Clinical Readiness Project:
Maintenance of Expeditionary Currency and Competency

CAPT Eric Elster MC, USN
Professor and Chair
USU Walter Reed Surgery

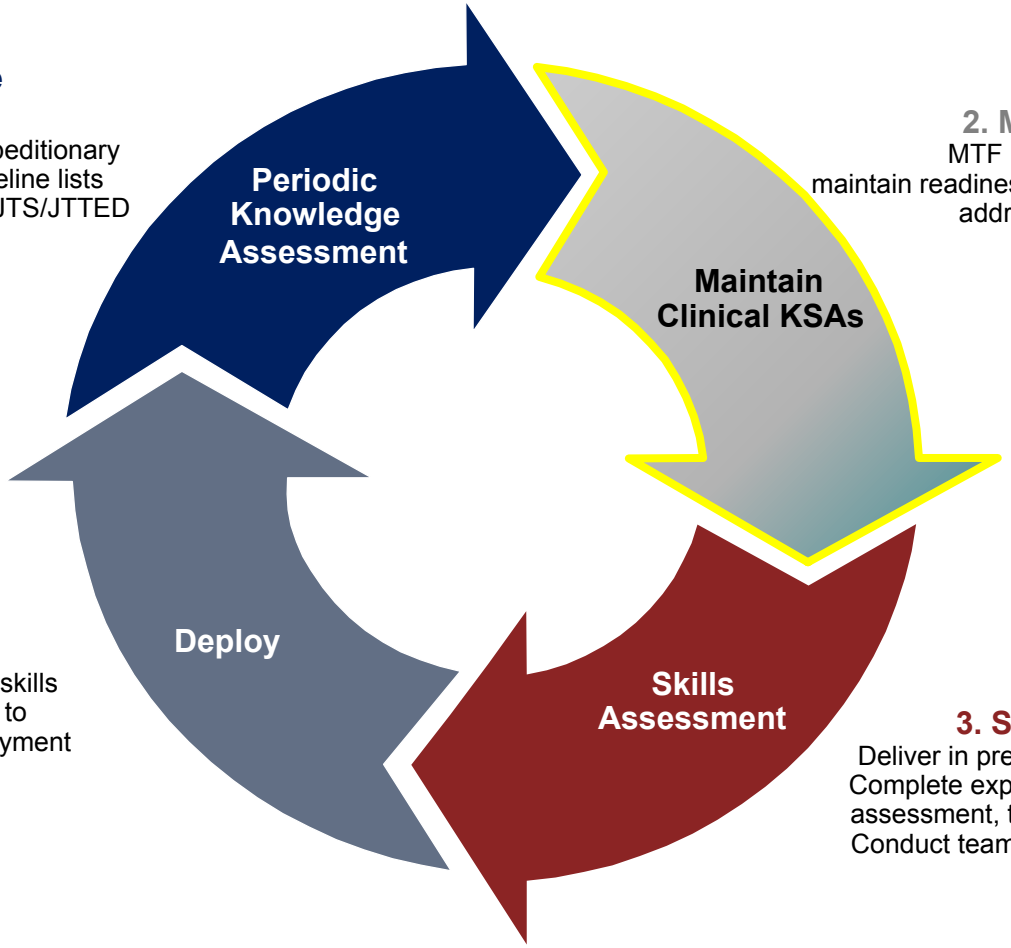
Overview

- What's the problem to be solved?
  - Perishable skills
  - Current fragmented approach not sufficient
- What's our solution?
  - Clinical Readiness Project– A way to capture and sustain the skills necessary to meet expeditionary need includes:
    - Knowledge, skills, and Attributes (KSAs)
    - Expeditionary Maintenance of Currency and Competency (MOC^2)
- What are the KSAs?
  - Data centric, specialty developed, expeditionary mission unique clinical tasks
- How do we get KSAs?
  - Build a healthcare system around readiness
  - MTF Care, TAA, ODE, VA – KSA metric
  - Assessment – Knowledge, Skills

Foundation of a Ready Medical Force

Clinical Readiness Lifecycle

1. Periodic Knowledge Assessment:
Individual assessment of expeditionary clinical knowledge. KSA baseline lists periodically updated via the JTS/JTTED



2. Maintain Clinical KSAs:
MTF practice aligned with KSAs to maintain readiness related clinical skills. Gaps addressed through VA and TAA's.

3. Skills Assessment:
Deliver in pre-deployment "window." Complete expeditionary clinical skills assessment, train/retrain as needed. Conduct team training as necessary.

4. Deployment Ready:
Knowledge assessment and skills training Information provided to Services to determine "deployment ready."

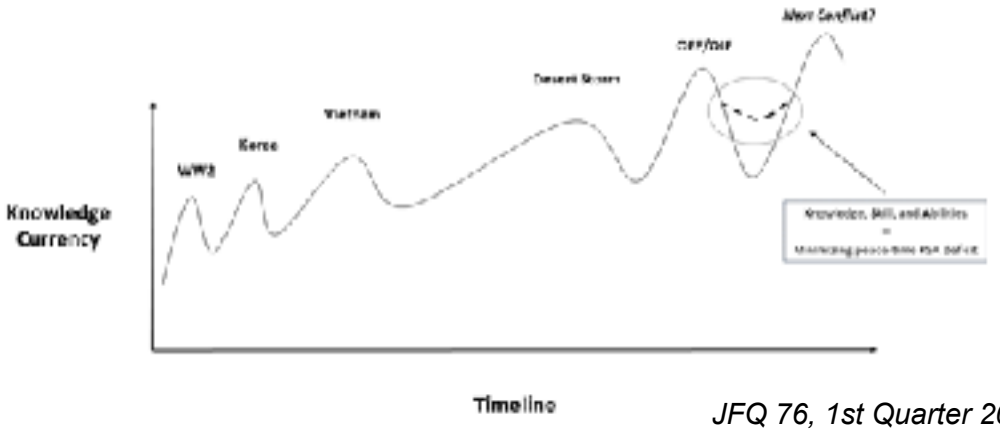
Problem: Perishable Skills

The current fragmented approach to expeditionary specialty skills training, refinement and retention in the MHS is not sufficient to maintain critical wartime combat casualty care skill sets

We recognize, however, the discordance between the skills we train for in peacetime against the requirement in war. Identifying approaches to remain proficient in critical skills is a challenge **for Navy Medicine.** (BUMED SSG Critical Skills Sustainment)

Pre-deployment training surveys, observations, insights, and lessons (OIL) indicate that clinical specific pre-deployment training provided to deploying personnel does not consistently and/or adequately prepare individuals to quickly assume their medical duties while deployed. (MEDCOM OPORD 17-17)

Evolution of Knowledge Skill Currency Across Conflicts



JFQ 76, 1st Quarter 2015

Deputy Secretary Direction

- First, expand and accelerate work on knowledge, skills, and abilities for the deployable medical force to ensure that we are better positioned to measure and ensure the readiness of our medical staff for contingency operations.

- Second, conduct a zero-based budget review of military medical treatment facilities, develop a standardized methodology for military treatment facility resource allocation, and begin the development of a single accounting system supporting the Military Health System, to ensure efficient resourcing of military treatment facilities and facilitate system-wide auditability, down to the level of individual military treatment facilities.

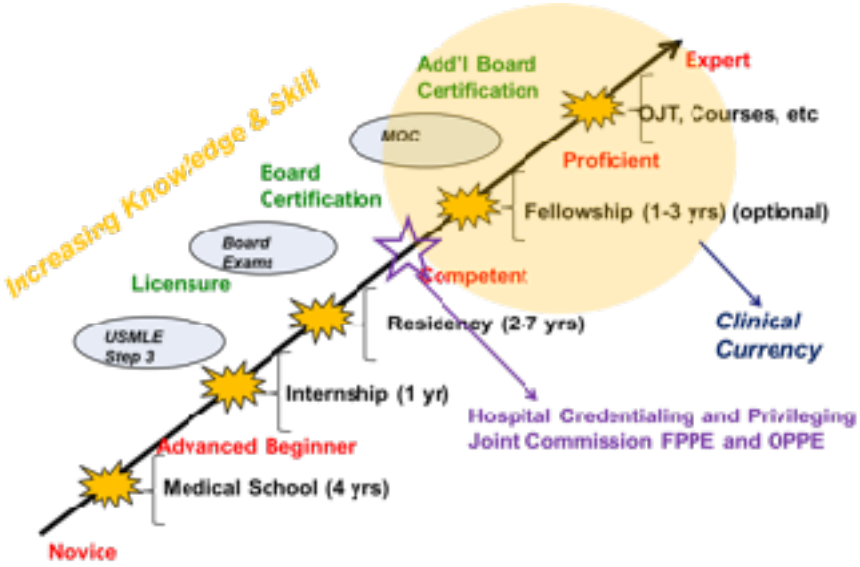
- Third, develop and present to me alternate courses of action to implement reform of the administration of the Defense Health Agency and military medical treatment facilities, as required by section 702 of the NDAA for FY 2017.

In carrying out the requirements of this Memorandum, the USD(P&R) shall work in coordination with the Secretaries of the Military Departments and the Joint Staff, and with the support of appropriate elements of the Office of the Secretary of Defense. Each Secretary shall designate a senior official in the Military Department to serve as lead for this effort. My point of

17 JAN 2017

What is Currency?

- Practice Makes Perfect
- 10,000 hour rule
- Factual knowledge
- Procedural skill
- Context
- Judgment
- Environment



From the flying world:

"The idea of requiring currency is to ensure that pilots' skill sets are, at the very minimum, what they were when the pilots earned their certificates or ratings."

– Tom Benenson, *Flying*, Oct 26, 2011

Pilots distinguish between currency and proficiency

- Currency – required tasks/competencies accomplished within a given time period
- Proficiency – ability to perform a skill (fly) with expert correctness

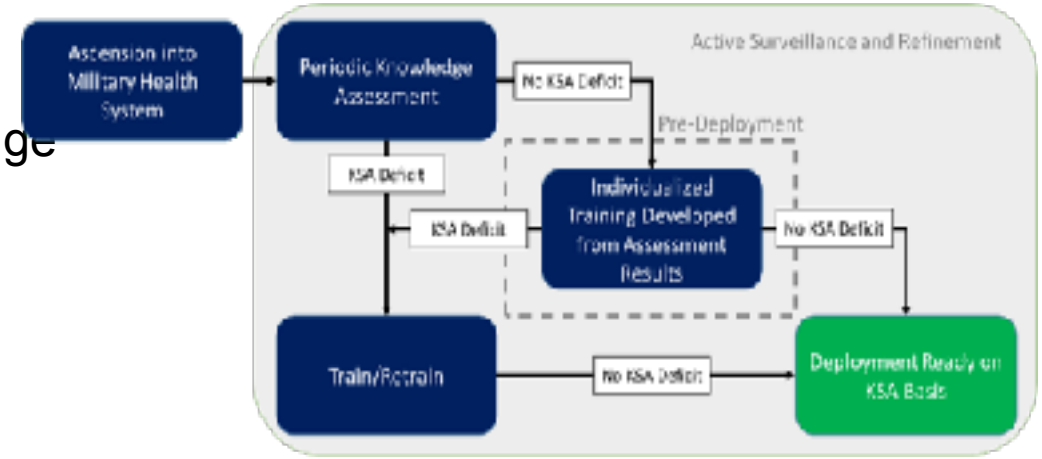
– Frank Lombardi, Rotor&Wing, Mar 1, 2010

Solution

- Implementation of specialty community supported, data driven metrics and processes that link clinical practice to deployed clinical experience. These metrics and processes will support Service and individual efforts to resource and sustain a ready medical force.

Four key parts:

- Development of a measurable "readiness" value of pre-deployment practice
- Periodic assessment of knowledge and abilities aligned with a relevant curriculum
- Pre-deployment assessment of procedural skills
- Train/Retrain when necessary focused by the above assessments



Tiered Approach to Clinical Skills

- Core Clinical Competence
  - Primary board certification
  - Specialty Maintenance of certification (MOC)
  - Hospital privileges
  - Participation in ongoing hospital CQI activity.
- [Joint] Military Medical Skills
  - Universal skills that all military healthcare providers deploying to a war zone should have.
    - TCCC and ATLS-OE
- [Joint] Essential KSAs (Knowledge, Skills, Abilities)
  - Define the knowledge base, skills, abilities needed for the provider and to develop means of assessing both cognitive and procedural tasks

Focus of this Effort

- [Service-specific] Military Medical Skills
  - Skills required to perform key tasks and work in service-specific clinical environments and platforms
    - Surface and undersea care, dive medicine, CCAT

Service Specific Requirements added to common KSAs

Strategic Partnership
Military Health System & American College of Surgeons

MHSSPACS: Focusing on Quality and Skill Sustainment

- Strategic Partnership focused on shared ethos
  - Military Health System Strategic Partnership American College of Surgeons (MHSSPACS)
- Initial agreement signed Oct 2014 between ACS Executive Director and ASD/HA
- Led by executive committee with equitable service representation
  - Chaired by Executive Director (ACS) and USU WR Chair of Surgery
- Three focus areas/working groups with defined deliverables
  - Quality
  - Systems
  - **Education and Training**
- Re-establishment of the Excelsior Society

Developed Casualty Care Specialty KSAs

KSA Blueprint Session Scope

- Tri-Service representation

- Specialties involved

General Surgery	**Anesthesia** (MD/CRNA)	**Orthopedic Surgery** (MD)
Critical Care[1] (MD, RN) -Role 3 only-	**Emergency Medicine**[1] (MD, RN)	

KSA Blueprint Session

- Defined Role 2+ expeditionary clinician by Specialty
- Defined scope of expeditionary practice by Specialty
- Utilized SME, JTS CPGs, case logs and external materials to determine necessary down-range skills
- Developed ~2,800 KSAs organized into 52 Domains by Specialty

Gen Surg 487 KSAs 8 Domains	***Ortho Surgery*** 281 KSAs 5 Domain	***ED*** 486 KSAs 8 Domains
Anesthesia 350 KSAs 7 Domains	***CC Nursing*** 523 KSAs 8 Domains	***ED Nursing*** 352 KSAs 8 Domains
	Critical Care 325 KSAs 8 Domains	

Informs NDAA Sections 703, 705, 706, 708, 725

Common KSA's Can Inform UME and GME

KSA BLUEPRINT

KSA Blueprint Session Participants

External Clinical SMEs

- Contractor-provided physician or nurse by background
- Provided clinical expertise, guidance, and outside perspective

Clinical SMEs by Specialty

- Previously deployed Army, Navy, Air Force physician or nurse and leader within specialty community
- Participated in daily discussion and agreement on TDS and KSAs

Session Leads

- Previous MHS participants of General Surgery Blueprint Session
- Oversaw entire session; provided opening and closing remarks

Pyschometrician

- American College of Surgeon and contractor-provided expert in task and test question development
- Facilitated KSA development process, reviewed and finalized KSAs to ensure consistency and appropriateness

Administrative Support

- Contractor-provided assistance
- Documented group discussion and outputs

Specialty Champion

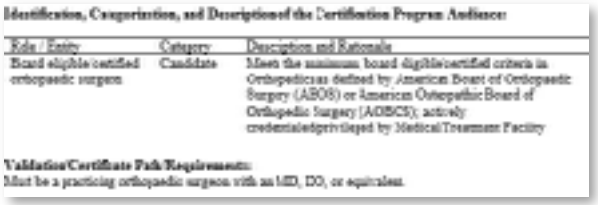
- Designated MHS leaders within specialty community
- Represented SMEs by specialty during Blueprint session
- Presented final TDS and KSAs to large group

KSA Blueprint Session Overview

Over the course of three-to-five days, the various participants worked together to complete the defined tasks

TASK 1:
Provide clear overview of blueprint session goal: identifying clinical, down-range KSAs

TASK 2:
By Specialty, define “who” will be impacted by program in “Test Definition Specification” document

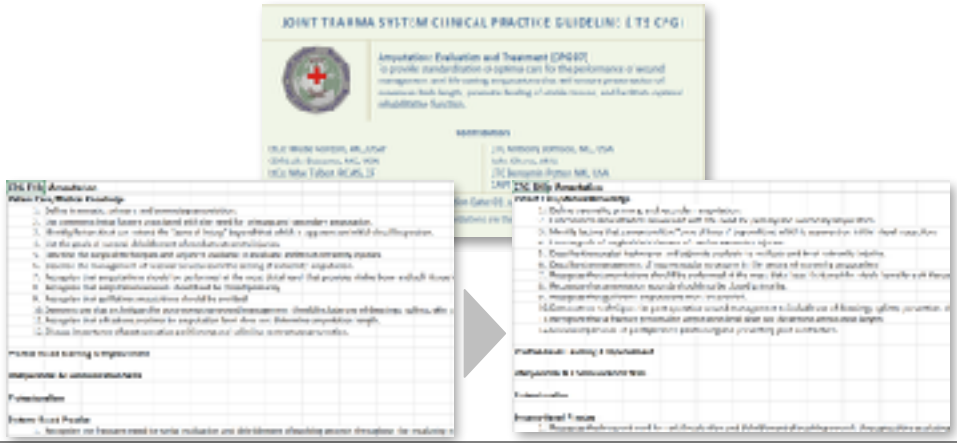


Identification, Categorization, and Description of the Certification Program Audience:

Role / Entity	Category	Description and Rationale
Board eligible/certified orthopaedic surgeon	Candidate	Meet the minimum board eligible/certified criteria as Orthopedicsas defined by American Board of Orthopaedic Surgery (ABOS) or American Osteopathic Board of Orthopedic Surgery (AOBOS); actively credentialed/privileged by Medical Treatment Facility

Validation/Certificate Path Requirements:
Must be a practicing orthopaedic surgeon with an MD, DO, or equivalent.

TASK 3:
Review CPGs and using General Surgery KSAs and other applicable Specialty KSAs as reference, develop KSAs



KSA Blueprint Session Overview

TASK 4:
Review non-CPG materials (e.g., textbooks, curriculum) that provide insight into necessary down-range capabilities

TASK 5:
Ensure Universal Domains (KSAs applicable to multiple domains) are reviewed and agreed upon

TASK 6:
Organize Domains as determined by Specialty

TASK 7:
Review General Surgery “scope of expeditionary practice” and modify tools and skills required for respective Specialty

ACGME Based Methodology

Review of JTS CPGs, R2 Registry, References

Grouped into 8 Expeditionary Domains

Wound & Amputation /Fx Mgt	Head and Spine Injury	Torso Trauma
Management of War Wounds	Cervical and TL Spine Injury	Pelvic Fracture Care
Compartment Syndrome and Fasciotomy	Concussion / mTBI Management	Blunt Abdominal Trauma
Amputation	Neurosurgical Management	Damage Control Surgery (ABD)
Burn Care	Cervical Spine Evaluation	Damage Control Surgery (Chest)
High Bilateral Amputations	Management of Severe Head Injury	Damage Control Surgery (Neck)
Extremity Trauma/ Hands and Feet		Thoracic Trauma
		Wartime Vascular Injury

Transfusion and Resuscitation	Airway and Breathing	Critical Care/Prevention
Frozen Blood	Trauma Airway Management	Hypothermia Prevention
Damage Control Resuscitation	Acute Respiratory Failure	Preventaion of DVT
Fresh Whole Blood	Trauma Anesthesia	Catastrophic Care
Inj Doc Resus Record	Inhalational Injury	Infection Control
REBOA for Hemorrhagic Shock		Management of Pain/Anxiety/Del
Emergency Thoracotomy		Critical Care additional

Military Other	Universal Domains
UXO Management	Systems Based Practice
TCCC/ Prehospital Care	Practice Based Learning and Improvement
EPW & Detainee Care	Interpersonal and Communication Skills
Obstetric / GYN Acute Care	Professionalism
Pediatric Trauma	
In Theater Transport	
Clinical Mgt of Mil Working Dogs	
Initial Care of occular/adnexal injuries	
Joint Trauma System	

Developed by a tri-service team of 14 military surgeons with deployment experience facilitated by the ACS

Educationally based methodology exportable to all critical specialties

Matching Clinical Work to KSAs

General Surgery Workload-to-KSA Methodology

CPT Codes (Procedure and E&M)

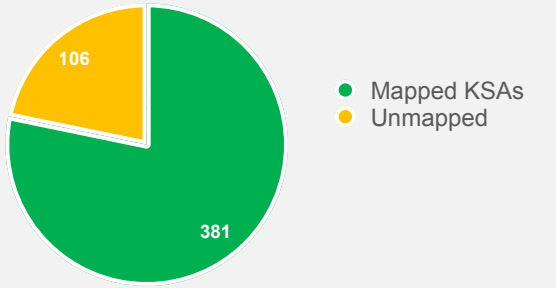
Example: Tracheostomy (31603) and Subsequent Hospital Care (99231)

American Medical Association Standards

AMA pre, intra, post descriptions of CPT Code

KSA Score by Procedure

- *AMA RUC Steps were mapped to pre-determined KSAs*
- *KSA Scores were calculated based # KSA addressed and prioritization (physician time, domain weights)*



90% General Surgery KSAs mapped using AMA Standards after removing KSAs unlikely to be included garrison practice (examples: UXOs, military working dogs)

Suggests clear potential – Must include volume to assess support for KSAs

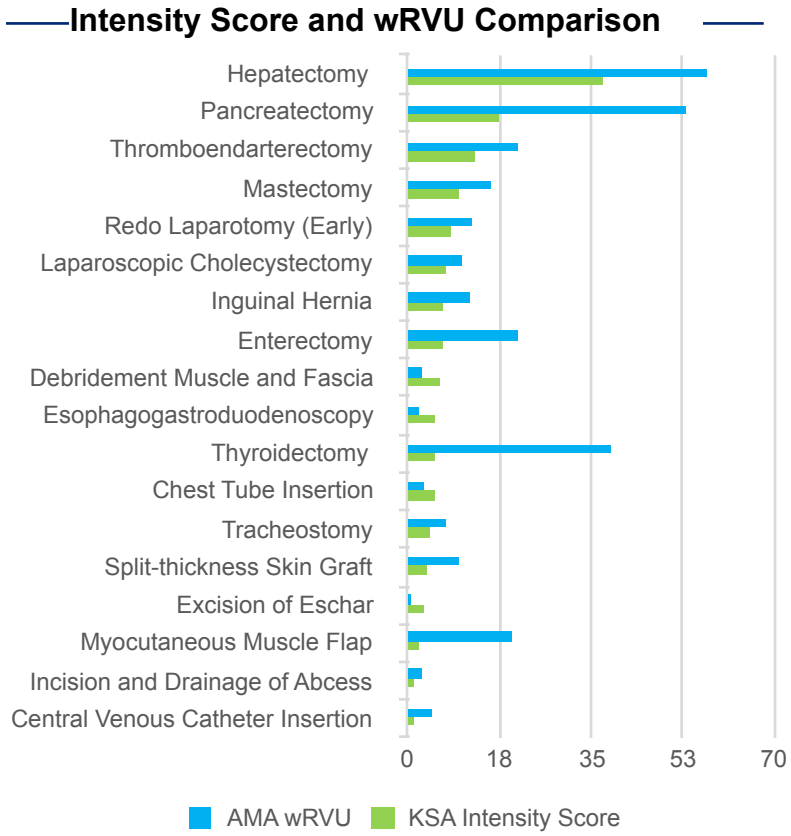
Medical Treatment Facilities Have Substantial Readiness Value

KSA Based Readiness Metric

Multiplying the KSA score by IWPUT (KSA Intensity Score) creates a more normalized curve for some procedures compared to multiplying the KSA score by wRVU

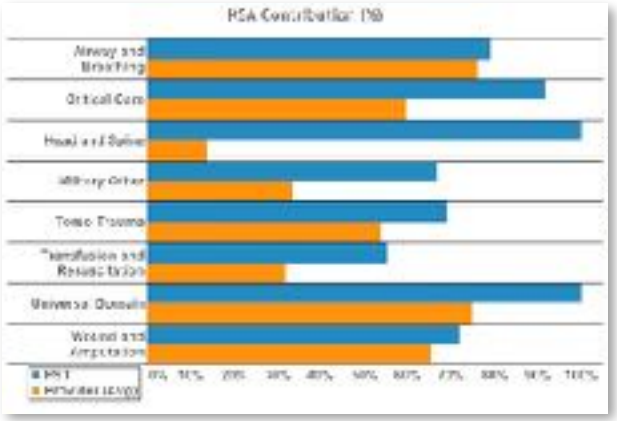
CPT Code	Procedure	KSA Score (Notional)[1]	wRVU	IWPUT [2]	KSA Intensity Score[3]
47130	Hepatectomy	279.98	57.19	0.1338	37.46
48153	Pancreatectomy	240.46	52.79	0.0727	17.48
35301	Thromboendarterectomy	121.51	21.16	0.104	12.64
19303	Mastectomy	102.22	15.85	0.0977	9.99
49000	Redo Laparotomy (Early)	128.74	12.54	0.0643	8.28
47562	Laparoscopic Cholecystectomy	100.02	10.47	0.0701	7.01
49560	Inguinal Hernia	74.94	11.92	0.0906	6.79
44120	Enterectomy	174.09	20.82	0.0379	6.60
11043	Debridement Muscle and Fascia	127.79	2.70	0.0506	6.47
43235	EGD	56.44	2.19	0.0925	5.22
60240	Thyroidectomy	76.26	39.01	0.0682	5.20
32551	Chest Tube Insertion	50.74	3.29	0.1011	5.13
31600	Tracheostomy	37.92	7.17	0.1143	4.33
15100	Split-thickness Skin Graft	68.06	9.90	0.0533	3.63
15003	Excision of Eschar	63.44	0.80	0.0518	3.29
15734	Myocutaneous Muscle Flap	44.96	19.86	0.0505	2.27
10061	Incision and Drainage of Abcess	26.09	2.45	0.0392	1.02
36558	Central Venous Catheter Insertion	9.90	4.84	0.0907	0.90

[1] IWPUT = RUC database intensity score



Threshold Development

Diversity



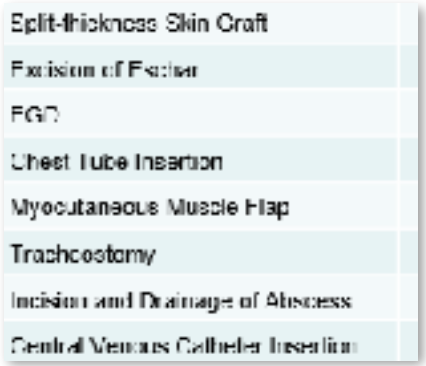
Volume

KSA Score Comparison

	Avg 75%	Avg 90%	Avg 99%
FST	2,161	2,558	2,989
MTF	32,382	37,749	115,789

The 75th percentile of the Forward Surgical Team's (FST) volume translated into a KSA Score was used due to feasibility

Acuity



E&M and select less complex procedures' contribution for the KSA Score Threshold was limited to minimize achievement of Readiness from less complex procedures

Links Garrison to Expeditionary Clinical Practice

KSA Threshold to Workforce Comparison

Compared to MHS:

- General Surgery
  - For FY16, 53% of General Surgeons meet and/or exceed the KSA Score Threshold
  - 23% of uniformed general surgeons exceeded 40% of MGMA threshold in FY2016 – P4I data
- Orthopedic Surgery
  - For FY16, 77% of Orthopedic Surgeons meet and/or exceed the KSA Score Threshold
  - 34% of uniformed Orthopedic surgeons exceeded 40% of MGMA threshold in FY2016 – P4I data

Compared to Civilian Practice:

- General Surgery
  - Currently Army general surgeons have a mean of ~117 cases per year
  - Civilian practice averages; ~500 cases per year

KSA Score Thresholds: general surgery (16,000) and ortho surgery (20,000) appear realistic and achievable

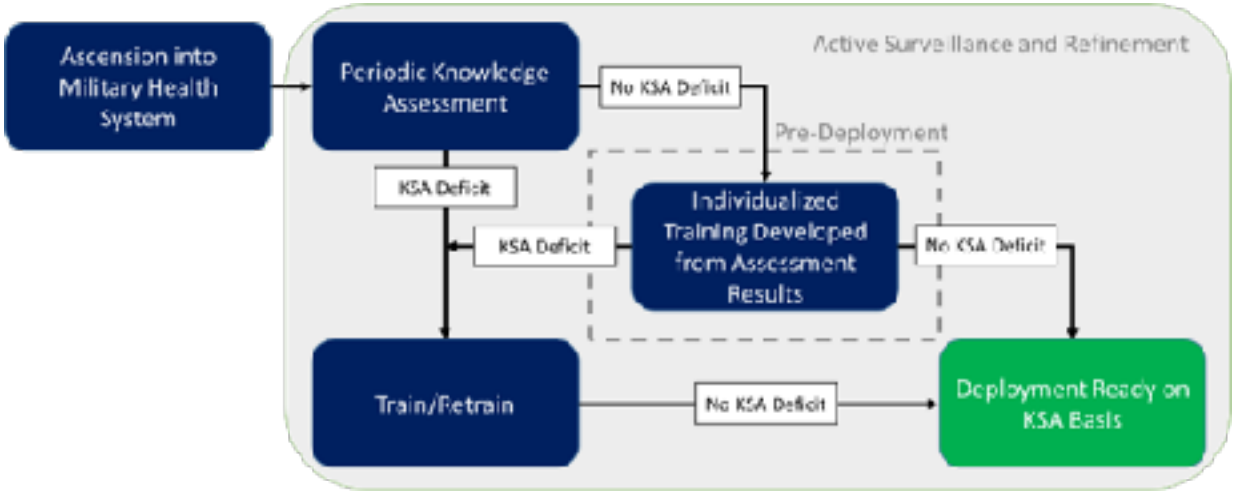
Real-time Physician and MTF Dashboard

Dashboard web link for easy access and viewing

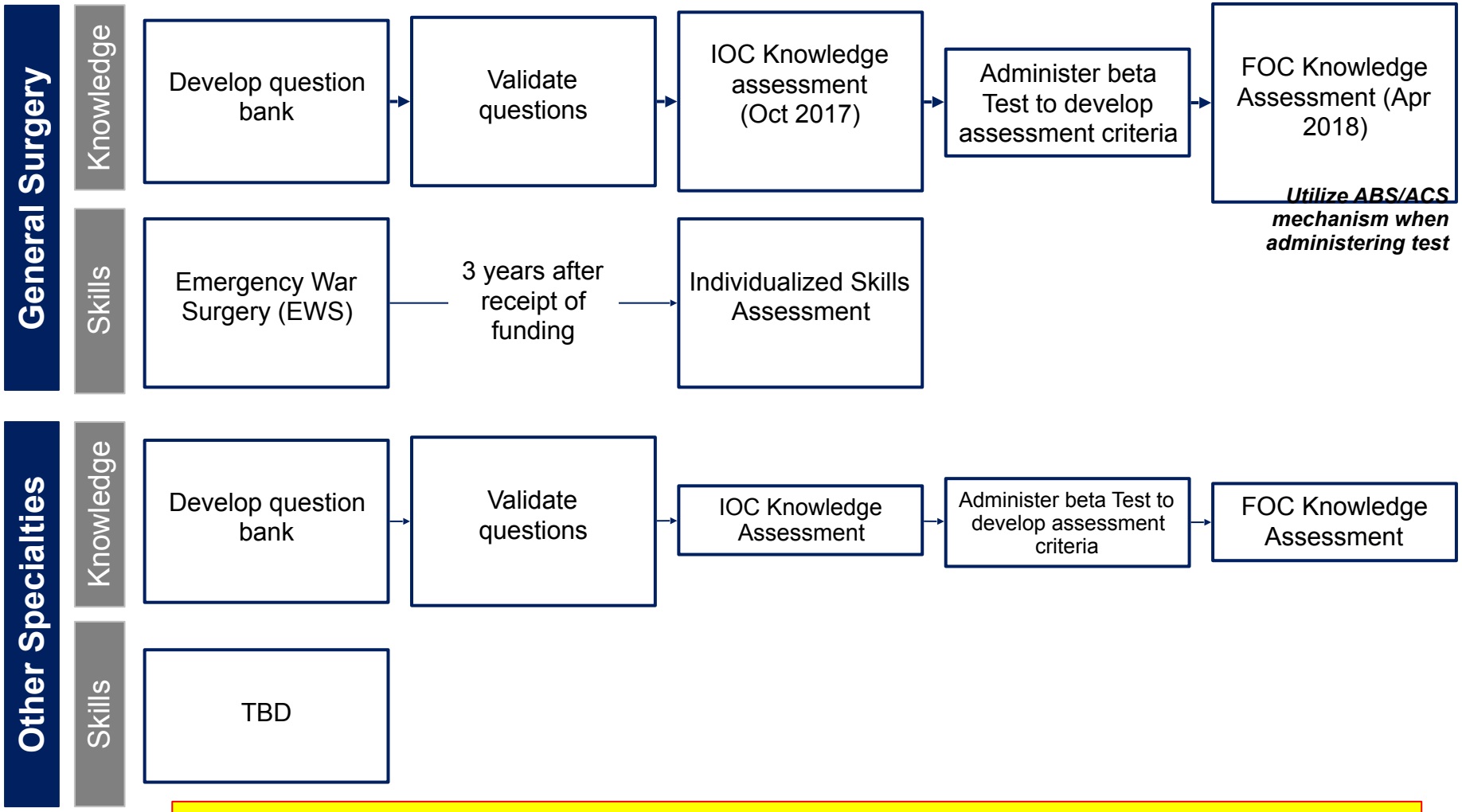
MOC² APPROACH

Expeditionary Maintenance of Currency and Competency (MOC²)

- Four Key Elements
  - Periodic assessment of knowledge and abilities aligned with a relevant curriculum;
  - Pre-deployment assessment of procedural skills;
  - Training/Retraining when necessary focused by the above assessments;
  - Development of a measurable “readiness” value of pre-deployment practice.
- Offsets:
  - Reduced need for pre-deployment trauma training if surgeon is deemed proficient
  - Standardizes requirement for existing Tier 3 trauma preparation courses
  - Meets ABMS MOC requirements



KSA Assessment and Testing Detail



Economies of Scale will occur as more specialties are developed

Pre-deployment assessment of procedural skills

ASSET (ACS)

ATOM (ACS)

Expeditionary Elements

EWS
- Didactic
- Skills

Curriculum and Knowledge Assessment

Remediation

Wound & Amputation /Fx Mgt	Head and Spine Injury	Torso Trauma
Management of War Wounds	Cervical and TL Spine Injury	Pelvic Fracture Care
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Clinical Mgt of Mil Working Dogs	
Initial Care of occular/adnexal injuries	
Joint Trauma System	

Individualized Skill Assessment
- Fasciotomy
- DCS
- REBOA/EDT
- Craniotomy
- Shunt Placement
- NPWT
- Debridement

Remediation

SKILLS DEMONSTRATION → **INDIVIDUALIZED ASSESSMENT**

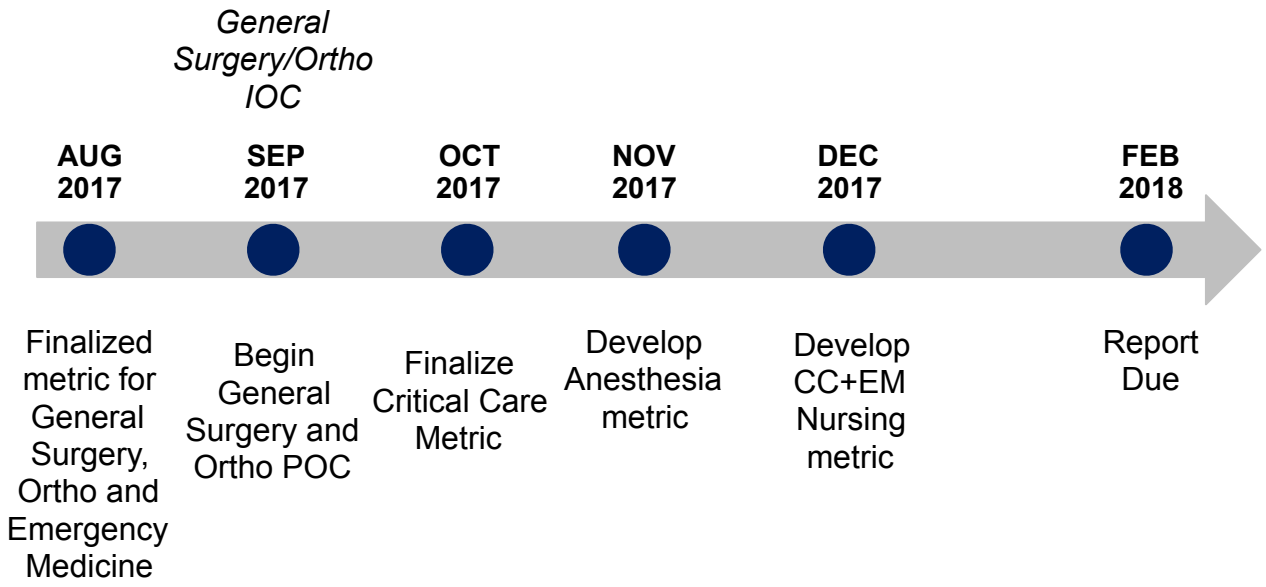
PROOF OF CONCEPT

Purpose

- Use the concepts and tools developed in the clinical setting to identify strengths and barriers in managing provider cases to KSAs

KSA Proof of Concept

- General Surgery and Orthopedic Surgery will participate in a 12-month Proof of Concept to test the KSA methodology and effectiveness of the management tool
- Additional specialties are at varying stages in KSA methodology development and may be included in future Proofs of Concept

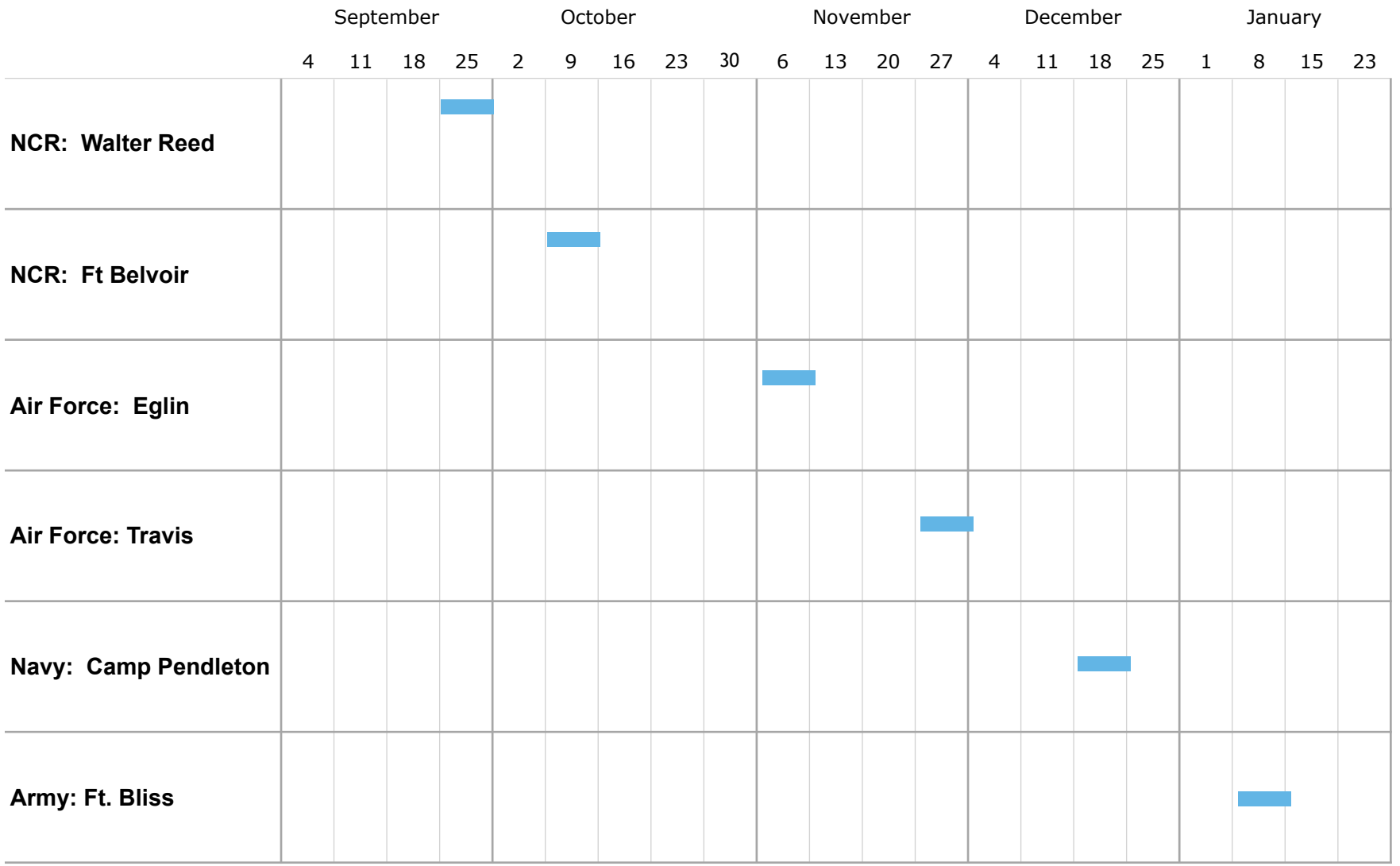


Proof of Concept Summary

- The KSA methodology and dashboard for General Surgery and Orthopedic Surgery will be tested during a 12 month long Proof of Concept at multiple MTFs
- The Proof of Concept and associated Clinician Readiness Dashboard is designed to expose this readiness assessment tool and methodology to a Military Treatment Facility's (MTF) clinical management team and gather feedback to refine the tool and methodology
- All Services and the NCR are participating in the Proof of Concept at the following MTFs:
    - Walter Reed National Military Medical Center
    - Fort Belvoir Community Hospital
    - William Beaumont Army Medical Center
    - Naval Hospital Camp Pendleton
    - 96th Medical Group
    - David Grant USAF Medical Center
- Walter Reed and Fort Belvoir served as first locations; KSA Support Team conducted site visits in September and October to meet with providers, clinical leads, and administrative staff and kickoff Proof of Concept

MILITARY HEALTH SYSTEM READINESS
Knowledge, Skills & Abilities
DEFINE • ASSESS • TRAIN • DEPLOY

Proof of Concept Timeline



Proof of Concept Metrics

In order to assess the success of the KSA Readiness Management trial in the NCR, operational and performance metrics must be put into place

Domain	Potential Metrics
Operational	▪ Labor hours linked to managing this program (MTF level, Market level, DHA level) ▪ No unfavorable change on patient access to needed care (e.g., Changes in third-next available appointment for relevant specialties) ▪ % of providers meeting the MGMA target within relevant clinical specialties ▪ Change in OR utilization ▪ Increased accuracy in workload capture (coding) ▪ Number of of requested changes to management tool
Financial	▪ Increase in MTF CMI for relevant clinical specialties
Readiness	▪ Increase (including % change) in number of clinicians that reach target KSA score ▪ Increase in average clinician diversity score ▪ Change in caseload per surgeon
Clinical Outcomes	▪ No increase in patient safety events within relevant clinical specialties (e.g., Sentinel Events or Patient Safety Reports) ▪ No unfavorable change in relevant quality metrics (e.g., 30-day readmissions, complications, mortality)

Proof of Concept Provider Feedback

During site visits at Walter Reed and Fort Belvoir, providers offered feedback on the KSA Proof of Concept

"You talk about defining moments in military medical history – this is it."

"I really value what you guys are doing."

"I think this is great. It's music to my ears."

"I'm all for it if we can try to make things a little more purposeful with our deployment."

Summary

- Implementation of specialty community supported, data driven metrics and processes that link clinical practice to deployed clinical experience
- Supports Service efforts to resource and sustain a ready medical force
- Supports MTFs as clinical readiness platforms
- Scalable process that mirrors approach in other DOD specialties
- Addresses clinical readiness complexity in understandable way
- Potential to link expeditionary KSA's throughout all stages of learning (UME ➔ GME ➔ CME)
- Defined current gaps in simulation based assessment and learning
- Informs FY2017 NDAA Sections 703, 705, 706, 708, 725

MILITARY HEALTH SYSTEM READINESS
Knowledge, Skills & Abilities
DEFINE • ASSESS • TRAIN • DEPLOY

Back-up

KSA Blueprint Session Participants
General Surgery

Tri-Service representatives were selected from each specialty to participate in the KSA development. The General Surgery participants also included clinical and non-clinical SMEs from MSSPACS

Specialty	Service	Name
General Surgery	Air Force	Lt Col Travis Gerlach
General Surgery	Air Force	Col Mary Guye
General Surgery	Air Force	Lt Col Thomas Stamp
General Surgery	Air Force	Maj Fi A Yi
General Surgery	Army	COL Brian S. Burlingame
General Surgery	Army	COL Mary J. Edwards
General Surgery	Army	LTC Jennifer M. Gurney
General Surgery	Army	LTC Jonathan B. Lundy
General Surgery	Navy	CDR Rodd Benfield
General Surgery	Navy	CAPT Ted Edson
General Surgery	Navy	CDR Robert P. Hinks
General Surgery	Navy	CAPT Craig Shepps
General Surgery	MHSSPACS	Col E. Matthew Ritter
General Surgery	MHSSPACS	Anne Rizzo
General Surgery	MHSSPACS	Col Jeffrey Bailey
General Surgery	MHSSPACS	CAPT Eric Elster
General Surgery	MHSSPACS	M. Margaret Knudson
General Surgery	MHSSPACS	Patricia Turner
General Surgery	MHSSPACS	David Hoyt
General Surgery	MHSSPACS	Ajit Sachdeva
General Surgery	MHSSPACS	Patrice Blair
General Surgery	MHSSPACS	Sara S. Hennings
General Surgery	MHSSPACS	Garrett G. Kirk

KSA Blueprint Session Participants
Critical Care, Emergency Med, Anesthesia, Nursing

Tri-Service representatives were selected from each specialty to participate in the KSA development

Specialty	Service	Name
Critical Care	Army	**Champion - COL Christopher Lettieri**
Critical Care	Air Force	Col Jerry Fortuna
Critical Care	Air Force	Lt Col Sean Macdermott
Critical Care	Army	LTC Matthew Borgman
Critical Care	Army	COL Alan DeAngelo
Critical Care	Army	LTC Jeffrey Mikita
Critical Care	Army	LTC Jeremy Pamplin
Critical Care	Navy	CDR Sean McKay
Emergency Med	Army	**Champion - COL Ian Wedmore**
Emergency Med	Air Force	Col Terry Lonergan
Emergency Med	Air Force	Maj Torree McGowan
Emergency Med	Air Force	Lt Col Bryan Szalwinski
Emergency Med	Army	LTC Jason Bothwell
Emergency Med	Army	LTC Stewart McCarver
Emergency Med	Navy	CAPT Michael Matteucci
Emergency Med	Navy	CDR Jeffrey Ricks
Emergency Med	Navy	CDR Bettina Sauter
Emergency Med	USMC	CDR Wayne Smith

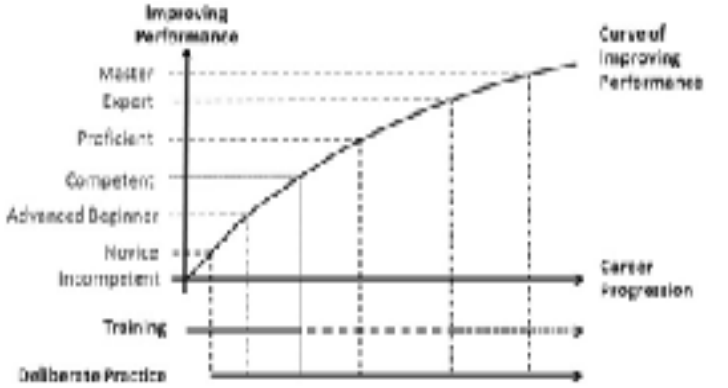
Specialty	Service	Name
Anesthesia	Air Force	**Champion – Lt Col Napoleon "Skip" Roux**
Anesthesia	Air Force	Lt Col Michael Garrett
Anesthesia	Air Force	Maj Joshua Lindquist
Anesthesia	Air Force	Maj Michael Tiger
Anesthesia	Air Force	Lt Col Matthew Uber
Anesthesia	Army	MAJ Samuel Blacker
Anesthesia	Army	COL Donna Moore
Anesthesia	Army	LTC David Ruffin
Anesthesia	Army	LTC Jeffrey Thompson
Anesthesia	Army	MAJ Matthew D'Angelo
Anesthesia	Navy	CDR John Benjamin
Anesthesia	Navy	CDR Kyle Berry
Anesthesia	Navy	CDR Justice Parrott
Anesthesia	USMC	CAPT Mitch Moon
Critical Care Nursing	Air Force	Maj Myrna Spencer
Critical Care Nursing	Army	LTC Jana Nohrenberg
Critical Care Nursing	Navy	CDR Charlene (Rena) Ohliger
Emergency Med Nursing	Air Force	**Nursing Champion - Lt Col Peter Kulis**
Emergency Med Nursing	Army	MAJ Shane Obanion
Emergency Med Nursing	Navy	LCDR Brookes Englebert

KSA Blueprint Session Participants
Orthopedic Surgery

Tri-Service representatives were selected from each specialty to participate in the KSA development

Specialty	Service	Name
Orthopedic Surgery	**Air Force**	**Champion - Lt Col Chris Lebrun**
Orthopedic Surgery	Air Force	Col Michael Charlton
Orthopedic Surgery	Air Force	Lt Col Erik Nott
Orthopedic Surgery	Air Force	Lt Col James Dombrowski
Orthopedic Surgery	Air Force	Maj Ryan Finnan
Orthopedic Surgery	Army	LTC Kenneth Nelson
Orthopedic Surgery	Army	LTC Mark McAndrew
Orthopedic Surgery	Army	LTC Jean-Claude D'Alleyrand
Orthopedic Surgery	Navy	CDR George Nanos
Orthopedic Surgery	Navy	CDR Charles Osier
Orthopedic Surgery	Navy	LCDR Christopher Smith

Expert Trauma System



Conceptual framework for performance assessment: Competency, competence and performance in the context of assessments in healthcare – Deciphering the terminology (Kamran Khan et al, 2012).

Master:
. Sets new standards of performance
. Mostly deals with complex situations intuitively
. Able to train other experts at national or international level

Expert:
. Achieves excellent performance
. In complex situations, moves easily between analytical and intuitive solutions
. All options related to the given task are considered
. Able to train and supervise others performing routine and non-routine complex tasks

Proficient:
. Able to perform on acceptable standards routinely
. Able to deal with complexity analytically
. Related options also seen beyond the given task
. Able to train and supervise others performing routine complex tasks

Feedback & Assessment
(individual / system + adaptability)

Proficient → **Expert** → **Master**

BAS
Role 1

FST, CRTS
Role 2

CSH, EMEDS,
EMF, TAH
Role 3

OCONUS
Definitive Care
Role 4

USUHS - WRNMMC
SAMMC - MATC
Role 4

Education, Training, and Research

Pre-Deployment Practice (Role 4)