

Overview and Example PI Radar Dashboard

**(Example) Memorial Medical Center
4th Calendar Quarter 2008 Report**

**Helen Macfie, Pharm.D., FABC
Senior VP, Performance Improvement
MemorialCare Medical Centers**

Provided by Beacon Collaborative
www.beaconcollaborative.org

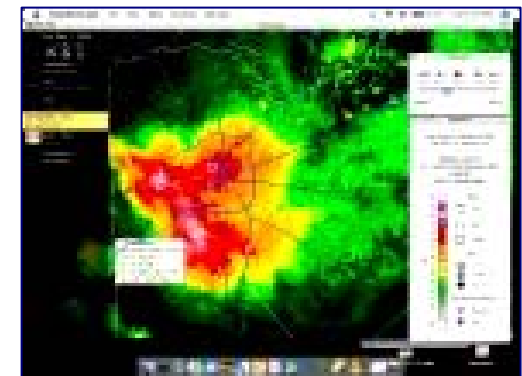
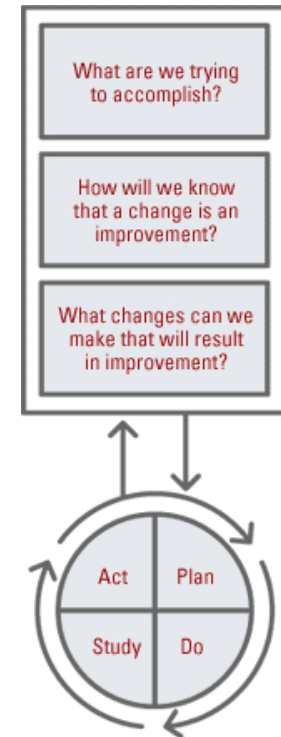
PI Dashboard Development

■ What Boards and leadership should do:

- ❖ *Understand and regularly oversee a few system-level quality measures*
- ❖ *Set specific “how good, by when” aims for improvement of these system-level measures*
 - Where are we trying to get to
 - How will we know we got there

■ Development of our “PI Radar” to:

- ❖ *Measure progress*
- ❖ *Facilitate storytelling*
- ❖ *Recognize success and opportunities for further improvement*



The PI Radar Dashboard – How It Works

■ Matches our Bold Goals

- Revised no more than annually (maintain focus for one year)
- Quarterly production, with data reflected monthly or quarterly per indicator
- On other months, review committees can then focus on a drilldown area, patient story, demonstration or other quality focus

■ Microsoft Excel – use of Radar graph

- Disparate indicators are able to be shown using “scalable segments”
- Example – Perfect Care Exceed = 100%, Target = 95%, “Average” = 80%, Below = 50% or less; whereas infections are reverse-ranked based on CDC/NHSN benchmarks

The PI Radar Dashboard – How It Works

■ The “basic inservice and interpretation”

- Can easily see movement by indicator from where we were, to where we’ve been last 12 months to most recent quarter
- allows both celebration and focus on opportunities
- If we look like Australia it’s good 😊
- Drilldown slides with “the rest of the story”
 - Total max 12-15 slides
 - Facilitates summary review and then focus depending on audience

■ Construction roles

- Excel PI Radar – system office staff
- Drilldown – data entered into Excel spreadsheet located in common shared drive by system (80%) and campus (20% staff
- PowerPoint – images imported/built by system staff, with the stories entered by campus staff
- Once final, PDF’d with “buttons” to help navigate – system staff

The PI Radar Dashboard – How It Works

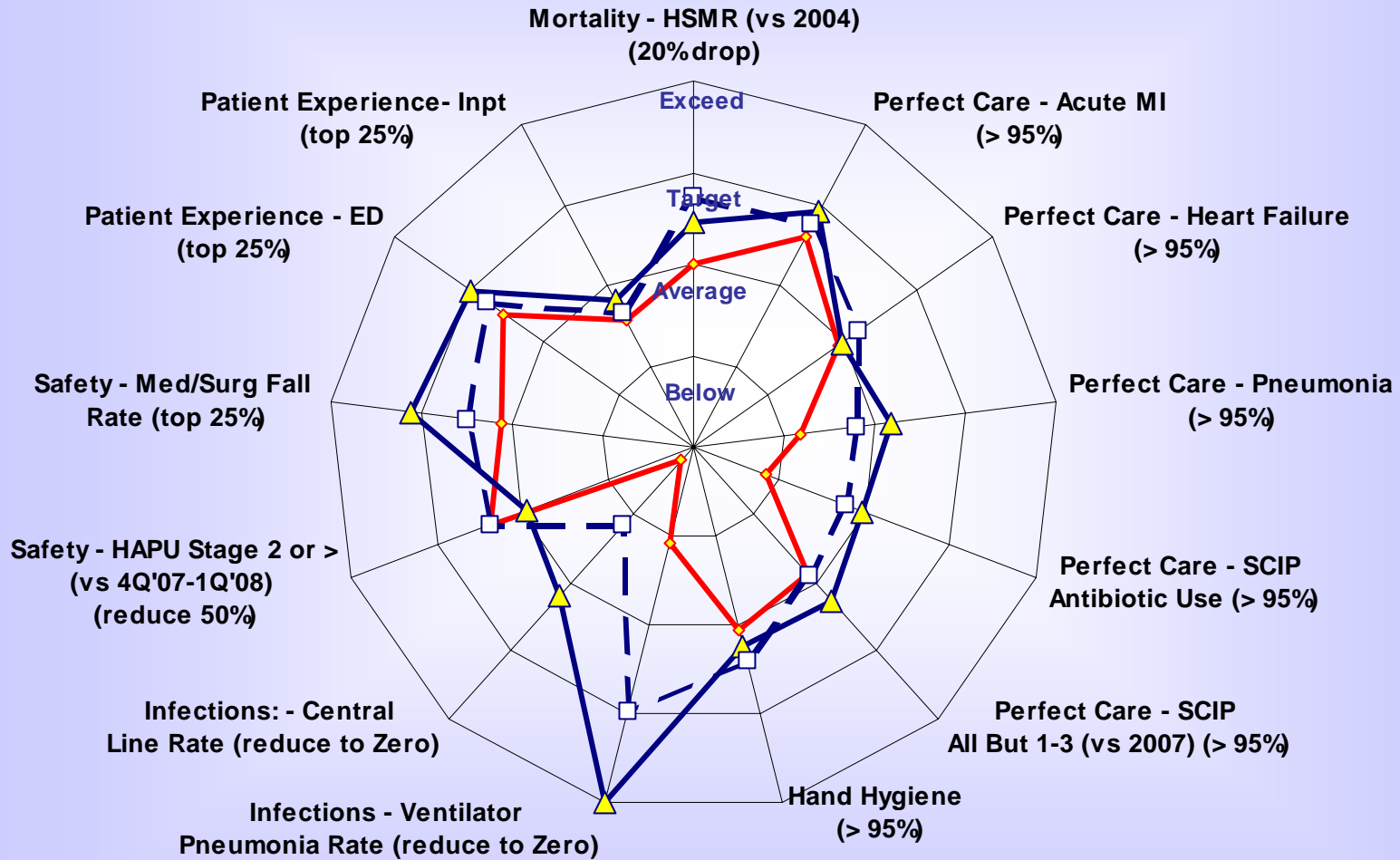
■ Show and Tell

- Either PowerPoint or PDF version can be shown
- PDF version allows hyperlinks to drilldown slides
- Road-test:
 - Hover cursor over indicator name on the PI Radar (see slide #8)
 - Will change to a hand, then click to link
 - When ready to return to Radar, simply click on “<<Back<< button
 - Or you can simply go through in order like a regular PowerPoint
- Can be shared virtually with a team (very transparent)

Performance Improvement Dashboard

Roll-Up Indicators - Memorial Medical Centers - 4CQ'08

(Reflects revised FY'09 Bold Goals and Targets)



MC Baseline (2005 where available and unless noted)

MC 4CQ08 Mean

FY'08

Bold Goal - Lives Touched

CY 2008 compared to Baseline*

Bold Goal	System	Hosp 1	Hosp 2	Peds	Hosp 4	Hosp 5
Medicare HSMR <i>Ratio MC FY'08 – by % , # Lives</i>	↓15.0% 129	↓11.1% 20	↓15.0% 44	N/A	↓7.9% 4	↓21.3% 61
Perfect Care**						
AMI by % (to %) # Lives	↑7% (92%) 86	↑2% (97%) 7	↑2% (92%) 7	N/A	↑5% (85%) 7	↑21% (91%) 65
Heart Failure by % (to %) # Lives	↑20% (82%) 380	↑10% (84%) 47	↑27% (86%) 180	N/A	↑25% (73%) 76	↑16% (79%) 77
Pneumonia: by % (to %) # Lives	↑52% (78%) 1061	↑54% (83%) 249	↑46% (71%) 335	N/A	↑54% (77%) 177	↑56% (85%) 300
SCIP 1-3: by % (to %) # Lives	↑35% (78%) 647	↑36% (71%) 153	↑40% (77%) 210	↑58% (80%) 51	↑44% (80%) 170	↑14% (84%) 62
SCIP Other: by % (to %) # Lives <i>(Note SCIP calc per sample size only)</i>	↑5% (81%) 139	↑7% (78%) 43	↑6% (76%) 48	-- (84%) 0	↑4% (81%) 25	↑4% (88%) 24
	2313	499	780	51	455	528
Codes Outside ICU # RRT Calls through 2008 # RRT Calls last 12mo thru 2908	(To date 3983) Last 12m 1637	(To date 504) Last 12m 146	(To date 2391) Last 12m 910	(To date 167) Last 12m 55	(To date 665) Last 12m 289	(To date 423) Last 12m 237
Falls to Floor Falls (rate/1000 med-surg)	↓20% (2.3) 149	↓19% (2.3) 20	↓20% (2.3) 74	N/A	↓37% (1.7) 47	↓8% (2.9) 8
Infections by % , # Lives	Adult rate Total #			PICU VAP, NICU CL		
Ventilator Pneumonia (rate/1000)	↓77% (0.74) 48	↓22% (2.64) 2	↓88% (0.6) 30	↓31% (3.6) 2	↓48% (0.7) 1	↓93% (0.3) 13
Central Line Infection (rate/1000)	↓67% (1.16) 89	↓82% (1.36) 14	↓5% (2.5) 1	↓74% (2.2) 50	↓100% (0.0) 6	↓86% (0.6) 18
	137	16	31	52	7	31
Total Annualized Lives Touched for These Indicators	4,365	701	1,839	158	802	865

*Lives impacted if stayed at Baseline ratio or rate, rate-based for current volume

** 2004 Perfect Care based on 2004 definitions, CY2008 Perfect Care based on 2008 definitions

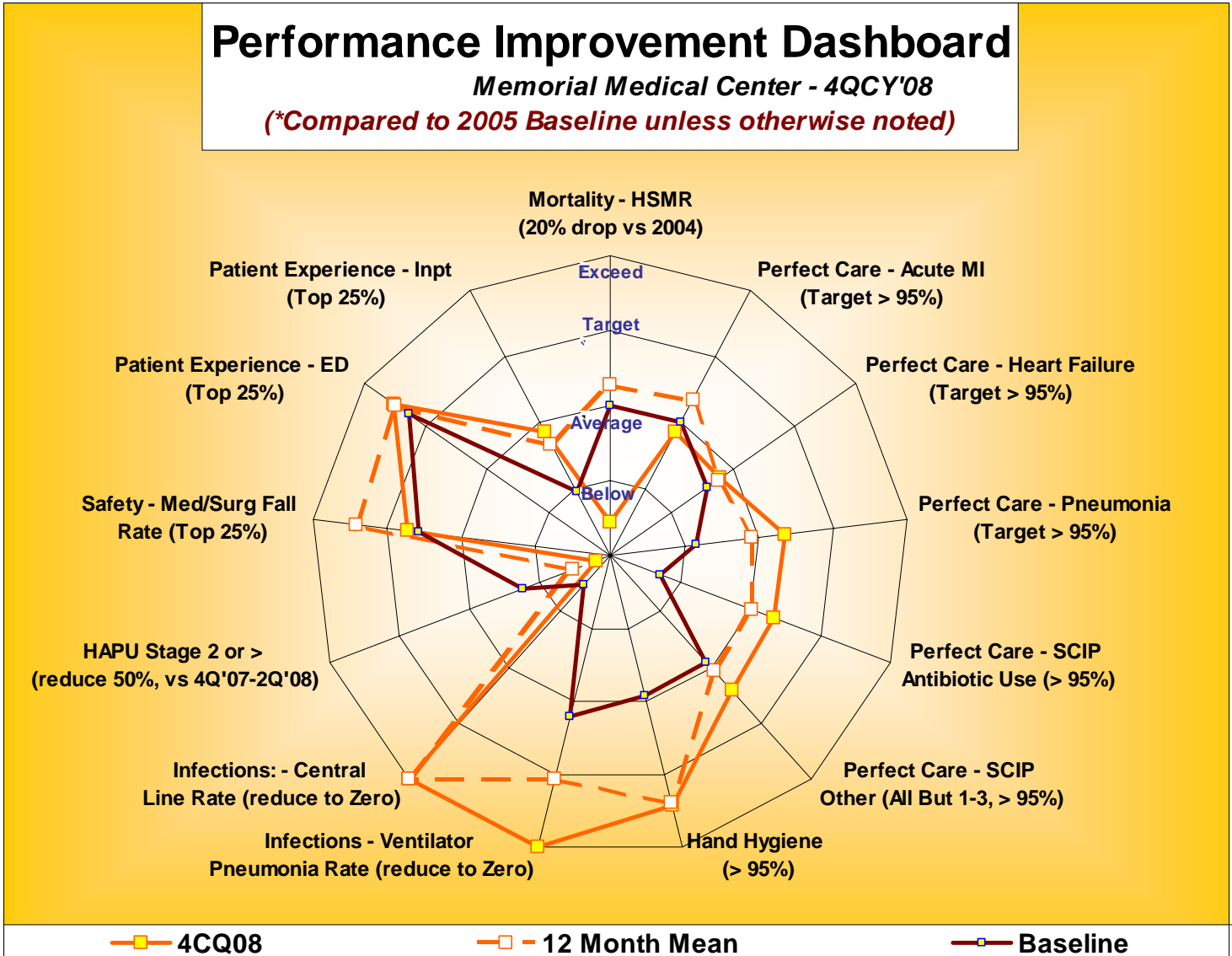
Note: Hosp 1: Fall, Central Line Infection, Ventilator Pneumonia, Falls c/w 2006

Hospital Drilldown

Click on indicator title to jump to linked drilldown

Performance Improvement Dashboard

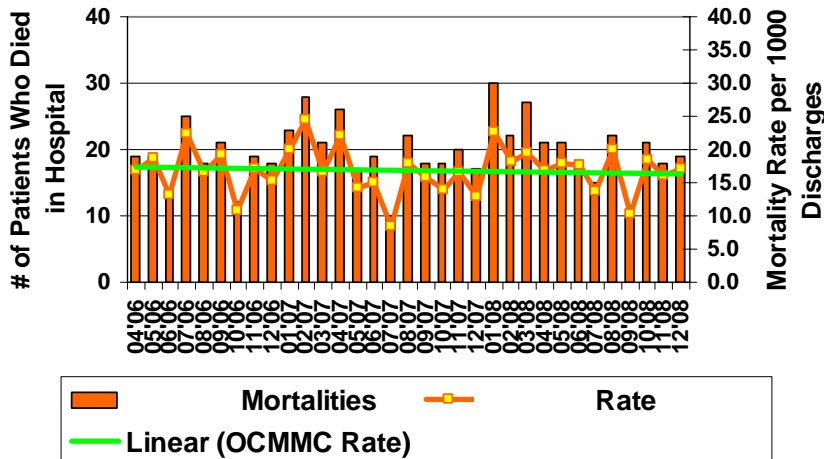
Memorial Medical Center - 4QCY'08
 (*Compared to 2005 Baseline unless otherwise noted)



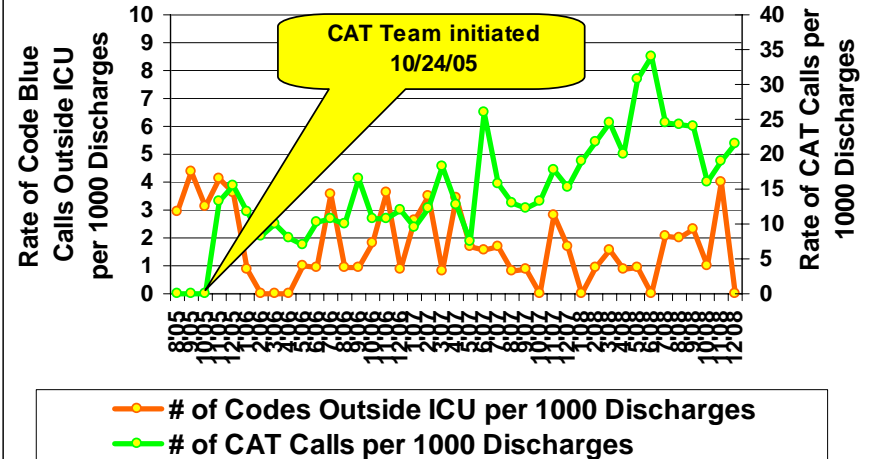
For internal use related to quality and performance improvement purposes only.

Mortality & Rapid Response

Mortality - All Cause

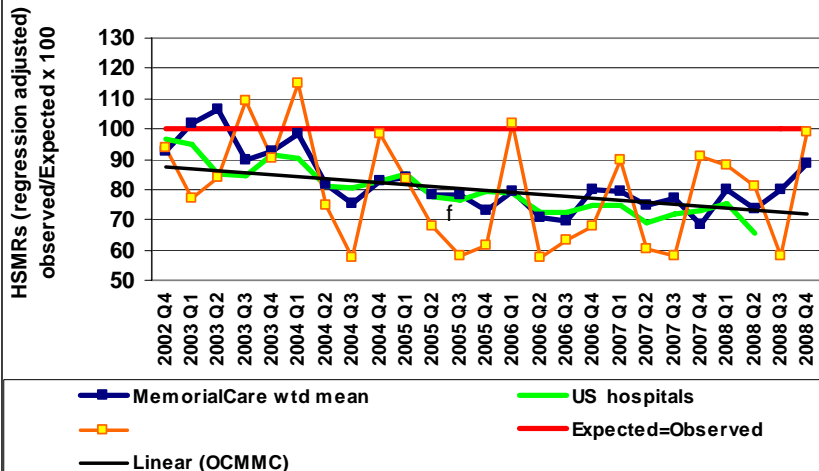


Code Blue Outside of ICU and Critical Assessment Team Calls



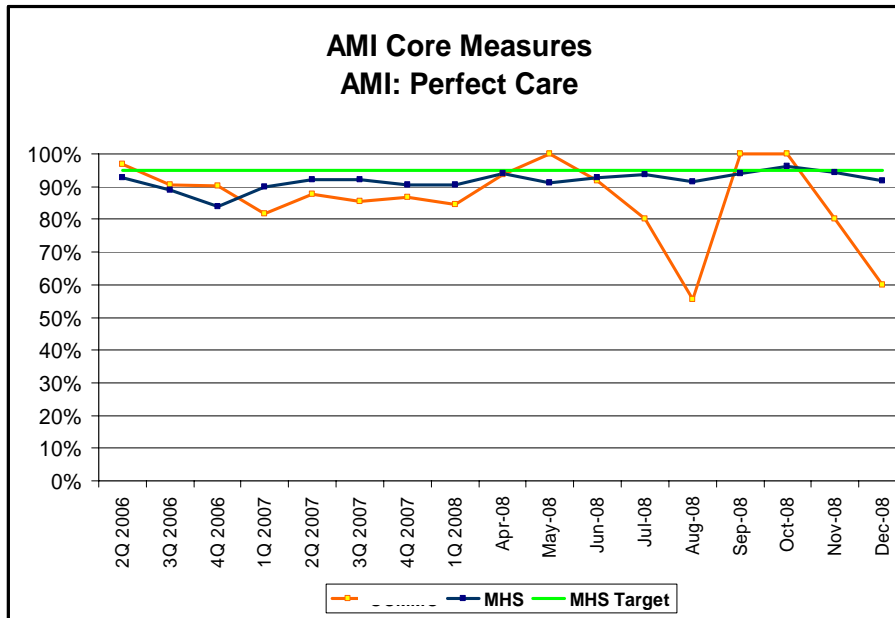
Hospital Standardized Mortality Ratio

Regression Adjusted - Medicare Only



- Rolling 4Q HSMR through 4CQ'08 shows 6% drop in observed to expected rate for OCMMC since 2004, with 4Q'08 at 14.6% increase
 - Further analysis shows there were 16 Medicare mortalities compared to 17.35 expected. With severity regression adjustment, 4Q rate increase noted
 - Seasonal variance noted in HSMR; rolling 4 quarters reflects downward trend (see linear trendline)
- Rapid Response Team (CAT) calls stabilized above target rate of 20 calls/1000 discharges, with decrease rate of Code Blues called

Perfect Care - Acute MI

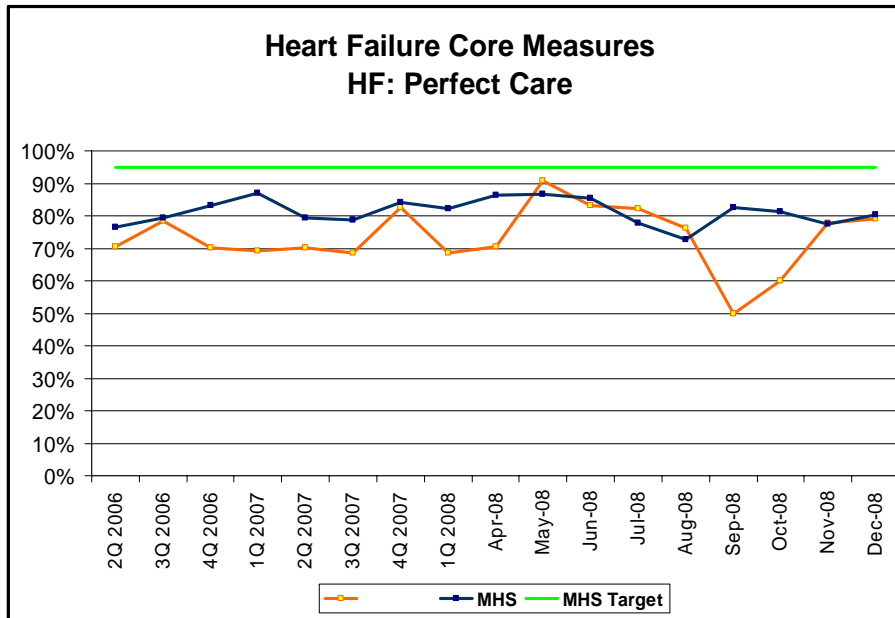


4Q 2008

Indicator	Value
AMI 1: ASA at Arrival	90%
AMI 2: ASA at D/C	89%
AMI 3: ACEI/ARB for LVSD	50%
AMI 4: Smoking Cessation Advice	50%
AMI 5: Beta Blocker at D/C	89%
AMI 6: Beta Blocker at Arrival	100%
AMI 8a: PCI within 90 minutes	100%
AMI 9: Inpatient Mortality ⁴	9.09%
Composite Care ²	90%
Perfect Care ³	76%

- Education to physicians meeting regarding documentation of contraindications to ACE/ARB and beta blockers
- 100% PERFECT CARE in Sept 08 and Oct 08, 4Q08 perfect care in 19 of 25 patient. Very low volumes in denominators for 4Q.
 - AMI-3 ACE-I / ARB for LVSD Numerator =1, Denominator = 2 (50%)
 - AMI-4 Smoking Cessation Numerator =1, Denominator = 2 (50%)
 - AMI-8a PCI within 90 minutes Numerator = 1 Denominator = 1 (100%)

Perfect Care – Heart Failure

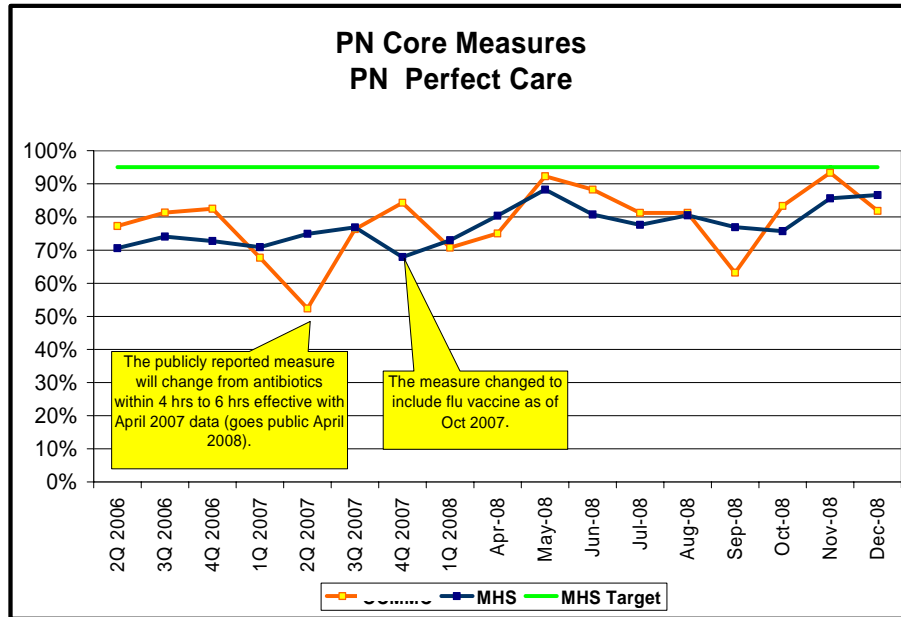


4Q 2008

Indicator	
HF 1: Discharge Instructions	82%
HF 2: LVF Assessment	95%
HF 3: ACEI/ARB for LVSD	81%
HF 4: Adult Smoking Cessation Advice	100%
Composite Care ²	88%
Perfect Care ³	74%

- Awaiting EMR integration of medication history into process to provide seamless process.
- Medication documentation on discharge had been major cause of discharge instruction fallout. (back up to 82%)
- Documentation of contraindications to ACE/ARB and LVF assessment communicated to physicians
- Smoking cessation counseling increased to 100%

Perfect Care - Pneumonia



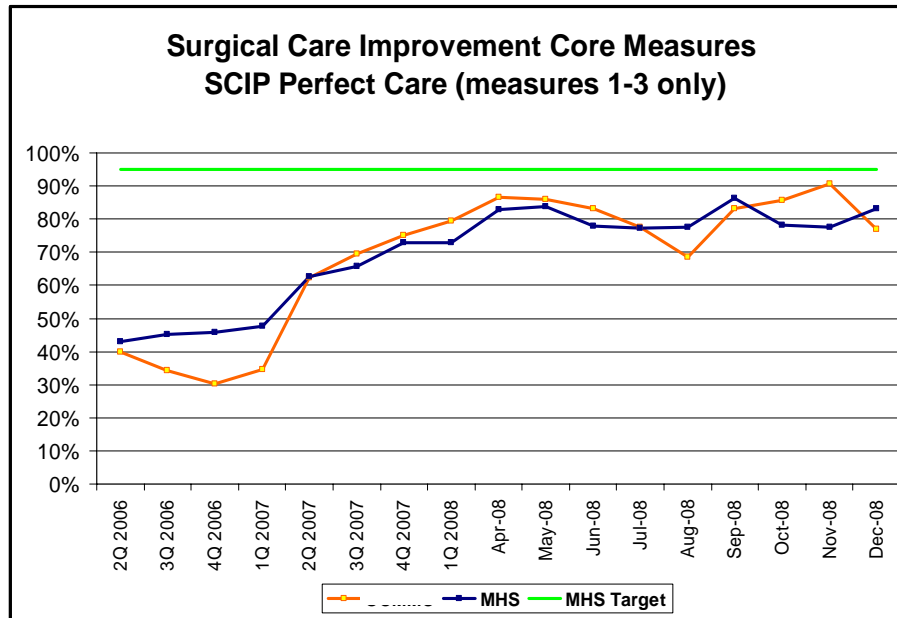
- Antibiotic compliance remains high
- Cooperative procedure between Lab and ED initiated to notify MD if antibiotics have been started already. PN3b compliance 90%
- Re-education regarding PN3a at physician meeting, working with critical care nurses to get orders on transfer.
- Worked with care providers to increase both pneumococcal and influenza vaccine utilization. New law (AB106) mandates both vaccines for much larger group of patients (age >65). 4Q08 of PN-2 at 94% and PN-7 at 91%.

4Q 2008

Indicator	
PN 1: Oxygen Assessment	98%
PN 2: Pneumococcal Screening/Vaccination	94%
PN 3a: Blood Cultures Within 24 Hours After Arrival for ICU Pts	79%
PN 3b: Blood Cultures in ED Prior to Initial Abx	90%
PN 4: Adult Smoking Cessation Advice	86%
PN 5c: Antibiotic Timing (within 360 minutes)	94%
PN 6a: Antibiotic selection- ICU	100%
PN 6b: Antibiotic selection- non-ICU	96%
PN 7: Influenza Screening/Vaccination	91%
Composite Care ²	93%
Perfect Care ³	85%

Infection Prevention - SCIP

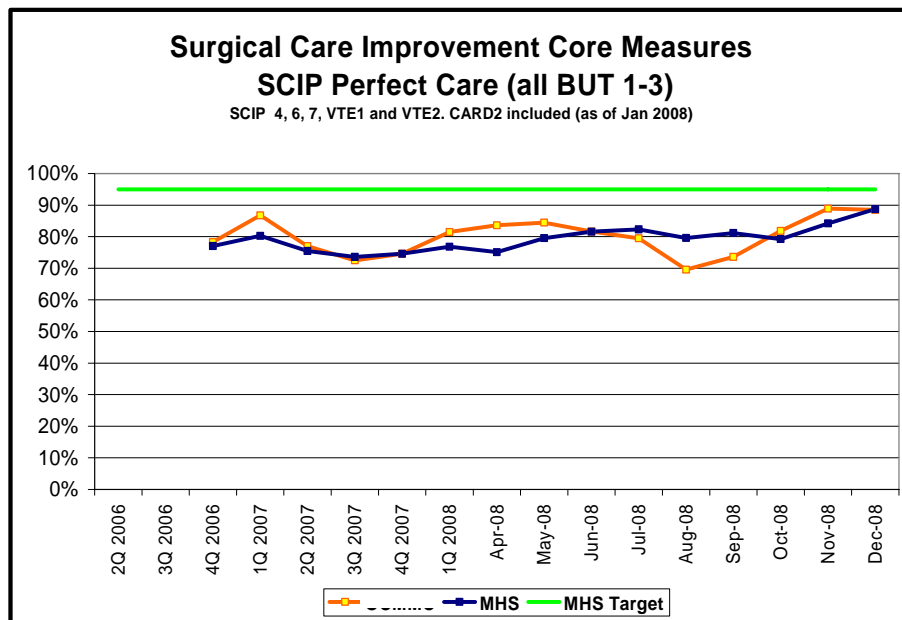
4Q 2008



Indicator	
SCIP 1: Prophylactic Abx Received Within 1 Hour Prior to Surgical Incision	99%
SCIP 2: Prophylactic Antibiotic Selection for Surgical Patients	98%
SCIP 3: Prophylactic Antibiotics Discontinued Within Appropriate Time	88%
Perfect Care³	85%

- System-wide collaborative team continuing
- Campus SCIP PI Team:
 - Awarded Certificate by VHA.
 - Team Leader Trophy awarded to RN-NP for successful team leadership
 - NEW FOCUS: Outpatient SCIP measures (pacemaker insertions, OP orthopedic surgeries, et al)

Other Prevention - SCIP



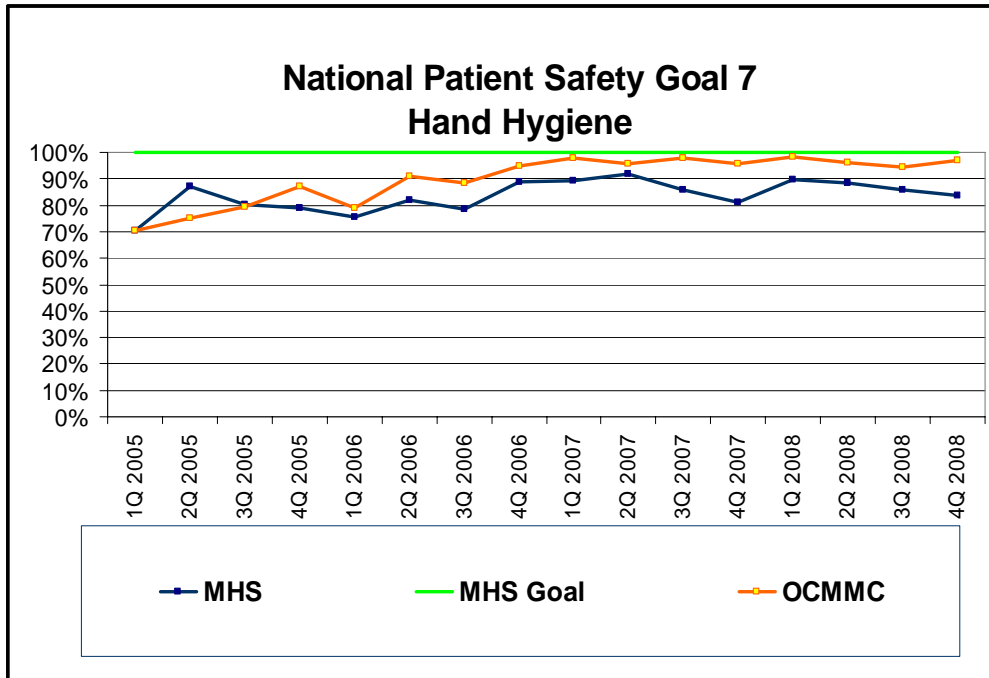
4Q 2008

Indicator	
SCIP 4: Cardiac Surgery Patients with Controlled 6am Postop Serum Glucose	
Overall	n/a
SCIP 6: Appropriate Hair Removal	
Overall	99%
SCIP 7: Colorectal Surg Pts with Immediate Postop Normothermia	
Overall	100%
SCIP VTE 1: Surg pts with Recommended VTE prophylaxis ordered	
Overall	74%
SCIP VTE 2: Surg Pts who received appropriate VTE within 24 hours of surgery	
Overall	76%
SCIP CARD 2: Patients on Beta Blockers Who Received a Beta Blocker During the Periop Period	
Overall*	79%
SCIP Perfect Care	
SCIP all BUT 1-3	87%

ADDITIONAL SCIP COMMENTS:

- Beta blocker usage and VTE (venous thromboemolism) prophylaxis stressed at committees and with nursing
- Normothermia improved in 4Q08 to 100%
- March 98 is National VTE Prevention Month campaign (Posters, presentations at National Patient Safety Awareness Week Event)

Hand Hygiene

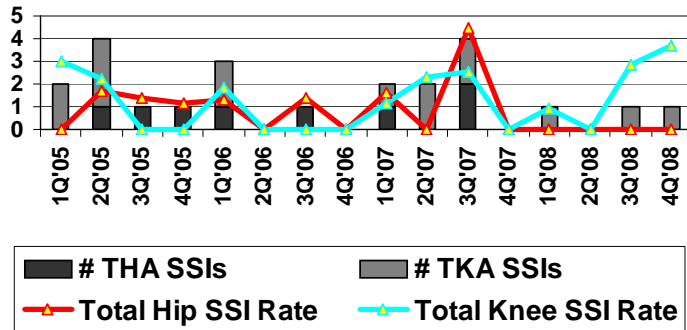


- Bold Goal – 100% compliance to National Patient Safety Goal
- Rollout of system-wide “Clean Hands Save Lives” Jan 09 included:
 - Video shown 4Q08 to staff and at meetings
 - National Patient Safety Week Event
 - “Hand Hygiene Champions” trained, serving as observers/monitors
 - Cards to be handed out starting Feb’09 – full compliance, partial compliance, no compliance
 - Measuring compliance with technique (15 seconds for soap/water, rub until dry for foam/gel)

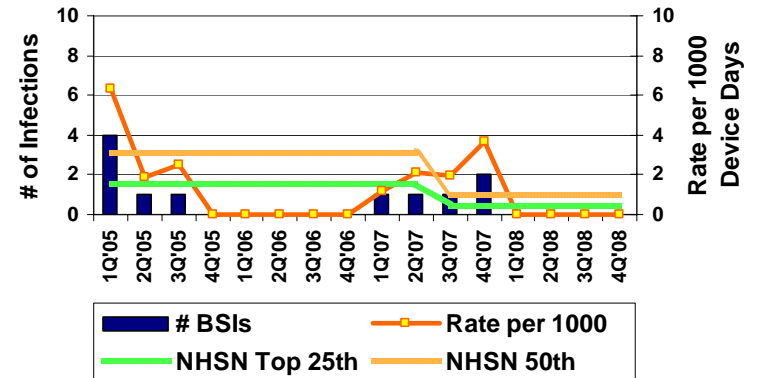
Infection Prevention

Surgical Infection Rates (Total Hip, Knee)

of Infections (bar); SSI Rate per 100 cases (lines)

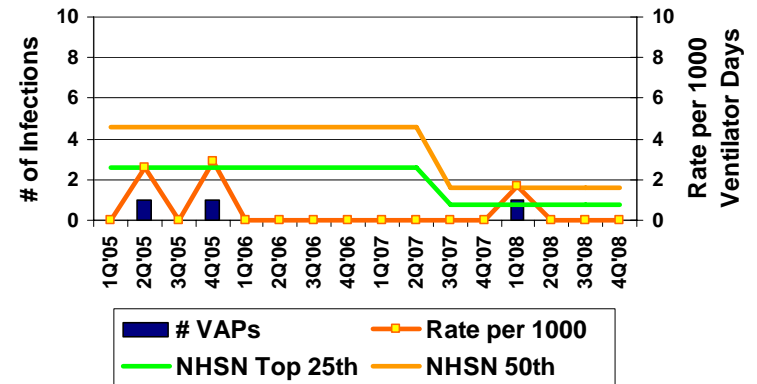


Central Line Bloodstream Infections (Critical Care Units)

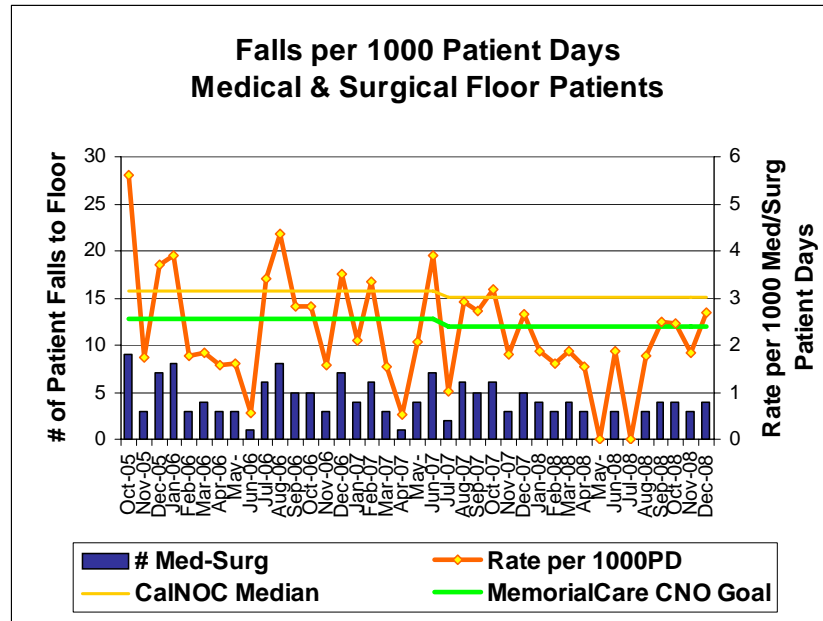


- Surgical Infections: Low #'s of Hip and Knee infections throughout 2008. Goal is ZERO infections
- No CLABSI for entire CY08 and 1Q09 QTD.
 - Work group completed focus on central line care.
 - VHA Clinical Performance Achievement Award Nov'08
- One VAP since Nov 2005 seen in Feb'08 (27 months). No critical process issues identified. None in 1Q09 QTD
- VHA Trophy for High Reliability and Sustained Performance Excellence in Prevention of Ventilator Associated Pneumonia awarded Nov 08

Ventilator Associated Pneumonia (VAP, Critical Care Units)



Patient Safety



FALL PREVENTION

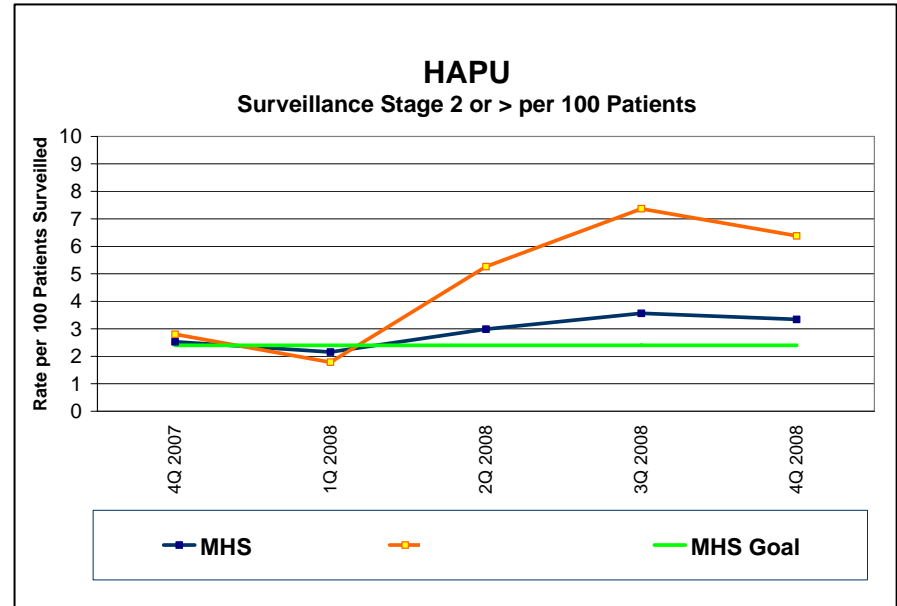
- 4Q08 rate (2.3 per 1000 Med-Surg patient days)
 - 11 total med-surg falls
 - No major injury falls in CY08
- SAFE program, fall prevention monitors followed (as part of program)
- System-wide Fall Reduction Collaborative underway
- Received VHA Clinical Performance Achievement Award for Falls Reduction in Nov 2008

Space for additional campus-specific safety focus (if/as needed)

Patient Safety – Pressure Ulcers

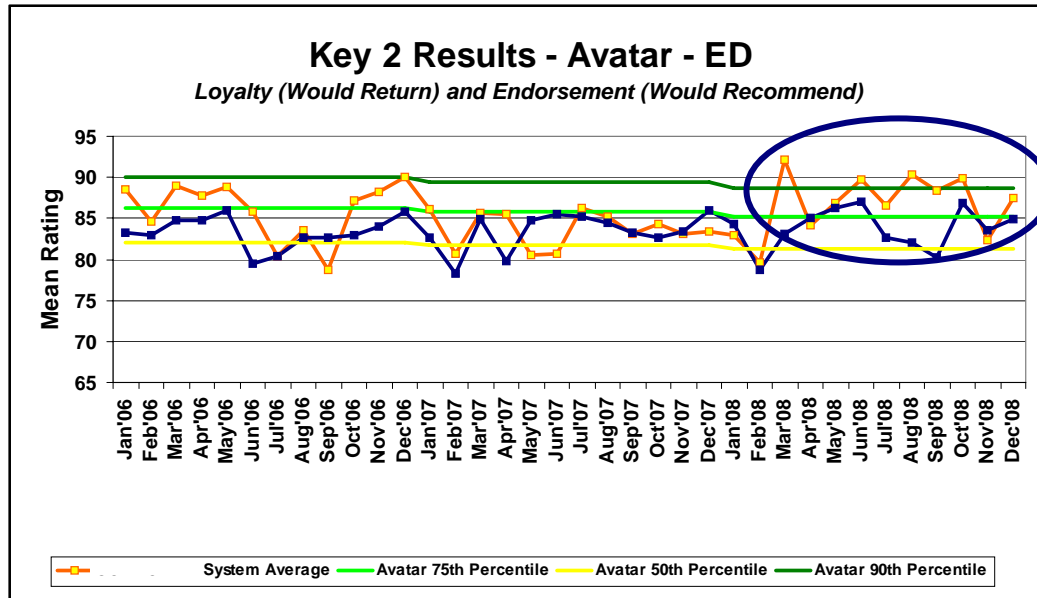
CHART Summary for HAPU Stage >2

		State Average
Period	4CQ'07 - 3CQ'08	
Prevalence Rate	4.2%	3.4%
CHART Rating	BELOW AVERAGE	
Volume	18 Patients out of 428	



- Bold Goal for FY'08 – 50% reduction in Stage 2-4 Pressure Ulcers
- 3rd Qtr increased to 7.37% for Hospital Acquired Pressure Ulcer for CHART reporting; 4 Qtr 6.38%.
- Participating in system-wide pressure ulcer collaborative on 4/2/09
- Documentation issues for non-traditional sites (e.g. behind the ear)
 - Educated by wound care nurse and skin care resource nurses
 - Preventative ear covers
- Developed new “double signed, 4-Eyes” wound documentation to assure appropriate recording of skin care assessment

Patient Experience - ED



Key 2 Questions - ED:

Would prefer to return without hesitation, if Emergency care needed

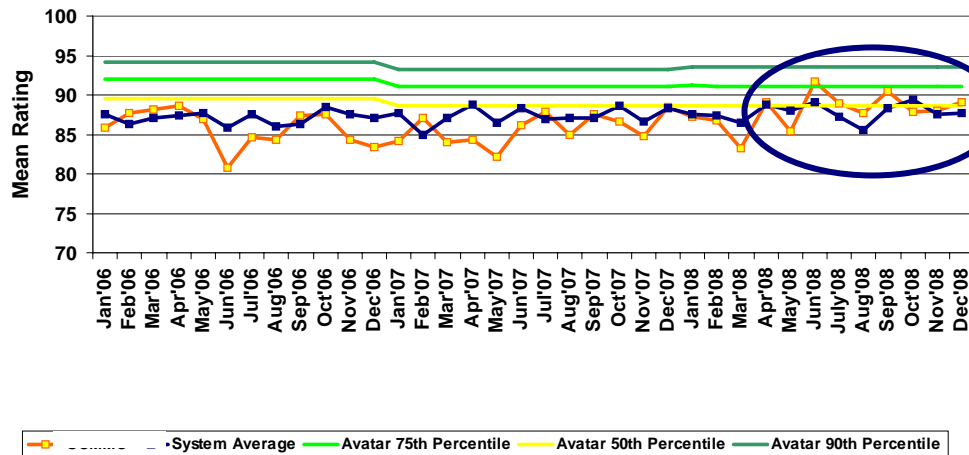
Would recommend Emergency services here without hesitation to others

- Service ACE education system-wide Fall'07
 - Service MATTERS toolkit distributed with training, scripts and techniques to all staff
- Presentation(s) at Dept Manager meetings on Bold Goals and emphasis on Key-2 questions (loyalty and endorsement) with awards to high performing units
- Service Recovery toolkit rollout implemented August 2008
- ED physician champion signing on to Avatar to review data
- Bold Goal performance [75th percentile (85.14)] in Key-2 exceeded last three quarters
 - Four months in 2008 exceeding 90th percentile

Patient Experience - Inpatient

Key 2 Results - Avatar - Inpatient:

Loyalty (Would Return) and Endorsement (Would Recommend)



Key 2 Questions - Inpatient:

I would prefer to return without hesitation, if care is needed.

I would recommend without hesitation to others.

- Service ACE education system-wide Fall'07
 - Service MATTERS toolkit distributed with training, scripts and techniques to all staff
- Presentation(s) at Dept Manager meetings on bold goals and emphasis on Key-2 questions (loyalty and endorsement) with awards to high performing units
- 5-Star awards given to nursing units with 75th percentile performance and supporting units
- Skylight system implemented Jun'08
 - Internet access
 - Service alerts – patients can directly contact Dietary, Housekeeping and Plant Operations for issues
- Service Recovery (“Mending Matters”) initiated Aug'08
- Three consecutive quarters at or above 50th percentile
- Surgical Unit initiated “Perfect Care Starts Here” to exceed patient expectations

Thank you!

Contact Information:

- **Helen Macfie, Pharm.D., F.A.B.C.**

- ❖ *Senior VP, Performance Improvement*

- ❖ hmacfie@memorialcare.org

- ❖ **714-377-3007**

