The Honorable Carl Levin  
Chairman  
Committee on Armed Services  
United States Senate  
Washington, DC 20510

Dear Mr. Chairman:

The enclosed report responds to section 712 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417), which required the Department of Defense to conduct a demonstration project to evaluate the efficacy of providing incentives to encourage healthy behaviors on the part of retired non-Medicare beneficiaries of the Military Health System (MHS) and their dependents. The Department implemented the demonstration, which included evaluation of participants' self-reported health risk assessment, blood pressure, glucose, lipids, nicotine use, and weight. Beneficiaries received a monetary incentive for full compliance in the amount of $115 for single participants and $230 for those enrolled with dependents.

Key elements of the enclosed report include program enrollment and participation, the incentives provided and their impact on encouraging healthy behaviors, an assessment of the demonstration effectiveness, recommendations regarding extending the demonstration project, and implementation of a permanent wellness assessment program. Only 12 percent of invited households enrolled in the demonstration, and less than half of those enrolled fulfilled the required activities to qualify for the incentive.

The results of this demonstration indicate that the monetary incentive was not a significant inducement for participation nor was it effective at improving the health status of the participants. MHS beneficiaries already receive numerous clinical preventive health services and screenings without incurring any out-of-pocket costs. Consequently, we believe a more cost-effectiveness approach would be to encourage beneficiaries to continue utilizing the comprehensive and extensive variety of clinical preventive health, health promotion, education, wellness, and disease management programs that already exist within the MHS that address prevalent chronic diseases and promote healthy behaviors. We remain committed to improving the overall health and wellness of the entire MHS population through a number of existing initiatives focused on prevention and encouragement of healthy behaviors.

A similar letter is being sent to the other Chairs of the congressional defense committees. If you would like a briefing or have additional questions, please do not hesitate to contact us.
Thank you for your interest in the health and well-being of our Service members, veterans, and their families.

Sincerely,

[Signature]

Jessica L. Wright
Acting

Enclosure:
As stated

cc:
The Honorable James M. Inhofe
Ranking Member
The Honorable Howard P. “Buck” McKeon
Chairman
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The enclosed report responds to section 712 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417), which required the Department of Defense to conduct a demonstration project to evaluate the efficacy of providing incentives to encourage healthy behaviors on the part of retired non-Medicare beneficiaries of the Military Health System (MHS) and their dependents. The Department implemented the demonstration, which included evaluation of participants’ self-reported health risk assessment, blood pressure, glucose, lipids, nicotine use, and weight. Beneficiaries received a monetary incentive for full compliance in the amount of $115 for single participants and $230 for those enrolled with dependents.

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Sincerely,

Jessica L. Wright
Acting

Enclosure:
As stated

cc:
The Honorable Adam Smith
Ranking Member
The Honorable Barbara A. Mikulski  
Chairwoman  
Committee on Appropriations  
United States Senate  
Washington, DC 20510

Dear Madam Chairwoman:

The enclosed report responds to section 712 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417), which required the Department of Defense to conduct a demonstration project to evaluate the efficacy of providing incentives to encourage healthy behaviors on the part of retired non-Medicare beneficiaries of the Military Health System (MHS) and their dependents. The Department implemented the demonstration, which included evaluation of participants’ self-reported health risk assessment, blood pressure, glucose, lipids, nicotine use, and weight. Beneficiaries received a monetary incentive for full compliance in the amount of $115 for single participants and $230 for those enrolled with dependents.

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Sincerely,

[Signature]

Jessica L. Wright
Acting

Enclosure:
As stated

cc:
The Honorable Richard C. Shelby
Vice Chairman
The Honorable Harold Rogers  
Chairman  
Committee on Appropriations  
U.S. House of Representatives  
Washington, DC 20515

Dear Mr. Chairman:

The enclosed report responds to section 712 of the Duncan Hunter National Defense Authorization Action for Fiscal Year 2009 (Public Law 110-417), which required the Department of Defense to conduct a demonstration project to evaluate the efficacy of providing incentives to encourage healthy behaviors on the part of retired non-Medicare beneficiaries of the Military Health System (MHS) and their dependents. The Department implemented the demonstration, which included evaluation of participants’ self-reported health risk assessment, blood pressure, glucose, lipids, nicotine use, and weight. Beneficiaries received a monetary incentive for full compliance in the amount of $115 for single participants and $230 for those enrolled with dependents.

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Sincerely,

[Signature]

Jessica L. Wright
Acting

Enclosure:
As stated

cc:
The Honorable Nita M. Lowey
Ranking Member
Chairman
Subcommittee on Personnel
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The enclosed report responds to section 712 of the Duncan Hunter National Defense Authorization Action for Fiscal Year 2009 (Public Law 110-417), which required the Department of Defense to conduct a demonstration project to evaluate the efficacy of providing incentives to encourage healthy behaviors on the part of retired non-Medicare beneficiaries of the Military Health System (MHS) and their dependents. The Department implemented the demonstration, which included evaluation of participants' self-reported health risk assessment, blood pressure, glucose, lipids, nicotine use, and weight. Beneficiaries received a monetary incentive for full compliance in the amount of $115 for single participants and $230 for those enrolled with dependents.

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Sincerely,

Jessica L. Wright
Acting

Enclosure:
As stated

cc:
Ranking Member
The Honorable Joe Wilson  
Chairman  
Subcommittee on Military Personnel  
Committee on Armed Services  
U.S. House of Representatives  
Washington, DC 20515  

Dear Mr. Chairman:

The enclosed report responds to section 712 of the Duncan Hunter National Defense Authorization Action for Fiscal Year 2009 (Public Law 110-417), which required the Department of Defense to conduct a demonstration project to evaluate the efficacy of providing incentives to encourage healthy behaviors on the part of retired non-Medicare beneficiaries of the Military Health System (MHS) and their dependents. The Department implemented the demonstration, which included evaluation of participants’ self-reported health risk assessment, blood pressure, glucose, lipids, nicotine use, and weight. Beneficiaries received a monetary incentive for full compliance in the amount of $115 for single participants and $230 for those enrolled with dependents.

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Sincerely,

[Signature]
Jessica A. Wright
Acting

Enclosure:
As stated

cc:
Ranking Member
The Honorable Richard J. Durbin
Chairman
Subcommittee on Defense
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The enclosed report responds to section 712 of the Duncan Hunter National Defense Authorization Action for Fiscal Year 2009 (Public Law 110-417), which required the Department of Defense to conduct a demonstration project to evaluate the efficacy of providing incentives to encourage healthy behaviors on the part of retired non-Medicare beneficiaries of the Military Health System (MHS) and their dependents. The Department implemented the demonstration, which included evaluation of participants’ self-reported health risk assessment, blood pressure, glucose, lipids, nicotine use, and weight. Beneficiaries received a monetary incentive for full compliance in the amount of $115 for single participants and $230 for those enrolled with dependents.

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Sincerely,

[Signature]
Jessica L. Wright
Acting

Enclosure:
As stated

cc:
The Honorable Thad Cochran
Vice Chairman
The Honorable C.W. Bill Young  
Chairman  
Subcommittee on Defense  
Committee on Appropriations  
U.S. House of Representatives  
Washington, DC 20515

Dear Mr. Chairman:

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Sincerely,

[Signature]
Jessica D. Wright
Acting

Enclosure:
As stated

cc:
The Honorable Pete Visclosky
Ranking Member
F I N A L   R E P O R T   T O   T H E   C O N G R E S S I O N A L
D E F E N S E   C O M M I T T E E S

M I L I T A R Y   H E A L T H   R I S K   M A N A G E M E N T
D E M O N S T R A T I O N   P R O J E C T

Office of the Secretary of Defense

January 2013

The estimated cost of report or study for
the Department of Defense is
approximately $3,630 for the 2013 Fiscal
Year.
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EXECUTIVE SUMMARY

Chronic diseases such as heart disease, stroke, cancer, and diabetes continue to be among the most common, costly, and preventable of all health problems in the United States (U.S.). Heart disease, cancer, and stroke account for more than 50 percent of all deaths each year (Kung et al., 2008). Diabetes continues to be the leading cause of kidney failure, non-traumatic lower-extremity amputations, and blindness among adults (Centers for Disease Control and Prevention, 2011). Moreover, obesity, a key risk factor for diabetes, remains a major health concern given that one in every three adults is obese (Ogden et al., 2007). Furthermore, findings from the National Health Interview Survey show that over the ten-year period between 1999-2000 to 2009-2010, the percentage of adults with two or more of nine chronic conditions – hypertension, heart disease, diabetes, cancer, stroke, chronic bronchitis, emphysema, current asthma, and kidney disease – increased from 16.1 to 21 percent for adults aged 45-64 and from 37.2 to 45.3 percent for those aged 65 and over (Freid et al., 2012). Incentives have been used for health care consumers as well as providers in an attempt to foster engagement in preventive care and health promotion practices.

The purpose of this demonstration was to evaluate whether providing a monetary incentive would encourage healthy behaviors on the part of retired non-Medicare eligible beneficiaries of the Military Health System (MHS) and their dependents. The enrollment among beneficiaries who met the eligibility criteria was low with only 12 percent of invited households enrolling in the demonstration, and less than half of the enrolled households fulfilled the activities required to qualify for the incentive. The results revealed that a much smaller percentage of participants in this demonstration are tobacco users compared to the national average for adult smokers. In addition, the proportion of demonstration participants with high total cholesterol levels and blood pressure measures in the hypertensive category was also below those reported for the general population. However, even for those households that completed the required screenings mandated by the demonstration, the increase in compliance in screening did not result in an improvement in participants’ HDL cholesterol, LDL cholesterol, triglycerides, glucose, weight, blood pressure, and nicotine use over the two year period. Consequently, the monetary incentive was not a significant inducement for households to participate nor was it an effective incentive to improve health status.

The results of this demonstration do not support extension of the demonstration or implementation of a permanent wellness assessment program using an incentive model. Rather, as we move from a culture of healthcare to health, it would be more cost-effective for the Department to seek to empower patients and influence behaviors, recognizing that the fundamental drivers of health occur in the life space between appointments. TRICARE beneficiaries already receive numerous preventive health services and screenings without incurring any out-of-pocket costs and should continue using the extensive and comprehensive variety of health promotion, education, disease management, and clinical preventive health services that already exist within the MHS that address prevalent chronic diseases and promote healthy behaviors.
Section 712 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417), required the Department of Defense to implement a Military Health Risk Management Demonstration Project to evaluate the efficacy of providing incentives to encourage healthy behaviors on the part of retired non-Medicare eligible beneficiaries of the Military Health System and their dependents. The demonstration was to be conducted in at least three geographic areas within the United States where TRICARE Prime is offered.

Specifically, the Health Risk Management Demonstration Project was to include the following:

- A self-reported health risk assessment
- Physiological and biometric measures, including at least
  - Blood pressure
  - Glucose
  - Lipids
  - Nicotine Use
  - Weight

The Department was also required to submit reports for each year of the demonstration project. The reports were to include the following:

- The number of beneficiaries who enrolled in the project.
- The number of enrolled beneficiaries who participated in the project.
- The incentives to encourage healthy behaviors that were provided, and the extent to which the incentives encouraged healthy behaviors.
- An assessment of the effectiveness of the demonstration project.
- Recommendations for adjustments to the demonstration project.
- The estimated costs avoided as a result of decreased health risk conditions.
- Recommendations for extending the demonstration project or implementing a permanent wellness assessment program.
- Identification of legislative authorities required to implement a permanent program.
INTRODUCTION

It is well-accepted by health care providers and researchers and supported by a wealth of existing literature, that increased preventive health screenings provides an opportunity for earlier intervention to help delay or prevent the progression of chronic diseases. It has been shown that financial incentives can enhance patient compliance with health care treatment and related activities (Guiffrida and Torgerson, 1997). However, any economic incentive must be viewed by the individual as a temporary support toward a personal goal. It is, therefore, important to create personal responsibility of the individual for his/her own health (Economic Incentives for Preventive Care, AHRQ, 2004). Simply completing health assessment activities alone does not result in behavior change sufficient to improve health unless the results of the health assessments are tied to activities designed to impact health outcomes and promote personal responsibility.

Research suggests that incentives directed at consumers of health care can effectively lead to behavior change in the short-term. However, there is insufficient evidence to support the effectiveness of incentives in promoting the long-term lifestyle changes needed for health promotion. Haveman (2010) concludes that evidence supporting the beneficial effects of incentive programs has been slow to emerge due to the ongoing need for research on how behaviors have changed because of the incentive. There continues to be a dearth of information on whether there is extinction of behaviors after the removal of incentives. Debate continues as to whether paying people to engage in preventive care behaviors sets up an expectation for future payments and, as a result, lowers participation rates when the incentive is eliminated.

This report provides the results of the Military Health Risk Management Demonstration Project, and addresses the impact of providing incentives to beneficiaries on the overall health status by reviewing results of the self-reported health risk assessment, and participants’ blood pressure, glucose, lipids, nicotine use, and weight. The report also delineates some of the health promotion, disease management, and clinical preventive services currently available within the MHS that address prevalent chronic medical diseases and promote healthy behaviors.
KEY ELEMENTS

Comprehensive Structure and Demonstration Project Service Areas

A comprehensive Military Health Risk Management Demonstration project was designed to support the requirements of Section 712 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009. The project was approved by the TRICARE Management Activity (TMA) Human Research Protection Office to ensure that the demonstration was conducted in an ethical manner that protected the rights and welfare of those participating.

Section 712 directed that the demonstration be conducted in at least three geographic areas within the United States (U.S.) where TRICARE Prime is offered. The three demonstration project service areas selected were the National Naval Medical Center (NNMC) (now called the Walter Reed National Military Medical Center), Bethesda, Maryland; and the Designated Provider programs at Martin’s Point Health Care, Portland, Maine; and CHRISTUSUS Health, Houston, Texas.

Program Enrollment and Participation

Invitations were sent to 9,000 retired, non-Medicare eligible MHS beneficiaries enrolled in TRICARE Prime in the three demonstration project service areas inviting them and their dependents to participate. Only 12 percent (1,060 households) successfully enrolled. The remaining 88 percent either did not respond to the invitation or failed to submit the required documentation for enrollment which included a consent form to participate and a Health Insurance Portability and Accountability Act (HIPAA) form authorizing access to their protected health information.

At the conclusion of the demonstration, only 497 households or 6 percent of the households invited to participate had successfully completed the required health services to quality for the incentive payment. Thus, the monetary incentive does not appear to be an inducement for participation or completion of the health screening mandated by the demonstration. Of these 497 compliant households, 116 were beneficiary households with no dependents and 381 households with dependents.

Figure 1 is a graphical depiction of participation progression from the initial 9,000 households invited to participate in the demonstration project to the final 497 households that qualified for an incentive.
Incentives Provided and the Impact on Encouraging Healthy Behaviors

In order to qualify for the incentive, all members of the household enrolled in the project were required to complete the self-reported health risk assessment and obtain laboratory testing for lipids and glucose. Participants’ blood pressure, nicotine use, weight, glucose and lipid measures were obtained from clinical data and/or the self-reported health risk assessment. Single beneficiaries were awarded $115, and those enrolled with dependents received $230 per household for compliance with the demonstration requirements. The amount of the incentive was equal to half of the TRICARE Prime annual enrollment fee at the time the participants were invited to participate.
The demonstration evaluated the rates of completion for the self-reported health risk assessments, and laboratory testing for glucose and lipids. Participants’ nicotine use, measures for weight and body mass screening, blood pressure, glucose and lipids, and responses to the self-reported health risk assessments were also assessed. A comparison of data from 2010 (baseline year without the incentive) and 2011 (observation period with the incentive) was assessed to determine if there were any improvements in these measures.

According to the self-reported health risk assessment, high cholesterol (51 percent) and hypertension (34 percent) were the leading chronic conditions among the surveyed population. The other chronic health conditions included diabetes, asthma, and headache with 9 percent each. According to the self-reported health risk assessment data, nearly 30 percent of respondents reported no regular exercise and 67 percent do not eat the recommended daily allowance of fruits and vegetables.

Weight and Body Mass Index

Obesity is associated with increased risk of morbidity and mortality. These include increased risk of coronary disease, hypertension, and stroke, type-2 diabetes, several types of cancer, and certain musculoskeletal disorders (U.S. Preventive Services Task Force, July 2012).

According to the clinical data, 28 percent of the demonstration participants were obese, 35 percent were overweight, and 37 percent were a normal weight. Among demonstration participants, females were more likely than males to be in the normal weight range, and males were more likely to be overweight. According to the clinical data, 52 percent of females were in the normal weight range compared to 22 percent of males, and 34 percent of males were obese compared to 22 percent of females.

Because provider site service areas differ geographically, the data were evaluated to determine whether there are geographic differences in reports of obesity. Across the demonstration project service areas, approximately 30 percent were obese regardless of geographic location.

A comparison of 2010 (baseline year without the incentive) and 2011 (observation period with the incentive) data indicated that body mass index classification did not change over the two year period.

Nicotine Use

The CDC reports that smoking is the leading preventable cause of death in the U.S., causing nearly one in five deaths annually (CDC, July 2012). Smoking cigarettes is associated with increased risk of coronary heart disease, lung disease, stroke, and cancer.
Both clinical sources and the self-reported questionnaire responses demonstrated that tobacco was used by a relatively small fraction of participants. Only four to five percent of demonstration participants used tobacco. These data suggest much smaller percentages of tobacco users than the 19 percent national average for adult smokers (CDC, July 2010).

A comparison of 2010 (baseline year without the incentive) and 2011 (observation period with the incentive) data indicated that the participants’ tobacco use did not change over the two year period.

**Hypertension**

Uncontrolled hypertension greatly increases the risk of heart disease and stroke, which are the first and third leading causes, respectively, of death in the U.S. (CDC 2012). According to the clinical data, 12 percent of participants had blood pressure measures in the hypertensive category, 35 percent in the pre-hypertensive category, and 53 percent had normal blood pressure measures. The percentage of demonstration participants with hypertension is lower than the national prevalence of hypertension, reported to be about one in three for U.S. adults (CDC, July 2012).

The highest percentage of individuals with hypertension was seen in the 60 to 65 year old age category. The clinical data revealed that hypertension was present in 17 percent of participants 60 to 65 years of age compared to 10 percent for the 50 to 59 years of age category, and 9 percent for those younger than 50 years of age. This was consistent with the CDC findings that hypertension is associated with older age groups (CDC, July 2012).

For the self-reported health risk assessment questionnaires, responses were examined about whether the respondent reported being told that they had hypertension and, for those that were, whether they were taking medication for this condition. Then, blood pressure readings were examined for these individuals reporting a diagnosis of hypertension. Most persons reporting a hypertension diagnosis appeared to have blood pressure readings within normal limits, which likely indicate adequate treatment with medication.

A comparison of 2010 (baseline year without the incentive) and 2011 (observation period with the incentive) data indicated that blood pressure measures did not improve over the two year period for those in the pre-hypertensive and hypertensive category.

**Lipids**

Dyslipidemias are among the major known risk factors for development of coronary heart disease. Low levels of high density lipoprotein-cholesterol (HDL cholesterol) and high levels of total cholesterol, low density lipoprotein-cholesterol (LDL cholesterol), and...
cholesterol), and triglycerides are important risk factors for coronary heart disease and cardiovascular disease (U. S. Preventive Services Task Force, July 2012).

**Total Cholesterol**

According to the clinical data, seven percent of demonstration participants had high total cholesterol measures, 31 percent had borderline high measures, and 62 percent had desirable total cholesterol measures. The proportion of participants found to have total cholesterol values in the high category were far below those reported for the general U. S. population of 16 percent for high cholesterol (CDC, July 2012).

A greater proportion of female demonstration participants than men suffered from borderline high or high cholesterol and a greater proportion of males than females had desirable levels of total cholesterol. According to the clinical data, 10 percent of women compared to five percent of men had high cholesterol; 34 percent of females compared to 27 percent of males had borderline high cholesterol; and 56 percent of females compared to 68 percent of males had desirable levels of total cholesterol. This is consistent with the CDC findings that more women than men suffer from borderline or high cholesterol levels (CDC, July 2012).

A comparison of 2010 and 2011 data revealed some improvement in total cholesterol levels between the two year period. There was an increase in the percentage of those in the desirable range for total cholesterol in 2011 compared to 2010, and a decrease in the percentage of those in the high range. For participants who obtained cholesterol testing for both years, 62 percent had total cholesterol measures in the desirable range in 2011 compared to 58 percent in 2010, and six percent had high total cholesterol levels in 2011 compared with 10 percent in 2010.

The self-reported health risk assessment included questions asking respondents whether they have been told that they have high cholesterol and if so, whether they were on medication for the condition. The questionnaire data were compared to reported laboratory results for those who completed the questionnaire. For those indicating they are being treated with medication, nearly 73 percent of these individuals had cholesterol levels in the desirable range.

**HDL Cholesterol, LDH Cholesterol and Triglycerides**

Among demonstration participants, 35 percent were in the optimal HDL category, 51 percent were in the good HDL category, and 15 percent were in the low HDL cholesterol category.

High and very high LDL cholesterol levels were observed among few participants who obtained this testing. Only one percent had very high, four percent had high, 21 percent had borderline high LDL cholesterol compared to 33 percent with near optimal and 41 percent with optional LDH cholesterol measures.
In addition, the vast majority of demonstration participants had triglyceride levels in the optimal range (75 percent).

A comparison of 2010 (baseline year without the incentive) and 2011 (observation period with the incentive) data for participants with lipid measures indicated that HDL cholesterol, LDL cholesterol, and triglycerides did not change over the two year period.

**Glucose**

The vast majority of participants had glucose measures within the normal range. Among the demonstration participants, 9 percent were diabetic, 30 percent were pre-diabetic, and 61 percent had normal glucose measures. These findings were consistent with the CDC finding that eight percent of the U.S. population is affected by (diagnosed and undiagnosed) diabetes (CDC, July 2012).

A comparison of 2010 (baseline year without the incentive) and 2011 (observation period with the incentive) data for participants with glucose measures indicated that glucose levels did not change over the two year period.

**Assessment of the Demonstration Effectiveness and Recommendations for Adjustments**

Among the 1,053 households who enrolled and continued to participate in the demonstration, 47 percent qualified for the incentive while 53 percent of households failed to fulfill the activities required for the incentive. Out of the 9,000 eligible households invited to participate in this demonstration, only 497 households or six percent fulfilled the requirements to qualify for the incentive. Thus the monetary incentive did not appear to be a significant inducement for participation or completion of the screenings mandated by the demonstration, which raises speculation about the overall value and effectiveness of this type of monetary incentive program for this particular beneficiary population.

When comparing the change in compliance from 2010 (baseline year without the incentive) to 2011 (observation period with the incentive), there was a statistically significant improvement for completion of the self-reported health risk assessment, and laboratory testing for glucose and lipids. There are several possible explanations that might explain this increase in compliance. These include the need to obtain these tests for an ongoing health condition, the physician ordering the tests for other reasons, the individual was due for a routine multi-year screening during the observation period, or the result was due to receiving an incentive payment. It is not possible to determine precisely which explanation(s) are accountable for the results observed, but it is unlikely that they can be explained solely on the receipt of a monetary incentive for completing the requirements. Despite the increased compliance for completion of the self-reported health risk assessment and laboratory testing for glucose and lipids, participants’ measures for HDL cholesterol, LDL cholesterol, triglycerides, glucose, weight, blood pressure, and nicotine use did not improve over the two year period.
It is unfortunate that we are unable to fully explain the reasons behind the low enrollment among beneficiaries who met the eligibility criteria for participation in this demonstration. It does, however, underscore the reality that lifestyle changes are difficult to undertake and do require a significant commitment and time to effect. Short-term interventions such as utilization of a modest monetary incentive may be insufficient to incentivize patients to sustain long-term changes that will lead to a healthier lifestyle and sustained improvements in health.

**Estimated Costs Avoided**

It is well-accepted by health care providers and researchers, and supported by a wealth of existing literature that preventive health screenings provide an opportunity for earlier intervention to help delay or prevent the progression of chronic diseases. A synthesis of literature suggests that three targeted health screenings from the demonstration, for cholesterol, glucose, and hypertension (blood pressure), are cost effective (Goodell, Cohen, and Neumann, 2009).

Cost savings as a result of preventive health services generally occur over a number of years after the intervention when, for example, diabetes is prevented or blood pressure is well-controlled as result of earlier intervention. Decreased health risk conditions are believed to result in a decrease in morbidity and mortality as well as reducing health costs over a lifetime. Unfortunately, notwithstanding the fact the screenings increased in participants from 2010 to 2011 (607 additional cholesterol screenings and 595 new blood glucose screenings (representing 31 percent increases) and 76 additional blood pressure screenings (reflecting a four percent increase)), the demonstration period did not include enough time to allow for changes in health status and resultant health care cost avoidances to occur. Specifically, despite the increased compliance for completion of the self-reported health risk assessments and laboratory testing for glucose and lipids between 2010 and 2011, participants’ HDL cholesterol, LDL cholesterol, triglycerides, glucose, weight, blood pressure, and nicotine use did not improve over the two year period. Consequently, it is not possible to show that there were specific estimated costs avoided as a result of this demonstration.

**Recommendations for Extending the Demonstration Project, Implementation and Identification of Legislative Authorities for a Permanent Wellness Assessment Program**

The results of this project do not support extension of the demonstration or implementation of a permanent wellness assessment program using a monetary incentive model.

As we move from a culture of healthcare to health, it would likely be more cost-effective for the Department to seek to empower patients and influence behaviors, recognizing that the fundamental drivers of health occur in the life space between appointments. TRICARE beneficiaries already have access to an extensive and comprehensive variety of health promotion, education, disease management, and clinical
preventive health services exist within the MHS that address chronic diseases and promote healthy behaviors. These include but are not limited to:

- **Clinical preventive health services.** TRICARE beneficiaries receive numerous clinical preventive health services and screenings without incurring any out-of-pocket costs.

- **Population health initiatives.** Population health promotes awareness, education, prevention, and intervention to improve health. This model connects medical interventions to individual Military Treatment Facilities, worksites, and community-based wellness and prevention activities to improve overall health, reduce morbidity and premature mortality. Some examples of current population health campaigns include tobacco cessation, obesity prevention and management, and alcohol reduction marketing and education campaigns.

- **Comprehensive disease management.** The disease management program is targeted at achieving positive outcomes for beneficiaries with chronic diseases such as asthma, congestive heart failure, chronic obstructive pulmonary disease, anxiety/depression, cancer, and diabetes. The disease management’s focus is intended to control and slow the progression of chronic diseases.

- **Patient Centered Medical Home (PCMH).** The MHS Direct Care system continues to implement a PCMH model of care to improve health care quality, medical readiness, access to care, patient satisfaction, and to lower per capita growth in costs. One of the core principles of the PCMH is that patients should have a consistent relationship with a primary care manager (PCM); the PCM, supported by a team, is accountable for integrating all primary, specialty, and ancillary care for the patient.

Based on the results of the demonstrations and the extensive and comprehensive variety of health promotion, education, disease management, and clinical preventive health services that already exist within the MHS, we do not recommend additional legislative authorities to implement a permanent program using an incentive model.

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