

HEALTH READINESS FOR LIFE: Creating an Interagency Workflow Culture

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Welcome to Session 228



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Conflict of Interest

Thomas Cantilina, MD

Jacob Aaronson, DO, MS

Dr. Cantilina and Dr. Aaronson have no real or apparent conflicts of interest to report.

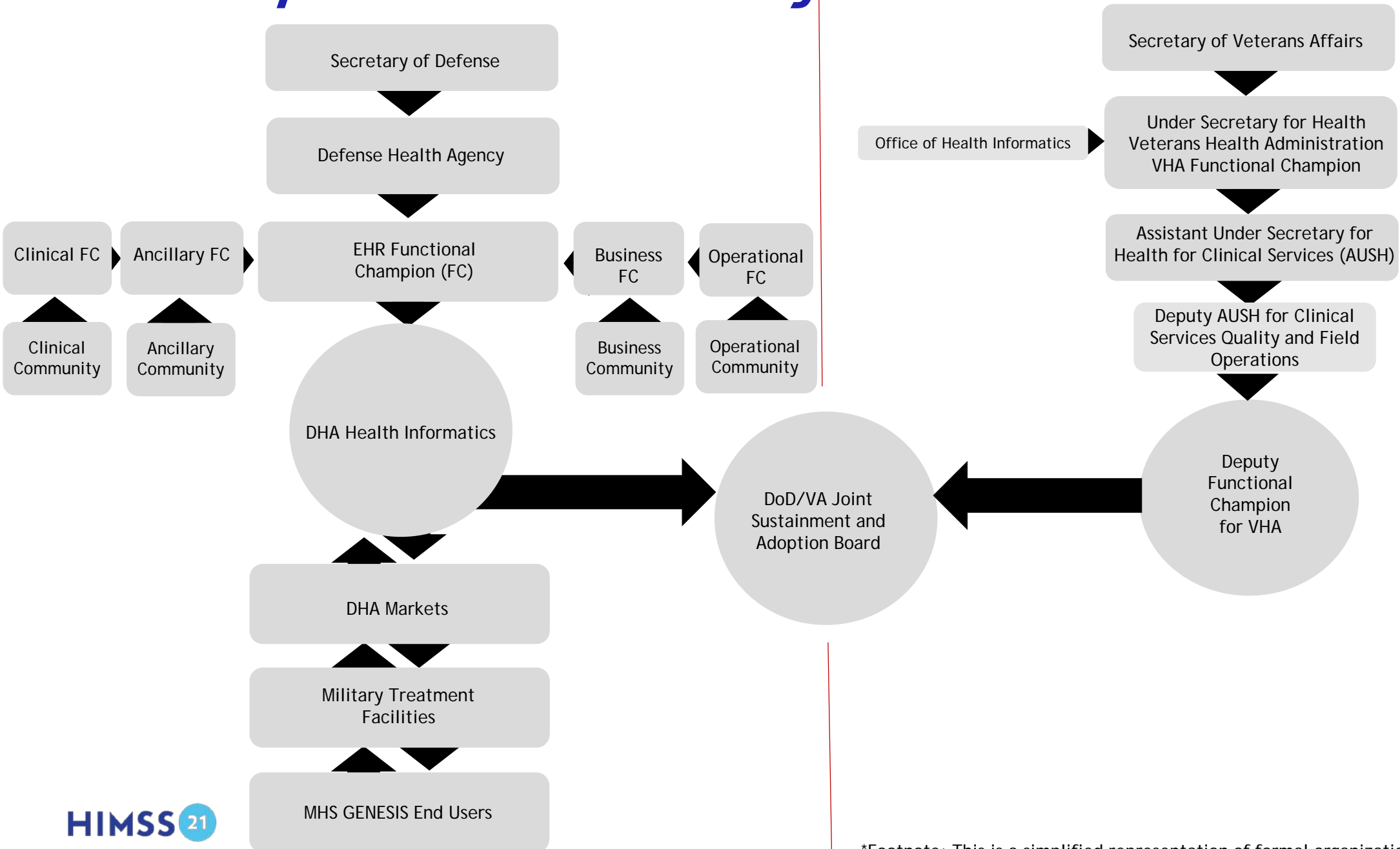
Agenda

- Introduction of the Lecturers
- Learning Objectives
- Patient Profile
- Standardizing Joint Workflows
- Workflow Transformation Continuum
- Success Stories of Joint Workflow Standardization
- Questions and Comments

Learning Objectives

1. Review who VHA has defined and fully described its health systems transformation efforts
2. Illustrate how a very large healthcare organization is modernizing its E H R systems
3. Apply evidence-based techniques employed by a wide variety of informaticists who are practicing transformation from one of the oldest EHRs in operation in the US

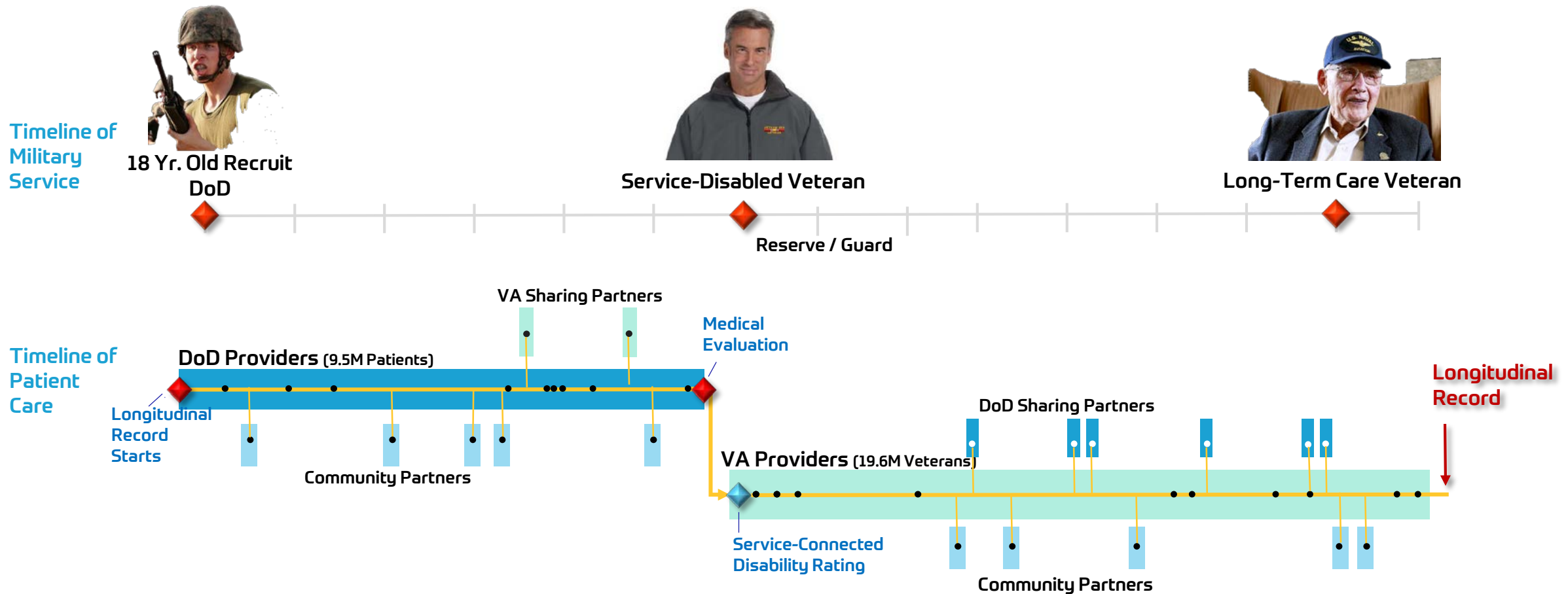
Joint Implementation - Project Governance*



Health Readiness for Life: Two Perspectives

- Registered Nurse (RN) Maria Sanchez, Ambulatory Nurse, Community-Based Outpatient Clinic (CBOC)
 - **Actualizes holistic patient care to veterans and active duty**
 - **Leverages one longitudinal electronic health record (EHR) and “Joint” workflows**
 - **Understands and adapts to a culture of workflow**
- Noah Brady, US Army, Combat Veteran, Former Staff Sargent
 - **Joined United States Army, served 8 years and was medically discharged after being wounded in Afghanistan**
 - **Provided entry examination, military readiness evaluations and initial wounded care from the DoD**
 - **Receives continued care, including shared services, from VA Community-Based Outpatient Clinic**

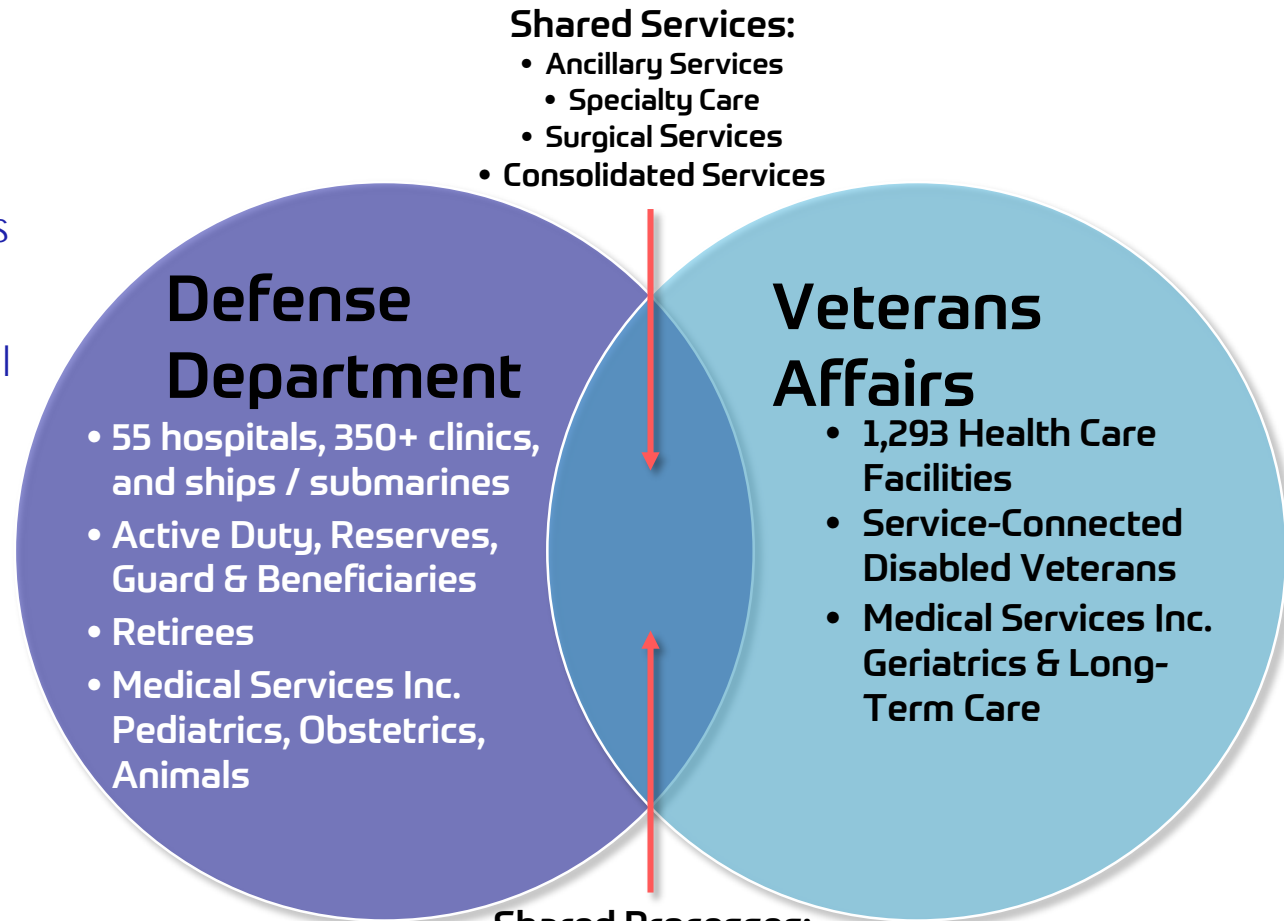
A Timeline of One of Our Patients



DoD/VA Shared Services – Current State Focus

DoD/VA Share Services to:

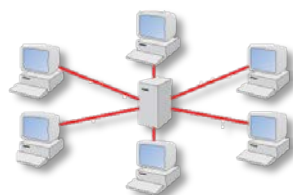
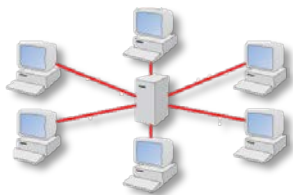
- Improve Veteran Care and Timeliness to Services
- Maintain Civilian and Military Medical Readiness
- Optimize Health Services Efficiency and Cost Savings



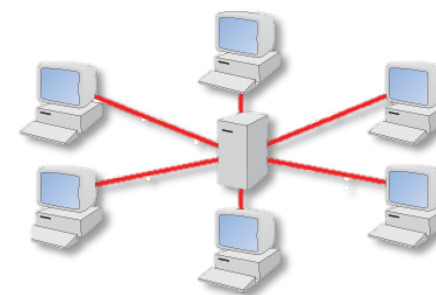
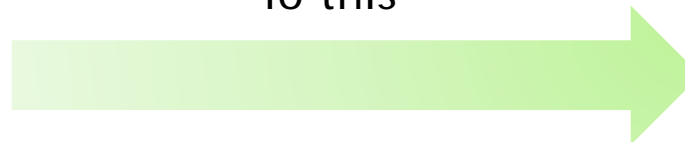
Shared Processes:

- Manual Referral Management
- Manual Encounter Documentation
 - Manual Care Coordination
 - Joint Patient Registration

Future State – Federal Healthcare Model



“To this”



Multiple As-Is EHRs: Composite Health Care System (CHCS) and Veterans Health Information System and Technology Architecture (VistA) and separate patient identity management systems, disparate patient record repositories, and non-integrated health data

DoD/VA Cerner EHR: To-Be Standardized Workflows, Integrated Data – Regardless of Service Location, Provider Organization, or Patient Affiliation



Electronic Health Record



Integrated Population Health



Single EHR Application Environment














Integrated Decision Support



Longitudinal Record

Joint Guiding Principles to Maximize Adoption

-  Standardize clinical and business processes across the Departments
-  Design a patient-centric system focusing on quality, safety, and patient outcomes/
-  Flexible and open, single enterprise solution
-  Clinical business process reengineering, adoption, and implementation over technology
-  Configure not customize
-  Decisions shall be based on doing what is best for the health care system as a whole
-  Decision-making and design will be driven by front-line and clinical staff
-  Drive toward rapid decision making to keep the program on time and on budget
-  Provide timely and complete communication, training, and tools to ensure a successful deployment
-  Build collaborative partnerships outside the Departments to advance national interoperability
-  Enable full patient engagement in their health care

Standardization Requires a Well-Refined Workflow

Key Elements of EHR Workflows

The 4 W's



Why

The reason you are performing the task in the first place



Who

The individual performing the action



What

The action taken



Where

The geographic location of activity



When




When and in what sequence



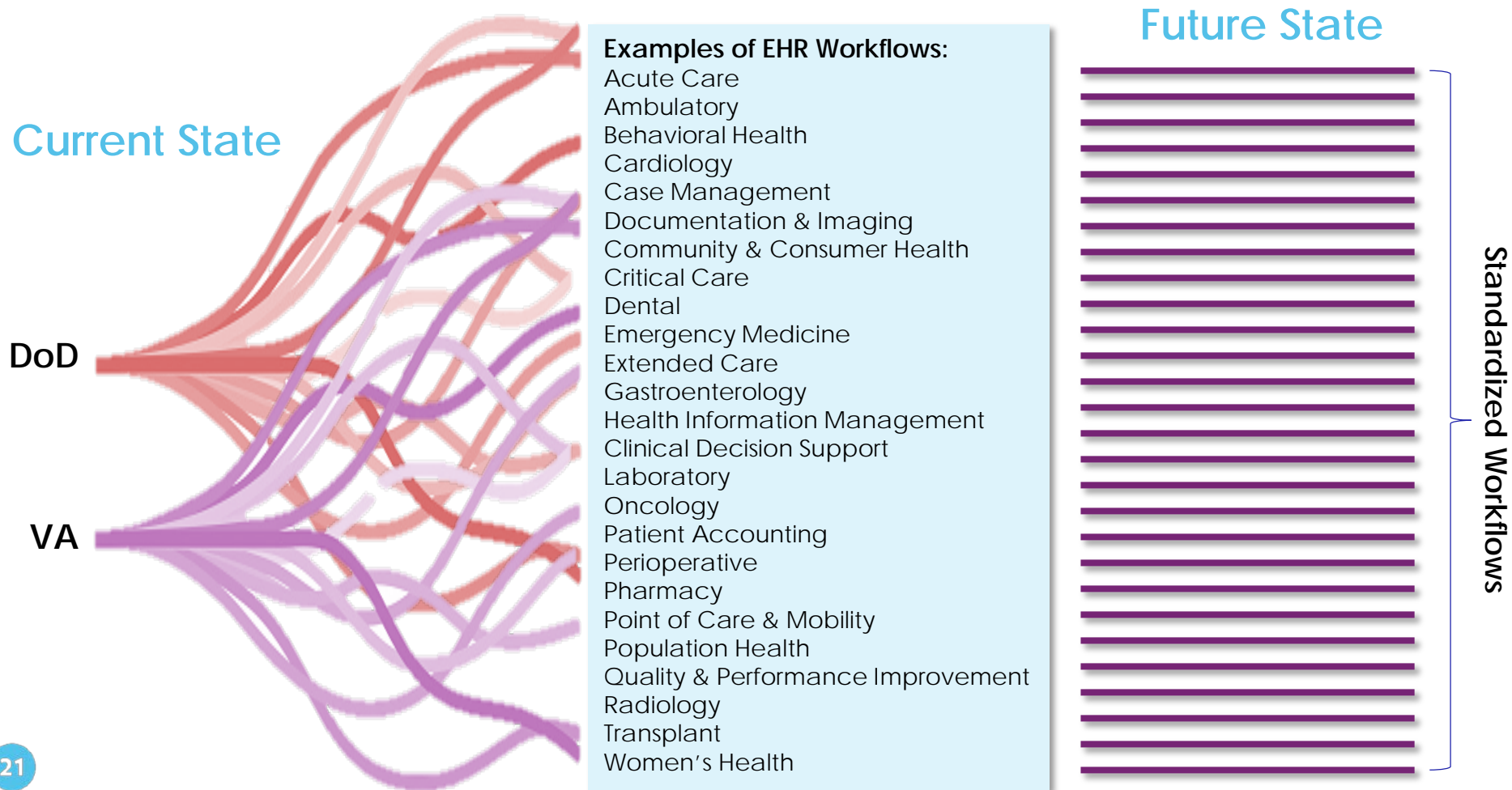
How

Specific instructions to complete a task

Desired State of Standardized Workflows

Current State		Future State
<ul style="list-style-type: none">• Lack of uniform workflows impedes staff portability to other facilities		<ul style="list-style-type: none">• Standardized workflows across the Federal government
<ul style="list-style-type: none">• EHRs are not standardized• Each CHCS and VistA Host is maintained separately		<ul style="list-style-type: none">• A single integrated electronic patient record using Cerner EHR• Hosted together
<ul style="list-style-type: none">• Patient experience varies by location		<ul style="list-style-type: none">• Seamless patient experience, regardless of provider location/ affiliation / location

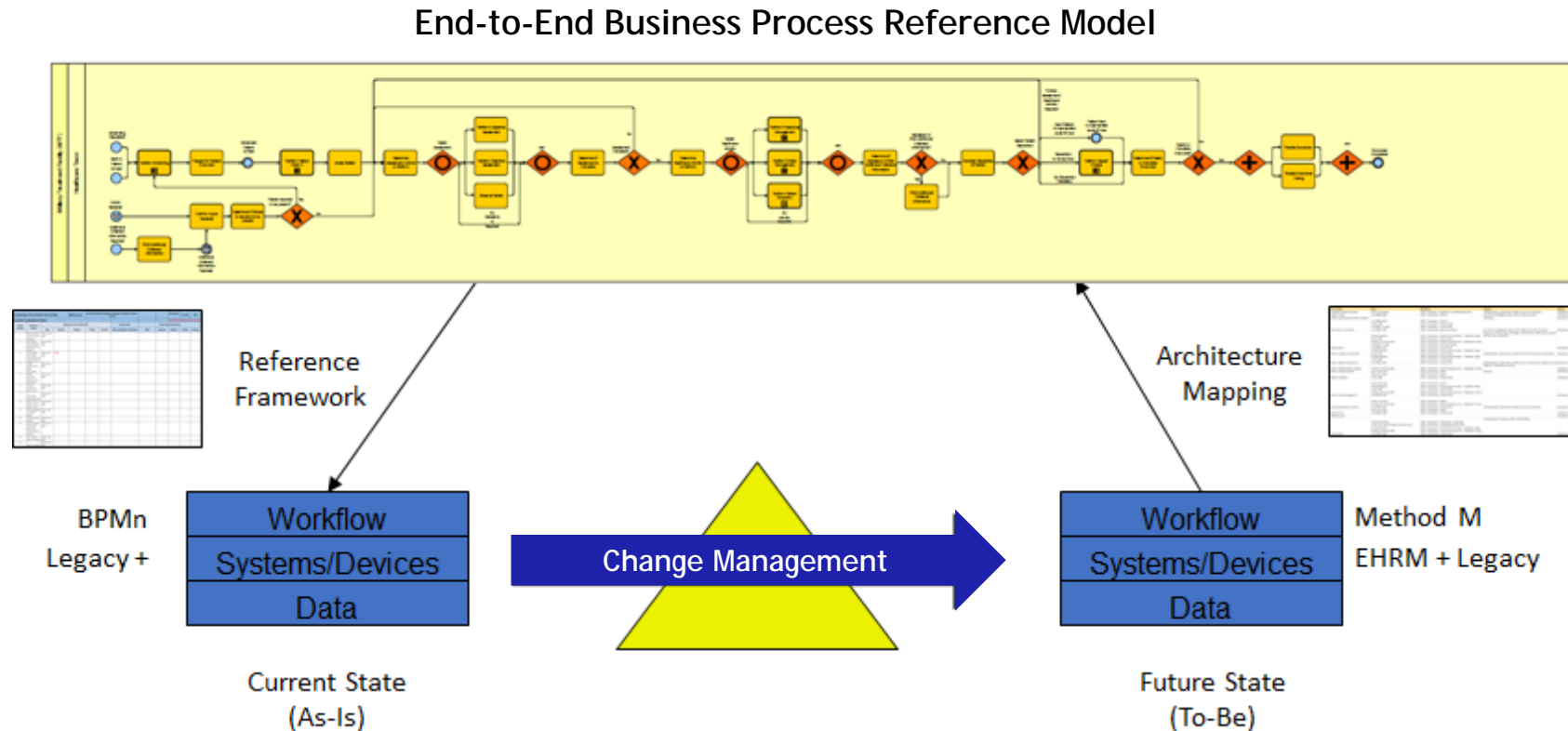
Standardizing Workflows with a Single EHR: A Forcing Function



Understanding the DoD/VA Current State

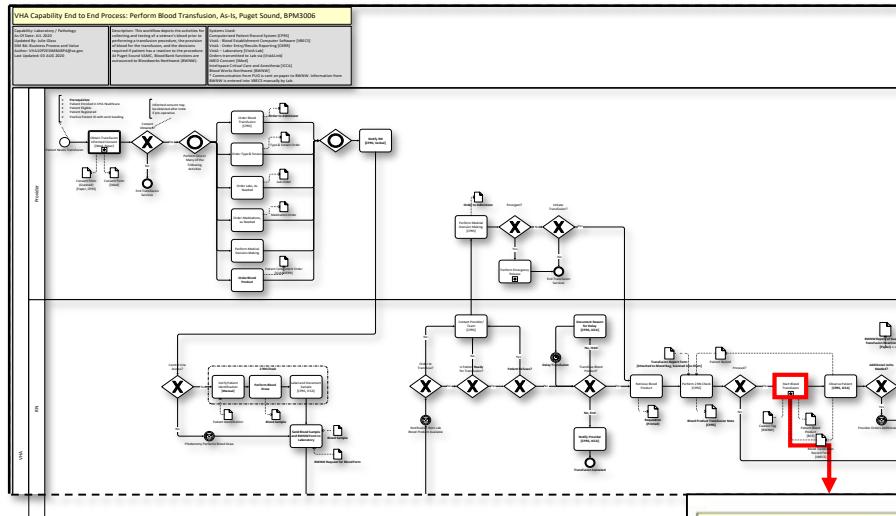
- Describe and explain per activity:
 - Role(s) – exclusive/inclusive
 - Setting
 - Activities (manual or automated)
 - Systems/apps/devices/products
 - Workarounds
 - Triggers
 - Data (inputs and outputs)
 - Sequence
 - Definition (name and description)
- Hard stops/Hand offs/dependencies
- Policies/Standard Operating Procedures (SOPs)/Guidance that dictate processes and workflows
- Document current End-to-End processes and Current State Workflows

Workflow Standardization / Optimization Continuum



Goal: Standardize the business processes before go-live to reduce change management and training impacts

DoD/VA Legacy Current State End-to-End Process Models vs. Workflow

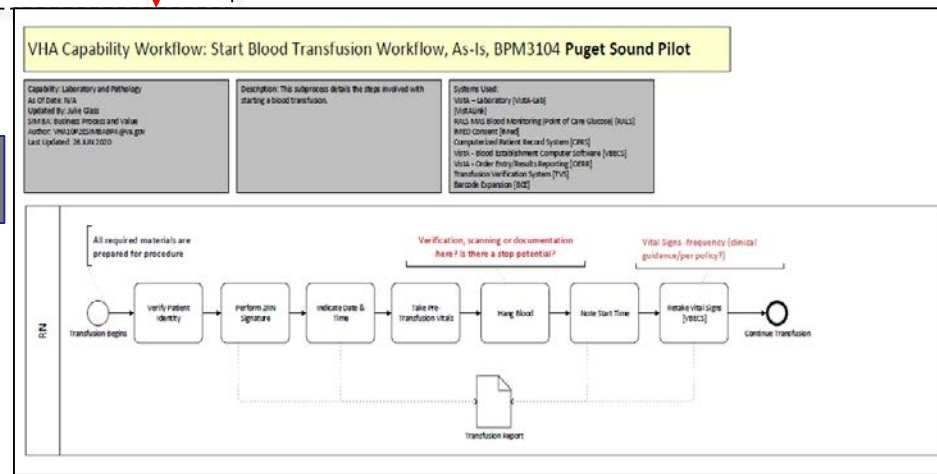


End-to-End Process Modeling

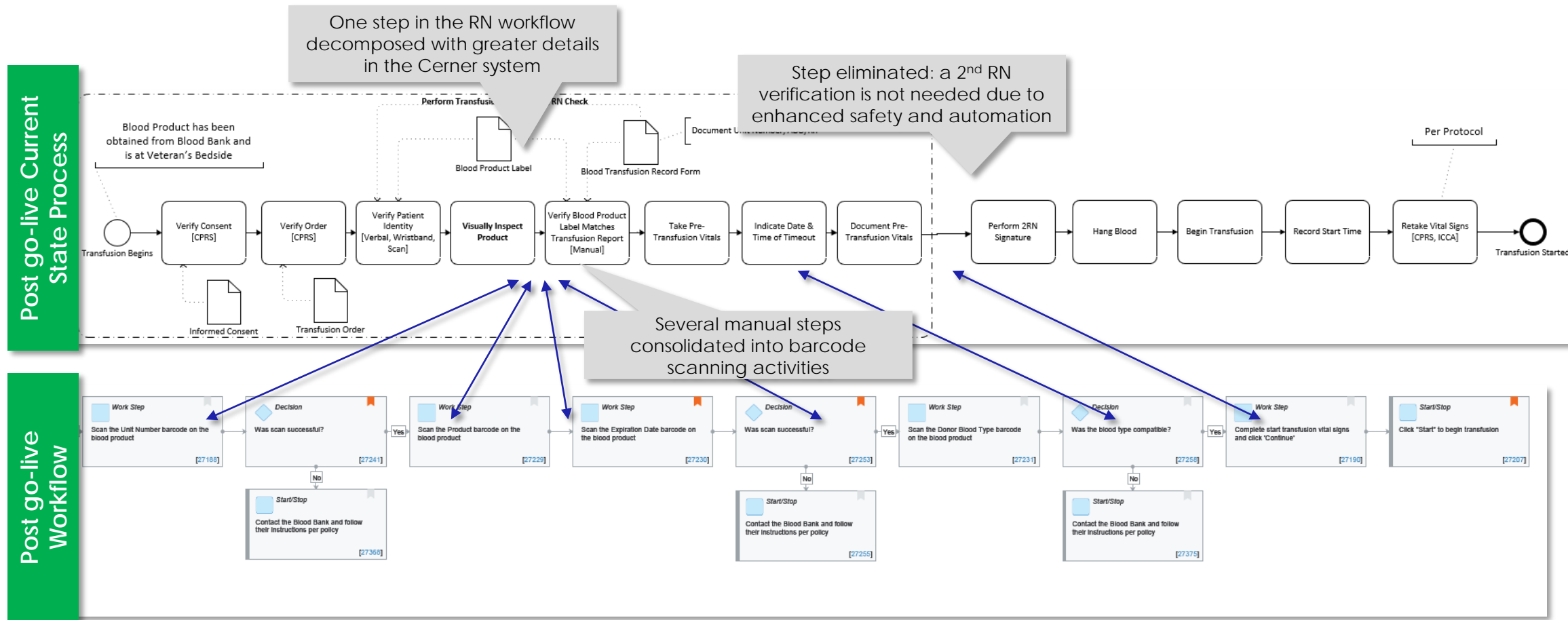
End-to-End Process Models describe *what* tasks and activities are performed for a specific capability area in the as-is operating environment

Current State Workflows

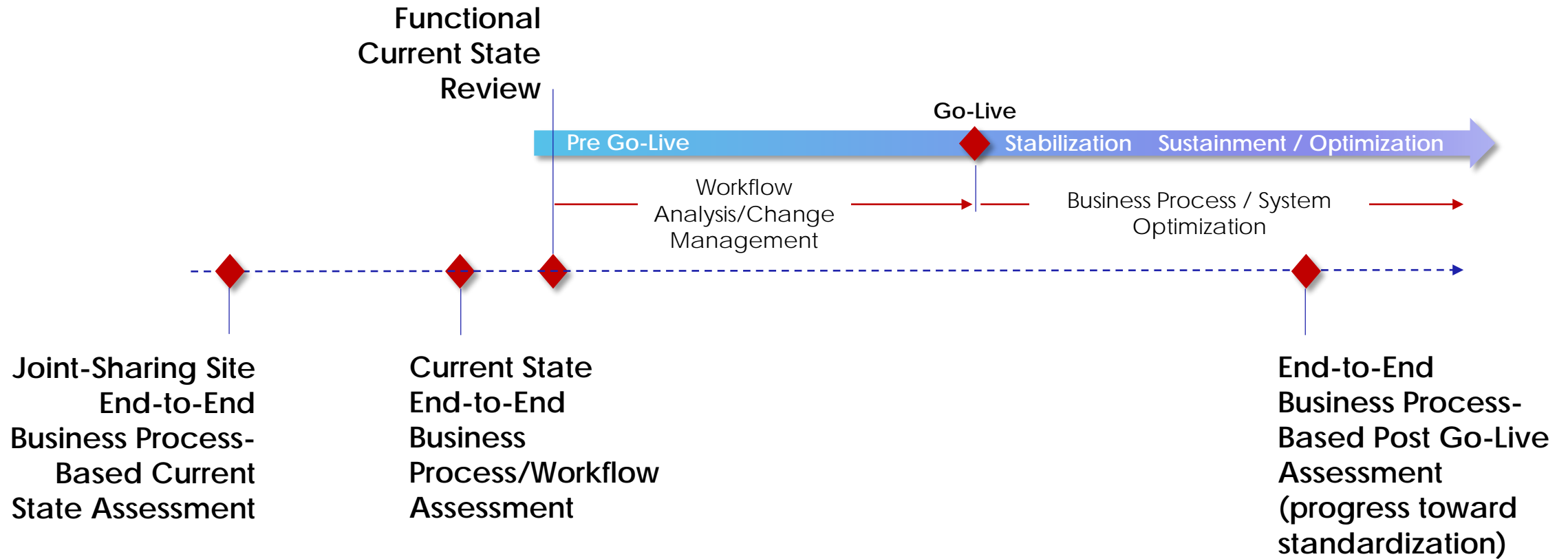
Current State Workflows describe *how* specific tasks or activities are performed at a much lower level of detail



Post Go-Live End-to-End Process & Workflow Models



Workflow Transformation Continuum



Success Stories of Joint Workflow Standardization

- Implementation of Mass Readiness for Health
 - **Assembly line healthcare delivery for high volume of patients in a small window of time using standard order package (immunizations, medications, lab tests, screening).**
 - Examples are initial entry (boot camps, Service Academies) and mobilization platforms
 - Added provider computer order entry and barcode medication administration
 - Linked to Military Entrance Processing Command (MEPCOM) process for preexisting history
- Adoption of order entry and results retrieval for select Laboratory tests
 - **DoD/VA Joint Sharing Site in Alaska is our proof of concept**
- Creation of Radiology joint workflows for electronic requesting and image retrieval
 - **DoD/VA Joint Sharing Site in Alaska is our pilot**

Success Stories of Joint Workflow Standardization

- Refining Mass Vaccination
 - **Assembly line healthcare delivery of an immunization for high volume of patients**
 - Utilized for COVID19, influenza or any single order immunization (typically 400-1000 patients per event)
- Coordinating a COVID19 Response, especially with Telehealth
 - **Leveraged vendor support as being part of the eco-system**
 - **Clear clinical workflow for mass testing, individual results, care coordination, data and reporting**
 - Date led to easy defect identification
 - **Rapid development and implementation of immunization strategy and workflows**
 - Weeks vs. months
 - **Direct benefit to our DoD/VA patients and clinical staff**

Business Transformation / Change Management

- Adopted a User-oriented processes
- Developed architecture-based framework for evaluating processes and workflows
- Focused on repeatability and generalizability
- Established Standard Facility-Level Informatics Functions and Structure
- Appointed Functional Champions
- Created Functional Councils
- Fostered a Coordinating / Collaborating Environment With Clinical, Technical, and Programmatic Organizations

Questions

Thank you!

- COL Thomas Cantilina – Department of Defense
- Dr. Jacob Aaronson – Department of Veterans Affairs

