

Defense Health Agency ADMINISTRATIVE INSTRUCTION

NUMBER 3000.01 August 3, 2020

DAD-SPFI

SUBJECT: Analytics and Evaluation (A&E)

References: See Enclosure 1.

1. <u>PURPOSE</u>. This Defense Health Agency-Administrative Instruction (DHA-AI), based on the authority of References (a) and (b), and in accordance with the guidance of References (c) through (o), establishes the Defense Health Agency's (DHA) procedures to:

a. Enable a central A&E Division to act as a liaison between functional and technical stakeholders to lead, coordinate, and manage the release of data products from inceptions all the way to productions. As such, A&E shall ensure a functional-centric process that accurately represents the functional stakeholders' requirement and Subject Matter Experts' (SMEs') domain knowledge throughout the data product development and deployment process.

b. Coordinate and partner with all relevant directorates and divisions to develop an ecosystem that enables data to be available, accessible, trustworthy, and actionable to all stakeholders. Relevant directorates and divisions would include, but not limited to, Functional Stakeholders, Subject Matter Experts, Research & Development, Policy Makers, Information Operations, Enterprise Architecture Division, and Capability Management Division.

c. Assign responsibilities to capture, organize, and disseminate stakeholders' data requirements, business rules, data definitions and meanings, and algorithms that enable quality data products. Data products include data management, analytics (descriptive, predictive, and prescriptive), measurement, and reporting.

d. Describe key enablers necessary to ensure the A&E Division assumes the responsibility as well as the empowerment to lead and coordinate a modern DHA data-driven organization. For the purpose of the DHA-AI, "data-driven" is used throughout to mean the approaches, methods, techniques, and processes to collect, organize, enrich, and distribute data that enjoys the trustworthiness of all stakeholders and provide insightful information to our decision makers.

e. Empower DHA's functional communities and stakeholders by removing data barriers for evidence-based analysis. Removing data barriers means to provide the right data sources on the right time, to the right users, to answer the right question, and it is a trustworthy for evidence-based decisions.

2. <u>APPLICABILITY</u>. This DHA-AI applies to the DHA components including DHA Headquarters (HQ), markets, and military medical treatment facilities (MTFs).

3. <u>POLICY IMPLEMENTATION</u>. It is DHA's instruction, pursuant to References (d) through (j), the A&E Division shall be the <u>centralized</u> and <u>specialized</u> division to support functional leads and <u>SMEs</u> to design, develop, manage, and standardized-the-functional-data management, analytics, measurement, and reporting initiatives and programs. It is imperative a DHA data-driven organization must have a <u>centralized</u> and <u>specialized</u> division. The central A&E Division shall work with the functional community to align data requirements and technologies to the mission, goals, and strategy of the DHA.

4. <u>RESPONSIBILITIES</u>. See Enclosure 2.

5. <u>PROCEDURES</u>. See Enclosure 3.

6. <u>RELEASABILITY</u>. **Cleared for public release**. This DHA-AI is available on the Internet from the Health.mil site at: <u>www.health.mil/DHAPublications</u>.

- 7. EFFECTIVE DATE. This DHA-AI:
 - a. Is effective upon signature.

b. Will expire 10 years from the date of signature if it has not been reissued or cancelled before this date in accordance with Reference (c).

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RONALD J. PLACE LTG, MC, USA Director

DHA-AI 3000.0 August 3, 20201

Enclosures

- 1. References
- Responsibilities
 Procedures

Glossary

ENCLOSURE 1

REFERENCES

- (a) DoD Directive 5136.01, "Assistant Secretary of Defense for Health Affairs (ASD[HA])," September 30, 2013, as amended
- (b) DoD Directive 5136.13, "Defense Health Agency (DHA)," September 30, 2013
- (c) DHA-Procedural Instruction 5025.01, "Publication System," August 24, 2018
- (d) DoD Chief Information Officer, "Department of Defense (DoD) Information Technology (IT) Portfolio Repository (DITPR) Guidance," May 2018
- (e) DoD Instruction 8500.01, "Cybersecurity," March 14, 2014
- (f) Defense Chief Management Office Memorandum, "Defense Business Systems Investment Management Process Guidance," June 26, 2018¹
- (g) DoD Financial Management Regulation 7000.14-R, June 2011, as amended
- (h) United States Code, Title 40, Section 1401, Subtitle III, (formerly Clinger-Cohen Act of 1996), February 10, 1996
- (i) DoD Instruction 5000.02, "Operation of the Defense Acquisition System," January 7, 2015, as amended
- (j) United States Code, Title 10, Section 2222(i)
- (k) DoD Directive 8000.01, "Management of the Department of Defense Information Enterprise (DoD IE)," March 17, 2016, as amended
- (1) DoD Instruction 8510.01, "Risk Management Framework (RMF) for DoD Information Technology (IT)," March 12, 2014, as amended
- (m) Committee on National Security Systems Instructions No. 4009, "Committee on National Security Systems (CNSS) Glossary," April 6, 2015
- (n) DHA Memorandum, "Analytics and Evaluation Reform" March 8, 2019²
- Memorandum for Heads of Executive Departments and Agencies M-19-23,
 "Implementation of the Foundations for Evidence-Based Policymaking," July 10, 2019³

This reference can be found at: ¹https://info.health.mil/staff/analytics/Documents/

² This reference can be found at: https://info.health.mil/staff/analytics/Documents/

³ This reference can be found at: https://info.health.mil/staff/analytics/Documents/

ENCLOSURE 2

RESPONSIBILITIES

1. DIRECTOR, DHA. The Director, DHA, must:

a. Exercise authority, direction, and control of the decisions made in the DHA, and delegate authority to subordinate leaders as appropriate.

b. Direct appropriate management models to effectively and efficiently assume responsibility for the management and administration of the DHA, Markets, MTFs, assigned Military Health System (MHS) functions, and DHA elements (e.g., all other subordinate organizations in addition to MTFs).

c. Approve corporate decisions where organization success hinges on big, high-value choices whether strategic or operational regarding DHA objectives, budget, policy, and human resources.

2. <u>DEPUTY DIRECTOR, DHA</u>. The Deputy Director, DHA, must:

a. Identify measures for performance and effectiveness to monitor and evaluate the A&E Division.

b. Oversee the performance of the A&E Division and monitor the progress of a data-driven organization.

c. As delegated, make decisions on behalf of the Director, DHA.

3. ASSISTANT DIRECTOR, MANAGEMENT (AD-M). The AD-M must:

a. As delegated by the Director, DHA, determine, codify, and memorialize decision-making authorities of Deputy Assistant Directors (DADs) and establish guidelines for DADs to escalate decisions to the AD-M.

b. Provide strategic guidance and prioritization for data management, analytics, measurement and reporting, and ensure data and information are managed as an asset.

c. Monitor the processes of managing data as an asset.

4. <u>DAD, STRATEGY, PLANNING, AND FUNCTIONAL INTEGRATION</u>. The DAD-Strategy, Planning, and Functional Integration must:

a. Provide the AD-M a progress report regarding the deliverables of a high-reliability datadriven healthcare delivery organization.

b. Provide oversight, direction, and monitor A&E Division functions.

c. Manage, monitor, and implement this DHA-AI.

d. Provide the AD-M a risk status report for progress in maturing the A&E Division.

e. Provide support to DHA, ADs/DADs, Directors, MTFs, Senior Market Managers, and Small Market/Stand-Alone MTF Office (SSO) Directors through oversight and direction of A&E Division teams.

f. Set up and manage governance bodies and groups including, but not limited to, data management boards, stakeholder forums, and communities of practice.

g. Realign and unify analytics and evaluation work streams under a standardized process to efficiently distribute work, prioritize the organization's needs, and evaluate the centralization/rationalization and evaluation of contracts.

5. DAD, INFORMATION OPERATIONS (IOs). The DAD-IOs must:

a. Manage and optimize the infrastructures that hosts data to enable secure and available data for analytics.

b. Ensure new technologies are aligned with the functional and data requirements coordinated by A&E, before acquiring and implementing any analytics, registries, and reporting solutions and any data related technologies (see Glossary, Part II for Definitions).

c. Not to accept any data solution deployment, before A&E performs market research, requirements gathering, and user experience analysis that are submitted to the MHS Request Submissions Portal. (See the following link to locate the portal https://info.health.mil/SitePages/mhsCAR_submit.aspx).

d. Provide technical support to the A&E Division throughout the data product cycle including hardware and software configuration, network security and access, installation, technology performance, and optimization.

6. <u>DADs</u>. The DADs or their designated representatives must:

a. Ensure requirements are submitted into the MHS Request Submissions Portal for new or existing data, analytics, measures, or reporting requirements. See Enclosure 3.

b. Work with the A&E Division to plan, design, develop, and release data products, analytics, and registries to meet the objective of the Quadruple Aim.

c. Sponsor initiatives to enable data (as an asset) to contribute to DHA's journey to becoming a high-reliability organization, aligning with the fundamental tenants of the Quadruple Aim.

d. Dedicate resources to manage data as an asset, such as providing SMEs and assigning functional stewards to monitor the quality of data throughout the data production cycle.

7. <u>CHIEF, A&E DIVISION</u>. The Chief, A&E Division must:

a. As delegated by the respective DAD, evaluate and approve tactical decisions.

b. Oversee the central data management, analytics, measurement, and reporting for both business and clinical domains.

c. Support DADs in identification of MHS Request Submissions Portal Triage Team Representative(s), as required.

d. Provide recommendations and escalate decisions outside of decisional authority to the appropriate DAD.

e. Develop a division budget to acquire resources including cloud analytics technologies, tools, training, and any necessary infrastructure to perform the job of a data-driven capability (see Glossary, Part II for Definitions).

f. Manage and enhance a data-driven capability through the alignment process of functional data requirements with data storage and analytics technologies.

g. Design, develop, manage, maintain, and release standard data-driven initiatives, tasks, projects and activities.

h. Design, develop, manage, maintain, and release standard and tested analytics models, machine learning algorithms, and business rules on behalf of the functional communities and stakeholders.

i. Manage, design, and develop data dictionaries for clarity and enhancement of data and information.

j. Manage and monitor the data quality across DHA systems. For example, manage the processes that ensure the integrity of clinical terminology used throughout the data production process (e.g., data interpretation, data collection, data entry, and data analysis).

k. Serve as the enterprise central hub for leading the coordination of data related tasks, requirements, and release of quality data content.

l. Manage and monitor the data science specifications of data interoperability and data exchange and data access privileges using roles-based management principles.

m. Identify risks, gaps, and deficiencies in managing data and analytics across the enterprise.

n. Provide descriptive, diagnostic, predictive, prescriptive, and deep learning analytics in support of Quadruple Aim goals.

8. CHIEF, ANALYTICS BRANCH. The Chief, Analytics Branch, must:

a. Assist enterprise stakeholders and external customers with new and modified requirements and perform quantitative and qualitative program evaluations on the initiatives and models.

b. Oversee cross-functional analysis of performance indicators to assess progress toward desired end state, identify drivers of performance, and implement policy to enable/sustain improvements.

c. Identify quality issues in the analytics products that are caused by the level of the data quality in the sources system.

9. <u>CHIEF, MEASURES AND REPORTING BRANCH</u>. The Chief, Measures and Reporting Branch, must:

a. Collect, organize, publish, and maintain functional measures approved by functional stakeholders.

b. Develop and populate dashboards to satisfy functional measures and metrics.

c. Review and maintain up-to-date measure and metric specifications.

10. CHIEF, DATA MANAGEMENT BRANCH. The Chief, Data Management Branch, must:

a. Serve as the single enterprise platform for data and the aggregation, standardization, and management of bulk data at the lower platforms of analysis. The Chief, Data Management, manages access to data repositories and maintains the MHS Authoritative Data Source List.

b. Develop data libraries with definitions and data standards to empower functional stewards.

c. Plan and coordinate with branch chiefs for data standards, data quality, and data retirements.

11. <u>SENIOR MARKET MANAGERS AND SSO DIRECTORS</u>. Senior Market Mangers and SSO Directors must:

a. Oversee and provide direction and provision of analytical and reporting support to MTFs in their execution of the Quadruple Aim.

b. Utilize A&E Division standardized analytics and dashboards (e.g., MHS Dashboard) to access performance measures for the purpose of conducting regional analysis and reporting implications of performance to the A&E Division and DHA HQ.

c. Estimate the quantity of analytics, reporting, and data support required to enable the market or MTF to meet the demands of market operations. Ensure analytics, reporting, and data requirements are submitted into the designated MHS Request Submissions Portal (See Enclosure 3) with sufficient lead time to allow for development and delivery of analytics, reporting, and data support.

d. Meet the healthcare delivery performance objectives of the Quadruple Aim established by DHA HQ.

e. Utilize DHA HQ approved dashboards (e.g., MHS Dashboard) for access to performance measures for purposes of conducting regional analysis.

f. Report implications of performance to DHA HQ.

g. Assist the MTF to develop and communicate requirements for analytics requests, proposed revisions of dashboards, and data requests. If additional support is required to develop or communicate requirements, coordinate with DHA HQ.

12. DIRECTORS, MTF. Directors, MTF, must:

a. Develop and implement leadership plans such that MTF personnel deliver healthcare in a manner that meets or exceeds standards of MHS core measures in accordance with specific goals established by the Market.

b. Utilize measures on DHA approved dashboards, including the MHS Dashboard, to assess MTF performance of the healthcare delivery mission.

c. Report to the Market Lead on activities and status of measures corresponding to marketcoordinated action plans including those action plans that are part of an active Quadruple Aim Performance Plan.

ENCLOSURE 3

PROCEDURES

This DHA-AI describes key procedures necessary to ensure the A&E Division assumes the responsibility as well as empowerment to lead a modern DHA data-driven capability. Becoming a data-driven organization involves integrating data into organization business strategy, process, and decision making.

1. <u>PROCESS</u>. All enterprise data management, analytics, measurement and reporting requests, requirements, modifications, enhancements, and questions shall be submitted to the MHS Request Submissions Portal (<u>https://info.health.mil/SitePages/mhsCAR_submit.aspx</u>) for performing alignment processes. Such alignment processes must take place prior to any production considerations by the IO Directorate. The A&E Division shall provide and monitor the production of the analytics and data management products.

2. <u>FUNCTIONAL AND TECHNOLOGY ALIGNMENT</u>. The MHS Request Submissions Portal is the first step to perform the alignment processes to ensure technology capabilities are aligned with functional capabilities (as indicated under the "Procedure"). Such alignment processes include but are not limited to registries, databases, data stores, data warehouses, data science, data integration, data innovation, artificial intelligence, robotic process automation, big data, cloud analytics, data interoperability, measurement and reporting, and meta data.

3. <u>APPROVAL</u>. The A&E Division shall coordinate with SMEs, functional and technical stakeholders to align, standardize, and approve data products before releasing it to the enterprise.

4. <u>PROCEDURE</u>. A record of decisions made in regard to resource and non-resource requests can be found by accessing the MHS Request Submissions Portal at <u>https://info.health.mil/SitePages/mhsCAR_submit.aspx</u> for military and civilian staff (not open to contractors). Following a data request submission, a simple seven step process is initiated within the MHS Request Submissions Portal (see Figure 1: Product Process Flow).

a. The customer enters the request in the portal. A GOV-ID is assigned when the process is completed. A GOV-ID is a system generated number to assign unique identity to the requirement submitted to the MHS Submission Portal.

b. The triage team receives the GOV ID and completes an Analytics and Evaluation Triage Team (A&E TT) checklist, which records information about the validity, scope, and prioritization of the request, and whether resourcing requirements were assessed. When all items on the checklist are complete, the lead branch (i.e., program management, analytics, measures and reporting, or data management) is selected. c. The branch lead selects an analyst to be paired with the SME/Functional Stakeholder. A Community of Practice (COP) Team Lead checklist is completed, which records information about COP scope, suspense date, and personnel assigned.

d. The analyst and the SME/Functional Stakeholder work on the report. An Analyst checklist is completed, which records whether sufficient information was provided to complete the requirements.

e. A blind review occurs on the completed product. A Triage Team Member Quality Control checklist is completed, which records information about whether the task went through appropriate quality control during development, and whether it appears to meet the customer's requirements.

f. The report/task is sent to the triage team who completes a Release Authority checklist, which records whether the artifacts went through the A&E Division process including blind quality control, and whether all risks covered by the preceding checklists have been adequately addressed.



g. The report/task is sent to the customer via the portal, along with a customer survey.

5. <u>PRIORITIZATION</u>. A&E uses methodical and systematic process to prioritize Analysis and data requirements based upon the level of urgency, importance and complexity. Prioritization is primarily used with urgency and importance in setting a customer's expectations, while complexity is used internally for performance evaluations and managing resource constraints.

Requests Prioritization is either Expedited or Normal and managed in following basic categories:

a. Expedited (Urgent) - A&E has defined a process for expediting requests. An Expedited Request is defined as a request for A&E services provided to requester with the highest priority to be completed as soon as A&E can produce the product. A&E further defines an "Expedited

Request" as any data related request to patient safety, current national, or DoD priorities. It may also include a direct request or sponsorship of a Flag Officer, Senior Executive Service, Executive branch, or legislative branch. Stakeholders can reach directly to the A&E Division Chief and his designee to communicate an "Expedited Request" however the chief or designee will determine whether the request meets the criteria set for prioritizing the request as Expedited. The Division Chief, COP Leads and their designee will submit an Expedited Request to the MHS Request Submissions Portal on behalf of the requester if the request is identified as Expedited.

b. Normal, Medium, High (Routine) - Normal requests can anticipate an expected delivery date within the customers stated requirement. These requests are further prioritized to Medium and High if those requests are less than 30 days for an expected delivery data.

c. Recurring reports and data requests (Repeating) are defined as any report or request on data produced by the A&E on a regular recurring basis. They are often created by A&E and distributed to stakeholders at a daily, weekly, monthly, quarterly or on annual interval. They refer to ongoing activity and display metrics deemed necessary for the organization and its stakeholders.

d. Customers are provided visibility of their request throughout the delivery process and will receive both system and Analyst generated e-mails.

e. A system generated survey is sent out 3 days after the completion of the request in order to support continuous process improvement initiatives by the A&E team.

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

AD-M	Assistant Director, Management
A&E	Analytics and Evaluation
COP	Community of Practice
DAD	Deputy Assistant Director
DHA	Defense Health Agency
DHA-AI	Defense Health Agency-Administrative Instruction
HQ	Headquarters
ΙΟ	Information Operation
MHS	Military Health System
MTF	military medical treatment facility
SME	Subject Matter Expert
SSO	Small Market/Stand-Alone MTF Office

PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this DHA-AI.

<u>alignment process</u>. Alignment is a process in which an organization uses rigorous discipline and methodology to analyze, design, and develop functional capabilities before acquiring and implementing new or existing technology. It is also imperative functional stakeholders are involved at the beginning and throughout the alignment process.

<u>analyze data</u>: The A&E Division provides the full spectrum of analytic capability. Analysis uses traditional technical techniques; however, analytics involves big data and computer software tools to achieve solutions.

<u>data-driven capabilities</u>. Means the methods, approaches, techniques, and processes to collect, organize, enrich, and publish data that is trusted and used for evidence-based decision making. Therefore data-driven capabilities require a centralized and specialized group to manage and monitor data management, analytics, measurements and reporting.

<u>data-driven enterprise</u>. Means the methods, approaches, techniques, and processes to collect, organize, enrich, and distribute data that is trusted and used for evidence-based decision making.

<u>data products</u>. Valuable data products require a collective and global effort across the DHA to analyze, design, develop, and deploy a variety of data products. Data products come in a variety of capabilities, such as advance analytics, artificial intelligence, machine learning, robotic process automation, dashboard, registry, data repository, and data quality report. These capabilities require the coordination and centralization of A&E to orchestrate the multidisciplines across the DHA that come from technical, functional, legal, educational, and research communities.

<u>descriptive analytics</u>. Examination of data or content, usually performed manually, to answer the question "What happened?" (or What is happening?), characterized by traditional business intelligence and visualizations, such as pie charts, bar charts, line graphs, tables, or generated narratives.

<u>diagnostic analytics</u>. Advanced analytics that examines data or content to answer the question "Why did it happen?" and is characterized by techniques such as drill-down, data discovery, data mining, and correlations.

<u>manage (A&E) knowledge</u>: The A&E Division manages analysts and SMEs, and capture and reuse of (A&E) knowledge based on 33 functions based on the input of 150 of the best Knowledge Architecture firms in the United States.

<u>manage A&E operations</u>: Multiple contracts support capabilities in (1) Analytics, (2) Data Management, and (3) Measurement and Reporting. Program Management supports the acquisition lifecycle, data exchange and data interoperability, policy, and strategy.

manage data: The A&E Division manages current state and future state data so that legacy and future systems can be analyzed by the analysts with high confidence.

manage measures and reports: The A&E Division manages the lifecycle of Enterprise Measures, ad-hoc, and automated reports.

<u>predictive analytics</u>. The most advanced form of analytics. The associated methodologies examine data or content to answer the question "What is going to happen?" or more precisely, "What is likely to happen?", and is characterized by techniques such as regression analysis, forecasting, multivariate statistics, pattern matching, predictive modeling, and forecasting. Approach to data mining with these four attributes:

a. An emphasis on prediction (rather than description, classification or clustering).

b. Rapid analysis measured in hours or days (rather than the stereotypical months of traditional data mining).

c. An emphasis on the business relevance of the resulting insights (the "So What?" No ivory tower analyses).

d. An emphasis on ease of use, thus making the tools accessible to business users.

prescriptive analytics. Advanced analytics that examines data or content to answer the question "What should be done?" or "What can we do to make <X> happen?", and is characterized by techniques such as graph analysis, simulation, complex event processing, neural networks, recommendation engines, heuristics, and machine learning.

<u>Quadruple Aim</u>. Represents the MHS leadership's commitment to better care, better health, readiness, and lower cost.