

**2026
DEFENSE HEALTH INFORMATION
TECHNOLOGY SYMPOSIUM**

**AUGUST 11-13, 2026
HYATT REGENCY NEW ORLEANS
NEW ORLEANS, LA**

Applying Health Intelligence: The Future of Joint Medical Planning

Dr. Matthew Kilboy, DNP, FNP-C



Agenda

- 1** JOMIS Program Overview and Priorities
- 2** Joint Health Service Support Planning and Operations
- 3** Current Planning & Modeling Capabilities
- 4** The Future of the Joint Medical Planning Capability
- 5** Roadmap and Next Steps for JOMIS

Speaker Introduction



Matthew Kilboy, DNP, FNP-C

Joint Operational Medicine Information Systems
Defense Health Agency

Dr. Matthew Kilboy is the assistant program manager for medical planning, modeling, and simulation capabilities and chief health informatics officer at the Joint Operational Medicine Information Systems program management office. He began his nursing career with the U.S. Navy at Naval Medical Center, Portsmouth. During his Naval career he was stationed at various Navy and Joint hospitals and medical centers, deployed to Joint Task Force Guantanamo Bay, served as the executive officer to the Director of Healthcare Operations at the DHA, and was the chief health informatics officer and project manager for the Defense Healthcare Management Systems Modernization program management office. After retiring from the Navy, Dr. Kilboy worked at the Department of Veterans Affairs as a project manager and the DHA as an analyst in Legislative Affairs.

In his current role at JOMIS, Dr. Kilboy is focused on providing warfighters with technologies to make life-saving and critical mission decisions through engagement and collaboration with the operational medicine functional community.

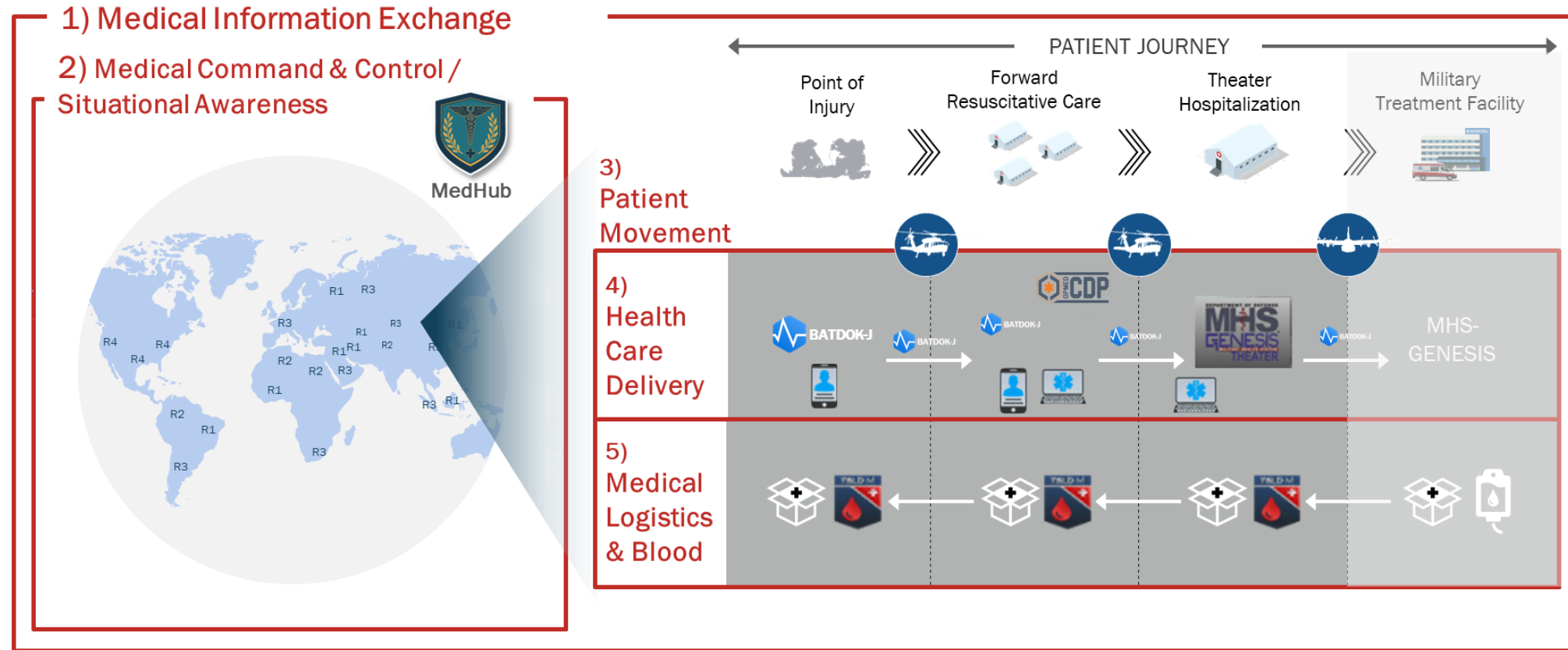
Dr. Kilboy is a family nurse practitioner and holds a doctorate in nursing practice with a focus on executive healthcare leadership. His professional interests include primary care and disease/injury prevention, military healthcare, healthcare technology, and national healthcare policy.

Learning Objectives

- 1** State how JOMIS Priority 3 will empower medical planners by infusing advanced tools with actionable health intelligence.
- 2** Describe the phased approach for modernizing Joint Medical Planning Tool (JMPT) and Medical Planner's Toolkit (MPTk) to better consume and analyze health data.
- 3** Identify the key stakeholders partnering to create a more data-driven medical planning ecosystem.
- 4** Explain how these modernized, intelligence-driven tools will improve casualty estimation and supply forecasting for joint operations.

JOMIS' Portfolio Enables Comprehensive Healthcare to Deployed Forces Across the Full Range of Military Operations

JOMIS suite of solutions will drive medical planning for the warfighter with precision health data and advanced health intelligence.



Heroes of Military Medicine Speech – 7 May 2026

“We cannot meet the challenges of 2030 with the tools of 2010. We need this community to build *three critical capabilities*.”

1. See the Battlefield

“The first is visualization... Commanders must be able to **see medical readiness and risk in real time** – just as clearly as they see the maneuver enemy.”

2. Trust the Data

“More data is better. Better data is better. We need **standardized data tied directly to the outcomes that matter**: readiness, survivability and recovery. When aligned with operational needs, **data stops being a metric and starts becoming a weapon**.”

3. Predict and Prepare

“[We need] proactive and prescriptive action. Despite our best efforts, we are still too reactive. We need **systems that anticipate medical challenges, predict risks** before they arrive, and **prescribe actions** to improve outcomes.”



General Mahoney

Vice Chairman, Joint Chiefs of Staff

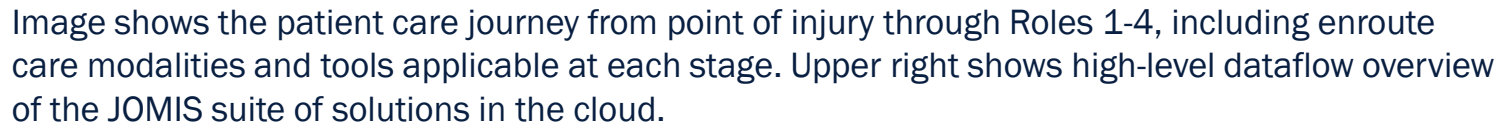
JOMIS' Suite of Solutions

Modernized Solutions	Description	Role of Care
 BATDOK-J (replacing paper charting) Battlefield Assisted Trauma Distributed Observation Kit-Joint	Android OS application that enables medics and providers to document trauma care in real time by using intuitive decision support interfaces at the point of injury and during intra/inter-theater medical evacuation (MEDEVAC) scenarios outside of Roles 1/2.	Point of Injury / En Route Care
 OpMed CDP (replacing AHLTA-T/TC2) Operational Medicine Care Delivery Platform	Improves clinical decision support and enables trauma documentation with intuitive, guided workflows that support adult, pediatric, and military working dog care.	Roles 1 and 2
 TBLD-M (replacing TMDS) Theater Blood Mobile	Provides real-time blood tracking of walking blood bank candidates and blood products at both the local and aggregated levels.	Blood Inventory Management (All Roles of Care)
 MedHub (formerly MedCOP)	Web-based interactive decision-support platform arming command surgeons and medical commanders with near real-time health surveillance and medical operations visibility to enable well-informed decisions.	Medical Situational Awareness / Command & Control (All Roles of Care)

JOMIS' Suite of Solutions, continued

	Modernized Solutions	Description	Role of Care
	JMPT/MPTk Joint Medical Planning Tool/Medical Planners' Toolkit	Provides analytic and modeling capabilities that enable planners to simulate patient flow, forecast medical resource requirements, and assess operational medical support risks across all Roles of Care.	Roles 1-3
	TRAC2ES Transportation Command Regulated & Command & Control Evacuation System	Provides end-to-end patient movement visibility and coordination, enabling medical planners and commanders to manage, track, and regulate aeromedical evacuation missions across all Roles of Care.	All Roles of Care
	MEDIX/OMDS (replacing TMDS backend) Medical Data Exchange / Operational Medical Data Service	Serves as the data backbone leveraging systems such as War Data Platform (WDP) and Operational Medicine Data Store (OMDS), providing critical data transport and management capabilities that are key to JOMIS operational medicine modernization activities.	Data Transfer (All Roles of Care)
	MHSG-T (replacing AHLTA-T/TC2) MHS GENESIS-Theater* *managed by the DOD Healthcare Management System Modernization (DHMSM) program management office	Enables healthcare delivery and documentation for all categories of advanced critical care and ancillary services.	Role 3

Enhancing Medical Readiness Against Evolving Threats



See the Battlefield

Trust the Data

Predict and Prepare

Cloud migration and model modernization for JMPT/MPTk.

Joint Health Service Support Planning and Operations



“A good plan violently executed now is better than a perfect plan executed at some indefinite time in the future.”

— General George S. Patton Jr.



“No plan of operations extends with any certainty beyond the first encounter with the main enemy forces.”

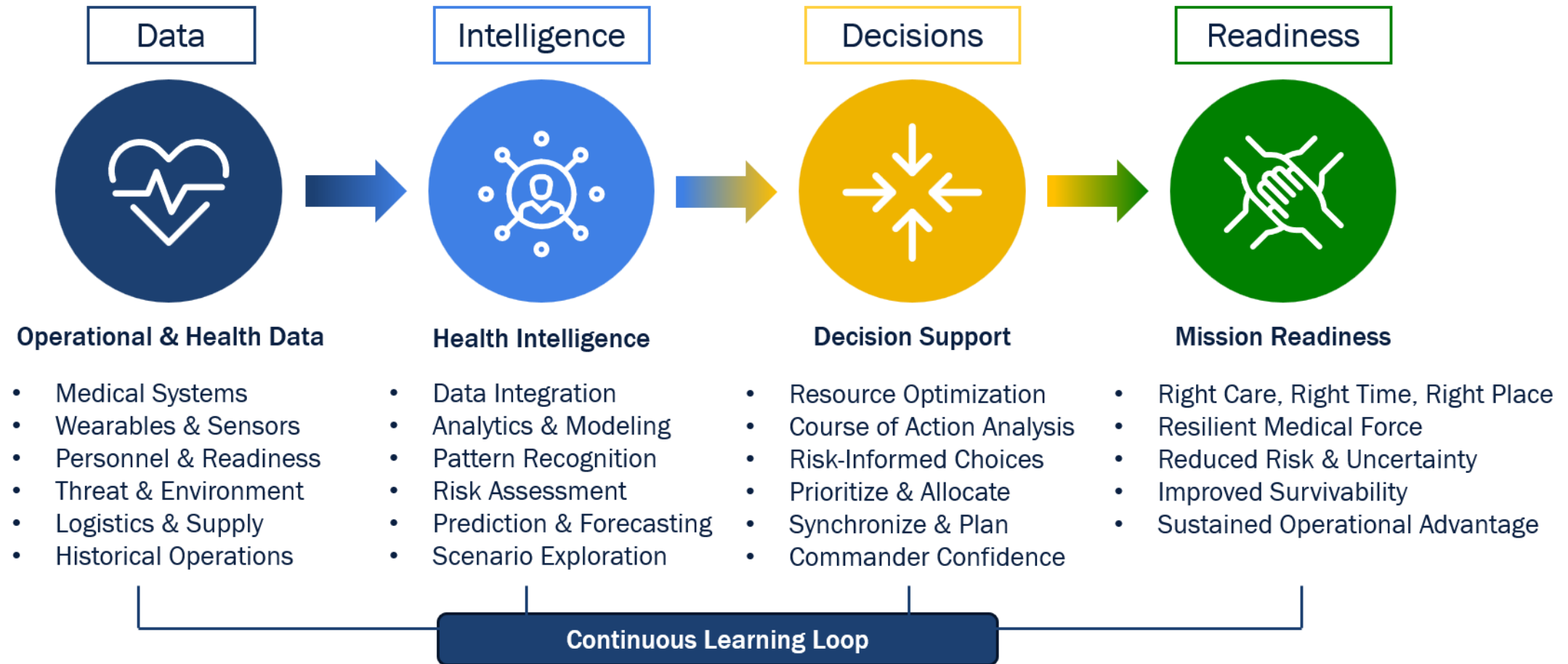
— Field Marshal Helmuth von Moltke the Elder

What is Medical Planning?

“ Given this plan, adversary, terrain, tempo, and evacuation constraints, what is the expected casualty flow rate, what medical capabilities will be required to prevent avoidable mortalities and limit morbidity, and what is the estimated return to duty timeline for casualties?”

Applying Health Intelligence to Strengthen the Joint Force

Health intelligence is the force multiplier that transforms information into impact.



The Path Forward is Build on Our Past

Understanding our history empowers smarter decisions for the future.



Current Planning & Modeling Capabilities

Medical Planner's Toolkit

and

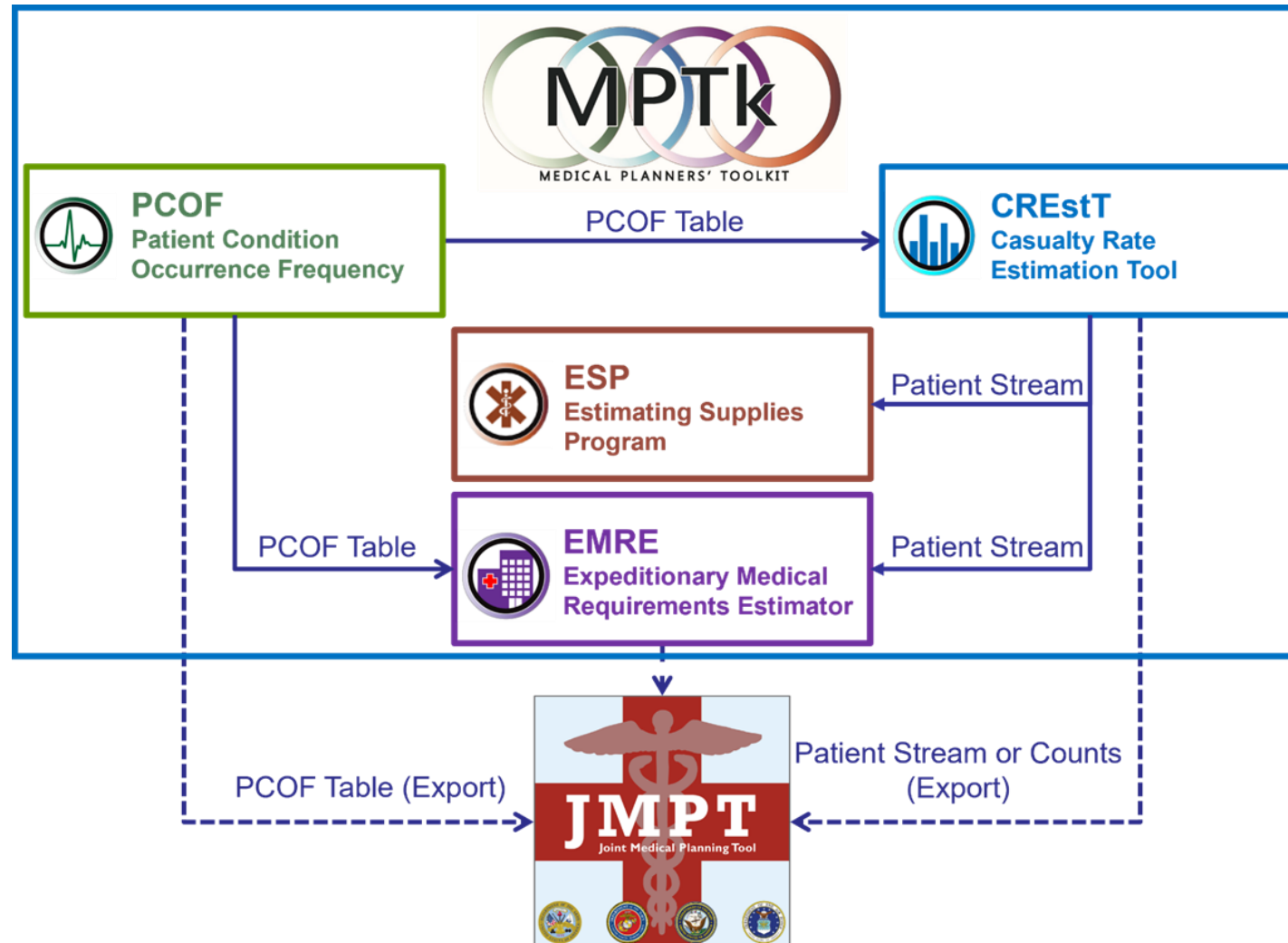
Joint Medical Planning Tool



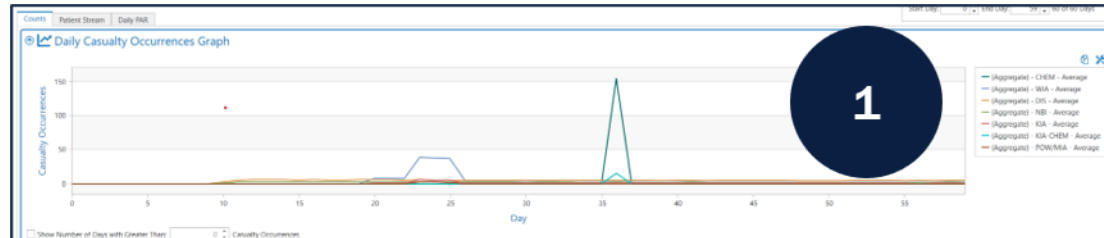
Current Capability: Details

		Description
	Expeditionary Medical Knowledge Warehouse (EMedKW)	Protects and organizes underlying medical modeling and simulation data; a web-based system.
	Medical Planners' Toolkit (MPTk)	Provides medical and personnel support planning across the ROMO with a suite of tools; a DoD-accredited tool.
	Patient Condition Occurrence Frequency (PCOF)	Determines injuries and illnesses.
	Casualty Rate Estimation Tool (CREsT)	Forecasts casualty rates during military operations for medical and personnel planning.
	Expeditionary Medical Requirements Estimator (EMRE)	Estimates high-level requirements for theater hospitalization and personnel replacements by specialty and grade.
	Estimating Supplies Program (ESP)	Forecasts medical supply requirements.
	Joint Medical Planning Tool (JMPT)	Provides medical risk assessment and course of action analysis; a DoD-accredited tool.

Current Capability



Key Outputs: Medical Planners' Toolkit (MPTk)



1. Set of Casualty Estimate Values by Day

2

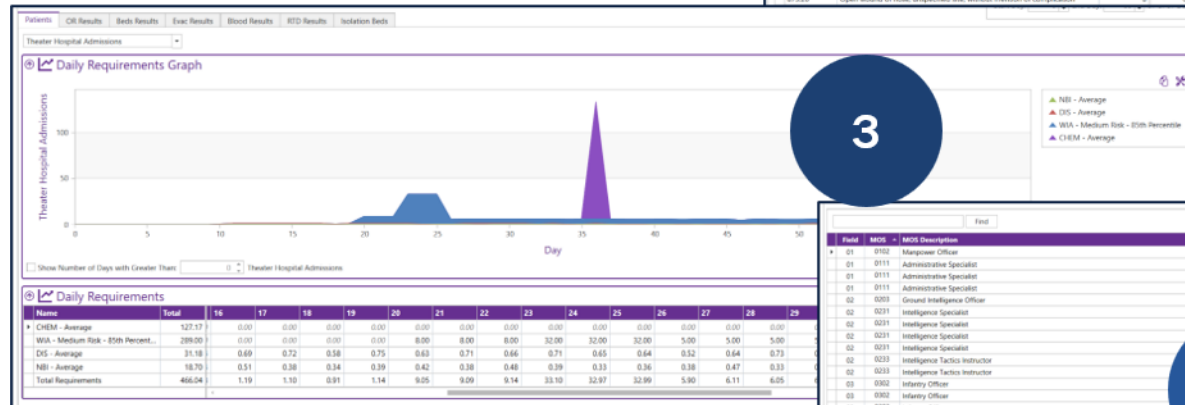
Category	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
(Aggregated) - CHEM - Average	152.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(Aggregated) - WIA - Average	288.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(Aggregated) - DS - Average	280.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(Aggregated) - NBI - Average	110.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(Aggregated) - KIA - Average	42.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(Aggregated) - KIA-CHEM - Average	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(Aggregated) - POW/MIA - Average	16.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	990.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2. Patient Stream by Day

3

PC	PC Description	Total	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
860.897	Traumatic pneumothorax and hemothorax & Traumatic amputation of leg(s)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
861.22	Laceration of lung without mention of open wound into thorax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
861.32	Laceration of lung with open wound into thorax	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
861.864	Injury to heart and lung & injury to liver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
861.897	Injury to heart and lung & Traumatic amputation of leg(s) (complete) (partial)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
861.901	Injury to heart and lung & injury to blood vessels of thorax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
863.15	Injury to rectum, with open wound into cavity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
863.80	Injury to gastrointestinal tract, unspecified site, without mention of open wound	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
863.90	Injury to gastrointestinal tract, unspecified site, with open wound into cavity	5	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
863.897	Injury to gastrointestinal tract & Traumatic amputation of leg(s) (complete) (partial)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
863.902	Injury to gastrointestinal tract & injury to blood vessels of abdomen and pelvis	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
864.00	Injury to liver without mention of open wound into cavity, unspecified injury	6	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
864.15	Injury to liver with open wound into cavity, laceration, unspecified	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
865.00	Injury to spleen without mention of open wound into cavity, unspecified injury	9	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0
865.10	Injury to spleen with open wound into cavity, unspecified injury	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
866.00	Injury to kidney without mention of open wound into cavity, unspecified injury	6	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
866.10	Injury to kidney with open wound into cavity, unspecified injury	10	0	1	2	1	0	0	1	1	0	0	0	0	0	0	1
867.0	Injury to bladder and ureters, without mention of open wound into cavity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
867.1	Injury to bladder and ureters, with open wound into cavity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
872.8	Open wound of ear, part unspecified, without mention of complication	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
873.20	Open wound of nose, unspecified site, without mention of complication	8	0	1	0	2	1	1	0	0	0	0	0	1	0	0	0

3. Theater Hospitalization Requirements by Day



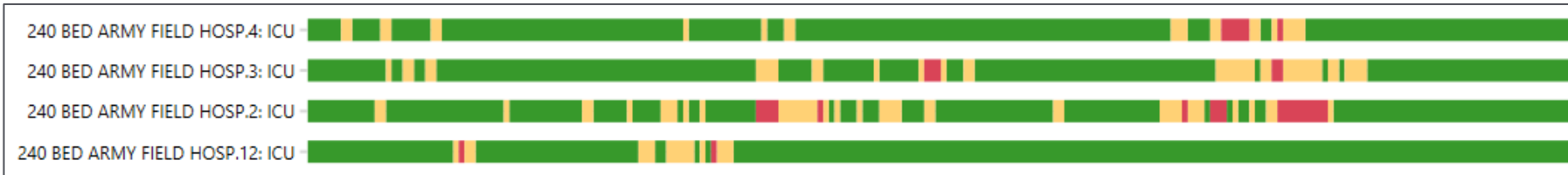
4. Replacement Estimate

5

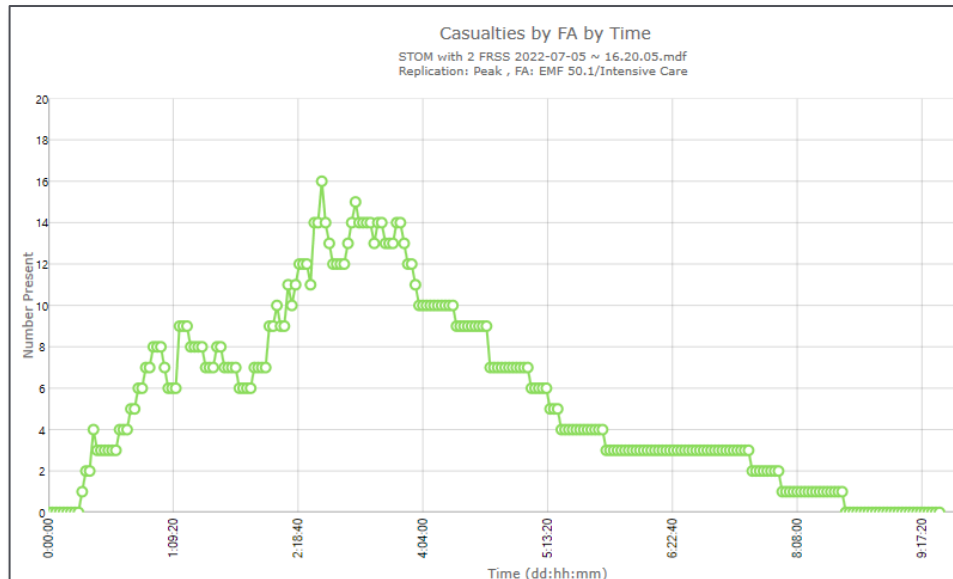
Field	MOS	MOS Description	Pay Grade	Total Replacements
01	0102	Managerial Officer	GS	0.15
01	0111	Administrative Specialist	E3	1.07
01	0111	Administrative Specialist	E4	0.12
01	0111	Administrative Specialist	E7	0.14
02	0203	Ground Intelligence Officer	GS	0.17
02	0221	Intelligence Specialist	E2	0.17
02	0221	Intelligence Specialist	E3	0.47
02	0221	Intelligence Specialist	E6	0.96
02	0221	Intelligence Specialist	E8	0.39
02	0223	Intelligence Tactics Instructor	GS	0.16
02	0223	Intelligence Tactics Instructor	E2	0.23
03	0302	Infantry Officer	GS	12.33
03	0302	Infantry Officer	E3	4.83
03	0302	Infantry Officer	E4	1.17
03	0302	Infantry Officer	E7	1.17
03	0306	Infantry Weapons Officer	E4	1.15
03	0311	Infantryman	E3	16.16
03	0311	Infantryman	E4	0.16
03	0311	Infantryman	E5	89.13
03	0311	Infantryman	E6	54.27
03	0311	Infantryman	E8	14.86
03	0317	Scout Sniper	E3	5.20
03	0317	Scout Sniper	E4	3.62

Key Outputs: Joint Medical Planning Tool (JMPT)

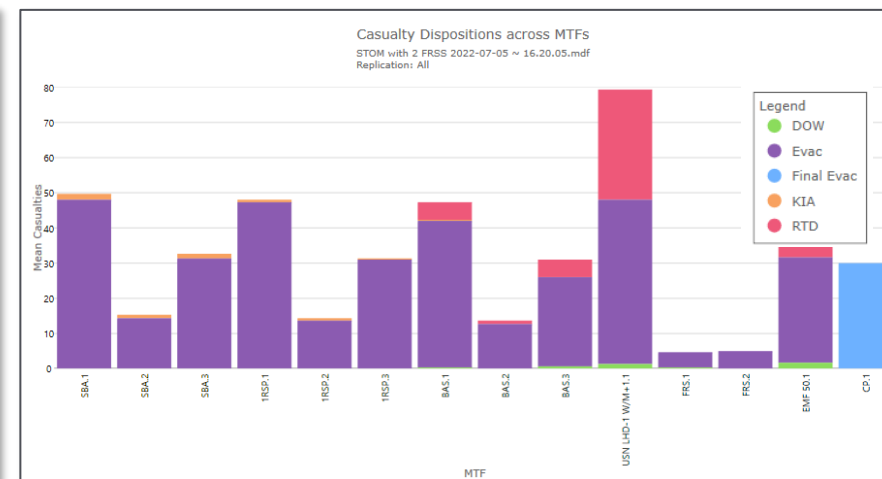
Medical Treatment Facility Status Over Time



Capacities by Functional Area Over Time

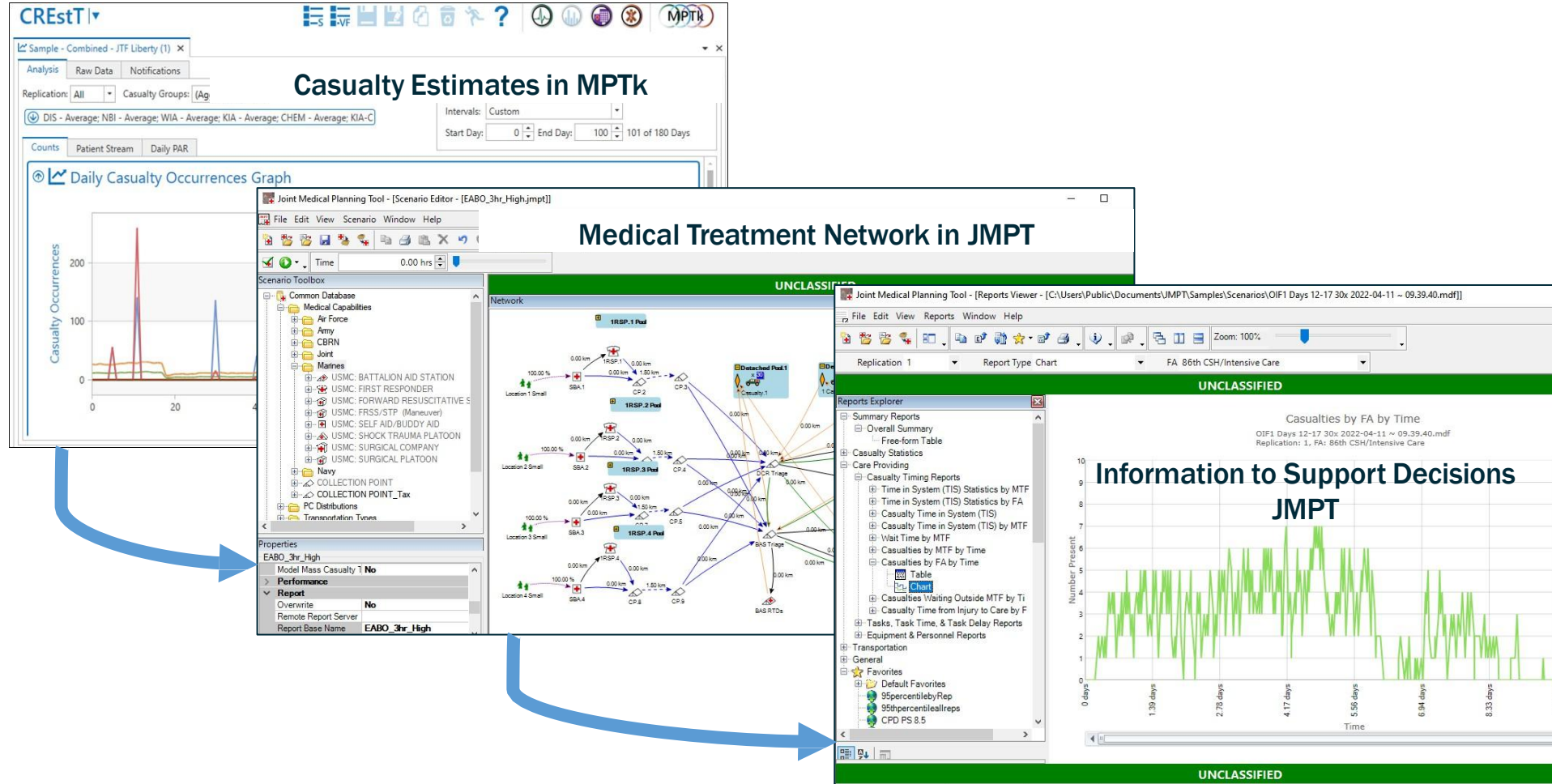


Casualty Dispositions



And More...

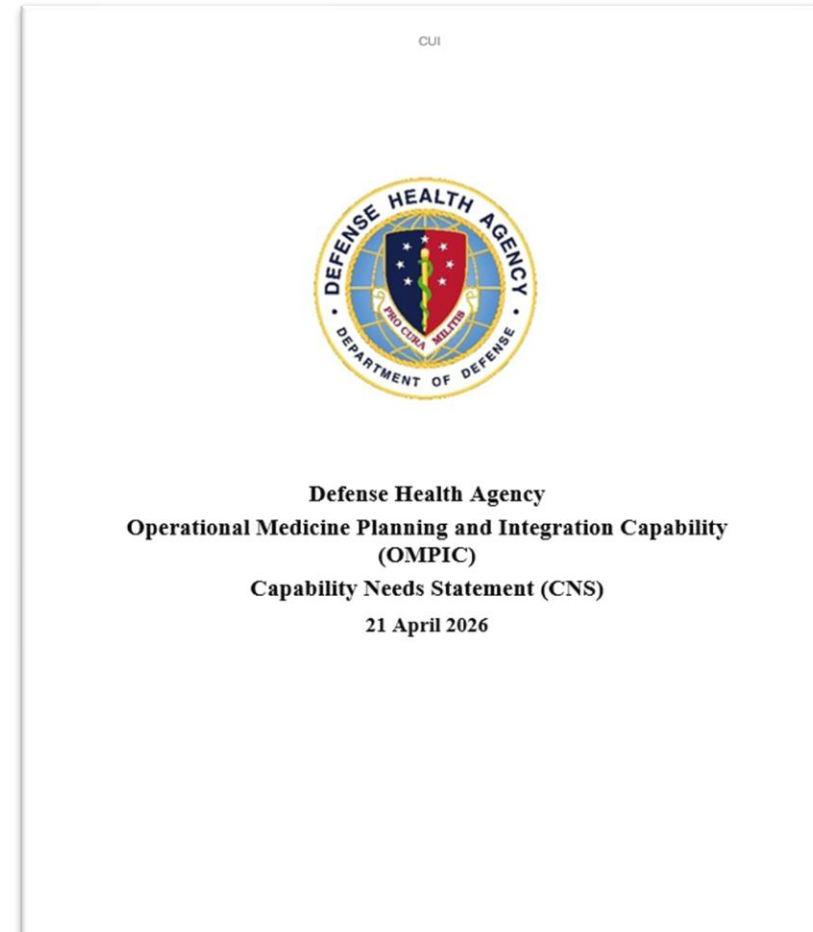
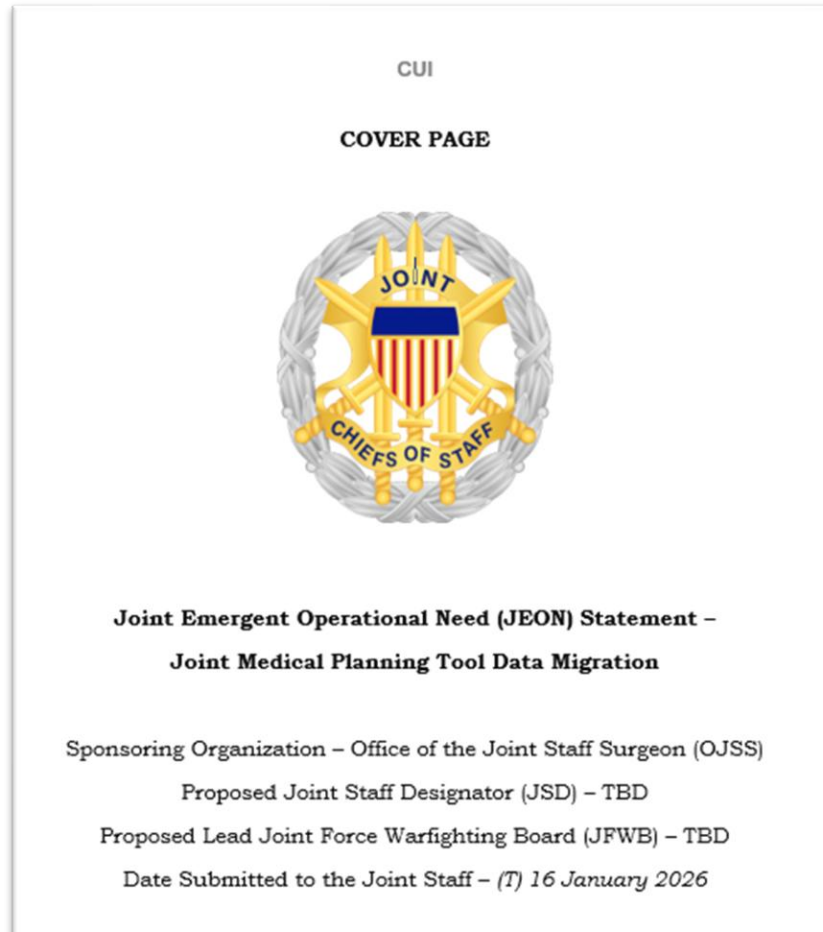
Tool Suite Workflow



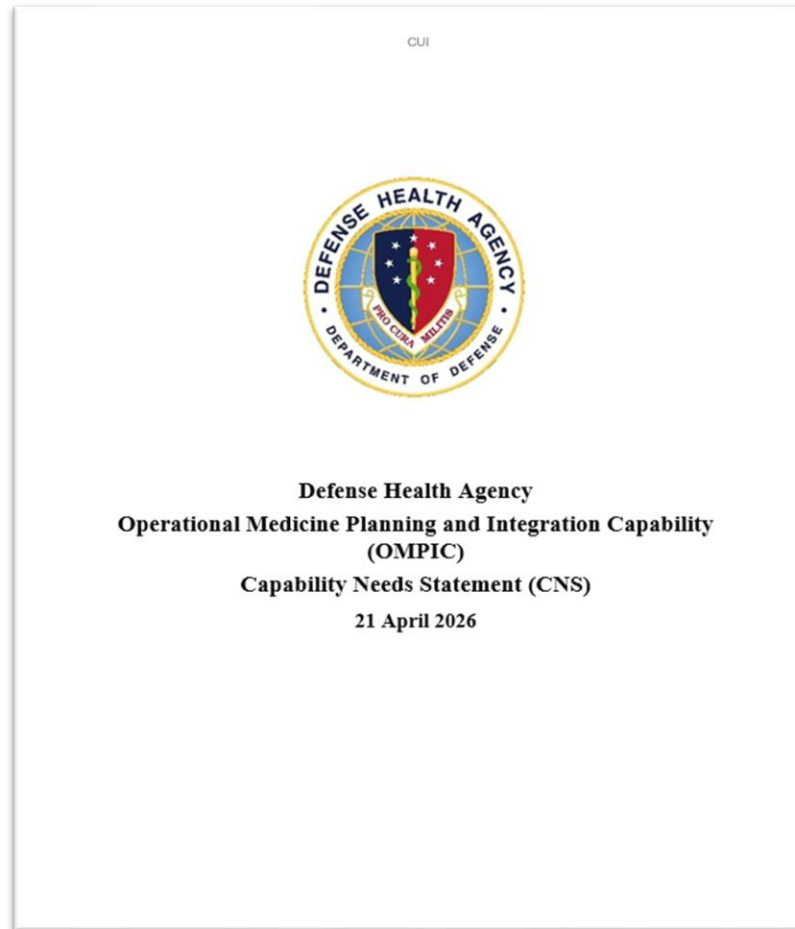
Medical Planning, Modeling, and Simulation

Change is Coming...

Imperative to Modernize & Expand Capability



Capability Needs Statement

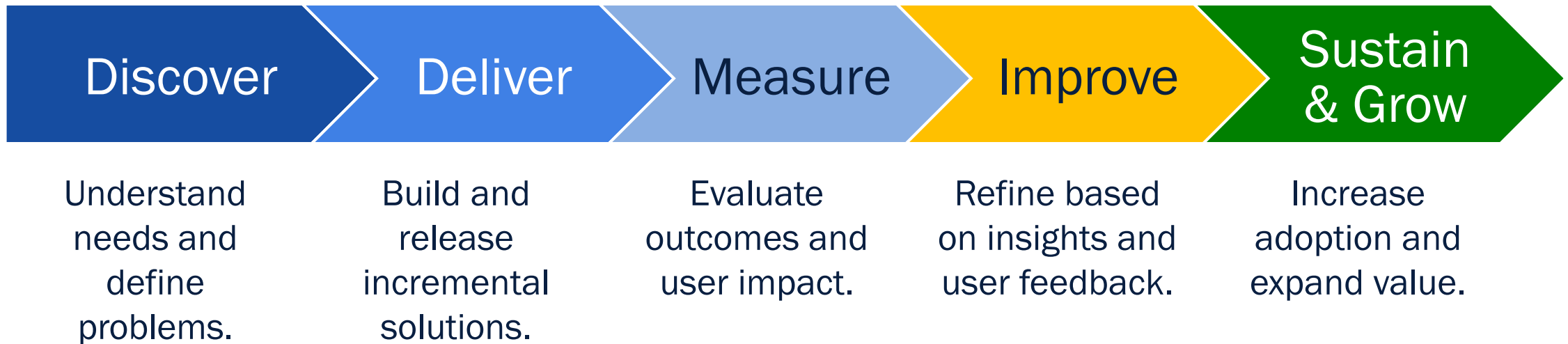


Capability Domains

- Modeling
- Simulation
- Planning
- Current Operations
- Analytics & Reporting
- Data Management
- Knowledge Management
- System & Technical
- User Management
- Training

Consistently Delivering Value Over Time

Value is not a destination. It's a continuous journey of delivering what matters most to our users.



Our Value Delivery Principles



User
Centered



Reliable



Transparent



Secure



Accountable

Join JOMIS to Shape the Future of Joint Medical Planning

Together, we will deliver decision advantage for the Joint Force.

Our Vision: A resilient, data-driven medical force – ready for any mission, anywhere.

Today	Tomorrow: Proactive. Integrated. Intelligent. Mission Ready.					
Reactive. Fragmented. Resource Constrained.	 Connected Data Seamless integration of operational, medical, and environmental data.	 Predictive Intelligence Advanced analytics and models anticipate needs and risks before they happen.	 Smarter Decisions Planners and leaders confidently choose the best course of action.	 Optimized Resources Right care, right place, right time with maximum efficiency and agility.	 Ready for Any Mission A resilient medical force that sustains warfighters and achieves mission success.	 Decision Advantage Turning health intelligence into the decisive edge that wins.

ENABLED BY JOMIS



Cloud-Native Platform



Secure & Compliant



Modular & Scalable



User-Centered Design



Continuous Learning



Partner-Driven



UNIFIED EXPERIENCE

Single sign-on and role-based views across all applications.



REAL-TIME INSIGHTS

Live data, interactive visuals, and predictive analytics.



ACTION FOCUSED

Recommendations and decision support embedded in every workflow.



COLLABORATE SECURELY

Share plans, annotate, and coordinate across roles and organizations.



ANYTIME, ANYWHERE

Responsive design across desktop, tablet, and mobile.



CLOUD-NATIVE

Scalable, secure, and always available.



DATA INTEGRATED

Trusted data from across the enterprise and mission partners.



INTELLIGENT

AI/ML powered insights and predictive analytics.



PEOPLE CENTERED

Designed with planners, for planners.

JOIN US.

SHAPE THE FUTURE. STRENGTHEN THE FORCE. SAVE LIVES.
Collaborate with JOMIS to build the next generation of medical planning capabilities.

JOMIS Medical Planning Suite

Home Planning Modeling Simulation Current Operations Reports



MAJ Smith
Operational Planner

Overview

Situation

Health Risk

Force Health

Resources

Casualty Estimates

Evacuation

Reports

Admin

OPERATION NORTHERN SHIELD

Updated: 15 May 2026 0930L

UNCLASSIFIED

THEATER: INDOPACOM
SCENARIO: Contested Littoral
TIMEFRAME: D+15

Change Scenario



OPERATIONAL VIEW



RESOURCE ALLOCATION

By Echelon



TOP RECOMMENDATION

Pre-position additional Role 2 assets within AO to reduce projected casualties by 18%.

See Analysis →

ALERTS & NOTIFICATIONS

High heat injury risk
Forecast increase in Sector Bravo
View Details →

Supply shortfall risk
Blood products in short supply at Role 2 locations
View Details →

Evacuation constraint
Weather window closing in 72 hours
View Details →

View All Alerts →

APPLICATIONS AT A GLANCE

PLANNING

Develop courses of action and resource plans.

MODELING

Build and configure models to estimate demand.

SIMULATION

Run simulations to test scenarios and outcomes.

CURRENT OPERATIONS

Monitor, assess, and respond in near real-time.

Contact

Dr. Matthew Kilboy
Assistant Program Manager

 matthew.j.kilboy.civ@health.mil

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Thank You!



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