Primary Care PCMH Advisory Board

# Access to Care—Appointment Wait Times: Average Number of Days to Acute and Future Appointments

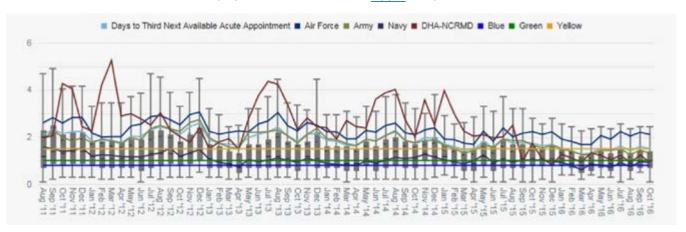
The direct care system prospectively measures access to primary care by evaluating the average number of days to the third next 24-hour or acute appointment and third next future appointment against the MHS goal of 1.0 and 7.0 days, respectively. Prospective measurement of access to care is considered a more sensitive and accurate measure of access compared with retrospective analysis of when the appointment was booked. For access to acute care appointments, the MHS average is improving, but remains higher than the 24-hour standard. In FY 2016, the average number of days to a third next acute appointment was 1.51 days, a 21 percent improvement over the 1.90 days average for FY 2014. The MHS has met the standard of 7.0 days for future appointments each year since FY 2012; and, in FY 2016, the MHS averaged 6.87 days to a third next future appointment. Variance among MTFs for both third next 24-hour and future appointments improved in FY 2016, compared with FY 2014, as demonstrated by the positive and negative outlier thresholds based on the IQR method and the box and whisker charts below.

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Avg # of Days to Third Next 24-Hour Appointment	2.09	2.07	1.90	1.72	1.51
Avg # of Days to Third Next Future Appointment	6.62	6.51	6.58	6.86	6.87

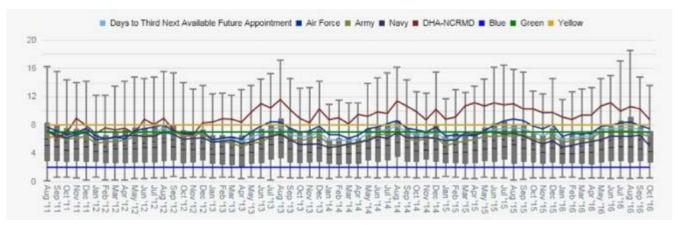
THIRD NEXT 24-HOUR APPOINTMENT	FY 2014	FY 2016
Median	1.55	1.30
Negative Outlier	≥2.71	≥2.04
Positive Outlier	≤0.38	≤0.56

THIRD NEXT FUTURE APPOINTMENT	FY 2014	FY 2016
Median	6.00	6.00
Negative Outlier	≥9.12	≥9.01
Positive Outlier	≤2.17	≤2.29

#### DAYS TO THIRD NEXT AVAILABLE ACUTE APPOINTMENT



#### DAYS TO THIRD NEXT AVAILABLE FUTURE APPOINTMENT



Source: TRICARE Operations Center data, DHA/J3/PCMH, 12/2/2016

#### **Access to Integrated Specialists in the PCMH**

The most common conditions in the direct care enrollee population, excluding pregnancy, are behavioral-health related, musculoskeletal issues, and miscellaneous conditions such as hypertension, hyperlipidemia, obesity, and diabetes. As a result, the direct care system began embedding specialists directly into PCMHs to provide more continuous, comprehensive care in the primary care setting and to facilitate coordinated care. Currently, over 80 percent of PCMHs serving adult enrollees have embedded behavioral health specialists who provide treatment for mental health and behavioral health issues. Directly embedding behavioral health providers ensures the embedded specialists are able to work closely in partnership with the patient, PCM, and PCMH team; moreover, because the specialties are co-located, it helps destigmatize the care received. The Uniformed Services University for the Health Sciences determined

that being seen by a behavioral health specialist embedded in a PCMH results in a statistically significant improvement in mental health status. PCMH clinical pathways have been developed and have been implemented for behavioral health-related issues prevalent in the MTF Prime population, including alcohol misuse, anxiety, depression, diabetes, obesity, chronic pain, sleep problems, and tobacco use. The MHS also is implementing embedded clinical pharmacists in PCMHs. A recent independent analysis demonstrated that the use of embedded clinical pharmacists resulted in a statistically significant improvement in diabetes, hypertension, and hyperlipidemia outcomes. Finally, the MHS is implementing physical therapists in PCMHs to address highly prevalent musculoskeletal issues, such as low back pain. Where implemented, embedded physical therapists have resulted in improved outcomes and reduced MTF enrollee purchased care costs.

# **Dispositions and Bed-Days per 1,000 MTF Enrollees**

PCMH goals include reducing dispositions (admissions) and bed-days per 1,000 MTF enrollees by proactively addressing and coordinating MTF enrollee comprehensive care in the PCMH setting. PCMH teams are working to reduce the number of times MTF enrollees are admitted to hospitals and medical centers in both the direct and purchased care sectors. and the length of time they spend as inpatients if they are admitted, which is measured by bed-days (number of dispositions multiplied by the length of stay). The dispositions per 1,000 MTF enrollees averaged 19.8 in FY 2016 through the second quarter, a reduction of 5 percent from the 20.73 dispositions per 1,000 in FY 2014, with a commensurate reduction in the number of bed-days per 1,000 MTF enrollees from 113.8 bed-days in FY 2014 to 107.7 bed-days per 1,000 enrollees in FY 2016 (also a 5 percent reduction). Median performance was better than average performance in both measures, and variance improved 7 percent and 19 percent, respectively. As a result, FY 2014 outliers in dispositions per 1,000 enrollees were MTFs with values greater than or equal to 119; in FY 2016, outliers were MTFs with values greater than or equal to 99. FY 2014 outliers in

bed-days per 1,000 enrollees were MTFs with values greater than or equal to 137; in FY 2016, outliers were MTFs with values greater than or equal to 114.

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016 (QTR 1 / 2)
Dispositions per 1,000 Enrollees	24.30	22.16	20.73	20.02	19.76
Bed-days per 1,000 Enrollees	128.51	119.19	113.77	111.73	107.74

DISPOSITIONS PER 1,000	FY 2014	FY 2016
Median	16.60	14.05
Negative Outlier	≥118.79	≥99.20
Variance	6.1	5.7

BED-DAYS PER 1,000	FY 2014	FY 2016	
Median	87.82	73.88	
Negative Outlier	≥137.17	≥113.68	
Variance	43.78	35.48	

Source: MHS Administrative Systems (M2); Tri-Service Primary Care PCMH Advisory Board, DHA/J3/PCMH, 12/2/2016

#### Recapturable Emergency Room Visits in the Private Sector per 100 Enrollees

The direct care system continues to reduce primary care—recapturable emergency room (ER) visits to the private sector in order to reduce fragmented, episodic, and expensive care. ER visits for primary care reasons are a small percentage of all ER visits and are defined by the Tri-Service Emergency Medicine consultants and industry as Evaluation and Management Codes

99281 and 99282. Efforts to reduce ER visits include better access to 24-hour care in PCMHs, walk-in clinics for common acute conditions, the use of PCMH team members to meet patients' needs, and the use of the NAL and secure messaging. As of July 31, 2016, the average number of primary care network ER visits per 100 MTF enrollees for primary care reasons decreased

15 percent compared to the FY 2014 average. In FY 2016, 13 percent of all network ER visits by MTF enrollees were for primary care reasons. Due to the direct care system's efforts to provide more continuous care overall in the MTF, overall network ER visits for all reasons, including true emergencies, declined 3 percent over the same period. Median performance among MTFs improved in FY 2016 compared to FY 2014, decreasing to 1.55 from 1.99. Variance among MTFs improved 47 percent comparing the same periods. In FY 2014, an MTF was considered an outlier if network ER utilization was greater than or equal to 4.94. In FY 2016, an MTF was considered an outlier if network ER utilization was greater than or equal to 3.78. To date, the 2016 NDAA-directed Urgent Care (UC) demonstration has not reduced network ER visits at a higher rate beyond what MTF PCMH has achieved. A recent large-scale study published in the Annals of Emergency Medicine and reported by the National Institute of Health revealed that across the United States, UC clinics do not reduce ER visits for primary care reasons.1

<b>Enhanced A</b>	ccess to	Care:	Nurse	<b>Advice</b>	Line (	(NAL)	
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The MHS implemented the NAL in the 50 United States in FY 2014. The NAL provides beneficiaries with access to after-hours health care expertise from registered nurses (RNs) along with integrated appointing services for direct care enrollees when follow-on care is required. Since implementation in late March 2014, the NAL has provided triage services, self-care advice, and general health information to more than 1.3 million callers. Over 94 percent of calls are from direct care system enrollees, and almost 30 percent of all calls concern patients aged two and under. The daily call volume in calendar year 2016 averaged over 1,700 calls per day. The NAL is fully integrated with direct care system PCMH primary care clinics, can schedule MTF appointments if the RN determines the caller needs to be seen within 24 hours, can transfer the caller directly to his or her MTF via telephone, and can provide information about MTF UC and ER Fast Track options. If care is not available in the MTF, the NAL will assist callers in seeking UC in the network. PCMH teams have access to caller encounter information in a live NAL portal; teams use portal data to follow up with the patient and coordinate care, if clinically indicated. The NAL portal also includes performance data, which allow PCMH teams to monitor demand surges in real-time and adjust future appointing templates to accommodate changes in demand.

YEAR	AVERAGE NETWORK ER VISITS PER 100 MTF ENROLLEES (INCLUDING TRUE EMERGENCIES)	AVERAGE NETWORK ER VISITS PER 100 MTF ENROLLEES FOR PRIMARY CARE REASONS
FY 2012	25.07	4.11
FY 2013	24.58	3.86
FY 2014	24.63	3.66
FY 2015	24.93	3.37
FY 2016 (through July 31)	23.89	3.10
Two-Year Improvement	-3%	-15%

NETWORK ER VISITS PER 100 FOR PRIMARY CARE REASONS	FY 2014	FY 2016
Median	1.99	1.55
Negative Outlier	≥4.94	≥3.78
Variance	3.67	1.94

Source: MHS Administrative Data (M2); Tri-Service Primary Care PCMH Advisory Board, DHA/J3/PCMH, 12/2/2016

The direct care system analyzed over 400,000 FY 2016 calls from direct care system enrollees to compare patient pre-intent with NAL advice and what action the patient took following the call. The NAL demonstrated it was able to safely and cost-effectively direct patients to the most clinically appropriate level of care. Overall, 35 percent of callers originally intended to seek network ER care; after calling the NAL, only 11 percent did so. In FY 2016, callers were able to obtain needed care in their own MTF 45 percent of the time. Due to the success of the direct care system's access to care initiatives, such as Simplified Appointing, the most recent data from May to July 2016 demonstrated 50 percent of callers were directed to and subsequently received care in their own MTF.

DISPOSITION	CALLER'S PRE-INTENT	NURSE ADVICE	CALLER'S ACTION WITHIN 24 HOURS
Network ER	35%	9%	11%
Network Urgent Care	27%	30%	20%
Direct Care MTF	22%	22%	45%
Self-Care at Home	7%	32%	23%
Other	9%	8%	0%

Source: DHA/J3/PCMH from NAL portal and MHS Administrative data (M2), 12/2/2016

<sup>&</sup>lt;sup>1</sup> Martsolf, Grant, et al., "Association Between the Opening of Retail Clinics and Low-Acuity Emergency Department Visits." *Annals of Emergency Medicine*, November 4, 2016, pii: S0196-0644(16)30998-2.

#### **Enhanced Access to Care: Secure Messaging**

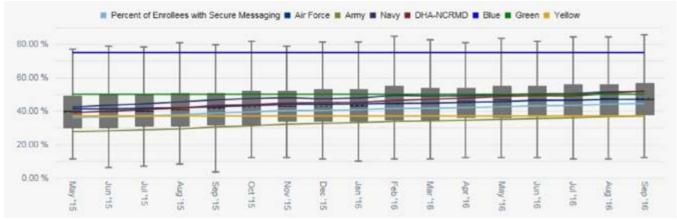
The direct care system continues to offer enhanced access to care through the use of a commercially available secure messaging system. Secure messaging allows MTF enrollees to communicate directly with their PCMs and PCMH teams to ask questions about their health or medical tests and to arrange referrals or appointments. As of the end of FY 2016, over 1.5 million MTF enrollees were registered in secure messaging (or 44 percent of all MTF Prime and TRICARE Plus [seniors] enrollees). As in FY 2015, 9 percent of registered patients initiated a secure message with their PCMH team each month. Although not shown in the table (at right), analysis of the primary reasons patients initiate messages include: asking a medical question (56 percent), arranging primary care appointments (15 percent), or renewing medications (12 percent). The direct care system is developing a campaign to increase the utilization of secure messaging by registered enrollees. In FY 2016, the direct care system changed the response time goal to eight hours or one business day, from the previous goal of 72 hours. By the end of FY 2015, 78 percent of patient-initiated messages were responded to within one business day, compared with 68 percent at the beginning of FY 2015. In FY 2015, the best-performing MTF had 82 percent of enrollees registered in secure messaging. In FY 2016, 95 percent of enrollees were registered at the best-performing MTF. While variance has remained

consistent, as demonstrated by the box and whisker chart below, the negative outlier threshold continues to improve to overall program growth. In FY 2015, an MTF was considered an outlier if performance was less than or equal to 24 percent. In FY 2016, an MTF was considered an outlier if performance was less than or equal to 29 percent.

	FY 2015	FY 2016
Percent of MTF Enrollees Registered in Secure Messaging	39%	44%
Percent of Patient-Initiated Messages per Registered User	9%	9%
Enrollees Registered	1,318,169	1,503,373
Average Monthly Patient-Initiated Messages	114,912	121,020

PERCENTAGE OF MTF ENROLLEES REGISTERED IN SECURE MESSAGING	FY 2015	FY 2016
Median	42%	47%
Negative Outlier	≤24%	≤29%
Maximum Performance	82%	95%

# PERCENTAGE OF ENROLLEES WITH SECURE MESSAGING

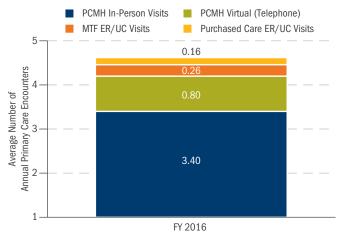


Source: Secure Messaging Program: DHA/DHSS and DHA Operations/Clinical Support Division/PCMH, 12/2/2016

# **Primary Care Utilization**

The average annual number of direct care system enrollees' primary care visits increased from 4.1 in FY 2015 to 4.6 in FY 2016, reflecting both enrollees' growing demand for health care and the direct care MTFs' ability to meet more of their enrollees' needs for care. Direct care system enrollees' primary care demand is 200 percent higher than the average utilization by insured patients in the U.S. Direct care utilization does not include military-specific screening. In order to increase convenience and capacity in the direct care system, PCMHs offer telephone visits with PCMs. In FY 2016, 17 percent of enrollees' primary care needs were met through a telephone visit with a PCM. Overall in FY 2016, the direct care system captured 93.5 percent of direct care enrollees' health care needs with MTF care.

# PRIMARY CARE ACCESS IN FY 2016, BY VENUE



Source: Secure Messaging Program: DHA/DHSS and DHA Operations/Clinical Support Division/PCMH, 12/2/2016

In addition to tracking patient care using administrative and provider-centric data, including patient self-reported information, provide a more complete assessment of the performance of the health care system from the nonmedical user's perspective. There are a number of methods for evaluating the patient's experience: face-to-face encounters, complaint and suggestion programs, focus groups, and surveys. Within surveys, patients can be asked about their experience following a specific event and time, as in event-based surveys after an outpatient visit or discharge from a hospital.

The goal of MHS outpatient surveys is to monitor and report on the experience and satisfaction of MHS beneficiaries who have received outpatient care in an MTF or civilian provider office. The TRICARE Outpatient Satisfaction Survey (TROSS) is based on the Agency for Healthcare Research and Quality (AHRQ) CAHPS Clinician and Group questionnaire (CAHPS® C&G). The TROSS instrument also includes MHS-specific questions that measure satisfaction with various aspects important to MHS. The TROSS supports standardized comparison of beneficiary experiences across different Service Departments, between direct and purchased care, and with civilian benchmarks using the same survey.

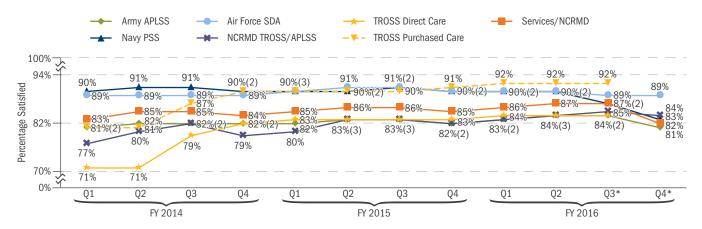
The Army, Navy, and Air Force also field individual outpatient Service satisfaction surveys: the Army Provider Level Satisfaction Survey (APLSS), the Navy Patient Satisfaction Survey (PSS), and the Air Force Service Delivery Assessment (SDA). Service surveys focus on MTF care within each Service and provide extensive detailed data for each MTF, for clinics within MTFs, and down to the individual providers. Service surveys provide transparency across a Service's MTFs and allow providers to understand beneficiary perceptions of the care they provide. Because of differences in Service and DHA outpatient surveys, MHS leadership agreed to create a standardized outpatient survey using a standardized instrument, sampling methodology, analysis, and reporting. The JOES is a unified outpatient survey that merges and standardizes the methodology and fielding of the outpatient survey for use by the Army, Navy, Air Force, and National Capital Region (NCR). It aims to more efficiently glean beneficiary health care experiences and ultimately better inform improvement measures within and across the Services. The Services transitioned to JOES from their respective surveys during the third and fourth fiscal quarters of FY 2016. Most of the Service survey results presented in this report, in access and in quality, are based on results of the respective Service surveys through FY 2016 and cannot be compared across Services, only within (e.g., at the MTF and intermediate command level). FY 2016 Q3 results reflect a mixture of Service and JOES data as each Service transitioned during the quarter: Navy began using the JOES survey in May 2016, the NCR began between May and June 2016, Army began in June 2016, and Air Force began in September 2016. Survey transitions were staggered to avoid overlapping survey contracts and to allow each Service to close out its survey and contract in an orderly fashion, without duplicating effort.

# **Beneficiary Ratings of Access to Care Following Outpatient Treatment**

- Combining DHA and Service Surveys: The measure Getting Care When Needed is a common item across all outpatient Service surveys, APLSS, PSS, SDA, and TROSS direct care and purchased care.
- ◆ The chart on the next page presents overall ratings of this access measure for FY 2014 to FY 2016. While comparison across Services is not appropriate given different surveys, Navy PSS beneficiary ratings and Air Force SDA beneficiary ratings were consistently the highest rated until Navy ratings appear to decline from FY 2016 Q2 to Q4, when the JOES survey replaced the Navy PSS. Army and NCR ratings also adjusted downward during FY 2016 Q3 as well. As such, the change for Navy, Army, and the NCR was due to a complete change in survey

process, and, for all Services, MHS leadership will monitor as a new baseline evolves in FY 2017 for all Services. TROSS beneficiary ratings are slightly higher for beneficiaries receiving outpatient care at civilian facilities than for beneficiaries receiving care at MTFs. TROSS purchased care ratings remain consistently within three values of 90 percent, and TROSS direct care ratings peak at 90 percent. Note: A new TROSS survey was fielded in May 2014, following a change in the TROSS instrument from a six-point scale to a four-point scale questionnaire. This resulted in a change in the satisfaction scores starting in FY 2014 Q3, not necessarily due to any improvement in beneficiary ratings. By the beginning of FY 2015, TROSS direct care results appear to have stabilized.

#### RATING OF GETTING CARE WHEN NEEDED, USING MULTIPLE SURVEYS



Source: Office of the Assistant Secretary of Defense for Health Affairs (OASD[HA])/DHA Decision Support. TROSS, Air Force SDA, Army APLSS, and Navy PSS results are as of FY 2016 Q2 (August 2016). JOES results for Navy and NCR starting FY 2016 Q3 and Army starting FY 2016 Q4, compiled 10/27/2016.

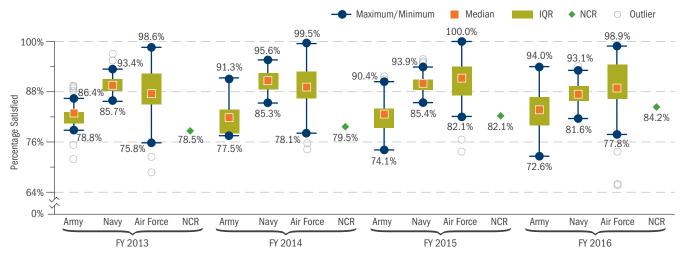
- Percentage satisfied for Getting Care When Needed calculated using the proportion of responses "Somewhat Agree" or "Strongly Agree" of all responses to the statement: "In general, I am able to see my provider when needed."
- FY 2014 Q3 data include May and June data only because a new version of the TROSS instrument was fielded in May 2014.
- "MHS Overall" refers to the users of both direct and purchased care components; "Direct Care" refers to MTF-based care, and "Purchased Care" refers to care provided in the private sector through the claims-based reimbursement process.
- All MHS direct care data are adjusted for selection, nonresponse, gender, beneficiary category, and TRICARE region.
- All MHS civilian purchased care data are adjusted for selection, nonresponse, gender, beneficiary category, age, and TRICARE region.
- Asterisk indicates JOES survey data were used for Army APLSS, Navy PSS, and Services/NCRMD.
- The table on the following page displays the extent to which the measure of getting care when needed changed over time in terms of improvement (increasing mean or median), or decreased dispersion (reduced range from minimum to maximum MTFs).
- The box and whisker plots shown on the following pages illustrate the distribution of facility satisfaction scores over time. The satisfaction scores are sorted from highest to lowest, and those in the top 25 percent are shown at the top by the whiskers and open circles. Facilities in the bottom 25 percent for satisfaction are, conversely, shown in the bottom of the graph. The IQR is a measure of variation and represents the middle 50 percent of satisfaction scores. Facilities with scores outside this range are labeled as outliers and are indicated in the box plots by open circles. The maximum and minimum are the scores that are at 1.5 times above and below the IQR, or are the maximum or minimum values, and are denoted in the box plot by the whiskers. Facilities with scores above and below the whiskers are indicated in the box plots by open circles. From FY 2013 to FY 2015, each Service improved in terms of the average and median ratings. The FY 2016 results in part reflect the change from the unique Service surveys to the standardized JOES survey, with Navy transitioning to JOES early May 2016, the NCR
- between May and June, Army in June, and Air Force in September 2016. As such, the FY 2016 results are not comparable to previous results; nor is it comparable between Services in the final quarter of FY 2016. FY 2017 results will be fully comparable.
- Dispersion in terms of the range of the lowest and highest performing MTFs increased overall from FY 2013 to FY 2016 for Army, Navy, and NCR, and decreased for Air Force.
- Results are based on unweighted Service survey data with no adjustment made to account for nonresponse or undercoverage. However, facility satisfaction scores were scaled by the number of respondents to each question. Incorporating this method of scaling into calculations reduces the ability of facilities with low numbers of respondents to have an overstated influence on the outcomes of analyses and resultant influence on conclusions.
- Overall, satisfaction at the facility level showed little change for each Service across the fiscal years that were included, but did show a consistent difference between the Services. The varying methodologies used to conduct the Service surveys prevents comparison of performance. However, changes in variation over time can be analyzed by looking at changes to the IQR and coefficient of variation (CV).

# SERVICE SURVEYS: GETTING CARE WHEN NEEDED

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2013-FY 2016 % POINT CHANGE			
	ARMY							
Mean	82.4%	81.9%	82.7%	83.8%	1.4			
Median	83.1%	81.9%	83.0%	84.0%	0.9			
IQR	2.6%	5.4%	4.3%	6.4%	3.8			
Maximum*	86.4%	91.3%	90.4%	94.0%	7.6			
Minimum*	78.8%	77.5%	74.1%	72.6%	-6.2			
Range	7.6%	13.8%	16.3%	21.3%	13.7			
		NAVY						
Mean	89.7%	90.8%	90.0%	87.8%	-1.9			
Median	89.1%	90.6%	90.3%	87.1%	-2.0			
IQR	2.8%	3.6%	2.2%	3.2%	0.4			
Maximum*	93.4%	95.6%	93.9%	93.1%	-11.8			
Minimum*	85.7%	85.3%	85.4%	81.6%	7.4			
Range	7.7%	10.3%	8.5%	11.5%	3.8			
		AIR FORCE	Ē					
Mean	87.9%	88.9%	90.4%	89.5%	1.6			
Median	87.8%	89.3%	91.2%	89.5%	1.7			
IQR	6.9%	6.0%	6.4%	7.7%	0.8			
Maximum*	98.6%	99.5%	100.0%	98.9%	0.3			
Minimum*	75.8%	78.1%	82.1%	77.8%	2.0			
Range	22.8%	21.4%	17.9%	21.0%	-1.8			
		NCR	•					
Mean	78.5%	79.5%	82.1%	84.2%	5.7			

Note: The maximum and minimum are the scores that are at 1.5 times above and below the IQR, or are the maximum or minimum values if those values fell within 1.5 times the IQR. Box plots were created in Stata 12 following methods of Cox, N. J. (2009). Speaking Stata: Creating and Varying Box Plots. *Life*, 60, 65.

# GETTING CARE WHEN NEEDED RATINGS



Source: TRICARE Inpatient Satisfaction Survey (TRISS), data weighted for nonresponse and undercoverage Notes:

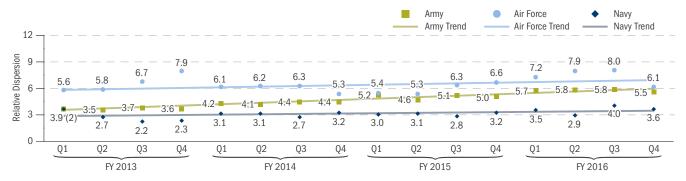
- The box shows interquartile range (25th–75th percentiles) with median highlighted.
- Length of whiskers are at 1.5 times the interquartile range or the min/max value.
- FY 2014 includes Q1-Q3 data only. Data were not available in FY 2014 Q4.
- Facilities are scaled to account for the number of responses, and those reporting fewer than 30 responses were excluded from analyses.

# Service Surveys: Getting Care When Needed-Variability Over Time

- The following graph shows the CV, a measure used to assess variability of experience scores among facilities. The CV describes variability as it relates to average score and standard deviation and allows for the comparison of survey data variability across questions.
- Service survey data showed less variability in experience ratings among facilities than the levels of dispersion noted for the same questions that were administered under the TROSS. The levels of

variability for Service data are similar for Army, Air Force, and Navy in that each exhibited little variation when compared with the levels of dispersion noted for TROSS ratings. Air Force and Navy measures of dispersion remained nearly unchanged throughout the period under observation, while Army showed increases in CV from FY 2013 to FY 2016.

#### RELATIVE DISPERSION BY FISCAL YEAR AND OUARTER

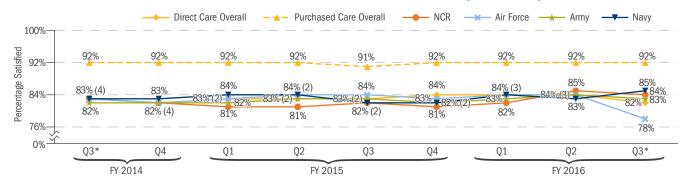


Source: Aggregation of four separate surveys (Army APLSS, Navy PSS, Air Force SDA, and DHA TROSS) until initiation of the JOES, reporting beginning in FY 2016 Q3 for Navy and NCR and FY 2016 Q4 for Army; unweighted facilities are scaled to account for the number of responses, and those reporting fewer than 30 responses were excluded from analyses.

#### **DHA TROSS Surveys—Getting Care When Needed**

- ◆ Using the TROSS instrument only, using the same question in common with all Service surveys, the TROSS surveyed beneficiaries after an outpatient visit on their experience with being able to see providers when they needed. Patient satisfaction for this measure is fairly high (>80%) and there is little difference (<3%) between the Services from
- quarter to quarter. Generally, MHS beneficiary users of civilian providers of care rate their experience with the accessibility of providers higher than users of MTF care.
- MHS also assesses access to care using the nationally standardized CAHPS C&G composite question of access to care.

#### TROSS RATINGS OF GETTING CARE WHEN NEEDED, FY 2014 Q3-FY 2016 Q3



Source: OASD(HA)/DHA Decision Support TROSS survey results, compiled 10/28/2016 Notes:

- "Getting Care When Needed" is an abbreviation of TROSS question 26: "In general, I am able to see my provider when needed."
- Percentage satisfied for "Getting Care When Needed" are responses of "Completely Satisfied" or "Somewhat Satisfied" on the scale of "Completely Dissatisfied," "Somewhat Dissatisfied," "Neither Satisfied nor Dissatisfied," "Somewhat Satisfied," and "Completely Satisfied."
- "Direct Care" refers to MTF-based care, and "Purchased Care" refers to care provided in the private sector through the claims-based reimbursement process.
- FY 2014 Q3 data include May and June data only, because the new TROSS instrument was fielded in May 2014. FY 2016 Q3 data include April data for
  purchased care and April and May data for direct care (including Services), because the TROSS survey terminated during April and May for purchased care and
  direct care, respectively.
- All MHS direct care data are adjusted for selection, nonresponse, gender, beneficiary category, and TRICARE region.
- All MHS civilian purchased care data are adjusted for selection, nonresponse, gender, beneficiary category, age, and TRICARE region.

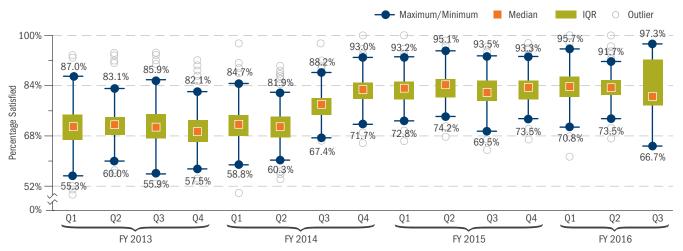
# TROSS Assessment of Dispersion Over Time—Self-Reported Experience of Getting Care When Needed

- ◆ The TROSS instrument changed how outpatient data were collected midway through FY 2014. One of the results of the TROSS change in instrument and methodology was higher recorded satisfaction, as seen between the second and fourth quarters of FY 2014 in the box plot below. As a result, the mean and median satisfaction scores are not an accurate representation of the change observed over the period from FY 2013 to FY 2016.
- Analyses were performed using data that were weighted to adjust for survey nonresponse and undercoverage. Facility satisfaction scores were then scaled based on the number of respondents to each question, which ensured that facilities with fewer respondents were not overrepresented in the analysis.

# TROSS GETTING CARE WHEN NEEDED

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2013-FY 2016 % POINT CHANGE	
Direct Care						
Mean	70.9%	75.5%	83.0%	83.6%	12.7	
Median	70.3%	75.5%	83.1%	84.0%	13.7	
IQR	6.7%	4.6%	4.3%	5.7%	-1.0	
Maximum*	83.9%	84.3%	90.8%	94.2%	10.3	
Minimum*	57.5%	66.6%	75.4%	73.4%	15.9	
Range	26.4%	17.6%	15.4%	20.7%	-5.7	

#### DESCRIPTION OF DATA BY FISCAL YEAR AND QUARTER: GETTING CARE WHEN NEEDED-DIRECT CARE



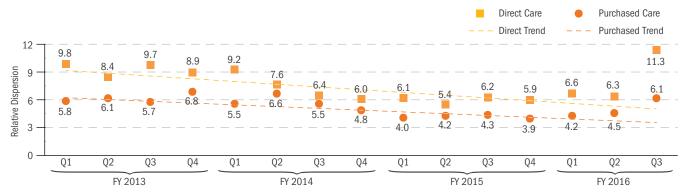
Source: TRICARE Outpatient Satisfaction Survey (TROSS), data weighted for nonresponse and undercoverage, 10/28/2016 Notes:

- The box shows interquartile range (25th to 75th percentiles) with median highlighted
- $\,-\,$  Length of whiskers are at 1.5 times the interquartile range or the min/max value
- A survey instrument change was implemented in FY 2014 Q3. TROSS was terminated in April 2016 for purchased care and May 2016 for direct care.
- Facilities are scaled to account for the number of responses, and those reporting fewer than 30 responses were excluded from analyses

The following graphs show two measures assessing variability of satisfaction scores among facilities: the IQR and the CV. The CV, like the IQR, is a measure of variation within the data, but differs from the IQR by describing variability as it relates to the average score and the standard deviation. The CV allows for the comparison of data variability across satisfaction questions with differing means.

◆ Both the IQR and CV show decreased variation in direct care and purchased care. CV is a function of the standard deviation and the mean; the cases where this value would decrease include instances where either there is little change in standard deviation and an increase in the mean, or a decrease in the standard deviation and little change in the mean. Decreased IQR results from a tightening of scores within the group of facilities that make up the middle 50 percent—the score itself is not considered in the calculation of IQR. The current result was driven by an increased proportion of satisfaction among outpatients over time, and the fact that these scores were increasingly bunched and close to the maximum possible proportion of satisfaction among facilities. The third quarter of FY 2016 shows considerably more variability than previous quarters for both purchased and direct care. The increased variability is due to one and two months less data available at the time of analysis for direct and purchased care, respectively.

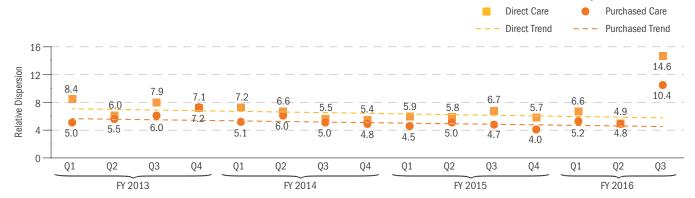
# RELATIVE DISPERSION OF PATIENT RATINGS OF GETTING CARE WHEN NEEDED-TREND IN CV



Source: TRICARE Outpatient Satisfaction Survey (TROSS), data weighted for nonresponse and undercoverage, 10/28/2016 Notes:

- A survey instrument change was implemented in FY 2014 Q3. TROSS was terminated in April 2016 for purchased care and May 2016 for direct care.
- Facilities are scaled to account for the number of responses, and those reporting fewer than 30 responses were excluded from analyses.

# RELATIVE DISPERSION OF PATIENT RATINGS OF GETTING CARE WHEN NEEDED-TREND IN IQR

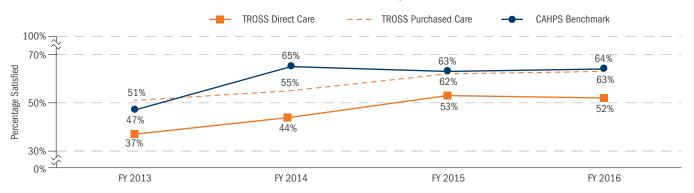


Source: TRICARE Outpatient Satisfaction Survey (TROSS), data weighted for nonresponse and undercoverage, 10/28/2016 Notes:

- A survey instrument change was implemented in FY 2014 Q3. TROSS was terminated in April 2016 for purchased care and May 2016 for direct care.
- Facilities are scaled to account for the number of responses, and those reporting fewer than 30 responses were excluded from analyses.

♦ MHS also assesses access to care using the nationally standardized CAHPS C&G composite question of Access to Care. Using the TROSS instrument only, MHS beneficiary overall ratings of the Access to Care composite for FY 2013 to FY 2016 Q1-Q3 are shown below. This measure is based on the CAHPS C&G survey and has a comparable CAHPS 50th percentile benchmark as noted. Access to Care ratings for beneficiaries receiving outpatient care at civilian facilities are higher than for those receiving care from MTFs. In FY 2016, the beneficiary rating in the direct care system was 52 percent, while the rating for beneficiaries in the purchased care system was 63 percent. Beneficiary ratings within both the direct care and purchased care systems were statistically significantly below the benchmark in FY 2016. As noted, the TROSS instrument was changed during this period, and the new TROSS survey was fielded in May 2014 (i.e., partway through FY 2014 Q3).

#### TROSS ACCESS TO CARE COMPOSITE, FYs 2013-2016



Source: OASD(HA)/DHA Decision Support TROSS survey results as of FY 2016 Q3, compiled 10/28/2016 Notes:

- Percentage satisfied for the "Access to Care" composite is scored as "Always" on the scale of "Never, Sometimes, Usually, Always."
- FY 2014 data include May and June (FY 2014 Q3) data only because the new TROSS instrument was fielded in May 2014.
- FY 2016 includes data for Q1-Q3.
- This measure is based on the CAHPS C&G and has a comparable CAHPS 50th percentile benchmark as noted in the graph.
- "Direct Care" refers to MTF-based care; "Purchased Care" refers to care provided in the private sector through the claims-based reimbursement process.
- All MHS direct care data are adjusted for selection, nonresponse, gender, beneficiary category, and TRICARE region.
- All MHS civilian purchased care data are adjusted for selection, nonresponse, gender, beneficiary category, age, and TRICARE region.

Instead of focusing on a specific health care event to assess patient experience with care, population surveys are designed to sample populations based on the demographics being considered (e.g., a survey of all Active Duty Service members about their health behaviors, or a survey of all MHS beneficiaries to assess their use of preventive services and access to primary and specialty care), as in the case of the DHA Health Care Survey of DoD Beneficiaries (HCSDB). The next two pages of charts are based on beneficiary ratings of their care experiences in the prior 12 months, and not based on a particular visit or hospital stay.

#### **Satisfaction with Doctors' Communication**

Communication between doctors and patients is an important factor in beneficiaries' satisfaction and their ability to obtain appropriate care. The following charts present beneficiary-reported perceptions of how well their doctor communicates with them.

- Overall Prime enrollee (military and civilian PCMs combined) satisfaction levels with their doctors' communication declined slightly between FY 2014 and FY 2016. Satisfaction levels for those with a civilian PCM were higher than for those with a military PCM. Over the same period, non-enrollee satisfaction levels remained stable. In FY 2016, satisfaction ratings for Prime enrollees were lower than the civilian benchmark, while non-enrollee satisfaction was higher.
- The levels of satisfaction with doctors' communication remained stable for all beneficiary groups. For Active Duty, the level of satisfaction increased in FY 2015, but returned to the FY 2014 level in FY 2016.
- In FY 2016, satisfaction with doctors' communication was lower than the civilian benchmark for all beneficiary groups.

# Prime: Military PCM Prime: Civilian PCM Standard/Extra (Not Enrolled) - - Civilian Benchmark 94.9% 94.8% 94.8% 95.5% 93.6% 988.7% 93.2% 88.7% 93.2% 88.7% 93.2%

FY 2015

TRENDS IN SATISFACTION WITH DOCTORS' COMMUNICATION BY ENROLLMENT STATUS

#### TRENDS IN SATISFACTION WITH DOCTORS' COMMUNICATION BY BENEFICIARY CATEGORY Active Duty Active Duty Family Members Retirees and Family Members Civilian Benchmark 100% 94.9% 94.8% 94.8% Percentage Reporting Satisfied 94% 88% 89.8% 87.1% 87.0% 82% 0% FY 2014 FY 2015 FY 2016

# Note: DoD data were derived from the FYs 2014–2016 HCSDB, as of 11/9/2016, and adjusted for age and health status. "All MHS Users" applies to survey respondents in the 50 United States. See Appendix (General Method and Data Sources) for a more detailed discussion of the HCSDB methodology. Rates are compared with the most recent benchmarks of the same CAHPS survey version available at the beginning of the MHS survey year. Civilian benchmarks for the composites and numeric ratings are taken from CAHPS Version 5.0 for the fiscal year 2014 to 2016 surveys. CAHPS results come from micro data submitted to the NCQA by commercial plans. Benchmarks used in 2014 and 2015 come from NCQA's 2013 data, while the benchmarks used in 2016 come from NCQA's 2015 data. In this and all discussions of the HCSDB results, the terms "increasing," "decreasing," "stable," or "comparable" (or "equaled" or "similar") reflect the results of statistical tests for significance of differences or trends.

0%

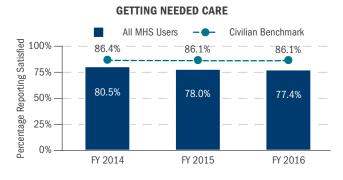
## ACCESS TO CARE: BENEFICIARY RATINGS BASED ON POPULATION-WIDE SURVEYS

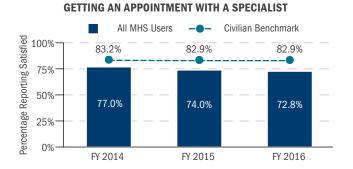
#### **Availability and Ease of Obtaining Care**

Availability and ease of obtaining care can be characterized by the ability of beneficiaries to obtain the care they need when they need it. Two major measures of access within the CAHPS survey—**Getting Needed Care** and **Getting Care Quickly**—address these issues. **Getting Needed Care** has a submeasure: problems getting an appointment with specialists. **Getting Care Quickly** also has a submeasure: waiting for a routine visit.

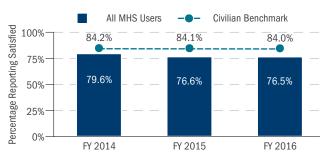
- Overall MHS beneficiary ratings for Getting Needed Care, Waiting for Routine Appointments, Getting Referrals to Specialists, and for Getting Care Quickly declined from FY 2014 to FY 2016. Civilian benchmarks for all four access measures remained stable over the same time period.
- MHS beneficiary satisfaction with all four access measures was lower than the comparable civilian benchmarks in each year between FY 2014 and FY 2016.

## TRENDS IN MEASURES OF ACCESS FOR ALL MHS BENEFICIARIES (ALL SOURCES OF CARE)

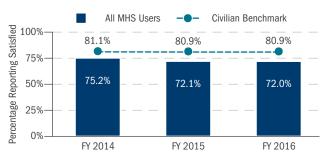




## **GETTING CARE QUICKLY**



## **GETTING TIMELY ROUTINE APPOINTMENTS**



# ACCESS TO CARE: AVAILABILITY OF MENTAL HEALTH PROVIDERS FOR ACTIVE DUTY MEMBERS AND FAMILIES

Given the tremendous growth in Department of Defense (DoD) mental health (MH) staffing since early FY 2002, the current level of MH resourcing continues to be adequate to serve all Active Duty and eligible Reserve Component (RC) members and their families, as well as retirees and their dependents. In April 2016, the Government Accountability Office (GAO) completed an audit to assess the availability and accessibility of MH care for Service members in the MHS. GAO found that the MHS makes a variety of inpatient and outpatient MH care services available to Active Duty Service members and eligible RC members domestically and overseas. This care is typically available through MTFs and clinics (direct care), and it is supplemented by care provided through networks of civilian providers (purchased care). In FY 2015, DoD provided 76 percent of 2.95 million outpatient MH services through direct care and 67 percent of 0.2 million inpatient MH bed-days through purchased care. To deliver MH care, the military Services use a range of strategies, including telehealth, embedding MH providers within units, and integrating MH providers in primary care.

Since 9/11, with the support of Congress, DoD has increased the outlays for MH care by an 8.5 percent compounded annual rate from FY 2002 through FY 2015. TRICARE assets have also been bolstered to better serve Reservists, dependents, and retirees, with a total of 83,701 MH providers available in the network.

Approximately 21 percent of the Active Duty force was seen by a MH professional in 2015, averaging nine visits per Service member seeking care. In addition, care is embedded into both primary care clinics and fighting units. The number of MH providers in the MHS has increased by 40 percent from 6,548 in FY 2009 to 9,156 in FY 2016 Q4. Further, TRICARE network assets have been bolstered to better serve Reservists, dependents, and retirees, with a total of 81,780 MH providers available in the purchased care network.

Additionally, on September 2, 2016, DoD published the Final Rule: TRICARE; Mental Health and Substance Use Disorder Treatment, which contains comprehensive revisions to the TRICARE regulation to reduce administrative barriers to accessing MH benefit coverage and improve access to substance use disorder (SUD) treatment for all TRICARE beneficiaries,

consistent with current standards of practice and principles of MH parity. Subsequently, more than 90 TRICARE program manuals were impacted by this change, to include: development of new manual sections that describe the expanded coverage of MH and SUD treatment under TRICARE, including coverage of intensive outpatient programs and venues for medication-assisted treatment for opioid use disorder (e.g., buprenorphine, methadone); removal of quantitative and non-quantitative treatment limitations; outpatient SUD treatment by TRICARE-authorized individual professional providers; and streamlining the requirements for MH and SUD institutional providers to become TRICARE-authorized providers.

A pilot to deliver Telemental Health (TMH) services to a patient's location (e.g., home) was initiated with two US Family Health Plan (USFHP) Designated Providers on June 1, 2016. The purpose of this pilot is to assess if Web-based audio/video conferencing technologies can be used to deliver safe, effective, and quality MH care in the patient's home for those who need medically necessary MH care. This pilot will also facilitate the identification and resolution of legal, policy, benefit, and technological issues related to the delivery of at-home TMH and will allow for the collection of data on safety, outcomes, patient satisfaction, and other variables of interest. In addition, this will enable DoD to determine whether the use of TMH care at the patient's location can:

- Enhance access for beneficiaries;
- Shorten wait times for appointments;
- In the case of child psychotherapy services, provide an opportunity to observe child behavior and parent-child interaction in the home environment and facilitate participation of both parents in the treatment process; and
- Serve as a viable alternative to delivery of MH care in a traditional clinic setting.

This pilot will also allow for evaluation of the acceptance and use of a Web-based delivery system for TMH at a patient's location by eligible beneficiaries and authorized TRICARE providers and the feasibility of offering Web-based TMH services to beneficiaries in their home, or other patient location, on a permanent basis.

## ACCESS TO CARE: HEALTH CARE AND RELATED SUPPORT FOR CHILDREN IN TRICARE

The MHS continues to advance programs, discussions, and decision-making for the pediatric population in the areas of quality, safety, access, and satisfaction, with data reporting to represent this unique population. The DHA, along with Service leader partners, continues to engage internal and external stakeholders to facilitate collaboration and increase transparency in this journey. For the past two years, the DHA has presented to organizations inside and outside the federal government, engaging specifically with pediatric advocacy groups to discuss updates of pediatric benefits, pilots, demonstrations, innovations, and metrics. DHA pilots that began in 2016 and will have the largest impact on the pediatric population include the Urgent Care pilot, which allows two visits to urgent care without referral for CONUS Prime; the Virtual Phone Visits pilot, which provides the opportunity for parents to speak to a provider about a health issue if an appointment is not available within 24 hours in the MTF; and the TMH pilot, which provides therapy to patients (including children) in their home environment rather than in an office setting. Additionally, the NAL has provided invaluable support and increased access to care for families. The NAL reports that 25 percent of patient calls are for children between birth and two years of age. Expansion of the NAL to include OCONUS in FYs 2017-2018 will provide this support to pediatric patients and their families worldwide.

Sweeping revisions published as a Final Rule in the *Federal Register* on September 2, 2016, revise TRICARE's MH and SUD benefit to achieve MH parity and improve MH care and access for children and families. These (over 90) TRICARE manual changes authorize TRICARE's adult and pediatric beneficiaries to receive MH and SUD treatment at an appropriate

level of care in proximity to their communities. These changes enable treatment to progress for both MH and SUD without the historic limits on number of visits or hospitalizations for these complex conditions. The expansion of MH and SUD benefits should also increase access to and inclusion of more provider types, treatment modalities, settings to facilitate increased family involvement in MH and SUD, use of psychotherapy and family therapy, SUD treatment, and hospitalization for MH and/or SUD. Specifically, the expansion of new types of TRICARE-authorized provider types are expected to increase access to the settings of residential treatment centers, free-standing SUD facilities, partial hospitalization programs, intensive outpatient programs, and office-based treatment programs for MH and SUD, including opioid use. Additionally, the reimbursement methodologies for these new services provide incentives for providers to participate in TRICARE networks. TRICARE will continue to evaluate and adjust benefits for pediatric care within the statutory and regulatory authority granted by Congress. The proposed changes, expected to be implemented in 2017, are especially important to the pediatric population, as they expand the use of less restrictive settings for care and therapy.

These changes bring the MH and SUD benefits into increased alignment with the Affordable Care Act and treatments similar to the civilian behavioral health care industry. These changes also include a benefit to allow nonsurgical treatment for gender dysphoria. The goals of these changes are to continue to update access, safety, and quality health options to strengthen our families' resilience.

# ACCESS TO MHS CARE AND SERVICES FOR ACTIVE DUTY AND NON-ACTIVE DUTY FAMILY MEMBERS WITH AUTISM SPECTRUM DISORDER

In response to section 714 of the NDAA 2013, this section of the report builds on the previous three reports by extending evaluation of the TRICARE program in addressing dependents of members on Active Duty with severe disabilities and chronic health care needs.

Applied Behavior Analysis (ABA) is one of many TRICARE-covered services to treat Autism Spectrum Disorder (ASD). Other services include, but are not limited to speech therapy, occupational therapy, physical therapy, medications, and psychotherapy. In June 2014, TRICARE published the Comprehensive Autism Care Demonstration (ACD) Notice in the Federal Register upon the approval of the Office of Management and Budget, and in compliance with the regulations that govern TRICARE demonstrations. In July 2014, the ACD was created to be a single program, from three previous programs, based on limited demonstration authority with no annual caps of government cost shares in an attempt to strike a balance that maximizes access while ensuring the highest level of quality care for our beneficiaries. This consolidated demonstration will ensure consistent ABA coverage for all TRICARE beneficiaries—including Active Duty family members (ADFMs) and non-ADFMs diagnosed with ASD. ABA services are not limited by the beneficiary's age, the dollar amount spent, or the number of services provided. The most recent full-year fiscal data available, FY 2015, show the total ABA services program expenditures were \$195.3 million. ABA services are not provided at MTFs; all ABA services are provided through the ACD in the purchased care system. The ACD runs from July 25, 2014, through December 31, 2018.

As evidenced in our previous reports and the information in the table below, participation in the ACD by beneficiaries and ABA providers is growing. As shown in the table below, 12,155 beneficiaries participating in the ACD had filed claims by the end of FY 2015. Current program data through FY 2016 indicate the number will grow to 13,400 in FY 2016 (not shown).

In summation, DoD has implemented a robust ABA benefit that serves all eligible TRICARE beneficiaries. Unlike many civilian insurance plans, the TRICARE benefit has no limits on medically necessary hours of ABA care or cost per beneficiary. While our contractors deserve a lot of credit for their recruitment efforts to continually build our network, another factor contributing to our success is that the TRICARE benefit is one of the best in the nation. That is especially true since ABA providers never have to collect a copayment, deductible, or any other payment from Active Duty families, who have 100 percent coverage. Retirees have nominal out-of-pocket costs and are protected by the catastrophic cap.

HISTORICAL NUMBER OF COMBINED TRICARE ADFM AND NON-ADFM ASD PROGRAM USERS (BASED ON MDR DATA AS OF AUGUST 1, 2016)								
NUMBER OF USERS				1	GROWTH IN USER	S FROM PRIOR YE	EAR	
	ECHO AND TUTOR PILOT PROGRAMS	TRICARE BASIC ABA	NEW AUTISM CARE DEMO	TOTAL UNIQUE USERS	ECHO AND TUTOR PILOT PROGRAMS	TRICARE BASIC ABA	NEW AUTISM CARE DEMO	TOTAL UNIQUE USERS
	BY SIX-MONTH INCREMENTS							
FY 2012 First Six Months	5,317	50	_	5,342	-	_	-	-
FY 2012 Second Six Months	6,064	192	_	6,140	_	_	_	_
FY 2013 First Six Months	6,184	1,834	-	6,958	16%	3,568%	-	30%
FY 2013 Second Six Months	5,943	3,020	_	7,838	-2%	1,473%	_	28%
FY 2014 First Six Months	6,010	3,699	-	8,219	-3%	102%	-	18%
FY 2014 Second Six Months	6,583	4,774	14	9,410	11%	58%	_	20%
FY 2015 First Six Months	5,350	3,287	8,938	9,774	-11%	-11%	_	19%
FY 2015 Second Six Months	179	_	10,732	10,771	-97%	-100%	_	14%
FY 2016 First Six Months	335	_	10,728	10,785	-94%	-100%	-	10%
				BY FISCA	AL YEARS			
FY 2011	5,140	9	-	5,149	-	-	_	_
FY 2012	6,465	221	_	6,686	26%	2,356%	_	30%
FY 2013	7,215	3,526	-	8,743	12%	1,495%	-	31%
FY 2014	7,561	5,848	14	10,462	5%	66%	_	20%
FY 2015	5,420	3,287	11,445	12,155	-28%	-44%	-	16%

## **QUALITY OF MHS CARE**

MHS Hospital Quality Measures—DoD Military and Contracted Civilian Hospitals Compared with National Civilian Hospitals, FYs 2011–2015

MHS assesses the quality of clinical care through analysis of process and outcome measures for both the inpatient and outpatient settings. Standardized, nationally recognized, consensus-based metrics are used to ensure consistency in methodology and to facilitate comparison with civilian-sector care. Although the sources of data vary, the performance in MTFs and by contracted civilian health care inpatient institutions is reviewed. The measures data provide essential information for leaders and stakeholders who are focused on evaluating and improving the quality of health care delivered to MHS beneficiaries.

## **MHS Hospital Quality of Care and National Standards**

The performance of hospitals in MHS is, in part, evaluated through measure sets for the following: adult quality measures (acute myocardial infarction [AMI], heart failure [HF], pneumonia [PN]), and Surgical Care Improvement Project (SCIP), Maternity and Perinatal Care Outcomes (perinatal care [PC] rates and children's asthma care [CAC]). In direct care MTFs, the data for the hospital quality measures are abstracted by trained specialists, reported to The Joint Commission (TJC) to meet hospital accreditation requirements, and presented to facility leadership for analysis and identification of improvement opportunities. Data on the same measure sets for hospitals enrolled in a managed care support contractor (MCSC) network are obtained from the files posted by the Centers for Medicare & Medicaid Services (CMS) on the Hospital Compare website: <a href="http://www.hospitalcompare.hhs.gov">http://www.hospitalcompare.hhs.gov</a>. Quarterly, the Hospital Compare data file is downloaded, and the participating purchased care network hospitals are identified. These data reflect the overall performance of the network hospitals for the measures and include both TRICARE-reimbursed patients as well as all others reported by the civilian hospital (the Department does not have access to data based solely on TRICARE patients).

The display of MTF and network facility data provides a systemwide view of the performance of health care facilities available to beneficiaries. MHS subject matter experts for both direct care and purchased care review the data and work collaboratively to identify and communicate performance excellence and improvement opportunities. The data file is available publicly on the MHS Clinical Quality Management website, at https://www.mhs-cqm.info.

DoD data displayed in the following charts include all patients who meet the National Hospital Measures technical specifications for the 54 inpatient MTFs and 2,026 civilian hospitals participating in contracted

care networks. As noted in last year's report, TJC, consistent with guidance from CMS, continues to retire a number of clinical measures where national rates are consistently above top performance of 95 percent or better. Other measures were continued, and some were added last year (e.g., cesarean rates) to core sets to better focus on areas that require improvement. Also, several measures reflected in this year's report were scheduled for retirement in 2015 and will not be reported next year. The national trend toward using electronic measure collection and submission will challenge the existing MHS system until the new electronic health record is deployed.

## MHS Hospital Quality Measures (Cont.)

#### **Adult Quality Measures**

	FY 2012	FY 2013	FY 2014	FY 2015	
AMI-2 HEART ATTACK PATIE	NTS GIVEN	ASPIRIN AT	DISCHARG	E	
Military/Civilian Hospitals Treating DoD Patients	99.3%	99.4%	99.4%	99.5%	
DoD MTFs	98.3%	97.1%	98.7%	97.0%	
Civilian Hospitals Treating DoD Pts.	99.3%	99.4%	99.4%	99.5%	
National	99.0%	99.0%	99.0%	99.4%	
AMI-8a HEART ATTACK PATIENTS GIVEN PCI WITHIN 90 MINUTES OF ARRIVAL					
Military/Civilian Hospitals Treating DoD Patients	94.4%	96.0%	96.2%	96.2%	
DoD MTFs	60.3%	59.3%	74.6%	75.3%	
Civilian Hospitals Treating DoD Pts.	94.4%	96.0%	96.2%	96.2%	
National	95.0%	96.0%	96.0%	95.0%	
AMI-10 STATINS PF	RESCRIBED	AT DISCHA	RGE		
Military/Civilian Hospitals Treating DoD Patients	98.3%	98.7%	98.9%	99.0%	
DoD MTFs	98.0%	98.2%	99.2%	98.2%	
Civilian Hospitals Treating DoD Pts.	98.3%	98.7%	98.9%	99.0%	
National	98.0%	98.0%	99.0%	98.8%	

	FY 2012	FY 2013	FY 2014	FY 2015	
HF-1 HEART FAILURE PATIENT	rs given di	SCHARGE I	NSTRUCTIO	NS	
Military/Civilian Hospitals Treating DoD Patients	92.9%	94.7%	94.8%	93.7%	
DoD MTFs	87.9%	89.8%	80.2%	Retired	
Civilian Hospitals Treating DoD Pts.	93.0%	94.7%	94.9%	93.7%	
National	93.0%	94.0%	94.0%	93.1%	
HF-2 HEART FAILURE PATIENTS GIVEN AN EVALUATION OF LEFT VENTRICULAR SYSTOLIC (LVS) FUNCTION					
Military/Civilian Hospitals Treating DoD Patients	99.2%	99.4%	99.5%	99.4%	
DoD MTFs	97.9%	98.9%	98.4%	99.0%	
Civilian Hospitals Treating DoD Pts.	99.2%	99.4%	99.5%	99.4%	
National	99.0%	99.0%	99.0%	98.0%	
HF-3 HEART FAILURE PATIENTS G	GIVEN ACE II	NHIBITOR O	R ARB FOR	LVSD <sup>a</sup>	
Military/Civilian Hospitals Treating DoD Patients	96.7%	97.3%	97.4%	97.6%	
DoD MTFs	94.3%	96.3%	95.9%	95.8%	
Civilian Hospitals Treating DoD Pts.	96.8%	97.3%	97.5%	97.6%	
National	97.0%	97.0%	97.0%	97.3%	

	FY 2012	FY 2013	FY 2014	FY 2015
PN-6 PNEUMONIA PATIEN INITIAL	TS GIVEN TH ANTIBIOTIC		PROPRIATE	
Military/Civilian Hospitals Treating DoD Patients	95.5%	96.3%	96.7%	96.5%
DoD MTFs	94.9%	94.7%	94.3%	92.8%
Civilian Hospitals Treating DoD Pts.	95.5%	96.3%	96.7%	96.5%
National	95.0%	95.0%	96.0%	95.0%

Source: Data provided by Operations (J3), Clinical Support Division, 1/3/2017 a Angiotensin II Receptor Blocker; Left Ventricular Systolic Dysfunction

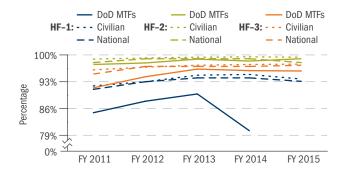
◆ Acute Myocardial Infarction (AMI): DoD MTF performance for the AMI measures is improving relative to the national benchmark, especially in closing the gap in giving percutaneous coronary intervention (PCI) and prescribing statins. One measure with noted opportunity for continued improvement is AMI−8a for MTFs. A performance improvement review to analyze the process and timeline for PCI in the MTFs is underway.

## Dod Hospital Quality Measure: Ami



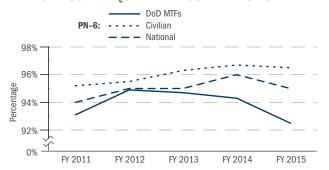
 Heart Failure (HF): DoD performance for the HF measures continues to improve, while lagging the national rates. TJC retired the HF measure set in 2015.

## Dod Hospital Quality Measure: Heart Failure



Pneumonia (PN): DoD performance on the PN measure is consistent with the average performance across the nation. TJC retired the PN measure set in 2015.

#### Dod Hospital Quality Measure: Pneumonia



MHS Hospital Quality Measures (Cont.)

## **Surgical Quality Measures**

	FY 2012	FY 2013	FY 2014	FY 2015
SCIP INF-1 <sup>a</sup> SURGERY PATIENTS WHO TIME (WITHIN ONE HOUR BEFORE				
Military/Civilian Hospitals Treating DoD Patients	98.4%	98.9%	99.1%	99.1%
DoD MTFs	96.3%	98.1%	98.8%	98.6%
Civilian Hospitals Treating DoD Pts.	98.4%	98.9%	99.1%	99.1%
National	98.0%	99.0%	99.0%	99.0%
SCIP INF-2° SURGERY PATIENTS ANTIBIOTIC TO HE				ID OF
Military/Civilian Hospitals Treating DoD Patients	98.6%	99.1%	98.9%	98.8%
DoD MTFs	96.5%	97.4%	97.9%	98.1%
Civilian Hospitals Treating DoD Pts.	98.6%	99.1%	98.9%	98.8%
National	99.0%	99.0%	99.0%	99.0%
SCIP INF-3° SURGERY PATIENTS STOPPED AT THE RIGHT TIME (				
Military/Civilian Hospitals Treating DoD Patients	97.3%	98.2%	98.4%	98.4%
DoD MTFs	96.1%	96.5%	96.8%	97.3%
Civilian Hospitals Treating DoD Pts.	97.3%	98.2%	98.4%	98.4%
National	97.0%	98.0%	98.0%	98.0%
SCIP INF-9° URINARY CATHETE DAY OF SURGI			OR POD2 V	VITH
Military/Civilian Hospitals Treating DoD Patients	95.9%	97.6%	98.3%	98.4%
DoD MTFs	97.4%	98.4%	98.7%	99.3%

## **Maternity and Perinatal Care Outcomes**

Civilian Hospitals Treating DoD Pts.

National

Perinatal Care (PC): This measure (PC-1) focuses on improving the health and outcomes of infants and mothers by avoiding non-medically indicated early elective births (before 39 weeks gestation). DoD MTF rates continue to be significantly below the national rates.

95.8%

96.0%

97.6%

97.0%

98.3%

98.0%

98.4%

98.0%

	FY 2012	FY 2013	FY 2014	FY 2015
	PC-1 ELECTIVE DELIV	/ERY <sup>c</sup>		
DoD MTFs	6.1%	4.6%	5.2%	4.5%
National	9.1%	5.0%	3.5%	3.0%

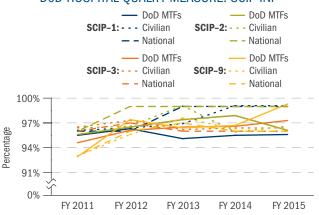
Cesarean Rates: This measure (PC-02) focuses on safe and appropriate opportunities to prevent overuse of cesarean delivery to reduce risk and increase safety for mothers and babies. DoD MTF rates continue to be significantly below the national rates.

	FY 2012	FY 2013	FY 2014	FY 2015
	PC-2 CESAREAN SEC	CTION <sup>c</sup>		
DoD MTFs	21.6%	21.8%	21.6%	20.4%
National	26 5%	26.1%	26.7%	_

Source: Data provided by Operations (J3), Clinical Support Division, 1/3/2017

Surgical Care Improvement Project (SCIP): DoD
performance on SCIP measures is consistent with
the average performance across the nation, with all
measures above 95 percent—the benchmark used by
TJC to identify top-performing hospitals.

## Dod Hospital Quality Measure: Scip Inf

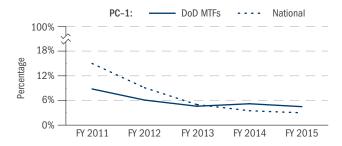


FY:	20 <b>12</b> F	Y 2013 I	FY 2014	FY 2015
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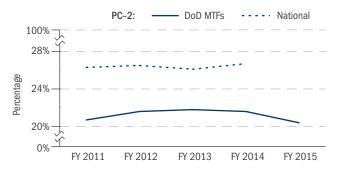
SCIP VTE-2<sup>b</sup> PATIENTS WHO GOT TREATMENT AT THE RIGHT TIME (WITHIN 24 HOURS BEFORE OR AFTER THEIR SURGERY) TO HELP PREVENT BLOOD CLOTS AFTER CERTAIN TYPES OF SURGERY

Military/Civilian Hospitals Treating DoD Patients	97.3%	98.3%	99.5%	99.9%
DoD MTFs	95.1%	96.2%	99.2%	99.9%
Civilian Hospitals Treating DoD Pts.	97.3%	98.3%	99.5%	99.9%
National	98.0%	98.0%	99.0%	100.0%

## Dod Hospital Quality Measure: Elective Delivery PC-1°



## Dod Hospital Quality Measure: Cesarean Section PC-2°



<sup>&</sup>lt;sup>a</sup> Surgical Care Improvement Project-Infection

 $<sup>^{\</sup>mbox{\tiny b}}$  Surgical Care Improvement Project–Venous, Thromboembolism, Prophylaxis

<sup>&</sup>lt;sup>c</sup> Lower rates are better.

## MHS Hospital Quality Measures (Cont.)

 Newborn Bloodstream Infections: DoD continues to strive to reduce its rates, and, in 2015, may be approaching the national rate.

	FY 2012	FY 2013	FY 2014	FY 2015
PC-4 HEALTH CARE-ASSOCIA	TED BLOODSTREA	AM INFECTI	ONS IN NEV	VBORNS <sup>a</sup>
DoD MTFs	9.5%	4.1%	0.9%	1.7%
National	1.6%	_	_	_

Breastfeeding: The benefits of breastfeeding a baby, especially in the days after birth, are internationally recognized. DoD MTFs have seen success with this program relative to the national rates, improving incrementally over each of the past three years.

	FY 2012	FY 2013	FY 2014	FY 2015
	PC-5 EXCLUSIVE BREAST	FEEDING		
DoD MTFs	64.5%	68.8%	70.5%	70.9%
National	49.6%	53.4%	49.5%	52.4%

#### **Children's Quality Measures**

	FY 2012	FY 2013	FY 2014	FY 2015
CAC-1 CHILDREN WHO RECEIVED RELIEVER MEDICATION WHILE HOSPITALIZED FOR ASTHMA				
Military/Civilian Hospitals Treating DoD Patients	99.9%	100.0%	100.0%	100.0%
DoD MTFs	99.3%	100.0%	100.0%	100.0%
Civilian Hospitals Treating DoD Pts.	100.0%	100.0%	100.0%	100.0%
Hospital Compare National Rate	100.0%	100.0%	100.0%	100.0%

CAC-2 CHILDREN WHO RECEIVED SYSTEMIC CORTICOSTEROID MEDICATION (ORAL AND IV MEDICATION THAT REDUCES INFLAMMATION AND CONTROLS SYMPTOMS) WHILE HOSPITALIZED FOR ASTHMA

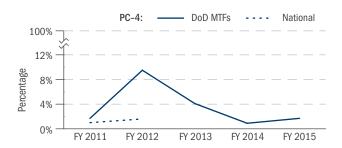
Military/Civilian Hospitals Treating DoD Patients	99.6%	99.9%	99.8%	99.8%
DoD MTFs	98.7%	99.1%	99.6%	100.0%
Civilian Hospitals Treating DoD Pts.	99.7%	99.9%	99.8%	99.8%
Hospital Compare National Rate	100.0%	100.0%	100.0%	100.0%

CAC-3 CHILDREN AND THEIR CAREGIVERS WHO RECEIVED A HOME MANAGEMENT PLAN OF CARE DOCUMENT WHILE HOSPITALIZED FOR ASTHMA

Military/Civilian Hospitals Treating DoD Patients	85.4%	87.1%	89.5%	91.9%
DoD MTFs	70.9%	62.5%	50.1%	47.3%
Civilian Hospitals Treating DoD Pts.	86.1%	88.1%	91.0%	92.4%
Hospital Compare National Rate	86.0%	88.0%	90.0%	88.0%

Source: Data provided by Operations (J3), Clinical Support Division, 1/3/2017 
<sup>a</sup> Lower rates are better.

## Dod Hospital Quality Measure: Health Care-associated bloodstream Infections in Newborns PC-4<sup>a</sup>

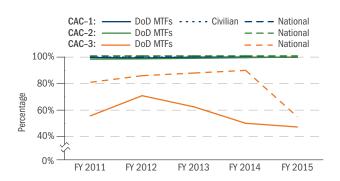


## Dod Hospital Quality Measure: Exclusive Breastfeeding PC-5



▶ Children's Asthma Care (CAC): MTFs providing care to DoD beneficiaries are 100 percent for CAC-1 and CAC-2, which focus on medications for asthma patients. CAC-3 focuses on the transition of care from the inpatient to the outpatient setting and is an area for improvement for both DoD and the nation. While a standardized note for the electronic medical record has been developed to support MTF performance for this measure, more work needs to be done to keep pace with the national improvement.

## Dod Hospital Quality Measure: CAC



#### **HEDIS Measures for MHS 2008-2016**

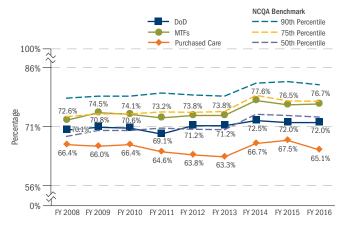
MHS collects health plan measures using the Healthcare Effectiveness Data and Information Set (HEDIS) methodologies. HEDIS is a tool used by more than 90 percent of America's health plans to measure performance on important dimensions of care and service. HEDIS makes it possible to compare the performance of health plans on an "apples-to-apples" basis (HEDIS Manual 2017, VOL I, NCQA copyright 2016) and consists of 91 measures across seven domains of care. MHS leadership, from MTF staff, through the respective Services, to DHA and senior SG and OASD(HA) leadership routinely monitor HEDIS performance at all levels of the MHS. HEDIS performance measures are included in the MHS performance management system known as the Partnership for Improvement, or P4I. They are presented in the dynamically linked MHS Dashboard at the MTF level and aggregated to Service Intermediate Commands, Services, and the MHS as a whole. MHS leadership formally reviews and assesses select measures on a quarterly basis, including HEDIS, with discussion on Service efforts to improve performance and encouraging increased MTF compliance with measures.

There are currently 24 measures available for MTFs derived from administrative and Armed Forces Health Longitudinal Technology Application data, and 10 measures available for purchased care derived from administrative data sources. Other measures are under development to support the Health Base Initiative, disease management (DM), and PCMH programs. MHS collects and trends metrics for adults (breast, cervical, and colorectal cancer screening; diabetes management; use of imaging studies for lower back pain; and follow-up after hospitalization for mental illness) and children (asthma care [for ages 5–65], well-child care, and use of antibiotics for pharyngitis and upper respiratory infection). MHS data can be compared with the National Committee for Quality Assurance (NCQA) annual benchmark results. The HEDIS methodologies used by the Portal to calculate HEDIS measures have been reviewed annually by an NCQA HEDIS auditor to validate that the Portal methodology is appropriately implemented.

#### **Adult HEDIS Measures**

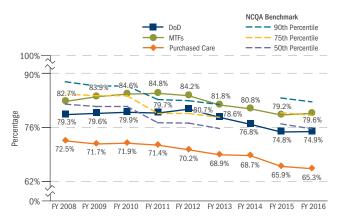
- Breast and Cervical Cancer Screening: Direct care, DoD MTFs continue to perform near the national 75th percentile and above purchased care rates (based on claims data of MHS enrollees to network civilian providers).
- Initiatives to engage patients and to optimize technology are underway to improve compliance with these important clinical service screening and care management recommendations.

#### BREAST CANCER SCREENING



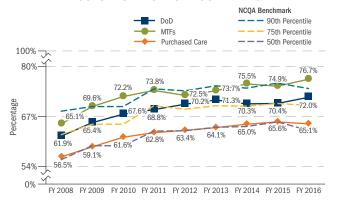
Source: DHA/Operations, Clinical Support Division, 12/27/2016

## CERVICAL CANCER SCREENING



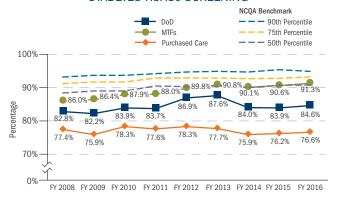
HEDIS Measures for MHS 2008-2016—Adult HEDIS Measures (Cont.)

## **COLORECTAL CANCER SCREENING**



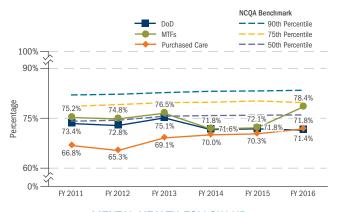
Colorectal Cancer Screening: Similar to the national rates, MHS direct and purchased care rates have improved in colorectal cancer screening. MHS direct care MTF rates exceeded the NCQA 90th percentile in FY 2014 and FY 2016, while purchased care rates continue to lag.

#### DIABETES HbA1c SCREENING



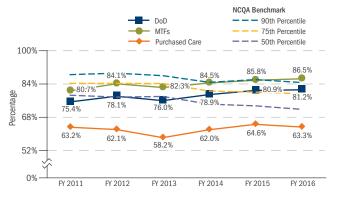
Diabetes HbA1c: MHS continues to work to improve diabetic management. Diabetes screening for HbA1c is presented here, based on rates determined from administrative data only. LDL screening was retired in 2014.

## LOW BACK PAIN IMAGING



Low Back Pain: Focused on overuse of imaging for acute back pain, MHS is working to integrate the DoD-VA clinical practice guideline into the electronic medical record to support improvement in this measure.

#### MENTAL HEALTH FOLLOW-UP

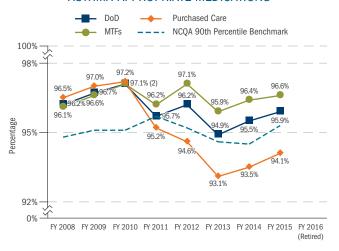


• Mental Health Follow-Up 30 Days Post-Hospitalization: MHS is addressing crossvenue communications to enhance transition of care between the MTF and purchased care venues; exceeded the NCQA 90th percentile in FY 2016.

Source: DHA/Operations, Clinical Support Division, 12/27/2016

## **HEDIS Measures for MHS 2008-2016—Adult and Pediatric HEDIS Measures**

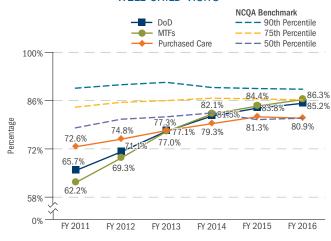
### **ASTHMA-APPROPRIATE MEDICATIONS**



◆ Asthma-Appropriate Medications: MHS direct care MTF adherence to guidelines for appropriate medications for asthma (ages 5–65 years) exceeds the NCQA 90th percentile.

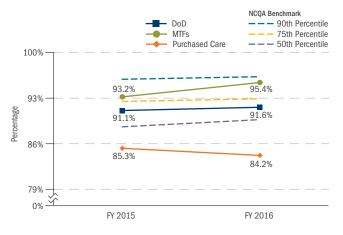
#### **Pediatric HEDIS Measures**





Well-Child Visits: The MHS continues to demonstrate improvement in this measure, which focuses on children having six visits within the first 18 months of life; direct care facilities exceeded the NCQA 75th percentile in FY 2016.

### CHILDREN WITH UPPER RESPIRATORY INFECTION



◆ HEDIS Measures for Children with Upper Respiratory Infection: Direct care facilities exceeded the NCQA 75th percentile in the U.S., and continue to approach the 90th percentile.

Source: DHA/Operations, Clinical Support Division, 12/27/2016
For visual display, numbers in parentheses on the graph indicate the number of overlapping data points.

## HEDIS Measures for MHS 2008-2016—Adult and Pediatric HEDIS Measures (Cont.)

MHS has performed well compared with national HEDIS benchmarks, meeting or exceeding the 2016 national 90th percentile benchmarks on three measures (with 5 stars shown below: management of asthma, screening for chlamydia, and controlling diabetes with HbA1c under 7), and above the 75th percentile for five measures (colorectal cancer screening, controlling diabetes with HbA1c levels at or under 9 and under 8, and following up on mental health stays within seven and 30 days). MHS has improved on eight of 12 measures, and exceeds the 75th percentile on three of the four measures that did not statistically improve.

HEDIS MEASURES	2014	2015	2016	2014 TO 2015 CHANGE	2015 TO 2016 CHANGE	HEDIS BENCHMARK STATUS (2016)
Asthma	95.85%	95.82%	95.86%	-0.03%	0.04%	****
Breast Cancer Screening	72.65%	72.27%	72.08%	-0.38%	-0.19%	**
Cervical Cancer Screening	77.13%	74.38%	74.73%	-2.75%	0.35%	**
Chlamydia Screening	58.33%	62.36%	64.43%	4.03%	2.07%	****
Colorectal Cancer Screening	70.64%	70.91%	71.81%	0.27%	0.91%	***
Diabetes ≤9	76.71%	76.77%	77.31%	0.06%	0.54%	***
Diabetes <7	50.21%	48.52%	48.33%	-1.69%	-0.18%	****
Diabetes <8	68.10%	67.69%	67.87%	-0.40%	0.17%	***
Diabetes Screening	84.24%	83.68%	84.30%	-0.57%	0.62%	*
Follow-Up Mental Health: 30 days	78.10%	78.86%	81.08%	0.76%	2.22%	***
Follow-Up Mental Health: 7 days	62.41%	64.01%	68.03%	1.60%	4.01%	***
Well-Child: 6 or more visits	80.85%	83.09%	84.09%	2.24%	1.01%	***

Source: MHS Population Health Portal, June 2016

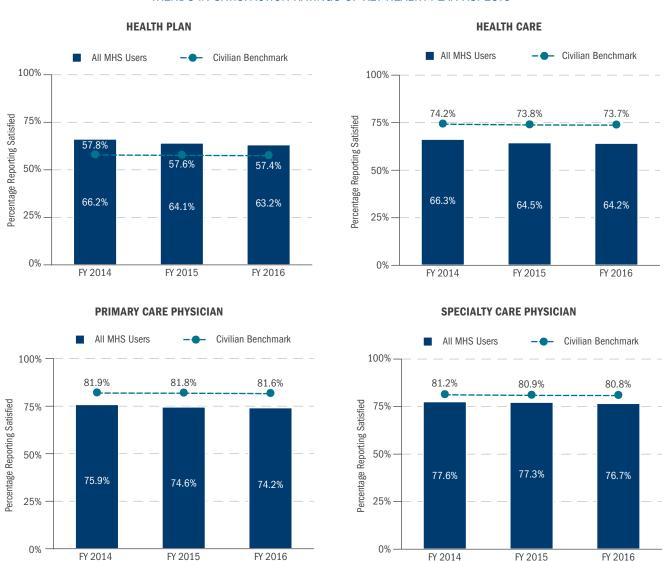
- 2014: Rates for June 2014; 2015: Rates for June 2015; 2016: Rates for June 2016
- Statistical Testing: Two-sample Z test; Green or Red: statistically significant at p=0.05 level
- HEDIS Benchmark Status
- · 1 star: Below 25th percentile
- · 2 stars: Between 25th and 49th percentile
- · 3 stars: Between 50th and 74th percentile
- · 4 stars: Between 75th and 89th percentile
- 5 stars: At or above 90th percentile

## Beneficiary Ratings of Experience and Satisfaction with Key Aspects of TRICARE

In this section, MHS beneficiaries in the U.S. who have used TRICARE are compared with the civilian benchmark with respect to ratings of (1) the health plan, in general; (2) health care; (3) personal physician; and (4) specialty care. Health plan ratings depend on access to care and how the plan handles various service aspects such as claims, referrals, and customer complaints.

- MHS beneficiary satisfaction with both their health plan and health care quality declined from FY 2014 to FY 2016. The civilian benchmarks for all four health plan aspects remained steady over the same time period.
- MHS beneficiary satisfaction with the health plan exceeded that of the civilian benchmark in each year between FY 2014 and FY 2016. However, MHS beneficiary satisfaction with health care quality and with primary and specialty care physicians was lower than the comparable civilian benchmarks.

#### TRENDS IN SATISFACTION RATINGS OF KEY HEALTH PLAN ASPECTS

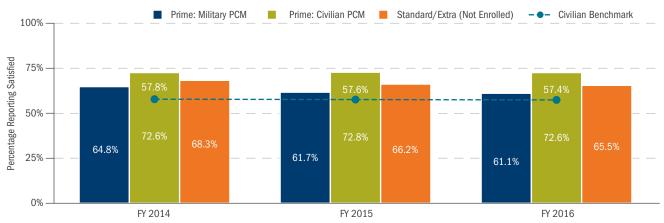


## Beneficiary Ratings of Satisfaction with Health Plan Based on Enrollment Status

DoD health care beneficiaries can participate in TRICARE in two ways: by enrolling in the Prime option or by not enrolling and using the traditional indemnity option for seeing participating providers (Standard) or network providers (Extra). Satisfaction levels with one's health plan across the TRICARE options are compared with commercial plan counterparts.

- Satisfaction with the TRICARE health plan declined from FY 2014 to FY 2016 for Prime enrollees with a military PCM and remained stable for those with a civilian PCM and for non-enrollees. Although it appears that non-enrollee beneficiary satisfaction declined, the trend was not statistically significant.
- For each year between FY 2014 and FY 2016, all MHS enrollment groups reported higher levels of satisfaction with their health plan than did their civilian counterparts.



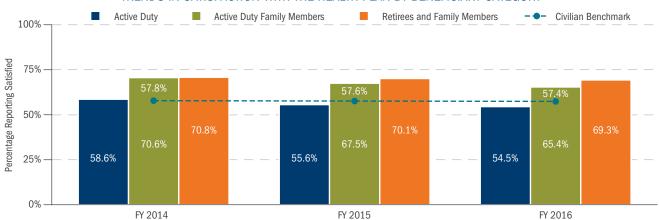


### Beneficiary Ratings of Satisfaction with Health Plan by Beneficiary Category

Satisfaction levels of different beneficiary categories are examined to identify any diverging trends among groups.

- Satisfaction with the TRICARE health plan declined from FY 2014 to FY 2016 for Active Duty and ADFMs but remained stable for retirees and family members.
- Active Duty satisfaction was lower than the civilian benchmark in FY 2016. However, satisfaction levels for ADFMs and non-enrollees were higher than the civilian benchmarks in each year from FY 2014 to FY 2016.

#### TRENDS IN SATISFACTION WITH THE HEALTH PLAN BY BENEFICIARY CATEGORY

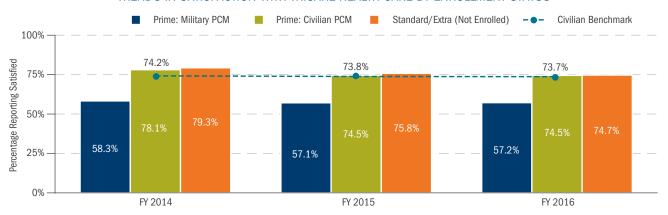


## Beneficiary Ratings of Satisfaction with Health Care Based on Enrollment or Beneficiary Category

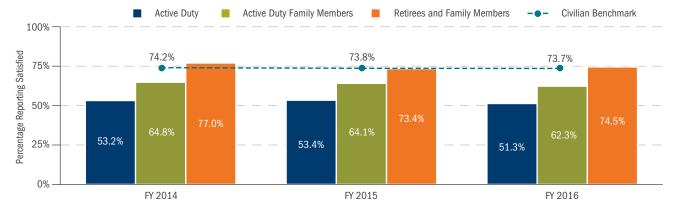
Similar to satisfaction with the TRICARE health plan, satisfaction levels with the health care received differ by beneficiary category and enrollment status.

- Non-enrolled beneficiaries' satisfaction with health care declined from FY 2014 to FY 2016. Although satisfaction remained stable for both those with a military PCM and those with a civilian PCM, Prime enrollees as a whole (i.e., military and civilian PCMs combined) exhibited a decline.
- In FY 2016, satisfaction with health care for beneficiaries with a military PCM were lower than the civilian benchmark. Satisfaction levels for the other enrollment groups equaled the civilian benchmarks.
- ◆ Satisfaction with health care remained steady for all beneficiary groups from FY 2014 to FY 2016.
- In FY 2016, the satisfaction levels of Active Duty and ADFMs were lower than the corresponding civilian benchmark. The satisfaction level for retirees and family members equaled the civilian benchmark.

#### TRENDS IN SATISFACTION WITH TRICARE HEALTH CARE BY ENROLLMENT STATUS



#### TRENDS IN SATISFACTION WITH TRICARE HEALTH CARE BY BENEFICIARY CATEGORY



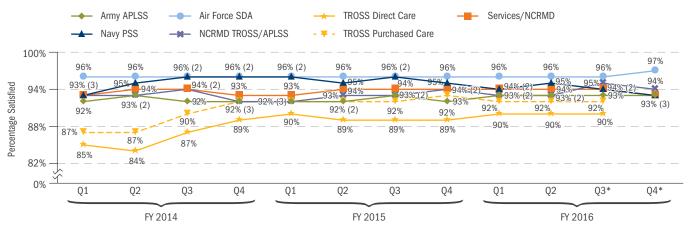
## Beneficiary Ratings of Care Following Outpatient Treatment Using Multiple DHA and Service Outpatient Surveys

The Army, Navy, Air Force, and DHA measure various aspects of the patient experience with MHS care. The Services focus on MHS beneficiaries using their MTFs for outpatient care, and design their surveys with sufficient power to be able to drill down to examine each MTF, as well as individual providers within each MTF. The focus of DHA surveys, on the other hand, is to use a standardized instrument and survey methodology to effectively examine beneficiary experience of care across the Services and between the direct and purchased care venues, as well as to compare to civilian CAHPS benchmarks; however, they are not designed to examine the performance of individual providers within MTFs.

New near the end of FY 2016 is the JOES. This is a single survey for all MTFs and Services. JOES is a unified outpatient survey that merges and standardizes the methodology and fielding of the outpatient survey for use by the Army, Navy, Air Force, and NCR. It aims to more efficiently glean beneficiary health care experiences and ultimately better inform improvement measures within and across the Services. From FY 2014 Q1 to FY 2016 Q2, the measure Access to Care is reported for each separate Service survey (Army APLSS, Navy PSS, Air Force SDA, and DHA TROSS, used for the NCR's Walter Reed National Military Medical Center and Pentagon's DiLorenzo clinic). As noted in the outpatient access measure "Get Care When Needed" addressed earlier, Service surveys transitioned to JOES in the third quarter at different points (Navy, NCR, and Army) and in the fourth quarter (Air Force). As such, Service ratings shown below in these quarters represent a blend of survey results, still obviating any comparison between Service ratings. By the end of FY 2017 Q1, JOES will facilitate comparing across Services, across multi-Service market areas with different Service MTFs, and across all MHS MTFs. The data points involving JOES data are indicated below with an asterisk.

Rating of Satisfaction with Care (Following an Outpatient Visit): The measure rating of Satisfaction with Care is another common item across all outpatient surveys (APLSS, PSS, SDA, and TROSS direct and purchased care). Overall ratings from FY 2014 to FY 2016 are shown in the chart below. Air Force SDA beneficiary ratings were consistently above the Services average across time. TROSS ratings were slightly higher for beneficiaries receiving outpatient care at civilian facilities than beneficiaries receiving care at MTFs. TROSS purchased care ratings remain consistently within three values of 90 percent, and TROSS direct care ratings peak at 90 percent. Note: A new TROSS survey was fielded in May 2014, following a change in the TROSS instrument from a six-point scale to a four-point scale questionnaire. This resulted in a change in the satisfaction score starting in FY 2014 Q3.

#### RATINGS OF SATISFACTION WITH CARE, FYs 2014-2016



Source: OASD(HA)/DHA Decision Support. TROSS, Air Force SDA, Army APLSS, and Navy PSS results are as of FY 2016 Q2 (August 2016). JOES results for Navy and NCR starting FY 2016 Q3 and Army starting FY 2016 Q4, compiled 10/27/2016. Asterisk in graph denotes the reporting of JOES data.

Notes:

- Percentage Satisfied with Care are calculated using responses to "Somewhat Satisfied" or "Completely Satisfied" on the scale "Completely Dissatisfied, Somewhat Dissatisfied, Neither Satisfied nor Dissatisfied, Somewhat Satisfied, and Completely Satisfied."
- FY 2014 Q3 data include May and June data only because the new TROSS instrument was fielded in May 2014.
- "MHS Overall" refers to the users of both direct and purchased care components; "Direct Care" refers to MTF-based care, and "Purchased Care" refers to care provided in the private sector through the claims-based reimbursement process.
- All MHS direct care data are adjusted for selection, nonresponse, gender, beneficiary category, and TRICARE region.
- All MHS civilian purchased care data are adjusted for selection, nonresponse, gender, beneficiary category, and TRICARE region.
- TROSS DC includes all MTFs, and TROSS PC includes the results of all civilian provider offices responding to the survey, randomly selected from claims data for inclusion in the survey.

- The table on the next page displays the extent to which the ratings of satisfaction with care changed over time in terms of improvement (increasing mean or median), or decreased dispersion (reduced range from minimum to maximum MTFs and reduced IQR).
- ◆ The box and whisker plots shown on the next page illustrate the distribution of facility satisfaction scores over time. The satisfaction scores are sorted from highest to lowest, and those in the top 25 percent are shown at the top by the whiskers and open circles. Facilities in the bottom 25 percent for satisfaction are, conversely, shown in the bottom of the graph. The IQR is a measure of variation and represents the middle 50 percent of satisfaction scores. Facilities with scores outside this range are labeled as outliers and are indicated in the box plots
- by open circles. The maximum and minimum are the scores that are 1.5 times above and below the IQR, or are the maximum or minimum values, and are denoted in the box plot by the whiskers.
- ◆ From FY 2013 to FY 2015, each Service improved in terms of the average and median ratings. The FY 2016 results, in part, reflect the change from the unique Service surveys to the standardized JOES survey, with Navy transitioning to JOES early May 2016, the NCR between May and June 2016, Army in June 2016, and Air Force in September 2016. As such, the FY 2016 results are not comparable to previous results; nor are they comparable among Services in the final quarter of FY 2016. FY 2017 results will be fully comparable.

Ratings of satisfaction with care among MTFs were high for all Services and showed minimal spread in the data over the time period from FY 2013 to FY 2016.

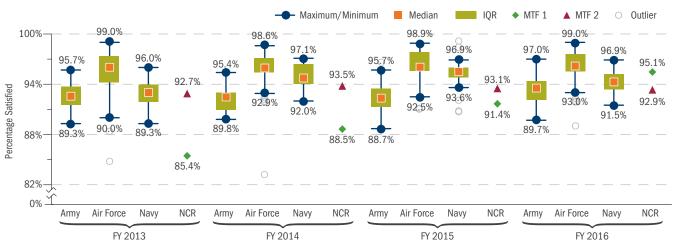
- As a result of being very close to 100 percent satisfaction, there was little change seen over the period under study.
- Dispersion in terms of the range of the lowest and highest performing MTFs remained small and unchanged between FY 2013 and FY 2016 for each Service.
- Results are based on unweighted Service survey data with no adjustment made to account for nonresponse or undercoverage. However, facility satisfaction scores were scaled by the number of respondents to each question. Incorporating this
- method of scaling into calculations reduces the ability of facilities with low numbers of respondents to have an overstated influence on the outcomes of analyses and resultant influence on conclusions.
- Overall, facility level satisfaction showed little change for each Service for the time period included but did show consistent differences between the Services. Service surveys were conducted using different methodologies, which prevents comparison among them. However, differences in the distribution of satisfaction can be analyzed by looking at changes to the IQR and CV over time.

SERVICE DATA: OVERALL SATISFACTION WITH CARE

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2013-FY 2016 % POINT CHANGE		
ARMY							
Mean	92.7%	92.1%	92.4%	93.1%	0.4		
Median	92.5%	92.0%	92.4%	93.7%	1.2		
IQR	2.0%	1.9%	2.0%	2.1%	0.1		
Maximum	95.7%	95.4%	95.7%	97.0%	1.3		
Minimum	89.3%	89.8%	88.7%	89.7%	0.4		
Range	6.5%	5.6%	6.9%	7.2%	0.7		
		AIR FO	DRCE				
Mean	95.5%	95.8%	96.3%	96.2%	0.7		
Median	96.0%	96.1%	96.5%	96.3%	0.3		
IQR	2.9%	1.6%	2.1%	1.9%	-1.0		
Maximum	99.0%	98.6%	98.9%	99.0%	0		
Minimum	90.0%	92.9%	92.5%	93.0%	3.0		
Range	9.0%	5.8%	6.4%	5.9%	-3.1		
		NA	VY		`		
Mean	92.9%	94.9%	95.2%	94.2%	1.3		
Median	93.5%	94.9%	95.8%	94.2%	0.7		
IQR	1.9%	2.2%	1.1%	1.7%	-0.2		
Maximum	96.0%	97.1%	96.9%	96.9%	0.9		
Minimum	89.3%	92.0%	93.6%	91.5%	2.2		
Range	6.7%	5.1%	3.4%	5.4%	-1.3		
		NC	R				
Mean	92.2%	93.0%	93.0%	93.5%	1.3%		

Note: The maximum and minimum are the scores that are at 1.5 times above and below the IQR, or are the maximum or minimum values if those values fell within 1.5 times the IQR. Box plots were created in Stata 12 following methods of Cox, N. J. (2009). Speaking Stata: Creating and varying box plots. *Life*, 60, 65.

### SERVICE SURVEYS: OVERALL SATISFACTION WITH CARE

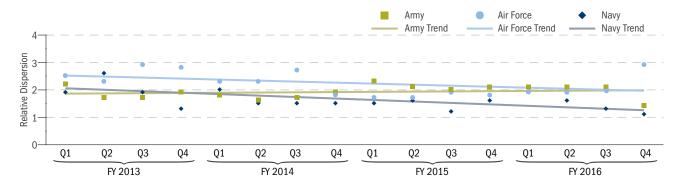


Source: Aggregation of four separate surveys (Army APLSS, Navy PSS, Air Force SDA, and DHA TROSS) until initiation of JOES reporting beginning in FY 2016 Q3 for Navy and NCR and FY 2016 Q4 for Army; unweighted

#### Notes:

- The box shows interquartile range (25th to 75th percentiles) with median highlighted.
- Length of whiskers are at 1.5 times the interquartile range or the min/max value.
- $\,$  FY 2014 includes Q1–Q3 data only. Data were not available in FY 2014 Q4.
- Facilities are scaled to account for the number of responses, and those reporting fewer than 30 responses were excluded from analyses.

## RELATIVE DISPERSION BY FISCAL YEAR AND QUARTER: OVERALL SATISFACTION WITH CARE

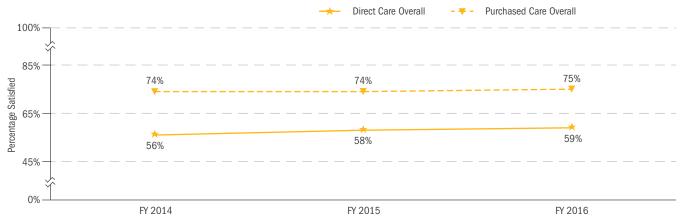


Source: Aggregation of four separate surveys (Army APLSS, Navy PSS, Air Force SDA, and DHA TROSS) until initiation of the JOES, reporting beginning in FY 2016 Q3 for Navy and NCR and FY 2016 Q4 for Army, unweighted

Note: Facilities are scaled to account for the number of responses, and those reporting fewer than 30 responses were excluded from analyses.

- Beneficiaries receiving outpatient care from purchased care providers reported higher ratings of their experience and satisfaction with health care than those receiving care in direct care MTFs from FY 2014 to FY 2016.
- Satisfaction increased slightly for direct care and remained somewhat stable for purchased care.

## TROSS OVERALL RATING OF HEALTH CARE, FYs 2014-2016



Source: DHA Decision Support, 12/29/2016

Note: Responses for FY 2014 are provided from May–Sept 2014 due to the TROSS survey instrument change. Responses for FY 2016 are provided from Oct–May 2016 due to the transition from TROSS to JOES-C in May 2016.

## **Beneficiary Ratings of Care Following Inpatient Treatment**

## **TRICARE Inpatient Satisfaction Survey (TRISS)**

The purpose of the OASD(HA)/DHA TRISS is to monitor and report on the perceptions and experiences of MHS beneficiaries who have been admitted to MTF and civilian hospitals. The survey instrument incorporates the questions developed by the AHRQ and CMS for the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS®) initiative.

The goal of the HCAHPS initiative is to measure uniformly and report publicly on inpatient care experiences through the use of a standardized survey instrument and data collection methodology. The information derived from the survey can provide feedback to providers and patients, valuable insight for internal quality improvement initiatives, and an assessment of the impact of changes in operating procedures.

Comparison of these data with the results from previous surveys, as well as comparisons to civilian benchmark data, enable DoD to measure progress in meeting its goals and objectives of high-quality health care. The TRISS compares care across all Services and across venues (i.e., direct MTF-based care and private-sector, or purchased care) including comparisons of inpatient surgical, medical, and obstetric care. In 2014, new methodological changes and HCAHPS requirements were implemented that resulted in higher response rates. The survey covers a number of domains, including:

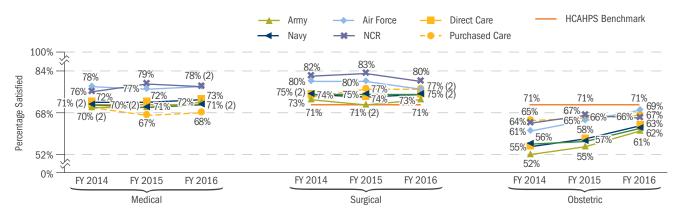
- Overall rating of hospital and recommendation of hospital to others;
- Nursing care (care, respect, listening, and explanations);
- Physician care (care, respect, listening, and explanations);
- Communication (with nurses and doctors, and regarding medications);

- Responsiveness of staff;
- Pain control;
- Hospital environment (cleanliness and quietness);
   and
- Post-discharge (such as written directions for post-discharge care).

The TRISS study follows the HCAHPS protocols developed by the CMS and is endorsed by the National Quality Forum. The HCAHPS protocols for sampling, data collection, and coding can be found in the HCAHPS Quality Assurance Guidelines manual on the official HCAHPS website, www.hcahpsonline.org.

**Rating of Hospital:** Overall, MHS beneficiaries receiving medical care at MTFs rated their inpatient care higher than those who were treated in civilian facilities. Patients who received surgical care in NCR and Air Force facilities rated their care higher than beneficiaries who sought care in direct and purchased care facilities. Although beneficiaries receiving obstetric care consistently reported lower overall hospital ratings than those receiving medical or surgical care, there was a steady upward trend in obstetrics ratings. Direct care satisfaction ratings for obstetric patients show a positive trend from FY 2012 through Q3 FY 2016, across each of the Services.

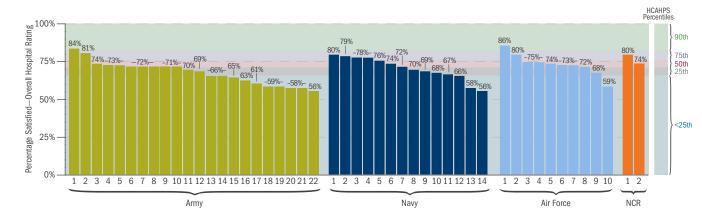
#### TRISS OVERALL HOSPITAL RATING TRENDS, FYs 2014-2016



The facilities in both TRISS histogram charts have been de-identified within their respective Service. The de-identified labels (e.g., Army 1, Army 2, etc.) in "Overall Hospital Ratings" correspond with the same facilities in the "Recommend Hospital" histogram chart on page 128.

The chart below shows a distribution for "Overall Hospital Ratings" of direct care inpatient facilities, and how they compared with the HCAHPS percentiles. There are two facilities, ACH Moncrief-Jackson and AF-MC-81st-Keesler, which had ratings within the HCAHPS 90th percentile. A total of seven inpatient facilities had ratings from FY 2016 Q1–Q3 in the 75th percentile. There are 18 facilities in the 50th percentile, which is the current benchmark that TRISS reporting uses as comparison. The rest of the facilities had ratings below the 50th percentile.

## TRISS OVERALL HOSPITAL RATING-DIRECT CARE, FY 2016 Q1-Q3



Source: OASD(HA)/DHA Decision Support TRISS results, compiled 11/7/2016 Notes:

- "Overall Hospital Rating" is an abbreviation of TRISS question 21: "Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?"
- Percentage satisfied for Overall Hospital Rating is a score of 9 or 10 on a 0–10 scale, where 10 is the best.
- "Direct Care" refers to MTF-based care, and "Purchased Care" refers to care provided in the private sector through the claims-based reimbursement process.
- Facilities with fewer than 30 responses are not included in the above analysis.
- All MHS direct care data are adjusted for selection, nonresponse, gender, beneficiary category, and TRICARE region.
- All MHS civilian purchased care data are adjusted for selection, nonresponse, gender, beneficiary category, age, and TRICARE region.

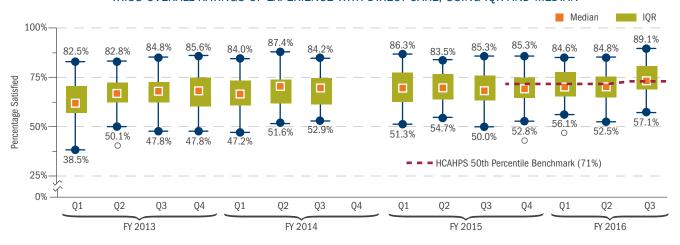
- Analyses were performed using data that were weighted to adjust for survey nonresponse and undercoverage. Facility satisfaction scores were then scaled based on the number of respondents to each question, which ensured that facilities with fewer respondents were not overrepresented in the analysis. Box and whisker plots illustrate the distribution of patient satisfaction scores by treatment facility over time. Satisfaction scores are sorted from highest to lowest, and those in the top 25 percent are shown by the upper whisker and open circle(s). Facilities in the bottom 25 percent for satisfaction are, likewise, shown by the bottom whisker and open circle(s). The IQR is represented by the box between the whiskers and represents the middle 50 percent of satisfaction scores.
- The median is shown by the square inside the IQR and represents the middle satisfaction score—half of facilities scored higher and half scored lower. The maximum and minimum are the scores 1.5 times above and below the IQR, or the maximum or minimum values if those values fell within 1.5 times the IQR. Facilities with scores outside this range are labeled as outliers and are indicated in the box plots by open circles.
- Overall, the box plots show that the proportion of satisfied patients at MTFs has increased over time and that more than half exceeded the HCAHPS benchmark for FY 2016. In addition, the decreases in both the IQR and range suggest that facilities are performing more similarly with regard to patient satisfaction.

## TRISS OVERALL RATING OF HEALTH CARE

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2013-FY 2016 % POINT CHANGE
Direct Care					
Mean	66.9%	68.0%	69.2%	71.2%	4.3
Median	65.8%	69.3%	68.4%	71.6%	5.8
IQR	12.2%	13.8%	12.7%	8.3%	-3.9
Maximum	84.5%	93.5%	86.6%	86.3%	1.8
Minimum	51.9%	46.0%	50.3%	55.7%	3.8
Range	32.7%	47.5%	36.3%	30.6%	-2.1

Note: The maximum and minimum are the scores that are at 1.5 times above and below the IQR, or are the maximum or minimum values if those values fell within 1.5 times the IQR. Box plots were created in Stata 12 following methods of Cox, N. J. (2009). Speaking Stata: Creating and varying box plots. *Life*, 60, 65.

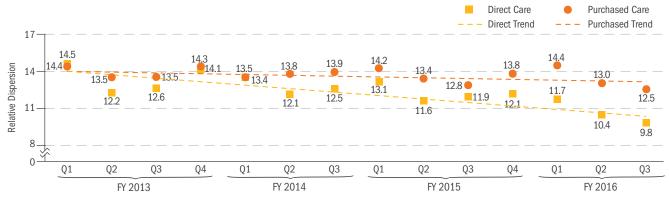
## TRISS OVERALL RATINGS OF EXPERIENCE WITH DIRECT CARE, USING IQR AND MEDIAN



Source: TRICARE Inpatient Satisfaction Survey (TRISS), data weighted for nonresponse and undercoverage 11/7/2016 Notes:

- The box shows interquartile range (25th to 75th percentiles) with median highlighted.
- Length of whiskers are at 1.5 times the interquartile range or the min/max value.
- FY 2016 includes Q1–Q3 data only. Data were not available in FY 2016 Q4.
- Facilities are scaled to account for the number of responses, and those reporting less than 30 responses were excluded from analyses.

#### RELATIVE DISPERSION OF HOSPITAL RATING BY FISCAL YEAR AND QUARTER



Source: TRISS, data weighted for nonresponse and undercoverage, 11/7/2016 Notes:

- FY 2014 includes Q1-Q3 data only. Data were not available in FY 2014 Q4.
- Facilities are scaled to account for the number of responses, and those reporting less than 30 responses were excluded from analyses.

### VARIABILITY OF HOSPITAL RATING BY FISCAL YEAR AND QUARTER



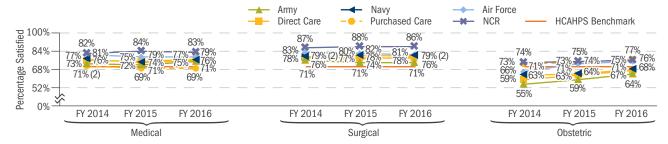
Source: TRISS, data weighted for nonresponse and undercoverage, 11/7/2016

- FY 2014 includes Q1-Q3 data only. Data were not available in FY 2014 Q4.
- Facilities are scaled to account for the number of responses, and those reporting less than 30 responses were excluded from analyses.

## **Recommendation of Hospital**

As with "Overall Hospital Ratings," beneficiaries who received medical care at MTFs recommended their provider more often than those who received purchased care. This was the opposite for obstetric care, where more patients recommended purchased care than those who received direct care. NCR and Air Force medical care were consistently the highest recommended of the Services. Army and Navy saw an increase in the recommendation rate between FY 2016 Q2 and Q3 in surgical care. Although lagging, beneficiary ratings in military hospitals have improved remarkably since FY 2014 for users of obstetric care.

## TRISS RECOMMENDATION OF HOSPITAL TRENDS, FYs 2014-2016

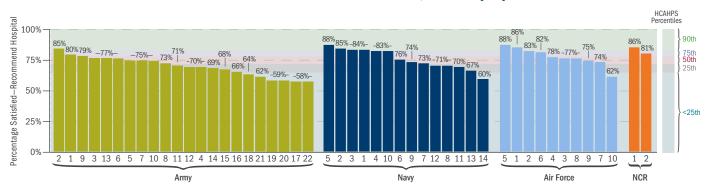


Source: OASD(HA)/DHA Decision Support TRISS survey results, compiled 11/7/2016 Notes:

- "Recommend the Hospital" is an abbreviation of TRISS question 22: "Would you recommend this hospital to your friends and family?"
- Percentage satisfied for Overall Hospital Rating is a score of "Definitely yes" on a scale of "Definitely no," "Probably no," "Probably yes," and "Definitely yes."
- "Direct Care" refers to MTF-based care, and "Purchased Care" refers to care provided in the private sector through the claims-based reimbursement process.
- FY 2014 Q4 data and FY 2016 Q4 data are not available and are not included in the above analysis.
- All MHS direct care data are adjusted for selection, nonresponse, gender, beneficiary category, and TRICARE region.
- All MHS civilian purchased care data are adjusted for selection, nonresponse, gender, beneficiary category, age, and TRICARE region.

The chart below shows the distribution of "Recommend Hospital" ratings of direct care inpatient facilities, as well as a comparison to HCAHPS percentiles. There are nine facilities with ratings in the 90th percentile: one Army, five Navy, two Air Force, and one NCR facility. Between FY 2016 Q1 and Q3, there were six facilities within the 75th HCAHPS percentile. Thirteen facilities were within the 50th percentile, which TRISS uses as the civilian benchmark. The rest of the facilities had ratings below the 50th percentile.

## TRISS RECOMMEND HOSPITAL-DIRECT CARE, FY 2016 Q1-Q3



Source: OASD(HA)/DHA Decision Support TRISS survey results, compiled 11/7/2016 Notes:

- "Recommend the Hospital" is an abbreviation of TRISS question 22: "Would you recommend this hospital to your friends and family?"
- Percentage satisfied for Overall Hospital Rating is a score of "Definitely yes" on a scale of "Definitely no," "Probably no," "Probably yes," and "Definitely yes."
- "Direct Care" refers to MTF-based care, and "Purchased Care" refers to care provided in the private sector through the claims-based reimbursement process.
- Facilities with fewer than 30 responses are not included in the above analysis.
- All MHS direct care data are adjusted for selection, nonresponse, gender, beneficiary category, and TRICARE region.
- All MHS civilian purchased care data are adjusted for selection, nonresponse, gender, beneficiary category, age, and TRICARE region.
- A small but positive change in patient recommendations for the hospital was observed in each fiscal year for both the mean and median scores, resulting in a total increase of

3.7 and 4.9 percentage points, respectively, while variation in terms of the range decreased by almost four percentage points.

### TRISS RECOMMEND HOSPITAL RATING

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2013-FY 2016 % POINT CHANGE
Direct Care					
Mean	71.5%	72.1%	72.6%	75.2%	3.7
Median	70.2%	71.5%	73.0%	75.1%	4.9
IQR	16.9%	17.2%	16.4%	10.3%	-6.6
Maximum*	91.1%	87.5%	100.0%	91.2%	0.1
Minimum*	54.2%	45.6%	55.2%	57.8%	3.6
Range	36.9%	41.9%	44.8%	33.3%	-3.6

Note: Asterisk indicates the maximum and minimum, which are the scores that are at 1.5 times above and below the IQR, or are the maximum or minimum values if those values fell within 1.5 times the IQR. Box plots were created in Stata 12 following methods of Cox, N. J. (2009). Speaking Stata: Creating and varying box plots. *Life*, 60, 65.

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## **Drivers of Patient Satisfaction/Experience Ratings**

Results of patient surveys have become increasingly important in measuring health plan performance and in directing action to improve the beneficiary experience and quality of services provided. Patient experience surveys help measure patients' perceptions of health care services and functions, and are an invaluable tool for improving communication and engaging patients in their care. Results have continued to gain in importance as a measure of health plan performance and in directing action to improve the beneficiary experience and health service quality.

- ◆ Three key beneficiary surveys measure self-reported access to and satisfaction with MHS direct and purchased care experiences:
  - TRICARE Inpatient Satisfaction Survey (TRISS)—event-based after a discharge from a hospital (based on HCAHPS);
- TRICARE Outpatient Satisfaction Survey (TROSS)—event-based following an outpatient visit (based on CAHPS C&G); and
- Health Care Survey of DoD Beneficiaries (HCSDB)—population-based quarterly survey sampling MHS-eligible beneficiaries who may use MHS or their own health insurance (based on CAHPS Plan).

Results from these three surveys for FYs 2015 and 2016 (using all data available at the time of analysis) were modeled to identify key drivers of satisfaction. Drivers of satisfaction for all surveys, for the direct care system, were determined by examining the effects of composite scores on outcome variables. The models controlled for all composites and patient demographic variables, including beneficiary category, gender, Service, health status, and region. The statistical significance and effect size of odds ratios were used to rank drivers of satisfaction.

- ◆ The table below shows that beneficiary satisfaction with health care provided in MTFs was driven by: communication between patients, doctors, and nurses; getting needed care; getting care quickly; satisfaction with office staff; and cleanliness of the patient room/bathroom. In addition to the above, communication about medications was also important to beneficiary satisfaction with outpatient care.
- Results suggest that improving communication between beneficiaries and health care providers, ensuring patient room/bathroom cleanliness, and improving communication about medications have the potential to influence a patient's health care experience and hospital satisfaction.

	TOP THREE DRIVERS OF SATISFACTION BY SURVEY: DIRECT CARE, FYs 2015-2016						
FISCAL YEAR	RANKING	TRISS DIRECT CARE MHS RATING OF HOSPITAL	TROSS DIRECT CARE MHS SATISFACTION WITH HEALTH CARE	HCSDB DIRECT CARE U.S. SATISFACTION WITH HEALTH CARE			
FY 2015	#1	Communication with Nurses	Communication with Doctors	Communication with Doctors			
	#2	Communication with Doctors	Communication about Medications	Getting Care Quickly			
	#3	Cleanliness of Room/Bathroom	Office Staff	Getting Needed Care			
FY 2016	#1	Communication with Nurses	Communication with Doctors	Communication with Doctors			
	#2	Communication with Doctors	Office Staff	Getting Needed Care			
	#3	Cleanliness of Room/Bathroom	Communication about Medications	Getting Care Quickly			

 $Sources: OASD(HA)/DHA\ TRISS, TROSS, and\ HCSDB,\ FYs\ 2015-2016\ (Q1-Q3\ only\ for\ TRISS\ and\ TROSS), compiled\ 11/17/2016\ (Q1-Q3\ only\ for\ TRISS\ and\ TRISS\ and\$ 

## PATIENT SAFETY IN MHS

The mission of the Department of Defense (DoD) Patient Safety Program (PSP) is to promote a culture of safe, high-quality patient care to end preventable patient harm by engaging, educating, and equipping patient-care teams to put evidence-based safe practices in place across the organization. In the MHS direct care system, the DoD PSP regularly monitors, measures, and identifies trends in patient safety data and safety event reports; which are leveraged to prioritize areas of focus for patient safety improvement in collaboration with the Services. The DoD PSP then develops targeted tools and solutions, disseminates them to frontline care teams, and evaluates their impact for continuous improvement.

The comprehensive May 2014 MHS Review reinvigorated the organization's commitment to the delivery of safe, high-quality health care with the adoption of high-reliability principles to reduce variability and improve performance. The DoD PSP, in collaboration with Service leadership, is integral to this effort in its continued support for advancing a culture of a safe health care system and establishing data-driven, standardized processes to promote safe and reliable care for every patient, every time.

### **Assessing Data to Identify Patient Safety Needs**

Reporting patient safety events is one of the key components in the MHS effort to achieve high reliability, to continuously improve, and to provide the safest patient care possible. The reporting of patient safety events, including those that did not reach the patient (i.e., near-miss events), allows DoD PSP to analyze the sequence of events that potentially lead to an error, identify trends in patient harm across the MHS direct care system, and share lessons learned across the enterprise to prevent future harm events reaching the patient. The Patient Safety Reporting (PSR) system is a standardized, anonymous, voluntary web-based reporting system that was implemented across the MHS direct care system in FY 2011 to capture patient safety events.

MHS leadership has directed military treatment facility (MTF) commanders and staff to report all patient safety events reaching the patient and encourages the reporting of near misses to the greatest extent possible. The table below compares FY 2013 and FY 2016 patient safety reporting, stratified by harm classification. In FY 2016, a total of 105,726 patient safety event reports were submitted from our direct care system, which includes 55 hospitals, 373 ambulatory clinics, 251 dental clinics, and the operational environment, which represents an 8.5 percent increase over FY 2015. Near-miss safety events accounted for 55 percent of all patient safety events reported in both FY 2015 and FY 2016, while the percentage of harm events decreased slightly from 10 percent in FY 2015 to 9 percent in FY 2016.

HARM	FY 2013		FY 2013 FY 2014		FY 2015		FY 2016	
GROUP	#	%	#	%	#	%	#	%
Harm	5,447	7%	7,758	8%	9,308	10%	9,989	9%
No Harm	31,767	39%	38,749	42%	34,320	35%	37,549	36%
Near Miss	44,147	54%	45,219	49%	53,819	55%	58,188	55%
Total	81,361	100%	91,726	100%	97,447	100%	105,726	100%

Source: DHA/Health Care Operations/Clinical Support Division, 12/9/2016

In addition to capturing patient safety events reported through PSR, DoD PSP receives root cause analyses (RCAs), which are required from MTFs for every sentinel event (SE) that occurs within a facility. Services can also voluntarily submit "Internal" RCAs for safety events that are not regarded as sentinel, but for which an RCA would still be beneficial by promoting learning and system improvements. Of the RCAs received in FY 2016, the leading event categories included: wrong site/person/procedure surgery, unintended retention of foreign object (URFO), delay in treatment, intraoperative/ postoperative complications, and maternal. There was a 5 percent decrease in the number of RCAs and a 41 percent increase in the number of internal RCAs in FY 2016 compared with FY 2015. The leading root cause categories have remained steady over time, and include management systems, work direction, communication, training, and procedures.

DoD PSP and MHS leadership have prioritized four safety event categories to focus on improvement. These include: (1) wrong-site surgery (WSS) SEs, (2) unintended retention of foreign objects (URFO) SEs, (3) central line-associated bloodstream infections (CLABSIs), and (4) catheter-associated urinary tract infections (CAUTIs).

WSS SEs are wrong-site, wrong-side, wrong-procedure, or wrong-patient errors, and are relatively rare, preventable patient safety events. The MHS has adopted The Joint Commission (TJC) definition of wrong-site surgery sentinel events, which is an "invasive procedure, including surgery, on the wrong patient, at the wrong site, or that is the wrong (unintended) procedure." All WSS SEs, regardless of the patient outcome or procedure type, are considered TJC-reviewable SEs and must be reported appropriately. The MHS goal for WSS SEs is zero events since these events are thought to be predominantly preventable.

URFO SEs occur when an item is left in the patient after an invasive medical or surgical procedure. These SEs cause patient harm and significantly increase the cost of patient care. The MHS goal for URFO SEs is zero

<sup>&</sup>lt;sup>1</sup> Joint Commission, "Sentinel Events (SE)," Comprehensive Accreditation Manual for Hospitals, SE-1–SE-19. Chicago: Joint Commission Resources, 2016, https://www.jointcommission.org/assets/1/6/SE\_CAMAC\_2016Upd1.pdf, accessed 10/31/2016.

events, as it is believed that these are predominantly preventable. MHS measures URFO SEs by looking at the reported number of events involving an URFO that result in no harm (i.e., event reached the patient, but no harm was evident), harm, or death in the direct care system.

The table below shows the number of direct care nondental URFO and WSS SEs that were reported to DoD Patient Safety Analysis Center (PSAC) from FY 2013 to FY 2016. The number of URFO SEs reported decreased from 22 in FY 2015 to 17 in FY 2016, representing a 23 percent decrease. However, the overall trend for URFO events from 2013 to present is stable. The number of WSS SEs reported increased from 21 in FY 2015 to 23 in FY 2016, representing a 10 percent increase. However, the overall trend of WSS from 2013 to present is relatively stable.

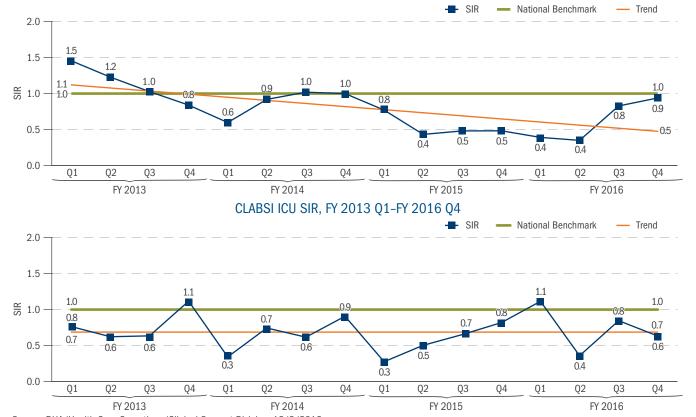
	FY 2013	FY 2014	FY 2015	FY 2016
Number of URFO Sentinel Events <sup>a</sup>	17	16	22	17
Number of WSS Sentinel Events <sup>b</sup>	14	22	21	24

- The Joint Commission. 2016c. "Sentinel Events (SE)." In Comprehensive Accreditation Manual for Hospitals, SE-1–SE-19. Chicago: The Joint Commission Resources, from: <a href="https://www.jointcommission.org/assets/1/6/SE\_CAMAC\_2016Upd1.pdf">https://www.jointcommission.org/assets/1/6/SE\_CAMAC\_2016Upd1.pdf</a>, accessed 10/31/2016
- b Sentinel event numbers are as of 11/30/2016, are non-dental and TJC-reportable only, and are presented based on the date the event was reported to PSAC.

CLABSIs and CAUTIs are health care-associated infections that occur after placement of a central line or catheter, respectively. These infections are associated with increased morbidity, mortality, health care costs, and length of stay per the CDC; however, they can be prevented when recommended infection control measures are followed. There are five specific ICU types within the MHS that are required to report to CDC's National Healthcare Safety Network (NHSN): Medical, Pediatric Medical/Surgical, Medical/Surgical, and Trauma.

The most reliable way to track CLABSI and CAUTI is through the use of the standardized infection ratio (SIR). This measure compares the number of infections (CLABSI and CAUTI) that occurred in MHS direct care ICUs with the number of infections that were predicted in these settings by a statistical model that adjusts for patient characteristics that may increase the risk of infection. These methods were developed by the CDC and are the current benchmarks used for performance comparisons by Medicare. As shown in the graphs below (where lower is better), the CLABSI SIR for MHS direct care was statistically no different than the national benchmark for three quarters in FY 2016, but was significantly below (better than) the national benchmark in FY 2016 Q2. In FY 2016, the MHS direct care CAUTI SIR for the five ICU types previously mentioned was significantly below (better than) the national benchmark in Q1 and Q2, and statistically no different from the national benchmark in Q3 and Q4.1

## CAUTI ICU SIR, FY 2013 Q1-FY 2016 Q4



Source: DHA/Health Care Operations/Clinical Support Division, 12/9/2016

<sup>&</sup>lt;sup>1</sup> CLABSI and CAUTI data are as of 11/30/16.

## **MHS Patient Safety Culture Survey**

Recently in 2016, the DoD PSP administered the MHS Patient Safety Culture Survey, which is adapted from the nationally recognized Hospital Survey on Patient Safety Culture, developed by the Agency for Healthcare Research and Quality (AHRQ) and designed to assess staff perceptions of patient safety at their MTF. The survey is fielded in the MHS direct care system approximately every three years across all hospitals, clinics, and dental facilities. It is essential that all leaders in the MHS commit to understanding and fostering a strong culture of safety at their MTF in order to support the ongoing journey toward high reliability, and the Culture Survey provides a tool for measuring progress toward that goal. The MHS had a 42 percent response rate for the 2016 survey administration.

The table below provides a summary of the 12 patient safety dimension scores for the MHS, along with comparisons to the 2011 survey administration and AHRQ's national benchmarks. The survey also has two additional questions that measure number of events reported and patient safety grade. The highest scoring dimension in the MHS in 2016 was teamwork within units, while the lowest were nonpunitive response to error and staffing. In addition, the MHS saw improvements in the area of event reporting, where number of events reported, nonpunitive response to error, communication openness, frequency of events reported, and feedback and communication about error all increased since the 2011 survey.

PATIENT SAFETY DIMENSION	OVERALL MHS	MHS 2016 VS. 2011	MHS 2016 VS. AHRQ 2016
Teamwork within Units	76%	+1pt	-6pts*
Supervisor/Manager Expectations and Actions Promoting Patient Safety	74%	+1pt	-4pts
Management Support for Patient Safety	72%	_	_
Organizational Learning-Continuous Improvement	69%	+2pts	-4pts
Frequency of Events Reported	66%	+2pts	-1pt
Overall Perceptions of Patient Safety	65%	-1pt	-1pt
Feedback and Communication About Error	65%	+3pts	-3pts
Communication Openness	64%	+3pts	_
Teamwork Across Units	59%	_	-2pts
Handoffs and Transitions	50%	+1pt	+2pts
Nonpunitive Response to Error	46%	+4pts	+1pt
Staffing	46%	-2pts	-8pts*

Source: DHA/Health Care Operations/Clinical Support Division, 12/9/2016

Note: Asterisk indicates "practical significance" as defined by the AHRQ as a change of five or more percentage points.

#### **Developed Targeted Solutions to Engage, Educate, and Equip**

Staff-to-staff communication breakdowns remain frequently cited as a primary factor contributing to patient safety events across the nation. Included among the many resources and solutions the DoD PSP offers is the Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS®), a system whose purpose is to improve communication techniques within health care teams. TeamSTEPPS is an evidence-based teamwork development system designed to produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes. The PSP DoD supports the Services by helping TeamSTEPPS Service coordinators collaborate and learn together, hosting the annual TeamSTEPPS DoD conference session to share best practices, provide infrastructure to obtain continuing education, provide one-on-one coaching, and evaluate the system's effectiveness. Throughout the

MHS direct care system, 57,000 MHS staff members (CY 2010–September 2016) from all over the world are TeamSTEPPS trained.¹

Further targeted training is offered for Patient Safety Managers (PSMs), who serve as local champions within MTFs. DoD PSP conducts a Patient Safety Professional Course (PSPC) to provide new PSMs with standardized knowledge, skills, and tools to implement patient safety initiatives at their facility. The PSPC offers an awardwinning, state-of-the-art learning system with a prework module, five days of face-to-face training, 12 months of post-training virtual coaching, and opportunities for continued development through a PSM Ongoing Learning Certificate. The PSPC was recently updated and renamed in October 2016 to align and integrate High Reliability Organization (HRO) principles, and foundational knowledge within the course content,

<sup>&</sup>lt;sup>1</sup> Reflects training that occurred after 2010, as those data were not tracked electronically, nor do all current training sessions get documented in this systematic manner. Data only reflect participation in this electronic system.

keeping attendees up to date on the latest innovative health care information, principles, and resources. Before attending PSPC, trainees reported an average confidence level of 29.6 percent across all aspects of their role; after course completion, this increased to 77.1 percent.

The DoD PSP also provides team and individual coaching to the Services for various improvement and knowledge base efforts. For example, as stated previously, the PSPC provides three, six, and 12 months of coaching call support after the PSPC to help PSMs' confidence continuously grow with their new role. Nearly 100 percent of those surveyed at the 12-month coaching session express high confidence in their understanding and abilities as PSMs. In 2016, the PSP also assisted PSMs and staff members in understanding their culture survey results by hosting group coaching sessions in the months following the release of the 2016 results. Culture Survey subject matter experts assisted with data interpretation, analysis, and action planning to help frontline staff drive and implement change based on their data. The PSP is also preparing to launch a Daily Safety Briefing coaching series in early 2017 to assist MTF leaders with implementing this leadership engagement practice across their MTF.

In addition to educating frontline workers and PSMs, DoD PSP also undertakes actions to develop tools and resources to engage leadership and staff in advancing quality and patient safety by providing them with innovative best practices and resources to facilitate large-scale change. In 2016, the PSP developed the Leadership Engagement Toolkit, a document designed to help health care leaders assess gaps in their safety culture, engage key influencers for change, set goals for targeted improvement, implement proven safe practices, and reinforce key behaviors to ensure high-reliability performance for improvement.

The PSP also promotes education and shared knowledge through the development and release of the key resources, such as the RCA Resource Guide, designed to help teams conduct effective RCAs and to reduce variation in execution across the enterprise. Additionally, the PSP released the Guidebook for Eliminating URFOs to provide the MTF leaders and staff with a resource aimed at educating and assisting users in identifying, understanding, and

implementing standardized, nationally and internally recognized best practices in preventing the occurrence of URFOs. The PSAC published three Focused Review publications in 2016, which are deep-dive analyses and recommendations on safety topics (e.g., WSS SEs and URFO SEs) and the importance of RCAs, and feature 11 (i.e., one per month until November 2016) successful improvement projects from the DoD PSP's health care quality and patient safety award submissions. PSAC also published the Calendar Year 2015 Patient Safety Annual Summary, which is a retrospective annual review of MHS direct care patient safety trends for CY 2015 in comparison with CYs 2014 and 2013. These publications act as a catalyst for transparency, sharing success stories and areas of improvement to focus on, and aid in understanding the complex care network that contributes to quality and safety in the MHS.

## **Patient Safety Support of MHS HRO Transformation**

DoD PSP assists the Services in their HRO efforts by facilitating collaboration that helps to ensure MHS effort alignment and that all resources and best practices are available for each of the Services. The PSP ensures that its products, resources, and services complement the Services' in their patient safety HRO and improvement efforts. The DoD PSP also encourages and engages field members through its facilitation of the 2016 Advancement Toward High Reliability in Healthcare Awards, which was conceived as a way to raise awareness, reward successful efforts, inspire organizations, and communicate success throughout the MHS. The award identifies those who have shown innovation and commitment to the development of systems and processes focused on the needs of the patient, eliminating preventable harm, and enhancing the integration of nationally recognized standards of care. There were a total of 70 submissions received for the awards program: 48 for Healthcare Quality and Safety, 19 for Improved Access, and three for Patient Engagement. The Healthcare Quality and Patient Safety Award had three award winners and eight honorable mentions; the Improved Access Award had seven award winners across five categories; and the Patient Engagement award had one award winner. Winners were recognized by the Acting Assistant Secretary of Defense for Health Affairs at the 2016 AMSUS Conference, during the annual dinner and awards banquet.

## 2016 ADVANCEMENT TOWARD HIGH RELIABILITY IN HEALTHCARE AWARDS PROGRAM

LIEVITUOADE	OLIALITY AND	DATIENT CAFETY	AMMADD
HEALIHCARE	OUALITY AND	PATIENT SAFETY	AWARD

Award Winner	Naval Hospital Pensacola	Hepatitis C Evaluation Prevention and Cure (H.E.P.C.) Program
Award Winner	Walter Reed National Military Medical Center	Identification of MCR1 Positive E Coli
Award Winner	San Antonio Military Medical Center	Improving Cardiac Arrest Outcomes and CPR Quality through Dedicated Interdisciplinary Code Team Training
Honorable Mention	Naval Medical Center San Diego	Oxytocin Protocol
Honorable Mention	U.S. Naval Hospital Guam	Recentralization and Standardization of the High-Level Disinfection Program
Honorable Mention	Carl R. Darnall Army Medical Center	Optimizing Asthma Management
Honorable Mention	San Antonio Military Medical Center	Reduction of Blood Culture Contaminations in the Emergency Department
Honorable Mention	Naval Medical Center San Diego	Postpartum Hemorrhage Reduction through Implementation of a PPH Treatment Bundle
Honorable Mention	Wright-Patterson Medical Center	Hand Hygiene Initiative
Honorable Mention	Naval Medical Center San Diego	A Standardized Nurse Initiated Protocol to Improve Management of Severe Hypertension in Pregnancy
Honorable Mention	San Antonio Military Medical Center	Effects of Electrolyte Replacement Protocol Implementation in a Medical Intensive Care Unit

#### IMPROVED ACCESS AWARD

Award Winner—Operational Access to Primary Care	Naval Hospital Oak Harbor	Improving Fleet Centered Access
Award Winner—Embedded Specialists in PCMH (PT)	Brooke Army Medical Center	Physical Therapy Purchased Care Recapture Plan
Award Winner—Pharmacy Access	Fort Belvoir Community Hospital	Reducing Process Lead Times (Wait Times) in Main Outpatient Pharmacy
Award Winner—ATC— Specialty Care	Naval Medical Center San Diego	Operation PINC: Process Improvement for Non-Delayed Contraception
Award Winner—ATC— Primary Care PCMH—1st Place	97th Medical Group—Altus Air Force Base	"Let Me In"—Improving Access from the Patient Perspective
Award Winner—ATC— Primary Care PCMH—2nd Place	14th Medical Group	Optimize Access to Care for Needed Services
Award Winner—ATC— Primary Care PCMH—3rd Place	U.S. Army Medical Command	Enterprise Appointing System

#### PATIENT ENGAGEMENT AWARD

Award Winner	Naval Health Clinic Patuxent River	Engage Community in Health Care Promotion Activity

## **Patient Safety in the Purchased Care System**

All TRICARE contractors continue to monitor their networks using the National Quality Forum Serious Reportable Events criteria, and to analyze administrative data using the AHRQ indicators. Occurrences are thoroughly reviewed with follow-up, in an effort to learn from errors and prevent future harm events.

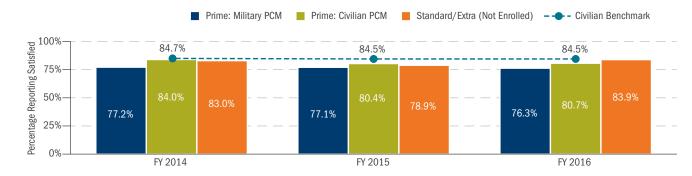
## **CUSTOMER SERVICE**

#### **Satisfaction with Customer Service**

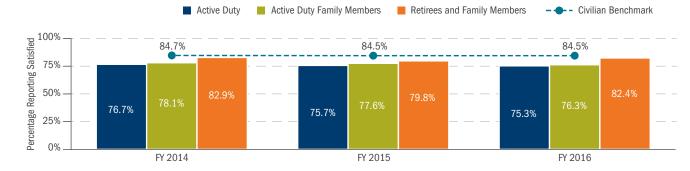
Access to and understanding written materials about one's health plan are important determinants of overall satisfaction with the plan.

- MHS beneficiary satisfaction with customer service in terms of understanding written material, getting customer assistance, and dealing with paperwork remained steady for all enrollment groups from FY 2014 to FY 2016. The civilian benchmark remained steady as well over the same time period.
- In FY 2016, satisfaction for Prime enrollees with either a military or civilian PCM was lower than the civilian benchmark.
- Satisfaction levels for all beneficiary groups held steady from FY 2014 to FY 2016. The civilian benchmark also held steady over the same period.
- For each year between FY 2014 and FY 2016, satisfaction levels for Active Duty and ADFMs were lower than the civilian benchmark. Except for FY 2015, satisfaction of retirees and family members was equal to the civilian benchmark.

## TRENDS IN RESPONSIVE CUSTOMER SERVICE: COMPOSITE MEASURE OF FINDINGS (UNDERSTANDING WRITTEN MATERIAL, GETTING CUSTOMER ASSISTANCE, AND DEALING WITH PAPERWORK) BY ENROLLMENT STATUS



## TRENDS IN RESPONSIVE CUSTOMER SERVICE: COMPOSITE MEASURE OF FINDINGS (UNDERSTANDING WRITTEN MATERIAL, GETTING CUSTOMER ASSISTANCE, AND DEALING WITH PAPERWORK) BY BENEFICIARY CATEGORY



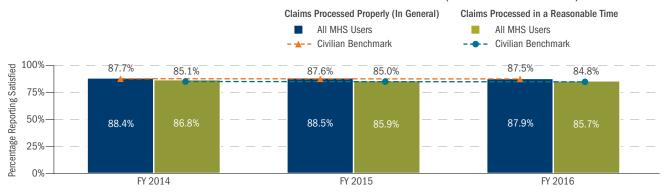
## **CLAIMS PROCESSING**

Both beneficiaries and their providers have an interest in the promptness and accuracy of claims processing and payment. MHS monitors the performance of TRICARE claims processing through surveys of beneficiary perceptions and administrative tracking.

## **Beneficiary Perceptions of Claims Filing Process**

- Satisfaction with claims being processed properly and with processing speed remained stable from FY 2014 to FY 2016. The civilian benchmarks also remained stable over the same period.
- MHS satisfaction levels with both the accuracy and the speed of claims processing were equal to the civilian benchmarks from FY 2014 to FY 2016.

#### TRENDS IN SELF-REPORTED ASPECTS OF CLAIMS PROCESSING (ALL SOURCES OF CARE)



Note: DoD data were derived from the FYs 2014–2016 Health Care Survey of DoD Beneficiaries (HCSDB), as of 11/9/2016, and adjusted for age and health status. "All MHS Users" applies to survey respondents in the 50 United States. See Appendix (General Method and Data Sources) for a more detailed discussion of the HCSDB methodology. Rates are compared with the most recent benchmarks of the same Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey version available at the beginning of the MHS survey year. Civilian benchmarks for the composites and numeric ratings are taken from CAHPS Version 5.0 for the fiscal year 2014 to 2016 surveys. CAHPS results come from micro data submitted to the National Committee for Quality Assurance (NCQA) by commercial plans Benchmarks used in 2014 and 2015 come from NCQA's 2013 data, while the benchmarks used in 2016 come from NCQA's 2015 data. In this and all discussions of the HCSDB results, the terms "increasing," "decreasing," "stable," or "comparable" (or "equaled" or "similar") reflect the results of statistical tests for significance of differences or trends.

## **Trends in Claims Filing Process**

TRICARE monitors claims processing to ensure compliance with contractual requirements and to ensure our participating providers are paid on a timely basis. Claims processing for purchased care comprises three intervals: claims submission, claims processing, and transmission acceptance.

- Claims Submission: The claims submission interval is the time from the patient's last date of care to the date that the treating provider files a claim for payment with the Purchased Care Processing Contractor.
- ◆ Claims Processing: The Purchased Care Processing Contractor adjudicates the claim and sends a TRICARE Encounter Data (TED) record to DHA requesting payment. Claims processing includes the time needed for the Purchased Care Processing Contractor to ensure the TED records pass all TRICARE validation edits (services are "Accepted").
- ◆ Transmission Acceptance: The transmission acceptance interval is the time between when DHA takes an "Accepted" TED record and when it identifies the appropriate program cost fund for payment. The accept date is defined as the "Last Update Date" in the TED by current contracts. Contracts between DHA and MCSCs require that TED records be received by 10 AM Eastern time for DHA to accept same day; otherwise, the cutoff moves the TED "Accept" record to the next day.

## CLAIMS PROCESSING (CONT.)

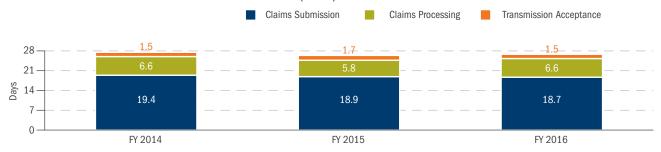
DHA pays MCSCs within seven days of the later of "Transmission Receive Date" or "Last Update Date," in compliance with contractual language. The graph below shows that TRICARE payments met time requirements, complying with MCSCs.

The below graph excludes paper claims and claims from other health insurance (OHI), pharmacy, TRICARE Dual Eligible Fiscal Intermediary Contract, and TRICARE Overseas Program contracts. There was an increase in claims processing times across all contract regions during FY 2016. This was mainly due to four major causes: (1) the implementation of the ICD-10 medical classification coding system, (2) the volume of claims deferred due to the new Urgent Care demonstration, (3) delays from the implementation of Durable Medical Equipment (DME) rural rates, and (4) a delay with update files for Outpatient Prospective Payment System (OPPS) in January–February 2016.

The lengthiest portion of claims processing consistently is claims submission—the time it takes for the treating provider to submit claims. Since institutional claims are less than 5 percent of the total claims, the claims submission time is not affected by this claim type.

The chart below shows results of analysis of claims counts of 37.4 million, 38.3 million, and 38.7 million for FY 2014, FY 2015, and FY 2016 respectively. The most recent fiscal year is an increase over the previous, and a slight decline can be seen from FY 2015's previous measurement due to canceled claims and an ongoing OHI discovery process.

## AVERAGE INTERVAL (DAYS) FOR CLAIMS PROCESSING



Source: MHS Administrative data, 11/29/2016

## TRICARE BENEFITS FOR THE RESERVE COMPONENT

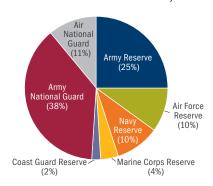
TRICARE offers a broad array of benefits coverage for RC members who qualify and their eligible family members, pre-deployment, during deployment, post-deployment, and into retirement.

**TRICARE Reserve Select (TRS).** The premium-based TRS health plan offers comprehensive TRICARE Standard and Extra coverage for purchase by qualified members of the Selected Reserve. TRS had grown to nearly 137,000 plans with more than 363,000 covered lives by the end of FY 2016. The chart below shows TRS enrollment growth since the NDAA FY 2007 enacted current member qualifications, effective October 1, 2007.

- As shown in the pie chart at right, Army National Guard and Army Reserve combined constitute
   63 percent of the 363,655 TRS covered lives.
- ◆ The Department has been asked previously to estimate the "take rate"—the share of members of the Reserve and Guard who could qualify for TRS that actually hold coverage. As shown in the table on the right, almost 127,000 Reserve and Guard members held TRS coverage by the end of CY 2014 of the almost 494,000 qualified Selected Reservists at the time, for an estimated "take rate" of almost 26 percent. (The take rate methodology was validated by the Government Accountability Office [GAO], GAO-11-151, June 2011, pages 11–12.)
- ◆ TRS monthly premiums are derived from actual prior year costs. Member-only rates will decrease by \$0.08, from \$47.90 in CY 2016 to \$47.82 in CY 2017. Member-and-family rates will increase by \$6.68, from \$210.83 in CY 2016 to \$217.51 in CY 2017, as follows (accessed 10/26/2016; see http://tricare.mil/Costs/HealthPlanCosts/TRS.aspx):

MONTHLY PREMIUMS	CY 2015	CY 2016	CY 2017	
TRS Member Only	\$50.75	\$47.90	\$47.82	
TRS Member and Family	\$205.62	\$210.83	\$217.51	

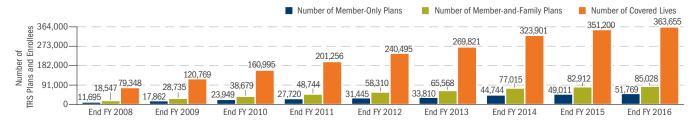
# TRICARE RESERVE SELECT: POPULATION BY COMPONENT (363,655 SPONSORS AND FAMILY MEMBERS AS OF SEPTEMBER 2016)



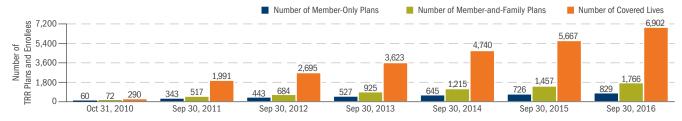
	TOTAL
Selected Reserve End Strength	826,848
Federal Employees Health Benefits Plan (FEHBP)	(113,121)
On Active Duty (AD)	(147,792)
On Early Identification or Early Eligibility (E-ID)	(12,599)
On Transitional Assistance Management Program (TAMP)	(59,678)
Adjusted TRS Eligible Population	493,658
Enrolled TRS Sponsors	126,980
Take Rate for Eligible Population	25.72%

Note: Data in table are unchanged since being provided in the FY 2016 TRICARE Evaluation report (page 66); OPM data unavailable for updating as of this writing. Source: ODASD (MPP) eligibility data as of 12/30/2014, provided 12/10/2015 Note: Selected Reserve end strength subcategories are mutually exclusive counts based on precedence of category (e.g. FEHBP, then AD, then E-ID, then TAMP). End of CY 2014 data are the latest available match results for the DoD-OPM match to identify Reserve Component members with FEHBP

#### TREND IN RESERVE COMPONENT ENROLLMENT IN TRS (SEPTEMBER 2008-SEPTEMBER 2016)



#### TREND IN ENROLLMENT IN TRICARE RETIRED RESERVE (OCTOBER 2010-SEPTEMBER 2016)



Source for TRR and TRS data: Defense Manpower Data Center (DMDC)/DEERS Medical Policy Report, 10/17/2016

## TRICARE BENEFITS FOR THE RESERVE COMPONENT (CONT.)

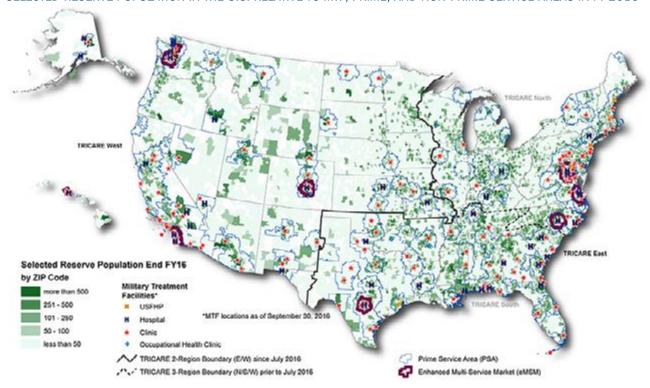
TRICARE Retired Reserve (TRR). Coverage under the TRR premium-based health plan began on October 1, 2010 (NDAA for FY 2010, section 705 and encoded at 10 U.S.C. 1076e). The law allows qualified members of the Retired Reserve to purchase full-cost, premium-based coverage under TRR until they reach age 60, when they receive premium-free TRICARE coverage for themselves as retirees and their eligible family members.

Although coverage under TRR is similar to TRS, it differs in the cost contribution. Unlike TRS, where the Department and member share in the cost of the premium, TRR members pay the full cost of the premium. Premiums are calculated annually for both.

- By the end of FY 2016, over 6,900 retired Reservists and their families were covered by TRR in 2,595 member-only and member-and-family plans.
- ◆ TRR monthly premiums, based on actual prior year costs, will increase by \$14.02 in member-only plans, from \$388.79 in CY 2016 to \$402.81 in CY 2017, and the member-and-family plans will increase by \$55.92, from \$957.44 in CY 2016 to \$1,013.36 in CY 2017, as follows (accessed 10/26/2016; see http://tricare.mil/Costs/HealthPlanCosts/TRR.aspx):

MONTHLY PREMIUMS	CY 2015	CY 2016	CY 2017	
TRR Member Only	\$390.89	\$388.79	\$402.81	
TRR Member and Family	\$961.35	\$957.44	\$1,013.36	

## SELECTED RESERVE POPULATION IN THE U.S. RELATIVE TO MTF, PRIME, AND NON-PRIME SERVICE AREAS IN FY 2016



## COMPARISON OF SELECTED RESERVE AND ACTIVE DUTY SPONSORS AND FAMILY MEMBER PROXIMITY TO MILITARY TREATMENT FACILITIES AND NETWORK PROVIDERS IN THE U.S. (SEPTEMBER 30, 2016)

BENEFICIARY GROUP	POPULATION TOTAL (FY 2016)	POPULATION IN PSAs	% IN PSAs	POPULATION IN CATCHMENTS	% IN CATCHMENTS	POPULATION IN PRISMs	% IN PRISMs	POPULATION IN MTF SERVICE AREAS	% IN MTF SERVICE AREAS	POPULATION IN MULTI- SERVICE MARKET AREAS	% IN MULTI- SERVICE MARKET AREAS
Active Duty and Their Families	2,813,645	2,687,614	96%	1,958,525	70%	2,483,345	88%	2,610,805	93%	1,098,933	39%
Selected Reservists and Their Families	1,958,517	1,339,605	68%	481,391	25%	733,973	37%	1,059,030	54%	247,594	13%

Sources: MTF information from DHA Business Support Directorate, Facility Planning 11/10/2016, and geospatial representation by DHA/Decision Support Division, 12/22/2015; Populations: Selected Reserve and family member data provided by OASD/RAS Reserve Components Common Personnel Data System (RCCPDS) and Defense Enrollment Eligibility Reporting System (DEERS) database extract as of 9/30/2016, provided 12/2/2016; Active Duty and their families from MHS Data Repository (MDR) DEERS extract as of 9/30/2016, provided 11/3/2016.

#### Notes:

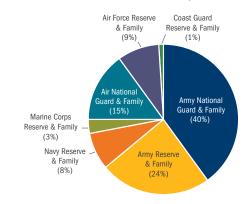
- Percentages are rounded to the nearest whole number.
- MTF Service Areas are 40-mile circles around inpatient and outpatient MTFs, rounded to include all complete and partial ZIP codes, subject to overlap rules, barriers, and other policy overrides.
- Prime Service Areas are MTF Service Areas and similar geographies around closed MTFs (Base Realignment and Closure [BRAC] Prime Service Areas), effective 9/30/2016.
- Multi-Service market areas are the six enhanced multi-Service market (eMSM) areas used in the MHS strategy and metrics calculations (i.e., National Capital Region, Puget Sound, Colorado Springs, San Antonio, Tidewater, and Hawaii areas) and two densely populated multiple-market areas in San Diego and Fort Bragg.

## TRICARE BENEFITS FOR THE RESERVE COMPONENT (CONT.)

- As of September 30, 2016, there were more than 2 million Selected Reserve Service members and their families (2,081,117), of which 818,212 were sponsors and 1,262,905 were family members.
- The map on page 139 depicts where Selected Reservists and their family members reside in the U.S., relative to the direct care MTFs, and also to all areas where TRICARE Prime networks are available. As shown in the accompanying table, by September 30, 2016, 68 percent of Selected Reservists and their family members (96 percent for Active Duty and their family members) in the U.S. live within the area covered by the TRICARE network (PSAs). Slightly more than half (54 percent) of this population resides near a clinic or inpatient MTF, compared with 93 percent of Active Duty and their family members.

As shown below, almost two-thirds (64 percent) of the worldwide Selected Reserve population of 2 million sponsors and their family members are Army National Guard (40 percent) and Army Reserve (24 percent), similar to the 63 percent enrolled in TRICARE Reserve Select.

## SELECTED RESERVE POPULATION (2,081,117): SPONSORS AND FAMILY MEMBERS BY SERVICE (SEPTEMBER 2016)



Source: OUSD(RA) (M&P), as of 12/2/2016

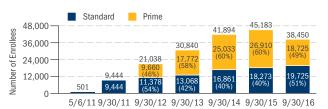
## TRICARE YOUNG ADULT

The TRICARE Young Adult (TYA) program is a premium-based TRICARE plan coverage available for purchase by qualified adult-age dependents who lose eligibility for TRICARE due to age. TYA extends specific TRICARE health care coverage options based on where the adult-age dependent lives and the sponsor's status, and can provide coverage up to the age of 26 if not otherwise qualified. TYA is an umbrella plan that offers Prime and Standard coverage across all TRICARE plans (Prime, TPR ADFM, Prime Overseas, Prime Overseas Remote, Standard, Standard Overseas, TRR, TRS, and USFHP). TYA Standard plans began in May 2011 and expanded to TYA Prime plans in January 2012. Monthly premiums are established to actuarially cover the full cost of the coverage. When purchased, TYA meets the minimum essential coverage requirements of the Patient Protection and Affordable Care Act.

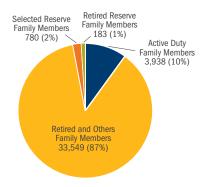
- As shown in the chart at right, enrollment dropped from just over 45,000 in FY 2015 to just under 38,500 in FY 2016, with the decrease mainly due to lower Prime enrollment. Prime enrollment slipped to less than half of total TYA enrollment.
- As shown in the accompanying pie chart, most TYA enrolled (90 percent) are family members of those who are not Active Duty (e.g., dependents of retirees and others).
- Based on actual prior year costs, TYA monthly premiums will increase from \$306 to \$319 per month for Prime and decrease from \$228 to \$216 per month for Standard in CY 2017 (table below; see <a href="http://tricare.mil/Costs/HealthPlanCosts/TYA.aspx">http://tricare.mil/Costs/HealthPlanCosts/TYA.aspx</a> [accessed 10/26/2016]).

MONTHLY TYA PREMIUMS	CY 2015	CY 2016	CY 2017
Prime	\$208	\$306	\$319
Standard	\$181	\$228	\$216

## TRENDS IN TYA ENROLLMENT SINCE INCEPTION (MAY 2011–SEPTEMBER 2016)



## TYA ENROLLMENT BY SPONSOR CAREER STATUS



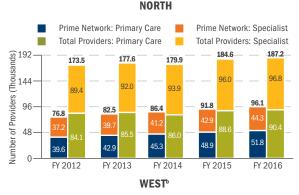
Source: DHA/J10-TRICARE Health Plan Directorate, 9/30/2016

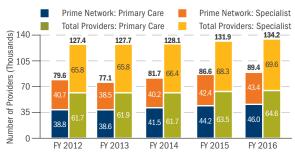
## TRICARE PROVIDER PARTICIPATION

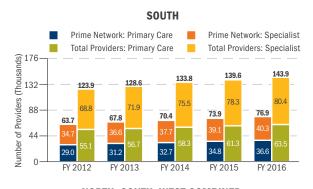
The National Provider Identifier (NPI) is a unique identification number issued to health care providers in the U.S. by CMS. All Health Insurance Portability and Accountability Act (HIPAA)-covered individual health care providers and organizations must obtain an NPI for use in all HIPAA standard transactions. In this report, providers are counted using the NPI. The number of TRICARE-participating providers was determined by the number of unique providers filing TRICARE (excluding TFL) claims.¹ Providers were counted in terms of full-time equivalent (FTE) units (1/12 of a provider for each month the provider saw at least one MHS beneficiary). The total number of participating providers has been rising steadily for more than a decade. The trend is due exclusively to an increase in the number of network providers; the number of Standard providers has actually declined slightly. Furthermore, the number of network primary care providers has increased at a higher rate (25 percent) than that of specialists (14 percent), but the total number of participating primary care providers has increased at a slightly lower rate (9 percent) than that of total participating specialists (10 percent).²

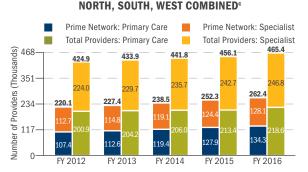
- Between FY 2012 and FY 2016, the South Region saw the largest increase in the total number of TRICARE providers (16 percent), while the North Region saw an increase of 8 percent and the West Region an increase of 5 percent.
- ◆ The North Region saw the largest increase in the number of network providers (25 percent), followed by the South at 21 percent and the West at 12 percent.
- The total number of TRICARE providers decreased by 13 percent in PSAs and increased by 104 percent
- in non-PSAs (not shown). This pattern is not due to any fundamental shift in where providers practice, but rather to the reduction in the number of PSAs in FY 2014.
- The number of network providers decreased by 5 percent in PSAs and increased by 154 percent in non-PSAs, also due to the reduction in the number of PSAs in FY 2014.
- In FY 2016, 68 percent of all network providers and 65 percent of all participating providers were in PSAs.

## TRENDS IN NETWORK AND TOTAL PARTICIPATING PROVIDER FTES, FYS 2012-2016<sup>a</sup>









Source: MHS administrative data, 1/17/2017

Notes: The source for the provider counts shown above was the TRICARE purchased care claims data for each of the years shown, in which a provider was counted if he or she was listed as a TRICARE-participating provider. The claims also explicitly identify network providers. Numbers may not sum to bar totals due to rounding.

- <sup>a</sup> Network providers are TRICARE-authorized providers who have a signed agreement with the regional contractors to provide care at a negotiated rate. Participating providers include network providers and those non-network providers who have agreed to file claims for beneficiaries, to accept payment directly from TRICARE, and to accept the TRICARE allowable charge, less any applicable cost shares paid by beneficiaries, as payment in full for their services.
- b The West Region includes Alaska.
- ° Numbers may not sum to regional totals due to rounding.
- <sup>1</sup> Providers include physicians, physician assistants, nurse practitioners, and select other health professionals. Providers of support services (e.g., nurses, laboratory technicians) were not counted.
- <sup>2</sup> Primary care providers were defined as General Practice, Family Practice, Internal Medicine, Obstetrics/Gynecology, Pediatrics, Physician's Assistant, Nurse Practitioner, and clinic or other group practice.

## CIVILIAN PROVIDER ACCEPTANCE OF, AND BENEFICIARY ACCESS TO, TRICARE STANDARD AND EXTRA

DoD has completed the fourth and final year of a congressionally mandated four-year survey (2012–2015) of civilian providers and MHS non-enrolled beneficiaries, designed to determine civilian provider acceptance of, and beneficiary access to, the TRICARE Standard benefit option. This survey complies with the requirements of Section 721, NDAA FY 2012, Public Law 112-81. This four-year survey is required as a follow-on to a previous four-year survey completed from 2008 to 2011 (Section 711, NDAA 2008 Public Law 110-181). The survey is licensed by the Office of Management and Budget (provider survey) and Washington Headquarters Service (beneficiary survey), and has been reviewed by the Government Accountability Office (GAO) as required by the guiding legislation.

### Results and key points:

- Cumulative provider survey results after four years:
- About six of 10 providers overall (60 percent of physicians and nonphysician behavioral health providers) and eight of 10 physicians (76 percent) accept new TRICARE Standard patients if they accept new patients of any insurance. These acceptance rates are statistically lower than the 2008–2011 benchmark survey for all providers (61 percent) and are higher for physicians (74 percent).
- Almost nine of 10 providers (84 percent) and over nine of 10 physicians (93 percent) are aware of the TRICARE program in general (greater than the 2008–2011 benchmarks of 82 percent and 91 percent, respectively).
- Similar to the 2008–2011 benchmark survey, behavioral health providers (including psychiatrists, psychologists, and nonphysician providers) report lower rates than physicians for awareness (74 percent) and acceptance (38 percent), pulling down the all-provider acceptance rates.
- Specialist nonpsychiatrist physicians report rates similar to those of primary care physicians for awareness, while specialists report higher acceptance rates than primary care providers for any new patients, new TRICARE Standard patients, and new Medicare patients.
- Prime and non-Prime Service
   Area differences: Responding
   to guiding legislation to assess
   differences between areas
   where Prime is offered (Prime
   Service Areas [PSAs]) and
   where it is not (non-PSAs),
   provider awareness and
   acceptance of new TRICARE
   Standard patients are higher
   in non-PSAs and former PSAs
   than in PSAs.

- · Beneficiary survey results, after two years:
- MHS non-enrolled Standard/Extra-eligible beneficiaries rate their care experience and access to care similarly to, or higher than, the benchmark standardized CAHPS Plan survey used by Medicare, Medicaid, and commercial health plans, and health plan accrediting agencies.
- Standard/Extra beneficiaries residing in non-PSAs report global ratings of specialists that are lower than the rates for those residing in PSAs, yet they rate access to specialists similarly. However, Standard/Extra beneficiaries in non-PSAs report higher ratings of access to TRICARE personal doctors and specialists than beneficiaries in PSAs; such ratings are similar to those of beneficiaries residing in PSAs for all other global and access measures.
- Provider and beneficiary results vary among PSAs, non-PSAs, and Health Service Areas (HSAs), offering opportunities for improvement in some local areas, such as the boroughs of New York City, N.Y., and Sacramento and Los Angeles, Cali.

### TRICARE STANDARD SURVEYS



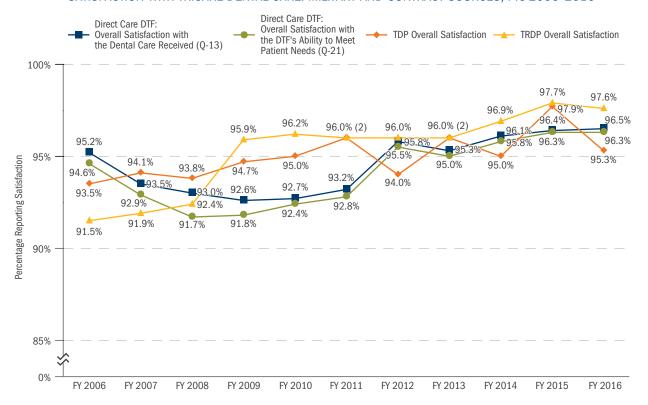
## TRICARE DENTAL PROGRAMS CUSTOMER SATISFACTION

#### **Dental Customer Satisfaction**

The overall TRICARE dental benefit is composed of several delivery programs serving the MHS beneficiary population. Consistent with other benefit programs, beneficiary satisfaction is routinely measured for each of these important dental programs.

- Military Dental Treatment Facilities (DTFs) are responsible for the dental care of about 1.54 million Active Duty Service members worldwide and eligible family members residing outside the continental U.S. (OCONUS). The Tri-Service Center for Oral Health Studies completed 69,765 surveys in FY 2016. Reports of overall satisfaction have remained steady at over 96 percent since FY 2014.
- ◆ The TRICARE Dental Program (TDP) composite overall average enrollee satisfaction remained steady from FY 2014 to FY 2016 at about 95 percent. The TDP is a voluntary, premiumsharing dental insurance program available to eligible ADFMs, Selected Reserve and Individual Ready Reserve members, and their families. As of September 30, 2016, the TDP enrollment totaled 764,279 contracts, covering almost 2 million lives (1,758,326), 94 percent of which were in the U.S.
- The TDP network has 99,218 total dentists—or 4 percent more than the 95,345 in FY 2015—of which 79,157 are general dentists and 20,061 are specialists.
- ◆ The TRICARE Retiree Dental Program (TRDP) overall retired enrollee satisfaction rate rose from just under 97 percent in FY 2014 to nearly 98 percent in FYs 2015 and 2016, after remaining steady at 96 percent for the five years prior (from FY 2009 to FY 2013). The TRDP is a full premium insurance program open to retired Uniformed Services members and their families. TRDP enrollment at the end of FY 2016 was higher by 11 percent than in FY 2013, with over 1.56 million total covered lives in over 792,600 contracts in FY 2016, compared with about 1.40 million lives in over 691,800 contracts in FY 2013.

## SATISFACTION WITH TRICARE DENTAL CARE: MILITARY AND CONTRACT SOURCES, FYS 2006-2016



Sources: TRICARE Dental Office, Health Plan Execution and Operations; Tri-Service Center for Oral Health Studies; and DoD Dental Patient Satisfaction Reporting website (Trending Reports), 10/26/2016

Note: The three dental satisfaction surveys (Direct Care, TDP, and TRDP) are displayed above for ease of reference, but are not directly comparable because they are based on different survey instruments and methodologies. For visual display, numbers in parentheses on the graph indicate the number of overlapping data points.

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## HEALTHY AND RESILIENT INDIVIDUALS, FAMILIES, AND COMMUNITIES

This section presents the Military Health System (MHS) Quadruple Aim of "Better Health" and efforts to move "from health care to health" by making the healthy choice the easy choice. This transition is focused on addressing health determinants across the organization, which includes the military health community and places where beneficiaries live, learn, work, and play.



## ENGAGING PATIENTS IN HEALTHY BEHAVIORS

The Healthy People (HP) 2020 goals are national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce those threats; these goals have been embraced by the Department of Defense (DoD) along with the National Prevention Council (NPC). The NPC comprises twenty federal departments, agencies, and offices, and developed the National Prevention Strategy (NPS), America's plan for improving health and well-being. An additional paradigm guiding our efforts within DoD is Total Force Fitness (TFF). This paradigm focuses on several domains that address the NPS, encompassing mind and body.

In response to health concerns regarding Service members and their families, DoD launched Operation Live Well (OLW) in 2013. This initiative brings together the resources and capabilities of the entire military community to focus on the best ways to promote health and wellness for all beneficiaries.

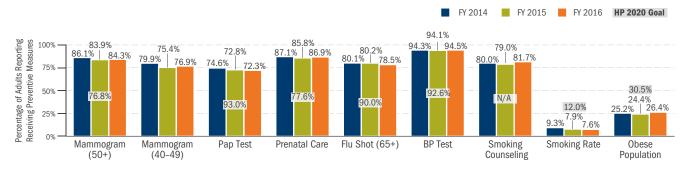
This activity was only a first step in DoD's long-term effort to address a core challenge to America's military strength and readiness in the years to come. Although there is no simple strategy for improving health and wellness in the military community, the opportunity exists to explore increased collaboration within DoD overall.

The MHS strategic goals go beyond those for primary health and wellness. The graph on the following page reflects secondary-prevention efforts via self-reported responses from all eligible MHS beneficiaries within the categories shown (e.g., all adult women for mammography, all adult pregnant women for prenatal care, etc.).

- ◆ MHS has set as goals a subset of the health-promotion and disease-prevention objectives specified by the Department of Health and Human Services (DHHS) in HP 2020. Over the past three years, MHS has exceeded targeted HP 2020 goals for providing mammograms, Pap tests, and prenatal care for women, as well as for rates of smoking and obesity (see notes on page 146).
- While exceeding the HP 2020 targets, the percentage of MHS female beneficiaries receiving Pap tests declined from just under 75 percent in FY 2014 to just above 72 percent in FY 2016.
- ◆ Tobacco Use: The overall self-reported smoking rate among all MHS beneficiaries has declined for the past 5 years, decreasing from almost 15 percent in 2010 (not shown) to under 8 percent in FY 2016, four percentage points below the HP 2020 goal of 12 percent. Smoking-cessation counseling has increased slightly from 80 percent in FY 2014 to just under 82 percent in FY 2016.
- ◆ Obesity: The overall proportion of MHS beneficiaries identified as obese increased slightly from about 25 percent in FY 2014 to about 26 percent in FY 2016. This is below the HP 2020 goal of 30.5 percent (revised from 34 percent in 2012, consistent with reporting from the National Health and Nutrition Examination Survey [NHANES]) and below the most recently identified U.S. population average of 35 percent (CDC National Center for Health Statistics, 2012, not shown). See additional charts on the following pages, which distinguish obesity rates by beneficiary category.

## ENGAGING PATIENTS IN HEALTHY BEHAVIORS (CONT.)

## TRENDS IN MEETING PREVENTIVE CARE STANDARDS, FYs 2014-2016



Source: Defense Health Agency (DHA), Decision Support Division 2016 Health Care Survey of DoD Beneficiaries (HCSDB) <a href="http://www.tricare.mil/survey/hcsdbsurvey/">http://www.tricare.mil/survey/hcsdbsurvey/</a><a href="https://www.tricare.mil/survey/hcsdbsurvey/hcme/z\_reports.cfm">https://www.tricare.mil/survey/hcsdbsurvey/

#### Notes:

- Unlike the objective for all other categories, the objective for Smoking Rate and Obese Population is for actual rates to be below the HP 2020 goals.
- The goal for Prenatal Care was revised down from 90 percent in the HP 2010 goals to 77.6 percent in the HP 2020 goals.
- The goal for Obese Population was revised up from 15 percent in the HP 2010 goals to 30.5 percent in the HP 2020 goals (see <a href="http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx">http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx</a> for more information).

#### MHS-TARGETED PREVENTIVE CARE MEASURES

Mammogram: Women aged 50 or older who had a mammogram in the past year; women aged 40–49 who had a mammogram in the past two years. Pap Test: All women who had a Pap test in the last three years. Prenatal: Women pregnant in the last year who received care in the first trimester. Flu Shot: People aged 65 and older who had a flu shot in the last 12 months. Blood Pressure (BP) Test: People who had a blood pressure check in the last two years and know the results.

Obese: Obesity is defined as a Body Mass Index (BMI) of 30 or above, which is calculated from self-reported data from the HCSDB. An individual's BMI is calculated using height and weight (BMI = 703 times weight in pounds, divided by height in inches squared). Although BMI is a risk measure, it does not measure actual body fat; as such, it provides a preliminary indicator of possible excess weight, which in turn provides a preliminary indicator of risk associated with excess weight. It should therefore be used in conjunction with other assessments of overall health and body fat. Smoking-Cessation Counseling: People advised to quit smoking in the last 12 months.

## POPULATION HEALTH

Population Health is dedicated to proactively managing the health care of patient populations. Although this concept is generally associated with managing the clinical risks associated with patients, MHS has extended this concept to include helping the population manage their own health and creating an environment where the healthy choice is the easy choice. The MHS model has evolved to better address the determinants of health through strategies such as strengthening the connections between community-based wellness and prevention programs.

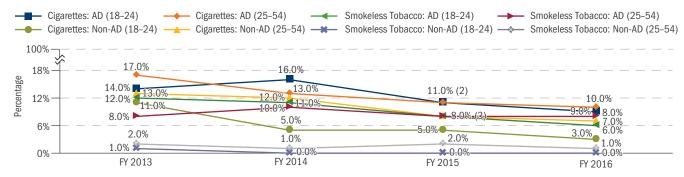
## TOBACCO CESSATION

Tobacco use is the leading cause of death in the U.S., and rates of smoking in the military remain higher than desired. Military personnel who smoke experience reduced physical-performance capability, impaired night vision, increased risk of respiratory illnesses and surgical complications, delayed wound healing, and accelerated age-related hearing loss. Furthermore, there are negative impacts on dental readiness, and long-term effects of tobacco use often include cancer, stroke, emphysema, and heart disease.

Cigarette smoking for Active Duty Service members (ADSMs), with the exception of FY 2014, has declined. Smokeless tobacco usage for young ADSMs has declined; however, it has remained flat for the older ADSMs. Self-reported cigarette smoking declined from 14 percent in FY 2013 to 9 percent in FY 2016 for young Active Duty (aged 18–24), and from 17 percent to 10 percent for older Active Duty (aged 25–54) during the same period, both of which are lower than the national civilian adult average of just under 18 percent in 2013 (down from 21 percent in 2005). Cigarette smoking among Active Duty family members (ADFMs) in both age groups has also declined over this same time period, although Active Duty smoking remains higher than that of family members. Active Duty use of smokeless tobacco has also declined for the younger group, down to 6 percent by 2016, and has remained flat for the older group, but is still higher than the civilian average of almost 4 percent.

## TOBACCO CESSATION (CONT.)

## MHS CIGARETTE AND SMOKELESS TOBACCO USE RATES AMONG ACTIVE DUTY AND FAMILY MEMBERS, FYs 2013-2016



Source: Defense Health Agency (DHA), Decision Support Division survey, 11/09/2016, HCSDB Notes:

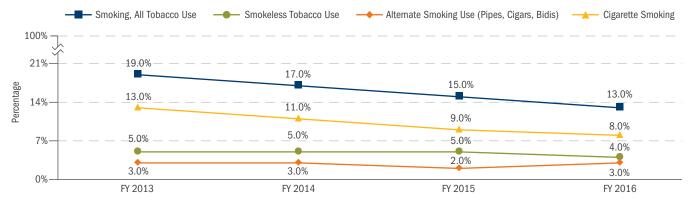
- For visual display, numbers in parentheses on the graph indicate the number of overlapping data points.
- Percentages are weighted for the probability of selection and nonresponse; variation in quarterly estimates may not be significant and should not be assumed as such without appropriate tests of significance.
- U.S. adult smoking rate of 15.1 percent from http://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/adult\_data/cig\_smoking/, accessed November 22, 2016
- U.S. adult smokeless tobacco rate of 3.4 percent in 2014, from: <a href="http://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/smokeless/use\_us/index.htm">http://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/smokeless/use\_us/index.htm</a>, accessed November 22, 2016

## ♦ MHS Prime Enrollee Use of Any Tobacco Products:

Although attention has historically been focused on cigarette smoking, the HCSDB has also been directed to assess the use of various tobacco products across MHS. The chart below presents the self-reported estimates of the prevalence of MHS Prime enrollees using different tobacco products (cigars, pipes, bidis, or kreteks). Based on the survey, Prime enrollee use of tobacco in one form or another has had a statistically significant decline from 19 percent in FY 2013 to 13 percent

in FY 2016. Cigarette smoking, which is the mostused form of tobacco among Prime enrollees, has declined from 13 percent to 8 percent over the same time period, while smokeless tobacco usage has declined by 1 percent (from 5 percent in FY 2013 to 4 percent in FY 2016). Usage of various tobacco products shown in the chart are not mutually exclusive (e.g., a cigarette smoker may also report being a snuff user [smokeless tobacco] or a pipe smoker [alternate smoking tobacco]), and thus are not additive.

## MHS PRIME ENROLLEE USE OF TOBACCO PRODUCTS, BY TYPE OF TOBACCO USE: CIGARETTES, ALTERNATE SMOKING TOBACCO, AND SMOKELESS TOBACCO, FYS 2013–2016



Source: Defense Health Agency (DHA), Decision Support Division, HCSDB survey, 11/9/2016 Notes:

- Smokeless tobacco may include dip, snuff, snuss, chew, etc., while alternate smoking tobacco may include cigars, pipes, hookahs, bidis, or kreteks.
- Percentages are weighted for the probability of selection and nonresponse; variation in quarterly estimates may not be significant and should not be assumed as such without appropriate tests of significance.

## TOBACCO CESSATION (CONT.)

#### **Tobacco Cessation Resources**

Current TRICARE Policy Manual Chapter 8, Section 19.1 states that tobacco cessation counseling is covered for all TRICARE beneficiaries age 18 and older who are not Medicare-eligible, and who reside in one of the 50 states or the District of Columbia, and only when the tobacco cessation counseling is delivered in one of the 50 states or the District of Columbia. Counseling sessions must be conducted by a TRICARE-authorized provider. Counseling may include individual or group sessions. In addition, the TRICARE smoking-cessation program for ADSMs and Active Duty dependents residing overseas—including the U.S. territories of Guam, Puerto Rico, and the Virgin Islands who are enrolled in TRICARE Prime at an MTF-may have access to those services that the ASD(HA) has determined may be reasonably provided overseas under the authority of 32 CFR 199.17.

TRICARE beneficiaries are eligible for medications at no cost through TRICARE Pharmacy Home Delivery and military pharmacies with a prescription from their primary care provider or another health care professional. This includes both over-the-counter nicotine replacement therapies and prescription medications that are under the regulatory authority of the Food and Drug Administration.

TRICARE's managed care support contractors (MCSCs) also provide access to toll-free quit lines available to beneficiaries 24 hours a day, seven days a week. The quit line numbers can be found at http://www.tricare. mil/HealthWellness/Tobacco/Quitlines or through each of the MCSC's websites. Tobacco cessation printed material has been created and TRICARE beneficiaries can receive smoking and smokeless tobaccocessation support through DoD's comprehensive website, https://www.ucanguit2.org. In FY 2016, there were 443,960 visits to UCanQuit2.org, a greater than 120 percent increase from FY 2015. There were 6,109 uses of Quit Tobacco—UCanQuit2.org cessation resources, which encompass live chat conversations; new SmokefreeMIL text message users; and creation of Ready2Quit quit plans. Additionally, there were 778 orders for Quit Tobacco—UCanQuit2.org promotional materials placed by tobacco cessation or health promotion specialists at military installations around the world.

Quit Tobacco—UCanQuit2.org also executed a four-month digital media campaign targeting ADSMs. This campaign integrated Facebook, Google ads, mobile advertising, and other digital media strategies to increase awareness of Quit Tobacco tools and resources. The number of impressions gained in these four months was 38,025,067.

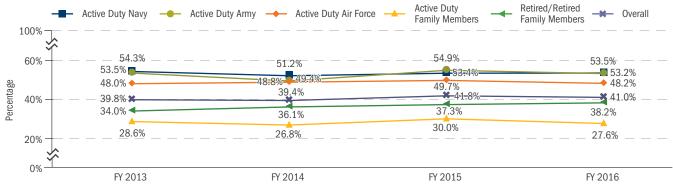
## MHS ADULT OBESITY

This measure provides important information about the overall health of DoD beneficiaries for use by MHS leadership to help promote military initiatives that encourage exercise and healthy nutritional habits. These data also can shape the need for, and development of, medical interventions or modalities that are effective in maintaining healthy weights for all age groups.

The chart below displays the percentage of the population reporting in the HCSDB a height and weight that, when used in calculating BMI, result in a measurement of 30 or higher (30 is the threshold for obesity).

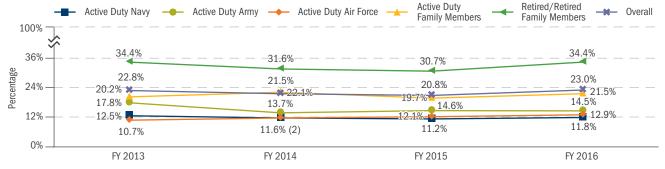
♦ As shown in the first chart below, 41 percent of all MHS beneficiaries were overweight in FY 2016, lower than the overall U.S. rate of 70.7 percent (CDC's NCHS 2013–2014). ADFMs appear to have the lowest rate of being overweight (27.6 percent), but represent over one-fourth of the MHS-eligible population. Calculated BMI rates reflecting overweightness may not be reflective of Active Duty fitness without consideration of muscle mass, and may explain why Active Duty appears to have high prevalence rates of being overweight but low obesity rates, as shown in the second chart.

## MHS OVERWEIGHT RATE (BMI 25-29.9), FYs 2013-2016



▶ The second chart displays the prevalence of obesity in the MHS population (i.e., a calculated BMI of 30 or higher based on self-reported height and weight). Active Duty present the lowest rates (between 12 and 15 percent) in FY 2016. The overall MHS obesity rate in FY 2016 (23 percent) as well as obesity rates for family members (21.5 percent) and retired and their family members (34 percent) are lower than the NHANES rates for adults ages 18–42 (32 percent), ages 43–64 (38 percent), and ages 65 and over (37 percent). Overweight and obesity rates did not change appreciably from FY 2013 to FY 2016.

#### MHS OBESITY RATE (BMI 30 OR HIGHER), FYs 2013-2016



Source: Defense Health Agency (DHA), Decision Support Division, HCSDB, 11/9/2016 Notes:

- BMI is defined as the individual's body weight divided by the square of his or her height. The formula universally used in medicine produces a unit of measure of kg/m². Because the HCSDB collects height and weight in inches and pounds, BMI is calculated as lb/in² x 703. A BMI of 18.5 to 25 may indicate optimal weight; a BMI lower than 18.5 suggests the person is underweight, while a number above 25 may indicate the person is overweight; a number of 30 or above suggests the person is obese (Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion, CDC).
- Since the data are self-reported, they are subject to recall bias, while provider measurements are subject to instrument error (e.g., lack of calibration of weight scales) and inconsistency in recording (e.g., asking patient's height or weight versus measuring). Self-reported scores are adjusted for user characteristics that allow comparison with civilian benchmarks. No objective validation tool is used to verify accuracy of BMI results.
- CDC-reported obesity and overweight rates in U.S. adults: http://www.cdc.gov/nchs/fastats/obesity-overweight.htm, accessed 12/7/2016

In an effort to capture objective administration data on obesity prevalence among the MHS population, an MHS guideline was developed to support the documentation of BMI with all direct care patient encounters. This documentation is intended to support the capture of information concerning the overall health of DoD

beneficiaries for use by MHS leadership to help promote military initiatives that encourage exercise and healthy nutritional habits. These data also can shape the need for, and development of, medical interventions or modalities that are effective in maintaining healthy weights for all age groups.

## ALCOHOL-REDUCTION MARKETING AND EDUCATION CAMPAIGN

The DoD has several educational initiatives promoting the reduction of alcohol consumption that address providers as well as beneficiaries. Efforts targeting providers are focused on facilitating the use of evidence-based screening tools across the Military Services and educating them on new developments in the field of addiction medicine.

DoD's integrated, evidence-based counter marketing campaign, "Don't Be That Guy," continues to target military junior enlisted personnel ages 18–24 based on research showing that this audience, historically, has the highest rate of binge drinking. The "That Guy" campaign, founded on the internationally recognized Stages of Change Model of behavior change, was launched in December 2006 across all branches of Service. It leverages a multimedia, peer-to-peer social marketing approach for this age group to increase awareness of the negative, short-term social and reputational consequences of excessive drinking.

The "That Guy" campaign has won 39 marketing industry awards of excellence, including a 2015 first place award for "Campaign of the Year" from the National Association of Government Communicators (NAGC). The campaign includes a website (https://www.thatguy.com), online and offline public service announcements, social media channels (e.g., Facebook, YouTube, and Instagram), a mobile site and game app, funded and pro bono billboard and print advertising, a turnkey implementation plan and annually developed schedule for installation project officers, centrally funded promotional materials, and centralized support for special events. Installation leaders consistently support campaign efforts, as they believe alcoholrelated incidents have a negative impact on readiness. Several quantitative surveys and studies conducted and approved by DoD are used to measure the impact and efficacy of "That Guy" in addition to a variety of qualitative research tools.

From 2006 to 2016, the "That Guy" campaign conducted 89 in-person focus groups with 737 junior

Service members at 23 DoD installations to ensure the campaign's continued efficacy with the E1–E4 target audience. According to the 2014 Status of Forces Survey, the "That Guy" campaign has achieved a 59 percent awareness rate among the target audience to date, and analysis of the 2008 DoD Health Related Behaviors Survey indicated a statistical correlation between installations consistently implementing "That Guy" and lower rates of binge drinking. In addition, the September 2016 draft report of the 2015 Health Related Behaviors Survey suggests that binge drinking may be somewhat lower now than it was in 2011 among Service members (all members: 30 percent in 2015 versus 33 percent in 2011; all males: 31 percent in 2015 versus 35 percent in 2011).

Most recently, two separate two-year quantitative alcohol-related incidents (ARI) studies (an initial pilot study conducted at one large DoD installation from 2013 to 2015, and a second study at another large DoD installation that remains in the field with completion of analysis by March 2017) have been launched to explore the potential connection between "That Guy" and lower rates of ARIs. Findings from the initial pilot study showed that ARIs at the participating DoD installation declined, with the rate of ARIs lowest among the target audience during the campaign's years of highest implementation. This decline was (1) linked to "That Guy's" prevention marketing materials (with the rate of ARIs, on average, lower a few months following the pilot installation's receipt and distribution of campaign materials) and (2) most rapid among the campaign's target audience (when compared with a nontarget group of older, higher-ranking enlisted members). Specifically, over the course of the pilot study period, the target audience's (E1-E4s who are 18-24) annual ARIs decreased 61 percent over eight years. Over the same period, annual ARIs for the comparison group (E5–E9s who are 25 or older) decreased 18 percent. Please note that the target group's decline in ARIs occurred at a rate that is statistically significant relative to the comparison group.

## DISEASE MANAGEMENT

Improving the health and quality of life for MHS beneficiaries living with chronic conditions is an ongoing effort. To support identification and engagement with this population the Military Health System (MHS) is working to proactively identify beneficiaries within a dedicated MHS Population Health Portal (MHSPHP). The registries are created by using direct care and

purchased care information, and enhanced using the Johns Hopkins Adjusted Clinical Groups® (ACG®) System. The MHSPHP registries stratify beneficiaries with select chronic conditions by identifying morbidity patterns, which can then be utilized by military treatment facility disease management staff to target specific high-risk populations for interventions.

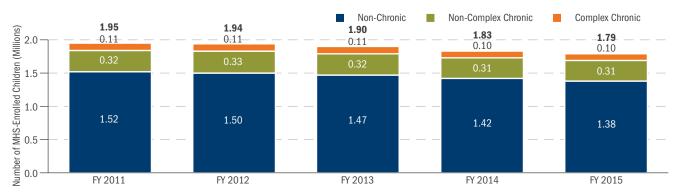
# DESCRIBING RESOURCE REQUIREMENTS FOR CHILDREN IN THE MHS USING THE PEDIATRIC MEDICAL COMPLEXITY ALGORITHM (PMCA)

## PMCA and the MHS Population FYs 2011-2015

The Pediatric Medical Complexity Algorithm (PMCA) is an emerging, publicly available method for identifying complexity in children's medical needs. This study sought to apply the algorithm to the MHS pediatric population to identify and understand health care utilization patterns and resource needs. The PMCA algorithm uses administrative data to categorize medical complexity into three strata (non-chronic, non-complex chronic, and complex chronic). These efforts will provide a tool for analyzing trends, predicting future health care utilization, and potential comparisons with civilian populations. The data and trends discovered through use of this tool can be shared with beneficiaries, policy makers, and administrators to gain greater understanding of the diversity of children receiving TRICARE benefits.

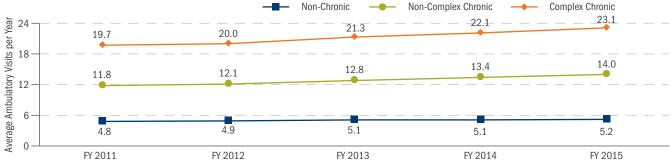
**Methods**: This study included beneficiaries between six months and 21 years of age who were entitled to TRICARE benefits as identified in the Defense Enrollment Eligibility Reporting System (DEERS). The study looked at data from FYs 2011–2015. The PMCA was applied to the study population, and demographic and health care utilization variables were analyzed. Further study will include more granular examination of utilization data.

## TOTAL NUMBER OF CHILDREN ENROLLED IN THE MHS, BY PMCA CATEGORY, FYs 2011-2015



- Overall, the TRICARE-eligible dependent child population decreased incrementally, from 1.95 million in FY 2011 to 1.79 million in FY 2015.
- However, the proportion of children in each PMCA category remained consistent throughout the time period studied.
- The most recent data (FY 2015) show that 77.1 percent of children were classified as non-chronic, 17.3 percent non-complex chronic, and 5.6 percent complex chronic.

### AMBULATORY VISITS PER CHILD (AGE 6 MONTHS-21 YEARS), BY PMCA, FYs 2011-2015



Source: DHA Operations/Clinical Support Division, 12/13/2016

- The average number of annual ambulatory (office) visits per child increased for all PMCA categories from FY 2011 to FY 2015, although the increase was greatest in children who were classified as complex chronic, followed by those classified as non-complex chronic.
- ◆ Children classified as non-chronic had the lowest rate of annual ambulatory visits (4.8–5.2), while complex chronic had the highest rate (19.7–23.1).
- Extended Care Health Option (ECHO)-registered children in all PMCA categories had much greater ambulatory visit utilization than non-ECHO registered children.

## SAVINGS AND RECOVERIES

### **Pharmacy Retail Refunds**

With the District Court's decision that the Department of Defense (DoD) has the authority to require refunds from drug manufacturers going back to January 29, 2008, affirmed by the U.S. Court of Appeals on January 4, 2013, the Defense Health Agency (DHA) produced retroactive refunds for the calendar years (CY) 2008 Q1 through 2009 Q2 bill quarters during fiscal year (FY) 2012.



Due to enhancements in the Retail Refund Calculation process and improvements in communication of eligible products among drug manufacturers, the Department of Veterans Affairs (VA), and DoD, utilization data/refund recalculations were performed to ensure accuracy of the data reported to drug manufacturers, as well as refunds due to DoD, since the inception of the Final Rule. Recalculations were conducted for CY 2009 Q3 through CY 2011 Q4 bill quarters during FY 2013 and FY 2014.

There are two main drivers for the decline in refunds on retail drugs: (1) the implementation of the maintenance drugs benefit program influenced beneficiaries to purchase maintenance drugs through Mail Order rather than Retail pharmacies, and (2) many drugs included under the TRICARE Retail Refund Program have patents expiring and therefore are no longer included in the program.

PHARMACY RETAIL REFUNDS (\$ MILLIONS)					
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Total Receivables	\$3,143.53	\$1,491.06	\$1,319.28	\$1,068.04	\$929.44
Routine	\$1,509.28	\$1,370.80	\$1,280.96	\$1,068.04	\$929.44
Retroactive (CY 2008 Q1- CY 2009 Q2)	\$1,634.25	-	-	-	-
Additional from Recalculations (CY 2009 Q3- CY 2011 Q4)	-	\$120.26	\$38.32	-	-
Total Collections	\$1,516.41	\$2,359.77	\$1,496.25	\$1,117.14	\$982.73

Source: DHA Resources and Management Directorate, Contract Resource Management, 9/30/2016

Notes: Refund amounts are netted out of pharmacy costs provided within this report. The refunds in the table above are categorized in the FY they were validated and billed to the drug manufacturers.

## **Program Integrity Activities**

The DHA Program Integrity (PI) Office is responsible for all antifraud and abuse activities worldwide for the DHA to protect benefit dollars and safeguard beneficiaries. The PI develops and executes antifraud and abuse policies and procedures, provides oversight of contractor program integrity activities, coordinates investigative activities, develops cases for criminal prosecutions and civil litigations, and initiates administrative measures. DHA PI develops areas of focus and analyzes claims data to identify outliers. Through a Memorandum of Understanding, DHA PI refers its fraud cases to the Defense Criminal Investigative Services and coordinates investigative activities with Military Criminal Investigative Offices, as well as other federal, state, and local agencies.

PROGRAM INTEGRITY RECOVERIES/COST AVOIDANCE (\$ MILLIONS)						
	CY 2013	CY 2014	CY 2015			
Total Recoveries	\$182.1	\$21.6	\$70.0			
Court-Ordered Fraud Judgments/ Settlements	\$175.5	\$15.5	\$61.2			
PI Contractor Administrative Recoupment/Offsets (Received)	\$6.5	\$6.1	\$8.8			
Total PI Contractors Cost Avoidance	\$16.5	\$18.1	\$34.2			
Contractor Prepayment Reviews	\$15.4	\$17.7	\$33.5			

Sources: TRICARE Program Integrity Operational Reports and Quarterly Fraud and Abuse Reports, CY 2013–CY 2015. CY 2015 data are latest reported as of 11/23/2016.

## **Program Savings and Claim Recoveries**

**Excluded Providers** 

New reimbursement approaches are continually evaluated for potential savings to TRICARE. As new programs are established, savings are estimated and monitored.

Claim recoveries result from overpayments identified in TRICARE Encounter Data (TED) and dental contractor invoices. These differences are recouped.

#### Recovery A—Post-Payment Duplicate Claim

**Recoveries:** A post-payment duplicate claims system was developed by the DHA Healthcare Operations Directorate/TRICARE Health Plan Division for use by TRICARE purchased care contractors. The system was designed as a retrospective auditing tool and facilitates the identification of actual duplicate claim payments and the initiation and tracking of recoupments. The table below provides the historical recovery of duplicate claims payments. Duplicate Claim recoveries are consistent with previous years.

RECOVERIES (\$ MILLIONS)					
	FY 2014	FY 2015	FY 2016		
Recovery A—Post-Payment Duplicate Claim Recoveries	\$9.0	\$7.4	\$6.8		

Recovery B—Improper Payment Recoveries: The DHA is vigilant in ensuring the accuracy of health care claims payment within the military health benefits program. The DHA has contracted with an External Independent Contractor (EIC) who is responsible for conducting post-payment accuracy reviews of TRICARE health benefit claims. The EIC is responsible for identifying improper payment made by TRICARE purchased care contractors as a result of contractor noncompliance with TRICARE policy, benefit, and/or reimbursement requirements.

## SAVINGS AND RECOVERIES (CONT.)

FY 2015 OVERPAYMENTS RECAPTURED THROUGH PAYMENT RECAPTURE AUDITS (\$ MILLIONS)					
PROGRAM OR ACTIVITY (FY 2015)	ACTUAL OVERPAYMENT DOLLARS IDENTIFIED VIA RANDOM SAMPLES	TOTAL AMOUNT EXTRAPOLATED (ESTIMATED THROUGHOUT TOTAL OUTLAYS)	AMOUNT RECAPTURED <sup>a</sup> (ACTUAL REFUNDS FY 2015)		
Total	\$2.11	\$121.58	\$346.87		

Sources: TRICARE Program Integrity Operational Reports and Quarterly Fraud and Abuse Reports, CY 2013–CY 2015. CY 2015 data are latest reported as of 11/23/2016.

In addition to the EIC post-payment reviews, DHA requires TRICARE purchased care contractors to use industry best business practice when processing TRICARE claims. Contractors are required to use claims auditing software and develop prepayment initiatives that are manual and/or automated to avoid or prevent improper payments. The above table provides FY 2015 improper payment recoveries of health care as a result of the EIC compliance reviews and ongoing purchased care contractor efforts to identify and recover improper payments.

a "Amount Recaptured" represents dollars paid back to DHA throughout FY 2015. These refunds include overpayments identified in FY 2015 audits as well as refunds occurring in the course of routine claim adjustments (for claims initially paid in FY 2015 and other fiscal years). Refunds for Active Duty Dental Program (ADDP) claims are also included in "Amount Recaptured."

#### **TRICARE Inpatient Utilization Rates Compared with Civilian Benchmarks**

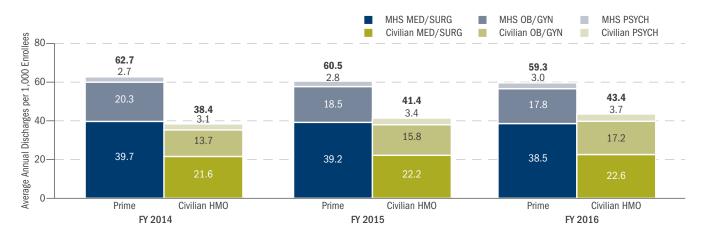
#### **TRICARE Prime Enrollees**

This section compares the inpatient utilization of TRICARE Prime enrollees with that of enrollees in civilian employer-sponsored health maintenance organization (HMO) plans. The comparisons are limited to the U.S. because the civilian benchmark data cover domestic plans only. Inpatient utilization is measured as the total number of dispositions (i.e., the sum of direct and purchased care dispositions) because relative weighted products (RWPs) are not available in the civilian-sector data.

Dispositions are computed for three broad product lines—Obstetrics/Gynecology (OB/GYN), mental health (PSYCH), and other Medical/Surgical (MED/SURG)—and compared for acute care facilities only. The comparisons exclude beneficiaries age 65 and older because very few are covered by employer-sponsored plans. The Military Health System (MHS) data further exclude beneficiaries enrolled in the Uniformed Services Family Health Plan (USFHP) and TRICARE Plus.

- ◆ TRICARE Prime inpatient utilization rates declined between FY 2014 and FY 2016, while the civilian HMO rates increased. In FY 2016, the TRICARE Prime inpatient utilization rate (direct and purchased care combined) was 37 percent higher than the civilian HMO utilization rate (59.3 discharges per 1,000 Prime enrollees compared with 43.4 per 1,000 civilian HMO enrollees).
- In FY 2016, the TRICARE Prime inpatient utilization rate was 71 percent higher than the civilian HMO rate for MED/SURG procedures, 4 percent higher for OB/GYN procedures, and 18 percent lower for PSYCH procedures.
- ◆ The average length of stay (LOS) for MHS Prime enrollees (direct and purchased care combined) increased slightly from 3.2 days in FY 2014 to 3.3 days in FY 2016, whereas the average LOS for civilian HMO enrollees remained about the same at 3.6 days. In FY 2016, the average LOS for MHS Prime enrollees was 10 percent lower than that of civilian HMO enrollees (not shown).

#### INPATIENT UTILIZATION RATES BY PRODUCT LINE: TRICARE PRIME VS. CIVILIAN HMO BENCHMARK



Sources: MHS administrative data, 1/18/2017, and Truven Health Analytics Inc., MarketScan® Commercial Claims and Encounters (CCAE) database, 12/9/2016

#### Notes:

- The civilian data for each year were adjusted to reflect the age/sex distribution of the MHS-enrolled beneficiary population. FY 2016 civilian data are based on two quarters of data, which were seasonally adjusted and annualized.
- Numbers may not sum to bar totals due to rounding.

TRICARE Inpatient Utilization Rates Compared with Civilian Benchmarks (Cont.)

#### **Non-Enrolled Beneficiaries**

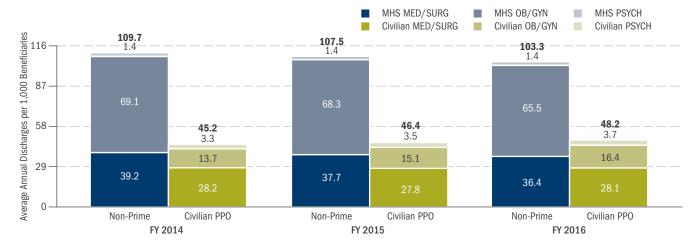
This section compares the inpatient utilization of beneficiaries not enrolled in TRICARE Prime with that of participants in civilian employer-sponsored preferred provider organization (PPO) plans. The comparisons are limited to the U.S. because the civilian benchmark data cover domestic plans only. Inpatient utilization is measured as the total number of dispositions (i.e., the sum of direct and purchased care dispositions) because RWPs are not available in the civilian-sector data.

Dispositions are computed for three broad product lines—OB/GYN, PSYCH, and other MED/SURG procedures—and compared for acute care facilities only. The comparisons exclude beneficiaries age 65 and older because very few are covered by employer-sponsored plans. To make the utilization rates of MHS and civilian beneficiaries more comparable, non-enrolled MHS beneficiaries covered by a primary civilian health insurance policy are excluded from the calculations. Although most beneficiaries who fail to file a TRICARE claim have private health insurance, we estimate that about 16 percent do not file because they have no utilization. The MHS utilization rates shown below include these non-users to make them more comparable with the civilian rates, which also include non-users.

- Between FY 2014 and FY 2016, the TRICARE non-Prime utilization rate decreased, whereas the civilian PPO inpatient utilization rate increased. Despite trending in opposite directions, the TRICARE rate remains well above the civilian benchmark. In FY 2016, the inpatient utilization rate (direct and purchased care combined) for non-enrolled beneficiaries was more than double that of civilian PPO participants.
- By far the largest discrepancy in utilization rates between MHS and the private sector is for OB/GYN procedures. From FY 2014 to FY 2016, the MHS OB/GYN disposition rate decreased by 5 percent, whereas it increased by 20 percent in the civilian sector. In FY 2016, the MHS non-Prime OB/GYN disposition rate was four times as high as the corresponding civilian PPO rate.

- Of the three product lines considered in this report, only PSYCH procedures had lower utilization in MHS than in the civilian sector.
- ◆ The average LOS for MHS non-enrolled beneficiaries (direct and purchased care combined) remained at about 3.5 days between FY 2014 and FY 2016, whereas the average LOS for civilian PPO participants declined slightly from 3.6 to 3.5 days. As a result, the average LOS for MHS non-Prime beneficiaries was the same as that of civilian PPO participants in FY 2016 (not shown).

### INPATIENT UTILIZATION RATES BY PRODUCT LINE: TRICARE NON-PRIME VS. CIVILIAN PPO BENCHMARK



Sources: MHS administrative data, 1/18/2017, and Truven Health Analytics Inc., MarketScan® CCAE database, 12/9/2016 Notes:

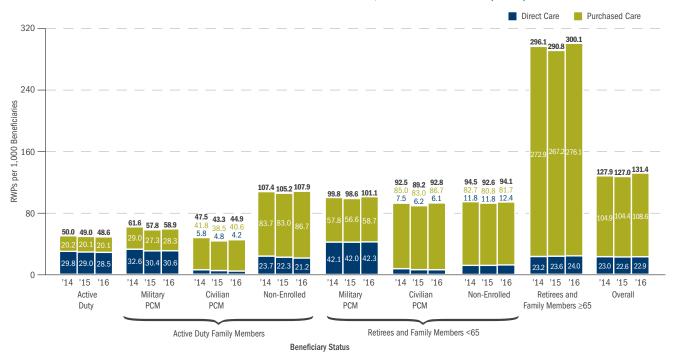
- The civilian data for each year were adjusted to reflect the age/sex distribution of the MHS-enrolled beneficiary population. FY 2016 civilian data are based on two quarters of data, which were seasonally adjusted and annualized.
- Numbers may not sum to bar totals due to rounding.

## **Inpatient Utilization Rates by Beneficiary Status**

When breaking out inpatient utilization by beneficiary group, RWPs per capita more accurately reflect differences across beneficiary groups than do discharges per capita. MHS RWPs are based on the Medicare Severity Diagnosis Related Group (MS-DRG) system of classifying inpatient hospital cases under the Medicare Prospective Payment System and are relevant only for acute care hospitals.

- The overall (direct and purchased care combined) inpatient utilization rate (RWPs per 1,000 beneficiaries) increased by 3 percent from FY 2014 to FY 2016.
- ◆ The direct care inpatient utilization rate remained the same overall, but there was a great deal of variation across beneficiary groups. Beneficiaries with a civilian PCM experienced large declines (27 percent for Active Duty family members (ADFMs) and 18 percent for retirees and family members (RETFMs) under 65) but direct care utilization by those groups is relatively small. The only groups with an increase in utilization were non-enrolled RETFMs under 65 and seniors (5 percent and 4 percent, respectively).
- Purchased acute care inpatient utilization rates decreased for all beneficiary groups except Active Duty (+2 percent) and seniors (+1 percent). Groups with the largest declines were enrolled ADFMs (8 percent for those with a military PCM and 7 percent for those with a civilian PCM).
- Excluding Medicare-eligible beneficiaries (for whom Medicare is likely their primary source of care and TRICARE is second payer), the percentage of per capita inpatient workload performed in purchased care facilities remained at about 70 percent from FY 2014 to FY 2016.
- From FY 2014 to FY 2016, the percentage of per capita inpatient workload referred to the network on behalf of beneficiaries enrolled with a military PCM (including Active Duty personnel) remained at just under 50 percent.

### AVERAGE ANNUAL INPATIENT RWPs PER 1,000 BENEFICIARIES (BY FY)



Source: MHS administrative data, 1/18/2017

Notes:

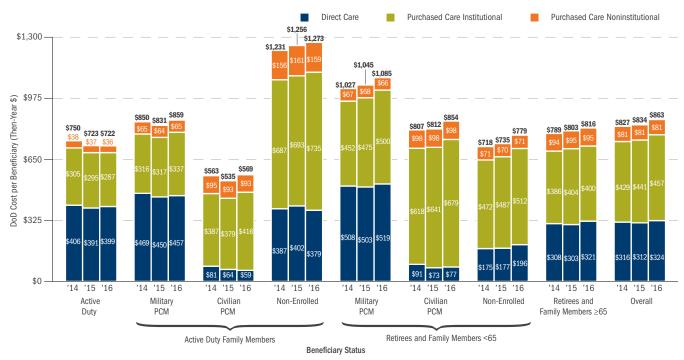
- Numbers may not sum to bar totals due to rounding.
- The "Retirees and family members" groups include survivors and others not explicitly identified elsewhere.

## **Inpatient Cost by Beneficiary Status**

MHS costs for inpatient care include costs incurred in both acute and non-acute care facilities. They also include the cost of inpatient professional services (i.e., noninstitutional charges [e.g., physician, lab, anesthesia]) associated with a hospital stay. The overall MHS inpatient cost (in then-year dollars) per beneficiary (far-right columns below), including TRICARE for Life (TFL), increased by 4 percent between FY 2014 and FY 2016.

- Direct care inpatient costs per capita increased by 2 percent between FY 2014 and FY 2016.
   Purchased care inpatient costs per capita increased by 6 percent over the same period.
- All beneficiary groups except Active Duty experienced an increase in total (direct plus purchased) per capita inpatient costs. The largest increase was for non-enrolled RETFMs (9 percent), followed by enrolled RETFMs (with either a military or civilian PCM; 6 percent for both).
- The direct care cost per RWP increased from \$13,765 in FY 2014 to \$14,155 in FY 2016 (3 percent).
- Exclusive of TFL, DoD purchased care cost (institutional plus noninstitutional) per RWP in acute care facilities increased from \$7,178 in FY 2014 to \$7,405 in FY 2016 (3 percent).
- ◆ The DoD purchased care cost per RWP is much lower than that for direct care partly because some beneficiaries have substantial cost shares (e.g., retirees) and may also have other health insurance (OHI). When beneficiaries have OHI, TRICARE becomes second payer, and the government pays a smaller share of the cost. If OHI claims are excluded, the DoD cost per RWP in acute care facilities increased from \$8,696 in FY 2014 to \$8,836 in FY 2016 (2 percent, exclusive of TFL).
- Note: The reader should exercise caution when comparing the direct versus purchased care costs per RWP. The data on this page are unadjusted for differences in beneficiary mix, enrollment status, geographical location of care, etc. They represent DoD health care costs only; and specifically exclude beneficiary cost shares, administrative, and overhead expenses.

## AVERAGE ANNUAL DOD INPATIENT COSTS PER BENEFICIARY (BY FY)



Source: MHS administrative data, 1/18/2017

- Numbers may not sum to bar totals due to rounding.
- The "Retirees and family members" groups include survivors and others not explicitly identified elsewhere.

## **Leading Inpatient Diagnosis Groups**

MHS uses the MS-DRG system to classify acute care hospital inpatient cases into clinically related categories having similar treatment costs. For the purpose of this section, MS-DRGs exhibiting variations in complications and comorbidities (CC) were grouped into like categories1 and numbered sequentially. The category numbers have no significance other than to identify the DRG groups on the horizontal axes in the charts below. See Appendix for additional detail on the DRG grouping methodology.

The top 25 MS-DRG groups in terms of volume in FY 2016 accounted for 66 percent of all inpatient admissions (direct care and purchased care combined) in acute care hospitals. The leading MS-DRG groups in terms of cost in FY 2016 include both institutional and noninstitutional claims (i.e., they include hospital, attendant physician, drug, and ancillary service charges). The top 25 MS-DRG groups in terms of cost in FY 2016 accounted for 58 percent of total inpatient costs (direct and purchased care combined) in acute care hospitals. TFL admissions are excluded from the calculations for both volume and cost.





Source: MHS administrative data, 1/18/2017

#### **MS-DRG Groups**

- Ecmo or Tracheostomy 010
- Craniotomy
  Stomach, Esophageal, and Duodenal Procedures 025
- Major Small and Large Bowel Procedures
- Appendectomy 029
- 041 Esophagitis, Gastroenteritis, and Miscellaneous Digestive Disorders
- Cholecystectomy Seizures and Headaches 058
- 087 Simple Pneumonia and Pleurisy
- Bronchitis and Asthma
- Cardiac Valve and Other Major Cardiothoracic Procedures 0.94
- 097 Coronary Bypass
- Spinal Fusion Except Cervical 111
- Major Joint Replacement or Reattachment of Lower Extremity 112 Cervical Spinal Fusion
- Percutaneous Cardiovascular Procedures with Coronary Artery Stent
- Other Vascular Procedures
- The top two procedures by volume are related to childbirth, accounting for 42 percent of all hospital admissions and 26 percent of total hospital costs (not just among the top 25).
- Procedures performed in private-sector acute care hospitals account for 61 percent of the total volume of the top 25 MS-DRG groups and 52 percent of the total cost.

- Heart Failure and Shock
- 139 Cardiac Arrhythmia and Conduction Disorders
- 142 Chest Pain
- 181 O.R. Procedures for Obesity
- 186 Diabetes
- Nutritional and Miscellaneous Metabolic Disorders
- 201
- Kidney and Urinary Tract Infections Uterine and Adnexal Procedures for Non-Malignancy 217
- Pregnancy, Childbirth, and the Puerperium
- 226 Newborns and Other Neonates with Conditions Originating in Perinatal Period Infectious and Parasitic Diseases with O.R. Procedure
- 243 247 Septicemia or Severe Sepsis
- 251 Neuroses Except Depressive
- Psychoses
- Alcohol/Drug Abuse or Dependence
- Extensive O.R. Procedure Unrelated to Principle Diagnosis
  - Admissions in direct care facilities exceed those in purchased care facilities for only eight of the top 25 MS-DRG groups. However, expenditures in direct care facilities exceed those in purchased care facilities for 13 of the top 25 MS-DRG groups.
  - Surgical procedures for obesity rank 18th in volume and 13th in cost among the top 25 MS-DRG groups. Thus, the obesity epidemic in the civilian sector appears to be mirrored to an extent in the DoD population as well.

DRGs were grouped into like categories using a code set available on www.findacode.com/code-set.php?set=DRG, an online database of medical billing codes and information. The site lists surgical and medical DRGs within each Major Diagnostic Category (MDC) with headings above diagnostically related DRGs. In some cases (e.g., DRGs related to pregnancy and childbirth) the headings were further grouped into larger, descriptively similar categories. The headings were then sequentially numbered, providing the basis for the DRG grouping methodology.

#### **TRICARE Outpatient Utilization Rates Compared with Civilian Benchmarks**

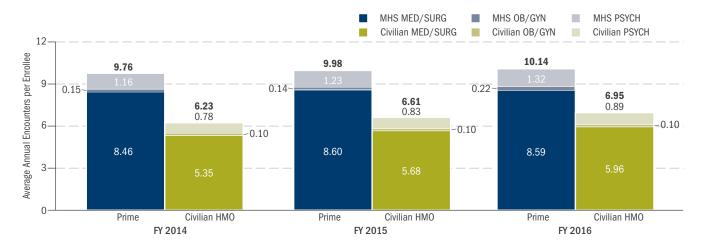
#### **TRICARE Prime Enrollees**

This section compares the outpatient utilization of TRICARE Prime enrollees with that of enrollees in civilian employer-sponsored HMO plans. The comparisons are limited to the U.S. because the civilian benchmark data cover domestic plans only. Outpatient utilization is measured in terms of encounters because the civilian-sector data used in the comparisons do not contain a measure of relative value units (RVUs). However, there is no fixed definition for what constitutes a "face-to-face" encounter with a physician. TRICARE and the private sector may therefore use varying methodologies to calculate the number of encounters.

Encounters are computed for three broad product lines: OB/GYN, PSYCH, and other MED/SURG procedures. The comparisons are made for beneficiaries under age 65 only. The MHS data exclude beneficiaries enrolled in the USFHP and TRICARE Plus. Because telephone consults are routinely recorded in direct care data, but appear very infrequently in private-sector claims, they are also excluded from the direct care utilization computations.

- The overall TRICARE Prime outpatient utilization rate (direct and purchased care combined) increased by 4 percent between FY 2014 and FY 2016. The civilian HMO outpatient utilization rate increased by 12 percent over the same period.
- In FY 2016, the overall Prime outpatient utilization rate was 46 percent higher than the civilian HMO rate.
- ◆ In FY 2016, the Prime outpatient utilization rate for MED/SURG procedures was 44 percent higher than the civilian HMO rate.
- ◆ The Prime outpatient utilization rate for OB/GYN procedures increased by 51 percent¹ between FY 2014 and FY 2016 (albeit from a low base rate). As a result, the Prime outpatient OB/GYN utilization rate was more than double that for civilian HMOs in FY 2016, but the disparity is due in part to how the direct care system records global procedures.²
- The Prime outpatient utilization rate for PSYCH procedures was 49 percent higher than the corresponding rate for civilian HMOs in FY 2016. This disparity, though based on relatively low MHS and civilian mental health utilization rates, may reflect the more stressful environment that many Active Duty Service members (ADSMs) and their families endure.

#### OUTPATIENT UTILIZATION RATES BY PRODUCT LINE: TRICARE PRIME VS. CIVILIAN HMO BENCHMARK



Sources: MHS administrative data, 1/18/2017, and Truven Health Analytics Inc., MarketScan® CCAE database, 12/9/2016

Note: The civilian data for each year were adjusted to reflect the age/sex distribution of the MHS-enrolled beneficiary population. FY 2016 civilian data are based on two quarters of data, which were seasonally adjusted and annualized.

<sup>&</sup>lt;sup>1</sup> The large increase in OB/GYN encounters in FY 2016 is due almost exclusively to the conversion from the ICD-9-CM coding system to the more specific and detailed ICD-10-CM system.

Outpatient encounters are not precisely comparable between the direct and private care sectors (including purchased care). In particular, services that are bundled in the private sector (such as newborn delivery, including prenatal and postnatal care) will not generate any outpatient encounters but will generate a record for each encounter in the direct care system. Because maternity care is a high-volume procedure, the disparity in utilization rates between the direct care and civilian systems will be exaggerated.

## TRICARE Outpatient Utilization Rates Compared with Civilian Benchmarks (Cont.)

#### **Non-Enrolled Beneficiaries**

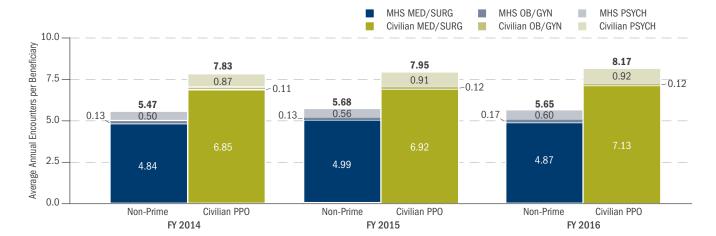
This section compares the outpatient utilization of beneficiaries not enrolled in TRICARE Prime with that of participants in civilian employer-sponsored PPO plans. The comparisons are limited to the U.S. because the civilian benchmark data cover domestic plans only. Outpatient utilization is measured in terms of encounters because the civilian-sector data used in the comparisons do not contain a measure of RVUs. However, there is no fixed definition for what constitutes a "face-to-face" encounter with a physician. TRICARE and the private sector may therefore use varying methodologies to calculate the number of encounters.

Encounters are computed for three broad product lines: OB/GYN, PSYCH, and other MED/SURG. The comparisons are made for beneficiaries under age 65 only. To make the utilization rates of MHS and civilian beneficiaries more comparable, non-enrolled MHS beneficiaries covered by a primary civilian health insurance policy are excluded from the calculations. Because telephone consults are routinely recorded in direct care data, but appear very infrequently in private-sector claims, they are also excluded from the direct care utilization computations. Although most beneficiaries who fail to file a TRICARE claim have private health insurance, we estimate that about 16 percent do not file because they have no utilization. The MHS utilization rates shown below include these non-users to make them more comparable to the civilian rates, which also include non-users.

- ◆ The overall TRICARE non-Prime outpatient utilization rate (direct and purchased care combined) for non-enrolled beneficiaries increased from 5.5 encounters per participant in FY 2014 to 5.7 encounters per participant in FY 2016 (3 percent). The civilian PPO outpatient utilization rate increased by 4 percent over the same period.
- The overall TRICARE non-Prime (space-available and Standard/Extra) outpatient utilization rate remained well below the level observed for civilian PPOs. In FY 2016, TRICARE non-Prime outpatient utilization was 31 percent lower than in civilian PPOs.
- In FY 2016, the non-Prime outpatient utilization rate for MED/SURG procedures was 32 percent lower than the civilian PPO rate. MED/SURG procedures account for almost 90 percent of total outpatient utilization in both the military and private sectors.

- ◆ The non-Prime outpatient utilization rate for OB/GYN procedures increased by 35 percent¹ between FY 2014 and FY 2016. As a result, the MHS OB/GYN rate was 47 percent higher than the rate for civilian PPO participants in FY 2016.²
- ◆ The PSYCH outpatient utilization rate of non-enrolled MHS beneficiaries increased by 22 percent from FY 2014 to FY 2016; the rate increased by 7 percent for civilian PPO participants. In FY 2016, the PSYCH outpatient utilization rate for non-enrolled beneficiaries was 35 percent below that of civilian PPO participants. The latter observation, together with the utilization exhibited by Prime enrollees, suggests that MHS beneficiaries in need of extensive PSYCH counseling (primarily ADSMs and their families) are more likely to enroll in Prime.

## OUTPATIENT UTILIZATION RATES BY PRODUCT LINE: TRICARE NON-PRIME VS. CIVILIAN PPO BENCHMARK



Sources: MHS administrative data, 1/18/2017, and Truven Health Analytics Inc., MarketScan® CCAE database, 12/9/2016

Note: The civilian data for each year were adjusted to reflect the age/sex distribution of the MHS-enrolled beneficiary population. FY 2016 civilian data are based on two quarters of data, which were seasonally adjusted and annualized.

<sup>&</sup>lt;sup>1</sup> The large increase in OB/GYN encounters in FY 2016 is due almost exclusively to the conversion from the ICD-9-CM coding system to the more specific and detailed ICD-10-CM system.

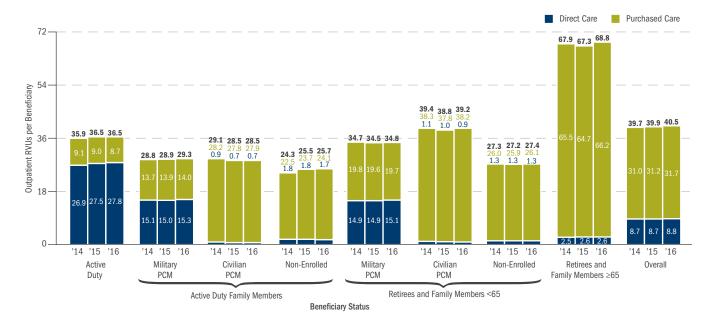
<sup>&</sup>lt;sup>2</sup> The numbers on the chart are the same when rounded to two digits but are slightly different when not rounded.

## **Outpatient Utilization Rates by Beneficiary Status**

When breaking out outpatient utilization by beneficiary group, RVUs per capita more accurately reflect differences across beneficiary groups than encounters per capita. The RVU measure used in this report is the sum of the Physician Work and Practice Expense RVUs (see the Appendix for a detailed description of the Physician Work and Practice Expense RVU measures). In FY 2016, some enhancements were made to the RVU measure that resulted in a slightly lower direct care RVU total and a substantially higher purchased care RVU total. The changes were retrofit to earlier years of data so that RVUs are measured consistently over time.

- Total per capita MHS utilization (direct plus purchased care) decreased by 5 percent from FY 2014 to FY 2016.
- In absolute terms, direct care outpatient utilization was relatively unchanged for all beneficiary groups from FY 2014 to FY 2016. In percentage terms, beneficiaries with a civilian PCM experienced large declines in direct care outpatient utilization (24 percent for ADFMs and 15 percent for RETFMs under age 65) but their utilization of direct care is very little compared with other beneficiary groups.
- From FY 2014 to FY 2016, purchased care outpatient utilization declined for all beneficiary groups and by 7 percent overall. Declines ranged from 2 percent for non-enrolled ADFMs to 11 percent for Active Duty service members.
- ◆ The TFL outpatient utilization rate decreased by 8 percent from FY 2014 to FY 2016.¹

### AVERAGE ANNUAL OUTPATIENT RVUS PER BENEFICIARY (BY FY)



Source: MHS administrative data, 1/18/2017

#### Notes:

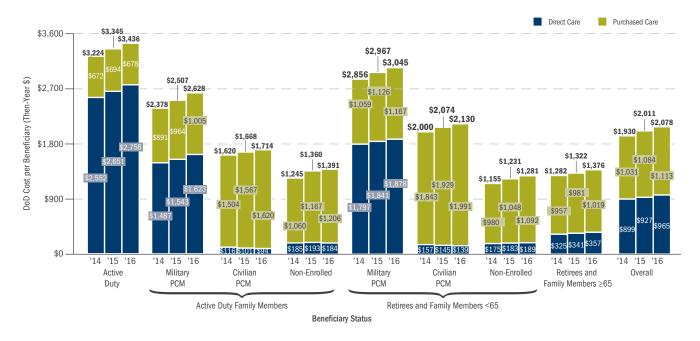
- Numbers may not sum to bar totals due to rounding.
- The "Retirees and family members" groups include survivors and others not explicitly identified elsewhere.
- ¹ The basis for this statement is the collection of stacked bars labeled "Retirees and Family Members ≥65." Although the vast majority of TFL-eligible beneficiaries are retirees and family members ≥65, there is a small number who are not.

## **Outpatient Costs by Beneficiary Status**

Although overall outpatient utilization rates declined, DoD outpatient costs increased, albeit at a modest rate. Overall MHS outpatient costs (in then-year dollars) per beneficiary (far-right columns below), including TFL, increased by 8 percent from FY 2014 to FY 2016.

- ◆ The direct care cost per beneficiary increased by 7 percent overall from FY 2014 to FY 2016. Seniors experienced the largest increase, at 10 percent, but ADFMs with a military PCM and non-enrolled RETFMs under age 65 also experienced moderately large increases (9 percent and 8 percent, respectively). Beneficiaries with a civilian PCM experienced large declines (–19 percent for ADFMs and –12 percent for RETFMs under age 65).
- Excluding TFL, the per capita DoD purchased care outpatient cost increased for all beneficiary groups. Increases ranged from 1 percent for Active Duty Service members to 14 percent for non-enrolled ADFMs.
- ◆ The TFL outpatient cost per beneficiary increased by 7 percent between FY 2014 and FY 2016.¹

## AVERAGE ANNUAL DOD OUTPATIENT COSTS PER BENEFICIARY (BY FY)



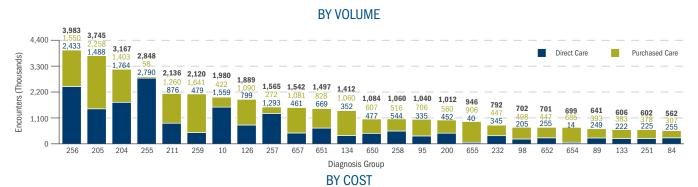
Source: MHS administrative data, 1/18/2017

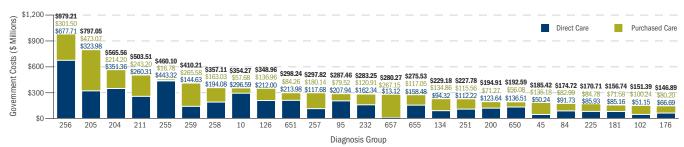
Notes:

- Numbers may not sum to bar totals due to rounding.
- The "Retirees and family members" groups include survivors and others not explicitly identified elsewhere.
- <sup>1</sup> The basis for this statement is the collection of stacked bars labeled "Retirees and Family Members ≥65." Although the vast majority of TFL-eligible beneficiaries are retirees and family members ≥65, there is a small number who are not.

## **Leading Outpatient Diagnosis Groups**

Leading outpatient diagnoses were determined by grouping ICD-10-CM primary diagnosis codes into like categories using the Clinical Classifications Software tool developed through a Federal-State-Industry partnership and sponsored by the Agency for Healthcare Research and Quality.¹ The top 25 outpatient diagnosis groups in FY 2016 accounted for 66 percent of all outpatient encounters (direct care and purchased care combined) and 54 percent of total outpatient costs.² Direct care drug expenses, which are included in outpatient costs in the direct care administrative data, are excluded from the cost totals in this section. TFL encounters and telephone consults are excluded from the calculations for both volume and cost.





Source: MHS administrative data, 1/18/2017

#### **Diagnosis Group**

200 Other skin disorders

204 Other non-traumatic joint disorders

Immunizations and screening for infectious diseases 211 Other connective tissue disease Maintenance chemotherapy; radiotherapy 225 Joint disorders and dislocations; trauma-related 47 Other and unspecified benign neoplasm 232 Sprains and strains Headache, including migraine 251 Abdominal pair 89 255 Administrative/social admission Blindness and vision defects Other nervous system disorders 256 Medical examination/evaluation 95 257 98 Essential hypertension Other aftercare 102 Nonspecific chest pain 258 Other screening for suspected conditions (not mental disorders or infectious disease) 126 Other upper respiratory infections Residual codes, unclassified 650 133 Other lower respiratory disease Adjustment disorders 651 Anxiety disorders 134 Other upper respiratory disease 181 Other complications of pregnancy 652 Attention-deficit, conduct, and disruptive behavior disorders

654

657

Developmental disorders

Mood disorders

◆ The top six diagnostic groups in terms of volume are the same as those in terms of cost, albeit in different orders. The top three diagnosis groups by both volume and cost are, in order, general health examinations (adults and children), intervertebral disc disorders, and other non-traumatic joint disorders.

205 Spondylosis, intervertebral disc disorders, and other back problems

- Diagnoses treated in purchased care facilities account for 52 percent of the total volume of the top 25 diagnosis groups and 44 percent of the total cost.
- Encounters in direct care facilities exceed those in purchased care facilities for only six of the 25 top diagnosis groups. However, expenditures in direct care facilities exceed those in purchased care facilities for 16 of the top 25 diagnosis groups.

Disorders usually diagnosed in infancy, childhood, or adolescence

<sup>&</sup>lt;sup>1</sup> MHS began using the ICD-10-CM coding system for the first time in FY 2016. The analogous charts in all previous reports were based on the ICD-9-CM coding system.

<sup>&</sup>lt;sup>2</sup> All costs were aggregated based on the primary diagnosis. Some costs may be attributable to additional diagnoses on the record but there is no easy way to allocate the total cost to multiple diagnoses on the same record.

## PRESCRIPTION DRUG UTILIZATION RATES AND COSTS

## **TRICARE Prescription Drug Utilization Rates Compared with Civilian Benchmarks**

Prescription utilization is difficult to quantify since prescriptions come in different forms (e.g., liquid or pills), quantities, and dosages. Moreover, home delivery and military treatment facility (MTF) prescriptions can be filled for up to a 90-day supply, whereas retail prescriptions are usually based on 30-day increments for copay purposes. Prescription counts from all sources (including civilian) were normalized by dividing the total days supply for each by 30 days.

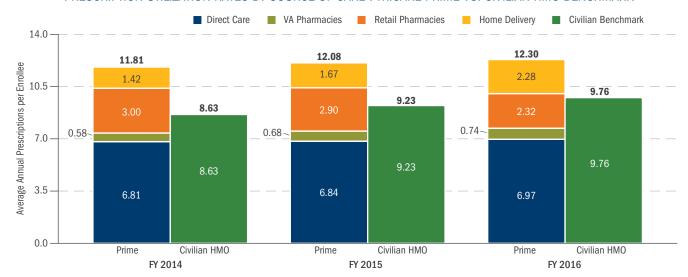
Direct care pharmacy data differ from private-sector claims in that they include over-the-counter medications. To make the utilization rates of MHS and civilian beneficiaries more comparable, over-the-counter medications were backed out of the direct care data using factors provided by the DHA Pharmacy Operations Division.

#### **TRICARE Prime Enrollees**

This section compares the outpatient prescription drug utilization of TRICARE Prime enrollees with that of enrollees in civilian employer-sponsored HMO plans. The comparisons are limited to the U.S. because the civilian benchmark data cover domestic plans only. To give a more complete picture of total prescription drug utilization by TRICARE beneficiaries, prescriptions filled at VA pharmacies as part of a beneficiary's VA benefit (and paid for by the VA) are included. Prescriptions filled at VA pharmacies under the TRICARE benefit have always been included with retail pharmacy prescriptions. Comparisons are made for beneficiaries under age 65 only. The MHS data exclude beneficiaries enrolled in the USFHP and TRICARE Plus.

- The overall prescription utilization rate (direct care, VA, and purchased care combined) for TRICARE Prime enrollees increased by 4 percent between FY 2014 and FY 2016, while the civilian HMO benchmark rate rose by 13 percent. In FY 2016, the TRICARE Prime prescription utilization rate was 26 percent higher than the civilian HMO rate.
- Prescription utilization rates for Prime enrollees at DoD pharmacies rose by 2 percent between FY 2014 and FY 2016, whereas the utilization rate at retail pharmacies decreased by 23 percent (due largely to greater reliance on home delivery prescriptions).
- Prescription utilization rates for Prime enrollees at VA pharmacies rose by 27 percent (although the number of prescriptions is small) between FY 2014 and FY 2016. Not all of the increase is a result of higher utilization—a portion is due to improved data sharing between the VA and DoD pharmacy systems.
- ♦ Home delivery prescription utilization has been on the upswing ever since DoD began increasing the disparity in copayments between retail and home delivery drugs in FY 2012. Between FY 2014 and FY 2016, enrollee home delivery prescription utilization increased by 60 percent. In FY 2016, home delivery accounted for 50 percent of per capita purchased care prescription utilization by Prime enrollees (as measured by 30-day supply).

#### PRESCRIPTION UTILIZATION RATES BY SOURCE OF CARE®: TRICARE PRIME VS. CIVILIAN HMO BENCHMARK



Sources: MHS administrative data, 1/18/2017, and Truven Health Analytics Inc., MarketScan® Commercial Claims and Encounters (CCAE) database, 12/9/2016

Note: The civilian data for each year were adjusted to reflect the age/sex distribution of the MHS beneficiary population. FY 2016 civilian data are based on two quarters of data, which were seasonally adjusted and annualized.

a Source of care (direct, VA, retail, or home delivery) is based solely on where the prescriptions were filled, not on where the prescribing services were provided.

## PRESCRIPTION DRUG UTILIZATION RATES AND COSTS (CONT.)

TRICARE Prescription Drug Utilization Rates Compared with Civilian Benchmarks (Cont.)

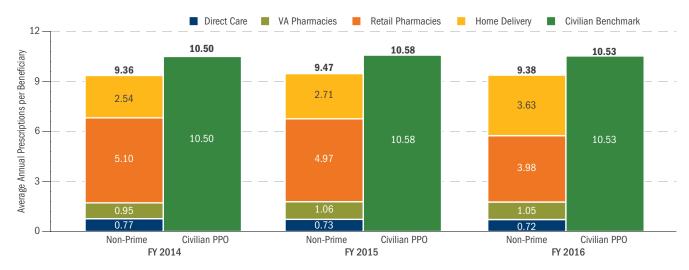
#### **Non-Enrolled Beneficiaries**

This section compares the outpatient prescription drug utilization of beneficiaries not enrolled in TRICARE Prime with that of participants in civilian employer-sponsored PPO plans. The comparisons are limited to the U.S. because the civilian benchmark data cover domestic plans only. To give a more complete picture of total prescription drug utilization by TRICARE beneficiaries, prescriptions filled at VA pharmacies as part of a beneficiary's VA benefit (and paid for by the VA) are included. Prescriptions filled at VA pharmacies under the TRICARE benefit have always been included with retail pharmacy prescriptions. The comparisons are made for beneficiaries under age 65 only.

To make the utilization rates of MHS and civilian beneficiaries more comparable, non-enrolled MHS beneficiaries covered by a primary civilian health insurance policy are excluded from the calculations. Although most beneficiaries who fail to file a TRICARE claim have private health insurance, we estimate that about 16 percent do not file because they have no utilization. The MHS utilization rates shown below include these non-users to make them more comparable to the civilian rates, which also include non-users.

- The overall prescription utilization rate (direct care, VA, and purchased care combined) for non-enrolled beneficiaries remained unchanged between FY 2014 and FY 2016. During the same period, the civilian PPO benchmark rate also remained roughly constant. In FY 2016, the TRICARE prescription utilization rate for non-enrollees was 11 percent lower than the civilian PPO rate.
- The direct care prescription utilization rate for non-enrolled beneficiaries decreased by 6 percent from FY 2014 to FY 2016, whereas the utilization rate at retail pharmacies decreased by 22 percent (largely because of greater reliance on home delivery services).
- Prescription utilization rates for non-Prime enrollees at VA pharmacies increased by 12 percent between FY 2014 and FY 2016. Not all of the increase is a result of higher utilization—a portion is due to improved data sharing between the VA and DoD pharmacy systems.
- Home delivery prescription utilization has been on the upswing ever since DoD began increasing the disparity in copayments between retail and home delivery drugs in FY 2012. Non-enrollee home delivery prescription utilization increased by 43 percent from FY 2014 to FY 2016. In FY 2016, home delivery accounted for 48 percent of per capita purchased care prescription utilization by non-enrollees.

### PRESCRIPTION UTILIZATION RATES BY SOURCE OF CARE®: TRICARE NON-PRIME VS. CIVILIAN PPO BENCHMARK



Sources: MHS administrative data, 1/18/2017, and Truven Health Analytics Inc., MarketScan® Commercial Claims and Encounters (CCAE) database, 12/9/2016

Note: The civilian data for each year were adjusted to reflect the age/sex distribution of the MHS beneficiary population. FY 2016 civilian data are based on two quarters of data, which were seasonally adjusted and annualized.

a Source of care (direct, VA, retail, or home delivery) is based solely on where the prescriptions were filled, not on where the prescribing services were provided.

## PRESCRIPTION DRUG UTILIZATION RATES AND COSTS (CONT.)

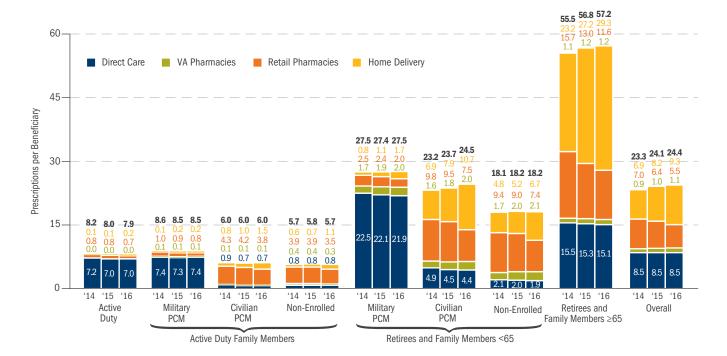
## **TRICARE Prescription Drug Utilization Rates by Beneficiary Status**

Prescriptions include all initial and refill prescriptions filled at military pharmacies, VA pharmacies (for DoD/VA dual-eligible beneficiaries), retail pharmacies, and home delivery. VA prescriptions include those filled as part of a beneficiary's VA benefit and paid for by the VA. Prescriptions that were filled at a VA pharmacy under the TRICARE benefit have always been included with retail pharmacy prescriptions. Prescription counts from all sources were normalized by dividing the total days supply for each by 30 days.

- The total (direct, VA, retail, and home delivery) number of prescriptions per beneficiary increased by 3 percent from FY 2014 to FY 2016, exclusive of the TFL benefit. Including TFL, the total number of prescriptions increased by 5 percent.
- The overall direct care prescription utilization rate remained unchanged between FY 2014 and FY 2016. However, declines were experienced by all beneficiary groups except ADFMs with a military PCM (less than a 1 percent increase).
- ◆ Average per capita prescription utilization through VA pharmacies increased by 20 percent from FY 2014 to FY 2016. The only beneficiary groups experiencing declines were Active Duty and non-enrolled ADFMs (both at −22 percent, but from very small base utilization levels). Increases for other beneficiary groups ranged from 11 percent for seniors up to 24 percent for non-enrolled RETFMs.
- Average per capita prescription utilization through retail pharmacies decreased by 22 percent overall, primarily because of the congressionally

- mandated requirement for TFL beneficiaries to refill prescriptions for select nongeneric maintenance medications at TRICARE home delivery or MTF pharmacies, effective February 14, 2014. The refill requirement was expanded on October 1, 2015, to cover all non-Active Duty beneficiaries. Another contributor to the decline was the increase in copayments for retail drugs, which caused beneficiaries to migrate to home delivery for their maintenance drugs. Declines of between 9 percent (non-enrolled ADFMs) and 26 percent (seniors) occurred for every beneficiary group.
- Home delivery, which once accounted for only a small fraction of purchased care prescription drug utilization, grew by 36 percent between FY 2014 and FY 2016, to the point where it now accounts for 63 percent of total purchased care prescription drug utilization (as measured by 30-day supply) per capita. For beneficiaries under age 65, home delivery accounts for 47 percent of total purchased care prescription drug utilization, whereas for seniors it accounts for 72 percent.

### AVERAGE ANNUAL PRESCRIPTION UTILIZATION PER BENEFICIARY (BY FY)



Source: MHS administrative data, 1/18/2017 Notes:

- Numbers may not sum to bar totals due to rounding.
- The "Retirees and family members" groups include survivors and others not explicitly identified elsewhere.

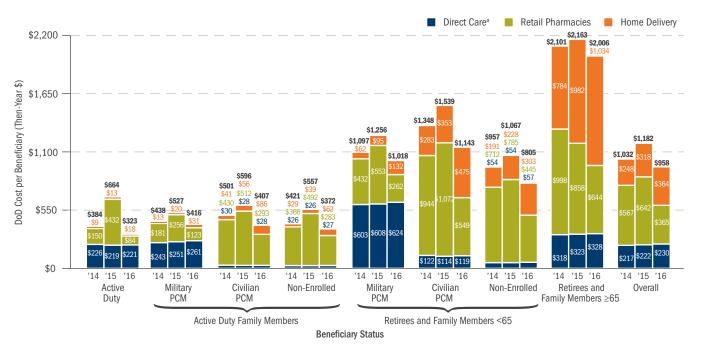
## PRESCRIPTION DRUG UTILIZATION RATES AND COSTS (CONT.)

## **Prescription Drug Cost by Beneficiary Status**

Although the drug refunds referenced on page 27 have slowed the overall growth of retail prescription drug costs, the refunds are not reflected in the chart below because they cannot be attributed to specific beneficiary groups. Exclusive of refunds, overall MHS prescription drug costs (in then-year dollars) per beneficiary (far-right columns below), including TFL, decreased by 7 percent from FY 2014 to FY 2016. The drop is due primarily to MHS's efforts to contain previously out-of-control compound drug prices. The annual pharmacy cost for non-enrollees is diluted by the larger number of beneficiaries with Other Health Insurance coverage where DoD pays approximately 30 percent of their prescriptions coverage cost.

- Exclusive of TFL, per capita prescription drug costs fell by 12 percent between FY 2014 and FY 2016. Declines occurred for all beneficiary groups and ranged from 5 percent for ADFMs with a military PCM to 19 percent for ADFMs with a civilian PCM.
- Direct care costs per beneficiary increased by 6 percent, while retail pharmacy costs decreased by 36 percent, with and without TFL.
- Home delivery costs per beneficiary increased by 73 percent excluding TFL and by 47 percent including TFL. All ADFM enrollment groups experienced increases of over 100 percent. Home delivery costs per capita are increasing because of a shift away from retail pharmacy utilization to home delivery.

## AVERAGE ANNUAL DOD PRESCRIPTION COSTS PER BENEFICIARY (BY FY)



Source: MHS administrative data, 1/18/2017

Notes:

- Numbers may not sum to bar totals due to rounding.
- The "Retirees and family members" groups include survivors and others not explicitly identified elsewhere.
- <sup>a</sup> Direct care prescription costs include an MHS-derived dispensing fee.

Out-of-pocket costs are computed for Active Duty and retiree families in the U.S. grouped by sponsor age: (1) under 65, and (2) 65 and older (seniors). Costs include deductibles and copayments for medical care and drugs, TRICARE enrollment fees, and insurance premiums. Costs are compared with those of civilian counterparts (i.e., civilian families with the same demographics as the typical MHS family). For beneficiaries under age 65, civilian counterparts are assumed to be covered by other employer-sponsored group health insurance (OHI).

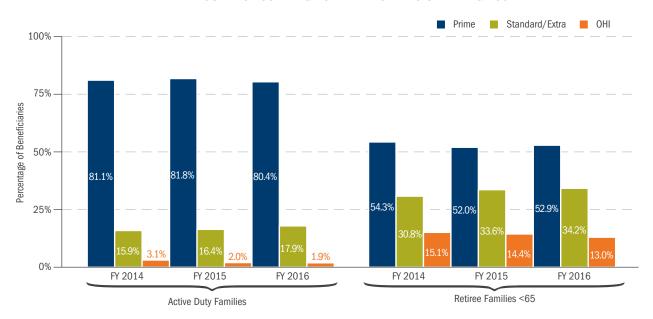
### **Health Insurance Coverage of MHS Beneficiaries Under Age 65**

MHS beneficiaries have a choice of (1) TRICARE Prime, (2) TRICARE Standard/Extra, and (3) OHI. Many beneficiaries with OHI have no TRICARE utilization; however, some use TRICARE as a second payer.

Beneficiaries are grouped by their primary health plan:

- ◆ TRICARE Prime: Family enrolled in TRICARE Prime (including a small percentage who also have OHI coverage). In FY 2016, 80.4 percent of Active Duty families and 52.9 percent of retiree families were in this group.
- ◆ TRICARE Standard/Extra: Family not enrolled in TRICARE Prime and does not have OHI coverage. In FY 2016, 17.9 percent of Active Duty families and 34.2 percent of retiree families were in this group.
- ◆ OHI: Family covered by OHI. In FY 2016, 1.9 percent of Active Duty families and 13.0 percent of retiree families were in this group.

#### HEALTH INSURANCE COVERAGE OF BENEFICIARIES UNDER AGE 65



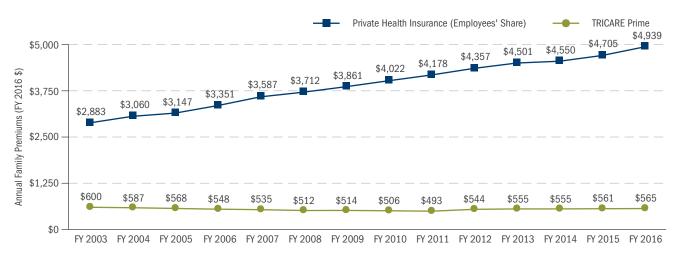
Source: Insurance coverage in FYs 2014–2016 based on DEERS and Health Care Survey of DoD Beneficiaries (HCSDB) responses; as of 12/31/2016

Note: The Prime group includes HCSDB respondents enrolled in Prime based on DEERS plus enrollees in the USFHP. The Standard/Extra group includes HCSDB respondents without OHI who are non-enrollees based on DEERS. The OHI group includes HCSDB respondents with private health insurance (i.e., Federal Employees Health Benefits Plan [FEHBP]), a civilian HMO such as Kaiser, or other civilian insurance such as Blue Cross. A small percentage of Prime enrollees are also covered by OHI; these beneficiaries are included in the Prime group. Percentages may not sum to 100 due to rounding.

## **Retirees and Family Members Under Age 65 Returning to MHS**

From FY 2003 to FY 2016, the average private health insurance family premium increased substantially, whereas the TRICARE Prime enrollment fee declined slightly. In FY 2016 dollars, private health insurance premiums increased by \$2,056 (71 percent); the TRICARE Prime enrollment fee declined by \$35 (–6 percent).

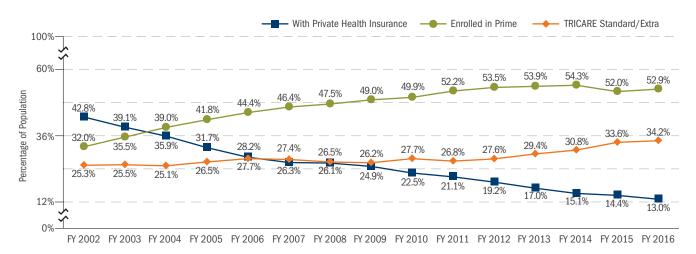
### TRENDS IN PRIVATE INSURANCE PREMIUMS VS. TRICARE ENROLLMENT FEE



Sources: Employees' share of insurance premium for typical employer-sponsored family health plan in FYs 2003–2015 from the Insurance Component of the Medical Expenditure Panel Surveys (MEPS) 2002–2015; OHI premiums in FY 2016 forecasted by the Institute for Defense Analyses based on trends in premiums from Kaiser Family Foundation surveys; as of 12/31/2016

Between FY 2002 and FY 2016, 29.8 percent of retirees switched from private health insurance to TRICARE. Most switched because of an increasing disparity in premiums and out-of-pocket expenses; in the past few years, some lost coverage due to the recession. As a result of declines in private insurance coverage, about 900,000 more retirees and family members under age 65 in the U.S. are now relying primarily on TRICARE instead of on private health insurance.

#### TRENDS IN RETIREE (<65) HEALTH INSURANCE COVERAGE



Sources: Insurance coverage in FYs 2002–2016 based on DEERS and HCSDB responses; as of 12/31/2016

Note: The Prime enrollment rates above include about 4 percent of retirees who also have private health insurance.

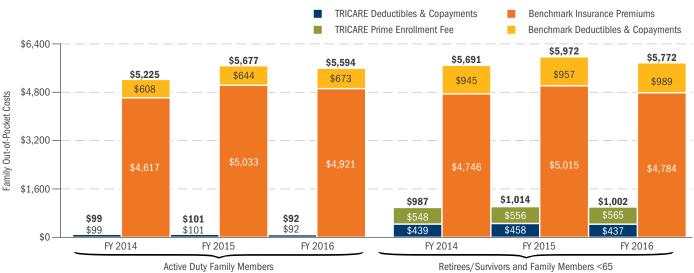
<sup>&</sup>lt;sup>1</sup> For an analysis of retirees' switching from OHI to TRICARE, see Goldberg et al., "Demand for Health Insurance by Military Retirees," IDA Document D-5098, May 2015, Alexandria, VA: Institute for Defense Analyses.

## Out-of-Pocket Costs for Families Enrolled in TRICARE Prime vs. Civilian HMO Counterparts

In FYs 2014–2016, civilian counterpart families had substantially higher out-of-pocket costs than TRICARE Prime enrollees.

- Civilian HMO counterparts paid more for insurance premiums, deductibles, and copayments.
- ◆ In FY 2016, costs for civilian counterparts were:
  - \$5,500 more than those incurred by Active Duty families enrolled in Prime.
  - \$4,800 more than those incurred by retiree families enrolled in Prime.

## OUT-OF-POCKET COSTS FOR FAMILIES ENROLLED IN TRICARE PRIME VS. CIVILIAN HMO COUNTERPARTS



**Beneficiary Family Type** 

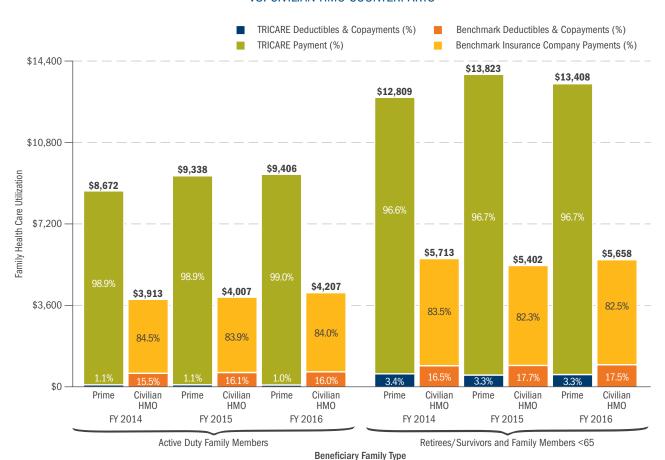
Sources: TRICARE beneficiary expenditures for deductibles and copayments in FYs 2014-2016 from MHS administrative data for all families enrolled in Prime without OHI payments; civilian benchmark expenditures for deductibles and copayments from the Household Component of the MEPS, actual MEPS in FY 2014 and projected MEPS in FYs 2015-2016; civilian benchmark insurance premiums in FYs 2014-2016 from the 2013-2015 Insurance Component of the MEPS; OHI premiums in FY 2016 forecasted by the Institute for Defense Analyses based on trends in premiums from Kaiser Family Foundation surveys; as of 12/31/2016 Note: Estimates are for a demographically typical family. For Active Duty dependents, the family includes a spouse and 1.54 children, on average. For retirees, a family includes a sponsor, spouse, and 0.65 children.

## Coinsurance and Health Care Utilization for Families Enrolled in TRICARE Prime vs. Civilian HMO Counterparts

Previous private-sector studies found that very low coinsurance rates increase health care utilization (dollar value of health care services).¹ In FYs 2014–2016, TRICARE Prime enrollees had negligible coinsurance rates (deductibles and copayments per dollar of utilization) and, not surprisingly, much higher utilization compared with civilian HMO counterpart families. Differences in coinsurance rates are a major reason for the higher utilization of health care services by Prime enrollees.

- ◆ In FYs 2014–2016, TRICARE Prime enrollees had coinsurance rates that were 13.1 to 15.0 percentage points below those of civilian HMO counterparts.
  - In FY 2016, the coinsurance rate for Active Duty families was 1.0 percent versus 16.0 percent for civilian counterparts (15.0 points lower).
  - In FY 2016, the coinsurance rate for retiree families was 3.3 percent versus 17.5 percent for civilian counterparts (14.2 points lower).
- In FYs 2014–2016, TRICARE Prime enrollees had substantially higher health care utilization than civilian HMO counterparts.
  - In FY 2016, Active Duty families consumed \$9,400 of medical services versus \$4,200 by civilian counterparts (\$5,200 more).
  - In FY 2016, retiree families consumed \$13,400 in medical services versus \$5,700 by civilian counterparts (\$7,800 more).

## COINSURANCE AND HEALTH CARE UTILIZATION FOR FAMILIES ENROLLED IN TRICARE PRIME VS. CIVILIAN HMO COUNTERPARTS



Sources: TRICARE utilization expenditures by MHS and beneficiaries in FYs 2014–2016 from MHS administrative data for all families enrolled in Prime without OHI payments for TRICARE utilization; civilian benchmark utilization payments by insurance companies and families from the Household Component of the MEPS, actual MEPS in FY 2014, and projected MEPS in FYs 2015–2016; as of 12/31/2016. Dual-eligible retirees obtain some care at the Department of Veterans Affairs (VA), which is not included in MHS administrative data. Using regression analyses, the Institute for Defense Analyses estimated utilization at the VA in FYs 2014–2016 for retirees enrolled in Prime and included these estimates in total utilization (e.g., \$513 per retiree family in FY 2016).

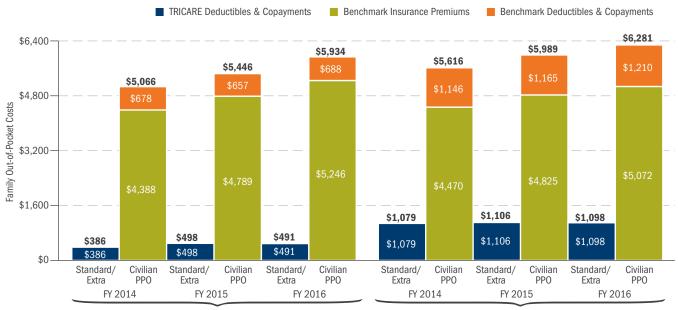
<sup>&</sup>lt;sup>1</sup> Newhouse, Joseph P., and Insurance Experiment Group. Free for All? Lessons from the RAND Health Insurance Experiment. A RAND Study. Cambridge, MA: Harvard University Press, 1993.

Out-of-Pocket Costs for Families Who Rely on TRICARE Standard/Extra vs. Civilian PPO Counterparts

In FYs 2014–2016, civilian counterparts had much higher out-of-pocket costs than did TRICARE Standard/Extra users.

- Civilian PPO counterparts paid \$4,500 to \$5,400 more for insurance premiums, deductibles, and copayments.
- ◆ In FY 2016, costs for civilian counterparts were:
  - \$5,400 more than those incurred by Active Duty families who relied on Standard/Extra.
  - \$5,200 more than those incurred by retiree families who relied on Standard/Extra.

## OUT-OF-POCKET COSTS FOR FAMILIES WHO RELY ON TRICARE STANDARD/EXTRA VS. CIVILIAN PPO COUNTERPARTS



Active Duty Family Members

Retirees/Survivors and Family Members <65

**Beneficiary Family Type** 

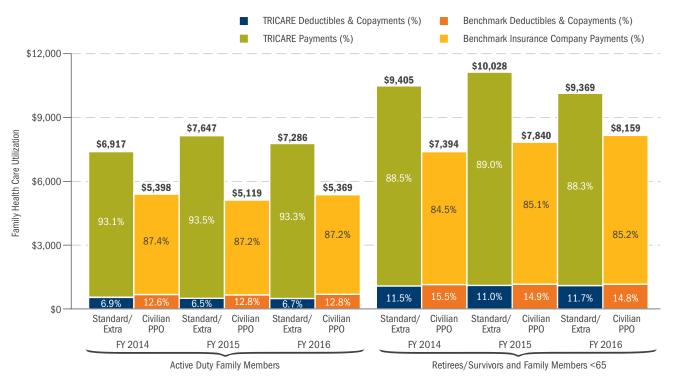
Sources: TRICARE beneficiary expenditures for deductibles and copayments in FYs 2014–2016 from MHS administrative data for all Standard/Extra-reliant families without OHI payments for TRICARE utilization; civilian benchmark expenditures for deductibles and copayments from the Household Component of the MEPS, actual MEPS in FY 2014, and projected MEPS in FYs 2015–2016; civilian benchmark insurance premiums in FYs 2014–2015 from the 2013–2015 Insurance Component of the MEPS; OHI premiums in FY 2016 forecasted by the Institute for Defense Analyses based on trends in premiums from Kaiser Family Foundation surveys; insurance coverage from HCSDB, FYs 2014–2016; as of 12/31/2016

## Coinsurance and Health Care Utilization for Families Who Rely on TRICARE Standard/Extra vs. Civilian PPO Counterparts

In contrast to Prime enrollees, families who relied on TRICARE Standard/Extra had only slightly lower coinsurance rates (deductibles and copayments per dollar of utilization) and only slightly higher health care utilization (dollar value of health care services consumed) than civilian counterparts.

- ♦ In FY 2016 for Active Duty families:
  - Coinsurance rates were 6.7 versus 12.8 percent for civilian counterparts (6.1 points lower).
  - Health care utilization was \$7,300 versus \$5,400 for civilian counterparts (\$1,900 more).
- In FY 2016 for retiree families:
  - Coinsurance rates were 11.7 versus 14.8 percent for civilian counterparts (3.1 points lower).
  - Health care utilization was \$9,400 versus \$8,200 for civilian counterparts (\$1,200 more).

## COINSURANCE AND HEALTH CARE UTILIZATION FOR FAMILIES WHO RELY ON TRICARE STANDARD/EXTRA VS. CIVILIAN PPO COUNTERPARTS



**Beneficiary Family Type** 

Sources: TRICARE utilization payments by MHS and beneficiaries in FYs 2014–2016 from MHS administrative data for all Standard/Extra-reliant families without OHI payments; civilian benchmark utilization payments by insurance companies and families from the Household Component of the MEPS, actual MEPS in FY 2014, and projected MEPS in FYs 2015–2016; as of 12/31/2016. Dual-eligible retirees obtain some care at the VA, which is not included in MHS administrative data. Using regression analyses, the Institute for Defense Analyses estimated utilization at the VA in FYs 2014–2016 for retirees who relied on TRICARE Standard/Extra and included these estimates in total utilization (e.g., \$487 per retiree family in FY 2016).

## BENEFICIARY FAMILY HEALTH INSURANCE COVERAGE AND OUT-OF-POCKET COSTS (MHS SENIOR BENEFICIARIES)

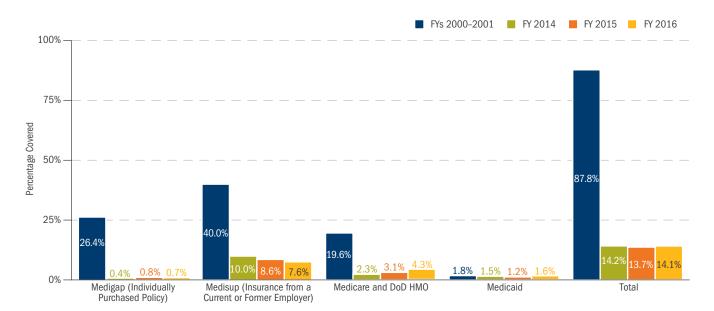
Out-of-pocket costs for retirees age 65 and older (seniors) and their families include deductibles and copayments for medical care and drugs, TRICARE enrollment fees, and insurance premiums. In April 2001, DoD expanded drug benefits for seniors; on October 1, 2001, DoD implemented the TFL program, which provides Medicare wraparound coverage (i.e., TRICARE acts as second payer to Medicare, minimizing beneficiary out-of-pocket expenses). For seniors, costs are compared with civilian counterparts enrolled in Medicare having pre-TFL supplemental insurance coverage.

### Health Insurance Coverage of MHS Senior Beneficiaries Before and After TFL

Although Medicare provides coverage for medical services, there are substantial deductibles and copayments. Until FY 2001, most MHS seniors purchased some type of Medicare supplemental insurance (e.g., Medigap, Medisup).<sup>1</sup> A small number were active employees with employer-sponsored insurance or were covered by Medicaid. Because of the improved drug and TFL benefits, most MHS seniors dropped their supplemental insurance.

- Before TFL (FYs 2000–2001), 87.8 percent of MHS seniors had Medicare supplemental insurance or were covered by Medicaid. After TFL, the percentage of MHS seniors with supplemental insurance or Medicaid fell sharply. It was 14.1 percent in FY 2016.
- Why do 14.1 percent of all seniors still retain supplemental insurance, especially a Medisup policy, when they can use TFL for free? Some possible reasons are:
  - A lack of awareness of the TFL benefit.
  - · A desire for dual coverage.
  - Higher family insurance costs if a spouse is not yet Medicare-eligible. Dropping a non-Medicareeligible spouse from an employer-sponsored plan can result in higher family costs if the spouse must purchase a nonsubsidized individual policy.

#### MEDICARE SUPPLEMENTAL INSURANCE COVERAGE OF MHS SENIORS



Source: FYs 2000–2001 and FYs 2014–2016 HCSDB; as of 12/31/2016

Medigap is an individually purchased policy that covers Medicare deductibles and copays. Medisup is group insurance from a current or former employer (or a union). It includes those with Medicare who are covered either by FEHBP, a civilian HMO such as Kaiser, or other civilian health insurance such as Blue Cross. Individually obtained HMO policies include Medicare Advantage, USFHP, and TRICARE Senior Prime (until December 2001). Almost all TRICARE seniors are covered by Medicare and are enrolled in Parts A and B; only 1.3 percent have just Part A. About 2 percent of TRICARE seniors are covered by government-sponsored Medicaid. About 1 percent of TRICARE seniors have OHI and are not covered by Medicare; these are excluded from the above figure; as of 12/31/2016.

## BENEFICIARY FAMILY HEALTH INSURANCE COVERAGE AND OUT-OF-POCKET COSTS (MHS SENIOR BENEFICIARIES) (CONT.)

#### **Out-of-Pocket Costs for MHS Senior Families Before and After TFL**

About 87 percent of TRICARE senior families use MHS health care. TFL and added drug benefits have enabled MHS seniors to reduce their out-of-pocket costs for deductibles/copayments and supplemental insurance. The costs for a typical TRICARE senior family after TFL, including MHS users and non-users, are compared with those of civilian counterparts having the supplemental insurance coverage of TRICARE senior families before TFL in FYs 2000–2001.

- ◆ In FY 2016, out-of-pocket costs for MHS senior families were 57 percent less than those of their "before TFL" civilian counterparts.
- ♦ In FY 2016, MHS senior families saved about \$3,300 as a result of TFL and added drug benefits.

### OUT-OF-POCKET COSTS OF MHS SENIOR FAMILIES AFTER TFL VS. CIVILIAN COUNTERPARTS



Sources: TRICARE senior family deductibles and copayments for MHS users in FYs 2014–2016 from MHS administrative data on all TRICARE senior families. For MHS non-users and civilian benchmark senior families, deductibles and copayments by type of Medicare supplemental coverage from the Household Component of the MEPS, actual MEPS in FY 2014, and projected MEPS in FYs 2015–2016; Medicare Part B and Medicare HMO premiums in FYs 2014–2016 from the Centers for Medicare & Medicaid Services; Medigap premiums in FYs 2014–2016 from Weiss Research, Inc.; Medisup premiums in FYs 2014–2016 from Towers Perrin Health Care Cost Surveys; Medicare Part D premiums in FYs 2014–2016 from Kaiser Family Foundation Surveys; Medicare supplemental insurance coverage, before and after TFL from HCSDB, FYs 2000–2001, 2014–2016; as of 12/31/2016.

Note: Estimates are for a demographically typical senior family. On average, this consists of 0.7 men and 0.7 women over the age of 65. "D&C" is deductibles and copayments.

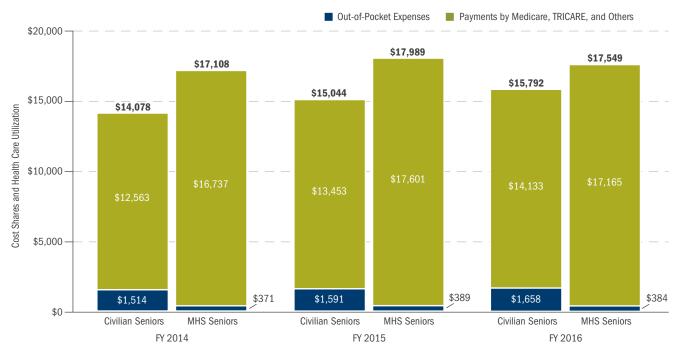
## BENEFICIARY FAMILY HEALTH INSURANCE COVERAGE AND OUT-OF-POCKET COSTS (MHS SENIOR BENEFICIARIES) (CONT.)

#### Coinsurance and Health Care Utilization for MHS vs. Civilian Senior Families

Medicare supplemental insurance lowers the coinsurance rate (deductibles and copayments per dollar of utilization), and previous studies have found that this leads to more health care services consumed for seniors. TFL and added drug benefits substantially lowered coinsurance rates; not surprisingly, utilization is higher for MHS seniors compared with "before TFL" civilian counterparts.

- ◆ TRICARE senior families have coinsurance rates below those of civilian counterparts.
  - In FY 2016, the coinsurance rate for civilian counterparts was 10.5 percent; for MHS seniors, 2.2 percent (8.3 percentage points lower).
- ◆ TRICARE senior families have relatively high health care utilization.
  - In FY 2016, MHS senior families consumed \$1,800 more in medical services than their civilian counterparts (11 percent greater).

#### COINSURANCE AND HEALTH CARE UTILIZATION FOR SENIOR FAMILIES VS. CIVILIAN COUNTERPARTS



Sources: TRICARE senior family utilization, deductibles, and copayments for MHS users in FYs 2014–2016 from MHS administrative data. For MHS non-users and civilian benchmark senior families, utilization, deductibles, and copayments by type of Medicare supplemental coverage from the Household Component of the MEPS, actual MEPS in FY 2014, and projected MEPS in FYs 2015–2016; Medicare supplemental insurance coverage, before and after TFL, from HCSDB, FYs 2000–2001 and 2014–2016; as of 12/31/2016.

<sup>&</sup>lt;sup>1</sup> Physician Payment Review Commission, "Private Secondary Insurance for Medicare Beneficiaries," in *Annual Report to Congress: Fiscal Year* 1997 (Washington, D.C.: U.S. Government Printing Office, 1997), 27–28.

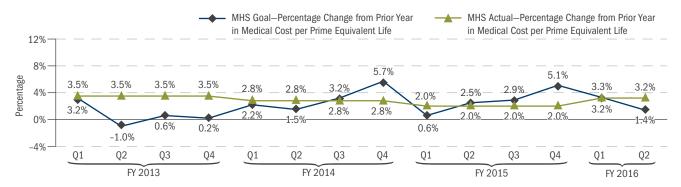
#### SYSTEM PRODUCTIVITY: MHS MEDICAL COST PER PRIME ENROLLEE

The goal in using this financial and productivity metric is to support the Quadruple Aim of managing lower costs. This metric focuses on per capita costs to examine the extent to which MHS stays below a targeted annual rate of increase based on industry practice, including how well MHS manages the care for those individuals who have chosen to enroll in an HMO-type of benefit provided by MTFs. Designed to capture aspects of three major management issues, this metric measures (1) how efficiently MTFs provide care, (2) how efficiently MTFs manage the demand of their enrollees, and (3) how well MTFs determine which care should occur internally versus which should be purchased externally from a managed care support contractor.

- For the recent performance update, pharmacy compounded products were removed from all years, which resulted in a change in reporting for FYs 2014 and 2015 in the graph below. The vast majority of compounded products in FY 2014 and FY 2015 were found to be fraudulent, and, if included, would unrealistically demonstrate dramatic decreases in growth rates for FY 2016. During FY 2016, pharmacy showed dramatic improvement due to NDAA 2015 maintenance medication and operational changes. Under the NDAA 2015, maintenance medications were redirected from the retail pharmacy to either the TRICARE Mail Order or MTFs, which resulted in significant improvements. Additionally, through the Pharmacy & Therapeutics Committee explicit formulary management and actionable Prime enrollee leakage reports for non-maintenance medication, further reductions in overall costs were achieved. The impact of these actions resulted in achievement of the goal through the second quarter of FY 2016.
- ◆ Through FY 2014, increases in purchased care outpatient costs were eased by DHA's implementation of the Outpatient Prospective Payment System (OPPS), beginning in May 2009 and completely phased in by May 2013, aligning TRICARE reimbursement with Medicare rates for hospital outpatient services. Pharmacy refunds continue to partially mitigate retail pharmacy costs—the highest-cost pharmacy venue. OPPS and refunds have provided short-term pricing decreases; however, as

- they have been phased in fully, pricing has stabilized and utilization has again become a cost driver, as reflected in increases beginning in FY 2014.
- ◆ MHS continues to expand the Patient-Centered Medical Home (PCMH) strategy, a practice model in which a team of health care professionals, coordinated by a personal physician, works collaboratively to provide high levels of care, access, and communication; care coordination and integration; and care quality and safety. Care delivered in a PCMH is meant to produce better outcomes; reduce mortality, unnecessary emergency department visits, and preventable hospital admissions for patients with chronic diseases; lower overall utilization; and improve patient compliance with recommended care, resulting in lower spending for the same population.
- ◆ The MHS goal in percentage change in medical costs from the prior year is based on the annual national survey of nonfederal private and public employers with three or more workers, conducted by the Kaiser Family Foundation and the Health Research and Educational Trust (HRET). From this survey, the MHS rate is set, based on the average annual premiums for employer-sponsored health insurance for family coverage. For the FY 2013 to FY 2016 time period, the MHS goal was set at one percentage point below the survey. Starting with FY 2017, it will return to the actual survey result, since the average growth rate has consistently been lower than historical trends.

#### PERCENTAGE CHANGE IN MEDICAL COST PER PRIME EQUIVALENT LIFE (FROM PRIOR YEAR)



Source: Office of the Assistant Secretary of Defense for Health Affairs (OASD[HA]) Health Budgets and Financial Policy, dated 12/1/2016, and MHS administrative data (M2: Standard Inpatient Data Record [SIDR]/Standard Ambulatory Data Record [SADR]/Comprehensive Ambulatory/Professional Encounter Record [CAPER]/TRICARE Encounter Data-Institutional [TED-I]/TED-Noninstitutional [-NI], Pharmacy Data Transaction Service [PDTS]; Expense Assignment System IV [EASIV]). Enrollees are adjusted for health risk status. FY 2016 data are reported through FY 2016 Q2, and data from this quarter should be considered preliminary.

#### **GENERAL METHOD**

This report presents the overall performance of the TRICARE program with respect to the Military Health System (MHS) Quadruple Aim of increased readiness, better care, better health, and lower cost. MHS monitors various metrics to assess performance and, where possible, tries to compare MHS performance with relevant civilian health care performance. This report examines the effects of TRICARE on beneficiary utilization of inpatient, outpatient, and prescription services, as well as on MHS and beneficiary costs. Wherever feasible, the report contrasts various aspects of TRICARE and national health care trends. These include comparison of TRICARE utilization and cost measures with comparable civilian sector benchmarks derived from the MarketScan® Commercial Claims and Encounters (CCAE) database provided by Truven Health Analytics Inc., trended changes in medical costs based on the national survey of nonfederal health plans and public employers conducted by the Kaiser Family Foundation and the Health Research and Education Trust (HRET), and national patient survey results from the consortium of the Agency for Healthcare Research and Quality (AHRQ) and the Consumer Assessment of Health Providers and Systems (CAHPS).

#### **Notes on Methodology**

- Numbers in charts or text may not sum to the expressed totals due to rounding.
- Unless otherwise indicated, all years referenced are federal fiscal years (FYs; October 1–September 30).
- Unless otherwise indicated, all dollar amounts are expressed in then-year dollars for the fiscal year represented.
- All photographs in this document were obtained from webites accessible by the public. These photos have not been tampered with other than to mask an individual's name.
- ◆ Differences between MHS survey-based data and the civilian benchmark, or MHS over time, were considered statistically significant if the significance level was less than or equal to 0.05.
- All workload and costs are estimated to completion based on separate factors derived from MHS administrative data for direct care and recent claims experience for purchased care.

- Data were current as of:
  - Surveys—HCSDB (11/9/2016); Service surveys: APLSS, PSS, and SDA (11/17/2016); and TROSS/ TRISS (11/17/2016)
  - Eligibility/enrollment data—1/5/2017
  - MHS workload/costs—1/18/2017
  - Website uniform resource locators—2/7/2017
- ◆ The Defense Health Agency (DHA) regularly updates its encounters and claims databases as more current data become available. It also periodically "retrofits" its databases as errors are discovered. The updates and retrofits can sometimes have significant impacts on the results reported in this and previous documents if they occur after the data collection cutoff date. The reader should keep this in mind when comparing this year's results with those from previous reports.

#### **DATA SOURCES**

#### **Health Care Survey of DoD Beneficiaries (HCSDB)**

The HCSDB was developed by the Defense Health Agency (DHA) and its predecessor, the TRICARE Management Activity, to fulfill the 1993 National Defense Authorization Act (NDAA) requirements and to provide a routine mechanism to assess TRICARE-eligible beneficiary access to and experience with MHS or with their alternate health plans. Conducted continuously since 1995, the HCSDB was designed to provide a comprehensive look at beneficiary opinions about their DoD health care benefits. The HCSDB provides information on a wide range of health care issues, such as beneficiaries' ease of access to health care and preventive care services.

The worldwide, multiple-mode Adult HCSDB has been conducted on a quarterly basis (three fiscal year quarters: October, January, and April) since FY 2013, and reported quarterly on a publicly accessible website (http://www.tricare.mil/survey/hcsdbsurvey/home/z\_reports.

<u>cfm</u>). Mathematica Policy Research, Inc. has been contracted during this time to provide independent analysis and assessment of the HCSDB and TRICARE Standard Survey results.

The CAHPS is a nationally recognized set of standardized questions and reporting formats that has been used to collect and report meaningful and reliable information about the health care experiences of consumers. It was developed by a consortium of research institutions and sponsored by the AHRQ. It has been tested in the field and evaluated for validity and reliability. The questions and reporting formats have been tested to ensure that the answers can be compared across plans and demographic groups.

About three-fourths of HCSDB questions are closely modeled on the CAHPS program in wording, response choices, and sequencing. The other one-fourth of HCSDB questions are designed to obtain information unique to TRICARE benefits or operations, and to

#### DATA SOURCES (CONT.)

solicit information about healthy lifestyles or health promotion, often based on other nationally recognized health care survey questions. Supplemental questions are added on a quarterly basis to explore specific topics of interest, such as the acceptance and prevalence of preventive services, including colorectal cancer screening and annual influenza immunizations, availability of other non-DoD health insurance, and indications of post-traumatic stress in the overall MHS population.

Because the HCSDB uses CAHPS questions, TRICARE can be benchmarked to civilian managed care health plans. More information on CAHPS can be obtained at https://www.cahps.ahrq.gov.

The survey request is sent by postal mail to all beneficiaries and also by e-mail to Active Duty members, with responses accepted via Web and. for a random sample of initial nonrespondents, by postal mail. The HCSDB is fielded to a stratified random sample of beneficiaries. In order to calculate representative rates and means from their responses, sampling weights are used to account for different sampling rates and different response rates in different sample strata. Beginning with the FY 2006 report, weights were adjusted for factors such as age, sex, and rank that do not define strata, but make some beneficiaries more likely to respond than others. Because of the adjustment, rates calculated from the same data differ from past evaluation reports and are more representative of the population of TRICARE users.

The DHA HCSDB is sent to a random sample of all MHS-eligible users and non-users. Survey results are reported quarterly, with almost 29,000 respondents from about 300,000 beneficiaries sampled in FY 2015 (about a 10 percent raw response and 17 percent weighted response rate, down from an almost 18 percent raw response rate in FY 2013). Results can be estimated from the HCSDB for all beneficiary groups eligible for MHS benefits, whether they use direct care, purchased care, or other health insurance available to them, and are compared with benchmark results from a national sample of commercial civilian health plans administering the CAHPS Health Plan survey.

Results provided from HCSDB in FY 2013 were based on questions taken from the CAHPS Version 4.0 Questionnaire, while the FYs 2014 and 2015 fieldings of the HCSDB were based on CAHPS Version 5.0. The HCSDB results for FY 2013 (using CAHPS Version 4.0) were benchmarked to CAHPS Version 4.0 surveys conducted in 2011, and results for FYs 2014 and 2015 (using CAHPS Version 5.0) were benchmarked to CAHPS Version 5.0 surveys conducted in 2013 and 2014, respectively. Because of the

changes in the questionnaire, changes in rates are only meaningful when compared with changes in the relevant benchmark. CAHPS Version 4.0 benchmarks were obtained from the National CAHPS Benchmarking Database (NCBD). CAHPS Version 5.0 benchmarks were obtained from the National Committee for Quality Assurance (NCQA).

Although the benchmark data files for CAHPS Versions 4.0 and 5.0 were obtained from different organizations, their contents and specifications are consistent, and the same selection criteria and methods were used to calculate benchmarks from both. The NCBD collects CAHPS results voluntarily submitted by participating health plans and is funded by the AHRQ and administered by a contractor. The NCQA's file also contains voluntarily submitted health plan survey results. Only health maintenance organization (HMO), preferred provider organization (PPO), and HMO/point-of-service (POS) plans from either source are used in the calculation of the benchmark scores. Both benchmarks and TRICARE results are adjusted for age and health status.

Differences between MHS and the civilian benchmark were considered significant at less than or equal to 0.05, using the normal approximation. The significance test for a change between years is based on the change in the MHS estimate minus the change in the benchmark, which is adjusted for age and health status to match MHS. T-tests measure the probability that the difference between the change in the MHS estimate and the change in the benchmark occurred by chance. Tests are performed using a Z-test, and standard errors are calculated using SUDAAN to account for the complex stratified sample and unequal weights. If P is less than 0.05, the difference is significant.

Within the context of the HCSDB, Prime enrollees are defined as those enrolled at least six months.

#### **TRICARE Inpatient Satisfaction Survey (TRISS)**

The purpose of the Office of the Assistant Secretary of Defense (Health Affairs) (OASD[HA]) TRISS is to monitor and report on the experience and satisfaction of MHS beneficiaries who have been admitted to MTFs and civilian hospitals. The survey instrument incorporates the questions developed by the AHRQ and Centers for Medicare & Medicaid Services (CMS) for the Hospital-CAHPS (HCAHPS®) initiative. The goal of the HCAHPS initiative is to measure uniformly and report publicly patient experiences with inpatient care through the use of a standardized survey instrument and data collection methodology. The information derived from the survey can be useful for internal quality improvement initiatives, to assess the impact of changes in policy, and to provide feedback to providers and patients.

#### DATA SOURCES (CONT.)

The TRISS is a 43-item survey instrument, with 21 questions asking how often or whether patients experienced a critical aspect of hospital care, rather than whether they were "satisfied" with their care, and 22 DoD-specific questions, including an open-ended question to solicit specific location-specific comments from our beneficiaries.

The TRISS questionnaire is sent to all (census) adult MTF inpatients worldwide between 48 hours and six weeks after discharge. The TRISS survey is also administered to a random sample of adult MHS inpatients discharged from civilian network/purchased care hospitals. The TRISS follows the HCAHPS protocols developed by the CMS. HCAHPS protocols for sampling, data collection, and coding can be found in the HCAHPS Quality Assurance Guidelines manual on the official HCAHPS website, <a href="http://www.hcahpsonline.org">http://www.hcahpsonline.org</a>. The overall FY 2016 response rate for direct care was almost 42 percent and for purchased care was 47 percent.

## TRICARE Outpatient Satisfaction Survey (TROSS) and Service Outpatient Surveys

This report presents beneficiary self-reported ratings of their outpatient experience from multiple sources, and, in so doing, offers different perspectives on how MHS assesses the outpatient beneficiary experience. These outpatient surveys are the TRICARE Outpatient Satisfaction Survey (TROSS), the Army Provider Level Satisfaction Survey (APLSS), the Navy Patient Satisfaction Survey (PSS), and the Air Force Service Delivery Assessment (SDA).

- ◆ The DHA TROSS is sent to a randomized sample of MHS beneficiaries following their outpatient encounter in either direct or purchased care. Survey results are reported monthly, with about 131,000 responses from about 590,000 annually surveyed in FY 2015 (22 percent raw annual response rate). Metric scores are compared with benchmarks established by the CAHPS Clinician and Group (C&G) Survey.
- ◆ The Army Provider Level Satisfaction Survey (APLSS) is sent to about 2.5 million beneficiaries annually who have had an outpatient visit at an Army MTF. Results are reported to Army medical leadership from the Surgeon General, down to the individual providers in the MTFs.
- ◆ The Navy Patient Satisfaction Survey (PSS) is sent to about 1 million beneficiaries annually who have used Navy MTFs. Results are reported to the Bureau of Medicine and Surgery (BUMED) leadership from the Surgeon General, down to the individual providers in the MTFs.

◆ The Air Force Satisfaction Delivery Assessment (SDA) is a telephone-based survey, with about 600,000 beneficiaries called annually who have used Air Force MTFs. Results are reported from the Surgeon General through Air Force Medical Service leadership, down to the individual providers in the MTFs.

The Joint Outpatient Experience Survey (JOES) combines and standardizes the long-standing Services outpatient surveys: Army APLSS, BUMED PSS, and Air Force SDA. JOES will continue to focus on the beneficiary experience with care received in MTFs. JOES results will be reported centrally, and will continue to be reported for each Service, down to each MTF and provider. JOES will also include a separate monthly survey based on the DHA TROSS, called JOES-C (where "C" stands for Consumer Assessment of Health Providers and Systems [CAHPS Clinician and Group Survey]). JOES-C will continue to focus on beneficiary experience in both direct and purchased care provider offices, and will allow MHS to compare our beneficiary results to the civilian benchmark results. JOES will be managed by a Tri-Service working group using a single central contract.

#### Quality

Military hospital inpatient quality measures were abstracted from clinical records by trained specialists and reported to the Joint Commission for national benchmarking. Data for direct care hospitals participating in the National Surgical Quality Improvement Program are abstracted and submitted to the American College of Surgeons by surgical case reviewers. The risk-adjusted outcome reports provide hospital surgical leadership with valuable information to evaluate and improve care. Perinatal data are submitted to the National Perinatal Information Center to support comparison with other participating organizations from across the nation. The availability of data for MHS providers continues to increase through the MHS Population Health Portal (MHSPHP) with a streamlined access process, registry development for population management, and improved data displays. The MHSPHP has also established a discharge tool to ensure patients at high risk for readmission are identified during hospitalization. This facilitates continuity of care and provides caregivers with time for patient education and follow-up appointment scheduling to reduce the risk of readmissions.

#### **Utilization and Costs**

Data on MHS and beneficiary utilization and costs came from several sources. We obtained the health care experience of eligible beneficiaries by aggregating Standard Inpatient Data Records (SIDRs—MTF hospitalization records), Comprehensive Ambulatory/

#### DATA SOURCES (CONT.)

Professional Encounter Records (CAPERs—MTF outpatient records), TRICARE Encounter Data (TED—purchased care claims information) for institutional and noninstitutional services, and Pharmacy Data Transaction Service (PDTS) claims within each beneficiary category.

Inpatient utilization was measured using dispositions (direct care)/admissions (purchased care) and Medical Severity Diagnosis Related Group (MS-DRG) RWPs, the latter being a measure of the intensity of hospital services provided. Outpatient utilization for both direct and purchased care was measured using encounters and an MHS-derived measure of intensity called Enhanced Total Relative Value Units (RVUs). MHS uses several different RVU measures to reflect the relative costliness of the provider effort for a particular procedure or service. Enhanced Total RVUs were introduced by MHS in FY 2010 and subsequently revised in FY 2016 (in both cases, they were retroactively applied to earlier years) to account for units of service (e.g., 15-minute intervals of physical therapy) and better reflect the resources expended to produce an encounter. The word "Total" in the name reflects that it is the sum of Work RVUs and Practice Expense RVUs. Work RVUs measure the relative level of resources, skill, training, and intensity of services provided by a physician. Practice Expense RVUs account for nonphysician clinical labor (e.g., a nurse), medical supplies and equipment, administrative labor, and office overhead expenses. In the private sector, Malpractice RVUs are also part of the formula used to determine physician reimbursement rates, but since military physicians are not subject to malpractice claims, they are excluded from Total RVUs to make the direct and purchased care workload measures more comparable. For a more complete description of enhanced as well as other RVU measures, see https://www.milsuite.mil/video/watch/video/9653.

Costs recorded on TEDs were broken out by source of payment (DoD, beneficiary, or private insurer). Although the SIDR and CAPER data indicate the enrollment status of beneficiaries, the Defense Enrollment Eligibility Reporting System (DEERS) enrollment file is considered to be more reliable. We therefore classified MTF discharges as Prime or space-available by matching the discharge dates to the DEERS enrollment file. Final data pulls used for this report were completed in January 2017, as referenced above.

The CCAE database contains the health care experience of several million individuals (annually) covered under a variety of health plans offered by large employers, including PPOs, POS plans, HMOs, and indemnity plans. The database links inpatient services and admissions, outpatient claims and encounters and, for most covered lives, outpatient pharmaceutical

drug data and individual-level enrollment information. We tasked Truven Health Analytics Inc. to compute quarterly benchmarks for HMOs and PPOs, broken out by product line (MED/SURG, OB, PSYCH) and several sex/age group combinations. The quarterly breakout, available through the second quarter of FY 2016, allowed us to derive annual benchmarks by fiscal year and to estimate FY 2016 data to completion. Product lines were determined by aggregating Major Diagnostic Categories (MDCs) as follows: OB = MDC 14 (Pregnancy, Childbirth, and Puerperium) and MDC 15 (Newborns and Other Neonates with Conditions Originating in Perinatal Period), PSYCH = MDC 19 (Mental Diseases and Disorders) and MDC 20 (Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders), and MED/SURG = all other MDCs. The breakouts by gender and age group allowed us to apply DoD-specific population weights to the benchmarks and aggregate them to adjust for differences in DoD and civilian beneficiary populations. We excluded individuals age 65 and older from the calculations because most of them are covered by Medicare and Medigap policies rather than by a present or former employer's insurance plan.

#### **DRG Grouping Methodology**

In the section that displays the "Top 25" inpatient diagnosis groups, Diagnosis Related Groups (DRGs) are grouped into descriptively (but not necessarily clinically) similar categories using a code set available on http://www.findacode.com/code-set.php?set=DRG, an online database of medical billing codes and information. The site lists DRGs within each Major Diagnostic Category (MDC), with headings above diagnostically related DRGs. These headings provide a broad description of the DRGs underneath and distinguish between medical and surgical DRGs, but do not distinguish among DRGs with different (or any) levels of complications and comorbidities. For the purposes of this report, the DRGs were too detailed and the MDCs too broad to provide the reader with a general sense of the most common inpatient diagnoses MHS confronts; therefore, the headings were used as the basis for broadening the groupings in this report into descriptively related categories, without regard for whether they are medical or surgical, whether there are complications, or which parts of the body are affected. For example, the "ECMO or Tracheostomy" group includes DRGs 003, 004, 011, 012, and 013. The description for each of those DRGs includes the words "ECMO" or "Tracheostomy"—some with complications, some without; some for face, mouth, and neck; and some for other parts of the body. Once all the groups were formed, they were numbered sequentially following the order in which they were presented on the website. This resulted in a reduction from 818 DRGs to 284 DRG groups.

### **ABBREVIATIONS**

ADDITEVIATIONS			
ABA	applied behavior analysis   10	NHANES	National Health and Nutrition Examination
ACD	Autism Care Demonstration   10	INITAINES	Survey   145
AD	Active Duty   10	NHE	National Health Expenditures   21
	- 1		·
ADFM	Active Duty family member   13	NPC	National Prevention Council   145
ADSM	Active Duty Service member   5	NPI	National Provider Identifier   141
AHRQ	Agency for Healthcare Research and Quality   48	NPS	National Prevention Strategy   145
APLSS	Army Provider Level Satisfaction Survey   50	NSQIP	National Surgical Quality Improvement Project   35
ASD	autism spectrum disorder   10	OB	obstetrics   24
BAG	Budget Activity Group   22	000	Overseas Contingency Operations   20
BMI	body mass index   146	OCONUS	outside the continental U.S.   143
BRAC	Base Realignment and Closure   15	OHI	other health insurance   18
BT	behavior technician   10	OLW	Operation Live Well   145
CAD	Catchment Area Directory   15	0&M	Operations and Maintenance   20
CAHPS	Consumer Assessment of Healthcare Providers	OTC	over-the-counter   9
	and Systems   60	P4I	Partnership for Improvement   33
CAHPS (C&G)	CAHPS Clinician and Group survey   97	PCM	primary care manager   5
CAUTI	Catheter-Associated Urinary Tract	PCMH	Patient-Centered Medical Home   4
	Infection   47	PDTS	Pharmacy Data Transaction Service   27
CHAMPUS	Civilian Health and Medical Program of the	PfP	Partnership for Patients   89
	Uniformed Services   5	PH	psychological health   21
CDC	Centers for Disease Control and Prevention   9	PI	Program Integrity   4
CLABSI	Central Line-Associated Bloodstream Infection   47	POS	
CMS	Centers for Medicare & Medicaid Services   21		point-of-service   5
CY	calendar year   21	PRISM	Provider Requirement Integrated Specialty
CV	coefficient of variation   98	DCA	Model   15
DEERS	Defense Enrollment Eligibility Reporting	PSA	Prime Service Area   15
	System   12	PSC	Private-Sector Care   22
DHA	Defense Health Agency   6	PSM	Patient Safety Manager   49
DHP	Defense Health Program   11	PSP	Patient Safety Program   39
DHHS	Department of Health and Human Services   145	PSR	Patient Safety Reporting   46
DM	disease management   113	PSS	Navy Patient Satisfaction Survey   60
DMDC	Defense Manpower Data Center   138	RC	Reserve Component   4
DoD	Department of Defense   1	RCA	root cause analysis   39
ECHO	Extended Care Health Option   151	RDT&E	Research, Development, Test, and Evaluation   20
EHR	electronic health record   7	RETFMs	Retirees and Family Members   12
eMSM	Enhanced Multi-Service Market   3	RVUs	relative value units   4
ER	emergency room   25	RWPs	relative weighted products   4
FDA	U.S. Food and Drug Administration   28	SDA	Air Force Service Delivery Assessment   67
FTE	full-time equivalent   141	SECDEF	Secretary of Defense   35
FY	fiscal year   1	TAMP	Transitional Assistance Management
GRDFM	Guard/Reserves and Family Members   13		Program   138
HCAHPS	Hospital Consumer Assessment for Healthcare	TBI	traumatic brain injury   8
	Providers and Systems   37	TDP	TRICARE Dental Program   5
HCSDB	Health Care Survey of DoD Beneficiaries   67	TeamSTEPPS	Team Strategies and Tools to Enhance
HEDIS	Healthcare Effectiveness Data and		Performance and Patient Safety   40
	Information Set   41	TED	TRICARE Encounter Data   136
HIE	Health Information Exchange   7	TFF	Total Force Fitness   145
HIPAA	Health Insurance Portability and Accountability	TFL	TRICARE for Life   4
	Act   141	TMA	TRICARE Management Activity   6
HRO	High Reliability Organization   1	TPR	TRICARE Prime Remote   5
HP	Healthy People   145	TRDP	TRICARE Retiree Dental Program   5
IQR	interquartile range   89	TRISS	TRICARE Inpatient Satisfaction Survey   50
JOES	Joint Outpatient Experience Survey   50	TRO	TRICARE Regional Office   5
MCSC	managed care support contractor   6	TROSS	TRICARE Outpatient Satisfaction Survey   60
MDR	MHS Data Repository   15	TRR	TRICARE Retired Reserve   4
MERHCF	Medicare-Eligible Retiree Health Care Fund   4	TRS	TRICARE Reserve Select   4
MH	mental health   106	TYA	TRICARE Young Adult   4
MHS	Military Health System   1	UMP	Unified Medical Program   1
MHSPHP	MHS Population Health Portal   150	USFHP	Uniformed Services Family Health Plan   5
MS-DRG	Medicare Severity Diagnosis Related Group   157	USD(P&R)	Under Secretary of Defense for Personnel and
MTF	military treatment facility   1	305(1 011)	Readiness   33
NCQA	National Committee for Quality Assurance   56	USUHS	Uniformed Services University of Health
NCR	National Capital Region   1	300110	Sciences   77
NCRMD	National Capital Region Medical Directorate   98	VA	Department of Veterans Affairs   5
NDAA	National Defense Authorization Act   1	WRNMMC	Walter Reed National Military Medical Center   77

#### TRICARE PROGRAM AND BENEFITS TIMELINE: FY 1995-FY 2016



- Provided beneficiaries with greater choice, access to care, and coverage
  of preventive services through restructuring the Military Health System with
  publication of TRICARE Final Rule (October 5, 1995; 60 FR 52078-52103)
  to implement managed care legislation of 1993
- TRICARE overlaid the Civilian Health and Military Program of the Uniformed Services (CHAMPUS) program established in 1966
- Established cost-neutral TRICARE triple option (TRICARE Prime, Extra & Standard)
- Started nationwide roll-out of managed care support contracts (seven contracts) across 12 regions, each headed by a lead agent (five Army, two Navy, four Air Force, one rotating)
- Built a TRICARE provider network to wrap around the MTFs
- Increased beneficiary access to pharmacy options by adding mail order and retail pharmacy points of service as a result of Base Realignment and Consolidation (BRAC) commission
- ◆ Preventive services first offered exclusively under TRICARE Prime
- Catastrophic cap for non-Active Duty enrollees is reduced from \$7,500 to \$3,000
- Expanded Active Duty Dental Benefit Plan begins

- Cancer Treatment Clinical Trial demonstration begins. Expanded beneficiary access to additional options for cancer treatment and through implementing a demonstration project—Phase II and III Cancer Treatment Clinical Trials
  - Expanded coverage of cancer clinical trials to all National Cancer Institute (NCI) sponsored phase II and III clinical trials
  - Widened access to promising cancer therapies, and contributed to the NCI's efforts to further the science of cancer treatment
- Eventually became a permanent TRICARE Basic benefit available to all beneficiaries
- Requirement for Outpatient Non-Availability Statement (NAS) dropped
- Increased beneficiary access to preventive services by expanding access in TRICARE Standard/Extra (expanded further in 1997 to be very similar to TRICARE Prime)
- TRICARE website is launched





- National Mail Order Pharmacy program begins
- Improved access to services for families with a disabled family member through the implementation of the Program for Persons with Disabilities (PFPWD), simplifying the process and making access easier for families
- ◆ TRICARE Standard/Extra get comprehensive preventive benefits
- TRICARE Retiree Dental Program begins full-cost premiums with no DoD subsidy

- TRICARE roll-out is complete with 11 regions operational (regions 7 and 8 consolidated)
- Increased beneficiary access to ancillary care, making it easier and cheaper by removing TRICARE Prime copayments for ancillary services (radiology, laboratory, and diagnostic testing) conducted as a result of an outpatient visit

• TRICARE Senior Prime demonstration begins





- TRICARE Prime Remote benefit begins
- Nonavailability Statements are required for maternity care
- Increased beneficiary access to more providers by adding Corporate Services Provider Class
  - Allowed provider groups and foundations to become TRICARE-authorized providers; the care rendered by these providers was previously not cost-shared
  - Included freestanding corporations or foundations that rendered professional ambulatory care (e.g., physical therapy), in-home care, or technical diagnostic procedures



- Catastrophic cap for retirees, their family members, and survivors under TRICARE Standard/Extra is reduced from \$7,500 to \$3,000
- DoD waives charges for Active Duty Prime Remote family members through August 31, 2000
- TRICARE benefits are expanded to cover school physicals





- TRICARE eliminates Prime copays for Active Duty family members
- ◆ TRICARE for Life (TFL) benefit begins, superseding TRICARE Senior Prime Demonstration. TFL is Medicare-wraparound coverage for TRICARE beneficiaries who have Medicare Part A and Medicare Part B; TRICARE pays after Medicare and other health insurance for TRICARE-covered health care services.
- TRICARE Senior Pharmacy (TSRx) benefit begins, adding pharmacy benefits for retirees over 65 years of age who formerly lost all TRICARE benefits upon becoming eligible for Medicare at age 65
- TRICARE simplifies and reduces copay structure for prescription drugs
- Active Duty Service members get permanent chiropractic care benefit in MTFs
- TRICARE Prime travel benefit to reimburse travel expenses when a TRICARE Prime enrollee has to travel more than 100 miles for referred specialty care

- Improved beneficiary access to needed care by revising the Coverage Criteria for Transplants and Cardiac and Pulmonary Rehabilitation
- Added coverage of heart-lung, single or double lung, and combined liver-kidney transplants
- Added coverage of pulmonary rehabilitation
- Enhanced access to life-saving treatments for seriously ill TRICARE beneficiaries
- Expanded coverage for pulmonary rehabilitation services to additional diagnoses as determined by the Director, or designee
- Demonstration that waived (a) non-availability statements and (b) annual TRICARE Standard/Extra deductible for family of mobilized Reserve Component (RC) sponsor (extended five times until made permanent in 2008)
- Deployed Pharmacy Data Transaction Service (PDTS)—improving patient safety—an online, real-time worldwide prospective drug utilization review (clinical screening) against a patient's complete medication history for each new or refilled prescription; these clinical screenings identify potential medication issues, which are immediately resolved to ensure the patient receives safe and quality care

- TRICARE Prime Remote for Active Duty Family Members (TPRADFM) benefit begins
- TRICARE Mail Order Pharmacy (TMOP) contract awarded (formerly managed by DLA as the National Mail Order Program)
- TRICARE Global Remote Overseas (TGRO) contract begins, providing cashless/claimless health care to overseas ADSMs/ADFMs assigned to Prime Remote locations
- Created Individual Case Management Program for Persons with Extraordinary Conditions (ICMP-PEC)—a discretionary program for beneficiaries with extraordinary medical or psychological conditions, providing coverage of care normally excluded by law or regulation, as long as the benefit was cost effective
- Created Custodial Care Transition Policy (CCTP) developed to cover new cases of custodial care for beneficiaries entitled to expanded benefits





- TPRADFM is modified to allow family members residing in Prime Remote locations to remain enrolled when sponsors undergo Permanent Change of Station on unaccompanied tour
- Requirement for Reserve Component sponsor's activation orders TRICARE Global Remote Overseas benefit begins
- Eliminated NAS requirement for TRICARE Standard, except for mental health
- "TRICARE Retail Pharmacy" contract (TRRx) awarded, carving the benefit out of the Managed Care Support Contracts into a single program
- Transitional Assistance Management Program (TAMP) coverage is temporarily extended to 180 days for all participants (made permanent in 2005)
- Early eligibility begins for Reserve Component members activated for more than 30 days in support of a contingency operation (made permanent in 2005)
- TRICARE Regions and Managed Care Support Contracts consolidated to three from 11 (North, South, and West)





- Premium-based TRICARE Reserve Select (TRS) benefit begins for certain Reserve Component members
- Superseded the Program for Persons with Disabilities (PFPWD) with Extended Health Care Option/Home Health Care (ECHO/EHHC) program, including 16 hours of respite care per month
- Improved beneficiary access to needed medications and, in many cases, decreased beneficiary cost share, by implementing the DoD Pharmacy Uniform Formulary/threetier cost-share system
- Implemented the Uniform Formulary three-tier copay, administered by the DoD Pharmacy and Therapeutics committee under the Pharmacy Program
- Two premium tiers added to TRS so all members of the Selected Reserve can purchase coverage
- Gastric bypass, gastric stapling, or gastroplasty become covered benefits under TRICARE
- Family members are given a 30-day period to submit a TRICARE Prime enrollment form
- Improved access to care for beneficiaries by adding transitional TRICARE survivor coverage for dependents whose sponsor dies on Active Duty (greater than 30 days)
- Expanded coverage to certain direct commission reserve officers awaiting Active Duty





- Anesthesia and other costs for dental care for certain children and other beneficiaries are authorized
- Claims processing under TRICARE program and Medicare program is standardized
- Mental health screening and services for members of the Armed Forces are enhanced
- TRS is simplified—superseded three-tier TRS with a single 28 percent premium tier; opened to all Selected Reservists other than those eligible for, or enrolled in, Federal Employees Health Benefits (FEHB) program.



- Implemented the Enhanced Access to Autism Care Demonstration through the ECHO for ADFMs
- Improved the care provided to Wounded Warriors by adding numerous benefits, including:
- Expanded ECHO services to Service members with respite care added
- Added retiree combat-related disability travel
- Added transitional care for service-related conditions first identified during TAMP for RC members
- Integrated disability evaluation system—ensured DoD disability ratings and VA disability ratings were established prior to medical retirement from Active Duty





- Started Active Duty Dental Program (ADDP)
- Eased the potential burden on families with special needs by increasing the ECHO Cap to \$36,000 per year for certain services
- Increased access to care by expanding the TAMP program:
  - Separating Active Duty members who affiliate with the Selected Reserve
  - Members in receipt of a sole survivorship discharge
- Improved beneficiary access to behavioral health care by allowing a streamlined certification for Hospital-Based Psychiatric Partial Hospitalization Programs
- TRICARE Pharmacy manufacturer refunds are established (retroactive to January 2008)
- OPPS is implemented
- Improved beneficiary access to vaccines by expanding coverage under pharmacy benefit for H1N1 at retail pharmacies at zero copay

- TRICARE Overseas Program begins health care delivery
- Launched premium-based TRICARE Retired Reserve (TRR) program—TRICARE Standard/Extra coverage offered for purchase by Retired Reserve members (gray-area) for themselves and eligible family members
- Expanded ADDP to Reservists during TAMP





- Launched premium-based TRICARE Young Adult (TYA)— TRICARE Standard/Extra coverage offered for purchase for certain beneficiaries up to age 26
- Increased access to support services by expanding the Autism Care Demonstration
- Increased access to needed treatment by expanding coverage of the available surgical options for morbid obesity
- TRICARE Pharmacy announces copay decreases for the home delivery option, coinciding with increases to copays for retail pharmacy purchases
- TRICARE Prime enrollment fee is adjusted and can now be collected annually (frozen for survivors and certain significantly injured or ill retirees)
- Increased beneficiary access to behavioral health services by adding Certified Mental Health Counselors as independent practitioners

- Eliminated TRICARE Standard/Extra cost shares for authorized preventive services (always free of cost-sharing in TRICARE Prime)
- TYA expanded to offer TRICARE Prime coverage
- TRICARE revises compound drug coverage by adopting a more rigorous screening process to ensure they are safe and effective, and covered by TRICARE
- Decreased beneficiary cost by freezing TRICARE Prime enrollment fees at rate effective when first enrolled for Survivors of Active Duty deceased sponsors and medically retired members and dependents
- Added coverage for off-label uses of devices if reliable evidence indicates it is safe, effective, and in accordance with nationally accepted standards of practice in the medical community
- Added assisted reproductive services for seriously or severely ill or injured service members





- Reduction in Prime Services Areas (closed all PSAs not built around an MTF or BRAC site)
- TRS termination date delayed 180 days for Selected Reserve members involuntarily separated under honorable conditions
- Expanded Autism Care Demonstration to include retiree family members
- Restricted US Family Health Plan enrollment to beneficiaries (65 years and younger)
- Permanent authority to include certain OTC drugs under Uniform Formulary based on P&T recommendation
- Modified Over-the-Counter Demonstration Project to include Plan B One-Step (levonorgestrel) without prescription requirement
- Added coverage for abortions for rape or incest and brought coverage into conformance with existing federal statutory laws, including the Hyde Amendment, the Affordable Care Act, and President's Executive Order #13535 (March 24, 2010)
- Added coverage of hippotherapy under ECHO (horseback riding as a therapeutic or rehabilitative treatment)

- Prime eligibility reinstated for some beneficiaries
- Launched Laboratory-Developed Test demonstration—authority to determine whether tests not yet approved by the FDA are safe and effective for use and thus eligible for TRICARE coverage
- TRICARE adds single-level cervical total disc replacement to list of covered procedures
- TRICARE increases access to mental health counselors
- DoD expands available treatments for substance abuse
- TRICARE for Life (TFL) Pharmacy Pilot begins, requiring TFL beneficiaries living in the U.S. and the U.S. territories who use select maintenance medications to fill those prescriptions using TRICARE Pharmacy Home Delivery or a military pharmacy
- ◆ TRICARE extends the Over-the-Counter demonstration, which permits beneficiaries to fill prescriptions for certain OTC drugs, from network pharmacies and through home delivery for free
- Certified Mental Health Counselors added as authorized TRICARE providers
- · Day limits for inpatient mental health stays eliminated
- ◆ U.S.-based TRICARE Service Centers closed
- Expanded breast pump (and supplies) coverage to all TRICARE beneficiaries
- TRICARE extended coverage to same-sex spouses and their family members
- Clarified the Unfortunate Sequelae policy, ensuring that treatment of complications or medically necessary follow-on care that occur subsequent to noncovered initial surgery/treatment at MTF are covered



- TRICARE Prime access changed to allow beneficiaries to enroll in a region where their desired PCM is located (cross-region enrollment)
- Launched fourth-generation pharmacy contract
- Added requirement for all beneficiaries (other than Service members) to receive maintenance drugs vial mail-order or at MTFs only
- Awarded second-generation TRICARE Overseas Program contract
- Coverage of Transitional Care Management Services—transitional care management includes services provided to beneficiaries with moderate or complex medical needs and who are transitioning from the inpatient setting to their community setting (e.g., home)



- The lower extremity joint replacement (LEJR) demonstration in the Tampa-St. Petersburg market has a direct linkage between quality and reimbursement
- Better care coordination between the hospital and post-op care providers
- Comprehensive mental health parity—improved access at lower out-of-pocket expense
- Centralized approach for MHS to support safe disposal of unwanted medications from patients
- Developed Medication Therapy Management Pilot
- DoD/VA Continuity of Care Drug List created for the purpose of including pharmaceutical agents critical for the treatment transition of Service members from DoD to VA
- Added Advance Care Planning Services policy—provider reimbursement for end-of-life care beneficiary planning consultations, including the completion of Advance Directive documents
- Provided enhancements to preventive services and eliminated cost share/copays for some preventive services
- Comprehensive Autism Care Demonstration cost-shares reduced for all applied behavior analysis services provided by authorized providers
- Added requirement for all beneficiaries (other than Service members) to get select brand name maintenance drugs through either TRICARE Pharmacy Home Delivery or from a military pharmacy
- Awarded TRICARE regional contracts, consolidating regions from three (North, South, and West) to two (East and West)
- Launched Urgent Care Pilot Program allowing non-ADSM Prime CONUS enrollees up to four network visits per year without referral or prior authorizations
- Expanded inpatient mental health hospital services coverage

- Over-the-counter drug coverage made permanent part of the TRICARE pharmacy benefit
- Slightly increased copays for prescription drugs at Home Delivery and retail network pharmacies
- Provisional coverage program introduced to provide coverage for emerging treatments and technologies
- Coverage additions under the TRICARE Basic Program
- Surgery for femoroacetabular impingement (FAI)
- Transcranial magnetic stimulation (TMS) for treatment of major depressive order and two-level cervical disc replacement
- Nonsurgical treatment of gender dysphoria for all MHS beneficiaries; gender reassignment surgery only for Active Duty Service members
- U.S.-based pilot to encourage MHS beneficiaries seen in civilian emergency rooms (in designated markets) to voluntarily transfer to a participating MTF if an inpatient admission is needed and if determined safe for transfer
- Substance Use Disorder (SUD) Treatment Benefit revised to allow officebased opioid treatment by individual TRICARE-authorized physicians and add coverage of qualified opioid treatment programs as TRICARE authorized providers of SUD treatment for opioid use disorder.
- Health care delivery under second-generation TRICARE Overseas Program contract began September 1, 2016 (includes inpatient medical management of TOP Prime enrollees in civilian facilities and translation of medical documentation for all TOP Prime and Prime Remote beneficiaries)
- Implemented CHAMPUS Maximum Allowable Charges (CMAC) rates for professional services in all U.S. territories
- Prime Service Area (PSA) definition changed to include newly created ZIP codes enclosed entirely within the existing PSA boundary
- Provided enhancements to preventive services and eliminated cost share/copays for some preventive services



The **Evaluation of the TRICARE Program: Fiscal Year 2017 Report to Congress** is provided by the Defense Health Agency, Decision Support Division, in the Office of the Assistant Secretary of Defense (Health Affairs) (OASD[HA]). Once the Report has been sent to the Congress, an interactive digital version with enhanced functionality and searchability will be available at: <a href="http://www.health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Health-Care-Program-Evaluation/Annual-Evaluation-of-the-TRICARE-Program">http://www.health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Health-Care-Program-Evaluation/Annual-Evaluation-of-the-TRICARE-Program</a>.

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M&RA = Manpower & Reserve Affairs

OPS = Operations

PCMH = Patient-Centered Medical Home

PHD = Public Health Division

R&M = Resources & Management

THP = TRICARE Health Plan

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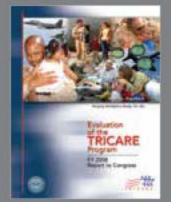
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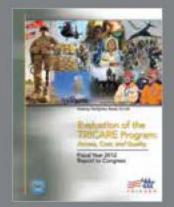
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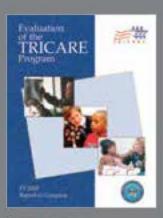




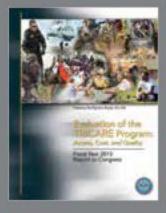


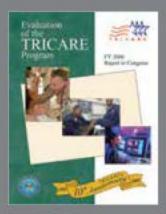






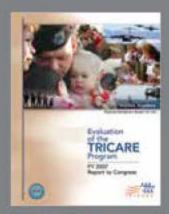


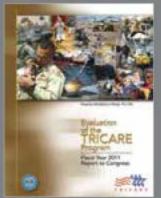


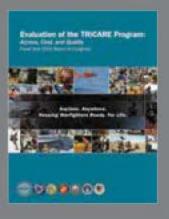












# 20th Annual

**TRICARE Evaluation Report and Data** 





















