# 2013 TRICARE Inpatient Satisfaction Survey (TRISS)

## Report of Findings

**Calendar Year 2012 Discharges**

**Defense Health Cost Assessment and Program Evaluation (DHCAPE)**

**ALTARUM INSTITUTE**

SYSTEMS RESEARCH FOR BETTER HEALTH

# 2013 TRICARE Inpatient Satisfaction Survey (TRISS)

# Report of Findings

## Calendar Year 2012 Discharges

**Prepared for**

**TRICARE Management Activity**

**Defense Health Cost Assessment and Program Evaluation (DHCAPE)**

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# Preface

This document contains Altarum's Report of Findings for the TRICARE Inpatient Satisfaction Survey (TRISS). It was produced as part of Contract Number GS-10F-0261K, Delivery Order/Call No. W81XWH-10-F-0573, under the guidance of TRICARE Management Activity (TMA), Defense Health Cost Assessment and Program Evaluation (DHCAPE).

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**Results at a Glance**

The TRICARE Inpatient Satisfaction Survey (TRISS) is a random sample, mail and phone mixed-mode survey of Military Health System (MHS) inpatients. The survey includes patients treated worldwide in military (Direct Care) facilities or in stateside civilian hospitals (Purchased Care). This report includes data collected from 121,935 patients discharged between January 1 and December 31, 2012. The survey yielded a 40% response rate during this period. The survey asks beneficiaries to rate their overall hospital experience and their willingness to recommend the facility to other eligible TRICARE beneficiaries. It also asks two or more questions in each of these categories:

- Communication with doctors
- Communication with nurses
- Responsiveness of hospital staff
- Cleanliness and quietness of the hospital environment
- Pain management
- Communication about medicines
- Discharge information

Performance comparisons against the Consumer Assessment of Healthcare Providers and Systems (HCAHPS) national benchmark averages are then presented.

**Direct Care and Purchased Care Combined:**

➢ Overall, TRICARE beneficiaries reported higher *Overall Hospital Rating* (67%) and *Recommend the Hospital* (70%) in 2012 compared with 2011 (65% and 69%, respectively).

➢ Overall, TRICARE beneficiaries rated their hospital lower than the HCAHPS national benchmark (69%).

➢ Ratings for *Communication with Nurses, Communication with Doctors, Communication about Medicines, Responsiveness of Hospital Staff, Discharge Information, Pain Management, Cleanliness of Hospital Environment*, and *Quietness of Hospital Environment* for Direct Care and Purchased Care combined were higher in 2012 compared with 2011.

**Direct Care (DC):**

➢ Overall, beneficiaries who were inpatients at Air Force (73%) and Joint Task Force Capital Region Medical Command (JTF CapMed) (72%) MTFs rated their hospitals higher for *Overall Hospital Rating* compared with the civilian benchmark of 69%.

➢ DC patient satisfaction scores have consistently exceeded national HCAHPS averages for *Communication with Nurses, Communication with Doctors, Communication about Medicines, Responsiveness of Hospital Staff, Discharge Information, Pain Management, Cleanliness of Hospital Environment*, and *Quietness of Hospital Environment*.

➢ Among the three Product Lines (Medical, Surgical, and Maternity Care), overall satisfaction (*Overall Hospital Rating* and *Recommend the Hospital*) was highest for Surgical Care respondents.

➢ MTFs

   – San Antonio Military Medical Center, Moncrief Army Community Hospital (ACH), and the 88th Medical Group-Wright-Patterson received the highest ratings for *Overall Hospital Rating*.

   – More patients at Landstuhl Regional Medical Center and the 88th Medical Group-Wright-Patterson were willing to *Recommend the Hospital* compared with more than 90% of civilian facilities.

**Changes from 2011 to 2012 in *Overall Hospital Rating* among DC Beneficiaries:**

➢ Almost two-thirds (28) of the 46 MTFs, for whom data were available from at least 70 respondents in 2012, had an increase in their *Overall Hospital Rating* by one percent or more.

➢ Fort Belvoir Community Hospital, Naval Hospital (NH) Yokosuka, Moncrief ACH, and Bayne-Jones ACH, showed the most improvement in *Overall Hospital Rating* from 2011 to 2012.

**Purchased Care (PC):**

➢ PC beneficiaries scored their hospitals slightly lower than the HCAHPS benchmark for *Overall Hospital Rating* (68% compared with the benchmark of 69%) and slightly higher than the benchmark for *Recommend the Hospital* (71% with the benchmark being 70%).

➢ PC hospitals that received an *Overall Hospital Rating* equal or higher than 90% of civilian hospitals were:

  − St. Luke's Regional Medical Center, Boise, Idaho
  − Community Hospital of the Monterey Peninsula, Monterey, Calif.
  − Sharp Memorial Hospital, San Diego, Calif.
  − University of North Carolina Hospitals, Chapel Hill, N.C.
  − FirstHealth Moore Regional Hospital, Pinehurst, N.C.
  − Grossmont Hospital, La Mesa, Calif.
  − University of Alabama Hospital, Birmingham, Ala.
  − Vanderbilt University Hospital, Nashville, Tenn.

## 1.1    Introduction

The purpose of the Office of the Assistant Secretary of Defense/TRICARE Management Activity (OASD/TMA) TRICARE Inpatient Satisfaction Survey (TRISS) is to monitor and report on the experience and satisfaction of Military Health System's (MHS) beneficiaries who have been admitted to MHS direct care (DC) military treatment facilities (MTFs) and civilian network/purchased care (PC) hospitals. The survey instrument incorporates the questions developed by the Agency for Health Care Research and Quality (AHRQ) and the Centers for Medicare and Medicaid Services (CMS) for the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) initiative.

The goal of the HCAHPS initiative is to measure uniformly and report publicly patients' experience with inpatient care through the use of a standardized survey instrument and data-collection methodology. This report summarizes information from the TRISS. Results inform internal quality improvement initiatives, assess the impact of changes in operating procedures, and provide feedback to providers and patients (additional information is available in section 1.4).

TRISS reports on adult beneficiaries receiving inpatient care at MTFs worldwide and selected civilian network hospitals throughout the continental United States. This report summarizes the data obtained by the TRISS from inpatients discharged between January 1, 2012, and December 31, 2012. It compares the results of the TRISS with the results of the HCAHPS surveys reported by CMS.

During this reporting year, the TRISS survey was administered to a random sample of discharged adult patients, 18 years of age and older, with a variety of medical conditions, using two survey modes: mail, with telephone follow-up. DC patients' surveys were administered within six weeks (42 days) after discharge, in compliance with the HCAHPS Quality Assurance Guidelines. The HCAHPS standard was not applied to PC patients whose discharge records were not available in time to meet the 42-day rule. Of the 121,935 beneficiaries surveyed, completed surveys were received from 48,580 inpatients of whom 28,321 received care in 56 MTFs and 20,259 received care in 73 PC network hospitals. The overall response rate was 40%.

Comparison of these results with the results from previous surveys as well as comparisons with civilian benchmark data provides insights into the Department of Defense's (DoD) progress in meeting its goals for patient satisfaction and high-quality health care. This TRISS report of findings provides data analysis of the following measures:

- Overall rating of hospital and willingness to recommend hospital
- Nursing care (courtesy, respect, listening and explanations)
- Physician care (courtesy, respect, listening and explanations)
- Communication (with nurses, doctors and medications)
- Responsiveness of staff
- Pain management
- Hospital environment (clean and quiet)

The TRISS report of findings presents results in the following views:

- MHS-wide (DC and PC combined)
- by DC and PC separately
- by TRICARE Regions: North, South and West
- by Beneficiary Category: Active Duty (AD), AD Family, Retirees and Family under 65 years of age, and Retirees and Family over 65 years of age
- by Product Line: Medical, Surgical, and Maternity Care,

- by Military Services: Army, Navy, Air Force
- by Joint Task Force Capital Region Medical Command (JTF CapMed)

For this report, JTF CapMed was included in the DC analysis. JTF CapMed includes Walter Reed National Military Medical Center and Ft. Belvoir Community Hospital, both located in the Washington, D.C., area.

The patient-mix adjustment used in this report allows MHS hospitals to directly compare results with private civilian hospitals reported on the Hospital Compare website. Hospital Compare results are available at http://www.medicare.gov/hospitalcompare/. Patient-mix adjustments were applied to DC and PC combined, overall DC and overall PC, TRICARE Regions, Military Services, and DC MTFs. Details on patient-mix adjustment can be found in Appendix A.5.1.

## 1.2   Key Findings

**Highlights for MHS (Exhibit 1):**

- Satisfaction factors among DC users that increased significantly since calendar year (CY) 2011 included: *Communication with Doctors, Communication with Nurses, Responsiveness of Hospital Staff, Discharge Information, Pain Management*, and *Quietness of Hospital Environment*. During this same time period, PC users reported higher satisfaction with *Communication with Doctors, Communication with Nurses, Communication about Medicines, Responsiveness of Staff Discharge Information, Pain Management*, *Cleanliness of Hospital Environment* and *Quietness of Hospital Environment.*

- About two-thirds (67%) of all respondents gave the hospital ratings of 9 or 10 on *Overall Hospital Rating* and 70% would *Recommend the Hospital*. The *Overall Hospital Rating* was below the HCAHPS national average of reporting hospitals. PC results for *Overall Hospital Rating* and *Recommend the Hospital* were 68% and 71%, respectively, slightly higher than their DC counterparts (66% and 68%).

- More DC beneficiaries gave satisfied responses in 2012 compared with 2011 on all measures except *Communication about Medicines* and *Cleanliness of Hospital Environment,* for which there were no changes from 2011 to 2012. More PC patients gave satisfied responses in 2012, compared with 2011, on all measures.

**MHS Satisfaction by Product Line (Medical, Surgical, and Maternity Care) (Exhibit 1):**

- Medical, Surgical, and Maternity Care patients reported higher satisfaction with *Communication with Nurses* and *Pain Management* in 2012 than in 2011.

- Overall, Medical and Maternity Care patients were more likely to recommend their facility in 2012 than in 2011. Surgical patients were more likely to recommend their hospital than patients receiving care in other Product Lines (Medical and Maternity Care). Surgical patients reported the highest satisfaction with the *Communication with Nurses*, *Communication with Doctors, Discharge Information*, *Pain Management*, and *Cleanliness of Hospital Environment* compared with patients from the other Product Lines. Maternity Care patients reported the highest satisfaction with *Responsiveness of Hospital Staff, Quietness of Hospital Environment* and *Communication about Medicines*.

**MHS Results by Respondent Beneficiary Categories (Exhibit 1):**

- Active Duty (AD) and their family members (ADFMs) recommended their hospital more often in 2012 than in 2011 (64% vs. 62% for AD; 63% vs. 61% for ADFMs). ADFMs' recommendation and rating of hospitals continue to lag the civilian benchmarks (70% and 69%, respectively) in 2012, which were 64% and 57% for AD, and 63% and 57% for ADFMs, respectively.

- AD, ADFMs, and Retirees and their family members reported significantly higher satisfaction with *Communication with Nurses* in 2012 than in 2011 (83%, 78%, 83% for Retirees and family under 65 years and 80% for Retirees and family over 65 years in 2012 vs. 82%, 77%, 81%, 79% in 2011) and exceeded the civilian benchmark in 2012 (78%).

- Retirees and their family members, in all age groups, gave more satisfied responses for *Overall Hospital Rating* (72% for <65, 76% for 65+), *Recommend the Hospital* (76% for <65, 78% for 65+), *Communication with Nurses* (83% for <65, 80% for 65+), *Communication about Medicines* (72% for <65, 66% for 65+), and *Pain Management* (72% for <65, 67% for 65+) compared with the benchmarks. In addition, the under age 65 retiree group gave more satisfied responses to all measures compared with the benchmark.

- Retirees and their family members reported the highest *Overall Hospital Rating* for their hospitals, under age 65 (<65; 72%), ages 65 and older (65+; 76%), while ADFMs reported lower *Overall Hospital Ratings* (57%).

- The percentage recommending the hospital followed a similar pattern, with Retirees under age 65 (76%) and age 65 and older (78%) more likely to recommend their hospital, compared with 64% of AD and 63% of ADFM respondents.

- Retirees and their family members 65 years and older reported lower satisfaction with *Communication about Medicines* (67%), *Responsiveness of Hospital Staff* (66%), *Discharge Information* (85%), and *Quietness of Hospital Environment* (56%), compared with AD (80%, 76%, 91%, 77%, respectively) and other beneficiary categories.

- Retirees and their family members 65 years and older gave ratings that met or exceeded the benchmark in all satisfaction measures except *Quietness of Hospital Environment* (56%), which they rated below the benchmark of 60%.

- ADFMs' satisfaction level met or exceeded the benchmark in all categories, with the exception of *Cleanliness of Hospital Environment* (72%), which they rated below the benchmark (73%).

**Direct Care Results Based on 28,321 Patient Responses (see Exhibits 17 and 18):**

- Beneficiaries who received care in DC facilities rated all satisfaction measures higher than the civilian benchmark, with the exception of *Overall Hospital Rating* (66%) and *Recommend the Hospital* (68%), which were rated lower than the benchmarks (69% and 70%, respectively).

- Navy DC respondents reported higher satisfaction with *Communication with Nurses* (82%), *Communication about Medicines* (72%), *Responsiveness of Hospital Staff* (75%), and *Pain Management* (70%) in 2012 than in 2011 (81%, 70%, 73% and 69%, respectively). Navy respondents also gave higher scores to their MTFs on *Overall Hospital Ratings* (64%) and were more likely to *Recommend the Hospital* (68%) in 2012 compared with 2011 (63% and 68%[1], respectively).

- Air Force MTF respondents were more likely to report higher satisfaction with *Responsiveness of Hospital Staff* (79%) in 2012 than in 2011 *(*78%) and Army MTF users reported higher satisfaction for *Communication with Doctors* (84%), *Discharge Information* (88%), and *Quietness of Hospital Environment* (65%) in 2012 than in 2011 (84%, 87%, and 64%, respectively). Army and Navy MTF respondents were also more satisfied with *Pain Management* in 2012 compared with 2011 (71% and 70% versus 70% and 69%).

- JTF CapMed MTF respondents reported higher satisfaction on *Cleanliness of Hospital Environment* (73%) and *Quietness of Hospital Environment* (67%) in 2012 than in 2011 (68% and 58%, respectively). These respondents reported higher *Overall Hospital Ratings* (73%) in

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[1] The difference at the one decimal point level is masked due to rounding. A few other comparisons in the report also show similar, seeming non-differences.

- 2012 than in 2011 (64%), as well as were more likely to *Recommend Their Hospital* (78% in 2012, 72% in 2011).

- Overall hospital ratings and the likelihood of recommending the facility were higher than the national benchmark (69% and 70%, respectively) from inpatients from Air Force and JTF CapMed facilities (72% and 73% for *Overall Hospital Rating*, respectively) (74% and 78% for *Recommend the Hospital*, respectively).

- AD respondents from DC facilities were more likely to recommend their hospital and give higher rating to *Communication with Nurses*, *Discharge Information,* and *Quietness of Hospital Environment* in 2012 than in 2011. ADFMs rated their hospitals higher in 2012 than in 2011. Retirees and their family members reported no change in satisfaction rates from 2011 to 2012 (Exhibit 17 and 18).

- Among Medical, Surgical, and Maternity respondents from DC facilities, Surgical inpatients reported higher ratings (71%) and were more likely to *Recommend the Hospital* to family and friends (76%) compared with Medical (70% and 74%, respectively) and Maternity (54% and 59%, respectively) inpatients. In addition, Surgical and Medical inpatients' scores met or exceeded the national benchmarks (69% and 70%, respectively), while Maternity inpatients gave scores below the benchmark on both measures. (Exhibit 17).

- Medical inpatients from DC facilities reported higher ratings and higher satisfaction with *Communication with Nurses* (84%), *Discharge Information* (87%), *Pain Management* (70%) and *Quietness of Hospital Environment* (67%) in 2012 than in 2011 (83%, 86%, 69%, 66%, respectively). DC Maternity inpatients reported higher *Overall Hospital Rating* (54%), were more likely to *Recommend the Hospital* (59%), and reported higher satisfaction with *Communication with Doctors* (84%) in 2012 compared with 2011 (52%, 57%, and 83%, respectively). DC Surgical inpatients were more likely to rate higher satisfaction with *Responsiveness of Hospital Staff* (76%) in 2012 than in 2011 (74%) (Exhibit 17).

- Retirees and their family members using DC facilities reported the highest ratings for their hospital, under age 65 (75%), ages 65 and older (85%), while AD and their family members reported lower ratings (56 and 55%).

- The percentage recommending the hospital followed a similar pattern, with the retirees under age 65 (79%) and age 65 and older (86%) more likely to *Recommend the Hospital* , while only 62% of AD and 60% of their family members would *Recommend the Hospital* .

- Retirees and their family members using DC facilities met or exceeded the civilian benchmark in all satisfaction categories.

- ADFMs using DC facilities gave ratings that met or exceeded the benchmark in all categories with the exception of *Overall Hospital Rating* (55%; benchmark, 69%) and *Recommend the Hospital* (60%; benchmark, 70%) and *Cleanliness of Hospital Environment* (71%), which family members rated below the benchmark (73%). AD inpatients reported satisfaction scores that met or exceeded the benchmark in all categories, with the exception of *Overall Hospital Rating* (56%; benchmark, 69%) and *Recommend the Hospital* (62%; benchmark, 70%).

- San Antonio Military Medical Center, Moncrief ACH, and the 88th Medical Group-Wright-Patterson inpatients rated their hospitals highest of all DC facilities (79%) for *Overall Hospital Rating* and just below the HCAHPS 90th percentile cutoff point of 80% (Exhibit 7). Landstuhl Regional Medical Center and the 88th Medical Group-Wright-Patterson respondents rated their hospitals at or above the HCAHPS 90th percentile on *Recommend the Hospital* (Exhibit 9). Nineteen MTFs received ratings at or above the benchmark (69%) for *Overall Hospital Rating* (Exhibit 7), and 21 MTFs received ratings at or above the benchmark (71%) for *Recommend the Hospital* (Exhibit 9).

**Purchased Care Results Based on 20,259 Patient Responses (see Exhibits 25 and 26):**

- PC respondents in all regions rated their hospital higher in 2012 (67% for TRICARE Regional Office (TRO) North, 67% for TRO South, and 70% for TRO West) as compared with 2011 (63% for TRO North, 66% for TRO South, and 68% for TRO West). Beneficiaries who received care in the North and West regions were more likely to recommend their hospital in 2012 than in 2011.

- PC respondents in the North, South, and West regions reported higher satisfaction with *Communication with Nurses* in 2012 (79%, 78%, and 78%) as compared with 2011 (77%, 77%, and 78%). In addition, respondents in these regions reported satisfaction with *Communication about Medicines* (67%, 67%, and 68%) and *Discharge Information* (87%, 86%, and 87%) that exceeded civilian benchmarks (63% and 84%, respectively).

- Among the Medical, Surgical, and Maternity respondents from PC facilities, Surgical inpatients reported higher *Overall Hospital Ratings* (74%) and were more likely to recommend their hospital to family and friends (76%) compared with Medical (66% and 69%, respectively) and Maternity (64% and 73%, respectively) inpatients. In addition, Surgical (76%) and Maternity (73%) PC inpatients were more likely to recommend their hospital as compared with the national benchmark (70%). Medical, Surgical, and Maternity PC inpatients equaled or exceeded the scores for *Communication with Nurses* from 2012 (76%, 80%, and 81%) to 2011 (76%, 79%, and 79%).

- Retirees and family age 65 and older, who received care within the PC sector, gave the highest hospital ratings (72%; benchmark, 69%) and recommendations (73%; benchmark, 70%) compared with other beneficiary categories.

- ADFMs, using PC facilities ratings, met or exceeded the benchmark in all categories with the exception of *Overall Hospital Rating* (63%; benchmark, 69%). AD, using these same facilities, reported satisfaction scores that met or exceeded the benchmark in all categories with the exception of *Overall Hospital Rating* (62%; benchmark, 69%).

- St. Luke's Regional Medical Center, Boise, Idaho, and Community Hospital of the Monterey Peninsula, Calif., inpatients reported the highest ratings among PC hospitals and within the HCAHPS 90th percentile (84% each) (Exhibit 21). FirstHealth Moore Regional Hospital and Sharp Memorial Hospital in San Diego were most likely to be recommended and fell within HCAHPS 90th percentile (88% each). Forty-two PC hospitals received ratings at or above the benchmark of 69% (Exhibit 21) for *Overall Hospital Rating*, while 48 hospitals received recommendations at or above the 50th percentile benchmark (71%) (Exhibit 23).

## 1.3 Change in *Overall Hospital Rating* Between 2012 and 2011

Results from January to December 2011 and those from January to December 2012 were compared for each MTF to identify the magnitude of change over time. Of particular interest was the distribution of change in ratings from 2011 to 2012 when examined for *Overall Hospital Rating* for all DC facilities (Exhibit 2). Only MTFs with 70 or more respondents during 2012 were included in this analysis—46 MTFs met this criterion. Of those, six had no change from 2011 to 2012, another six increased their rating by 1%, and 22 MTFs increased their rating by 2% or more. Only 12 MTFs had decreases from 2011 to 2012. The median change among these MTFs was a 1% increase.

Exhibit 3 displays the MTFs with the largest increases in *Overall Hospital Rating*, as well as those with the largest decreases. The five MTFs with the largest increases include Ireland ACH, Bassett ACH, Bayne-Jones ACH, NH Yokosuka, and Fort Belvoir Community Hospital, which had the largest increase, 22 percentage points from 2011 to 2012. The five MTFs with the largest decreases in *Overall Hospital Rating* included 366th

Medical Group-Mountain Home, Reynolds ACH, 633rd Medical Group-Langley-Eustis, Blanchfield ACH, and Madigan Army Medical Center, which had the largest decrease of 7 percentage points.

## 1.4    About TRISS and the HCAHPS

The TRISS includes questions from the HCAHPS questionnaire as well as DoD-specific questions. The HCAHPS component of the survey is a national, standardized, publicly reported survey of patients' perspectives of hospital care.

HCAHPS designed this national survey with three broad goals in mind:

- A standardized survey that allows objective and meaningful comparisons of hospitals on topics important to consumers.
- Public reporting of HCAHPS results to create new incentives for hospitals to improve quality of care.
- Enhanced accountability through public reporting by increasing transparency of the quality of hospital care provided in return for the public investment.

TRISS is structured to align closely with HCAHPS' goals by producing data about patients' perspectives of care that allow objective and meaningful comparisons of care in MTFs and PC hospitals on topics important to TRICARE beneficiaries, DoD leaders, and military healthcare providers. These survey results identify opportunities for benchmarking best practices, improving quality of care and enhancing accountability within the MHS for the public investment of caring for beneficiaries.

The HCAHPS survey was developed over a multiyear partnership of the CMS and the AHRQ. AHRQ carried out a rigorous, multi-faceted, scientific process to validate the survey, which has been endorsed by the National Quality Forum, a national organization that represents the consensus of many healthcare providers, consumer groups, professional associations, purchasers, federal agencies, and research and quality organizations.

CMS first implemented the HCAHPS survey in October 2006 and, as of Spring 2012, 3,851 hospitals reported HCAHPS results on Hospital Compare. These hospitals submit responses to this core set of questions to CMS quarterly. Their data are then used to calculate quarterly average benchmark scores for patient satisfaction with inpatient experiences. Hospitals can measure, track and compare their individual scores and the public can use these reports to inform their healthcare decisions.

The TRISS survey instrument, the basis for this report, asked recently discharged patients 41 questions about their hospital stay. The survey contained 27 core HCAHPS questions about critical aspects of patients' hospital experiences and 14 DoD-specific items/questions. The DoD questions are not included in this report. To view results for the DoD questions or more information beyond what is covered in this Report of Findings, see the TRISS reporting Website, https://surveys.altarum.org/triss/. This website currently supports 479 MHS users by reporting patient satisfaction scores for MHS, Military Services, TROs, and for DC and PC hospitals. The website incorporates interactive tools and resources for assisting health professionals in assessing and improving patient satisfaction and medical care.

**Exhibit 1: Overall Summary: Percentage Satisfied**

| | CMS Benchmark | DC & PC Combined¹ | Direct Care¹ | Purchased Care¹ | Product Line² Medical¹ | Surgical¹ | Maternity¹ | Beneficiary Category² AD¹ | AD Family¹ | Retirees & Family under 65¹ | Retirees & Family 65+¹ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Overall Indicators** | | | | | | | | | | | |
| Recommend Hospital | 70% | 70% ↑ | 68% ↑ - | 71% ↑ + | 72% ↑ + | 76% + | 63% ↑ - | 64% ↑ - | 63% ↑ - | 76% + | 78% + |
| Overall Hospital Rating | 69% | 67% ↑ - | 66% ↑ - | 68% ↑ - | 68% ↑ | 73% + | 57% ↑ - | 57% - | 57% ↑ - | 72% + | 76% ↑ + |
| **Composites** | | | | | | | | | | | |
| Communication with Doctors | 81% | 83% ↑ + | 85% ↑ + | 81% ↑ | 79% - | 88% + | 84% ↑ + | 84% + | 83% ↑ + | 85% ↑ + | 81% |
| Communication with Nurses | 78% | 81% ↑ + | 82% ↑ + | 78% ↑ | 81% ↑ + | 82% ↑ + | 79% ↑ + | 83% ↑ + | 78% ↑ | 83% ↑ + | 80% ↑ + |
| Communication about Medicines | 63% | 70% ↑ + | 72% + | 67% ↑ + | 70% + | 74% + | 75% + | 80% + | 73% + | 72% + | 67% + |
| Responsiveness of Hospital Staff | 66% | 71% ↑ + | 74% ↑ + | 65% ↑ - | 67% ↑ | 72% ↑ + | 75% + | 76% + | 72% + | 71% + | 66% ↑ |
| Discharge Information | 84% | 88% ↑ + | 89% ↑ + | 87% ↑ + | 84% ↑ | 92% ↑ + | 90% + | 91% ↑ + | 89% + | 89% ↑ + | 85% ↑ |
| Pain Management | 70% | 71% ↑ + | 71% ↑ + | 72% ↑ + | 69% ↑ - | 77% ↑ + | 74% ↑ + | 74% ↑ + | 72% ↑ + | 74% + | 75% ↑ + |
| **Individual Items** | | | | | | | | | | | |
| Cleanliness of Hospital Environment | 73% | 73%³ ↑ + | 74% + | 73% ↑ | 75% ↑ + | 78% + | 73% ↑ | 82% ↑ + | 72% - | 76% ↑ + | 74% |
| Quietness of Hospital Environment | 60% | 62% ↑ + | 65% ↑ + | 58% ↑ - | 61% ↑ + | 66% + | 74% ↑ + | 77% ↑ + | 72% ↑ + | 64% ↑ + | 56% - |

¹ " ↑ " indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011. "+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.

²Ratings below the hospital level are weighted rather than patient-mix adjusted: Product Lines, Beneficiary Categories.

Note: Percentages being compared may show significant differences but appear to be the same, as the difference is at the decimal level and the percentages displayed have been rounded.

**Exhibit 3: Largest Changes in Percentage Satisfied from 2011 to 2012 for MTEs for *Overall Hospital Rating***



## Biggest Increases

| MTF | |
|-----|--|
| Ft. Belvoir Com Hosp (78%) | |
| NH Yokosuka (61%) | |
| Bayne-Jones ACH-Ft. Polk (71%) | |
| Bassett ACH-Ft. Wainwright (67%) | |
| Ireland ACH-Ft. Knox (57%) | |

0  5  10  15  20  25  30

## Biggest Decreases

366th MedGrp-Mountain Home (63%)

Reynolds ACH (65%)

633rd MedGrp-Langley-Eustis (66%)

Blanchfield ACH (53%)

Madigan AMC (63%)

-30  -25  -20  -15  -10  -5  0

# 2.0 Overview of Methodology

## 2.1 Background

The TRISS reports on the experiences of beneficiaries, who received medical, surgical, or maternity inpatient care in MHS MTFs, or through its civilian network hospitals, while maintaining compliance with guidelines used by HCAHPS. The objective of TRISS is to measure patients' satisfaction with their experiences with services received and the care environment, measured by *Overall Hospital Rating* and *Recommend the Hospital*:

- A score of 9 or 10 on Question 21 – rating the hospital stay
- A response of "Definitely Yes" on Question 22 – recommending the hospital to friends and family

The TRISS includes questions from the HCAHPS survey instrument where adults are asked about their recent experiences as an inpatient.

The survey focuses primarily on the following:

- Doctor communication and courtesy
- Nurse communication and courtesy
- Communication about medicines
- Responsiveness of hospital staff
- Discharge information

- Pain management
- Cleanliness of hospital environment
- Quietness of hospital environment
- Overall satisfaction with the inpatient visit
- Willingness to recommend the hospital to family and friends

Inpatient experiences are compared with civilian healthcare benchmarks published quarterly by HCAHPS (http://www.hcahpsonline.org/home.aspx). HCAHPS benchmarks are based on civilian patient experience data from three Product Lines—Medical, Surgical, and Maternity Care—although all estimates from HCAHPS combine scores from the three Product Lines. Inpatient visits are categorized into one of the three Product Lines, based on the Diagnosis Related Group (DRG) code associated with that inpatient stay.

Using TRISS, MHS leaders are able to monitor satisfaction levels and make comparisons with satisfaction levels in civilian care. This information enables informed decision making for quality improvement initiatives related to inpatient healthcare services.

## 2.2 Sampling Process

All inpatient discharge records from MTFs worldwide are delivered bimonthly from the Composite Health Care System (CHCS) for the DC sample frame. Similarly, all inpatient discharge records from care delivered by TRICARE's civilian provider network are pulled monthly from the MHS Data Repository (MDR) to create the PC sample frame. DC refers to care received at MTFs worldwide and PC refers to care received n civilian network hospitals.

The two types of care systems, Direct and Purchased, are described as follows:

- Direct Care System. This system includes roughly 56 inpatient acute care hospitals, 385 stand-alone medical clinics, and 350 stand-alone dental clinics provided by the DoD. These facilities serve over 9.6 million beneficiaries. The beneficiaries are entitled to receive care through U.S. Code Title 10. Beneficiaries include AD, Activated Guard and Reserve, Retirees, Survivors, some inactive Guard and Reserve, and their family members. Service members must generally serve 20 years to obtain retiree medical benefits. While claims are unnecessary, encounter data

are captured to indicate the types of care received, who provided the care, when the care was provided, etc.

- Purchased Care System. This system allows many beneficiaries to receive care using civilian providers when military facility cannot provide it or is inconvenient to access. A complex set of programs and policies govern the amount of payment that TRICARE contributes. Some beneficiaries have no cost shares for certain services, while others may have more substantial cost-sharing arrangements. Payments are made using Health Insurance Portability and Accountability Act (HIPAA) standard claims.

## 2.2.1 Eligible Patients for the TRISS

The following list of key inclusions/exclusions is applied to the inpatient discharge records to create the final sample frame:

- Patients over the age of 18;
- Patients with an admission with at least one overnight stay in the hospital;
- Patients alive at the time of discharge;
- Patients with a valid discharge, defined by HCAHPS (DRGs include: Medical Product Line (52-103, 121-125, 146-159, 175-208, 280-282, 286-316, 368-395, 432-446, 533-566, 592-607, 637-645, 682-700, 722-730, 754-761, 776-782, 808-816, 834-849, 862-872, 913-923, 933-935, 947-951, 963-965, 974-977 ), Surgical Product Line (1-8, 10-14, 16-17, 20-42, 113-117, 129-139, 163-168, 215-265, 326-358, 405-425, 453-517, 570-585, 614-630, 652-675, 707-718, 734-750, 769, 770, 799-804, 820-830, 853-858, 901-909, 927-929, 939-941, 955-959, 969, 970, 981-989), and Maternity Care Product Line (765-768, 774, 775), or missing;
- Patients without a mental health or substance abuse diagnosis; and
- Patients without a diagnosis of stillbirth, abortion, false labor, or antepartum.

The sample is selected using a simple random sample of discharges drawn for the MTF's Defense Medical Information System (DMIS) identification (ID) for DC. To better identify PC civilian facilities, a combination of tax ID, multi-provider suffix codes, and provider ZIP Code was used to identify distinct facilities and comparable hospitals as reported on Hospital Compare.

## 2.3 Data Collection

Data collection procedures for TRISS are modeled on the survey administration instructions from the HCAHPS Quality Assurance Guidelines, which can be found at http://www.hcahpsonline.org/qaguidelines.aspx. TRISS data are collected twice monthly for DC and monthly for PC patients. The total sample fielded for 2012 TRISS was 121,935 discharges MHS-wide (DC and PC combined). Based on the survey collection in this year's report, TRISS has an average response rate of 40%.

Questionnaires were mailed to respondents. Approximately three weeks after the questionnaires were mailed, a telephone survey was fielded to any non-respondents. Mailed surveys and telephone survey responses were both accepted until the end of each fielding period. Only completed survey results that were returned before the end of the fielding period were included in the final results.

## 2.4 Calculations and Composite Measures

Composites are groups of questions that measure a domain of care. TRISS has six Composites and two Individual items (questions) based on the HCAHPS survey, which have a corresponding benchmark derived from the HCAHPS, a survey of civilian hospital inpatients.

Scores from the individual questions are used to calculate the final composite score. Composite scores are created by first calculating the weighted proportion of patient responses in a favorable response category (i.e., "Always" for questions asking respondents how often they had a specific experience) for each item in a composite. The proportions of all individual questions in a composite are then combined to create the final composite score. Specific details of composite calculations can be found in Appendix A: Methodology.

These domains are defined as:

**HCAHPS Composite 1: Communication with Nurses**

- During this hospital stay, how often did nurses treat you with courtesy and respect? (Question 1)

- During this hospital stay, how often did nurses listen carefully to you? (Question 2)

- During this hospital stay, how often did nurses explain things in a way you could understand? (Question 3)

**HCAHPS Composite 2: Communication with Doctors**

- During this hospital stay, how often did doctors treat you with courtesy and respect? (Question 5)

- During this hospital stay, how often did doctors listen carefully to you? (Question 6)

- During this hospital stay, how often did doctors explain things in a way you could understand? (Question 7)

**HCAHPS Composite 3: Responsiveness of Hospital Staff**

- During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it? (Question 4)

- How often did you get help in getting to the bathroom, or in using a bedpan as soon as you wanted? (Question 11)

**HCAHPS Composite 4: Pain Management**

- During this hospital stay, how often was your pain well controlled? (Question 13)

- During this hospital stay, how often did the hospital staff do everything they could to help you with your pain? (Question 14)

**HCAHPS Composite 5: Communication about Medicines**

- Before giving you any new medicine, how often did the hospital staff tell you what the medicine was for? (Question 16)

- Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand? (Question 17)

**HCAHPS Composite 6: Discharge Information**

- During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital? (Question 19)

- During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital? (Question 20)

**HCAHPS Individual Question 1: Cleanliness of Hospital Environment**

- During this hospital stay, how often were your room and bathroom kept clean? (Question 8)

**HCAHPS Individual Question 2: Quietness of Hospital Environment**

- During this hospital stay, how often was the area around your room quiet at night? (Question 9)

# 3.0   Demographics of the Survey

The TRISS sample was developed using a two-stage process that included sampling DC and PC separately. Overall, the sample included 121,935 inpatients who met all survey inclusion criteria (see section 2.2.1 above for more details). Of those, 74,378 were sampled from the DC sample frame, which included all inpatients discharged from MTFs from January 1, 2012, to December 31, 2012, and met HCAHPS and DHCAPE inclusion criteria. The PC sample of 47,557 inpatients was created using a sample frame that included inpatients seen in higher-volume civilian facilities also with discharge dates between January 1, 2012,to December 31, 2012.

Of the 48,580 total respondents, 28,321 were DC respondents and 20,259 were PC respondents. DC and PC survey responses were weighted, as well as sampled, in separate processes, warranting distinct examination of demographic characteristics.

## 3.1   Direct Care – Comparison of the DC Sample Frame with Respondents, Weighted and Unweighted

DC inpatients included in the TRISS sample frame were generally under the age of 35 (46%), AD and ADFMs (68%), and female (69%), as shown in Exhibit 4.

The distribution of age groups among DC respondents was consistent with the sample frame, with larger numbers of inpatients ages 25 to 34 than other age groups. Once weighted, the distribution of beneficiary category respondents was more comparable with those of the DC sample frame, with a larger proportion of respondents being AD (26%) or ADFMs (34%). The distribution of gender was comparable to the sample frame for respondents both unweighted and weighted.

**Exhibit 4: Direct Care – Comparison of the DC Sample Frame to Respondents, Weighted and Unweighted**

## 3.2 Purchased Care – Comparison of the PC Sample Frame to Respondents, Weighted and Unweighted

PC inpatients included in the TRISS sample frame were generally 45 years old or older (57%) compared with those in the DC sample frame (30%). Likewise, many more of the PC sample frame were retirees (64%) compared with DC (32%) (Exhibits 4 and 5).

PC respondents included a higher proportion of inpatients 65 years and older (47%) compared with other age groups and a higher proportion, compared with the PC sample frame (35%). More PC respondents were retirees age 65 and older (47%) compared with other beneficiary categories and the PC sample frame (35%). Weighting PC respondents resulted in similar estimates to the sample frame (Exhibit 5) The distribution of gender was consistent between the PC sample frame and respondents, regardless of weighting (Exhibit 5). AD made up 5% of weighted PC respondents, as opposed to 26% of weighted DC respondents (Exhibit 4).

**Exhibit 5: Purchased Care – Comparison of the PC Sample Frame to Respondents, Weighted and Unweighted**

# 4.0 Direct Care – Hospitals Compared with the Civilian Benchmark on *Overall Hospital Rating* and *Recommend the Hospital*

HCAHPS publishes tables of percentile cut points quarterly for *Overall Hospital Rating* and *Recommend the Hospital, Communication with Doctors, Communication with Nurses, Communication about Medicines, Responsiveness of Hospital Staff, Discharge Information, Pain Management, Cleanliness of Hospital Environment,* and *Quietness of Hospital Environment* (http://www.hcahpsonline.org/files/Report_HEI_December_2012_Pctls.pdf).

The following table was published in December 2012 and is based on the most recently available civilian discharges from April 2011 to March 2012, and it aligns with the time period of TRISS data collection reported here. HCAHPS displays the 5th, 10th, 25th, 50th, 75th, 90th, and 95th percentiles for the satisfied ratings ("top box,") as well as the lower ratings ("bottom box"). Exhibit 6 below shows the HCAHPS "top-box" values for *Overall Hospital Rating* and *Recommend the Hospital.* There is a lag between publication of these HCAHPS percentile reports and the period of data collection; therefore, the 50th percentile measures published as part of the percentile reports often do not match those benchmarks reported on http://www.medicare.gov/hospitalcompare/ for the same time period. As a result, all benchmarks reported on the percentile exhibits differ from the HCAHPS PERCENTILES: December 2012 Public Report.

**Exhibit 6: HCAHPS PERCENTILES: December 2012 Public Report (April 2011-March 2012 Discharges)**

| Hospital Percentile | Overall Hospital Rating | Recommend Hospital |
|---|---|---|
| 95th (near best) | 84 | 86 |
| 90th | 80 | 82 |
| 75th | 75 | 77 |
| 50th | 69 | 71 |
| 25th | 64 | 64 |
| 10th | 59 | 58 |
| 5th (near worst) | 55 | 54 |

Scores for *Overall Hospital Rating* (Exhibits 7 and 8) and *Recommend the Hospital* (Exhibits 9 and 10) were ranked for each MTF and compared with HCAHPS percentile cutoff points. MTFs were included in the ranking if they had 70 or more respondents.

Of the 46 MTFs meeting this criteria, San Antonio Military Medical Center, Moncrief ACH, and the 88th Medical Group-Wright-Patterson received the highest overall ratings for the hospital (79% for each), which is in the 75th percentile. Seven MTFs were in the 75th percentile for *Overall Hospital Rating*, and 19 MTFs were at or above the benchmark of 69% (Exhibit 7). Twenty MTFs were below the 25th percentile for *Overall Hospital Rating* (Exhibit 8).

For *Recommend the Hospital*, 11 of 46 MTFs were at or above the 75th percentile, and Landstuhl Regional Medical Center and the 88th Medical Group-Wright-Patterson were included in the 90th percentile (82%) (Exhibit 9). Twenty-one MTFs were at or above the benchmark (71%). Seventeen MTFs were below the 25th percentile for *Recommend the Hospital* (Exhibit 10).

**Exhibit 7:  Direct Care Hospitals: Ranking of Percentage Who Rated 9 or 10 on *Overall Hospital Rating* Above the Civilian Benchmark**

| Hospital | Value |
|---|---|
| SAN ANTONIO  MMC-FT. SAM HOUSTN | 79 |
| MONCRIEF ACH-FT. JACKSON | 79 |
| 88th MED GRP-WRIGHT-PATTERSON | 79 |
| FT BELVOIR COMMUNITY  HOSP-FBCH | 78 |
| KELLER ACH-WEST POINT | 76 |
| 81st MED GRP-KEESLER | 76 |
| NH PENSACOLA | 75 |
| EISENHOWER AMC-FT. GORDON | 74 |
| NH JACKSONVILLE | 74 |
| 48th MED GRP-LAKENHEATH | 73 |
| LANDSTUHL REGIONAL  MEDCEN | 71 |
| 60th MED GRP-TRAVIS | 71 |
| BAYNE-JONES ACH-FT. POLK | 71 |
| NMC SAN DIEGO | 71 |
| NH GUAM-AGANA | 71 |
| 96th MED GRP-EGLIN | 71 |
| NH BREMERTON | 69 |
| WALTER REED  NATL MIL MED CNTR | 69 |
| 673rd MED GRP-ELMENDORF | 69 |
| Benchmark | 69 |

Legend:
- 90th Percentile (>=80)
- 75th Percentile (>=75)
- 50th Percentile (>=69)
- 25th Percentile (>=64)
- Below 25th Percentile
- CMS Benchmark (69)

[1] MTFs included had 70 or more respondents. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, and NH Sigonella.
[2] Percentile cutoff points are the most recent provided by HCAHPS.

**Exhibit 8: Direct Care Hospitals: Ranking of Percentage Who Rated 9 or 10 on *Overall Hospital Rating* Below the Civilian Benchmark**



Legend:
- 90th Percentile (>=80)
- 75th Percentile (>=75)
- 50th Percentile (>=69)
- 25th Percentile (>=64)
- Below 25th Percentile
- CMS Benchmark (69)

| Hospital | Value |
|---|---|
| Benchmark | 69 |
| BASSETT ACH-FT. WAINWRIGHT | 67 |
| 99th MED GRP-O'CALLAGHAN HOSP | 67 |
| 633rd MED GRP LANGLEY-EUSTIS | 66 |
| REYNOLDS ACH-FT. SILL | 65 |
| NH LEMOORE | 65 |
| WOMACK AMC-FT. BRAGG | 64 |
| NMC PORTSMOUTH | 64 |
| BRIAN ALLGOOD ACH-SEOUL | 63 |
| 366th MED GRP-MOUNTAIN HOME | 63 |
| MADIGAN AMC-FT. LEWIS | 63 |
| EVANS ACH-FT. CARSON | 62 |
| L. WOOD ACH-FT. LEONARD WOOD | 62 |
| NH YOKOSUKA | 61 |
| WINN ACH-FT. STEWART | 60 |
| TRIPLER AMC-FT SHAFTER | 58 |
| IRELAND ACH-FT. KNOX | 57 |
| NH TWENTYNINE PALMS | 57 |
| WILLIAM BEAUMONT AMC-FT. BLISS | 57 |
| DARNALL AMC-FT. HOOD | 56 |
| NH CAMP PENDLETON | 56 |
| WEED ACH-FT. IRWIN | 56 |
| MARTIN ACH-FT. BENNING | 54 |
| IRWIN ACH-FT. RILEY | 54 |
| NH CAMP LEJEUNE | 53 |
| BLANCHFIELD ACH-FT. CAMPBELL | 53 |
| NH OKINAWA | 46 |
| NH OAK HARBOR | 45 |

[1] MTFs included had 70 or more respondents. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, and NH Sigonella.

[2] Percentile cutoff points are the most recent provided by HCAHPS.

**Exhibit 9: Direct Care Hospitals: Ranking of Percentage Who Responded "Definitely Yes" to *Recommend the Hospital* Above the Civilian Benchmark**



Legend:
- 90th Percentile (>=82)
- 75th Percentile (>=77)
- 50th Percentile (>=71)
- 25th Percentile (>=64)
- Below 25th Percentile
- CMS Benchmark (71)

| Hospital | Value |
|---|---|
| LANDSTUHL REGIONAL MEDCEN | 82 |
| 88th MED GRP-WRIGHT-PATTERSON | 82 |
| FT BELVOIR COMMUNITY HOSP-FBCH | 81 |
| SAN ANTONIO MMC-FT. SAM HOUSTN | 81 |
| NH NAPLES | 79 |
| MONCRIEF ACH-FT. JACKSON | 79 |
| EISENHOWER AMC-FT. GORDON | 79 |
| 81st MED GRP-KEESLER | 79 |
| NH PENSACOLA | 78 |
| KELLER ACH-WEST POINT | 77 |
| NH GUAM-AGANA | 77 |
| WALTER REED NATL MIL MED CNTR | 76 |
| NH BEAUFORT | 76 |
| NMC SAN DIEGO | 76 |
| 60th MED GRP-TRAVIS | 75 |
| NH BREMERTON | 75 |
| NH JACKSONVILLE | 75 |
| 48th MED GRP-LAKENHEATH | 74 |
| NH LEMOORE | 74 |
| 96th MED GRP-EGLIN | 73 |
| BRIAN ALLGOOD ACH-SEOUL | 71 |
| Benchmark | 71 |

[1] MTFs included had 70 or more respondents. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, and NH Sigonella.
[2] Percentile cutoff points are the most recent provided by HCAHPS.

**Exhibit 10: Direct Care Hospitals: Ranking of Percentage Who Responded "Definitely Yes" to *Recommend the Hospital* Below the Civilian Benchmark**



Legend:
- 90th Percentile (>=82) — green
- 75th Percentile (>=77) — orange
- 50th Percentile (>=71) — blue
- 25th Percentile (>=64) — yellow
- Below 25th Percentile — red
- CMS Benchmark (71) — black

| Hospital | Value |
|---|---|
| Benchmark | 71 |
| 99th MED GRP-O'CALLAGHAN HOSP | 70 |
| 673rd MED GRP-ELMENDORF | 70 |
| 633rd MED GRP LANGLEY-EUSTIS | 69 |
| NMC PORTSMOUTH | 68 |
| BAYNE-JONES ACH-FT. POLK | 68 |
| BASSETT ACH-FT. WAINWRIGHT | 67 |
| NH YOKOSUKA | 67 |
| WOMACK AMC-FT. BRAGG | 65 |
| REYNOLDS ACH-FT. SILL | 64 |
| MADIGAN AMC-FT. LEWIS | 64 |
| EVANS ACH-FT. CARSON | 63 |
| TRIPLER AMC-FT SHAFTER | 62 |
| L. WOOD ACH-FT. LEONARD WOOD | 62 |
| 366th MED GRP-MOUNTAIN HOME | 61 |
| NH TWENTYNINE PALMS | 60 |
| NH CAMP LEJEUNE | 60 |
| WINN ACH-FT. STEWART | 58 |
| WILLIAM BEAUMONT AMC-FT. BLISS | 58 |
| IRELAND ACH-FT. KNOX | 57 |
| IRWIN ACH-FT. RILEY | 56 |
| NH CAMP PENDLETON | 56 |
| MARTIN ACH-FT. BENNING | 55 |
| DARNALL AMC-FT. HOOD | 54 |
| WEED ACH-FT. IRWIN | 52 |
| BLANCHFIELD ACH-FT. CAMPBELL | 51 |
| NH OKINAWA | 49 |
| NH OAK HARBOR | 46 |

[1] MTFs included had 70 or more respondents. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, and NH Sigonella.
[2] Percentile cutoff points are the most recent provided by HCAHPS.

# 5.0 Direct Care – *Overall Hospital Rating* and *Recommend the Hospital* by Product Line

HCAHPS calculates and adjusts scores and benchmarks based on the mix of patients and their diagnosis for all three Product Lines—Medical, Surgical, and Maternity—combined. In this report, *Overall Hospital Rating* and *Recommend the Hospital* were analyzed for each Product Line separately. Because patient-mix adjustment is not applicable for analysis against HCAHPS benchmarks by Product Line, responses from each MTF were compared with percentile cutoff points for all MTFs within each Product Line, rather than HCAHPS percentile cutoff points. MTFs were only included if they had 70 or more respondents per Product Line—36 MTFs met this criteria in the Medical product line, 33 were eligible in the Surgical product line and 43 MTF qualified for this analysis in the Maternity Care Product Line.

For *Overall Hospital Rating* in the Medical Product Line (Exhibit 11), respondents rated four of 36 MTFs at or above the $90^{th}$ percentile (cutoff point 80% ) and 10 MTFs at or above the $75^{th}$ percentile. Seventeen MTFs received an *Overall Hospital Rating* higher than the median score, or $50^{th}$ percentile, from Medical Product Line respondents (70%). Fort Belvoir Community Hospital received the overall highest rating, compared with all other MTFs from Medical Product Line respondents (83%). Appendix C identifies best practices for this hospital.

Of the 33 MTFs examined in the Surgical Product Line for *Overall Hospital Rating*, respondents gave four MTFs ratings in the $90^{th}$ percentile (81%) (Exhibit 12). Ten MTFs were rated in the $75^{th}$ percentile by Surgical Product Line respondents. Sixteen MTFs received ratings equal to or higher than the median score (72%) for *Overall Hospital Rating*. The $88^{th}$ Medical Group-Wright-Patterson, followed by the $633^{rd}$ Medical Group Langley-Eustis, received the highest *Overall Hospital Rating* (85% and 83%, respectively) from Surgical Line respondents. Appendix C identifies best practices for the $88^{th}$ Medical Group.

Forty-three MTFs were included in the *Overall Hospital Rating* Maternity Care Product Line ranking, with over half of those MTFs receiving scores above the median score of 56% (Exhibit 13). Respondents rated 11 MTFs at or above the $75^{th}$ percentile cutoff point (65%), and five received ratings at or above the $90^{th}$ percentile cutoff point (68%). Naval Hospital-Guam and the $48^{th}$ Medical Group-Lakenheath received the highest *Overall Hospital Rating* from Maternity Care Product Line respondents (69% for each).

Exhibit 14 displays the MTF ranking from Medical Product Line respondents for *Recommend the Hospital.* Three of 36 MTFs received ratings at the $90^{th}$ percentile with scores of 83% or higher and 17 received ratings at or above the median score from Medical Product Line respondents (75%). Fort Belvoir Community Hospital respondents were more likely to *Recommend the Hospital* (87%) among those in the Medical Product Line.

Of 33 MTFs examined by Surgical Product Line respondents, four MTFs received ratings at or above the $90^{th}$ percentile (84%) for *Recommend the Hospital* (Exhibit 15). Overall, 16 of 33 MTFs received ratings at or above the median score of 76% for *Recommend the Hospital*, and eight MTFs received ratings below the $25^{th}$ percentile. Landstuhl Regional Medical Center and the $88^{th}$ Medical Group-Wright-Patterson respondents were the most likely to *Recommend the Hospital* (88% for each) for those discharges in Surgical care.

Maternity Care Product Line respondents rated five MTFs at or above the $90^{th}$ percentile (74%) for *Recommend the Hospital* (Exhibit 16). Naval Hospital Pensacola respondents were most likely to *Recommend the Hospital* for the Maternity Care Product Line (78%). Appendix C identifies best practices for Naval Hospital Pensacola.

**Exhibit 11: Direct Care Medical Care: Ranking of Percentage Who Rated 9 or 10 on *Overall Hospital Rating***

| MTF | Rating |
|---|---|
| FT BELVOIR COMMUNITY HOSP-FBCH | 83 |
| NH JACKSONVILLE | 80 |
| 88th MED GRP-WRIGHT-PATTERSON | 80 |
| SAN ANTONIO MMC-FT. SAM HOUSTN | 80 |
| NH PENSACOLA | 79 |
| 81st MED GRP-KEESLER | 76 |
| 96th MED GRP-EGLIN | 76 |
| REYNOLDS ACH-FT. SILL | 74 |
| EISENHOWER AMC-FT. GORDON | 74 |
| MONCRIEF ACH-FT. JACKSON | 74 |
| 99th MED GRP-O'CALLAGHAN HOSP | 73 |
| NMC SAN DIEGO | 72 |
| NH GUAM-AGANA | 72 |
| WOMACK AMC-FT. BRAGG | 72 |
| 633rd MED GRP LANGLEY-EUSTIS | 70 |
| MADIGAN AMC-FT. LEWIS | 70 |
| 673rd MED GRP-ELMENDORF | 70 |
| Median | 70 |
| 60th MED GRP-TRAVIS | 69 |
| NH BREMERTON | 69 |
| LANDSTUHL REGIONAL MEDCEN | 69 |
| BLANCHFIELD ACH-FT. CAMPBELL | 67 |
| WINN ACH-FT. STEWART | 66 |
| MARTIN ACH-FT. BENNING | 66 |
| WALTER REED NATL MIL MED CNTR | 64 |
| NMC PORTSMOUTH | 64 |
| NH CAMP PENDLETON | 63 |
| BASSETT ACH-FT. WAINWRIGHT | 62 |
| IRELAND ACH-FT. KNOX | 61 |
| DARNALL AMC-FT. HOOD | 60 |
| TRIPLER AMC-FT SHAFTER | 59 |
| EVANS ACH-FT. CARSON | 58 |
| IRWIN ACH-FT. RILEY | 58 |
| WILLIAM BEAUMONT AMC-FT. BLISS | 57 |
| NH CAMP LEJEUNE | 55 |
| L. WOOD ACH-FT. LEONARD WOOD | 53 |
| NH OKINAWA | 47 |

Legend:
- 90th Percentile (>=80)
- 75th Percentile (>=74)
- 50th Percentile (>=70)
- Median (70)
- 25th Percentile (>=62)
- Below 25th Percentile

[1] MTFs included have 70 or more respondents for the Medical Product Line. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, 366th Med Grp-Mountain Home, 48th Med Grp -Lakenheath,779th Med Grp-Andrews, Bayne-Jones ACH-Ft. Polk, Keller ACH-West Point, Weed ACH-Ft. Irwin, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, NH Sigonella, NH Lemoore, NH Oak Harbor, NH Twentynine Palms, and NH Yokosuka.

[2] Percentile cutoff points are based on percentiles of all MTFs estimates for the Medical Product Line combined.

[3] These estimates are weighted rather than patient-mix adjusted.

**Exhibit 12:  Direct Care Surgical Care: Ranking of Percentage Who Rated 9 or 10 on** *Overall Hospital Rating*

| MTF | Rating |
|-----|--------|
| 88th MED GRP-WRIGHT-PATTERSON | 85 |
| 633rd MED GRP LANGLEY-EUSTIS | 83 |
| FT BELVOIR COMMUNITY HOSP-FBCH | 82 |
| NH PENSACOLA | 81 |
| KELLER ACH-WEST POINT | 79 |
| 81st MED GRP-KEESLER | 79 |
| 96th MED GRP-EGLIN | 77 |
| SAN ANTONIO MMC-FT. SAM HOUSTN | 77 |
| 60th MED GRP-TRAVIS | 77 |
| NH BREMERTON | 77 |
| EISENHOWER AMC-FT. GORDON | 76 |
| LANDSTUHL REGIONAL MEDCEN | 76 |
| 673rd MED GRP-ELMENDORF | 75 |
| NH JACKSONVILLE | 74 |
| NMC SAN DIEGO | 74 |
| 99th MED GRP-O'CALLAGHAN HOSP | 73 |
| Median | 72 |
| NMC PORTSMOUTH | 70 |
| WALTER REED NATL MIL MED CNTR | 70 |
| TRIPLER AMC-FT SHAFTER | 70 |
| BRIAN ALLGOOD ACH-SEOUL | 69 |
| EVANS ACH-FT. CARSON | 68 |
| WOMACK AMC-FT. BRAGG | 68 |
| REYNOLDS ACH-FT. SILL | 67 |
| DARNALL AMC-FT. HOOD | 67 |
| BLANCHFIELD ACH-FT. CAMPBELL | 64 |
| NH CAMP PENDLETON | 64 |
| WINN ACH-FT. STEWART | 63 |
| MARTIN ACH-FT. BENNING | 60 |
| WILLIAM BEAUMONT AMC-FT. BLISS | 60 |
| L. WOOD ACH-FT. LEONARD WOOD | 60 |
| MADIGAN AMC-FT. LEWIS | 60 |
| IRELAND ACH-FT. KNOX | 58 |
| NH CAMP LEJEUNE | 51 |

Legend:
- 90th Percentile (>=81)
- 75th Percentile (>=77)
- 50th Percentile (>=72)
- Median (72)
- 25th Percentile (>=64)
- Below 25th Percentile

[1] MTFs included have 70 or more respondents for the Surgical Product Line. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, 366th Med Grp-Mountain Home, 48th Med Grp-Lakenheath,779th Med Grp-Andrews, Bassett ACH-Ft. Wainwright, Bayne-Jones ACH-Ft. Polk, Keller ACH-West Point, Weed ACH-Ft. Irwin, Irwin ACH-Ft Riley, Moncrief ACH-Ft. Jackson, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, NH Sigonella, NH Lemoore, NH Oak Harbor, NH Twentynine Palms, NH Yokosuka. NH Guam-Agana, and NH Okinawa.

[2] Percentile cutoff points are based on percentiles of all MTFs estimates for the Surgical Product Line combined.

[3] These estimates are weighted rather than patient-mix adjusted.

**Exhibit 13: Direct Care Maternity Care: Ranking of Percentage Who Rated 9 or 10 on** *Overall Hospital Rating*



Legend:
- 90th Percentile (>=68) — green
- 75th Percentile (>=65) — orange
- 50th Percentile (>=56) — blue
- Median (56) — black
- 25th Percentile (>=49) — yellow
- Below 25th Percentile — red

| MTF | Value |
|---|---|
| NH GUAM-AGANA | 69 |
| 48th MED GRP-LAKENHEATH | 69 |
| 81st MED GRP-KEESLER | 68 |
| NH BREMERTON | 68 |
| NH PENSACOLA | 68 |
| L. WOOD ACH-FT. LEONARD WOOD | 67 |
| BAYNE-JONES ACH-FT. POLK | 66 |
| NH JACKSONVILLE | 66 |
| FT BELVOIR COMMUNITY HOSP-FBCH | 66 |
| SAN ANTONIO MMC-FT. SAM HOUSTN | 65 |
| BASSETT ACH-FT. WAINWRIGHT | 65 |
| 673rd MED GRP-ELMENDORF | 64 |
| NH LEMOORE | 63 |
| NMC SAN DIEGO | 62 |
| 633rd MED GRP LANGLEY-EUSTIS | 60 |
| 88th MED GRP-WRIGHT-PATTERSON | 59 |
| EVANS ACH-FT. CARSON | 58 |
| 60th MED GRP-TRAVIS | 58 |
| WALTER REED NATL MIL MED CNTR | 58 |
| WEED ACH-FT. IRWIN | 58 |
| 96th MED GRP-EGLIN | 56 |
| LANDSTUHL REGIONAL MEDCEN | 56 |
| Median | 56 |
| NH YOKOSUKA | 55 |
| WINN ACH-FT. STEWART | 54 |
| BRIAN ALLGOOD ACH-SEOUL | 54 |
| NH TWENTYNINE PALMS | 53 |
| REYNOLDS ACH-FT. SILL | 52 |
| 99th MED GRP-O'CALLAGHAN HOSP | 51 |
| NMC PORTSMOUTH | 51 |
| WOMACK AMC-FT. BRAGG | 50 |
| NH CAMP LEJEUNE | 50 |
| NH CAMP PENDLETON | 49 |
| IRWIN ACH-FT. RILEY | 49 |
| IRELAND ACH-FT. KNOX | 49 |
| EISENHOWER AMC-FT. GORDON | 48 |
| NH OAK HARBOR | 45 |
| MADIGAN AMC-FT. LEWIS | 45 |
| TRIPLER AMC-FT SHAFTER | 44 |
| NH OKINAWA | 44 |
| BLANCHFIELD ACH-FT. CAMPBELL | 44 |
| WILLIAM BEAUMONT AMC-FT. BLISS | 44 |
| DARNALL AMC-FT. HOOD | 43 |
| MARTIN ACH-FT. BENNING | 38 |

[1] MTFs included have 70 or more respondents for the Maternity Care Product Line. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, 366th Med Grp-Mountain Home, 779th Med Grp-Andrews, Keller ACH-West Point, Moncrief ACH-Ft. Jackson, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, and NH Sigonella.
[2] Percentile cutoff points are based on percentiles of all MTFs estimates for the Maternity Care Product Line combined.
[3] These estimates are weighted rather than patient-mix adjusted.

**Exhibit 14: Direct Care Medical Care: Ranking of Percentage Who Responded "Definitely Yes" to *Recommend the Hospital***



Legend:
- 90th Percentile (>=83) — green
- 75th Percentile (>=79) — orange
- 50th Percentile (>=75) — blue
- Median (75) — black
- 25th Percentile (>=65) — yellow
- Below 25th Percentile — red

| MTF | Value |
|---|---|
| FT BELVOIR COMMUNITY HOSP-FBCH | 87 |
| 88th MED GRP-WRIGHT-PATTERSON | 84 |
| LANDSTUHL REGIONAL MEDCEN | 83 |
| SAN ANTONIO MMC-FT. SAM HOUSTN | 81 |
| NH PENSACOLA | 80 |
| NH GUAM-AGANA | 79 |
| NH JACKSONVILLE | 79 |
| 81st MED GRP-KEESLER | 79 |
| 96th MED GRP-EGLIN | 78 |
| EISENHOWER AMC-FT. GORDON | 78 |
| NMC SAN DIEGO | 78 |
| MONCRIEF ACH-FT. JACKSON | 77 |
| 99th MED GRP-O'CALLAGHAN HOSP | 77 |
| 60th MED GRP-TRAVIS | 77 |
| NH BREMERTON | 77 |
| WOMACK AMC-FT. BRAGG | 75 |
| 673rd MED GRP-ELMENDORF | 75 |
| Median | 75 |
| WALTER REED NATL MIL MED CNTR | 74 |
| MADIGAN AMC-FT. LEWIS | 71 |
| 633rd MED GRP LANGLEY-EUSTIS | 71 |
| BASSETT ACH-FT. WAINWRIGHT | 70 |
| REYNOLDS ACH-FT. SILL | 69 |
| NMC PORTSMOUTH | 68 |
| MARTIN ACH-FT. BENNING | 68 |
| NH CAMP PENDLETON | 67 |
| BLANCHFIELD ACH-FT. CAMPBELL | 65 |
| EVANS ACH-FT. CARSON | 65 |
| IRELAND ACH-FT. KNOX | 65 |
| WINN ACH-FT. STEWART | 65 |
| NH CAMP LEJEUNE | 64 |
| TRIPLER AMC-FT SHAFTER | 64 |
| IRWIN ACH-FT. RILEY | 62 |
| L. WOOD ACH-FT. LEONARD WOOD | 62 |
| DARNALL AMC-FT. HOOD | 61 |
| WILLIAM BEAUMONT AMC-FT. BLISS | 61 |
| NH OKINAWA | 59 |

[1] MTFs included have 70 or more respondents for the Medical Product Line. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, 366th Med Grp-Mountain Home, 48th Med Grp-Lakenheath,779th Med Grp-Andrews, Bayne-Jones ACH-Ft. Polk, Keller ACH-West Point, Weed ACH-Ft. Irwin, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, NH Sigonella, NH Lemoore, NH Oak Harbor, NH Twentynine Palms, and NH Yokosuka.

[2] Percentile cutoff points are based on percentiles of all MTFs estimates for the Medical Product Line combined.

[3] These estimates are weighted rather than patient-mix adjusted.

**Exhibit 15: Direct Care Surgical Care: Ranking of Percentage Who Responded "Definitely Yes" to *Recommend the Hospital***

| MTF | Score |
|-----|-------|
| LANDSTUHL REGIONAL MEDCEN | 88 |
| 88th MED GRP-WRIGHT-PATTERSON | 88 |
| FT BELVOIR COMMUNITY HOSP-FBCH | 85 |
| NH BREMERTON | 84 |
| 81st MED GRP-KEESLER | 83 |
| NH PENSACOLA | 83 |
| SAN ANTONIO MMC-FT. SAM HOUSTN | 83 |
| KELLER ACH-WEST POINT | 83 |
| EISENHOWER AMC-FT. GORDON | 82 |
| WALTER REED NATL MIL MED CNTR | 82 |
| 633rd MED GRP LANGLEY-EUSTIS | 80 |
| NMC SAN DIEGO | 80 |
| 60th MED GRP-TRAVIS | 78 |
| 96th MED GRP-EGLIN | 78 |
| NH JACKSONVILLE | 77 |
| 673rd MED GRP-ELMENDORF | 76 |
| Median | 76 |
| 99th MED GRP-O'CALLAGHAN HOSP | 75 |
| BRIAN ALLGOOD ACH-SEOUL | 75 |
| TRIPLER AMC-FT SHAFTER | 75 |
| NMC PORTSMOUTH | 74 |
| REYNOLDS ACH-FT. SILL | 74 |
| WINN ACH-FT. STEWART | 73 |
| EVANS ACH-FT. CARSON | 72 |
| WOMACK AMC-FT. BRAGG | 72 |
| DARNALL AMC-FT. HOOD | 70 |
| BLANCHFIELD ACH-FT. CAMPBELL | 67 |
| MADIGAN AMC-FT. LEWIS | 65 |
| MARTIN ACH-FT. BENNING | 63 |
| WILLIAM BEAUMONT AMC-FT. BLISS | 63 |
| IRELAND ACH-FT. KNOX | 59 |
| NH CAMP LEJEUNE | 59 |
| L. WOOD ACH-FT. LEONARD WOOD | 56 |
| NH CAMP PENDLETON | 55 |

Legend:
- 90th Percentile (>=84) — green
- 75th Percentile (>=82) — orange
- 50th Percentile (>=76) — blue
- Median (76) — black
- 25th Percentile (>=68) — yellow
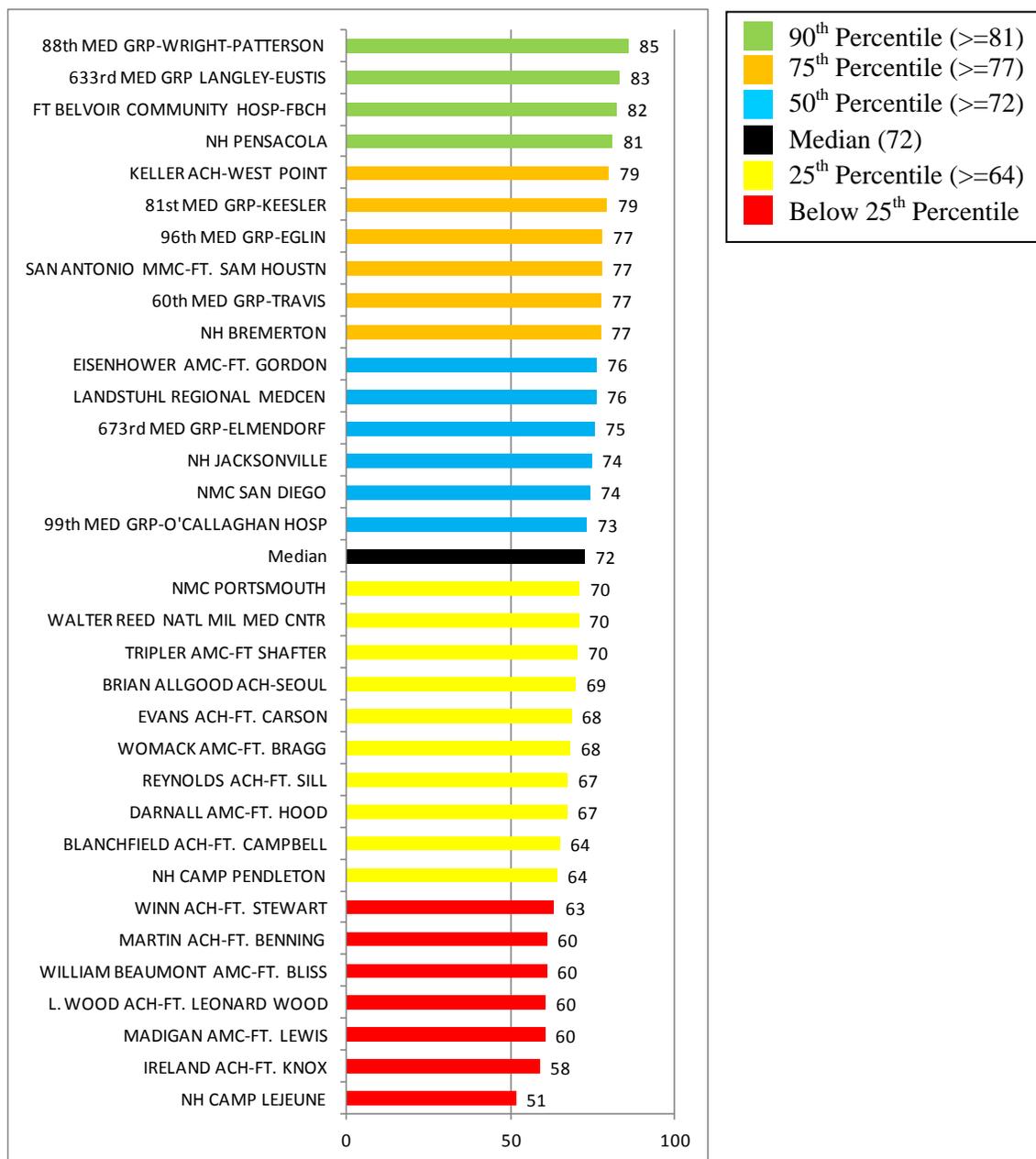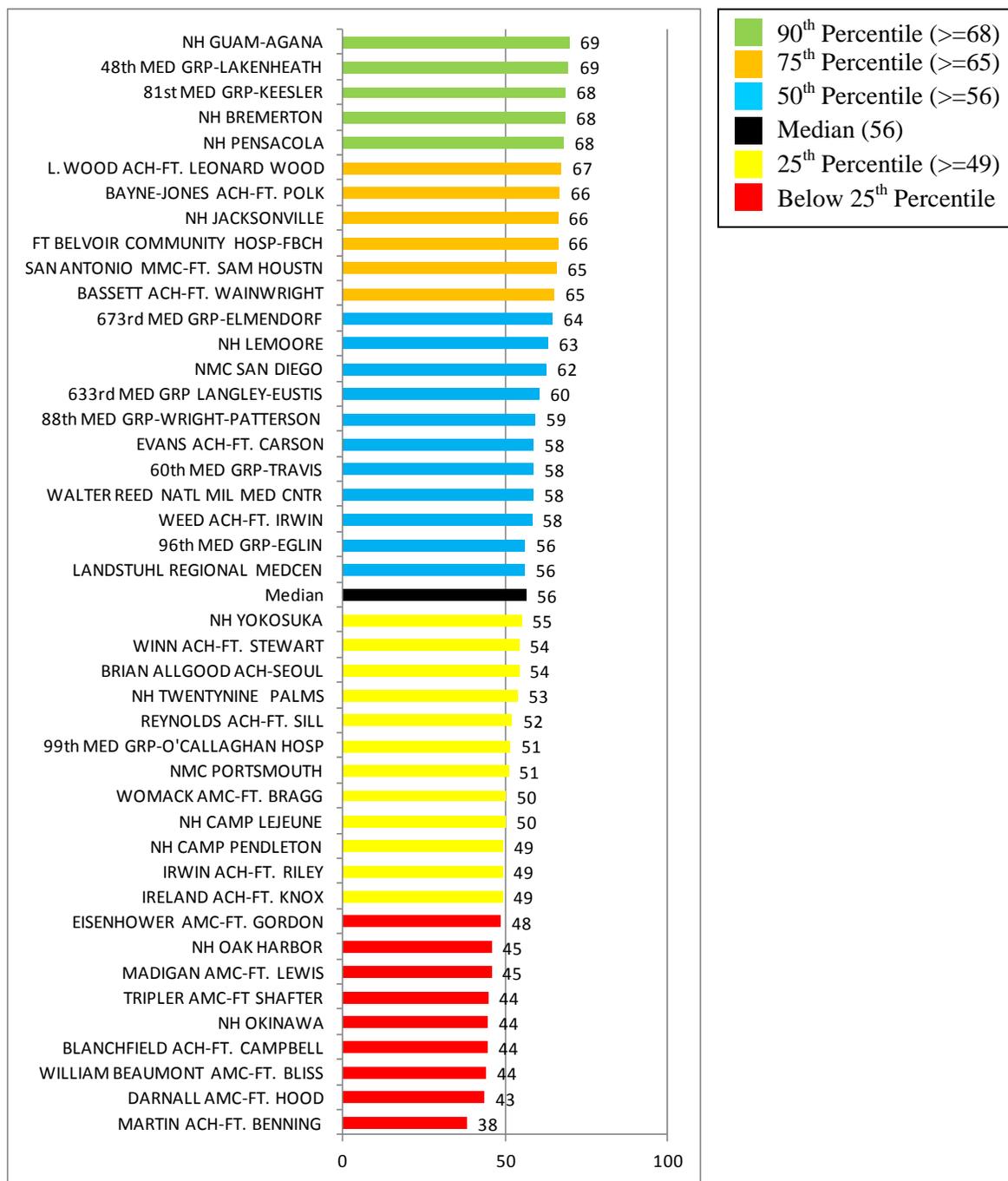- Below 25th Percentile — red

[1] MTFs included have 70 or more respondents for the Surgical Product Line. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, 366th Med Grp-Mountain Home, 48th Med Grp-Lakenheath,779th Med Grp-Andrews, Bassett ACH-Ft. Wainwright, Bayne-Jones ACH-Ft. Polk, Weed ACH-Ft. Irwin, Irwin ACH-Ft Riley, Moncrief ACH-Ft. Jackson, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, NH Sigonella, NH Lemoore, NH Oak Harbor, NH Twentynine Palms, NH Yokosuka. NH Guam-Agana, and NH Okinawa.
[2] Percentile cutoff points are based on percentiles of all MTFs estimates for the Surgical Product Line combined.
[3] These estimates are weighted rather than patient-mix adjusted.

**Exhibit 16: Direct Care Maternity Care: Ranking of Percentage Who Responded "Definitely Yes" to** *Recommend the Hospital*

| MTF | Value |
|---|---|
| NH PENSACOLA | 78 |
| NH GUAM-AGANA | 77 |
| NH BREMERTON | 75 |
| FT BELVOIR COMMUNITY HOSP-FBCH | 74 |
| NH LEMOORE | 74 |
| NH JACKSONVILLE | 73 |
| 48th MED GRP-LAKENHEATH | 72 |
| NMC SAN DIEGO | 72 |
| 81st MED GRP-KEESLER | 72 |
| 633rd MED GRP LANGLEY-EUSTIS | 70 |
| LANDSTUHL REGIONAL MEDCEN | 69 |
| WALTER REED NATL MIL MED CNTR | 68 |
| 673rd MED GRP-ELMENDORF | 67 |
| BRIAN ALLGOOD ACH-SEOUL | 67 |
| SAN ANTONIO MMC-FT. SAM HOUSTN | 67 |
| 88th MED GRP-WRIGHT-PATTERSON | 66 |
| 96th MED GRP-EGLIN | 66 |
| L. WOOD ACH-FT. LEONARD WOOD | 66 |
| NH YOKOSUKA | 65 |
| BAYNE-JONES ACH-FT. POLK | 65 |
| BASSETT ACH-FT. WAINWRIGHT | 65 |
| Median | 63 |
| 60th MED GRP-TRAVIS | 62 |
| NMC PORTSMOUTH | 61 |
| EVANS ACH-FT. CARSON | 59 |
| NH CAMP LEJEUNE | 59 |
| EISENHOWER AMC-FT. GORDON | 58 |
| WEED ACH-FT. IRWIN | 57 |
| 99th MED GRP-O'CALLAGHAN HOSP | 57 |
| NH TWENTYNINE PALMS | 57 |
| REYNOLDS ACH-FT. SILL | 56 |
| WINN ACH-FT. STEWART | 52 |
| TRIPLER AMC-FT SHAFTER | 52 |
| IRWIN ACH-FT. RILEY | 52 |
| WOMACK AMC-FT. BRAGG | 52 |
| NH CAMP PENDLETON | 50 |
| IRELAND ACH-FT. KNOX | 50 |
| NH OAK HARBOR | 49 |
| NH OKINAWA | 49 |
| MADIGAN AMC-FT. LEWIS | 47 |
| WILLIAM BEAUMONT AMC-FT. BLISS | 46 |
| BLANCHFIELD ACH-FT. CAMPBELL | 46 |
| DARNALL AMC-FT. HOOD | 43 |
| MARTIN ACH-FT. BENNING | 42 |

Legend:
- 90th Percentile (>=74)
- 75th Percentile (>=69)
- 50th Percentile (>=63)
- Median (63)
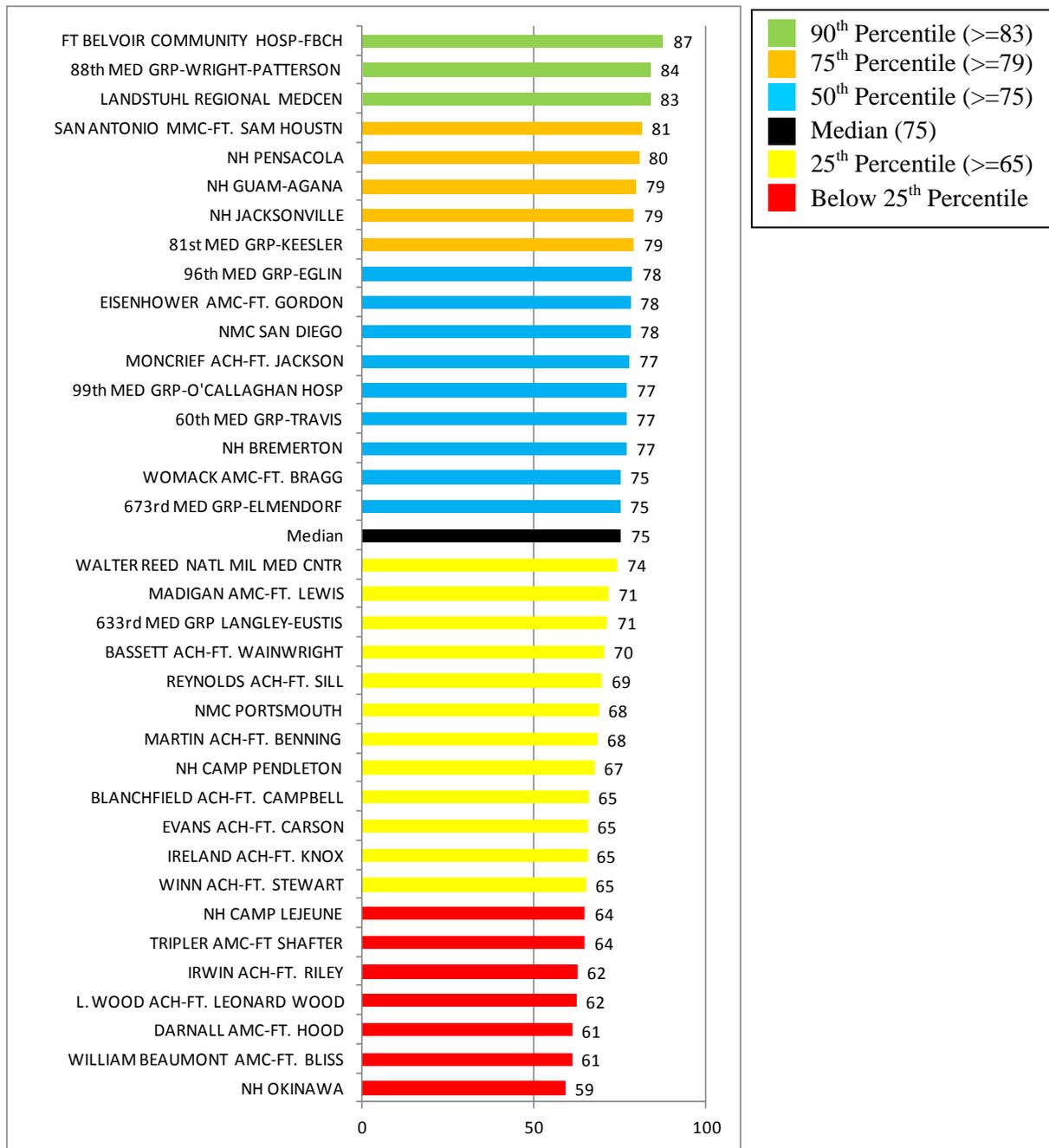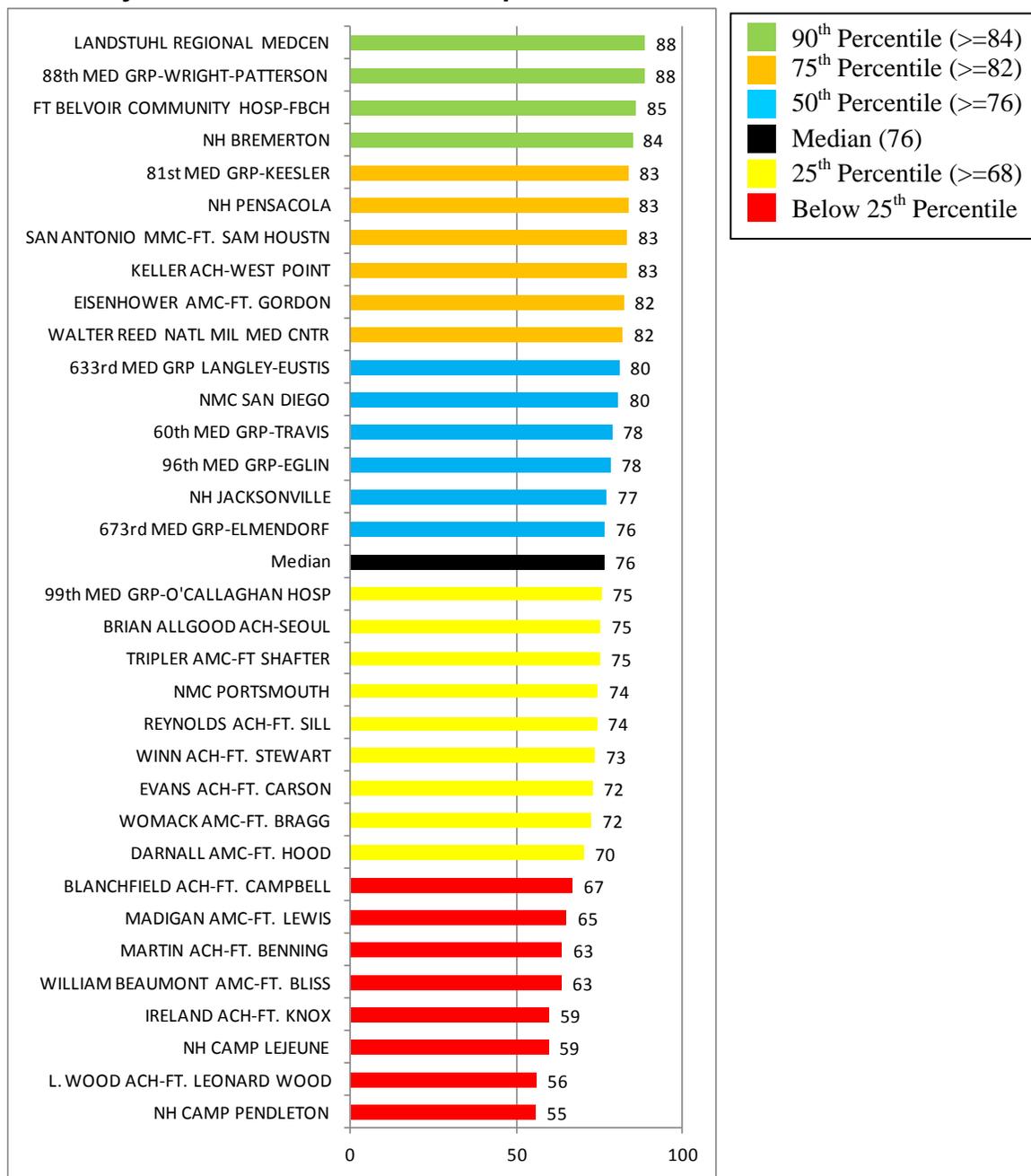- 25th Percentile (>=52)
- Below 25th Percentile

[1] MTFs included have 70 or more respondents for the Maternity Care Product Line. The following MTFs are excluded: 31st Med Grp-Aviano, 35th Med Grp-Misawa, 374th Med Grp-Yokota, 51st Med Grp-Osan, 366th Med Grp-Mountain Home, 779th Med Grp-Andrews, Keller ACH-West Point, Moncrief ACH-Ft. Jackson, NH Beaufort, NH Guantanamo Bay, NH Naples, NH Rota, and NH Sigonella.
[2] Percentile cutoff points are based on percentiles of all MTFs estimates for the Maternity Care Product Line combined.
[3] These estimates are weighted rather than patient-mix adjusted.

# 6.0   Direct Care Results

DC results are based on responses from 28,321 inpatients treated at 56 MTFs and are patient-mix adjusted (Exhibits 17 and 18). DC respondents reported lower *Overall Hospital Ratings* for MTFs (66%) compared with the benchmark of 69%. They were less likely to *Recommend the Hospital* (68%), compared with the benchmark of 70%. While DC respondents' ratings and recommendation did not meet the benchmarks of 69% and 70%, respectively, their 2012 ratings of 66% and 68% were an improvement over the 65% and 67% ratings of 2011. For all other measures, overall DC results were higher than all benchmarks and improved from the year prior, except for ratings for *Communication about Medicines* and *Cleanliness of Hospital Environment*, which were similar to the prior year.

Among all Services and JTF CapMed, JTF CapMed and Air Force respondents indicated higher satisfaction on *Overall Hospital Rating* (73% and 72%, respectively) and *Recommend the Hospital* (78% and 74%, respectively) compared with the benchmark and the other Services (Army, 63% and 65%, Navy, 64% and 68%, respectively). Navy and JTF CapMed MTF respondents gave higher ratings for *Overall Hospital Rating* (Navy, 64%, JTF CapMed, 73%) and *Recommend the Hospital* (Navy, 68%, JTF CapMed, 78%) in 2012 compared with 2011 (Navy, 62% and 66%, JTF CapMed, 64% and 72%, respectively).

Army MTF inpatients gave their hospitals ratings for *Cleanliness of Hospital Environment* (76%) above the benchmark (73%), while respondents reported lower satisfaction with Navy MTFs for the same measures (71%). Navy MTFs met or exceeded the benchmarks on all other measures, with the further exception of *Overall Hospital Rating* and *Recommend the Hospital*. Respondents from Air Force MTFs gave higher ratings, compared with the other Services, on *Communication with Doctors* (Air Force, 86%, Army, 84%, Navy, 84%, and JTF CapMed, 85%), *Communication with Nurses* (Air Force, 85%, Army, 81%, Navy, 82%, and JTF CapMed, 80%), *Communication about Medicines* (Air Force, 74%, Army, 72%, Navy, 72%, and JTF CapMed, 71%), *Responsiveness of Hospital Staff* (Air Force, 79%, Army, 72%, Navy, 75%, and JTF CapMed, 73%), and *Pain Management* (Air Force, 74%, Army, 71%, Navy 70%, and JTF CapMed ,69%).

Navy MTF inpatients reported higher satisfaction on *Communication with Nurses* (82%), *Responsiveness of Hospital Staff* (75%), *Pain Management* (70%), and *Quietness of Hospital Environment* (64%) in 2012, compared with 2011 (80%, 73%, 69%, and 62%, respectively). Air Force MTF inpatients reported higher satisfaction for *Responsiveness of Hospital Staff* (79%) in 2012, compared with 2011 (77%). Army MTF inpatients gave higher ratings for *Communication with Doctors* (84%), *Discharge Information* (88%), *Pain Management* (71%), *and Quietness of Hospital Environment* (65%) in 2012, compared with 2011 (83%, 87%, 70%, and 64%, respectively). Respondents from JTF CapMed MTFs gave *Cleanliness of Hospital Environment* (73%) and *Quietness of Hospital Environment* (67%) higher satisfactory responses in 2012, compared with 2011 (68% and 58%, respectively).

For the three Product Lines, *Overall Hospital Rating* and *Recommend the Hospital* results were highest for the Surgical Product Line respondents (71% and 76%, respectively), while respondents from the Maternity Care Product Line reported *Overall Hospital Rating* (54%) and *Recommend the Hospital* (59%), below the benchmarks (69% and 70%, respectively).

Results from Surgical and Medical Product Line exceeded benchmarks for all other measures with the exception of *Pain Management* in the Medical Product Line, which met the benchmark of 70%. Maternity Care MTF inpatients reported higher satisfaction on *Communication with Doctors* (84%), *Communication about Medicines* (76%), *Responsiveness of Hospital Staff* (75%), *Discharge Information* (89%), *Pain Management* (73%), and *Quietness of Hospital Environment* (74%) than the corresponding benchmarks (81%, 63%, 66%, 84%, 70%, and 60%, respectively). Their responses for *Cleanliness of Hospital Environment* (72%) were below the benchmark (73%) and met the benchmark for *Communication with Nurses* (79%; benchmark, 78%). Results from Medical Product Line respondents saw the most

improvement from 2011 to 2012, as *Communication with Nurses, Discharge Information, Pain Management,* and *Quietness of Hospital Environment* were higher in 2012.

Retirees and family age 65 and older indicated higher satisfaction for *Overall Hospital Rating* (85%) and *Recommend the Hospital* (86%), compared with the other beneficiary categories and exceeded those benchmarks (69% and 70%, respectively). Retirees and family under 65 responded similarly to those 65 and older, with an *Overall Hospital Rating* of 75% and for a willingness to *Recommend the Hospital* of 79%. Ratings received for *Overall Hospital Rating* and *Recommend the Hospital* by AD (56% and 62%) and ADFMs (55% and 60%) were lower than the benchmark (69% and 70%, respectively).

Although their responses on rating and recommending their hospitals were lower, AD respondents were more satisfied than the benchmarks with all other measures. ADFM respondents also were more satisfied than benchmarks with *Communication with Doctors* (83%; benchmark, 81%)*, Communication about Medicines* (74%; benchmark, 63%)*, Responsiveness of Hospital Staff* (73%; benchmark, 66%)*, Discharge Information* (89%; benchmark, 84%)*, Pain Management* (71%; benchmark, 70%)*,* and *Quietness of Hospital Environment* (72%; benchmark, 60%). ADFMs were equally satisfied as the benchmark with *Communication with Nurses* (78%) and less satisfied with *Cleanliness of Hospital Environment* (71%), compared with benchmark (73%).

AD and ADFM inpatients were more willing to *Recommend the Hospital* in 2012 (62% and 60%, respectively), compared with 2011 (61% and 58%, respectively). AD inpatients were more satisfied with *Communication with Nurses* (83%)*, Discharge Information* (91%)*, Pain Management* (73%)*,* and *Quietness of Hospital Environment* (77%) in 2012, compared with 2011 (82%, 89%, 71%, and 74%, respectively).

**Exhibit 17:  Direct Care Results:  Composites and Individual Items**

| | Overall Hospital Rating[1] | Recommend Hospital[1] | Communication with Doctors[1] | Communication with Nurses[1] | Communicate About Medicines[1] |
|---|---|---|---|---|---|
| Benchmark | 69% | 70% | 81% | 78% | 63% |
| DC Overall | 66% ↑ - | 68% ↑ - | 85% ↑ + | 82% ↑ + | 72% + |
| Army | 63% - | 65% - | 84% ↑ + | 81% + | 72% + |
| Navy | 64% ↑ - | 68% ↑ - | 84% + | 82% ↑ + | 72% + |
| Air Force | 72% + | 74% + | 86% + | 85% + | 74% + |
| JTF CapMed[2] | 73% ↑ + | 78% ↑ + | 85% + | 80% | 71% + |
| Medical[3] | 70% ↑ + | 74% + | 82% + | 84% ↑ + | 75% + |
| Surgical[3] | 71% + | 76% + | 89% + | 84% + | 77% + |
| Maternity[3] | 54% ↑ - | 59% ↑ - | 84% ↑ + | 79% | 76% + |
| Active Duty[3] | 56% - | 62% ↑ - | 84% + | 83% ↑ + | 81% + |
| Active Duty Family[3] | 55% ↑ - | 60% ↑ - | 83% ↑ + | 78% | 74% + |
| Retirees &Family Under 65[3] | 75% + | 79% + | 87% + | 85% + | 75% + |
| Retirees & Family 65+[3] | 85% + | 86% + | 87% + | 86% + | 73% + |

[1] " ↑" indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011. "+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.
[2] JTF CapMed includes Walter Reed National Military Medical Center and Ft. Belvoir Community Hospital.
[3] Ratings below the hospital level are weighted rather than patient-mix adjusted: Medical, Surgical, Maternity Care, AD, ADFMs, Retirees and family <65, and Retirees and family 65+.

**Exhibit 18: Direct Care Results: Composites and Individual Items (Continued)**

| | Overall Hospital Rating[1] | | Responsiveness of Hospital Staff[1] | | Discharge Information[1] | | Pain Management[1] | | Cleanliness of Hospital Environment[1] | | Quietness of Hospital Environment[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benchmark | 69% | | 66% | | 84% | | 70% | | 73% | | 60% | |
| DC Overall | 66% | ↑ - | 74% | ↑ + | 89% | ↑ + | 71% | ↑ + | 74% | + | 65% | ↑ + |
| Army | 63% | - | 72% | + | 88% | ↑ + | 71% | ↑ + | 76% | + | 65% | ↑ + |
| Navy | 64% | ↑ - | 75% | ↑ + | 89% | + | 70% | ↑ | 71% | - | 64% | ↑ + |
| Air Force | 72% | + | 79% | ↑ + | 89% | + | 74% | + | 74% | | 66% | + |
| JTF CapMed[2] | 73% | ↑ + | 73% | + | 88% | + | 69% | | 73% | ↑ | 67% | ↑ + |
| Medical[3] | 70% | ↑ + | 73% | + | 87% | ↑ + | 70% | ↑ | 78% | + | 67% | ↑ + |
| Surgical[3] | 71% | + | 76% | ↑ + | 93% | + | 77% | + | 79% | + | 69% | + |
| Maternity[3] | 54% | ↑ - | 75% | + | 89% | + | 73% | + | 72% | - | 74% | + |
| Active Duty[3] | 56% | - | 76% | + | 91% | ↑ + | 73% | ↑ + | 81% | + | 77% | ↑ + |
| Active Duty Family[3] | 55% | ↑ - | 73% | + | 89% | + | 71% | + | 71% | - | 72% | ↑ + |
| Retirees &Family Under 65[3] | 75% | + | 75% | + | 90% | + | 75% | + | 76% | + | 66% | + |
| Retirees & Family 65+[3] | 85% | + | 75% | + | 87% | + | 77% | + | 78% | + | 62% | + |

[1] " ↑" indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011. "+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.

[2] JTF CapMed includes Walter Reed National Military Medical Center and Ft. Belvoir Community Hospital.

[3] Ratings below the hospital level are weighted rather than patient-mix adjusted: Medical, Surgical, Maternity Care, AD, ADFMs, Retirees and family <65, and Retirees and family 65+.

# 7.0 Direct Care Hospital Level Results

Results for all measures for all MTFs are displayed in Exhibits 19 and 20. Significance tests were conducted between each estimate and the benchmark for each facility as well as the same estimate for calendar year 2011. MTFs within each Service are ranked by their score for *Overall Hospital Rating*.

**Exhibit 19: Direct Care Hospital Level Results: Composites and Individual Items**

| | N | Overall Hospital Rating[1] | | Recommend Hospital[1] | | Communication with Doctors[1] | | Communication with Nurses[1] | | Communicate About Medicines[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benchmark | | 69% | | 70% | | 81% | | 78% | | 63% | |
| DC Overall | 28,321 | 66% | ↑ - | 68% | ↑ - | 85% | ↑ + | 82% | ↑ + | 72% | + |
| **Army Overall** | **13,335** | **63%** | **-** | **65%** | **-** | **84%** | **↑ +** | **81%** | **+** | **72%** | **+** |
| San Antonio MMC-Ft. Sam Houston | 1,011 | 79% | + | 81% | + | 86% | + | 84% | + | 73% | + |
| Moncrief ACH-Ft. Jackson | 136 | 79% | + | 79% | + | 98% | ↑ + | 89% | + | 82% | + |
| Keller ACH-West Point | 196 | 76% | + | 77% | + | 90% | + | 90% | + | 74% | + |
| Eisenhower AMC-Ft. Gordon | 1,027 | 74% | + | 79% | + | 89% | + | 85% | + | 74% | + |
| Landstuhl Regional Medical Center | 663 | 71% | | 82% | ↑ + | 89% | + | 88% | + | 78% | + |
| Bayne-Jones ACH-Ft. Polk | 308 | 71% | ↑ | 68% | ↑ | 87% | ↑ + | 87% | ↑ + | 72% | + |
| Bassett ACH-Ft. Wainwright | 312 | 67% | ↑ | 67% | | 85% | + | 82% | ↑ | 76% | + |
| Reynolds ACH-Ft. Sill | 507 | 65% | | 64% | - | 85% | + | 79% | | 70% | + |
| Womack AMC-Ft. Bragg | 811 | 64% | - | 65% | ↑ - | 84% | + | 81% | + | 70% | + |
| Brian Allgood ACH-Seoul | 228 | 63% | | 71% | | 87% | + | 84% | + | 68% | |
| Madigan AMC-Ft. Lewis | 944 | 63% | ↓ - | 64% | ↓ - | 84% | + | 79% | | 68% | + |
| Evans ACH- Ft. Carson | 740 | 62% | - | 63% | - | 81% | | 78% | | 70% | + |
| L. Wood ACH-Ft. Leonard Wood | 564 | 62% | - | 62% | - | 86% | + | 82% | + | 75% | + |
| Winn ACH-Ft. Stewart | 678 | 60% | - | 58% | - | 82% | | 82% | + | 70% | + |
| Tripler AMC-Ft. Shafter | 909 | 58% | - | 62% | - | 81% | | 78% | | 70% | + |
| Ireland ACH-Ft. Knox | 453 | 57% | ↑ - | 57% | ↑ - | 86% | ↑ + | 84% | ↑ + | 77% | ↑ + |
| William Beaumont AMC-Ft. Bliss | 820 | 57% | - | 58% | - | 82% | | 79% | | 68% | + |

| | N | Overall Hospital Rating[1] | | Recommend Hospital[1] | | Communication with Doctors[1] | | Communication with Nurses[1] | | Communicate About Medicines[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Darnall AMC-Ft. Hood | 800 | 56% | - | 54% | - | 82% | | 80% | | 72% ↑ | + |
| Weed ACH-Ft. Irwin | 141 | 56% | - | 52% | - | 85% | | 85% | + | 73% | |
| Martin ACH-Ft. Benning | 650 | 54% | - | 55% | - | 84% | + | 77% | | 70% | + |
| Irwin ACH-Ft.Riley | 605 | 54% ↑ | - | 56% | - | 83% ↑ | | 79% | | 70% | + |
| Blanchfield ACH-Ft. Campbell | 832 | 53% | - | 51% | - | 82% | | 77% | | 70% | + |
| **Navy Overall** | 6,718 | 64% ↑ | - | 68% ↑ | - | 84% | + | 82% ↑ | + | 72% | + |
| Naval Hospital Pensacola | 580 | 75% | + | 78% | + | 90% | + | 85% | + | 78% | + |
| Naval Hospital Jacksonville | 783 | 74% | + | 75% | + | 86% | + | 85% | + | 72% | + |
| Naval Hospital Beaufort | 42 | 72% | | 76% | | 96% | + | 89% | + | - | |
| Naval Medical Center San Diego | 826 | 71% | | 76% | + | 85% | + | 84% | + | 72% | + |
| Naval Hospital Guam-Agana | 382 | 71% | | 77% | + | 89% | + | 90% | + | 76% | + |
| Naval Hospital Bremerton | 602 | 69% | | 75% ↑ | + | 84% | | 84% | + | 76% | + |
| Naval Hospital Lemoore | 126 | 65% | | 74% ↑ | | 87% | + | 80% | | 70% | |
| Naval Medical Center Portsmouth | 789 | 64% | - | 68% | | 83% | | 81% | + | 69% | + |
| Naval Hospital Yokosuka | 157 | 61% ↑ | - | 67% ↑ | | 87% | + | 85% | + | 77% | + |
| Naval Hospital Twentynine Palms | 242 | 57% | - | 60% | - | 82% | | 79% | | 69% | |
| Naval Hospital Camp Pendleton | 721 | 56% | - | 56% | - | 79% | | 79% | | 70% | + |
| Naval Hospital Camp Lejeune | 785 | 53% | - | 60% | - | 81% | | 78% | | 68% | + |
| Naval Hospital Okinawa | 464 | 46% | - | 49% | - | 84% | | 82% | + | 76% | + |
| Naval Hospital Oak Harbor | 143 | 45% | - | 46% | - | 80% | | 77% | | 67% | |
| **Air Force Overall** | 6275 | 72% | + | 74% | + | 86% | + | 85% | + | 74% | + |
| 88th Medical Group-Wright-Patterson | 1,132 | 79% | + | 82% | + | 88% | + | 88% | + | 76% | + |
| 81st Medical Group-Keesler | 828 | 76% | + | 79% | + | 90% | + | 87% | + | 77% | + |
| 48th Medical Group-Lakenheath | 178 | 73% | | 74% | | 87% | + | 83% | | 71% | |
| 60th Medical Group-Travis | 981 | 71% | | 75% | + | 86% | + | 83% | + | 72% | + |
| 96th Medical Group-Eglin | 886 | 71% | | 73% | + | 86% | + | 86% | + | 75% | + |

| | N | Overall Hospital Rating[1] | Recommend Hospital[1] | Communication with Doctors[1] | Communication with Nurses[1] | Communicate About Medicines[1] |
|---|---|---|---|---|---|---|
| 673rd Medical Group-Elmendorf | 597 | 69% | 70% | 85% + | 84% + | 73% + |
| 99th Medical Group-O'Callaghan Hospital | 879 | 67% | 70% | 85% + | 82% + | 73% + |
| 633rd Medical Group-Langley-Eustis | 604 | 66% | 69% | 82% | 82% + | 73% + |
| 366th Medical Group-Mountain Home | 80 | 63% | 61% | 90% + | 88% + | 80% + |
| **JTF CapMed Overall** | 1,993 | 73% ↑ + | 78% ↑ + | 85% + | 80% | 71% + |
| Ft. Belvoir Community Hospital | 996 | 78% ↑ + | 81% ↑ + | 86% + | 80% | 72% + |
| Walter Reed National Military Medical Center | 997 | 69% | 76% + | 85% + | 80% | 71% + |

[1] " ↑" indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011. "+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.

**Exhibit 20: Direct Care Hospital Level Results: Composites and Individual Items (Continued)**

| | N | Overall Hospital Rating | | Responsiveness of Hospital Staff | | Discharge Information | | Pain Management | | Cleanliness of Hospital Environment | | Quietness of Hospital Environment | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benchmark | | 69% | | 66% | | 84% | | 70% | | 73% | | 60% | |
| DC Overall | 28,321 | 66% | ↑ − | 75% | ↑ + | 89% | ↑ + | 71% | ↑ + | 74% | + | 65% | ↑ + |
| **Army Overall** | **13,335** | **63%** | **−** | **72%** | **+** | **88%** | **↑ +** | **71%** | **↑ +** | **76%** | **+** | **65%** | **↑ +** |
| San Antonio MMC-Ft. Sam Houston | 1,011 | 79% | + | 72% | + | 91% | + | 71% | | 79% | + | 63% | ↑ + |
| Moncrief ACH-Ft. Jackson | 136 | 79% | + | 88% | + | 93% | + | 84% | + | 85% | + | 81% | + |
| Keller ACH-West Point | 196 | 76% | + | 84% | + | 93% | + | 83% | + | 82% | + | 82% | + |
| Eisenhower AMC-Ft. Gordon | 1,027 | 74% | + | 76% | + | 90% | + | 73% | | 75% | ↓ | 62% | |
| Landstuhl Regional Medical Center | 663 | 71% | | 82% | + | 92% | + | 79% | + | 82% | + | 68% | + |
| Bayne-Jones ACH-Ft. Polk | 308 | 71% | ↑ | 78% | + | 88% | | 77% | + | 81% | + | 74% | + |
| Bassett ACH-Ft. Wainwright | 312 | 67% | ↑ | 76% | + | 90% | + | 72% | | 76% | ↑ | 70% | + |
| Reynolds ACH-Ft. Sill | 507 | 65% | | 76% | + | 89% | + | 73% | | 84% | + | 74% | + |
| Womack AMC-Ft. Bragg | 811 | 64% | − | 68% | | 87% | + | 69% | | 78% | + | 59% | |
| Brian Allgood ACH-Seoul | 228 | 63% | | 77% | + | 88% | | 74% | | 78% | | 78% | + |
| Madigan AMC-Ft. Lewis | 944 | 63% | ↓ − | 64% | | 87% | + | 67% | | 72% | | 55% | − |
| Evans ACH- Ft. Carson | 740 | 62% | − | 68% | | 90% | + | 69% | | 71% | | 67% | + |
| L. Wood ACH-Ft. Leonard Wood | 564 | 62% | − | 77% | + | 85% | | 72% | | 75% | | 66% | ↓ + |
| Winn ACH-Ft. Stewart | 678 | 60% | − | 74% | + | 90% | + | 73% | | 78% | + | 72% | + |
| Tripler AMC-Ft. Shafter | 909 | 58% | − | 67% | | 88% | + | 69% | | 68% | − | 53% | − |
| Ireland ACH-Ft. Knox | 453 | 57% | ↑ − | 75% | + | 89% | + | 72% | | 76% | | 70% | + |
| William Beaumont AMC-Ft. Bliss | 820 | 57% | − | 66% | | 86% | | 66% | − | 72% | | 67% | ↑ + |
| Darnall AMC-Ft. Hood | 800 | 56% | − | 70% | + | 86% | | 69% | | 77% | + | 64% | + |
| Weed ACH-Ft. Irwin | 141 | 56% | − | 80% | + | 87% | | 72% | | 71% | | 76% | + |
| Martin ACH-Ft. Benning | 650 | 54% | − | 73% | + | 85% | | 71% | | 71% | | 67% | + |
| Irwin ACH-Ft.Riley | 605 | 54% | ↑ − | 72% | + | 86% | | 69% | | 65% | − | 68% | + |
| Blanchfield ACH-Ft. Campbell | 832 | 53% | − | 69% | | 87% | + | 69% | | 81% | + | 59% | ↓ |

| | N | Overall Hospital Rating | Responsiveness of Hospital Staff | Discharge Information | Pain Management | Cleanliness of Hospital Environment | Quietness of Hospital Environment |
|---|---|---|---|---|---|---|---|
| **Navy Overall** | 6,718 | 64% ↑ - | 76% ↑ + | 89% + | 70% ↑ | 71% - | 64% + |
| Naval Hospital Pensacola | 580 | 75% + | 82% + | 89% + | 75% + | 80% + | 73% ↑ + |
| Naval Hospital Jacksonville | 783 | 74% + | 80% + | 90% + | 72% | 74% | 75% + |
| Naval Hospital Beaufort | 42 | 72% | 98% + | 95% + | 83% + | 82% | 92% + |
| Naval Medical Center San Diego | 826 | 71% | 77% ↑ + | 90% + | 73% | 75% | 54% - |
| Naval Hospital Guam-Agana | 382 | 71% | 81% + | 93% + | 75% + | 68% - | 63% |
| Naval Hospital Bremerton | 602 | 69% | 80% + | 91% + | 70% | 74% | 64% |
| Naval Hospital Lemoore | 126 | 65% | 64% | 87% | 75% | 75% | 73% + |
| Naval Medical Center Portsmouth | 789 | 64% - | 75% + | 88% + | 71% | 75% | 66% + |
| Naval Hospital Yokosuka | 157 | 61% ↑ - | 80% + | 91% + | 69% | 80% + | 69% ↑ + |
| Naval Hospital Twentynine Palms | 242 | 57% - | 78% ↑ + | 88% | 68% | 56% - | 61% |
| Naval Hospital Camp Pendleton | 721 | 56% - | 70% | 89% + | 67% | 65% - | 60% |
| Naval Hospital Camp Lejeune | 785 | 53% - | 68% | 88% + | 67% | 67% ↓ - | 58% |
| Naval Hospital Okinawa | 464 | 46% - | 71% + | 89% + | 70% | 69% ↑ | 56% |
| Naval Hospital Oak Harbor | 143 | 45% - | 68% | 89% | 60% - | 62% - | 58% |
| **Air Force Overall** | 6,275 | 72% + | 79% ↑ + | 89% + | 74% + | 74% | 66% + |
| 88th Medical Group-Wright-Patterson | 1,132 | 79% + | 84% + | 91% + | 77% + | 81% + | 76% + |
| 81st Medical Group-Keesler | 828 | 76% + | 82% + | 88% ↓ + | 78% + | 76% + | 68% + |
| 48th Medical Group-Lakenheath | 178 | 73% | 77% + | 90% + | 73% | 71% | 74% + |
| 60th Medical Group-Travis | 981 | 71% | 72% ↓ + | 88% + | 70% | 72% | 53% - |
| 96th Medical Group-Eglin | 886 | 71% | 81% + | 90% + | 75% + | 74% | 70% + |
| 673rd Medical Group-Elmendorf | 597 | 69% | 80% + | 90% ↑ + | 72% | 71% | 64% + |
| 99th Medical Group-O'Callaghan Hospital | 879 | 67% | 75% + | 86% | 72% | 66% ↓ - | 56% - |
| 633rd Medical Group-Langley-Eustis | 604 | 66% | 75% + | 87% + | 70% | 74% | 68% + |
| 366th Medical Group-Mountain Home | 80 | 63% | 76% + | 90% | 71% | 80% | 76% + |
| **JTF CapMed Overall** | 1,993 | 73% ↑ + | 72% + | 88% + | 69% | 73% ↑ | 66% ↑ + |

| | N | Overall Hospital Rating | Responsiveness of Hospital Staff | Discharge Information | Pain Management | Cleanliness of Hospital Environment | Quietness of Hospital Environment |
|---|---|---|---|---|---|---|---|
| Ft. Belvoir Community Hospital | 996 | 78% ↑ + | 76% + | 87% + | 69% | 77% ↑ + | 75% ↑ + |
| Walter Reed National Military Medical Center | 997 | 69% | 70% + | 89% + | 70% | 68% - | 59% |

[1] " ↑" indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011.
"+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.
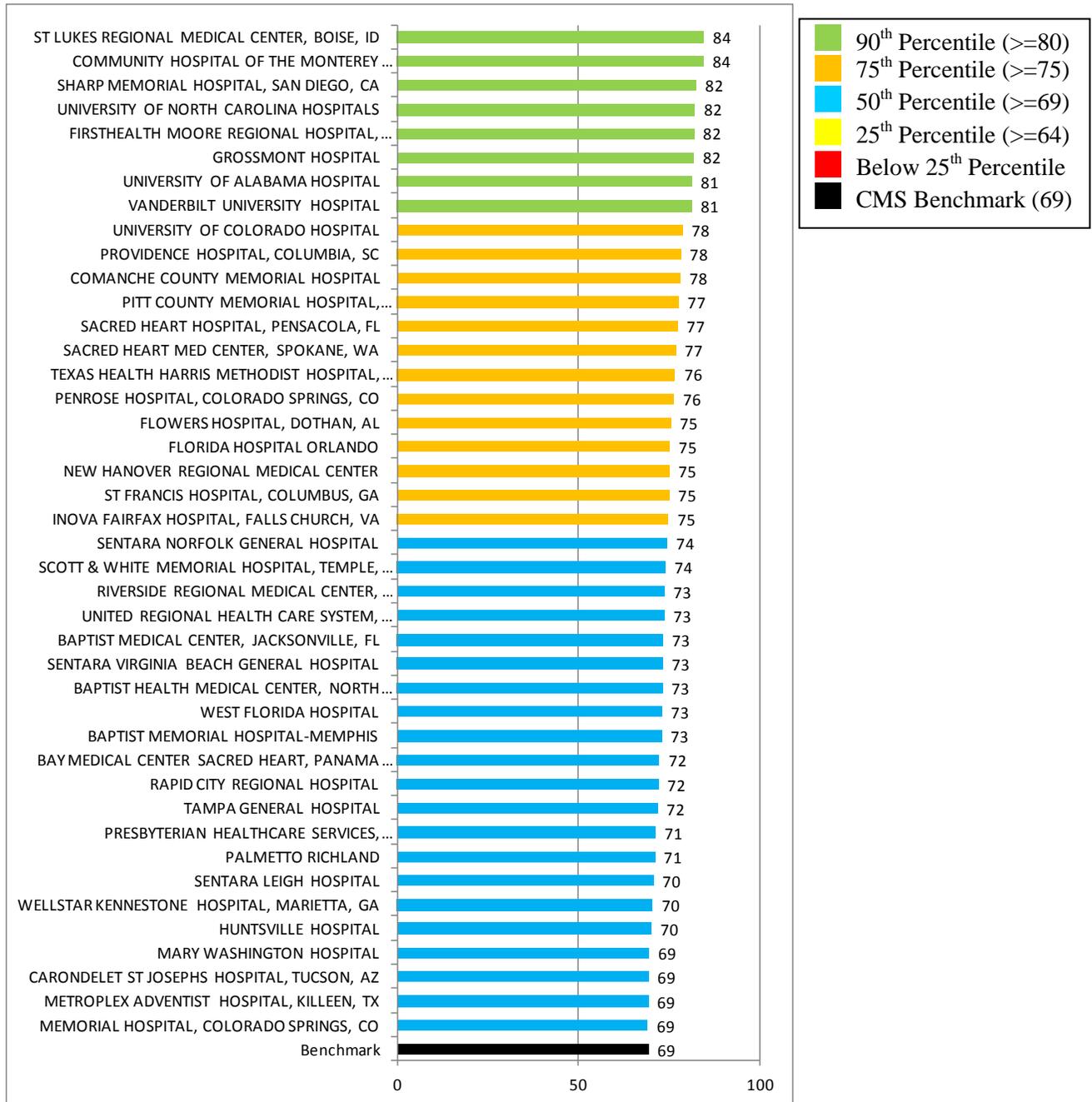
# 8.0 Purchased Care – Hospitals Compared with Civilian Benchmark for *Overall Hospital Rating* and *Recommend the Hospital*

Results for *Overall Hospital Rating* and *Recommend the Hospital* were ranked for each PC civilian hospital and compared with HCAHPS percentile cutoff points, consistent with DC (Exhibits 21 through 24). For PC, all hospitals were included in the percentile analysis, as they all had 70 or more responses. This yielded results from 20,259 inpatients from 73 civilian facilities.

Respondents reported *Overall Hospital Rating* for 42 PC hospitals above the civilian benchmark of 69% (Exhibit 21). Thirty-one PC facilities received an *Overall Hospital Rating* below the benchmark (Exhibit 22). Of the 73 civilian hospitals examined, respondents rated eight hospitals at or above the 90th percentile, with St. Luke's Regional Medical Center, Boise, Idaho, and Community Hospital of the Monterey Peninsula (Calif.) receiving the highest ranking (84%) for overall satisfaction. Respondents rated 21 civilian hospitals at or above the 75th percentile (75%), and 42 received ratings at or above the civilian benchmark of 69%, which is the 50th percentile. Twenty civilian hospitals received ratings below the 25th percentile for *Overall Hospital Rating*.

For *Recommend the Hospital*, eight of the 73 civilian facilities received ratings at or above the 90th percentile with a cutoff point of 83%, and 48 of all the PC facilities included received ratings at or above the benchmark of 71% (Exhibit 23). As with *Overall Hospital Rating*, St. Luke's Regional Medical Center, Boise, Idaho, and Community Hospital of the Monterey Peninsula, as well as FirstHealth Moore Regional Hospital, Pinehurst, N.C., and Sharp Memorial Hospital, San Diego, Calif., received the highest satisfaction (88%) for *Recommend the Hospital* from PC inpatients. Respondents rated 16 of the civilian facilities below the 25th percentile (below 65%) (Exhibit 24).

**Exhibit 21: Purchased Care Hospitals: Ranking of Percentage Who Rated 9 or 10 on** *Overall Hospital Rating* **Above the Civilian Benchmark**
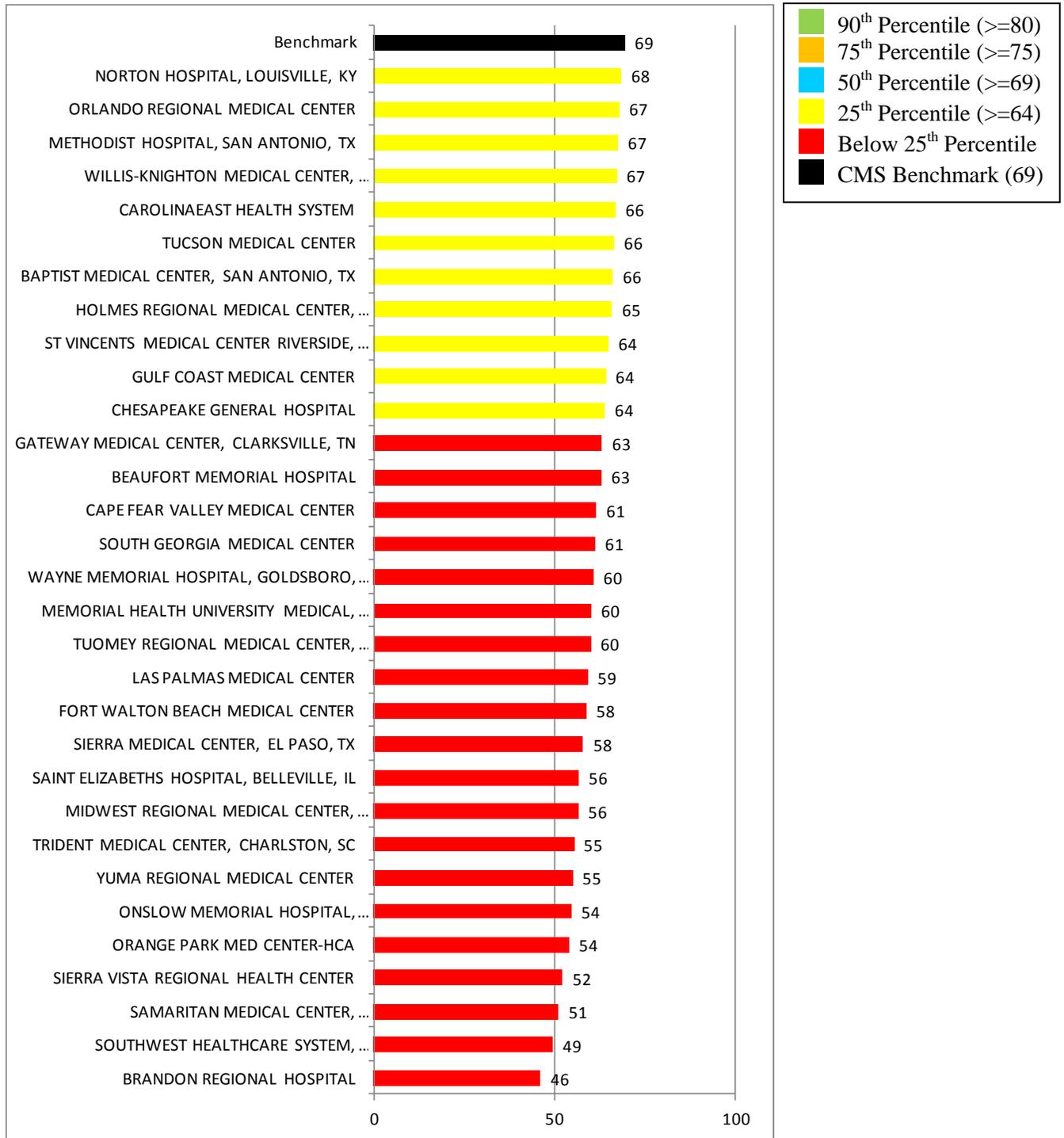


| Hospital | Value |
|---|---|
| ST LUKES REGIONAL MEDICAL CENTER, BOISE, ID | 84 |
| COMMUNITY HOSPITAL OF THE MONTEREY … | 84 |
| SHARP MEMORIAL HOSPITAL, SAN DIEGO, CA | 82 |
| UNIVERSITY OF NORTH CAROLINA HOSPITALS | 82 |
| FIRSTHEALTH MOORE REGIONAL HOSPITAL,… | 82 |
| GROSSMONT HOSPITAL | 82 |
| UNIVERSITY OF ALABAMA HOSPITAL | 81 |
| VANDERBILT UNIVERSITY HOSPITAL | 81 |
| UNIVERSITY OF COLORADO HOSPITAL | 78 |
| PROVIDENCE HOSPITAL, COLUMBIA, SC | 78 |
| COMANCHE COUNTY MEMORIAL HOSPITAL | 78 |
| PITT COUNTY MEMORIAL HOSPITAL,… | 77 |
| SACRED HEART HOSPITAL, PENSACOLA, FL | 77 |
| SACRED HEART MED CENTER, SPOKANE, WA | 77 |
| TEXAS HEALTH HARRIS METHODIST HOSPITAL,… | 76 |
| PENROSE HOSPITAL, COLORADO SPRINGS, CO | 76 |
| FLOWERS HOSPITAL, DOTHAN, AL | 75 |
| FLORIDA HOSPITAL ORLANDO | 75 |
| NEW HANOVER REGIONAL MEDICAL CENTER | 75 |
| ST FRANCIS HOSPITAL, COLUMBUS, GA | 75 |
| INOVA FAIRFAX HOSPITAL, FALLS CHURCH, VA | 75 |
| SENTARA NORFOLK GENERAL HOSPITAL | 74 |
| SCOTT & WHITE MEMORIAL HOSPITAL, TEMPLE, … | 74 |
| RIVERSIDE REGIONAL MEDICAL CENTER, … | 73 |
| UNITED REGIONAL HEALTH CARE SYSTEM, … | 73 |
| BAPTIST MEDICAL CENTER, JACKSONVILLE, FL | 73 |
| SENTARA VIRGINIA BEACH GENERAL HOSPITAL | 73 |
| BAPTIST HEALTH MEDICAL CENTER, NORTH… | 73 |
| WEST FLORIDA HOSPITAL | 73 |
| BAPTIST MEMORIAL HOSPITAL-MEMPHIS | 73 |
| BAY MEDICAL CENTER SACRED HEART, PANAMA … | 72 |
| RAPID CITY REGIONAL HOSPITAL | 72 |
| TAMPA GENERAL HOSPITAL | 72 |
| PRESBYTERIAN HEALTHCARE SERVICES,… | 71 |
| PALMETTO RICHLAND | 71 |
| SENTARA LEIGH HOSPITAL | 70 |
| WELLSTAR KENNESTONE HOSPITAL, MARIETTA, GA | 70 |
| HUNTSVILLE HOSPITAL | 70 |
| MARY WASHINGTON HOSPITAL | 69 |
| CARONDELET ST JOSEPHS HOSPITAL, TUCSON, AZ | 69 |
| METROPLEX ADVENTIST HOSPITAL, KILLEEN, TX | 69 |
| MEMORIAL HOSPITAL, COLORADO SPRINGS, CO | 69 |
| Benchmark | 69 |

Legend:
- 90th Percentile (>=80)
- 75th Percentile (>=75)
- 50th Percentile (>=69)
- 25th Percentile (>=64)
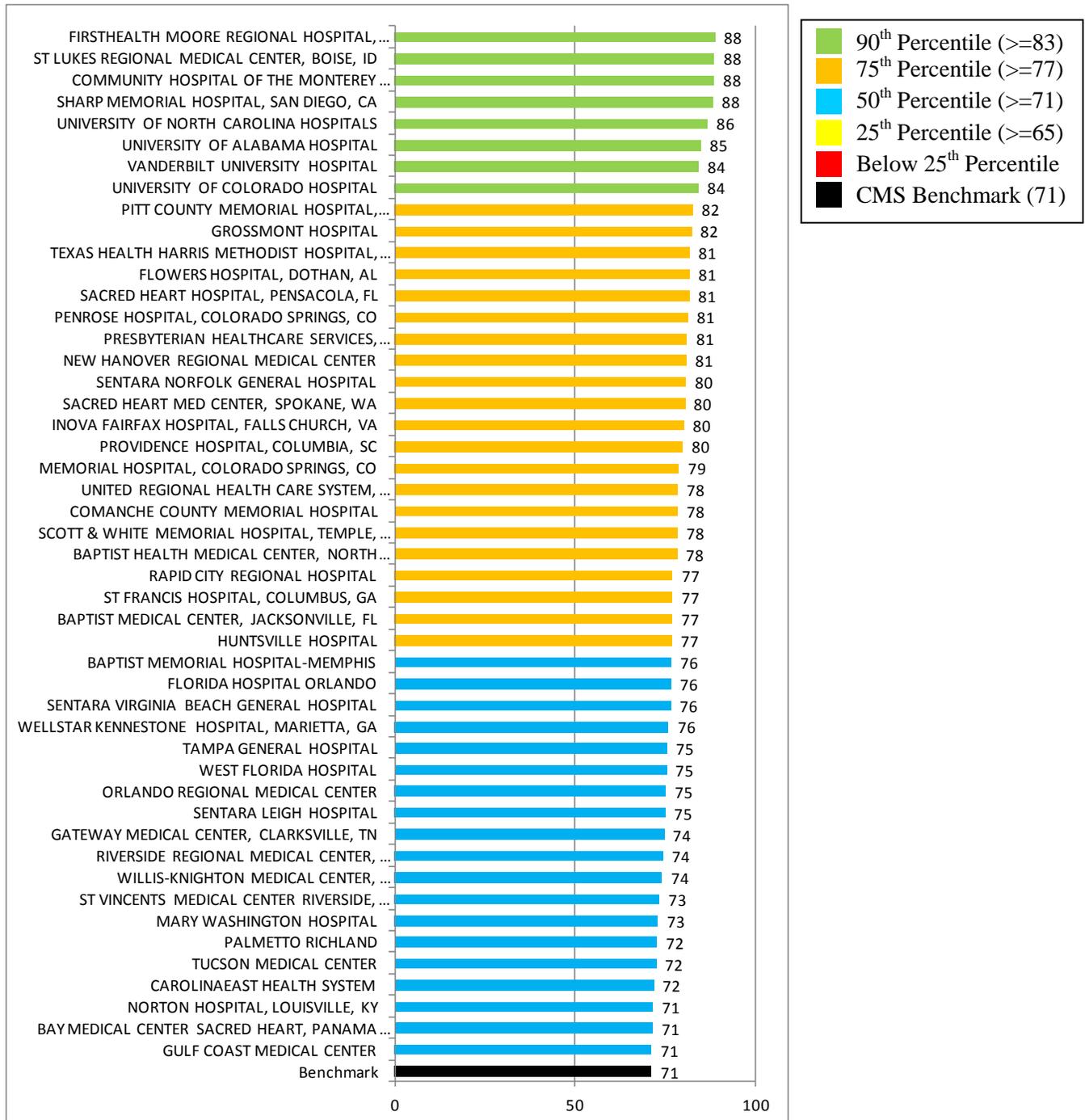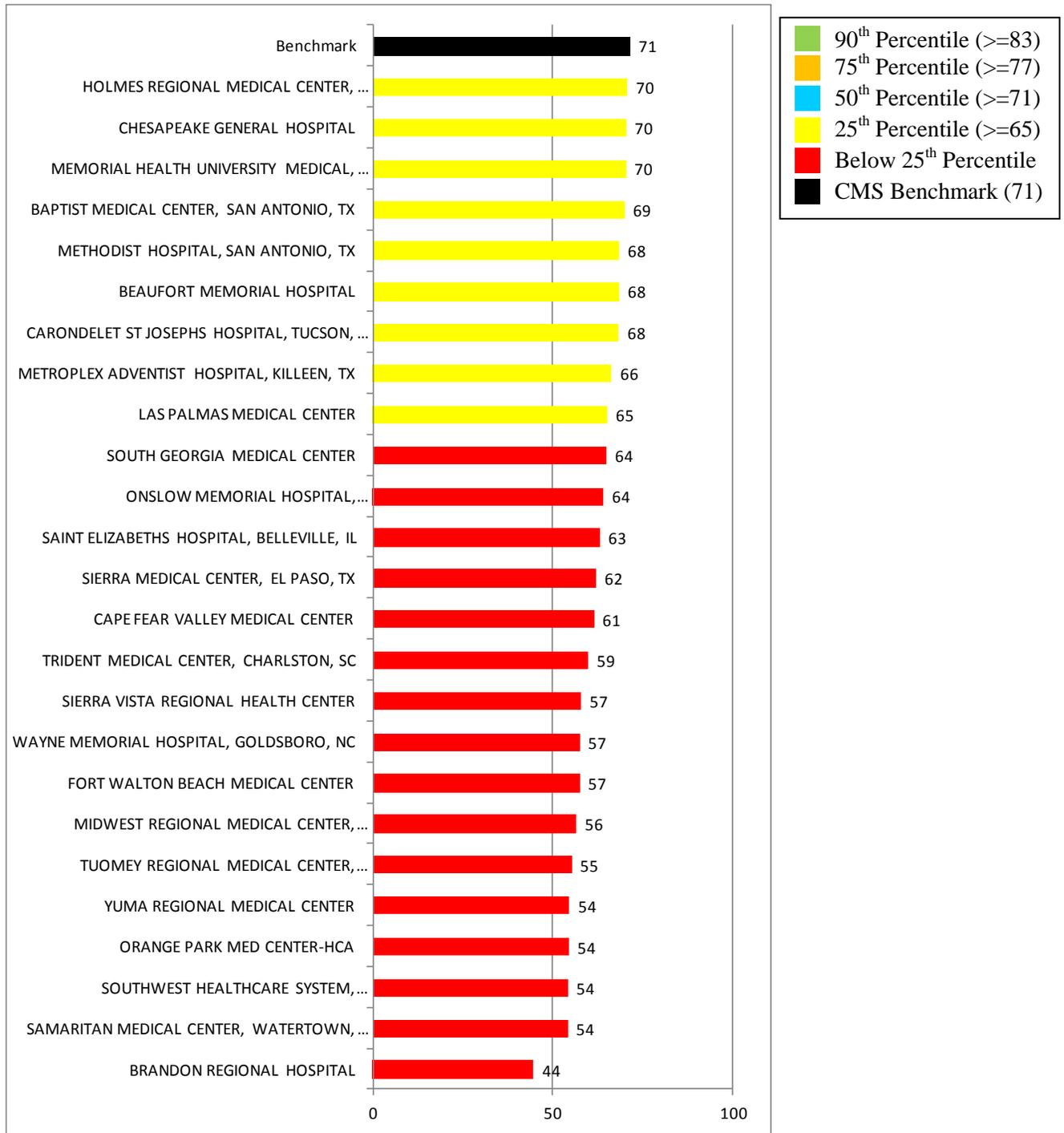- Below 25th Percentile
- CMS Benchmark (69)

[1] Civilian hospitals included have 70 or more respondents.
[2] Percentile cutoff points are the most recent provided by HCAHPS.
[3] These estimates are weighted rather than patient-mix adjusted.

**Exhibit 22: Purchased Care Hospitals: Ranking of Percentage Who Rated 9 or 10 on** *Overall Hospital Rating* **Below the Civilian Benchmark**

| Hospital | Rating |
|---|---|
| Benchmark | 69 |
| NORTON HOSPITAL, LOUISVILLE, KY | 68 |
| ORLANDO REGIONAL MEDICAL CENTER | 67 |
| METHODIST HOSPITAL, SAN ANTONIO, TX | 67 |
| WILLIS-KNIGHTON MEDICAL CENTER, … | 67 |
| CAROLINAEAST HEALTH SYSTEM | 66 |
| TUCSON MEDICAL CENTER | 66 |
| BAPTIST MEDICAL CENTER, SAN ANTONIO, TX | 66 |
| HOLMES REGIONAL MEDICAL CENTER, … | 65 |
| ST VINCENTS MEDICAL CENTER RIVERSIDE, … | 64 |
| GULF COAST MEDICAL CENTER | 64 |
| CHESAPEAKE GENERAL HOSPITAL | 64 |
| GATEWAY MEDICAL CENTER, CLARKSVILLE, TN | 63 |
| BEAUFORT MEMORIAL HOSPITAL | 63 |
| CAPE FEAR VALLEY MEDICAL CENTER | 61 |
| SOUTH GEORGIA MEDICAL CENTER | 61 |
| WAYNE MEMORIAL HOSPITAL, GOLDSBORO, … | 60 |
| MEMORIAL HEALTH UNIVERSITY MEDICAL, … | 60 |
| TUOMEY REGIONAL MEDICAL CENTER, … | 60 |
| LAS PALMAS MEDICAL CENTER | 59 |
| FORT WALTON BEACH MEDICAL CENTER | 58 |
| SIERRA MEDICAL CENTER, EL PASO, TX | 58 |
| SAINT ELIZABETHS HOSPITAL, BELLEVILLE, IL | 56 |
| MIDWEST REGIONAL MEDICAL CENTER, … | 56 |
| TRIDENT MEDICAL CENTER, CHARLSTON, SC | 55 |
| YUMA REGIONAL MEDICAL CENTER | 55 |
| ONSLOW MEMORIAL HOSPITAL, … | 54 |
| ORANGE PARK MED CENTER-HCA | 54 |
| SIERRA VISTA REGIONAL HEALTH CENTER | 52 |
| SAMARITAN MEDICAL CENTER, … | 51 |
| SOUTHWEST HEALTHCARE SYSTEM, … | 49 |
| BRANDON REGIONAL HOSPITAL | 46 |

Legend:
- 90th Percentile (>=80)
- 75th Percentile (>=75)
- 50th Percentile (>=69)
- 25th Percentile (>=64)
- Below 25th Percentile
- CMS Benchmark (69)

[1] Civilian hospitals included have 70 or more respondents.
[2] Percentile cutoff points are the most recent provided by HCAHPS.
[3] These estimates are weighted rather than patient-mix adjusted.

**Exhibit 23: Purchased Care Hospitals: Ranking of Percentage Who Responded "Definitely Yes" to *Recommend the Hospital* Above the Civilian Benchmark**

| Hospital | Value |
|---|---|
| FIRSTHEALTH MOORE REGIONAL HOSPITAL, … | 88 |
| ST LUKES REGIONAL MEDICAL CENTER, BOISE, ID | 88 |
| COMMUNITY HOSPITAL OF THE MONTEREY … | 88 |
| SHARP MEMORIAL HOSPITAL, SAN DIEGO, CA | 88 |
| UNIVERSITY OF NORTH CAROLINA HOSPITALS | 86 |
| UNIVERSITY OF ALABAMA HOSPITAL | 85 |
| VANDERBILT UNIVERSITY HOSPITAL | 84 |
| UNIVERSITY OF COLORADO HOSPITAL | 84 |
| PITT COUNTY MEMORIAL HOSPITAL, … | 82 |
| GROSSMONT HOSPITAL | 82 |
| TEXAS HEALTH HARRIS METHODIST HOSPITAL, … | 81 |
| FLOWERS HOSPITAL, DOTHAN, AL | 81 |
| SACRED HEART HOSPITAL, PENSACOLA, FL | 81 |
| PENROSE HOSPITAL, COLORADO SPRINGS, CO | 81 |
| PRESBYTERIAN HEALTHCARE SERVICES, … | 81 |
| NEW HANOVER REGIONAL MEDICAL CENTER | 81 |
| SENTARA NORFOLK GENERAL HOSPITAL | 80 |
| SACRED HEART MED CENTER, SPOKANE, WA | 80 |
| INOVA FAIRFAX HOSPITAL, FALLS CHURCH, VA | 80 |
| PROVIDENCE HOSPITAL, COLUMBIA, SC | 80 |
| MEMORIAL HOSPITAL, COLORADO SPRINGS, CO | 79 |
| UNITED REGIONAL HEALTH CARE SYSTEM, … | 78 |
| COMANCHE COUNTY MEMORIAL HOSPITAL | 78 |
| SCOTT & WHITE MEMORIAL HOSPITAL, TEMPLE, … | 78 |
| BAPTIST HEALTH MEDICAL CENTER, NORTH… | 78 |
| RAPID CITY REGIONAL HOSPITAL | 77 |
| ST FRANCIS HOSPITAL, COLUMBUS, GA | 77 |
| BAPTIST MEDICAL CENTER, JACKSONVILLE, FL | 77 |
| HUNTSVILLE HOSPITAL | 77 |
| BAPTIST MEMORIAL HOSPITAL-MEMPHIS | 76 |
| FLORIDA HOSPITAL ORLANDO | 76 |
| SENTARA VIRGINIA BEACH GENERAL HOSPITAL | 76 |
| WELLSTAR KENNESTONE HOSPITAL, MARIETTA, GA | 76 |
| TAMPA GENERAL HOSPITAL | 75 |
| WEST FLORIDA HOSPITAL | 75 |
| ORLANDO REGIONAL MEDICAL CENTER | 75 |
| SENTARA LEIGH HOSPITAL | 75 |
| GATEWAY MEDICAL CENTER, CLARKSVILLE, TN | 74 |
| RIVERSIDE REGIONAL MEDICAL CENTER, … | 74 |
| WILLIS-KNIGHTON MEDICAL CENTER, … | 74 |
| ST VINCENTS MEDICAL CENTER RIVERSIDE, … | 73 |
| MARY WASHINGTON HOSPITAL | 73 |
| PALMETTO RICHLAND | 72 |
| TUCSON MEDICAL CENTER | 72 |
| CAROLINAEAST HEALTH SYSTEM | 72 |
| NORTON HOSPITAL, LOUISVILLE, KY | 71 |
| BAY MEDICAL CENTER SACRED HEART, PANAMA … | 71 |
| GULF COAST MEDICAL CENTER | 71 |
| Benchmark | 71 |

Legend:
- 90th Percentile (>=83) — green
- 75th Percentile (>=77) — orange
- 50th Percentile (>=71) — blue
- 25th Percentile (>=65) — yellow
- Below 25th Percentile — red
- CMS Benchmark (71) — black

[1] Civilian hospitals included have 70 or more respondents.

[2] Percentile cutoff points are the most recent provided by HCAHPS.

[3] These estimates are weighted rather than patient-mix adjusted.

**Exhibit 24: Purchased Care Hospitals: Ranking of Percentage Who Responded "Definitely Yes" to *Recommend the Hospital* Below the Civilian Benchmark**

| Hospital | Value |
|---|---|
| Benchmark | 71 |
| HOLMES REGIONAL MEDICAL CENTER, … | 70 |
| CHESAPEAKE GENERAL HOSPITAL | 70 |
| MEMORIAL HEALTH UNIVERSITY MEDICAL, … | 70 |
| BAPTIST MEDICAL CENTER, SAN ANTONIO, TX | 69 |
| METHODIST HOSPITAL, SAN ANTONIO, TX | 68 |
| BEAUFORT MEMORIAL HOSPITAL | 68 |
| CARONDELET ST JOSEPHS HOSPITAL, TUCSON, … | 68 |
| METROPLEX ADVENTIST HOSPITAL, KILLEEN, TX | 66 |
| LAS PALMAS MEDICAL CENTER | 65 |
| SOUTH GEORGIA MEDICAL CENTER | 64 |
| ONSLOW MEMORIAL HOSPITAL, … | 64 |
| SAINT ELIZABETHS HOSPITAL, BELLEVILLE, IL | 63 |
| SIERRA MEDICAL CENTER, EL PASO, TX | 62 |
| CAPE FEAR VALLEY MEDICAL CENTER | 61 |
| TRIDENT MEDICAL CENTER, CHARLSTON, SC | 59 |
| SIERRA VISTA REGIONAL HEALTH CENTER | 57 |
| WAYNE MEMORIAL HOSPITAL, GOLDSBORO, NC | 57 |
| FORT WALTON BEACH MEDICAL CENTER | 57 |
| MIDWEST REGIONAL MEDICAL CENTER, … | 56 |
| TUOMEY REGIONAL MEDICAL CENTER, … | 55 |
| YUMA REGIONAL MEDICAL CENTER | 54 |
| ORANGE PARK MED CENTER-HCA | 54 |
| SOUTHWEST HEALTHCARE SYSTEM, … | 54 |
| SAMARITAN MEDICAL CENTER, WATERTOWN, … | 54 |
| BRANDON REGIONAL HOSPITAL | 44 |

Legend:
- 90th Percentile (>=83)
- 75th Percentile (>=77)
- 50th Percentile (>=71)
- 25th Percentile (>=65)
- Below 25th Percentile
- CMS Benchmark (71)

[1]Civilian hospitals included have 70 or more respondents.
[2]Percentile cut points are the most recent provided by HCAHPS.
[3]These estimates are weighted rather than patient-mix adjusted.

# 9.0   Purchased Care Results

PC results are based on 20,259 responses from 73 civilian facilities (Exhibits 25 and 26). Estimates for respondents from PC overall and the three TROs are patient-mix adjusted. For *Overall Hospital Rating* and *Recommend the Hospital*, PC respondents rated *Overall Hospital Rating* significantly lower (68%) for civilian facilities compared with a benchmark of 69%, while *Recommend the Hospital* (71%) was above the benchmark of 70%. For all other measures, overall PC results were at or above the benchmarks except for *Responsiveness of Hospital Staff (65%)* and *Quietness of Hospital Environment* (58%), which were significantly lower than the benchmarks (66% and 60%, respectively). PC respondents, in general, were more satisfied with all measures in 2012 compared with 2011.

Comparing the three TROs, respondents rated TRO West hospitals higher on *Overall Hospital Rating* (70%) than TRO North (67%) and TRO South respondents (67%), both of which rated hospitals below the benchmark of 69%. TRO West respondents were more willing to *Recommend the Hospital* in comparison to the benchmark (74%; benchmark, 70%) and were more likely to do so than respondents from other TROs (71% in TRO North and 70% in TRO South). All TRO respondents were more satisfied than the benchmark with *Communication about Medicines* and *Discharge Information.* Results for all TRO hospitals were higher for *Overall Hospital Rating* and *Communication with Nurses* in 2012 compared with 2011, while results for TROs North and West hospitals for *Recommend the Hospital* were higher in 2012.

For the three Product Lines, *Overall Hospital Rating* and *Recommend the Hospital* results were highest for the Surgical Product Line respondents (74% and 76%, respectively), while respondents from the Medical and Maternity Care Product Line gave *Overall Hospital Ratings* that were below the benchmark. All Surgical and Maternity Care respondents were at least as or more satisfied than the benchmark with *Communication with Doctors, Communication with Nurses, Communication about Medicines, Responsiveness of Hospital Staff, Discharge Information, Pain Management, Cleanliness of Hospital Environment* and *Quietness of Hospital Environment*; and all ratings were significantly higher except *Responsiveness of Hospital Staff* for Surgical respondents, which met the benchmark. Medical Product Line results were below the benchmark for all measures except *Communication about Medicines*, which met the benchmark. Respondents from all Product Lines rated *Overall Hospital Rating* higher in 2012 compared with 2011, and those from Medical and Maternity Care Product Lines were more willing to *Recommend the Hospital* in 2012. Surgical respondents were more satisfied with *Communication with Doctors, Communication with Nurses, Communication about Medicines, Discharge Information,* and *Pain Management* in 2012 compared with 2011.

Retirees and family age 65 and older indicated higher satisfaction than the other beneficiary categories and exceeded benchmarks for *Overall Hospital Rating* (72%; benchmark 69%) and *Recommend the Hospital* (73%; benchmark, 70%). However, on all other measures, AD and ADFM respondents' results were higher, compared with the other beneficiary categories. All beneficiary categories except AD rated hospitals higher for *Overall Hospital Rating* in 2012, compared with 2011. In general, Retirees and family tended to be more satisfied with hospitals in 2012 than in the prior year.

**Exhibit 25: Purchased Care Results: Composites and Individual Items**

| | Overall Hospital Rating[1] | Recommend Hospital[1] | Communication with Doctors[1] | Communication with Nurses[1] | Communicate About Medicines[1] |
|---|---|---|---|---|---|
| Benchmark | 69% | 70% | 81% | 78% | 63% |
| PC Overall | 68% ↑ - | 71% ↑ + | 81% ↑ | 78% ↑ | 67% ↑ + |
| TRO North | 67% ↑ - | 71% ↑ | 81% ↑ | 79% ↑ | 67% + |
| TRO South | 67% ↑ - | 70% | 82% ↑ | 78% ↑ | 67% + |
| TRO West | 70% ↑ | 74% ↑ + | 81% | 78% ↑ | 68% + |
| Medical[2] | 66% ↑ - | 69% ↑ | 75% ↑ - | 76% ↑ - | 63% |
| Surgical[2] | 74% ↑ + | 76% + | 86% ↑ + | 80% ↑ + | 70% ↑ + |
| Maternity[2] | 64% ↑ - | 73% ↑ + | 85% + | 81% ↑ + | 74% + |
| Active Duty[2] | 62% - | 72% | 85% + | 83% + | 80% + |
| Active Duty Family[2] | 63% ↑ - | 71% ↑ | 83% + | 79% ↑ | 72% + |
| Retirees &Family Under 65[2] | 68% ↑ - | 72% ↑ + | 82% ↑ | 79% ↑ | 69% + |
| Retirees & Family 65+[2] | 72% ↑ + | 73% + | 79% - | 77% ↑ | 64% ↑ |

[1] " ↑" indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011. "+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.

[2] These estimates are weighted rather than patient-mix adjusted: Medical, Surgical, Maternity Care, AD, ADFMs, Retirees and family <65, and Retirees and family 65+.

**Exhibit 26: Purchased Care Results: Composites and Individual Items (Continued)**

| | Overall Hospital Rating[1] | | Responsiveness of Hospital Staff[1] | | Discharge Information[1] | | Pain Management[1] | | Cleanliness of Hospital Environment[1] | | Quietness of Hospital Environment[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benchmark | 69% | | 66% | | 84% | | 70% | | 73% | | 60% | |
| PC Overall | 68% ↑ | - | 65% ↑ | - | 87% ↑ | + | 72% ↑ | + | 73% ↑ | | 58% ↑ | - |
| TRO North | 67% ↑ | - | 66% | | 87% ↑ | + | 71% | | 72% | | 55% ↑ | - |
| TRO South | 67% ↑ | - | 65% | - | 86% | + | 72% ↑ | + | 72% | | 59% | - |
| TRO West | 70% ↑ | | 66% ↑ | | 87% | + | 72% | + | 75% | + | 56% | - |
| Medical[2] | 66% ↑ | - | 60% ↑ | - | 82% | - | 68% | - | 72% ↑ | - | 53% | - |
| Surgical[2] | 74% ↑ | + | 67% | | 91% ↑ | + | 77% ↑ | + | 77% | + | 62% | + |
| Maternity[2] | 64% ↑ | - | 73% | + | 91% ↑ | + | 77% ↑ | + | 76% | + | 74% ↑ | + |
| Active Duty[2] | 62% | - | 72% | + | 93% ↑ | + | 75% | + | 84% | + | 76% | + |
| Active Duty Family[2] | 63% ↑ | - | 70% | + | 90% | + | 75% ↑ | + | 75% | + | 71% ↑ | + |
| Retirees &Family Under 65[2] | 68% ↑ | - | 66% ↑ | | 89% ↑ | + | 73% | + | 76% ↑ | + | 62% | + |
| Retirees & Family 65+[2] | 72% ↑ | + | 61% ↑ | - | 84% ↑ | | 74% ↑ | + | 71% ↑ | - | 53% | - |

[1] " ↑" indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011. "+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.

[2] These estimates are weighted rather than patient-mix adjusted: Medical, Surgical, Maternity Care, AD, ADFMs, Retirees and family <65, and Retirees and family 65+.

# 10.0    Purchased Care Hospital Level Results

Results for all measures for all civilian facilities are displayed in Exhibits 27 and 28. For PC overall and TROs, estimates are patient-mix adjusted and combine all Product Lines (Medical, Surgical, and Maternity) together. Facility-specific estimates are weighted rather than patient-mix adjusted. Significance tests were conducted between each estimate and the benchmark for each facility, as well as with the estimate from calendar year 2011. Civilian hospitals within each TRO are ranked by their score for *Overall Hospital Rating*.

**Exhibit 27:  Purchased Care Hospital Level Results:  Composites and Individual Items**

| | N | Overall Hospital Rating[1] | | Recommend Hospital[1] | | Communication with Doctors[1] | | Communication with Nurses[1] | | Communicate About Medicines[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benchmark | | 69% | | 70% | | 81% | | 78% | | 63% | |
| PC Overall[2] | 20,259 | 68% | ↑ - | 71% | ↑ + | 81% | ↑ | 78% | ↑ | 67% | ↑ + |
| **TRO North Overall[2]** | **4,900** | **67%** | **↑ -** | **71%** | **↑** | **81%** | **↑** | **79%** | **↑** | **67%** | **+** |
| University of North Carolina Hospitals[3] | 204 | 82% | + | 86% | + | 84% | | 82% | | 74% | + |
| FirstHealth Moore Regional Hospital, Pinehurst, NC[3] | 256 | 82% | + | 88% | + | 84% | | 85% | + | 78% | + |
| Pitt County Memorial Hospital, Greenville, NC | 248 | 77% | + | 82% | + | 85% | | 81% | | 72% | + |
| New Hanover Regional Medical Center | 333 | 75% | + | 81% | + | 81% | | 81% | | 72% | + |
| Inova Fairfax Hospital, Falls Church, VA | 328 | 75% | + | 80% | + | 80% | | 77% | | 63% | |
| Sentara Norfolk General Hospital | 282 | 74% | | 80% | + | 82% | | 80% | | 71% | + |
| Riverside Regional Medical Center, Newport News, VA | 313 | 73% | ↑ | 74% | | 80% | | 79% | | 65% | |
| Sentara Virginia Beach General Hospital | 302 | 73% | | 76% | + | 82% | | 79% | | 63% | |
| Sentara Leigh Hospital | 262 | 70% | | 75% | | 80% | | 79% | | 70% | |
| Mary Washington Hospital[3] | 196 | 69% | | 73% | | 80% | | 78% | | 61% | |
| Norton Hospital, Louisville, KY[3] | 183 | 68% | | 71% | | 83% | | 82% | | 63% | |
| CarolinaEast Health System | 360 | 66% | ↑ | 72% | | 80% | | 79% | | 67% | |
| Chesapeake General Hospital | 256 | 64% | | 70% | | 80% | | 75% | | 63% | |
| Cape Fear Valley Medical Center | 422 | 61% | - | 61% | - | 78% | | 76% | | 65% | |

| | N | Overall Hospital Rating[1] | | Recommend Hospital[1] | | Communication with Doctors[1] | | Communication with Nurses[1] | | Communicate About Medicines[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Wayne Memorial Hospital, Goldsboro, NC | 178 | 60% | - | 57% | - | 81% | | 78% | | 68% | |
| Saint Elizabeth's Hospital, Belleville, IL | 282 | 56% ↑ | - | 63% | - | 83% | | 83% | + | 74% | + |
| Onslow Memorial Hospital, Jacksonville, NC | 244 | 54% ↑ | - | 64% ↑ | - | 80% | | 82% | | 68% | |
| Samaritan Medical Center, Watertown, NY | 251 | 51% | - | 54% | - | 85% | | 78% | | 77% | + |
| **TRO South Overall[2]** | 10,983 | 67% ↑ | - | 70% | | 82% ↑ | | 78% ↑ | | 67% | + |
| University of Alabama Hospital | 260 | 81% | + | 85% | + | 82% | | 80% | | 69% | |
| Vanderbilt University Hospital | 284 | 81% | + | 84% | + | 85% | | 84% | + | 79% | + |
| Providence Hospital, Columbia, SC | 222 | 78% | + | 80% | + | 88% ↑ | + | 83% | | 72% | + |
| Comanche County Memorial Hospital | 222 | 78% ↑ | + | 78% ↑ | + | 84% | | 81% | | 75% | + |
| Sacred Heart Hospital, Pensacola, FL | 373 | 77% ↑ | + | 81% | + | 85% | | 83% | + | 71% | + |
| Texas Health Harris Methodist Hospital, Fort Worth | 244 | 76% | + | 81% | + | 80% | | 81% | | 72% | + |
| Flowers Hospital, Dothan, AL | 305 | 75% | + | 81% | + | 85% | + | 82% | | 67% | |
| Florida Hospital, Orlando, FL | 515 | 75% ↑ | + | 76% | + | 76% | - | 78% | | 65% | |
| St Francis Hospital, Columbus, GA | 279 | 75% | + | 77% | + | 83% | | 78% | | 58% | |
| Scott & White Memorial Hospital, Temple, TX | 411 | 74% | + | 78% | + | 84% | | 78% | | 76% | + |
| United Regional Health Care System, Wichita Falls, TX | 244 | 73% | | 78% | + | 82% | | 84% | + | 69% | |
| Baptist Medical Center, Jacksonville, FL | 249 | 73% | | 77% | + | 81% | | 79% | | 70% | |
| Baptist Health Medical Center, North Little Rock, AK | 235 | 73% | | 78% | + | 84% | | 80% | | 78% ↑ | + |
| West Florida Hospital | 325 | 73% | | 75% | + | 77% | | 79% | | 64% | |
| Baptist Memorial Hospital, Memphis[3] | 215 | 73% | | 76% | + | 78% | | 77% | | 64% | |
| Bay Medical Center Sacred Heart, Panama City, FL | 200 | 72% | | 71% | | 78% | | 79% | | 63% | |
| Tampa General Hospital | 221 | 72% | | 75% | | 78% | | 77% | | 64% | |

| | N | Overall Hospital Rating[1] | | Recommend Hospital[1] | | Communication with Doctors[1] | | Communication with Nurses[1] | | Communicate About Medicines[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Palmetto Richland | 233 | 71% | | 72% | | 84% | | 82% | | 76% | + |
| Wellstar Kennestone Hospital, Marietta, GA | 233 | 70% | | 76% | + | 80% | | 79% | | 67% | |
| Huntsville Hospital | 340 | 70% | | 77% | + | 84% | | 81% | | 70% | + |
| Metroplex Adventist Hospital, Killeen, TX | 261 | 69% | | 66% | | 83% | | 81% | | 75% | + |
| Orlando Regional Medical Center | 207 | 67% | ↓ | 75% | | 78% | | 80% | | 65% | |
| Methodist Hospital, San Antonio, TX. | 409 | 67% | ↑ | 68% | ↑ | 78% | | 74% | ↑ | 68% | ↑ |
| Willis-Knighton Medical Center, Shreveport, LA | 279 | 67% | | 74% | | 84% | | 79% | | 66% | |
| Baptist Medical Center, San Antonio, TX | 380 | 66% | | 69% | | 82% | | 77% | | 63% | |
| Holmes Regional Medical Center, Melbourne, FL | 316 | 65% | ↓ | 70% | | 75% | - | 75% | | 66% | |
| St Vincent's Medical Center Riverside, Jacksonville, FL | 316 | 64% | | 73% | | 78% | | 74% | | 61% | |
| Gulf Coast Medical Center | 250 | 64% | | 71% | | 76% | | 76% | | 60% | |
| Gateway Medical Center, Clarksville, TN | 250 | 63% | - | 74% | ↑ | 84% | | 80% | | 73% | + |
| Beaufort Memorial Hospital | 233 | 63% | - | 68% | | 85% | | 80% | | 73% | + |
| South Georgia Medical Center | 209 | 61% | - | 64% | | 81% | | 77% | | 66% | |
| Memorial Health University Medical, Savannah, GA | 320 | 60% | - | 70% | | 82% | | 77% | | 67% | |
| Tuomey Regional Medical Center, Sumter, SC | 260 | 60% | - | 55% | - | 82% | | 82% | | 69% | |
| Fort Walton Beach Medical Center | 377 | 58% | - | 57% | - | 75% | - | 72% | - | 57% | |
| Midwest Regional Medical Center, Oklahoma City, OK | 229 | 56% | - | 56% | ↑ - | 80% | | 69% | - | 65% | ↑ |
| Trident Medical Center, Charleston, SC | 468 | 55% | - | 59% | - | 78% | | 75% | | 63% | |
| Orange Park Medical Center-HCA | 305 | 54% | - | 54% | - | 76% | - | 75% | | 64% | |
| Brandon Regional Hospital | 304 | 46% | ↓ - | 44% | ↓ - | 73% | - | 64% | - | 51% | ↓ - |

| | N | Overall Hospital Rating[1] | | Recommend Hospital[1] | | Communication with Doctors[1] | | Communication with Nurses[1] | | Communicate About Medicines[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **TRO West Overall[2]** | 4376 | 70% | ↑ | 74% | ↑ + | 81% | | 78% | ↑ | 68% | + |
| St Luke's Regional Medical Center, Boise, ID | 257 | 84% | + | 88% | + | 88% | + | 84% | + | 77% | + |
| Community Hospital of the Monterey Peninsula | 260 | 84% | + | 88% | + | 83% | | 79% | | 71% | + |
| Sharp Memorial Hospital, San Diego, CA | 213 | 82% | + | 88% | + | 82% | ↓ | 84% | + | 79% | + |
| Grossmont Hospital | 249 | 82% | + | 82% | + | 81% | | 79% | | 67% | |
| University of Colorado Hospital | 353 | 78% | + | 84% | + | 83% | | 84% | + | 73% | + |
| Sacred Health Medical Center, Spokane, WA | 266 | 77% | + | 80% | + | 80% | | 80% | | 68% | |
| Penrose Hospital, Colorado Springs, CO | 509 | 76% | + | 81% | + | 80% | | 80% | ↑ | 70% | + |
| Rapid City Regional Hospital | 286 | 72% | | 77% | + | 83% | | 83% | + | 79% | ↑ + |
| Presbyterian Healthcare Services, Albuquerque, NM | 172 | 71% | | 81% | + | 83% | | 81% | | 68% | |
| Carondelet St. Joseph's Hospital, Tucson, AZ | 276 | 69% | | 68% | | 78% | | 74% | | 62% | |
| Memorial Hospital, Colorado Springs, CO | 285 | 69% | | 79% | + | 84% | | 82% | | 73% | + |
| Tucson Medical Center | 424 | 66% | ↑ | 72% | ↑ | 82% | | 78% | ↑ | 71% | + |
| Las Palmas Medical Center[3] | 151 | 59% | - | 65% | | 77% | | 72% | | 57% | |
| Sierra Medical Center, El Paso, TX | 205 | 58% | - | 62% | - | 79% | | 71% | - | 62% | |
| Yuma Regional Medical Center | 176 | 55% | - | 54% | - | 70% | - | 74% | | 59% | |
| Sierra Vista Regional Health Center | 168 | 52% | - | 57% | - | 73% | - | 81% | | 65% | |
| Southwest Healthcare System, Murrieta, CA | 126 | 49% | - | 54% | - | 76% | | 68% | - | 61% | |

[1] " ↑" indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011. "+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.

[2] These estimates are patient-mix adjusted: PC overall, TRO North, TRO South, and TRO West.

[3] Facilities were not sampled in 2011; therefore, no comparison was made between 2011 and 2012 estimates.

**Exhibit 28: Purchased Care Hospital Level Results: Composites and Individual Items (Continued)**

| | N | Overall Hospital Rating[1] | Responsiveness of Hospital Staff[1] | Discharge Information[1] | Pain Management[1] | Cleanliness of Hospital Environment[1] | Quietness of Hospital Environment[1] |
|---|---|---|---|---|---|---|---|
| Benchmark | | 69% | 66% | 84% | 70% | 73% | 60% |
| PC Overall[2] | 20,259 | 68% ↑ - | 65% ↑ - | 87% ↑ + | 72% ↑ + | 73% ↑ | 58% ↑ - |
| **TRO North Overall[2]** | 4,900 | 67% ↑ - | 66% | 87% ↑ + | 71% | 72% | 55% ↑ - |
| University of North Carolina Hospitals[3] | 204 | 82% + | 72% | 93% + | 77% + | 76% | 70% + |
| FirstHealth Moore Regional Hospital, Pinehurst, NC[3] | 256 | 82% + | 75% + | 87% | 77% + | 80% + | 65% |
| Pitt County Memorial Hospital, Greenville, NC | 248 | 77% + | 72% | 92% + | 75% | 78% | 62% |
| New Hanover Regional Medical Center | 333 | 75% + | 66% | 87% | 76% + | 79% + | 73% + |
| Inova Fairfax Hospital, Falls Church, VA | 328 | 75% + | 58% - | 83% | 76% + | 72% ↓ | 48% - |
| Sentara Norfolk General Hospital | 282 | 74% | 71% | 90% + | 77% + | 76% | 56% |
| Riverside Regional Medical Center, Newport News, VA | 313 | 73% ↑ | 65% | 82% | 69% | 74% | 53% - |
| Sentara Virginia Beach General Hospital | 302 | 73% | 68% | 87% | 74% | 72% | 55% |
| Sentara Leigh Hospital | 262 | 70% | 61% | 88% + | 73% | 71% | 43% ↓ - |
| Mary Washington Hospital[3] | 196 | 69% | 66% | 87% | 70% | 77% | 51% - |
| Norton Hospital, Louisville, KY[3] | 183 | 68% | 66% | 88% | 72% | 69% | 54% |
| CarolinaEast Health System | 360 | 66% ↑ | 69% | 88% + | 74% | 74% | 65% |
| Chesapeake General Hospital | 256 | 64% | 61% | 87% | 66% | 66% - | 55% |
| Cape Fear Valley Medical Center | 422 | 61% - | 58% - | 87% + | 71% | 67% - | 59% |
| Wayne Memorial Hospital, Goldsboro, NC | 178 | 60% - | 66% | 81% | 77% | 77% | 63% |
| Saint Elizabeth's Hospital, Belleville, IL | 282 | 56% ↑ - | 65% | 88% + | 74% | 70% | 60% |

| | N | Overall Hospital Rating[1] | Responsiveness of Hospital Staff[1] | Discharge Information[1] | Pain Management[1] | Cleanliness of Hospital Environment[1] | Quietness of Hospital Environment[1] |
|---|---|---|---|---|---|---|---|
| Onslow Memorial Hospital, Jacksonville, NC | 244 | 54% ↑ - | 74% + | 89% + | 78% + | 70% | 59% |
| Samaritan Medical Center, Watertown, NY | 251 | 51% - | 74% + | 89% + | 71% | 82% + | 79% + |
| **TRO South Overall[2]** | **10,983** | **67% ↑ -** | **65% -** | **86% +** | **72% ↑ +** | **72%** | **59% -** |
| University of Alabama Hospital | 260 | 81% + | 71% | 85% | 80% + | 71% | 66% ↓ + |
| Vanderbilt University Hospital | 284 | 81% + | 67% | 93% + | 78% + | 77% | 64% |
| Providence Hospital, Columbia, SC | 222 | 78% + | 73% + | 88% | 75% | 83% ↑ + | 70% + |
| Comanche County Memorial Hospital | 222 | 78% ↑ + | 71% ↑ | 83% | 78% + | 79% + | 67% + |
| Sacred Heart Hospital, Pensacola, FL | 373 | 77% ↑ + | 66% | 89% + | 80% + | 73% | 61% |
| Texas Health Harris Methodist Hospital, Fort Worth | 244 | 76% + | 67% | 88% | 76% | 80% + | 56% ↓ |
| Flowers Hospital, Dothan, AL | 305 | 75% + | 70% | 86% | 81% + | 75% | 70% + |
| Florida Hospital, Orlando, FL | 515 | 75% ↑ + | 63% | 87% ↑ + | 73% | 76% ↑ | 59% ↑ |
| St Francis Hospital, Columbus, GA | 279 | 75% + | 64% | 80% | 74% | 72% | 54% |
| Scott & White Memorial Hospital, Temple, TX | 411 | 74% + | 60% - | 88% + | 72% | 75% | 65% + |
| United Regional Health Care System, Wichita Falls, TX | 244 | 73% | 74% + | 88% + | 77% + | 83% + | 74% ↑ + |
| Baptist Medical Center, Jacksonville, FL | 249 | 73% | 69% | 86% | 72% | 78% | 65% |
| Baptist Health Medical Center, North Little Rock, AK | 235 | 73% | 71% | 89% + | 77% + | 79% + | 61% |
| West Florida Hospital | 325 | 73% | 65% | 86% | 74% | 70% | 58% |
| Baptist Memorial Hospital, Memphis[3] | 215 | 73% | 62% | 85% | 76% | 69% | 70% + |
| Bay Medical Center Sacred Heart, Panama City, FL | 200 | 72% | 65% | 78% ↓ - | 72% | 70% | 51% - |
| Tampa General Hospital | 221 | 72% | 71% | 86% | 75% | 67% | 50% - |
| Palmetto Richland | 233 | 71% | 67% | 89% + | 72% | 72% | 63% |

| | N | Overall Hospital Rating[1] | Responsiveness of Hospital Staff[1] | Discharge Information[1] | Pain Management[1] | Cleanliness of Hospital Environment[1] | Quietness of Hospital Environment[1] |
|---|---|---|---|---|---|---|---|
| Wellstar Kennestone Hospital, Marietta, GA | 233 | 70% | 65% | 88% | 76% | 75% | 51% ↓ - |
| Huntsville Hospital | 340 | 70% | 66% | 88% + | 78% + | 81% ↑ + | 67% + |
| Metroplex Adventist Hospital, Killeen, TX | 261 | 69% | 65% | 90% + | 71% | 81% + | 71% + |
| Orlando Regional Medical Center | 207 | 67% ↓ | 61% | 84% | 77% | 76% | 64% |
| Methodist Hospital, San Antonio, TX. | 409 | 67% ↑ | 57% - | 84% | 69% ↑ | 70% ↑ | 52% - |
| Willis-Knighton Medical Center, Shreveport, LA | 279 | 67% | 67% | 84% | 76% + | 76% ↑ | 71% + |
| Baptist Medical Center, San Antonio, TX | 380 | 66% | 61% - | 84% | 71% | 68% ↓ | 54% - |
| Holmes Regional Medical Center, Melbourne, FL | 316 | 65% ↓ | 64% | 87% | 72% | 78% + | 51% - |
| St Vincent's Medical Center Riverside, Jacksonville, FL | 316 | 64% | 51% - | 83% | 69% | 64% - | 54% - |
| Gulf Coast Medical Center | 250 | 64% | 60% | 86% | 70% | 69% | 54% - |
| Gateway Medical Center, Clarksville, TN | 250 | 63% - | 68% | 90% ↑ + | 76% + | 83% ↑ + | 69% ↑ + |
| Beaufort Memorial Hospital | 233 | 63% - | 68% | 87% | 75% | 74% | 60% |
| South Georgia Medical Center | 209 | 61% - | 63% | 86% | 74% | 75% | 64% |
| Memorial Health University Medical, Savannah, GA | 320 | 60% - | 65% | 88% + | 75% | 70% | 67% ↑ + |
| Tuomey Regional Medical Center, Sumter, SC | 260 | 60% - | 69% | 87% | 77% + | 70% | 67% + |
| Fort Walton Beach Medical Center | 377 | 58% - | 60% ↑ - | 84% | 72% | 70% | 63% |
| Midwest Regional Medical Center, Oklahoma City, OK | 229 | 56% - | 60% ↑ | 83% | 66% | 69% | 62% |
| Trident Medical Center, Charleston, SC | 468 | 55% - | 60% - | 84% | 72% | 70% | 58% |
| Orange Park Medical Center-HCA | 305 | 54% - | 60% - | 81% | 75% | 72% | 50% - |
| Brandon Regional Hospital | 304 | 46% ↓ - | 56% - | 79% ↓ - | 63% - | 69% | 55% |
| **TRO West Overall[2]** | 4,376 | 70% ↑ | 66% ↑ | 87% + | 72% + | 75% + | 56% - |

| | N | Overall Hospital Rating[1] | | Responsiveness of Hospital Staff[1] | | Discharge Information[1] | | Pain Management[1] | | Cleanliness of Hospital Environment[1] | | Quietness of Hospital Environment[1] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| St Luke's Regional Medical Center, Boise, ID | 257 | 84% | + | 70% | | 96% | + | 77% | + | 82% | + | 67% | + |
| Community Hospital of the Monterey Peninsula | 260 | 84% | + | 71% | | 90% | + | 82% | + | 89% ↑ | + | 74% | + |
| Sharp Memorial Hospital, San Diego, CA | 213 | 82% | + | 72% | | 87% | | 82% | + | 77% | | 63% | |
| Grossmont Hospital | 249 | 82% | + | 65% | | 85% | | 78% | + | 79% ↑ | + | 48% | - |
| University of Colorado Hospital | 353 | 78% | + | 74% | + | 91% | + | 74% | | 79% | + | 65% | |
| Sacred Health Medical Center, Spokane, WA | 266 | 77% | + | 67% | | 89% | + | 78% | + | 77% | | 57% | |
| Penrose Hospital, Colorado Springs, CO | 509 | 76% | + | 66% ↑ | | 87% | + | 74% | | 77% ↑ | + | 63% | |
| Rapid City Regional Hospital | 286 | 72% | | 76% | + | 91% | + | 79% | + | 80% | + | 60% | |
| Presbyterian Healthcare Services, Albuquerque, NM | 172 | 71% | | 66% | | 93% | + | 68% | | 77% | | 59% | |
| Carondelet St. Joseph's Hospital, Tucson, AZ | 276 | 69% | | 61% | | 85% | | 74% | | 77% | | 53% | - |
| Memorial Hospital, Colorado Springs, CO | 285 | 69% | | 67% | | 89% | + | 79% ↑ | + | 72% | | 60% | |
| Tucson Medical Center | 424 | 66% ↑ | | 65% ↑ | | 87% | + | 76% | + | 69% | | 55% ↑ | - |
| Las Palmas Medical Center[3] | 151 | 59% | - | 59% | | 89% | | 65% | | 73% | | 62% | |
| Sierra Medical Center, El Paso, TX | 205 | 58% | - | 58% | - | 83% | | 63% | | 72% | | 61% | |
| Yuma Regional Medical Center | 176 | 55% | - | 60% | | 75% | - | 61% | - | 73% | | 57% | |
| Sierra Vista Regional Health Center | 168 | 52% | - | 62% | | 83% | | 77% | | 71% | | 48% ↓ | - |
| Southwest Healthcare System, Murrieta, CA | 126 | 49% | - | 54% | - | 81% | | 70% | | 67% | | 58% | |

[1] " ↑" indicates significantly higher than the same estimate for CY2011. "↓"indicates significantly lower than the same estimate for CY2011. "+" indicates significantly above the benchmark. "-" indicates significantly below the benchmark.

[2]These estimates are patient-mix adjusted: PC overall, TRO North, TRO South, and TRO West.

[3] Facilities were not sampled in 2011; therefore, no comparison was made between 2011 and 2012 estimates.

# 11.0    Drivers of Low Satisfaction by Product Line

Results of customer surveys have become increasingly important in measuring health plan performance and directing action to improve the beneficiary experience and quality of services provided. In the past, the drivers of satisfaction for the TRISS have been analyzed annually, and it was repeatedly found that communication with medical providers was a top driver of satisfaction for both DC and PC. To further examine the relationship between facets of care and inpatients' overall experience with facilities in this report; this report focused on drivers of low satisfaction. As a part of this effort, the TRISS drivers of low satisfaction were analyzed using discharges in FY2012, October 1, 2011, to September 30, 2012.

To examine drivers of low satisfaction, the effects of low satisfaction on *Communication with Doctors, Communication with Nurses, Communication about Medicines, Responsiveness of Hospital Staff, Discharge Information, Pain Management, Cleanliness of Hospital Environment,* and *Quietness of Hospital Environment* on outcomes were examined, modeling the probability of reporting low satisfaction for *Overall Hospital Rating* as the primary outcome. On the rating scale of 1 to 10, low satisfaction on *Overall Hospital Rating* for a hospital was defined as a score of 1 to 6. Using subpopulation analysis-based survey-specific logistic regression explicitly controlling for socio-demographic characteristics , the models assessed *Communication with Doctors, Communication with Nurses, Communication about Medicines, Responsiveness of Hospital Staff, Discharge Information, Pain Management, Cleanliness of Hospital Environment, Quietness of Hospital Environment*, controlling for demographic factors, including age, gender, Military Service, health status, and region. The statistical significance and effect size of odds ratios were used to rank drivers of low satisfaction. Drivers of low satisfaction among DC Medical and Surgical, and Maternity Care Product Lines, as well as PC Medical and Surgical, and Maternity Care Product Lines, were analyzed.

## 11.1    Direct Care Drivers

*Communication with Doctors* was the primary driver of low satisfaction among DC inpatients for Medical and Surgical inpatients, while *Communication with Nurses* was the primary driver of low satisfaction among Maternity inpatients. This result indicates that low satisfaction for *Communication with Doctors* for Medical inpatients were most highly associated with low satisfaction (rating of 1 to 6) for *Overall Hospital Rating,* followed by *Communication with Nurses, and Pain Management* (Exhibit 29). *Pain Control* was also a significant driver of low satisfaction among all DC inpatients, regardless of Product Line.

**Exhibit 29:  Drivers of Low Direct Care Satisfaction**

| Ranking | TRISS Direct Care Medical Rating of Hospital | TRISS Direct Care Surgical Rating of Hospital | TRISS Direct Care Maternity Rating of Hospital |
|---------|----------------------------------------------|------------------------------------------------|------------------------------------------------|
| #1 | Communication with Doctors | Communication with Doctors | Communication with Nurses |
| #2 | Communication with Nurses | Pain Management | Communication with Doctors |
| #3 | Pain Management | Communication with Nurses | Pain Management |

# 11.2    Purchased Care Drivers

Similar to DC, *Communication with Nurses*, *Communication with Doctors,* and *Pain Management* were the primary drivers of low satisfaction among PC inpatients (Exhibit 30).

**Exhibit 30:  Drivers of Low Purchased Care Satisfaction**

| Ranking | TRISS Purchased Care Medical Rating of Hospital | TRISS Purchased Care Surgical Rating of Hospital | TRISS Purchased Care Maternity Rating of Hospital |
|---|---|---|---|
| #1 | Communication with Doctors | Communication with Nurses | Communication with Nurses |
| #2 | Communication with Nurses | Pain Management | Communication with Doctors |
| #3 | Pain Management | Communication with Doctors | Pain Management |

# 12.0 TRISS Readmission Study: Association of TRISS Responses and Subsequent Hospital Admission and Readmission

A special study was conducted to determine the association between satisfaction of TRISS composite scores and subsequent all cause readmission and readmission to the hospital. All cause readmission includes admission for any DRG following an initial admission. Readmission in this study denotes a readmission with the same DRG as the initial admission within a 45-day period following the target discharge. All cause readmission removes the constraint of both admissions having the same DRG. The financial impact of readmissions to the MHS was also calculated. This analysis addressed the relationship between beneficiaries:

- Being asked about the availability of help after discharge and the probability of subsequent all cause readmission/same-DRG readmission,
- Reporting they received (or did not receive) written discharge information and the probability of subsequent all cause readmission/ same-DRG readmission, and
- Reporting satisfaction via standard TRISS composite scores and the probability of subsequent all cause readmission/ same-DRG readmission.

The TRISS survey data from November 2010 to July 2012 were analyzed. Readmission was based on the beneficiary having the same DRG for both inpatient admissions where the second admission occurred within 45-days of the initial discharge. An extended readmission period (compared with the typical standard of 30 days) was allowed to accommodate the sampling methodology for the TRISS survey which attempts to sample beneficiaries within 42 days of the target admission. Patient transfers between hospitals or departments were treated as a continuation of admission, not readmission. The target TRISS admission was confirmed as the initial admission and not itself a readmission through analysis of the beneficiary's inpatient records, if any, prior to the target TRISS admission.

This analysis separated the composite *Discharge Information* into its two individual questions, which comprise two different components of discharge information. These two questions are:

- During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?
- During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

Demographic and care type variables contained within the analysis included gender, age group, Product Line, and the Military Service branch associated with the MTF. Descriptive statistics were calculated including cross-tabulations by various demographic characteristics. Survey-specific logistic regression explicitly controlling for socio-demographic characteristics, such as age, gender, Military Service and education, was used to determine the probability of all cause readmission and readmission based upon responses to the TRISS survey. Logistic regression modeling to determine predictors of all cause readmission necessitated use of two models, a fully specified model and a reduced component model, the latter accommodated the small sample sizes for the Maternity population.

## 12.1 Frequency of All-Cause Admission

A total of 53,880 respondents were eligible and included in the study, with more women than men included (35,289 and 18,591, respectively). Slightly more respondents were seen in an MTF (DC) than in a civilian hospital (31,177 and 22,703 respectively). There was a relatively similar mix of respondents by Product Line: 21,545 respondents in the Medical Product Line; 15,808 in the Maternity Care Product

Line; and 15,250 in the Surgical Product Line (1,277 respondents were classified as 'Unknown Product line'). Age distribution of the sample concentrated in the 25–34 and 45 and over age groups (See Exhibit 31).

**Exhibit 31:  Frequency of All Cause Readmission by System of Care and Age**

| | All Cause Readmissions by System of Care and Age Group | | | | | | |
|---|---|---|---|---|---|---|---|
| **Type of Care** | **All Cause Admission** | **Age Group** | | | | | |
| | **n %** | **18-24** | **25-34** | **35-44** | **45-64** | **65-69** | **Total** |
| Purchased Care | No | 1,923 | 3,779 | 1,654 | 5,565 | 9,026 | 21,947 |
| | | 96.5% | 97.0% | 95.0% | 93.0% | 99.3% | 96.3% |
| | Yes | 70 | 115 | 87 | 422 | 62 | 756 |
| | | 3.5% | 3.0% | 5.0% | 7.0% | 0.7% | 3.4% |
| | Total | 1,993 | 3,894 | 1,741 | 5,987 | 9,088 | 22,703 |
| Direct Care | No | 5,388 | 8,648 | 3,548 | 6,655 | 5,544 | 29,783 |
| | | 97.2% | 98.0% | 96.5% | 94.4% | 91.1% | 95.3% |
| | Yes | 156 | 175 | 127 | 396 | 540 | 1394 |
| | | 2.8% | 2.0% | 3.5% | 5.6% | 8.9% | 4.7% |
| | Total | 5,544 | 8,823 | 3,675 | 7,051 | 6,084 | 31,177 |

Of the eligible sample, 2,150 respondents were classified as having an all cause readmission (approximately 4%), and they were fairly evenly distributed between the civilian hospitals and MTFs (3.3% and 4.5%, respectively). The distribution of males and females was also comparable: 3.6% of females had an all cause readmission compared with 5.2% of males. Distinct differences in pattern of all cause readmission were seen by Product Line, with Medical patients having twice the frequency of all cause readmission compared to Surgical patients and more than six times the rate of Maternity patients (6.7% of Medical, 3.3% of Surgical and 0.8% of Maternity patients had all cause readmissions). Rates of all cause readmission by sponsor Service branch were comparable; between 3.7% and 4.3% of Service members within each Service branch experienced an all cause readmission (Exhibit 32).

**Exhibit 32:  Frequency of All Cause Readmission by Sponsor Service**

| Readmission | SERVICE | | | | | | |
|---|---|---|---|---|---|---|---|
| **n %** | **Army** | **Coast Guard** | **Air Force** | **Marines** | **Navy** | **Other** | **Total** |
| No | 21,099 | 7622 | 14,515 | 9240 | 13,055 | 8334 | 37,130 |
| | 95.9% | 96.2% | 95.7% | 96.3% | 95.9% | 96.2% | 95.7% |
| Yes | 908 | 298 | 657 | 357 | 559 | 325 | 1679 |
| | 4.1% | 3.8% | 4.3% | 3.7% | 4.1% | 3.8% | 4.3% |
| **Total** | 22,007 | 7920 | 15,172 | 9597 | 13,614 | 8659 | 38,809 |

Of the eligible sample, 339 respondents were classified as having a same-DRG readmission (approximately 0.6%), fairly evenly distributed between the civilian and military health systems (0.5% and 0.7%, respectively). The distribution of males and females was also comparable: 0.8% of females had a same-DRG readmission compared with 0.5% of males. Distinct differences in pattern of a same-DRG readmission were seen by Product Line, with Medical patients having three times the frequency of a same-DRG readmission compared with Surgical patients (1% of Medical, 0.3% of Surgical). There were no Maternity patients with a same-DRG readmission.

## 12.2 Predictors of All Cause Readmission

Logistic regression modeling was used to determine the predictors of all cause readmission individually for each Product Line. Using the reduced component model for Maternity care, respondents reporting they were not given 'Information in Writing' had increased odds of all cause readmission compared with respondents reporting 'Yes' (Exhibit 33).

**Exhibit 33: Logistic Regression Model for the Maternity Care Product Line, Predictors of All Cause Readmission**

| Composite | OR | 95% | Wald CL |
|---|---|---|---|
| Help After Discharge* | .90 | .752 | 1.082 |
| Information in Writing | .54 | .415 | .710 |
| Direct Care | .49 | .421 | .561 |
| Active Duty * | 1.05 | .868 | 1.259 |

   * Not statistically significant at .05 level
   "Information in Writing" results based on 1=Yes, the respondent received discharge information in writing.
   "Help after Discharge" results based on 1=Yes, staff asked if help was needed after discharge.
   Odds ratio less than 1 indicate decreased odds of readmission.

An expanded model, incorporating additional controls, for both the Medical and Surgical Product Lines found that respondents self-reporting poor overall health had approximately twice the odds of readmission relative to those reporting good overall health. For the Medical Product Line, respondents reporting satisfaction with *Responsiveness of Hospital Staff*, *Communication about Medicines*, and *Quietness of Hospital Environment* had reduced likelihood of readmission relative to those not satisfied with these aspects of care (Exhibit 34).

**Exhibit 34: Logistic Regression Model for the Medical Product Line, Predictors of All Cause Readmission**

| Medical Product Line Results for All Ages and for the Under 65 Population | | | | | |
|---|---|---|---|---|---|
| | All Ages | | | Under 65 Years of Age | |
| Composite | Odds Ratio | 95% Wald Confidence Interval | | Odds Ratio | 95% Wald Confidence Interval | |
| Communication with Nurses | 1.04* | 0.986 | 1.098 | 1.11 | 1.039 | 1.185 |
| Communication with Doctors | 1.09 | 1.037 | 1.149 | 1.01* | 0.948 | 1.074 |
| Responsiveness of Hospital Staff | 0.82 | 0.784 | 0.866 | 0.76 | 0.714 | 0.807 |
| Communication about Medications | 0.92 | 0.860 | 0.973 | 0.82 | 0.765 | 0.886 |
| Pain Management | 1.01* | 0.954 | 1.068 | 1.12 | 1.050 | 1.199 |
| Cleanliness of Hospital Environment | 1.01* | 0.963 | 1.064 | 0.93 | 0.878 | 0.992 |

| Medical Product Line Results for All Ages and for the Under 65 Population | | | | | |
|---|---|---|---|---|---|
| | All Ages | | | Under 65 Years of Age | |
| Composite | Odds Ratio | 95% Wald Confidence Interval | | Odds Ratio | 95% Wald Confidence Interval |
| Quietness of Hospital Environment | 0.77 | 0.734 | 0.803 | 0.75 | 0.710 | 0.793 |
| Discharge Information | 0.99* | 0.940 | 1.043 | 0.98* | 0.919 | 1.043 |
| Overall Health | 0.66 | 0.627 | 0.689 | 0.66 | 0.620 | 0.692 |

\* Not statistically significant at .05 level
Odds ratio less than 1 indicates decreased odds of readmission.

For the Surgical Product Line, respondents reporting satisfaction with *Communication with Doctors* , *Pain Management*, *Responsiveness of Hospital Staff*, *Cleanliness of Hospital Environment*, *Quietness of Hospital Environment* and *Discharge Information* had reduced likelihood of readmission relative to those not satisfied with these aspects of care (Exhibit 35).

**Exhibit 35: Logistic Regression Model for the Surgical Product Line, Predictors of All Cause Readmission**

| Surgical Product Line Results for All Ages and for the Under 65 Population | | | | | |
|---|---|---|---|---|---|
| | All Ages | | | Under 65 Years of Age | |
| Composite | Odds Ratio | 95% Wald Confidence Interval | | Odds Ratio | 95% Wald Confidence Interval |
| Communication with Nurses | 1.49 | 1.361 | 1.626 | 1.40 | 1.265 | 1.540 |
| Communication with Doctors | 0.70 | 0.646 | 0.766 | 0.75 | 0.678 | 0.819 |
| Responsiveness of Hospital Staff | 0.68 | 0.626 | 0.738 | 0.68 | 0.617 | 0.743 |
| Communication about Medications | 1.20 | 1.087 | 1.317 | 1.14 | 1.026 | 1.267 |
| Pain Management | 0.88 | 0.810 | 0.957 | 0.96* | 0.872 | 1.048 |
| Cleanliness of Hospital Environment | 0.92 | 0.841 | 0.996 | 0.89 | 0.806 | 0.973 |
| Quietness of Hospital Environment | 0.63 | 0.583 | 0.675 | 0.63 | 0.578 | 0.680 |
| Discharge Information | 0.87 | 0.787 | 0.955 | 0.84 | 0.751 | 0.928 |
| Overall Health | 0.54 | 0.499 | 0.577 | 0.47 | 0.438 | 0.514 |

\* Not statistically significant at .05 level
Odds ratio less than 1 indicates decreased odds of readmission.

Logistic regression modeling to determine the predictors of same-DRG readmission were conducted individually for each Product Line. Respondents reporting they were not given "Information in Writing" or informed about symptoms to be aware of after discharge had increased odds of same-DRG readmission compared with respondents reporting 'Yes' (Exhibit 36). An expanded model, incorporating additional controls, for the Medical Product Line, found that respondents self-reporting poor overall health had approximately twice the odds of readmission relative to those reporting good overall health. For the Medical Product Line, only *Quietness of Hospital Environment* was a statistically significant predictor of readmission (p<.05). For the Surgical Product Line, respondents reporting satisfaction with *Responsiveness of Hospital Staff* and *Quietness of Hospital Enviroment* had reduced likelihood of readmission relative to those not satisfied with these aspects of care.

**Exhibit 36: Logistic Regression Model, Predictors of Same-DRG Readmission**

| Same DRG Readmission Results, All Ages, Medical and Surgical Product Lines | | | | | |
|---|---|---|---|---|---|
| **Composite/Question** | **Medical Odds Ratio** | **95% Wald Confidence Interval** | | **Surgical Odds Ratio** | **95% Wald Confidence Interval** | |
| Help after discharge | 0.95* | 0.643 | 1.414 | 0.96* | 0.246 | 3.772 |
| Information in Writing | 0.98* | 0.603 | 1.587 | 0.27 | 0.073 | 0.996 |
| Communication with Nurses | 1.15* | 0.771 | 1.700 | 1.54* | 0.765 | 3.115 |
| Communication with Doctors | 1.1* | 0.762 | 1.595 | 0.72* | 0.358 | 1.453 |
| Responsiveness of Hospital Staff | 0.88* | 0.562 | 1.364 | 1.04* | 0.382 | 2.844 |
| Communication about Medications | 0.85* | 0.592 | 1.222 | 0.37 | 0.155 | 0.892 |
| Pain Management | 0.84* | 0.561 | 1.243 | 0.85* | 0.404 | 1.808 |
| Cleanliness of Hospital Environment | 1.15* | 0.800 | 1.658 | 1.35* | 0.483 | 3.778 |
| Quietness of Hospital Environment | 0.64 | 0.465 | 0.869 | 0.49* | 0.228 | 1.046 |
| Discharge Information | 1.02* | 0.707 | 1.473 | 0.51* | 0.181 | 1.440 |
| Overall Health | 0.45 | 0.308 | 0.655 | 0.51* | 0.232 | 1.134 |

* Not statistically significant at .05 level

"Information in Writing" results based on 1=Yes, the respondent received discharge information in writing.

"Help after Discharge" results based on 1=Yes, staff asked if help was needed after discharge.

Odds ratio less than 1 indicate decreased odds of readmission.

# 13.0 Recommendations for Improving Satisfaction in the MHS

In the following sections, information is provided and recommendations made for improving patient satisfaction throughout the MHS. Throughout this report, MTFs and PC hospitals are compared with the national benchmarks, highlighting those outside the norms for encouraging collaboration. These explorations logically lead to improvement initiatives. Literature from civilian sources are summarized and referenced; successes and challenges within the MHS are highlighted; and, finally, the approaches and practices of some of the highest-performing MTFs are presented as examples for stimulating improvement initiatives.

## 13.1 Comparisons with Benchmarks

This report identifies opportunities for policymakers, providers, and administrators to identify successful approaches and practices among inpatient facilities. For the first time in several years, the presentation of year-over-year change between 2011 and 2012 puts a focus on those facilities that have improved patient satisfaction scores so the factors associated with these increases can be examined. As reported, both DC and PC facilities received patient satisfaction scores above the 75th and the 90th percentiles, as compared with national benchmarks.

Examining hospitals that consistently perform better and those with significant increases in performance may provide insights into the key factors that lead to higher satisfaction scores. Exhibits 7, 9, 21, and 23 illustrate the highest performing DC MTFs and PC network hospitals. These examples, plus those facilities scoring consistently higher on individual survey questions may provide additional insight into key components of patient satisfaction. Conversely, Exhibits 8, 10, 22, and 24 show the DC MTFs and PC network hospitals scoring below civilian benchmarks. These scores, too, help identify issues common to MTFs that have challenges with their patient satisfaction scores. This year, to help facilitate benchmarking, interviews were conducted with the highest scoring MTFs to provide insights into the attributes and practices that are responsible for the higher satisfaction ratings. Insights from these interviews are reported in section 13.5 and Appendix C.

In addition, the TRISS website incorporates tools to help users compare their facility's performance with others'. It incorporates reports of hospitals and compares them with the national civilian benchmarks. In addition, the website incorporates tools like My Comparisons and Watchlist that help users track the performance of their facilities. Further, the quarterly "Percentiles Report" is posted to the TRISS website under the Resources tab. MTF satisfaction scores are ranked from highest to lowest and are available on the website. This report is published quarterly following the TRISS website update. For assistance with using the TRISS website or accessing reports, send an inquiry to TRISS.Support@altarum.org.

## 13.2 Improving Individual Components of Satisfaction

The HCAHPS, as adapted for use by TRISS, encompasses these key areas of satisfaction:

- Overall hospital rating and recommendation;
- How well nurses communicate;
- How well doctors communicate;
- Communication about medicines;
- Discharge information; and
- Pain management.

Each of these components is the subject of a research guide for translating patient satisfaction research to practice. In addition, these components were used as a base for building an interview protocol.

## 13.2.1 Hospital Satisfaction and Recommendation

According to the literature, overall satisfaction is associated with patients' perception of the quality of care received, whereas patients' willingness to recommend the hospital is more related to the perceptions of communications, personal attention and environmental factors. Clearly, there is overlap in patients' perceptions of these criteria. Thus, satisfaction scores for these two questions may be positively influenced by activities that convey messages of quality and caring, respectively. There is no single technique that can raise satisfaction scores alone. However, one strategy hospitals use is to conduct phone follow-ups with discharged patients. This activity has the potential for identifying patients at risk for readmissions, resolving concerns from unsatisfied patients, improving continuity of care and ensuring post-discharge compliance. Healthcare organizations that provide these follow-up services report increases in satisfaction of several points.

The second strategy is to influence patients' perceptions. Bear in mind that patients may have developed an impression of the hospital from prior encounters or through information provided to them by others. To manage perceptions, many hospitals today are actively engaging with their communities through social media, Facebook, and Twitter accounts. The hospitals monitor the social media content and maintain a positive dialogue with patients and others. When negative communications do occur, for example, a dissatisfied patient complaining through Twitter, the hospital can address the complaints and redirect the external communications to correct the message and reframe these communications to positive messages of how the hospital corrected a problem and satisfied the customer.

The Agency for Health Care Quality and Research (AHRQ) has sponsored the publication of the CAHPS Improvement Guide, which is an invaluable resource for quality improvement initiatives. The CAHPS Improvement Guide also recommends hosting a patient advisory council to gain feedback from patients on hospital performance and suggestions for improving services. MTFs have historically engaged similar councils for gaining feedback, sometimes called Hospital Advisory Councils. With minor reengineering in some cases, hospitals could use TRISS as a basis for creating a new opportunity to reinvigorate their council or start a council to elicit feedback geared to improving patient satisfaction and quality of care.

Hospitals can also influence patients' perceptions through enhancements to the hospital environment that create a warm, inviting setting that is aesthetically and psychologically appealing to patients. Such facility enhancements have a calming effect on patients that can allay anxiety and even promote recovery. Surprisingly, some design enhancements can produce a positive return on a small to medium investment. These enhancements include such things as the arrangement of waiting and patient rooms to resemble hotels, promoting the use of natural lighting, using soothing colors and natural wall-coverings, such as wood, and calming sound, such as running water over stones, as well as barriers to repetitive sounds, such as those made by medical machines. Moreover, enhancements like sound-proofing material in ceiling and flooring materials can promote a quiet, healing environment by helping patients rest without interruption.

Two other TRISS questions have complementary impact on patient's perceptions of care associated with patients' recommendation of the hospital. These are the cleanliness and quietness of the hospital environment. Suggestions for improving cleanliness include ensuring the patient's room is cleaned every day with extra attention to the bathroom, especially if the patient is sharing a room with another patient. Between cleanings by janitorial staff, hospital staff should ensure that the patient's room is maintained in a state of cleanliness by picking up trash, removing soiled items, leftover food, and used laundry. Quietness of the patient's environment can be enhanced through the facility designs discussed above and through training staff to maintain communication discipline around patients. Staff talking about personal or hospital affairs, laughing or discussing other patients that can be overheard by patients creates an unfavorable impression that can detract from the patient's perception of care and should be stringently avoided.

In all, the keys are for all staff to maintain a focus on sustaining an environment that expresses the pride of a quality staff delivering quality care in a caring way. Any messages that distract from this central one

should be corrected immediately, be they be an overgrown lawn, a neglected flowerbed, a drab, dingy facility, or an uncaring interaction. All these messages contribute to patients' perceptions of the hospital and the care they receive.

## 13.2.2 Communication with Nurses

Nurses play a substantial role in inpatient care. As discussed in Section11, their communications are a key driver of patient satisfaction in the inpatient setting. Note, however, that in the minds of patients, a nurse might be anyone who frequently attends them in their room. And while effective communication is irreplaceable when it comes to patients' perceptions of care quality, the processes of communication continue to challenge professionals and healthcare organizations throughout the world. These challenges typically arise from too much work, too little time, and disjointed work processes without sufficient opportunities to synthesize plans and actions among the care team members. These are challenges to consider for hospital quality improvement (QI) initiatives.

Initiatives for more immediate impact on patient satisfaction include some basic communication strategies nurses can employ in their daily work. Following are some techniques nurses can use to increase the effectiveness of their communications with patients and their supporters.

When meeting a patient, a nurse should introduce him- or herself and explain actions; take time to listen to each patient and ask questions; ask for feedback and confirm that the patient understands the information being given to them. The nurse will need to assess each patient's level of health literacy. Nurses should adjust their explanations as each situation dictates. They will also need to be prepared with what they are going to say and have the right information available when a patient asks a question. During the conversation, nurses should maintain eye contact, observe the patient's body language, and avoid the use of medical jargon. If they are going to be delivering any bad news, it is important to be emotionally prepared. Also, do not interrupt the patient while she or he is speaking. Nurses should always be sensitive, honest, and compassionate. Nurses need to listen well and ask questions so they can give feedback to medical colleagues after they have spoken initially to the patient. A technique used by hospitals for this purpose is SBAR. This is where the nurse explains the current SITUATION or diagnosis, describes what procedures have BEEN performed, ASSESSES the current state of the patient, and RECOMMENDS a plan of care. The hospital should support the nurse by having standardized documentation and care procedures tailored to each patient.

## 13.2.3 Communication with Doctors

Results have shown that there is an association between a physician's communication skills and a patient's satisfaction and adherence to treatment. There are three essential elements to effective communication between a patient and a physician:

- information gathering,
- relationship building, and
- patient education.

Information gathering includes finding out information from the patient and reviewing his or her medical history. Relationship building includes the rapport between the patient and the physician. Patient education may include repeating instructions, providing written instructions and requesting that the patient repeat the instructions back to the doctor.

For each of these, a doctor needs to let the patient know that she or he is, for that period of time, the doctor's most important priority. This objective can be achieved in a number of ways, including active listening. It may include reviewing the patient's chart before the admission and making comments about their prior health experiences. Other non-verbal cues include looking directly at the patient when she or he is talking. Staying seated until the admission is complete is another way to convey the importance of

that patient. These are only a few ways in which the doctor can demonstrate to the patient that she or he is their only concern at that moment.

These actions do not necessarily require that more time be spent with the patient. Research findings have demonstrated that physicians can be more responsive to a patient's concerns without lengthening the duration of the admission. Many patients feel that they need to be active participants in their care if they feel that their problem has been fully discussed. They should be encouraged to ask questions and be given clear verbal instructions.

## 13.2.4 Communication about Medicines

Effective communication about medicines builds on the communication approaches for doctors and nurses discussed above, with a focus on ensuring the patient and hospital staff are fully informed on the medications the patient will be administered during the course of hospitalization. This ensures the patient is fully informed and can avoid adverse drug events. Hospitals should use a patient-centered approach to reconciling medications, with the ultimate objective of providing the patient a complete medication list that can be used to guide and facilitate accurate communications with the patient and among hospital staff treating the patient. The reconciliation should be conducted each time the patient transitions to another level of care. Prior to administering medications to a patient, tell the patient what the medication is for, its risks and benefits, and advise the patient of any side effects she or he may experience. Give the patient adequate opportunities and encourage them to ask questions. Ensure the patient understands by eliciting the patient's feedback demonstrating their understanding.

## 13.2.5 Discharge Information

Providing effective discharge information relates closely to the effectiveness of communication about medicines. The current evidence indicates that hospital discharge planning improves when interventions address family inclusion and education, communication between healthcare workers and family, interdisciplinary communication, and ongoing support after discharge. Interventions should begin well before discharge. Some studies indicate that providing discharge instructions both verbally and in writing is more effective than either mode alone. Again, when providing discharge information, ensure the patient and any supporting family or caregivers present fully understand the discharge instructions by having them state their understanding of the instructions provided and fully answer any questions they have.

To ensure continuity of the patient's care, it is important to maintain ongoing communication with the referring primary care physician. When the patient is ready for discharge, hospitals should immediately send the referring physician a summary that includes discharge diagnosis, current medications, and a summary of the hospital stay.

## 13.2.6 Pain Management

Appropriate and effective pain management is an important component of quality patient care. Poor pain management is associated with impaired health, decreased patient satisfaction, and increased healthcare costs. An analysis of predictors of patient satisfaction in a sample of postoperative patients found that lower postoperative pain ratings were the best predictors of satisfaction and helpfulness of treatment. Researchers have found that patients with low postoperative pain ratings who perceived that the physicians and nurses showed concern with how much pain they were feeling reported greatest satisfaction with their care.

In 2000, the Department of Veterans Affairs (VA) and Institute for Healthcare Improvement (IHI) initiated a collaborative project that used learning sessions, monthly team conference calls, and monitoring of results and sharing of improvement methods to promote routine assessment of pain and related goals. These efforts reduced moderate or severe pain on study units; increased numbers of

completed pain assessments; increased completed pain care plans for patients with at least mild pain; and increased number of patients provided with pain educational materials.

In 2009, the Office of the Army Surgeon General implemented a Pain Management Task Force that developed a comprehensive set of recommendations and guidelines for pain management within DoD. The Task Force developed 109 recommendations that led to a comprehensive pain management strategy. Their recommendations are divided into four areas:

- Provide Tools and Infrastructure that Support and Encourage Practice and Research Advancements in Pain Management
- Build a Full Spectrum of Best Practices for the Continuum of Acute and Chronic Pain, Based on a Foundation of Best Available Evidence
- Focus on the Warrior and Family – Sustaining the Force
- Synchronize a Culture of Pain Awareness, Education, and Proactive Intervention

In addition to these strategies, adequate and effective staff and patient education on pain, pain symptomatology, and methods of pain assessment and management are associated with improved patient satisfaction.

Ongoing staff education and training is crucial to ensuring compliance with practice standards and clinical guidelines for pain management. Additionally, providers must ensure patients have appropriate expectations of pain and are informed about treatment for and self-management of pain. Individualized education and coaching of patients are associated with improvement in average pain severity in patients.

## 13.2.7 Special Considerations for Maternity Patients

Improvement of patient satisfaction among Maternity inpatients has become a special interest area in light of lagging satisfaction scores for this Product Line among DC MTFs. Even so, examples from model programs can provide hospitals with strategies for improving the satisfaction of these patients.

Research findings suggest that women's satisfaction with the birthing process increases as hospitals move closer to the at-home model. Over recent decades, hospital birthing units have taken steps to recreate the home environment. Today, the exemplary is single-room maternity care where the family is admitted to one room and the infant "sleeps in" throughout the stay.

Single-room maternity care is defined as providing intrapartum and postpartum care in a single, private room throughout the stay. In this configuration, one primary nurse cares for the family consistently through the hospital stay and, as a result, respect for privacy, individual choice, and an appreciation for addressing childbirth as a normal and natural process have been shown to increase women's satisfaction. Importantly, while offering a more inviting setting, hospitals that use this model also provide access to advanced support and pain medication throughout the birthing and postpartum continuum.

Pain management is an important part of the birthing experience. Poor pain management can damage the hospital's reputation and patient satisfaction with care. The Maternity patient should be taught to use a pain intensity scale and to establish a comfort–function goal. Pain management must also reflect patient preferences and sensitivities. Research suggests that labor pain can be managed better with various traditional or non-traditional interventions, with few adverse effects.

Several studies have found that hospitals can also increase satisfaction with the birthing experience through relatively low cost enhancements to the care setting such as providing an adjustable bed for vertical delivery and a bathtub and shower that the family can also use. Families also appreciate attractive and functional furnishings and the move away from an institutional feel through warm décor and natural lighting from an outside view, including windows that open. In addition, consider providing food

vouchers for the family, closets containing in-room supplies, and overnight sleeping accommodations for family members.

## 13.3    Successes

TRISS results and the TRISS website have been at the center of initiatives, working groups, "deep dives," and questions from individuals and groups about improving patient satisfaction and the patient experience throughout the MHS. These varied associations have included:

- TRISS adoption and widespread use as the gold standard for patient satisfaction,
- System-wide improvement in patient satisfaction scores,
- Focused analyses to help understand the drivers of satisfaction, quality and to equate patient satisfaction to specific units where care is delivered, and
- Responses with tools to help hospitals improve care.

**Adoption and Use as the Standard for Patient Satisfaction.** TRISS results have been established as the patient satisfaction performance indicators at all levels throughout the MHS. The survey's incorporation of the national, standardized HCAHPS questionnaire attests that the survey has been thoroughly validated for use across the country. Thus, it is the prime focus of hundreds of hospital leaders and managers who now rely on TRISS reports as objective evidence of hospital performance. As of this report, the TRISS website has approximately 479 active users.

**System-wide Improvement.** Year-over-year changes in TRISS scores from 2011 to 2012, shown in Exhibit 2, depict a trend of more hospitals improving and those declining dropped by a lesser degree. This is an encouraging trend that may indicate that MTFs are actively working to improve patient satisfaction. The reports of MTF personnel during the best-practices interviews provided indications that the TRISS website reports were being used by MTF personnel to determine the effectiveness of their improvement initiatives. Some MTFs' satisfaction scores were among the highest in the nation.

**Focused Analyses.** A number of analytical approaches, like the drivers analysis in Section 11 and the readmission analysis in Section 12 are helping TRISS proponents assess how and where to target efforts to improve TRISS results. DHCAPE successfully conducted a feasibility analysis and established the capability of reporting TRISS satisfaction scores at the inpatient unit level with five participating MTFs. They also conducted other ad hoc analyses to assist MTFs in improving care by using TRISS qualitative comments to add additional context to TRISS results. These qualitative comments are provided to the Services and TROs quarterly.

**Responded to User Requests.** In response to TRISS users' requests for help in improving TRISS scores, the TRISS website was complimented for a responsive helpdesk that assisted users in leveraging the full functionality of the website's capabilities. The helpdesk helped users prepare reports of survey results for their executive boards, helped users access reports and data, and helped  users with operational issues related to the website. DHCAPE also provided TRISS-related presentations, on demand, to TROs, Clinical Quality Forum committees, and other requestors.

## 13.4    Challenges

As shown in this report, providing care to military members and their families presents some unique challenges.

**Lower Ratings and Response Rates by Active Duty.** AD Service members and their families tend to respond less favorably and less frequently to surveys. This is indeed challenging due to this patient category being the highest priority for care. However, the main challenge tends to be in establishing contact with these beneficiaries. For example, if this group can be engaged on the phone, they tend to respond well to surveys. Some research suggests that this group would respond more readily to email

surveys but, as of this time, this is not an HCAHPS-approved mode. More targeted surveys and qualitative research may help to elucidate some of the issues that make engaging and satisfying this population a challenge.

**Systems Approach.** MTFs are generally managed by their respective military commands, and quality improvement in MTFs is also under the command of each the Services. However, the collaboration opportunities that the TRISS website represents still present an opportunity for a Tri-Service Quality Improvement Cell that could benefit all the Services by leveraging the collective knowledge and capabilities of all three Services in conjunction with TMA. The cell would be advisory and focus on translating research to practice and respond to the current groundswell of requests from MHS leadership and TRISS users who ask, "How can we improve?" The basis for this capability is already in place and warrants strategic attention.

**Highest and Lowest Performing MTFs**. Examining the facilities that have the highest satisfaction scores as well as those that have the lowest scores may provide special insights into what can be done to improve patient satisfaction. For the first time this year, qualitative research was conducted to better understand the drivers of patient satisfaction in the best-performing MTFs. Additional analyses, including targeted administrative data analysis and further qualitative analyses should be conducted at these MTFs to gain insights for improving scores.

## 13.5 MHS Best Practices

The objective of this section was to capture insights into organizational aspects of best practices that were associated with MTFs reporting the highest TRISS satisfaction scores in 2012. Best practices among these facilities were reported to share and possible incorporate within all MTFs.

### 13.5.1 Methods and Data Collection

Based on CY2012 TRISS results, four MTFs with high satisfaction scores were selected to participate in this study through in-person and telephone interviews. Qualitative data analysis identified best or promising practices associated with high overall satisfaction scores.

The interviews addressed any current use of TRISS or other patient satisfaction data by MTFs and policies that positively influence patient satisfaction. The discussions sought to identify practices and programs related to staff training and staff satisfaction. Additionally, processes of care, programs, and initiatives targeted at improving patient satisfaction were discussed. Special attention was given to identifying best practices focused on Maternity Care.

Data collection consisted of in-person and telephone interviews with senior leadership and their staff involved with patient satisfaction monitoring, patient care, management, and facility operations. Participants included senior MTF leaders, service chiefs, physicians/providers, nurses, unit managers, public affairs officials, quality management/improvement personnel, and others able to speak to patient experience initiatives. The interviews were conducted in June and July 2013 at selected MTFs shown in Exhibit 37. Individual MTF reports are shown in Appendix C.

**Exhibit 37:  Participating MTFs**

| MTF Name | Senior Official | Interview Dates |
|---|---|---|
| Ft. Belvoir Community Hospital (FBCH) | COL Charles Callahan | June 24, 2013 |
| Naval Hospital Pensacola | CAPT Maureen Padden | June 27, 2013 |
| San Antonio Military Medical Center (SAMMC), Ft. Sam Houston | COL Kyle Campbell | July 2, 2013 (Maternity Care) July 9, 2013 (Med/Surg) |
| Wright-Patterson Medical Center/88th Medical Group | Col Stephen Higgins | July 1, 2013 |

Each interview was unique in terms of staffing, which led to a diverse set of perspectives and subject matter expertise. Thus, the findings presented below provide content for improving multiple domains that intersect to enhance the patient experience. Staff members were knowledgeable and enthusiastically shared their MTF activities, initiatives, and organizational characteristics.

## 13.5.2 Findings

Effective leadership, on-going analysis of patient satisfaction data and care quality, staff training, patient-centered care practices, and facility characteristics were reported as key drivers among top satisfaction-scoring MTFs. These top performers continuously communicate and practice improving their performance daily. Staff members attributed high satisfaction scores on the ability to respond to rapid change; their facilities are focusing on rapid change, taking prompt actions, and sometimes home-grown solutions, as a result of issues identified in satisfaction or quality of care data. Interviewees noted that staff members are invested in hospital initiatives, and they feel they are part of a team and part of the community.

### 13.5.2.1 Leadership

Staff members were enthusiastic and appreciative of strong, positive MTF leadership and direction. According to one interviewee, "Leadership buys in to the importance of customer service and is committed to creating a culture of caring." One participant noted that "intrusive leadership" — described as chiefs knowing their staff members and their issues and challenges — solves and prevents problems before they happen and is key to the MTF effectively caring for their patients. Additionally, active, motivated, and involved leaders boost staff morale. MTF leaders willing to work alongside staff and set the example for patient-centered care is crucial.

**Effective Leaders**

- *Work alongside staff and set the example*
- *Take actions to demonstrate that patients are important and should be treated that way*
  - *Meet regularly with patient advocates to gain insights into patient experiences*
  - *Conduct frequent executive rounding to gain first-hand perspective of patient experiences*
- *Openly share patient feedback with clinical staff*
- *Connect with the community and staff through a myriad of communication channels*
- *Regularly monitor data from diverse sources*
- *Care for, develop, encourage, and listen to staff while demanding excellence*

Staff members reported that patient rounding is not only for providers, effective MTF leaders will regularly round to visit patients and units accompanied by unit staff and patient representatives. These effective leaders also strive to connect with the community they serve, the patients for whom they care, and their staff to get their message out. Staff depends on several methods to communicate with the community. These methods include Facebook, Twitter, Internet townhall meetings, and blogs.

Other important aspects of leader-inspired culture include a genuine interest by MTF staff in their patients and their patients' needs. These facilities let their patients know they are important. Several staff reported that "we earn our patients' trust and show them we care" by taking time to talk to and connect with patients. Patient problems or concerns are addressed quickly and responsively. Not only do effective leaders care about their patients, they also focus on maintaining staff satisfaction as well. Our MTF representatives expressed their belief that their concerns are heard by leadership and that they have a "voice."

Not every MTF visited has had a long, glorious stay as a top-rated MTF. The participants were specific in noting how they have changed either their facility or processes to support this type of culture and effective leadership. One MTF leader stated, "As any hospital moves into a new facility, it has a chance to

redefine itself." Whether through redefining or continually improving, the four top-rated MTFs have shown that even small changes in processes can positively impact patient satisfaction.

## 13.5.2.2    Manage By Data

Interviewees noted the importance of measuring and effecting change faster than routine data collection cycles ordinarily allow. Thus, they collect, report, and take actions based on internal surveys administered as often as daily. They then rely on the corporate surveys, such as TRISS, to see how their changes impact overall performance. Facilities do not limit data collection methods; they value receiving input from a variety of channels and formats. These include kiosks, Twitter, and multiple patient satisfaction surveys and feedback forms administered throughout the MTF. One staff member reported that hospitality staff members collect 85 patient satisfaction surveys from randomly-selected patients per week, and staff review the responses received. Survey data are also collected via Interactive Customer Evaluation (ICE) kiosks (portals for patient information) or the Patient Assistance Reporting System (PARS) that collects complaints, issues, or compliments that are forwarded to department staff. In addition, one facility reported that patient advocates meet weekly with the Executive Team to discuss trends in satisfaction or other issues. This information is also shared with unit leaders and patient care providers, providing unit-level feedback on performance and reported issues. Patient Family Advocacy Councils are active, consisting mainly of community members and staff, whose members (including the ombudsman) participate in an "Executive Walkaround" and meet monthly to discuss patient experiences and outcomes.

**Effective Leaders' Data Use**

- *Collect, report, and task actions based on data*
- *Operate multiple, simultaneous data collection processes*
- *Collect their own data too, via activities like executive rounds and community councils*
- *Share data/client feedback with staff*
- *Rapidly respond to patient concerns reported via the many data sources*

Among top-scoring facilities, groups comprising hospital leaders, staff, and patient and family representatives discuss survey results and top patient concerns regularly. Patient representatives in these groups include patient advocates or ombudsmen. In one facility, ombudsmen support the needs of wounded warriors, their family, and their nurses through AWICKETS and report regularly on issues.

Positive comments are also sent out to unit leaders for recognition. Interviewees spoke of their review of scores and trends of the Army Patient Level Satisfaction Survey (APLSS) and PARS. One noted, "Each quarter, when the new reports come out, we discuss them in our monthly meetings and results are shared with nursing staff." Staff members also described the use of Facebook, Twitter, and Vocera (a communications device) for discussion and distribution of TRISS results and active collection of feedback for the database. Use of social media lets facilities connect patient comments in nearly real-time back to providers, with one interviewee citing that kudos for doctors or staff are passed along. In maternity care, one facility reported use of patient satisfaction data from APLSS, ICE, kudos, and an L&D internal survey. Staff reported efforts to track progress and improve care through monthly reviews of Joint Commission Quality Indicators. Facility leaders review the findings from these modes of data collection and use the information to support a continuous cycle of improvement.

### 13.5.2.3 Staff Training and Recognition

High-scoring facilities offer frequent training in a variety of formats, venues, and courses. Most interviewees reported using scenario-based training or providing "boosters" or specific training for units with identified needs. One noted an active simulation center to translate training to action. Interviewees mentioned TeamSTEPPS (Team Strategies and Tools to Enhance Performance and Patient Safety) training as an important, military-wide annual clinical and non-clinical training program that is often a regular part of staff orientation with follow-on refresher courses. One facility has a trainer in every department and service area. TeamSTEPPS champions go through a week-long training course that includes a book entitled, "My Iceberg Is Melting."

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**Training and Recognition**

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- *Frequent training opportunities, including an active simulation center*
- *Customer service training with on-boarding and annual and follow-on refreshers*
- *Emphasis on the importance of the patient as customer*
- *Focus on staff empowerment, open communication, and learning from one another*
- *Use of "alternate" training methods, such as webinars, to continue training in an era of cost reduction*
- *Numerous programs for regarding and appreciating productive, patient-focused achievements by staff*

MTF representatives emphasized the importance of the patient as a customer at their facility, with customer service training offered in various formats and tailored to different audiences. Customer service training is required with staff orientation, annually, and then, as needed. Training is often offered several times per month to ensure all staff members have the opportunity to attend. Courses focus on courtesy and respect, communication about patients' rights, often including such practices as First Team Training. These training programs are often included in staff professional standards guide.

One facility offers monthly computer-based training on communication skills, customers, complaint resolution, and best strategies for customer service. Participants emphasized the benefits of open communication and customer service. These programs teach staff empowerment and to include public affairs representatives or the ombudsman as team members.

Interviewees also discussed training programs tailored to specific groups of staff. For example, a three-day course in leadership training and clinic management is offered at one facility. Clinic management training is offered to help unit managers learn service-level operations and how to handle and resolve patient complaints.

Other training includes mandated annual physician training, which is delivered through APeX Provider Training. This series can be customized for different audiences (e.g., students versus licensed providers). Patient Care and Touch is an Army-wide program delivered to inpatient and outpatient nurses. It focuses on building skills, values, and improving performance with presentations and peer feedback. Providers help to develop the content of the course.

Informal training also occurs, with one interviewee citing the benefit of unit-centered counseling. Nurses across units share concerns with one another and provide peer feedback focused on clinical practice. Facilities also mandate annual "resilience training," which helps staff cope through crises and adverse events. Staff often become the "second victim" in adverse events, and these facilities are proactive in offering support. Online, hospital-wide training was identified as an important option, especially with reduced budgets. For example, customer service webinars are hosted on Navy Knowledge Online and Patient Care and Touch is offered via the Web.

Many awards and recognition programs were mentioned as being in use and important to show gratitude and acknowledge the contributions of staff members. Participants mentioned the "ACE" award, which is based on staff and patient feedback. Others recognize exemplary staff, including recognition for taking the initiative in working with patients. The "Exceeding Expectations Everyday (E-3)," "Good Catch," and "Provider Spotlight" awards and "Gotcha" program are all opportunities for staff to recognize other staff. Additionally, a "gallery" provides staff, visitors, and patients an opportunity to place a sticky note with kudos, recommendations, and requests on a central board that becomes part of the data management collection. This is consistent with a culture of openness and continuous improvement.

## 13.5.2.4      Patient-Centered Care

The four facilities studied reported practices and policies that ingrain patient-centered care in their culture. The culture reported by these facilities is that of creating personal connections and offering a welcoming medical home, with one interviewee citing that they have begun to adopt the Patient Centered Medical Home (PCMH). The PCMH "bleeds over from [the] outpatient to inpatient" side of the house. The goal is to rally around the patient and see that all their needs are met. This has also reduced readmissions. Staff interviewed described numerous steps taken to involve the family, helping providers bring patients as partners, increasing patients' involvement in their care plan and learning more about the details of their care. Examples of best practice patient-centered care in the areas of communication, responsiveness of staff, discharge and continuity of care, pain management, and spirituality and integrated care

**Patient-Centered Care Practices**

- *Carryover from outpatient care*
- *Rallying around patients to ensure their needs are met*
- *Partnering with patients in their care and decision-making*
- *Informing patients of expectations, their providers, goals*

are described in the paragraphs that follow. Associated TRISS scores for subject MTFs have been excerpted and reported in Exhibit 38 to show the impact that reported practices have on MTF success. All four MTFs scored above the benchmark in all three communication-related composites.

**Exhibit 38:  TRISS Overall and Communication Scores for Best Practices MTFs[1]**

|  | Overall Hospital Rating | Commun. with Doctors | Commun. with Nurses | Commun. About Medicines |
|---|---|---|---|---|
| Benchmark | 69% | 81% | 78% | 63% |
| DC Overall | 66% | 85% | 82% | 72% |
| **Army Overall** | 63% | 84% | 81% | 72% |
| San Antonio MMC-Ft. Sam Houston | 79% | 86% | 84% | 73% |
| **Navy Overall** | 64% | 84% | 82% | 72% |
| Naval Hospital  Pensacola | 75% | 90% | 85% | 78% |
| **Air Force Overall** | 72% | 86% | 85% | 74% |
| 88th Medical Group-Wright-Patterson | 79% | 88% | 88% | 76% |
| **JTF Cap Med Overall** | 73% | 85% | 80% | 71% |
| Ft. Belvoir Community Hospital | 78% | 86% | 80% | 72% |

[1] Extracted from Exhibit 19.

### 13.5.2.4.1　Communication with Medical Staff

Interviewees described various types of communication practices that likely influenced patient satisfaction. Through multidisciplinary team huddles and debriefs, their facilities model communication to the patient, reinforce the care plan, and ensure effective care teamwork. They promote provider collaboration, where nurses, doctors, and other providers round together, so they are "on the same page, saying the same thing." Facilities encourage physician–patient relationships through introductions of providers to the patients to reduce confusion or fears. For example, Physician Assistants sit with the team and patients if there are questions or concerns and resolve issues that new residents or inexperienced nurses might have caused — "back-briefing" patients when there are miscommunications. Mentorship and teachable moments are used to educate junior staff.

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**Patient-Centered Care Practices: Medical Staff**

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- *Multidisciplinary team rounds ensure effective care teamwork*
- *Physician Assistant mentors to facilitate effective patient communication*
- *Introductions of staff to patients at shift change*
- *Maintaining same nursing staff assigned to patients*
- *House staffing meeting with nurses to discuss patients' care*
- *Frequent huddles and patient-safety huddles*
- *Rounding at the bedside*

To improve continuity of care, one facility conducts staff introductions at shift change, with the establishment of care goals. An interviewee described their goal to maintain consistency by assigning a Lead Nurse for the patient for most of the stay. Our interviewees felt these actions were critical, and the practices of Naval Hospital Pensacola led to a recent MHS Patient Safety award for partnering with patients.

In addition to staff-to-patient communication, our interviewees emphasized the importance of within-staff communication. One noted that house staff members discuss with nursing staff the patients' critical needs, and arriving and departing teams round with nurses and clinical specialists three times daily at shift changes. In one facility, doctors meet with nurses twice daily and on weekends to increase interdisciplinary communication. In maternity care, **i**nterviewees mentioned frequent staff huddles; one described a Charge Nurse Huddle, whereby all charge nurses for maternity care units meet before changes of shift to plan and discuss issues, and a Safety Huddle, covering who is on call and patients with precautions and special diet needs. The San Antonio Military Medical Center (SAMMC) gathers physicians twice daily to discuss patients, concerns, and assignments. An interviewee described the positive impact of changes to their operations prompted by TRISS results that showed issues with continuity. After they began to gather physicians together twice daily to discuss patients, they attributed an18 percentage point increase in TRISS rating scores to this process change.

### 13.5.2.4.2　Communication About Medications

Staff from three of the four facilities described policies and actions taken that resulted in improved communication about medications. Interviewees reported that the inpatient pharmacists are integrated into the care team by embedding them on the floor to educate staff and patients, rounding with the staff, and meeting with the patient to reconcile medications, change orders on the unit, and then review medications at discharge. Reconciliation is performed frequently, with one facility reconciling medications on admission, another at admission and discharge, and one described reconciliation by a nurse who then

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**Patient-Centered Care Practices: Medications**

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- *Embedded pharmacist on the floor, reconciling and educating on medicines*
- *5 Rights of medication administration*
- *Conducting hourly comfort rounds*
- *Pain reassessments within 59 minutes of medications*

reports any discrepancies to the physician with no pharmacy involvement. This positively impacts patient communication around medications. NH Pensacola staff reported practicing the 5 Rights (right patient, right drug, right dose, right route, and right time) each time a medication is administered, to ensure competent and safe care. The 5 Rights not only improves quality of care but also positively influences satisfaction scores. It reduces confusion and enhances trust in the medical staff.

### 13.5.2.4.3    Responsiveness of Hospital Staff

According to MTF representatives, the degree of responsiveness of hospital staff to patients' needs appears driven both by the nurse-to-patient ratio and other policies that help reduce the use of call devices (lights, bells, buttons). A high ratio of staff to patients allows staff to spend more time with the patients and provide more frequent checks. One facility reported a one-to-four nurse-to-patient ratio, with new graduate nurses having only two patients while in orientation. Top-performing facilities report the practice of conducting "comfort rounds" hourly, which minimizes use of call bells; implementing a 2:00-to-10:00 p.m. shift to help manage discharges and admissions; and having two staff responding to high-risk patient call devices (specifically for bathroom needs).

> **Patient-Centered Care Practices: Hospital Staff**
>
> - *Appropriate staff to patient ratios*
> - *Conducting hourly comfort rounds*
> - *Mid-shifts to facility discharges*
> - *Rapid response teams*
> - *Using in-room white boards as communications tool*
> - *Vocera for immediate communications*
> - *Concierge Book tailored to the patient's needs*
> - *Post discharge follow-up calls*
> - *Pain reassessments within 59 minutes of medications*

In Maternity Care, call devices (answered by administrative or anesthesia staff) separate requests by ante-partum, Labor & Delivery, post-partum, and pediatric issues. When an urgent or emergent issue arises, Rapid Response Teams are available for patients and families who are instructed how to call. This practice is provided to all patients, but also adapted for situations specific to Maternity Care patients. Interviewees described the effective use of communication tools, such as enhancing the in-room white board with the usual information, such as staff names and date, to include a "goal of day" and a birth plan (for Maternity patients), as well as patient concerns and questions. Discussion, via the white board, is conducted in front of the patient. The patient is encouraged to ask questions. Wireless, hands-free devices (e.g., Vocera) replace pagers as an instantaneous communication method to connect various functions, floors, staff members, and departments together to increase responsiveness. Fort Belvoir representatives expressed the attitude that use of Vocera quickens responsiveness not only among staff but also to patients and families.

**Maternity Care Focus.** Related to labor and delivery, staff from our interviews described a baby-friendly overall culture, with encouragement of attentiveness to the baby, recognizing the baby's needs proactively and focusing on Patient Care and Touch. One reported that prior to the inpatient stay, there are opportunities for the patient to see the same provider. One interviewee noted that twice weekly an ante-partum provider is available to see patients. Further supporting the expectant mother, providers schedule tests during the same day for a single appointment and expedite services for the patient.

As the expectant mother approaches labor and delivery in the hospital, facilities use telemetry and intermittent monitoring to give regular status updates to providers, and on admission they move patients quickly from the Emergency Room (ER) to the floors through faster patient triage. Those interviewed described an efficient, patient-focused approach to care throughout the stay. Families are provided a welcome packet ("Concierge Book"), with phone numbers, amenities, and what to expect. They tailor the book for the patients' needs on each unit, by outlining expectations in that unit in addition to the standard description of amenities and phone numbers. To enhance effectiveness of educational materials, one

facility uses a special team (PERT – Patient Education Resources Team) to review the information that patients receive.

Interviewees believe that encouragement for increasing skin-to-skin contact between the mother and baby is important. One noted that the new mother is offered lactation consulting whereby a certified lactation nurse is available seven days per week. This nurse promotes breastfeeding in the outpatient clinic and rounds on all Maternity Care patients (and not only those who indicate they want to breastfeed). Private patient rooms with open visitation, accommodations for families, and continuity of nursing staff were considered significant satisfiers when provided. Others mentioned providing in-room supplies, such as diapers and other baby supplies at the bedside to support training and encourage the family to adopt a good baby-care routine prior to returning home. One interviewee mentioned a special meal for new parents. Effective pain control was also discussed as being important to Maternity Care patients' satisfaction. MTF's TRISS scores for responsiveness, discharge information, and pain management are shown in Exhibit 39, followed by discussion of their discharge and pain management practices.

**Patient-Centered Care Practices: Maternity Care**

- *Focus on Patient Care and Touch*
- *Patient continuity with the same provider before admission*
- *Schedule tests and appointments the same day for patient convenience*
- *Offer a Concierge Book tailored to the patient's needs*
- *Patient Education Resources Team*
- *Encouraging skin-to-skin contact between mother and baby*
- *Make a lactation consultant available 7 days per week*
- *Offer open visitation, fully supplied private patient rooms, with accommodations for families*
- *Post discharge follow-up calls*
- *Pain reassessments within 59 minutes of medications*

**Exhibit 39: TRISS Overall, Responsiveness, Discharge Information and Pain Management Scores for Best Practices MTFs[1]**

|  | Overall Hospital Rating | Responsiveness of Hospital Staff | Discharge Information | Pain Mgmt |
|---|---|---|---|---|
| Benchmark | 69% | 66% | 84% | 70% |
| DC Overall | 66% | 75% | 89% | 71% |
| **Army Overall** | 63% | 72% | 88% | 71% |
| San Antonio MMC-Ft. Sam Houston | 79% | 72% | 91% | 71% |
| **Navy Overall** | 64% | 76% | 89% | 70% |
| Naval Hospital Pensacola | 75% | 82% | 89% | 75% |
| **Air Force Overall** | 72% | 79% | 89% | 74% |
| 88th Medical Group-Wright-Patterson | 79% | 84% | 91% | 77% |
| **JTF Cap Med Overall** | 73% | 72% | 88% | 69% |
| Ft. Belvoir Community Hospital | 78% | 76% | 87% | 69% |

[1] Extracted from Exhibit 20.

As shown above, in addition to high scores on responsiveness for all four facilities, all four MTFs scored above the benchmark on discharge information, and three of the four MTFs scored above the benchmark in pain management. Following are highlighted best practices described by the interviewees.

### 13.5.2.4.4    Discharge and Continuity of Care

The process of educating and preparing patients for discharge appears to be a well thought out series of events at the facilities interviewed, with early planning and tools in place to facilitate communication between patients and providers. Staff interviewees reported several methods to educate the patient. Discharge instructions are provided both verbally and in various printed forms. Facilities begin discharge planning within 24 to 72 hours after admission, and one cited beginning the process at admission. Instructions vary from standard booklets to individualized instructions (with care plans).

SAMMC interviewees noted that patients receive separate discharge summaries from doctors and nurses, providing a broader perspective of the patient's condition and care. The physician summary includes medications, follow-up appointments (set prior to discharge), and instructions, including nursing/multi-disciplinary summary alerts for potential symptoms and any additional instructions. In addition, SAMMC requires that all maternity patients attend a dedicated discharge class conducted by the early discharge nurse (offered 7 days per week).

**Patient-Centered Care Practices: Discharge and Continuity of Care**

- *Both verbal and written discharge instructions provided*
- *Discharge process starts soon after admission*
- *Maternity patients enjoy attending a discharge class together with their babies*
- *Follow-up appointments are made prior to discharge*
- *Care summaries are sent to the patient's physician*
- *Hall pass process facilitates communications between providers*
- *Bedside rounding and reporting*
- *Post-discharge phone follow-up*

Staff from the high-scoring facilities also reported several methods of cross-shift communication and enhancing continuity of care, with one describing the process used within the hospital to facilitate communication. Wright-Patterson representatives described the use of a "hall pass" that travels with the patient during transport in the hospital, and sending and receiving providers update information on the pass regarding the patient's status and care that informs the receiving provider of information they need to know.

Other methods interviewees described that are used at their facilities for enhancing continuity of care include rounding and reporting at the patient's bedside, attempts to maintain the same staff, and introducing new staff at the shift change. Once a patient is discharged, they provide electronic health records access to outpatient providers and transmit discharge orders or information to the primary care manager. Describing follow-up policies, interviewees discussed post-discharge home calls at Day 2 or 3 by a nurse/clinical educator or charge nurse, and staff from one facility conducts after-discharge call-backs within 24 hours for patients at high-risk for readmission. One facility's respondent reported contacting all patients post-discharge for same day surgeries, and another described the Partnership for Patients, where charge nurses follow-up with congestive heart failure patients after discharge. Facilities may further arrange physical therapy and deliver durable medical equipment to the home.

### 13.5.2.4.5    Pain Management

Three of four facilities studied met or exceeded the TRISS DC benchmark for pain management, and interviewees believe that pain management is taken seriously by leadership at the facilities we studied. Some cited that there are more options to treat pain than ever before. Pain management is established as a core competency at annual training and peer reviews at Wright-Patterson, and SAMMC reported that pain management is included in Performance Improvement/Patient Safety (PIPS), a monthly meeting to present hospital-level data about key items. One facility cited having anesthesia teams both for the operating rooms and L&D and that the nursing staff have a collaborative relationship with anesthesia staff. The anesthesia department answers maternity patients' pain-related call system requests at one facility we studied.

The Acute Pain Service (APS) was established by SAMMC for difficult-to-manage patients, a service made up of anesthesiologists, of whom some are pain subspecialty certified. Nurses proactively educate patients about expectations for pain and options for management. Facilities use frequent, proactive pain assessments; for example, reporting that the staff asks about pain with each vital sign assessment and checks back within one hour post-medication (Joint Commission standard). These facilities provide patients with multiple and varied options for pain control including biofeedback, acupuncture, Botox®, and physical therapy. A SAMMC representative expressed the importance of the pain management

**Patient-Centered Care Practices: Pain Management**

- *Pain management training is provided*
- *Acute pain service provides support*
- *Proactive education of patients on expectations*
- *Multiple and varied options for pain control*
- *59-minute reassessment after giving pain medication*
- *Hourly comfort rounds*

initiative and their improvement toward their ultimate goal of 97% adherence with the requirement, requiring pain reassessment within 59 minutes following medication.

### 13.5.2.4.6 Spirituality and Integrated Medicine

Staff interviewed take the initiative to account for spiritual and cultural beliefs around food and type of provider. They mentioned having a chapel and one cited two chaplains between whom patients can choose. One interviewee reported that their chaplain service is very good, coming as soon as they are needed in the ER department and accompanying trauma teams. In addition, chaplains do their own rounds. Chaplains are "exceptionally responsive," according to an interviewee, will meet the patients when they arrive, and in fact, patients are asked whether they want to be seen by a chaplain within the first 24 hours. They will remain affiliated and responsive to the patient no matter how they might move through departments.

**Patient-Centered Care Practices: Integrated Medicine**

- *Chaplain responds with the trauma team*
- *Patients asked within 24 hours of admission if they want chaplain support of the patient's religious choice*
- *Chaplain rounds*
- *Pet therapy is provided at some MTFs*
- *Doula (labor coach) services offered Alternative therapies augment care offered*

Staff from two of the four facilities cited use of pet therapy, with one describing work with a 15-dog Red Cross program. One mentioned the option of the patients' ability to bring in personal dogs. Interviewees also noted use of the doula in L&D and methods for stress relief, such as knitting or crocheting for patients.

## 13.5.2.5 Facility Attributes

Moving to a hotel-like model, high performing facilities have incorporated design features and operations changes to impart a safe, family-friendly, natural, and low-stress environment. Exhibit 40 show that all four facilities scored above the benchmark on cleanliness and quietness of the hospital environment Interviewees described cleaning and noise reduction practices that likely influenced patient satisfaction with their stay, as reflected in Exhibit 40. Additional examples of best practice in facility cleanliness, quietness, and design attributes are described in the paragraphs that follow.

**Exhibit 40: TRISS Overall, Cleanliness, and Quietness Ratings for Best Practices MTFs[1]**

| | Overall Hospital Rating | Cleanliness of Hospital Environment | Quietness of Hospital Environment |
|---|---|---|---|
| Benchmark | 69% | 73% | 60% |
| DC Overall | 66% | 74% | 65% |
| **Army Overall** | 63% | 76% | 65% |
| San Antonio MMC-Ft. Sam Houston | 79% | 79% | 63% |
| **Navy Overall** | 64% | 71% | 64% |
| Naval Hospital Pensacola | 75% | 80% | 73% |
| **Air Force Overall** | 72% | 74% | 66% |
| 88th Medical Group-Wright-Patterson | 79% | 81% | 76% |
| **JTF Cap Med Overall** | 73% | 73% | 66% |
| Ft. Belvoir Community Hospital | 78% | 77% | 75% |

[1] Extracted from Exhibit 20.

Interviewees reported that facility cleanliness stems from the experience and dedication of housekeeping staff, although all staff find and address issues with cleanliness. Some reported efforts to minimize clutter through keeping some equipment and staff behind the scenes. One interviewee termed this an "on stage–off stage model" where staff who perform such functions as trash transport are not allowed within the main hall of the patient space. The front areas are reserved for patients and family.

In essence, everyone is a housekeeper at some point. It is noted here that comments submitted to TRISS surveys have expressed dissatisfaction when hospital staff step around trash and soiled linens, maintaining the attitude that cleanliness is just the housekeeper's job. Conversely, housekeepers reported that they also consider themselves part of the caregiving team.

All interviewed were highly appreciative of their housekeeping staff that reportedly clean 12 to 16 hours a day. One representative reported that cleaning contracts are implemented that encourage housekeeping staff to take pride and ownership, acting as part of the team. Others report housekeeping as having dedicated staff with assigned areas that they take pride in cleaning. Interviewers noted the facilities they visited in person were among the cleanest ever seen. Indeed, an interviewee commented that, "People have said this is the cleanest facility they have ever seen."

Multiple factors were noted as contributing to the challenge of maintaining a quiet, stress-relieving atmosphere. They described the reduction of the general noise stemming from construction and renovations, to establishing quiet times and limiting overhead paging

**Facility Attributes**

- *On-stage, off-stage areas*
- *Housekeeping staff as part of the care team*
- *Everyone is a housekeeper at some point*
- *Housekeepers take pride in the areas they are assigned to maintain*
- *New construction designed to reduce sound*
- *Designated quite times and strictly controlled overhead paging*
- *Adjusting renovation work hours to minimize noise*
- *Navigation aids throughout the facility and no ad hoc signage*
- *Stork Parking for expectant mothers*
- *Warm, natural, inviting hotel and home-like décor*
- *Well maintained and updated*
- *Easy to walk throughout parking lot and building*
- *Places for staff to escape and recharge*

and announcements broadcast. In addition, interviewees mentioned all-private rooms, the bending of facility wings, and more use of carpet and in-room physical dividers to buffer sound.

Interviewees noted that their facilities have incorporated many design features they believe have increased overall patient satisfaction. These include navigation aids and other features to reduce confusion, features to impart a pleasing atmosphere, and other elements that make the time spent at the facility easier and more user-friendly. Navigation aids include signage that is uniform and strictly controlled in form and content, and way-finding elements to ensure clarity and aesthetic appeal. No ad hoc signage is allowed. Greeters, who are trained volunteers, are stationed at entrances to direct and welcome patients. Exterior to the MTF, there is "Stork Parking" for expectant mothers, and construction is designed with logical structure and flow. At one MTF it was reported that individuals with "smart" phones can scan their location and obtain directions.

The high-scoring facilities have also imparted warmth in design and décor with inviting colors, new fixtures, and themed wings; as one staff member noted "somewhat like a Disney concept." Staff described how their facilities establish an at-home feeling environment, going beyond the basics to add extra features and amenities. Some reported loosely enforced or open visiting hours and Wi-Fi availability. Interviewees mentioned single bed pull-outs from recliners, in-room refrigerators, towel bars at lower heights, blankets, hooks, and local control of lighting and temperature.

Interviewees described facility maintenance procedures that do ongoing inspections to repair all facility damage, such as wall scuffs, discolored ceiling tiles, burned out lights, and torn furniture. Interviewees cited further examples, such as open seating within the hospital allowing people to face one another, an atrium with fish-stocked ponds, and a very large TV screen. Patient room windows and lounges with natural lighting, benches below windows, and garden areas in between pavilions or planted roofs were cited by staff as features used to improve the facility environment. As mentioned previously, for L&D with follow-on maternity care, they provided single-family rooms supporting labor, delivery, recovery, and post-partum. One interviewee noted that some of their rooms to support labor offer hydrotherapy and a birthing ball. Facilities also had arrangements to support family to stay overnight, with hotel-like features that include pull-out beds, showers, local adjustment of room temperature, and vending/cafeteria or local on-floor kitchens. One mentioned having a "delivery cam" that is offered for remote family.

Facility design that enhances the satisfaction of staff and caregivers (that ultimately improves the patient experience), brings needed functions closer together and enables staff to seek a quiet respite from the stress of patient care. Our interviewees appreciated such facility features as break areas and open gardens with small fountains to relax, exercise and walking areas, a large "tranquility room" available to any staff via sign up, with stress relieving amenities, such as massage chairs (where outside therapy trainers teach massage and other techniques to staff), staff call rooms, nice eating and meeting facilities, and options for easy access to transportation.

Other features mentioned included ample parking, adjustments to sidewalk curbs for the correct height for mobility-challenged individuals, the attachment of non-slip surfaces to stairs, a marked-off walking trail, doorbells for key areas, adjustments to the timing of automatic doors, patient elevators, and providing more baby-changing stations.

### 13.5.3 Summary and Recommendations

These findings align with those reported in the literature, and the TRISS MTFs with the highest patient satisfaction scores appear to bear these reports out. Thus, for this study, the evidence suggests the key factors leading to the highest patient satisfaction scores were leadership, a commitment to excellence in patient-centered care, and a facility that reflected the polished look, professionalism, and pride of the staff who occupy it.

These MTFs were all reported to have excellent leaders who show their commitment to quality medical care and satisfied patients by:

- Establishing a culture that values patients and staff and creating a spirit of teamwork in both groups;

- Communicating their commitments to staff and the community;

- Managing by data and creating data-driven outcomes; and

- Empowering and equipping staff to take timely actions to improve the patient experience at every level within the organization.

The patient-centered care practices reported seem to satisfy patients by serving to rally around the patient to ensure all their medical needs are met. Patient-centered care requires close coordination and teamwork by the care team. It requires engaging patients and including them in the decision-making and care process. It creates better outcomes when these requirements are achieved because both the care team and the patient have complete knowledge and information about the care plan. The patient understands his or her role and participates as part of the care team and process.

Clearly, the MTFs' physical plant and facilities also play a role in the degree to which patients are satisfied with their care and that staff are satisfied with their work setting. The MTFs that were assessed in this study were in differing stages in terms of age and amenities. Some facilities were brand new, being renovated, or older structures built many years ago. The new facilities have design advantages that older facilities lack. However, what came through in these interviews was, regardless of the age and attributes of these MTFs, the culture of excellence conveyed from the commander down the chain. It was evident that all of these facilities were reported to be well-maintained and conveyed that same message to patients.

Given the above discussion, MTF leaders and staff can learn from one other and collaborate on how all MTFs can continue to improve. Beginning with their own TRISS scores, each MTF can continue to develop their own domain-specific patient satisfaction improvement plans. Many of the features and processes summarizing these interviews represent small, incremental changes that can have a noticeable impact when implemented. One new idea implemented from these MTFs could be the catalyst for improving satisfaction scores.

It is worth noting that even the highest-scoring MTFs did not have the highest scores on every scored survey category. Thus, the scores of other MTFs also offer the same types of opportunities for benchmarking and collaboration with other MTFs to understand how they achieved the highest scores. This TRISS Report of Findings and the TRISS website contain the information to identify opportunities for MTFs and policy leaders to identify the highest-performing MTFs in every domain and learn from them. DHCAPE is also ready to assist MHS leaders, the Services, TROs, and MTFs in their quest to continue improving health care quality and patient satisfaction.

## 13.6   Quality Improvement References

Readers will find helpful references links to resources for improving patient satisfaction and care on the TRISS Website at https://surveys.altarum.org/triss/DoTriss under the Resources Tab. In addition, quality improvement references are listed below.

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# Appendix A: Methodology

## A.1  Overview

The TRISS survey program is divided into two primary components: The DC Survey and the PC Survey. The total annual sample resource for the survey is 168,000. The survey program for TRISS can be summarized by the following:

- ➢ DC Mail Survey– Bimonthly Fielding
- ➢ PC Mail Survey– Monthly Fielding
- ➢ DC Non-Response Follow Up Phone Survey – Bimonthly Fielding
- ➢ PC Non-Response Follow Up Phone Survey – Monthly Fielding

**Direct and Purchased Care Mail Survey and Telephone Follow-up Direct and Purchased Care Mail Survey and Telephone Follow-up**

The DC Mail Survey is a bimonthly inpatient satisfaction survey, while the PC Mail component is conducted once per month. Designated respondents include all individuals who have received inpatient care in an MTF worldwide for DC or in a civilian network facility for PC, with the exception of patients who are under the age of 18, those who seek inpatient services for mental health or substance abuse, those who do not have normal discharges, and those who have diagnosis of stillbirth, abortion, false labor, or antepartum. To reduce the burden and confusion of being sampled and asked about more than one visit to the same or different providers in a short period of time, individuals are sampled no more than once every six months. The TRISS Survey follows the CMS HCAHPS Quality Assurance Guide Mixed-Mode survey data collection protocol. Respondents complete and return a self-administered mail survey questionnaire. Sample is delivered bimonthly and surveys are mailed within six days after the sample is processed. If after 21 days in field, a completed questionnaire has not been received, or the questionnaire has come back undelivered, the respondent is contacted by phone. The Mixed-Mode protocol promotes a high survey response rate.

## A.2  Sampling and Weighting

### A.2.1  Sample Frame

The sample frame is constructed using discharge records for PC and DC. The raw discharge records from CHCS are used to provide a listing of all relevant dispositions in MTFs both in the Unites States and outside the United States. The data represent all discharges at MTFs as defined by parent DMIS identifiers. This file serves as the sample frame for DC inpatient dispositions. Approximately eight weeks after the end of each calendar month, a list of all relevant PC inpatient visits made in that month and the month prior is compiled based on claims submitted by providers. The PC data is extracted from the TRICARE Encounter Data-Institution (TED-I) dataset and serves as the sample frame for the monthly PC survey. Exclusions are applied to the initial sample frame constructed from these resources in order to generate the final sampling frame.

### A.2.2  Sample Design and Selection

The TRISS sample design follows the CMS Quality Assurance Guide sampling protocol, and targets a final annual completed case count of 300. The CMS protocol also allows collecting more than 300 completed cases at the discretion of the individual facility. Some smaller facilities do not have the patient volume to obtain 300 completed cases per year, and for these smaller facilities, all discharged patients are included in the sample; this is referred to as a "census" sample. The sampling process for TRISS, for DC and PC, is summarized in the table below. The sampling plan categorizes MTFs, in each cycle, as either a

600+-response facility, a 300+-response facility, or a census facility. Similarly for PC, a census is taken for PC facilities with fewer than 100 patients in a cycle.

For sampling purposes, the individual MTF or civilian facility is defined as the "stratification" variable. The samples are generated using the SAS SURVEYSELECT procedure. Within each stratum, a Simple Random Sample (SRS) is constructed. Table A.1 summarizes the sampling process.

**Table A.1: Overview of the TRISS Sampling Process**

| Design | Direct Care | Purchased Care |
|---|---|---|
| Strata | MTF | Civilian facility |
| Number of PSUs | 58 MTFs* | 73 hospitals |
| Cycles Frequency | 24 cycles (2 per month) | 12 cycles (1 per month) |
| Sampling Strategy within Stratum | Simple Random Sampling | Simple Random Sampling |
| Sample size (per cycle) | Census up to 100 inpatients for those facilities with less than 100 discharges. 100 for any facility with over 100 discharges. | Census up to 100 inpatients for those facilities with less than 100 discharges. 100 for any facility with over 100 discharges. |

\* Note, while 58 MTFs are routinely sampled, 2 of them usually have too few cases for analysis.  The analysis is, as a result, based on 56 MTFs.

## A.3   Estimation

Estimation in the TRISS consists of estimates of means, proportions and their standard errors.

**Means and their Standard Errors**

Under the sampling plan, estimation is very simple for overall or regional estimates. The estimator for the stratified sample mean is

$$\bar{x} = \frac{\sum_{i=1}^{n} w_i\, x_i}{\sum_{i=1}^{n} w_i},$$

Where

$\bar{x}$  is mean of a particular survey variable

$x_i$ is a particular sample element observation

$w_i$ is the sampling weight for a particular respondent

and the weights are as described below in the weighting section. The variance estimator is that for the stratified sample mean,

$$\text{var}(\bar{x}) = \sum_{h=1}^{H} \left( N_h \big/ N \right)^2 (1 - f_f) \, s_h^2 \big/ n_h \, ,$$

where

var ($\bar{x}$) is the variance estimator of the mean of a survey variable

H is the number of strata

h denotes the stratum

$N_h$ is the population size of a particular stratum

N  is the entire population size

$f_h$ is the sampling fraction of a stratum, the ratio of the sample size to the size of the stratum

$s_h^2$ is the standard deviation within each stratum
$n_h$ is the sample size of a particular stratum

**Proportions and their Standard Errors**

The estimator for proportions such as proportion Excellent and Very Good is handled by defining the response variable Xi as a dichotomous variable where Xi = 1, if excellent or very good, or Xi = 0 if good, fair or poor. The estimator for the stratified proportion is the same as before, where

$$\bar{x} = \sum_{i=1}^{n} w_i \, x_i \Big/ \sum_{i=1}^{n} w_i \, ,$$

Where

$\bar{x}$  is mean of a particular survey variable
$x_i$ is a particular sample element observation

$w_i$ is the sampling weight for a particular respondent

and the variance estimator is still

$$\text{var}(\bar{x}) = \sum_{h=1}^{H} \left( N_h \big/ N \right)^2 (1 - f_f) \, s_h^2 \big/ n_h \, .$$

where

var ($\bar{x}$) is the variance estimator of the mean of a survey variable

H is the number of strata

h denotes the stratum

$N_h$ is the population size of a particular stratum

N  is the entire population size

$f_h$ is the sampling fraction of a stratum, the ratio of the sample size to the size of the stratum

$s_h^2$ is the standard deviation within each stratum

$n_h$ is the sample size of a particular stratum

For potential future analysis of the survey data, variance estimation of regression coefficient can be estimated by using either Taylor series method or replication method, such as balance repeated replication or jackknife repeated replication. These estimation methods can be conducted by SUDAAN or other statistical software that can account for complex sample survey design.

**Expected Precision**

Given the variance estimation formula above, estimates of variance stratum by stratum are needed to calculate the expected precision. These estimates can be derived from TRISS base year historical variance when the study is underway.

# A.4   Effective Sample Size

Effective sample size for a statistic is the simple random sample (SRS) sample size that would yield the same sampling variance as achieved by the actual design.

Effective sample size  $n_{eff} = \dfrac{n}{deff}$  , where  $deff = \dfrac{var(\bar{x})}{var_{srs}(\bar{x})}$

The *deff* is referred to as the design effect. It is a widely used tool in survey sampling in summarizing the effect of stratification and/or cluster design features. It is defined to be the ratio of the sampling variance for a statistic computed under the actual sample design (in our case,  $(\bar{x})$ ) divided by the sampling variance that would have been obtained from an SRS (simple random sampling) of exactly the same size ($var_{srs}(\bar{x})$). The stratified sampling design is efficient compared with a simple random sampling design, because the design effect might be smaller than 1 depending on the homogeneity within each stratum in terms of a particular survey variable.

# A.5   Weighting Plans
## A.5.1  Patient Mix Adjustment

To facilitate comparison of hospitals HCAHPS developed an algorithm to adjust scores, referred to as patient mix adjustment. The adjustment is designed to yield the most comparable satisfaction measures by simultaneously eliminating differences between the patient mix of hospitals and the way in which the hospital surveyed their patients (mode). The algorithm covers only the 10 items which are considered the HCAHPS measures. Those include

- Overall Hospital Rating
- Recommend the Hospital
- Communication about Doctors (composite)
- Communication about Nurses (composite)

- Communication About Medicines (composite)
- Discharge Information (composite)
- Pain Management (composite)
- Responsiveness of Hospital Staff (composite)
- Cleanliness of Hospital Environment
- Quietness of Hospital Environment

For each measure the unadjusted percent satisfied is computed using the HCAHPS criterion for that measure. In general the HCAHPS criterion is the "top box" such as "Always" for the composites; "Yes" for Discharge Information; "9" or "10" for Overall Hospital Rating; and "Definitely Yes" for Recommend the Hospital. To measure dissatisfaction the algorithm can also be applied to the "bottom" box on each of these measures.

The algorithm adjusts the demographic distribution for each Hospital on its sample's distribution of Education, Self-rated Overall Health, Non-English Language, Age, Product Line, Product Line by Age, Lag time (Response Percentile) to match the corresponding national mean/percentage. National means/percentages come from the latest available version of Table 3 from www.hcahpsonline.org.

For each measure the algorithm adds or subtracts a weighted percent for each of the demographic categories. They are based on a logistic regression analysis and estimated with a linear model. The latest available version from Table 1 was used from www.hcahpsonline.org.

All TRISS interviews are conducted with mailed questionnaires and follow up telephone call when needed. The "mixed" mode adjustment was used to account for the mode differences.

The HCAHPS algorithm normally applies a final adjustment of averaging scores across the last four quarters. This method is used for the TRISS Report of Findings. The user can optionally choose this by rolling four quarters together. If a single quarter is selected the score is not averaged.

More detail on the patient mix adjustment algorithm can be found on www.hcahpsonline.org. The patient mix adjustment is only applicable to hospital and higher units of analysis. It is not designed to be applied to sub units such as Product Lines. Applications to levels lower than the hospital should be viewed and translated with caution.

Patient mix adjusted scores will be available for MTFs, though they will not be available below the Parent-MTF level. For PC, patient mix adjusted scores will be available only for the TRICARE Regions. Each region will be treated as a unit. Analogously for DC, each Service will be treated as a unit. And for MHS-Wide, adjustment will consist of a single unit. All patient mix adjusted scores will only be available for the ten HCAHPS Measures.

## A.5.2 Traditional Weighting Strategy

The nature of MHS data is unique and there are known response biases among various age groups, beneficiary categories, and other subpopulations reflected in MHS data. Patient mix adjustment is based on specific subgroups and is not always feasible for subgroups of interest in this population, for example, beneficiary category and Product Line. When patient mix adjustment was not feasible, weighting methodology was used to control for these biases using a three step weighting process.

### A.5.2.1 Base Weights

The inverse of selection probability of each respondent was calculated as the base weight for each respondent, which is the inverse of (stratum sample size / stratum population size)

### A.5.2.2 Nonresponse weighting

SUDAAN's WTADJUST procedure was used, which regresses response participation variable (1 for response, 0 for nonresponse) on all variables existing for both respondents and nonrespondents to find the significant response predictors. Then a response propensity model is constructed. The nonresponse adjustment for each respondent is the predicted response probabilities computed from the model.

### A.5.2.3 Post-stratification

The raking scheme of SUDAAN's WTADJUST procedure was used to correct the potential under-coverage of the sampling frame. The process uses an iterative adjustment algorithm called iterative proportional fitting. The algorithm adjusts the sample weights such that the sample distribution matches the MHS region population distribution, it then adjusts weights to match the gender and age population distribution, and finally it adjusts the weights to match the beneficiary category population distribution. Since the last adjustment to weights may have caused the gender or age distribution to no longer match the population distribution, the process is repeated until there is negligible change in the weights. It has been shown that using this algorithm converges to the joint distribution of MHS region by age by sex by beneficiary category. This process is repeated each month. The algorithm uses the actual percent of users for MHS region, the beneficiary categories, age categories, gender, etc., for the month of sampling.

For DC, post-stratification weights were calculated for age, beneficiary category, and service branch affiliated with MTFs. PC weighting presented more of a challenge. PC facilities were originally selected based on the average number of monthly inpatient records and were not intended to represent all civilian network facilities. Therefore, weights for PC respondents were adjusted to match the population distribution of the 67 facilities originally selected for inclusion and were calculated for age, gender, beneficiary category, and TRICARE region.

**Summary of Weighting Process**

| Weighting Component | Direct Care | Purchased Care |
|---|---|---|
| Sampling Weight | (# MTF admissions) (MTF sample size) | (# hospital admissions) (hospital sample size) |
| Non-response Weight | Logistic regression model (marital status) | Logistic regression model (marital status) |
| Post-Stratification Weight | Uses "raking" algorithm (through SUDAAN) to approximate subtotals for the following variables: Age (<65 years, 65 years and over) Beneficiary category (Active Duty, Reserve/Guard, Dependents of AD and R/G vs. all other) MTF Service branch (Army, Navy, Air Force) | Uses "raking" algorithm (through SUDAAN) to approximate subtotals for the following variables: Age (<65 years, 65 years and older) Gender Beneficiary category (Active Duty, Reserve/Guard, Dependents of AD and R/G vs. all other) Facility TRICARE region (North, South, West) |

The aggregated weights for each respondent is Base weight * Nonresponse weight * Post-stratification weight.

## A.6 Composites and Composite Score Calculation

A composite is an overall score or rating, created by combining scores from subset questions that measure particular areas of the overall domain. There are currently six Composites that measure different domains of satisfaction on the TRISS. These are standard measures created by HCAHPS to ensure comparability of satisfaction assessments. The six Composites include:

**Communications with Nurses** – This composite focuses on questions relating to how well nurses communicate. This composite is composed of three questions (Q1, Q2, and Q3): how often nurses treated you with courtesy and respect; how often nurses listened carefully to you; and how often nurses explained things in a way you could understand.

**Communications with Doctors** – This composite focuses on questions relating to how well doctors communicate. This composite is composed of three questions (Q5, Q6, and Q7): how often doctors treated you with courtesy and respect; how often doctors listened carefully to you; and how often doctors explained things in a way you could understand.

**Responsiveness of Hospital Staff** – This composite focuses on questions relating to the courtesy and helpfulness of hospital staff. This is composed of two questions (Q4 and Q11): how often you got help as soon as you wanted it after pressing the call button & how often you got help in getting to the bathroom, or in using a bedpan as soon as you wanted.

**Pain Management** – This composite focuses on questions relating to the management of pain. This is composed of two questions (Q13 and Q14): how often your pain was well controlled & how often the hospital staff did everything they could to help you with your pain.

**Communication about Medicines** – This composite focuses on questions relating to communication by the hospital staff regarding medications. This is composed of two questions (Q16 and Q17): how

often the hospital staff told you what the medicine was for & how often hospital staff described possible side effects in a way you could understand.

**Discharge Information** – This composite focuses on questions relating to receiving adequate information about discharge. This is composed of two questions (Q19 and Q20): did hospital staff talk with you about whether you would have the help you needed when you left the hospital & did you get information in writing about what symptoms or health problems to look out for after you left the hospital.

In addition to these six HCAHPS-based composites, two individual questions are benchmarked by HCAHPS, including:

**Cleanliness of Hospital Environment** – Q8: During this hospital stay, how often were your room and bathroom kept clean?

**Quietness of Hospital Environment** – Q9: During this hospital stay, how often was the area around your room quiet at night?

Composites are calculated using the responses from all of the questions contained in the composite. The proportion of favorable responses corresponding to the proportion of respondents answering "always" is calculated.

The formal method of calculating the proportions is as follows –

$Xi$ = 100, if respondent answered "always

    = 0, if respondent answered "never", "sometimes", or "usually".

$Ii$ = 1, if response is not missing for level of reporting

  = 0, if response is missing for level of reporting

$wi$ = Sampling weight

The estimator for P1 is $$\dfrac{\sum_{i=1}^{n} w_i X_i I_i}{\sum_{i=1}^{n} w_i I_i}.$$

Proportions are then combined from the individual questions to form the composite using the following equation:

C = Composite proportion = (Proportion 1 + Proportion 2 +…..) / (number of questions in the composite)

This means that each question is equally important to the composite.

# A.7 Benchmarks

The TRISS study is designed to facilitate the comparison of healthcare delivered to inpatient beneficiaries of TRICARE. Hospitals are the basic focus. TRISS includes all major hospitals providing inpatient healthcare in the MHS, as well as the 73 highest-volume non-military hospitals providing PC to TRICARE beneficiaries. In addition to following HCAHPS protocols and CMS guidelines TRISS also facilitates comparison of hospitals by including CMS benchmarks, which are designed to be only a basis for comparison. The CMS Benchmarks are the national averages of all major hospitals participating in the CMS database. The database houses the data for all participating hospitals. The CMS Benchmarks are available for the ten measures designated as the Composites and Individual Items. CMS publishes both the Satisfaction and Dissatisfaction national averages. The averages listed below are those available for FY2013 Q1, at the time of the last quarter included in this annual report. These come from the CMS Database.

| Composites and Individual Items | National Satisfaction Average | National Dissatisfaction Average |
|---|---|---|
| Overall Hospital Rating | 69% | 8% |
| Recommend Hospital | 70% | 5% |
| Communication with Nurses | 78% | 5% |
| Communication with Doctors | 81% | 4% |
| Responsiveness of Hospital Staff | 66% | 10% |
| Pain Management | 70% | 7% |
| Communication About Medicines | 63% | 19% |
| Discharge Information | 84% | 16% |
| Cleanliness of Hospital Environment | 73% | 9% |
| Quietness of Hospital Environment | 60% | 11% |

# Appendix B: Survey Instrument

## TRICARE Inpatient Satisfaction Survey

### Survey Instructions

- You should only fill out this survey if you were the patient during the hospital stay named in the cover letter. Do not fill out this survey if you were not the patient.
- Answer <u>all</u> the questions by checking the box to the left of your answer.
- You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

&#9746; Yes
&#9746; No ➔ *If No, Go to Question 1*

According to the Privacy Act of 1974, as amended, the Department of Defense is required to inform you of the purposes and use of this survey. Please read this Privacy Act Statement carefully.

**AUTHORITY:** 10 U.S.C. 136, Under Secretary of Defense for Personnel and Readiness; 10 U.S.C. 1071 (NOTE), Annual Beneficiary Survey; 10 U.S.C. Chapter 55, Medical and Dental Care; 42 U.S.C. 11131-11152, Health Care Improvement Act of 1986; 32 CFR 199.16, TRICARE Program; and DoDD 6025.13, Medical Quality Assurance (MQA) in the Military Health System (MHS).

**PURPOSE:** The information collected in this survey helps health policy makers gauge beneficiary satisfaction with inpatient care within the Military Health System's direct care and the purchased care network facilities. Responses will be used to facilitate beneficiary comparisons of hospitals, guide Military Treatment Facility quality improvement efforts, and improve the Military Health System.

**ROUTINE USES:** None

**DISCLOSURE:** Voluntary. Failure to respond will not result in any penalty to the respondent. However, maximum participation is encouraged so that data will be as complete and representative as possible.

*Please answer the questions in this survey about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.*

### YOUR CARE FROM NURSES

**1. During this hospital stay, how often did nurses treat you with <u>courtesy and respect</u>?**

&#9746; Never
&#9746; Sometimes
&#9746; Usually
&#9746; Always

**2. During this hospital stay, how often did nurses <u>listen carefully to you</u>?**

&#9746; Never
&#9746; Sometimes
&#9746; Usually
&#9746; Always

**3. During this hospital stay, how often did nurses <u>explain things</u> in a way you could understand?**

&#9746; Never
&#9746; Sometimes
&#9746; Usually
&#9746; Always

**4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?**

&#9746; Never
&#9746; Sometimes
&#9746; Usually
&#9746; Always
&#9746; I never pressed the call button

### YOUR CARE FROM DOCTORS

**5. During this hospital stay, how often did doctors treat you with <u>courtesy and respect</u>?**

&#9746; Never
&#9746; Sometimes
&#9746; Usually
&#9746; Always

**6. During this hospital stay, how often did doctors <u>listen carefully to you</u>?**

&#9746; Never
&#9746; Sometimes
&#9746; Usually
&#9746; Always

7. During this hospital stay, how often did doctors <u>explain things</u> in a way you could understand?

☒ Never
☒ Sometimes
☒ Usually
☒ Always

### THE HOSPITAL ENVIRONMENT

8. During this hospital stay, how often were your room and bathroom kept clean?

☒ Never
☒ Sometimes
☒ Usually
☒ Always

9. During this hospital stay, how often was the area around your room quiet at night?

☒ Never
☒ Sometimes
☒ Usually
☒ Always

### YOUR EXPERIENCES IN THIS HOSPITAL

10. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?

☒ Yes
☒ No ➔ *If No, Go to Question 12*

11. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?

☒ Never
☒ Sometimes
☒ Usually
☒ Always

12. During this hospital stay, did you need medicine for pain?

☒ Yes
☒ No ➔ *If No, Go to Question 15*

13. During this hospital stay, how often was your pain well controlled?

☒ Never
☒ Sometimes
☒ Usually
☒ Always

14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?

☒ Never
☒ Sometimes
☒ Usually
☒ Always

15. During this hospital stay, were you given any medicine that you had not taken before?

☒ Yes
☒ No ➔ *If No, Go to Question 18*

16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?

☒ Never
☒ Sometimes
☒ Usually
☒ Always

17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

☒ Never
☒ Sometimes
☒ Usually
☒ Always

### WHEN YOU LEFT THE HOSPITAL

18. After you left the hospital, did you go directly to your own home, to someone else's home, or to another health facility?

☒ Own home
☒ Someone else's home
☒ Another health facility ➔ *If Another, Go to Question 21*

19. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?

☒ Yes
☒ No

20. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

☒ Yes
☒ No

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## OVERALL RATING OF HOSPITAL

*Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.*

21. **Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?**

    - ☒ 0 Worst hospital possible
    - ☒ 1
    - ☒ 2
    - ☒ 3
    - ☒ 4
    - ☒ 5
    - ☒ 6
    - ☒ 7
    - ☒ 8
    - ☒ 9
    - ☒ 10 Best hospital possible

22. **Would you recommend this hospital to your friends and family?**

    - ☒ Definitely no
    - ☒ Probably no
    - ☒ Probably yes
    - ☒ Definitely yes

## YOUR HEALTH CARE

*The next few questions cover some topics specifically about your experience during your recent hospital stay.*

23. **For this stay, were you admitted to the hospital for childbirth (including C-section), a surgical procedure or operation, or another medical condition or illness?**

    - ☒ Childbirth (including C-section)
    - ☒ Surgical procedure or operation
    - ☒ Another medical condition or illness
    - ☒ I don't know

24. **During this hospital stay, how often did staff check your identification before taking your blood, starting your IV or giving you medicine(s), even over the counter medicines like Tylenol® or ibuprofen?**

    - ☒ Never
    - ☒ Sometimes
    - ☒ Usually
    - ☒ Always
    - ☒ I did not have blood taken, have an IV or get any medicine(s)

25. **During this hospital stay, how often did you see staff wash or otherwise sanitize their hands or use gloves before treating or checking you?**

    - ☒ Never
    - ☒ Sometimes
    - ☒ Usually
    - ☒ Always
    - ☒ I was not treated or checked by staff

26. **During this hospital stay, did you feel that there was at least one <u>doctor</u> who had an understanding of your condition and treatment?**

    - ☒ Definitely yes
    - ☒ Somewhat yes
    - ☒ Somewhat no
    - ☒ Definitely no

27. **During this hospital stay, how often did <u>doctors or surgeons</u> involve you as much as you wanted in decisions about treatment?**

    - ☒ Never
    - ☒ Sometimes
    - ☒ Usually
    - ☒ Always
    - ☒ I did not want to be involved in decisions
    - ☒ There were no decisions about treatment during my hospital stay

28. **During this hospital stay, how often did <u>doctors</u> treat your family or close friend with courtesy and respect?**

    - ☒ Never
    - ☒ Sometimes
    - ☒ Usually
    - ☒ Always
    - ☒ I did not have visits from family or a close friend

29. **During this hospital stay, how often did <u>nurses</u> treat your family or close friend with courtesy and respect?**

    - ☒ Never
    - ☒ Sometimes
    - ☒ Usually
    - ☒ Always
    - ☒ I did not have visits from family or a close friend

30. **During this hospital stay, how often did <u>doctors, nurses and other hospital staff</u> make sure that you had privacy when they took care of you or talked to you?**

    - ☒ Never
    - ☒ Sometimes
    - ☒ Usually
    - ☒ Always

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**31. During this hospital stay, did hospital staff teach you what you needed to know to take care of yourself after you left the hospital?**

- ☒ Definitely yes
- ☒ Somewhat yes
- ☒ Somewhat no
- ☒ Definitely no

**32. During this hospital stay, when <u>doctors, nurses or other hospital staff</u> first came to your room, how often did they introduce themselves?**

- ☒ Never
- ☒ Sometimes
- ☒ Usually
- ☒ Always

**33. Before you left the hospital, did you receive information in writing about what activities you could and could not do?**

- ☒ Yes
- ☒ No
- ☒ I did not have any limitations in my activities

**34. If you were told to take any medicine at home that you had not taken before this hospital stay, did you receive information in writing before you left the hospital about how to take this medicine?**

- ☒ Yes
- ☒ No
- ☒ I was not told to take any medicine at home that I had not taken before

**35. If you were in the hospital for childbirth, did someone on the hospital staff talk with you about the signs and symptoms of postpartum depression before you left the hospital?**

- ☒ Yes
- ☒ No
- ☒ I was not in the hospital for childbirth

### ABOUT YOU

**36. In general, how would you rate your overall health?**

- ☒ Excellent
- ☒ Very good
- ☒ Good
- ☒ Fair
- ☒ Poor

**37. What is the highest grade or level of school that you have <u>completed</u>?**

- ☒ 8th grade or less
- ☒ Some high school, but did not graduate
- ☒ High school graduate or GED
- ☒ Some college or 2-year degree
- ☒ 4-year college graduate
- ☒ More than 4-year college degree

**38. Are you of Spanish, Hispanic or Latino origin or descent?**

- ☒ No, not Spanish/Hispanic/Latino
- ☒ Yes, Puerto Rican
- ☒ Yes, Mexican, Mexican American, Chicano
- ☒ Yes, Cuban
- ☒ Yes, other Spanish/Hispanic/Latino

**39. What is your race? Please choose one or more.**

- ☒ White
- ☒ Black or African American
- ☒ Asian
- ☒ Native Hawaiian or other Pacific Islander
- ☒ American Indian or Alaska Native

**40. What language do you <u>mainly</u> speak at home?**

- ☒ English
- ☒ Spanish
- ☒ Chinese
- ☒ Russian
- ☒ Vietnamese
- ☒ Some other language (please print):

_____

### COMMENT

**41. Tell us more! If there is anything else we can do to improve our health care services to you, or if you would like to explain your answers further, please attach a separate sheet with your comments and ideas.**

_____
_____
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_____

**THANK YOU**
**Please return the completed survey in the postage-paid envelope.**

TRICARE Inpatient Satisfaction Survey
Survey Operations
PO BOX 5720
Hopkins, MN 55343

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Data Recognition Corp.-2G0463-11427-54321

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# Appendix C: MTF Best Practices-MTF-Specific Findings

Staff members at four MTFs, which scored highly on the TRISS, were interviewed for their best practices. The four MTFs were Fort Belvoir Community Hospital, Naval Hospital Pensacola, San Antonio Military Medical Center, and Wright-Patterson Medical Center. Findings from those interviews are summarized and included in this appendix.

# C.1 Fort Belvoir Community Hospital



**Location**
National Capital Region

**Distinction**
Fort Belvoir Community Hospital was one of the top ranked MTFs by patients who gave a rating of 9 or 10 out of 10 when asked how they would rate the hospital overall, from January to December 2012. To be included, hospitals must have reported at least 70 surveys.

**Purpose/Methods**
The objective was to gain insights into best practices and MTF initiatives focusing on improving patient satisfaction and the patient experience. We sought recommendations from staff of high-performing facilities to assist other MTFs in improving their patient satisfaction scores. The interviews addressed any current use of TRISS or satisfaction data within the MTF; perceptions on MTF characteristics that may be positively influencing patient satisfaction; and discussion of training, initiatives, efforts, and activities targeted toward improving patient experience or satisfaction with the MTF. We also discussed best practices targeted toward improving the satisfaction of Maternity Care patients. We used insights from the discussions to recommend approaches MTFs can use to improve their patient satisfaction scores.

The data collection activities consisted of interviews with MTF leadership and staff, senior officials such as MTF commanders, MTF providers, patient affairs representatives, quality control/assurance personnel, chief nurses and chiefs of staff and other MTF representatives able to speak to patient experience initiatives. The interviews were completed in June and July 2013 at four MTFs: Fort Belvoir Community Hospital, Wright-Patterson Medical Center/88th Medical Group, San Antonio Military Medical Center, and Naval Hospital Pensacola.

**Philosophy and Attitude toward Patient Satisfaction**
Fort Belvoir Community Hospital (FCBH) places considerable value on the satisfaction of its patients. Recently moved into a new facility, Colonel Callahan cites the reorganization and facility change as an opportunity for staff and leadership to start fresh. The guiding principles that drive FCBH to deliver safe, quality, and compassionate care are a Culture of Excellence, Patient- and Family-Centered Care, and Evidence-Based Design. As Colonel Callahan related, at FCBH "Patient-centered care meets evidence-based design with a culture of excellence."

**Monitoring of Patient Satisfaction and Use of Satisfaction Data**
FBCH actively collects, monitors, and reports on patient satisfaction and patient concerns/feedback. Patient experience data are collected via satisfaction surveys or patient feedback forms (collected in-

person at discharge or via email, mail, or telephone). Results of the surveys and the details of the comments are then entered into a database for analysis and reporting. FBCH recently implemented a new program conducted by the Hospitality department. Hospitality staff randomly survey about 85 patients per week, asking them a series of questions about their experience and satisfaction. Interviewees reported that FBCH also uses TRISS data, discussing and sharing the quarterly updated results with leadership and nursing staff. Leadership at FBCH are involved in assessing options for further dissemination of TRISS results to patients and other staff, perhaps through their Facebook page or the facility website. FBCH communicates with patients via Facebook and Twitter, and captures data from these sources for their database as well.

## Medical-Surgical Promising Practices

FBCH offers staff customer service training through a couple of methods. First Team Training is conducted twice a month by the Customer Relations Department and offered at other times in a format tailored to address specific needs. This program has been in place about one year. Interviewees also discussed the effectiveness of Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS)2, military-wide annual clinical and non-clinical customer service training. The goal of TeamSTEPPS is to produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for patients. This is initially provided to everyone in the hospital but "boosters" or scenario-specific training is available for units who have identified needs. Content of both of the programs was adopted into FBCH's Professional Standards Guide.

FBCH has implemented many initiatives addressed at improving the experience of their patients and improving the quality of patient care. Several initiatives focus on ensuring the patient is informed and involved in their care. For example, the PERT (Patient Education Resources Team) reviews information patients receive with the patients, to ensure they understand and have an opportunity to ask questions. There are embedded pharmacists on the floors to educate staff and patients. Regular multi-disciplinary rounds include the nurse and pharmacist. Additionally, shift-change reports are conducted at the patient's bedside. Following discharge, unit nurses conduct call-backs within 24 hours for patients at high-risk for readmission.

Patient-centered care is important and taken seriously by the leadership and staff at FBCH. Open visitation is the norm, where families are welcome to stay with patients throughout their stay. Family is always considered to be whomever the patient says. Patient rooms are single occupancy only, and include a pull-out sofa and living and family zones. Patient rooms have defined spaces for staff and patients.

Moving to a hotel-like model, FBCH provides open seating within the hospital, imparts warmth in design and décor, with inviting colors and themed wings "somewhat like a Disney concept." Clutter is minimized through reducing visibility of equipment and staff to "behind-the-scenes," reserving the front areas for patients and family. Way-finding elements are streamlined to focus on key aspects and prominently displayed for easy visualization. Greeters are happily stationed at every door to welcome and direct patients, families, and guests.

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2 TeamSTEPPS was developed by the Department of Defense (DoD) Patient Safety Program (PSP), in collaboration with the Department of Health & Human Services' Agency for Healthcare Research and Quality (AHRQ), and is scientifically rooted in over 20 years of research and lessons learned from the application of teamwork principles identified in Crew Resource Management (CRM) and within High Reliability Organizations (HROs).

Further establishing an at-home feeling, FCBH provides unit family kitchens, patient-controlled lighting and temperature, Wi-Fi, and natural lighting, where possible, in patient rooms. Units are designed to be noise-reducing, with bending wings, carpet, and physical dividers in patient rooms. FBCH also ensures that rooms look out onto greenery or pleasing architecture, and ensure all visible roofs are planted. Meals are also very patient-friendly, with "room service" available 24 hours a day and accessed via phone in patient rooms.

Additional initiatives and resources include unit-based practice counseling, which allows units to share information with one another. Peer feedback, particularly by nurses and focused on clinical practice, is common and standard. In cases where a patient or family member has a concern or issue, the patient representative aims to respond within 72 hours if not earlier. Discharge planning is begun no later than 72 hours after admission, though in most cases it is within 24 hours. Finally, interviewees reported the importance of Vocera, a wearable, hands-free, voice-controlled device, which allows providers to communicate with each other at any time throughout the hospital. It has been an important component of care delivery and complaint resolution.

Leadership at FBCH realizes the importance of a happy staff and has taken initiatives to promote the satisfaction and well-being of their staff. FCBH adopted a friendly facility design model, where units were designed to be staff-friendly, equipment and supplies are located in convenient locations, and related units are co-located. There are welcoming break areas and open gardens to relax in as well as exercise and walking areas for staff. Cafeterias provide healthy and delicious food, so much so that base staff like to drop by for meals!

**Obstetric Promising Practices**
On selecting FBCH as their delivery location, expectant mothers are welcomed into the facility and provided scheduled tours of the facility and offered prenatal classes. Family is welcome to participate in all aspects of the visit, from attending the prenatal classes, to touring the facility, to being present during the delivery. Family are also encouraged to stay overnight following the delivery as all postpartum rooms are single-patient and contain showers as well as a pull-out couch. FBCH encourages lactation and operates a robust lactation program that offers classes to new mothers. On discharge, mothers are provided with a standard discharge guide informing them of expectations, symptoms, and available resources.

## C.2   Naval Hospital Pensacola



> *"If our staff isn't directly involved in supporting care, they're supporting someone who is. Everyone is responsible and dedicated to the satisfaction of our patients."*
> *-MTF staff member*

**Location**
Pensacola, Florida

**Distinction**
Naval Hospital Pensacola (NHP) was one of the top ranked MTFs by patients who gave a rating of 9 or 10 out of 10 when asked how they would rate the hospital overall, from January to December 2012. To be included, hospitals must have reported at least 70 surveys.

**Purpose/Methods**
The objective was to gain insights into best practices and MTF initiatives focusing on improving patient satisfaction and the patient experience. We sought recommendations from staff of high-performing facilities to assist other MTFs in improving their patient satisfaction scores. The interviews addressed any current use of TRISS or satisfaction data within the MTF; perceptions on MTF characteristics that may be positively influencing patient satisfaction; and discussion of training, initiatives, efforts, and activities targeted toward improving patient experience or satisfaction with the MTF. We also discussed best practices targeted toward improving the satisfaction of Maternity Care patients. We used insights from the discussions to recommend approaches MTFs can use to improve their patient satisfaction scores.

The data collection activities consisted of interviews with MTF leadership and staff, senior officials such as MTF commanders, MTF providers, public affairs representatives, quality control/assurance personnel, chief nurses and chiefs of staff and other MTF representatives able to speak to patient experience initiatives. The interviews were completed in June and July 2013 at four MTFs: Fort Belvoir Community Hospital, Wright-Patterson Medical Center/88th Medical Group, San Antonio Military Medical Center, and Naval Hospital Pensacola.

**Philosophy and Attitude toward Patient Satisfaction**
At Naval Hospital Pensacola (NHP), staff works diligently to ensure that the patient's stay is not only comfortable, but also stress-free. The culture of the hospital centers on creating a personal connection

between patients and staff, as well as among the staff members. NHP has had a patient-centered care focus for over five years and continues to strive for high patient satisfaction.

**Monitoring of Patient Satisfaction and Use of Satisfaction Data**
NHP receives satisfaction data through the Navy Bureau of Medicine and Surgery (BUMED) while NHP locally conducts an Interactive Customer Evaluation (ICE) survey as well as distributes comment cards to patients. NHP staff then looks for patterns or trends in the data and conducts quarterly briefings for the hospital Quality Council. Local reviews by product line are performed (down to the unit level) which include patient satisfaction metrics. They also pass results on to the hospital Executive Board and medical committee staff. Positive comments are sent out to unit leaders for individual recognition. At the unit level, customer relations staff tailors training to address patient needs identified in the comment cards.

**Medical-Surgical Promising Practices**
NHP offers staff monthly computer-based training through Swank Health Care[3], covering communication skills, internal/external customers, complaint resolution, and best strategies for customer service among other subjects. There is also an online customer service module offered through Navy Knowledge as well as an hour-long Service with Excellence training session.

NHP also enlisted Studer Group to train leadership. Studer Group "partners with organizations to create an aligned, energized, and empowered workforce focused on providing the highest levels of patient quality.[4]" This alliance focused on five main components in the process of patient care while using the TRISS to assess impacts: (1) acknowledging what's expected, (2) teaching staff to properly introduce themselves to patients with each visit, (3) establishing the expected duration of care, (4) providing explanations and answering questions, and (5) thanking the patient for choosing NHP.

NHP has implemented many initiatives addressed at improving the experience of their patients and improving the quality of patient care. Some key practices include:

- Staff "huddles" with patients to involve them in discussion regarding their care;
- Multidisciplinary rounds to avoid miscommunication between members of the care team;
- A low staff-to-patient ratio to ensure individual attention;
- Active use of the white board in each patient's room, which details goals for the day, patient concerns, provider names, etc.;
- Promote provider continuity by assigning the same providers throughout the patient's stay; and
- Hourly rounds to minimize patients' need for the use of the call bell.

NHP is committed to a personalized culture of patient-centered care and take spiritual and cultural beliefs into account with the food provided. They also have a chapel and two chaplains available to patients. Additionally, prior to a patient's discharge, a pharmacist meets personally with the patient to discuss their medications. Once discharged, a Nurse/Clinical Educator/Charge Nurse makes post-discharge calls to patients at home on the second or third day.

NHP believes that if staff is not directly involved in supporting care of a patient, then they are supporting someone who is. Because of this, it is important to them to promote staff satisfaction as well as patient satisfaction. Therefore, NHP recognizes outstanding staff and created several award programs:

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[3] https://www.swankhealth.com/Military/tabid/1411/Default.aspx?ssid=c85f0b63-2eea-426b-ac09-6ef0ed70b3db
[4] https://www.studergroup.com/what-we-do/coaching/ retrieved on 8/12/2013

- E3 Award – Exceeding Expectations Everyday
- Good Catch Award
- Provider Spotlight Award
- Gotcha Award – staff recognizing staff

NHP has also adopted concepts from the Institute for Healthcare Improvement (IHI) as well as the Agency for Healthcare Research and Quality (AHRQ) Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS)[5] program, a teamwork system designed for healthcare professionals to improve communication and teamwork skills to increase patient safety[6]. The goal of TeamSTEPPS is to produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for our patients. NHP was awarded the MHS Patient Safety award in 2011 for partnering with patients.

**Obstetric Promising Practices**
NHP has implemented several practices to improve patient satisfaction during birthing. They distribute a welcome guide for patients with an overview of the hospital and information about amenities, resources and other key resources. NHP provides:

- Single-room maternity care (Labor, Delivery, Recovery, and Postpartum (LDRP)) with refrigerators and sinks in the room;
- The opportunity to have a doula (labor coach); and
- Birthing balls, intermittent monitoring, telemetry, an option for the newborn to stay with the moms overnight, extra assistance to new moms (baby/wheelchair and baggage assistance as well as car checks at discharge), new parent support, and case management.

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[5] TeamSTEPPS was developed by the Department of Defense (DoD) Patient Safety Program (PSP), in collaboration with the Department of Health & Human Services' Agency for Healthcare Research and Quality (AHRQ), and is scientifically rooted in over 20 years of research and lessons learned from the application of teamwork principles identified in Crew Resource Management (CRM) and within High Reliability Organizations (HROs).

[6] https://www.teamstepps.ahrq.gov/about-2cl_2.htm  retrieved on 8/12/2013

## C.3   San Antonio Military Medical Center



**Location**
Fort Sam Houston, Texas

**Distinction**
San Antonio Military Medical Center (SAMMC) was one of the top-ranked MTFs by patients who gave a rating of 9 or 10 out of 10 when asked how they would rate the hospital overall, from January to December 2012. To be included, hospitals must have reported at least 70 surveys.

*"Patient care is a way of life – staff takes initiative to help patients. Command influence and culture contribute to this. Everyone wants the best for patients."*
*– MTF staff member*

**Purpose/Methods**
The objective was to gain insights into best practices and MTF initiatives focusing on improving patient satisfaction and the patient experience. We sought recommendations from staff of high-performing facilities to assist other MTFs in improving their patient satisfaction scores. The interviews addressed any current use of TRISS or satisfaction data within the MTF; perceptions on MTF characteristics that may be positively influencing patient satisfaction; and discussion of training, initiatives, efforts, and activities targeted toward improving patient experience or satisfaction with the MTF. We also discussed best practices targeted toward improving the satisfaction of Maternity Care patients. We used insights from the discussions to recommend approaches MTFs can use to improve their patient satisfaction scores.

The data collection activities consisted of interviews with MTF leadership and staff, senior officials such as MTF commanders, MTF providers, public affairs representatives, quality control/assurance personnel, chief nurses and chiefs of staff and other MTF representatives able to speak to patient experience initiatives. The interviews were completed in June and July 2013 at four MTFs: Fort Belvoir Community Hospital, Wright-Patterson Medical Center/88th Medical Group, San Antonio Military Medical Center, and Naval Hospital Pensacola.

**Philosophy and Attitude toward Patient Satisfaction**
SAMMC is committed to patient satisfaction and believes patient care is a way of life. Recently moved into a new facility, the staff is dedicated to making patients' stays as comfortable as possible. Their philosophy is to let their patients know they are the best and earn their trust by showing them they care. San Antonio has historically been a military city and SAMMC staff believes this has prepared them to offer military and dependents the best care possible. There is a pride in the care given at SAMMC expressed as follows: "The people who have worked here for many years have made their mark on medicine and the military – the people who work here are as proud as people at the Mayo Clinic, etc. We may not be staffed or resourced the same way, but the caliber is as good as those clinics."

**Monitoring of Patient Satisfaction and Use of Satisfaction Data**
Health care providers and administrators get information from the Army Patient Level Satisfaction Survey (APLSS), as well as conducting a local Interactive Customer Evaluation (ICE) survey and a Labor and Delivery (L&D) survey. ICE is available online or at the kiosks located throughout the MTF (about 15 to 20 ICE kiosks are located throughout the facility). Data are also collected through the Patient Assistance Reporting System (PARS), which collects complaints, issues, and compliments and forwards them to each department. APLSS and PARS scores and trends are reviewed monthly. SAMMC also has AWICKETS, a program focused on improving the experience of our wounded warriors. AWICKETS provides an ombudsman who works with wounded warriors and is a liaison between family members and the hospital for any concerns that the family wants to address.

SAMMC uses the comments from these resources to identify continuity-of-care and patient-satisfaction issues. Data are reported monthly to department chiefs. In obstetrics, these issues are then addressed twice daily at a gathering of physicians and nurses to discuss current patients and the status of their care. SAMMC uses social media to give patients an additional option for passing along messages or kudos to the hospital (they currently have about 5,000 followers on Facebook).

**Medical-Surgical Promising Practices**
SAMMC has implemented many initiatives addressed at improving the experiences of their patients and improving the quality of patient care. They offer customer relations training twice monthly, which is required on hire and annually as a refresher for all employees. This training reviews courtesy and respect through a variety of scenarios. They also offer Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS)[7] annual training, a teamwork system designed for healthcare professionals to improve communication and teamwork skills to increase patient safety[8]. The goal of TeamSTEPPS is to produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for patients. SAMMC also participates in Patient Care and Touch – an Army-wide program designed to build skills and values as well as improve performance. In addition, physicians also receive annual ethics training mandated by the state of Texas. SAMMC also has a Rapid Response Team (RRT) that responds to urgent patient situations.

Aside from training programs, SAMMC has worked to make their hospital patient friendly. Nurses perform bedside reporting at shift change, which allows patients to have more input, ask questions, and feel more involved in their care. They also use white boards in patient rooms to write down concerns or questions. Nurses have beepers to increase responsiveness, and they have multi-disciplinary team meetings to discuss patients. While continuing to use intercoms, they have reduced the number of announcements made. Nurses and support staff round hourly to reduce the number of call bells, and some units are tracking the number of times patients use the call light in quality improvement efforts. Arriving and departing physician teams round with nurses and clinical specialists three times daily at shift changes. In addition, housekeeping staff clean 12 to 16 hours a day, with some visitors commenting that SAMMC is "the cleanest facility they've ever seen."

SAMMC attempts to personalize each patient's stay by allowing patients to order room service from a menu of selections, in-room temperature control, and "the biggest TVs in the DoD." Additionally,

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[7] TeamSTEPPS was developed by the Department of Defense (DoD) Patient Safety Program (PSP), in collaboration with the Department of Health & Human Services' Agency for Healthcare Research and Quality (AHRQ), and is scientifically rooted in over 20 years of research and lessons learned from the application of teamwork principles identified in Crew Resource Management (CRM) and within High Reliability Organizations (HROs).

[8] https://www.teamstepps.ahrq.gov/about-2cl_2.htm  retrieved on 8/12/2013

SAMMC offers flexible visitation, which in the new hospital is facilitated by standard sleeper recliners in each room as well as a bathroom for family members staying overnight. Most units have family refrigerators to accommodate family over-night stays. SAMMC acknowledges their double-occupancy rooms can make flexible visitation challenging at times, but the new hospital now offers many private rooms. To help visitors, SAMMC is developing uniform signage and provides a smartphone scanner program that gives directions to locations around the hospital. Supporting integrated therapies, the hospital offers biofeedback, acupuncture, Botox® for pain, physical therapy, and an on-call chaplain.

SAMMC personnel understand the importance of adequate pain management and have implemented a series of initiatives designed to improve their patients' experiences. Care providers are proactive in teaching patients about what they should expect during their stay about pain and the options they have for pain control. They have begun a pain management initiative to reassess pain levels within 59 minutes following a medication at least 97% of the time. SAMMC holds a Performance Improvement/Patient Safety (PIPS) meeting monthly to present hospital-level data about key items including pain management and try to educate patients about expectations for pain and management options. They also have an Acute Pain Service (APS) for those patients with difficult pain management, within Anesthesiology and including staff who are pain subspecialty certified.

There are also several initiatives in place to improve documentation and patient communication and streamline the process so that providers have more time to spend with patients. For example, all providers at SAMMC have laptops that allow them to show x-rays to patients in their rooms and pull-up articles about diseases when talking with the patient. Nursing staff update all care plans and resolve all issues prior to discharge. All patients receive a summary from the doctor, including medications, follow-up appointment, and instructions as well as a summary from the nurses that explains symptoms to be aware of and instructions if those symptoms occur.

For the staff, the hospital requires annual resilience training, offers a tranquility room for relaxation, massage chairs, fountains, and Reiki therapy – the process of healing using the power of energy. The medical center recently moved into a space kept exceptionally clean by an "awesome housekeeping" staff. This environment itself is a satisfier to the staff. The housekeepers likewise express satisfaction with their assignments to specific areas that they clean and take ownership and pride in maintaining these areas.

**Obstetric Promising Practices**
Staff "huddles" to discuss such things as who is on call, patients with precautions, and special diet needs. They perform multidisciplinary rounds with both Registered Nurses and medical technicians to ensure all staff members are on the same page regarding patient care. Obstetric unit charge nurses huddle before each shift change to discuss issues and plan, as well as assign a "lead nurse" to new patients. The lead nurse is assigned to the patient for most or all of their stay in an effort to promote continuity of care. SAMMC also offers the Mobile Obstetric Emergencies Simulator[9] (MOES) system and provides training once weekly for emergencies, with after-action reviews. Additionally, SAMMC aims to improve obstetric patient triage by striving to see all Emergency Room obstetric patients within 15 minutes and to move patients more quickly from the Emergency Room to the floors.

Once on the units, all patients receive a welcome packet ("Concierge Book") that lists phone numbers and amenities and explains what to expect during their stay. Nurses perform pain assessments within one hour and do standard quality reviews to ensure standards of care are being met. At shift changes, new staff members introduce themselves and establish daily goals with the patient. Both patients and families are taught how to activate the Rapid Response Team (RRT) in case of an emergency. A member of the health

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[9] http://www.gaumard.com/noelle-s555-100-moes-mobile-obstetric-emergency-simulator/

care team rounds hourly on each patient while providers will round with each patient twice daily. Administrative staff aim to answer all call bells promptly. A certified lactation nurse, available 7 days per week, rounds on all obstetric patients. "Skin-to-skin" contact for babies is highly encouraged at SAMMC. A large volunteer staff offer activities for patients (e.g. knitting, crocheting,), providing some relief from boredom and an opportunity to interact with friendly faces.

Once a patient is ready for discharge, staff schedules their follow-up appointments and provides them with a standard discharge booklet. Patients are required to attend a discharge class, offered daily by the discharge nurse. At SAMMC, there is an effort to keep patients with the same provider after discharge by pre-scheduling all follow-up appointments prior to discharge.

## C.4　Wright-Patterson Medical Center



**Location**
Wright-Patterson Air Force Base, Ohio

**Distinction**
Wright-Patterson Medical Center (WPMC) was one of the top ranked MTFs by patients who gave a rating of 9 or 10 out of 10 when asked how they would rate the hospital overall, from January to December 2012. To be included, hospitals must have reported at least 70 surveys.

*"Leadership buys-in to the importance of customer service and are committed to creating a culture of caring."*
*-MTF staff member*

**Purpose/Methods**
The objective was to gain insights into best practices and MTF initiatives focusing on improving patient satisfaction and the patient experience. We sought recommendations from staff of high-performing facilities to assist other MTFs in improving their patient satisfaction scores. The interviews addressed any current use of TRISS or satisfaction data within the MTF; perceptions on MTF characteristics that may be positively influencing patient satisfaction; and discussion of training, initiatives, efforts, and activities targeted toward improving patient experience or satisfaction with the MTF. We also discussed best practices targeted toward improving the satisfaction of Obstetrics patients. We used insights from the discussions to recommend approaches MTFs can use to improve their patient satisfaction scores.

The data collection activities consisted of interviews with MTF leadership and staff, senior officials such as MTF commanders, MTF providers, public affairs representatives, quality control/assurance personnel, chief nurses and chiefs of staff and other MTF representatives able to speak to patient experience initiatives. The interviews were completed in June and July 2013 at four MTFs: Fort Belvoir Community Hospital, Wright-Patterson Medical Center/88th Medical Group, San Antonio Military Medical Center, and Naval Hospital Pensacola.

**Philosophy and Attitude toward Patient Satisfaction**
Wright-Patterson Medical Center (WPMC) is committed to customer satisfaction and rapidly responds to meet patient needs. There is no change they would not consider to reach this goal. They aim to rally around the patient and see that all their needs are met during their stay, which in turn leads to a reduction in readmissions.

**Monitoring of Patient Satisfaction and Use of Satisfaction Data**

WPMC actively collects, monitors, and reports on patient satisfaction and patient concerns or feedback with internal inpatient and outpatient surveys on discharge or exit, which can be filled out on site, emailed, or mailed back. Staff reviews the outpatient results weekly and the inpatient results monthly. In addition, WPMC staff evaluates TRISS data weekly for trends; the patient advocate then presents these findings to the MTF leadership. In addition, squadron commanders and executive leaders share their feedback with the responsible hospital staff. Flight commanders get feedback weekly and review that data as well as the outpatient survey results. WPMC also has an active Patient Advocate program that meets weekly with the executive team and discusses trends in the data.

**Medical-Surgical Promising Practices**

WPMC has also adopted concepts from the Agency for Healthcare Research and Quality (AHRQ) Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS)[10] program, a teamwork system designed for healthcare professionals to improve communication and teamwork skills to increase patient safety[11]. The goal of TeamSTEPPS is to produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for patients. TeamSTEPPS is a regular component of on-boarding for staff and is offered monthly. The MTF also has an active simulation center where they incorporate TeamSTEPPS practices into demonstrated behaviors. As well as receiving TeamSTEPPS training, staff members receive customer service training, including reviewing patients' rights, communication, and "ways to improve on customer service."

WPMC also has several in-house initiatives to reduce fall risks including:

- Using the John Hopkins Fall Risk Assessment Tool[12] and the Humpty Dumpty Fall Scale[13] to identify patients at risk for falling in order to correct problems and ultimately prevent falls from occurring;
- Denoting patients with high fall-risk by giving them yellow non-skid socks;
- Adhering to the Falling Star program guidelines[14] where a colorful "falling star" sticker is placed over the bed and on the side of the wheelchair or assistive device of any resident identified by the interdisciplinary team as high risk. This program serves as an alert to all staff, including clinical (medical, nursing, rehabilitation, dietary and social service) as well as housekeeping, laundry, maintenance and clerical staff. The colorful star is a signal to observe the resident closely and to intervene if the resident displays any unsafe behaviors (e.g., getting up from his or her wheelchair without the necessary assist); and
- Establishing a policy that two staff members must respond to high-risk patient call bells (specifically for attending to bathroom needs).

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[10] TeamSTEPPS was developed by the Department of Defense (DoD) Patient Safety Program (PSP), in collaboration with the Department of Health & Human Services' Agency for Healthcare Research and Quality (AHRQ), and is scientifically rooted in over 20 years of research and lessons learned from the application of teamwork principles identified in Crew Resource Management (CRM) and within High Reliability Organizations (HROs).

[11] https://www.teamstepps.ahrq.gov/about-2cl_2.htm retrieved on 8/12/2013

[12] http://www.hopkinsmedicine.org/nursing/_downloads/updates_agency_nurse_faculty2011.pdf

[13] http://www.utmb.edu/policies_and_procedures/IHOP/Supporting_Documents/Humpty%20Dumpty%20Fall%20Assessment%20Scale.pdf retrieved on 8/13/2013

[14] http://www.ltlmagazine.com/article/catch-falling-star retrieved on 8/13/2013

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WPMC has implemented many initiatives addressed at improving the experience of their patients and improving the quality of patient care, including:

- "Huddles" and bedside rounds at shift change with both Registered Nurses and medical technicians and reinforce the plan of care with the patient;
- Teaching both patients and families how to activate the Rapid Response Team (RRT);
- Use of white boards in each room with the staff names and "goal of the day" clearly detailed on it; and
- Comfort rounds hourly.

WPMC teams with the Fisher House Foundation[15], which allows family members to stay close to the hospital. Staff members schedule follow-up appointments with patients prior to discharge, arrange physical therapy, have medical equipment delivered to the patient's home, and offer pet therapy. The medical center is undergoing a renovation informed by staff inputs and now offers private rooms, state-of-the-art operating rooms, and uniform signage as well as a clean, modern look.

**Obstetric Promising Practices**

WPMC offers many advances to ensure new moms are comfortable during their stay. They offer private rooms, with a delivery webcam to ensure remote family members, such as deployed fathers, can view the birth, and they offer hydrotherapy as an option for labor as well. Family typically room in with the moms overnight and are encouraged to stay (pull-out beds are available in each room). A lactation consultant is available and breastfeeding is highly encouraged. The hospital also offers transition rooms for medical procedures for babies.

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[15] http://www.fisherhouse.org/about/