MILITARY MEDICINE TRANSFORMING THE FUTURE

Surgical Optimization and Standardization (SOS)

Association of periOperative Registered Nurses (AORN)
57th Congress

13 March 2010

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Agenda

Introductions

MHS Overview

Innovation Investment Process (IIP) Overview

Surgical Optimization and Standardization (SOS)

Next Steps

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Introductions

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Rachel Foster Introduction / Welcome

Rachel C Foster, FACHE

Ms. Foster is the Acting Deputy Assistant Secretary for Health Budgets and Financial Policy (HB&FP). In addition to her A(DASD) responsibilities, Ms Foster is the Program Manager for the Innovation Investment Process–an initiative geared toward identifying cost savings for the Military Health System. Ms. Foster is also the lead on the 2010 Quadrennial Defense Review Medical Working Group. Additionally, she acts as the lead on the alignment of Information Management and Information Technology with the Chief Financial Office Integrating Council. Prior to this, Ms. Foster chaired the 2006 QDR Medical Transformation Integration Working Group, which developed business transformation initiatives for the Military Health System and the Medical Readiness Review Resources Subgroup.

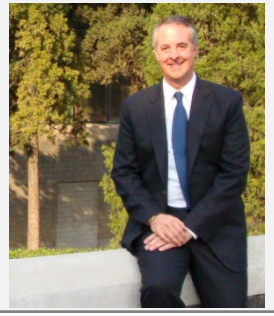
Ms. Foster is board certified in Healthcare Management and is a Fellow of the American College of Healthcare Executives. She holds a Bachelors Degree in Economics from the University of Texas, Austin; a Masters Degree in Public Policy and Administration from Columbia University in New York; and a Post Masters Degree in Health Services Administration from the George Washington University in Washington, D.C.

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

The IIP Team

Patrick Voight,
RN, BSN, MSA, CNOR

- *pvoight@deloitte.com*
- *Mobile: (248) 396 0960*



Patrick Voight is an experienced healthcare consultant in strategy, operations, and performance improvement. Patrick brings twenty-four years of industry, and consulting experience in acute care hospitals, academic teaching facilities, health system, and health plan environments. Area of experience includes: perioperative services; emergency services; case management; bed management; throughput and capacity; clinical and operational improvement. Patrick is one of the organization's lead content specialists for Perioperative Services and has national eminence in the area. Patrick is currently the National President for the Association of periOperative Registered Nurses (AORN).

Sarah Crane, MHA

- *sacrane@deloitte.com*
- *Mobile: (919) 619 7900*

Sarah Crane is a Manager in Deloitte Consulting's Life Sciences and Health Care practice and has over eight years of experience in the health care industry. Sarah has worked with executives, management and staff to help identify and implement operational and strategic improvements at several large academic medical centers and public healthcare systems across the United States. Her areas of experience include clinical and business process improvement with a strong concentration in the operating room and PACU. Sarah received her Master's in Health Administration from the University of North Carolina at Chapel Hill and her Bachelor's Degree in Computer Applications and Government from the University of Notre Dame.

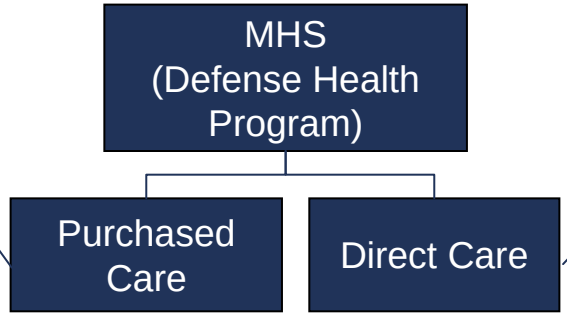
DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

MHS Overview

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Overview: Military Health System & TRICARE

- TRICARE is the Health plan for military personnel and their dependents
- 9.5 million beneficiaries and active duty service members
- 3 regional networks of civilian providers in CONUS



- Military Treatment Facilities (MTFs)
- 59+ military hospitals
- Over 500 military health & dental clinics

Provider of Care (Direct Care)

- 59+ military hospitals world wide
- 500+ military health & dental clinics
- Unique requirements and strategies

An Average Week in MHS:	
Direct Care Inpatient Admissions	4,800
Direct Care Outpatient Encounters	664,000
Total Prescriptions	2.22 million
Total Births	2,240
Claims Processed	3.7 million
Weekly Bill	$809 million

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA
MILITARY MEDICINE TRANSFORMING THE FUTURE

Military Health System (MHS) Overview

General Information

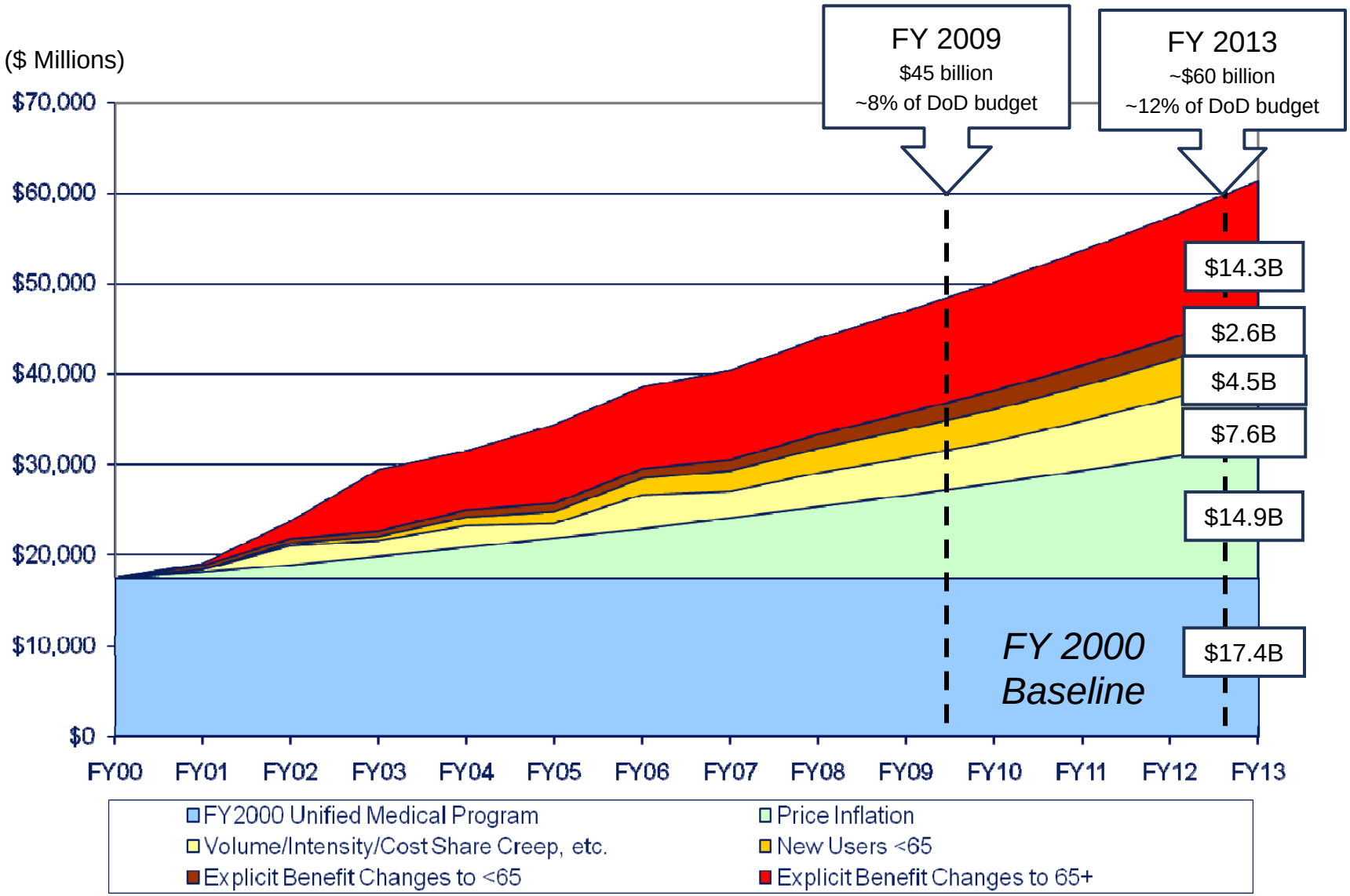
Mission: To enhance DoD and our Nation's security by providing health support for the full range of military operations and sustaining the health of all those entrusted to our care

Vision: A world-class health system that supports the military mission by fostering, protecting, sustaining and restoring health

- Operates within the Office of the Assistant Secretary of Defense (Health Affairs)
- The United States Department of Defense expenditures for fiscal year 2009 are $651.2 billion
  - MHS budget for fiscal year 2009 is estimated at $45 billion
- Health care has grown as a percentage of the DOD's budget from approx. 6% in FY2000 to 8% in FY2009
- Website: **http://www.health.mil/**

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Projected DoD Medical Cost Growth



Source: Congressional Budget Office (CBO) Estimates

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

MILITARY MEDICINE TRANSFORMING THE FUTURE

MHS Funding

FY 2009 Unified Medical Budget (millions)

DHP Appropriation:	Army	Navy	Air Force	TMA*	Total
O&M	$5,748	$2,954	$2,280	$14,737	**$25,719**
Procurement	$77	$53	$52	$130	**$312**
RDT&E	$576	$33	$45	$249	**$903**
Total DHP	$6,401	$3,040	$2,377	$15,116	**$26,934**
Other Sources:					
MILPERS	$2,090	$2,294	$2,559	$0	**$6,943**
MILCON	$334	$36	$68	$135	**$573**
MERHCF Contributions	$4,775	$3,197	$2,378	$0	**$10,350**
Total Budget Authority	**$13,600**	**$8,567**	**$7,381**	**$15,252**	**$44,800**

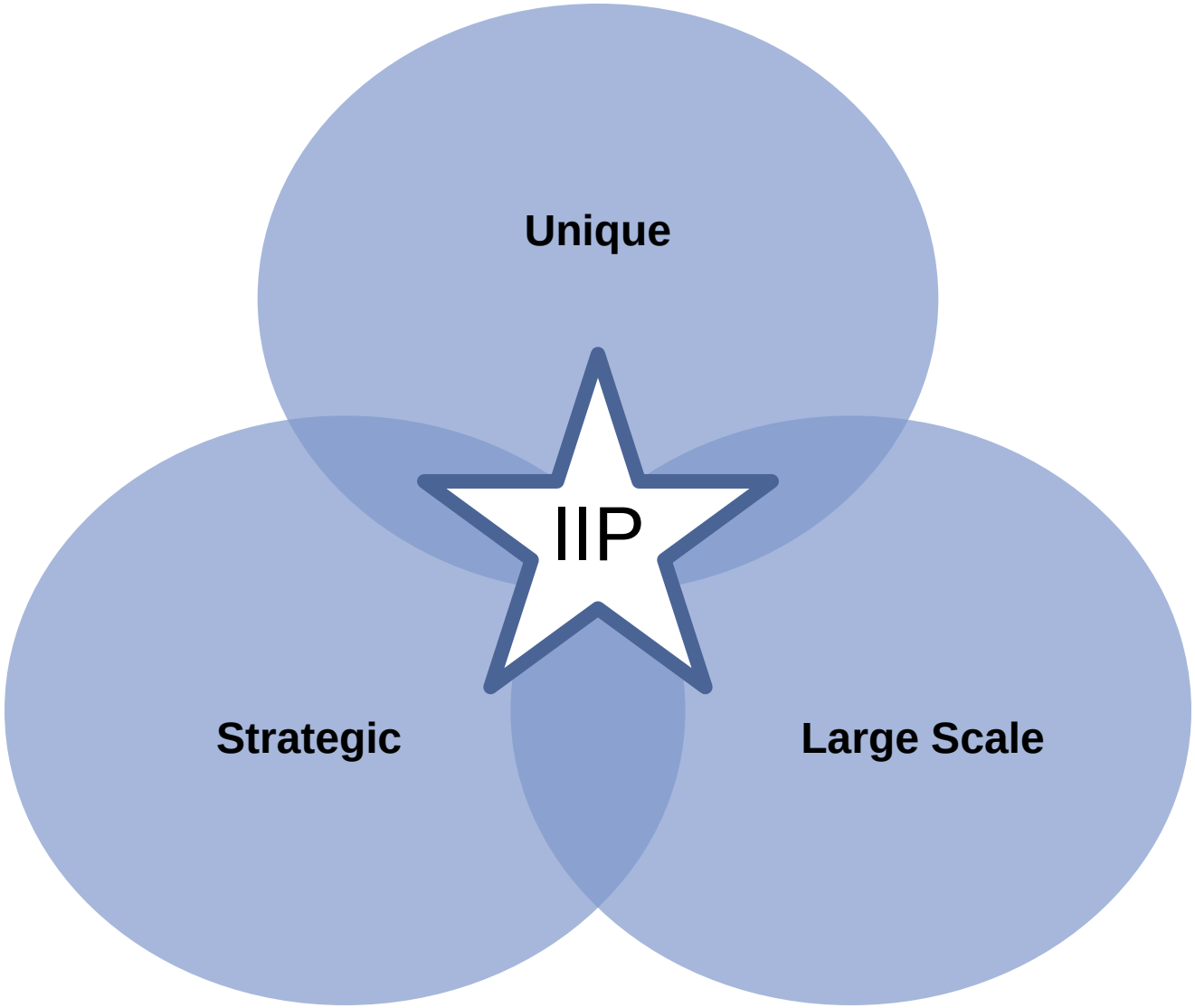
*includes TMA OPS, USUHS and Private Sector Care
MERHCF = DHP = Defense Health Program; Medicare Eligible Retiree Health Care Fund; MILCON = Military Construction; MILPERS = Military Personnel; O&M = Operations & Maintenance; RDT&E = Research Development Test & Evaluation

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA
MILITARY MEDICINE TRANSFORMING THE FUTURE

Innovation Investment Process (IIP)

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

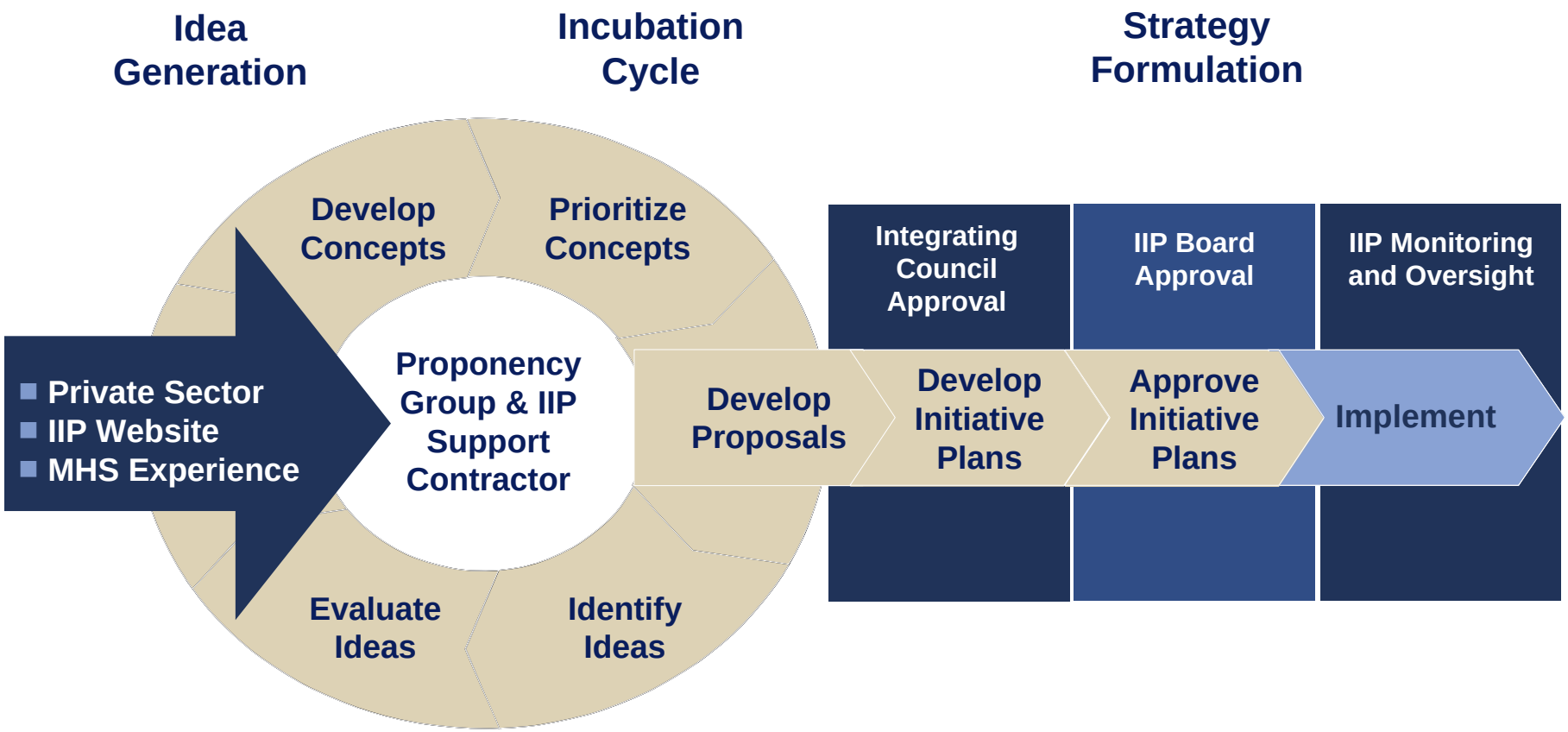
Value of the IIP



DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

MILITARY MEDICINE TRANSFORMING THE FUTURE

IIP Lifecycle



DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

IIP Ideas

Sources	Examples
▪ Services ▪ HA/TMA ▪ MHS Leadership ▪ Private Sector ▪ IIP Contractor Experience ▪ IIP Website	▪ Pharmacy ▪ Access to Care ▪ Clinical Services ▪ Supply Chain ▪ Medical, Case and Disease Management ▪ Customer Service ▪ Telemedicine

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Innovation in Selected Initiatives

Anesthesia Reporting & Monitoring Device

Represents the first time all Services will implement a medical device with a common configuration

Surgical Optimization and Standardization

Develops a standardized methodology for the evaluation of surgical capacity and utilization across the Services

Nurse Advice Line

Establishes a centralized clinician-staffed advice line and appointing center that improves access to care while reducing cost

Anesthesia Recording & Monitoring Device

Key Concepts

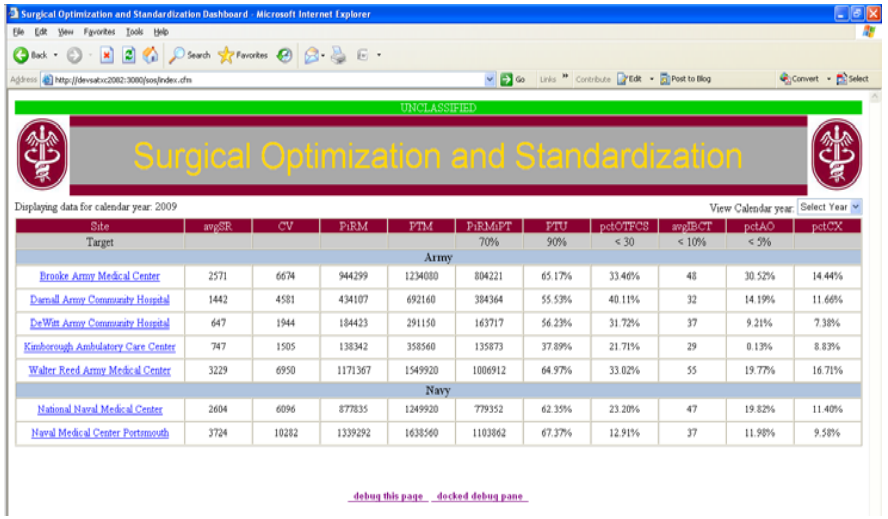
- Common configuration agreed to by all Services
- Medical trending and analysis
- Uniformed approach to leverage discounts
  - Procuring
  - Training
  - Fielding

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Surgical Optimization & Standardization

Key Concepts

- Standard metrics and reporting
- Manage capacity and utilization
- Recapture purchased care



Site	avgSR	CV	PiRM	PTM	PiRMiPT	PTU	pctOTFCS	avgIBCT	pctAO	pctCX
Target					70%	90%	< 30	< 10%	< 5%	
Army										
Brooke Army Medical Center	2571	6674	944299	1234080	804221	65.17%	33.46%	48	30.52%	14.44%
Darnall Army Community Hospital	1442	4581	434107	692160	384364	55.53%	40.11%	32	14.19%	11.66%
DeWitt Army Community Hospital	647	1944	184423	291150	163717	56.23%	31.72%	37	9.21%	7.38%
Kimbrough Ambulatory Care Center	747	1505	138342	358560	135873	37.89%	21.71%	29	0.13%	8.83%
Walter Reed Army Medical Center	3229	6950	1171367	1549920	1006912	64.97%	33.02%	55	19.77%	16.71%
Navy										
National Naval Medical Center	2604	6096	877835	1249920	779352	62.35%	23.20%	47	19.82%	11.40%
Naval Medical Center Portsmouth	3724	10282	1339292	1638560	1103862	67.37%	12.91%	37	11.98%	9.58%

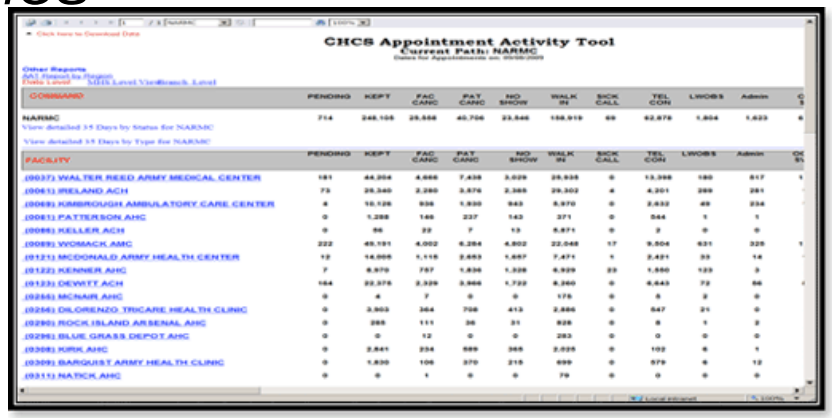
DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Nurse Advice Line

Key Concepts

- Nurse triage service linked to appointing
- Shifts intensity-of-care toward self-care
- Available 24/7 to all TRICARE beneficiaries

CHCS



DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

MILITARY MEDICINE TRANSFORMING THE FUTURE

Continuing the Call for Good Ideas

What:

The idea should have broad application across the MHS and positive ROI

Who:

Anyone can submit an idea

How:

www.health.mil/IIP

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Surgical Optimization and Standardization

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

SOS Phase I

Initial Recommendations from Phase I

1. Adopt "OR Dashboard" for monthly reporting

Monthly stats include: Case Volume, OR Case Minutes, Prime Time Volume, Prime Time OR Case Minutes, Prime Time Utilization, On-Time First Case Starts, In-between Case Time, Patient In to Incision, Case Cancellations within 24 hours, Same Day Add-ons

2. Adopt proposed targets on OR Dashboard

3. Approve funding for education, training and business rule development for OR Dashboard and core process redesign

4. Define business rules for data capture

5. Approve staffing resource to maintain S3 database for Army, Navy and potentially Air Force

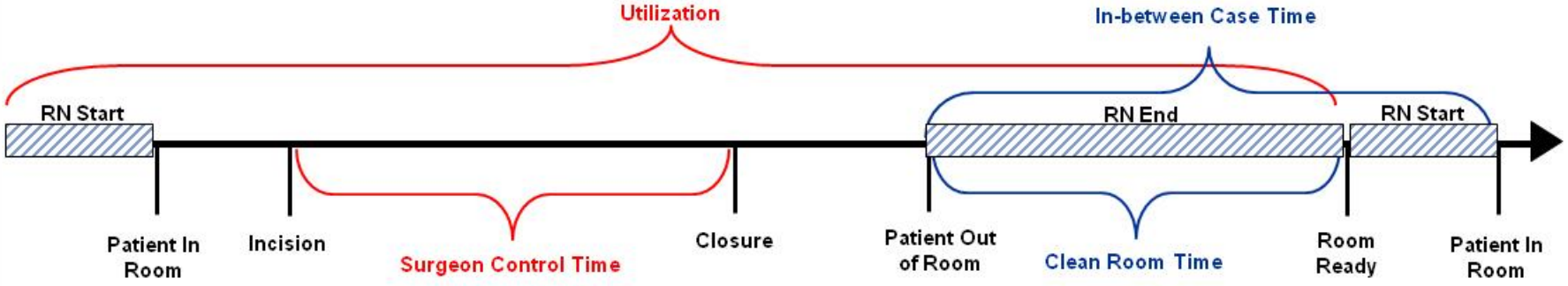
6. Map current and future state core operational processes - implement

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Utilization Methodology

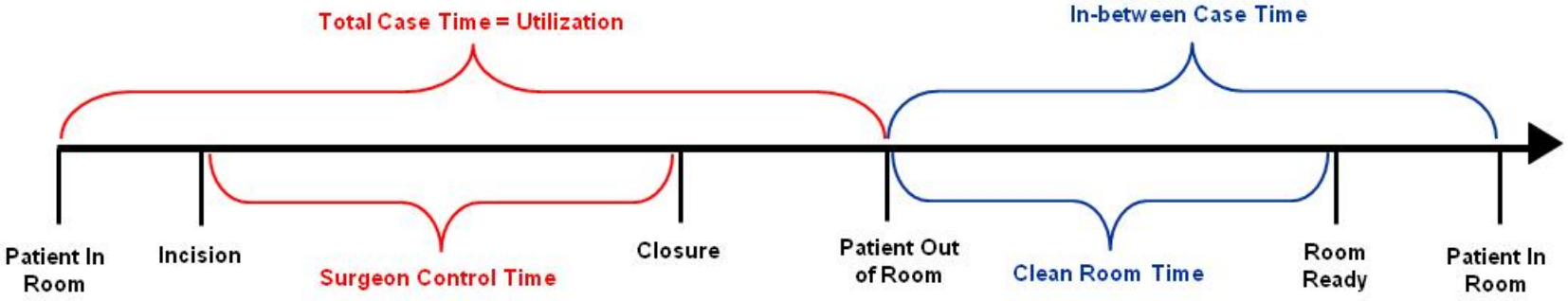
Current Methodology (S3):

- The current methodology used at MTFs with S3 measures "RN Start" and "RN End" in the utilization
- Room utilization includes turnover time ("RN Time") – Industry benchmark 85% utilization
- **There is inconsistency when RN times (RN Start, RN Stop) are used and *can artificially inflate room utilization***



Standard Methodology Used for Business Case:

- **The standard methodology used in this analysis ensure that all facilities were measured the exact same way**
- Room utilization excludes turnover time ("RN Time") – Industry benchmark 75% utilization
- Standardization allows comparison within and across Services



DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

MILITARY MEDICINE TRANSFORMING THE FUTURE

Core Metrics: Operating Room Dashboard (OR Dashboard)

Development of standardized, operational metrics via a dashboard is key to understanding and improving the business

Case level data from April 1, 2007 – March 31, 2008

		Army			Navy				Air Force	
	Target	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**
Total Annual Volume	**Site specific**	8,497	5,842	1,850	9,850	3,827	10,039	2,055	1,997	3,006
Total Annual Case Time (hours)	**Site specific**	20,323	8,577	2,880	21,883 **	5,730	22,255	2,621	3,395	6,322
Prime Time Volume	**Site specific**	6,985	5,165	1,842	8,571	3,261	9,111	1,490	1,871	2,712
Prime Time Case Time (hours)	**Site specific**	15,062	7,142	2,841	19,357	4,980	19,220	2,521	2,998	5,297
Prime Time Utilization *	**75%**	69%	66%	49%	62% ***	52%	63%	47%	41%	57%
% of On-Time First Case Starts	**95%**	45%	40%	10%	76%	27%	27%	25%	41%	42%
In-between Case Time	**20 - 30 mins**	40 mins	30 mins	30 mins	36 mins	28 mins	36 mins	23 mins	33 mins	30 mins
"Patient In" to "Incision"	**Minor 15-20 mins** **Major 20-25 mins**	29 mins	20 mins	25 mins	28 mins	24 mins	26 mins	24 mins	22 mins	21 mins
Same Day Add-ons	**TBD**	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Case Cancellations Day of Surgery	**< 4%**	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Example of annual results – going forward recommend implementation of a site specific monthly dashboard that can be rolled-up by facility to the Surgeons General

* Measurement excludes room turnover
** Excludes CT and Cysto hours
*** MTF runs prime time until 5:00 PM, if based on 3:30 PM end of prime time would demonstrate 68% utilization

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

MILITARY MEDICINE TRANSFORMING THE FUTURE

SOS Dashboard Development: Phase II

Goal: **To assess and determine a set of metrics to measure volume, demand, and utilization in the operating rooms and for each metric identify methodology for measurement, definitions, targets, and data points**

Objectives of SOS Phase II:

- Create an operational and standardized dashboard that will generate opportunities to:
  - Measure volume, demand, and utilization at each facility
  - Identify facilities that have excess capacity or facilities that are being underutilized
  - Deploy resources effectively to treat patients and align with demand
  - Promote readiness by standardizing processes across MTFs
  - Increase cost-saving opportunities by opening the surgical schedule and limiting the amount of purchased care referrals due to access-to-care issues
- Develop recommendations to align data collection and reporting methodologies with best practices
- Manage the development of a manual and reports for S3

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Phase II Pilot Sites

The following 13 sites represent the MTFs included in this initiative.

	Pilot Site	Surgical Management System	Service
1	**Brooke Army Medical Center**	S3	Army
2	**Fort Hood**	S3	Army
3	**Fort Belvoir**	S3	Army
4	**Fort Meade**	S3	Army
5	**Walter Reed Army Medical Center**	S3	Army
6	**Landstuchl***	S3	Army
7	**Camp Pendleton**	S3	Navy
8	**National Naval Medical Center Bethesda**	S3	Navy
9	**Portsmouth Naval Medical Center**	S3	Navy
10	**San Diego Naval Medical Center**	SurgSys	Navy
11	**Andrews Air Force Base**	Excel	Air Force
12	**Wilford Hall**	McKesson	Air Force
13	**Wright Patterson Air Force Base**	Essentris	Air Force

* Newly added

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Dashboard Metrics

	Dashboard Metrics	Purpose
1	Total Case Volume	Volume
2	Total “Patient in Room” Minutes	Volume / Demand
3	Total Prime Time Minutes Available	Volume
4	Total Prime Time “Patient in Room” Minutes	Volume / Demand
5	Prime Time Utilization	Productivity
6	% of On-Time First Case Starts	Productivity
7	Average In Between Case Time	Productivity
8	Add-ons	Demand / Productivity
9	Cancellations	Demand / Productivity
10	Staffed Rooms	Productivity

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Next Steps

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA

Key Next Steps for the Surgical Dashboard

Next Steps

- Review recommendations from Columbia graduate student interns
- Pilot dashboard for 3-6 months at 13 MTFs
- Present pilot results to the IIP Board
- Consider implementation of dashboard across the MHS

DRAFT DELIBERATIVE DOCUMENT FOR DISCUSSION PURPOSES ONLY – DO NOT RELEASE UNDER FOIA