Health Affairs Briefing: Military Health System (MHS) Review

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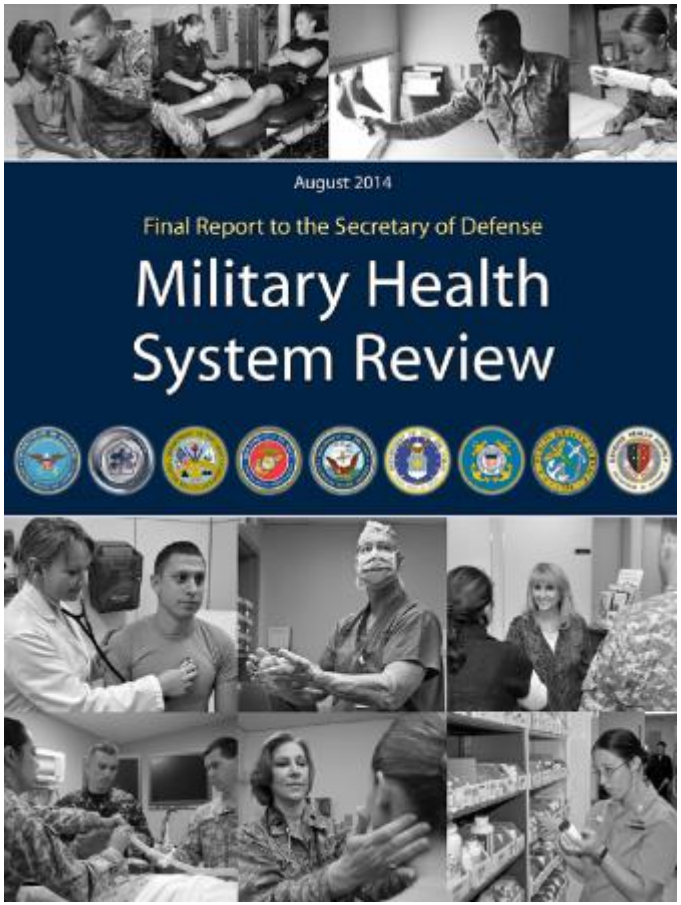
Background

- Driving forces behind MHS Review
- MHS long-standing engagement with many external organizations
  - The Joint Commission
  - National Committee on Quality Assurance /Health Employer Data Information Set (HEDIS)
  - American College of Surgeons / National Surgical Quality Improvement Program (NSQIP)
  - National Perinatal Information Centers

MHS Review Overview



- In May, SECDEF ordered a 90-day comprehensive review of the MHS, with particular focus in areas of access, quality, and safety.
- Each team led by Service Flag/GO, with DHA participation and HA oversight.
- Review included six leading external experts: three to review methodology and three to review performance.
- SECDEF was presented with final product on Aug 29, 2014. It included six over-arching recommendations, with 77 specific recommendations.

External Experts

- **Pamela Cipriano,** PhD, RN, FAAN
  Associate Research Professor of Nursing, University of Virginia
- **Janet M. Corrigan**, PhD
  Distinguished Fellow, The Dartmouth Institute for Health Policy and Clinical Practice
- **Brent C. James**, MD, M.Stat.
  Chief Quality Officer and Executive Director,
  Intermountain Institute for Health Care Delivery Research
- **Katherine L. Kahn,** MD
  Senior Scientist RAND
  Professor of Medicine, David Geffen School of Medicine at UCLA
- **Peter Pronovost,** MD, PhD, FCCM
  Johns Hopkins Medicine, Senior Vice President for Patient Safety and Quality
- **Qi Zhou**
  Executive Director, Performance Measurement Program Strategy & Quality Programs Oversight, Blue Cross Blue Shield of Massachusetts

Overarching Findings

- MHS provides good, quality care that is safe and timely, and comparable to that found in civilian sector
- There is wide performance variability
- There is no single set of metrics used across the enterprise to monitor performance in access, quality and safety
- Direct care and purchased care components are not aligned in terms of data collected or metrics used
- Greater transparency required – both internal and external
- Need a better mechanism for patient input and feedback

The Way Forward

- SECDEF announced MHS Improvement Plan on October 1st
- SECDEF, DEPSECDEF, PDUSD(P&R), ASD(HA) and Surgeons General all present
- SECDEF Memorandum outlined action plan
- Follow-on action group is established and have begun implementation of recommendations.

Action Plan

- Take immediate action to improve low-performing outliers across all domains of access, safety and quality
- Establish a common performance management system -- clear enterprise performance goals with standardized metrics – across both direct care and purchased care settings
- Establish and implement principles of a high-reliability organization (HRO)
- Expand transparency – share information with everyone: patients, providers and policymakers, American public

SECDEF MHS Review Directives

Timelines for SECDEF Mandated Actions

October | November | December | January 2015

6 13 20 27 3 10 17 24 1 8 15 22 29 5 12 19 26

Access to Care

30 Days - Action Plan to Address Outliers on Access

365 Days (Due 10/01/2015)

Complete study on access to care for TRICARE Prime enrollees with civilian PCMs

Complete study on patient satisfaction with direct and purchased care

Quality and Safety

45 Days - Action Plan to Address Outliers on Quality and Safety

90 Days - Plan to Address Quality and Safety in Purchased Care

Transparency and Performance Management

30 Days – Plan to provide all access, quality, and safety information to the public

30 Days – Plan for ongoing patient engagement

90 Days – Plan for addressing all MHS Review recommendations

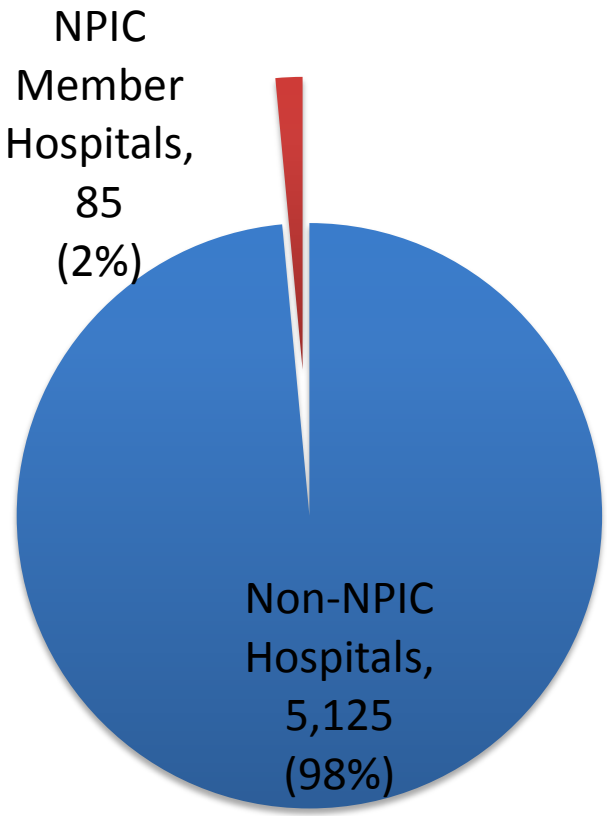
90 Days – Establish Performance Management System

295 Days (Due 07/2015): Report that demonstrated how PMS is driving system-wide improvement.

Background on Conclusions

- The data in the MHS Review, as well as the information shown in the NY Times stories are our data…we agree with the summary findings
- The MHS holds itself to higher standards than "average"
  - In the absence of national comparative data, we participate in a number of strategic partnerships with national organizations
  - Some of our public information shows how we perform against a smaller subset of American medicine

External Validation: Perinatal Care

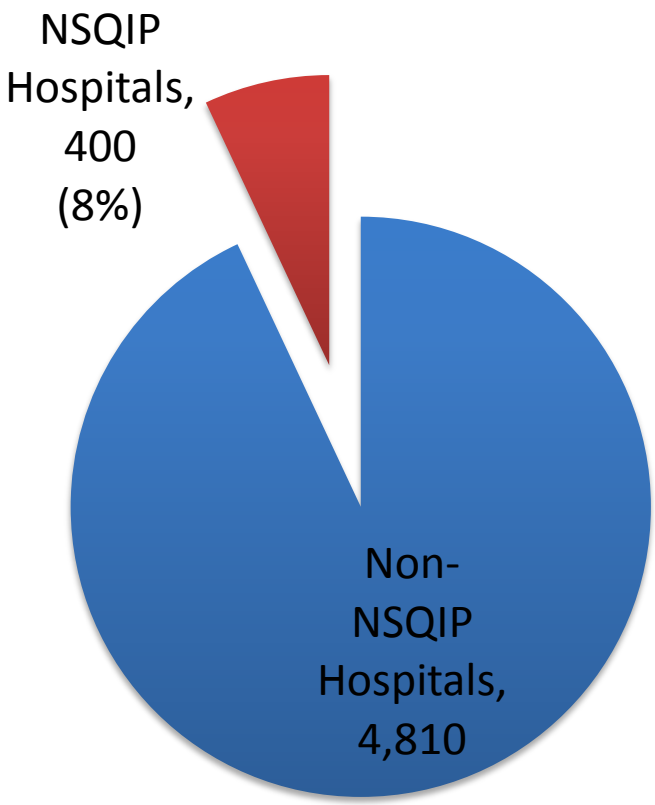


- There are no "national averages" for Obstetric / Perinatal quality outcomes.
- In absence of national standards, DoD participates in comparative analysis through the National Perinatal Information Center (NPIC).
  - 85 participating, high-volume perinatal hospitals
  - Provides wide-range of measures on quarterly basis for quality outcomes based on administrative data.

Perinatal Outcomes

- DoD higher performance
  - **Mortality (Death Rates).** From 2010 to present, DoD's inborn mortality rate for infants ≥ 500 grams were notably lower than NPIC benchmarks MHS wide.
  - **Cesarean Delivery.** MHS C-section rates are consistently lower than participating NPIC civilian-sector facilities.
- Challenges and areas for improvement
  - **Post-partum hemorrhage (PPH).** Increase in this measure is a trend currently impacting all of American medicine. DoD rates are higher than National Perinatal Information Center (NPIC) comparison rates. DoD is actively engaged in an improvement effort and collaborating with external partners to more effectively address PPH.
  - **Birth Trauma.** Indexed trauma to infant rates are significantly higher in the MHS as compared to the NPIC average. Part of the challenge is proper coding in administrative data in identifying what constitutes "trauma."

External Validation: Surgical Quality



- DoD participates in the American College of Surgeons (ACS) National Surgical Quality Improvement Program (NSQIP) -- a highly regarded, national, outcome-based, risk-adjusted program to measure and improve the quality of surgical care.

- Participation in NSQIP allows DoD to compare its performance on surgical-specific mortality (death rate) and morbidity (illness rate) against more than 400 leading hospitals in the United States.

- Seventeen (17) DoD hospitals participate in NSQIP – 9 Army hospitals, 4 Navy, 2 Air Force and 2 DHA (Walter Reed National Military Medical Center and Fort Belvoir Community Hospital). Other DoD hospitals were not participants in NSQIP due to their low surgical case volume; DHA is currently working with NSQIP to explore adding additional hospitals.

Surgical Outcomes

- DoD higher performance
  - **Mortality (Death Rates).** From Jul 2010 to present, DoD risk-adjusted surgical mortality rates were within national statistical norms in every hospital for every reporting period.
- Challenges and areas for improvement
  - **Surgical Morbidity.** DoD tracks overall morbidity, as well as performance across 9 sub-measures of morbidity. Four facilities were statistically significant outliers for overall surgical morbidity in some capacity since 2010.
  - 13 hospitals were within national norms (with some fluctuation within reporting periods).
  - Of the 9 reported morbidity measures, there are 3 sub-measures that have chronic underperformance -- Surgical Site Infection (SSI), Urinary Tract Infection (UTI); and Return to Operating Room (ROR).

Moving Forward

- **Outliers**
  - SECDEF required Service plans to address outliers on Nov 1st. Outlier performance will be tracked as part of Performance Management System, with reports due back to SECDEF.
- **Performance Management System**
  - The MHS must establish a common, enterprise-wide Performance Management System by Jan 1, 2015.
- **Transparency**
  - MHS will share and make available all aggregate statistical information and develop process for patient engagement and education surrounding access, safety, and quality data.

Core Measures for Performance Management System

Aim	Measure
Readiness	IMR
Care	HEDIS Diabetes Index
	HEDIS Cancer Screening Index
	HEDIS Appropriate Care Index (low back pain, pharngitis, URI)
	HEDIS (30 Day) Mental Health F/U
	HEDIS All Cause Readmission - Army concerns
	ORYX Transition of Care Index (asthma, VTE, Inpt psy(2))
	AHRQ Prevention Quality Indicator (PQI) Index
	Risk Adjusted Mortality (All Cases)
	NPIC Post-partum Hemorrhage
	NPIC Vaginal Deliveries with Coded Shoulder Dystocia linked to an Inborn >/=2500 grams with Birth Trauma
	National Surgical Quality Improvement Program (NSQIP) (30 Day)All Case Morbidity Index
	Satisfaction with Getting care When Needed (Service Surveys)
	Average number of days to third next available future appointment (primary care)
	Average number of days to third next available acute appointment (primary care)
	Percent of direct care enrollees in secure messaging
	PCM Continuity
	PSI 5 - Foreign Body Retention
	HAI (CLABSI)
	Overall Satisfaction with Healthcare - Inpatient
	Overall Satisfaction with Healthcare - Outpatient
Cost	PMPM
	Total Purchased Care
	Private Sector Care Cost per Prime Enrollee
	OR Utilization - Deferred until data available
	Prime Enrollment
	Pharmacy PMPM - Pending technical update
	Productivity Targets
	PCM Empanelment Targets
	ER/UCC Leakage

DRAFT Proposals: Based on internal review and discussions with other leading healthcare organizations DRAFT

Summary

"The Military Health System is unique in its scope and complexity as a world-wide health system, operating in every type of operational environment. This report…identifies many things the Military Health System is doing well. The report also identifies a number of areas for improvement. Our performance - and our challenges - reflect what is found throughout American medicine…We will expand our strategic partnerships with leading, external institutions…and leverage the exceptional talent we have within the MHS to make these improvements in our system. We can do better, and we will."

- Dr Jonathan Woodson, ASD(HA)
- Lieutenant General Patricia Horoho, US Army Surgeon General
- Vice Admiral Matt Nathan, US Navy Surgeon General
- Lieutenant General Tom Travis, US Air Force Surgeon General
- Lieutenant General Doug Robb, Director, Defense Health Agency

From MHS Review, page 108

Direct Care System

Table 4.12 Perinatal Performance Measures Summary – 2013 Annual Rates

No.	Measure	NPIC Average	Direct Care Average	Army	Air Force	Navy	NCRMD
1	Percent of inductions prior to 37 weeks gestation with a medical indication	97.1%	99.2%	98.3%	100.0%	99.7%	100.0%
2	Percent of C-sections prior to 37 weeks gestation with a medical indication	94.8%	96.0%	92.7%	98.9%	98.4%	100.0%
3	PSI 18 - Obstetric Trauma-Vaginal delivery with instruments	0.1481	0.1449	0.1285	0.1145	0.1604	0.2703
4	PSI 19 Obstetric Trauma-Vaginal delivery without instruments	0.0207	0.0177	0.0178	0.0167	0.0165	0.0262
5	Shoulder dystocia	0.0226	0.0258	0.0277	0.0369	0.0279	0.0202
6	Postpartum hemorrhage (PPH)	0.0340	0.0507	0.0464	0.0570	0.0562	0.0461
7	Postpartum Readmission to Delivery Site	0.0098	0.0136	0.0149	0.0110	0.0125	0.0139
8	Inborn Readmission to Delivery Site	0.0113	0.0342	0.0343	0.0301	0.0387	0.0152
9	PSI 17 Birth Trauma-Injury to Neonate	0.0020	0.0043	0.0041	0.0047	0.0042	0.0072
10	Inborn Mortality Rate >= 500 Grams	0.0026	0.0016	0.0014	0.0003	0.0024	0.0012

Rates are statistically significantly better than the NPIC average

Rates are statistically significantly worse than the NPIC average.

Rates are observationally better than the NPIC average; but there was not enough data for calculation of confidence intervals thus statistical significance could not be determined.

Lower is better for all measures except Measures 1 and 2.

2014 MHS Review Group

Source: National Perinatal Information Center Database, July 2014