

Strategic Analytics for Improvement and Learning The SAIL Value Model

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Reporting, Analytics, Performance, Improvement and Deployment (RAPID)

Office of Principal Deputy Under Secretary for Health

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Poll Question #1

What best describe your role in the VA?

- a. Research center staff (e.g., HSR&D, QuERI)
- b. Hospital staff (e.g., clinicians, administrators, etc.)
- c. VACO and Program Office staff
- d. Oversight agency staff (e.g., OIG, GAO)
- e. Others

Poll Question #2

How often do you access SAIL report?

- a. Daily
- b. A few times a week
- c. Occasionally
- d. Never accessed
- e. Never heard about it

Agenda

- Brief history of SAIL
- SAIL domains, metrics and scoring methods
- SAIL report features
- VA's progress to date
- New developments
- Q&A

About VA

Mission Statement

To fulfill President Lincoln's promise "To care for him who shall have borne the battle, and for his widow, and his orphan" by serving and honoring the men and women who are America's Veterans.

What is SAIL?

- Strategic Analytics for Improvement and Learning
- Web-based balanced scorecard model
- High-level views of healthcare quality, efficiency and productivity
- Link to source reports for analyzing strengths and opportunities
- Enables executives and managers to examine a wide breadth of existing VA measures
- Deployed on VA intranet in 7/2012, updated quarterly
- Published SAIL Scorecard on [VA Quality of Care](#) in 1/2015, updated quarterly
- Published SAIL Star designation and size of improvement on the same website in 11/2016, updated annually

Why Did VA Develop and Deploy SAIL?

- Internal benchmarking within VHA
- External benchmarking against the private sector
- Spotlight the successful strategies of VA's top performers
- Promote high quality, safety, and value-based health care
- Offer custom views of information to help VA users to pinpoint strengths and opportunities for improvement
- Facilitate sharing of strong practices for high quality and efficiency health care across VA health care systems
- Support VHA's vision of learning, discovery and continuous improvement

What Exactly Does SAIL Measure and How?

- Divide VA's 130 acute inpatient medical/surgical care VAMCs into five comparison groups based on hospital complexity level and intensive care unit level
- Include data from 16 facilities that do not have acute inpatient medical/surgical care to allow benchmarking on available measures
- Assess 25 Quality measures in areas such as mortality, complications, patient and employee satisfaction, organized within nine quality domains
- Includes an Efficiency/Capacity domain to assess overall Efficiency and Physician Productivity
- Most metrics are from existing metrics prepared by Program Offices
- A few metrics are prepared using VA national databases to monitor emerging priorities for health care delivery
- Provide a composite 1 to 5 star rating for each VAMC in overall Quality

FY2018 Appraisal Cycle

Quality



Efficiency/Capacity

Acute Care Mortality
(12%)

Avoidable Adverse Events*
(12%)

LOS & Utilization Management
(12%)

Mental Health
(12%)

Performance Measures
(8%)

Employee Satisfaction
(8%)

Patient Experience
(12%)

Care Transitions
(12%)

Access to Care
(12%)

Clinical & Administrative Efficiency

Physician Capacity

In-Hospital SMR

6.0%

30-Day SMR

6.0%

In-Hospital Complications

6.0%

Healthcare Associated Infections

6.0%

Inpatient-Post Acute Care Events

0.0%

Patient Safety Indicators

0.0%

Adjusted Length of Stay

7.2%

%Admit & Continued Stay Reviews Met

4.8%

Population Coverage

4.0%

Continuity of Care

4.0%

Experience of Care

4.0%

ORYX

4.0%

HEDIS EPRP Based

2.4%

HEDIS eQM Based

1.6%

AES Best Places to Work

4.0%

Registered Nurse Turnover

4.0%

Overall Rating of Hospital (Inpatient)

3.0%

Care Transition (Inpatient)

1.5%

Rating of Primary Care Provider

3.0%

Rating of Specialty Care Provider

3.0%

Stress Discussed (PCMH)

1.5%

ACSC Hospitalizations

7.2%

All Cause 30-Day Readmissions

4.8%

Timely Appt, Care & Info (PCMH, SC)

6.7%

Days Waited for Urgent Care (PCMH)

1.7%

Call Pick Up Speed & Abandonment

3.6%

PC, SC, MH Wait Times

0%

SAIL Score Calculations and Web Report

Metric

- Convert metric values to z-scores, adjusted for complexity grouping
- A higher z-score represents favorable performance

Domain

- Redistribute weights of metrics with missing data to other metrics in the same domain
- Calculate domain score as the weighted sum of metric z-scores

Overall

- Redistribute weights of domains with no applicable/valid metric values to other domains
- Calculate overall score as the weighted sum of domain z-scores

Star Rating

- Designate initial quality star rating using overall score in Q3 of a fiscal year
- Demote 5-Star to 4-Star if SMR/SMR30 in the 80th percentile; promote equal number of 4-Star to 5-Star
- Promote 1-Star to 2-Star if have the most metrics perform better than the bottom 20% of U.S. hospitals

Report

- Compare metric, domain and overall scores in quintiles
- Benchmarking facilities using tabular and graphic displays
- Improvement tools and resources

SAIL Metric Drill Down Reports


Domain	Measure	Link to	Lowest Level of Detail	Lowest Level of Time Slicer
Acute care mortality	In-hospital risk adjusted mortality (SMR)	Pyramid Report	Patient	Month
	30-day risk adjusted mortality (SMR30)	Pyramid Report	Patient	Month
Avoidable Adverse Events	Risk adjusted in-hospital complication index	Pyramid Report	Patient	Day
	Healthcare associated infections for CAUTI, CLAB, MRSA, VAE, CDI	Data Management Site	Unit	Month
LOS and Utilization Management	Adjusted length of stay	Pyramid Report	Patient	Month
	%Acute care admission reviews and continued stays met InterQual criteria	Pyramid Report	Patient	Day
Mental health	Mental health population coverage	Reporting Services	Facility	Rolling Yr
	Mental health continuity of care	Reporting Services	Facility	Rolling Yr
	Mental health experience of care	Reporting Services	Facility	Year
Performance measures	Inpatient core measure mean percentage	Reporting Services	Facility	Quarter
	HEDIS EPRP outpatient core measure mean percentage for PRV, TOB, BHS	Reporting Services	Facility	Month
	HEDIS eQM outpatient core measure mean percentage for DM and IHD	Reporting Services	Patient	Day
Employee Satisfaction	Best Places to Work (AES version)	Reporting Services	Workgroup	Year
	RN turnover rate	Pyramid Report	Assig Code	Month
Patient Experience	HCAHPS score (Overall Rating of Hospital)	Program Office web site	Division	6 Month
	HCAHPS Care Transition composite	Program Office web site	Division	Quarter
	PCMH Rating of Providers	Program Office web site	Division	Quarter
	PCMH Stress Discussed	Program Office web site	Division	Quarter
	SC Rating of Providers	Program Office web site	Division	Quarter
Care Transitions	Ambulatory care sensitive condition hospitalizations	Reporting Services	Patient	Month
	Hospital-wide all cause 30-day readmissions	Pyramid Report	Patient	Day
Access	Timely appointment, care and information (PCMH & SC)	Program Office web site	Division	Quarter
	Days waited for urgent appointment (PCMH)	Program Office web site	Division	Quarter
	Call pick up speed and telephone abandonment rate	Reporting Services	Division	Month
Efficiency/Capacity	SFA overall efficiency (=1/SFA)	Reporting Services	Facility	Year
	Physician capacity	Reporting Services	Facility	Year

Key SAIL Report Features

- **Radar diagram** to depict VISN and facility ranking in the VA on individual domains and measures
- **Benchmark tables** comparing VISNs / facilities with top performers (best 10%) and 5-Star VISNs and facilities on individual measures
- **Hyperlinks** on benchmark tables to drill down tools and program office reports
- **Maps** to display geographic variation of VISN and VAMC performance on individual measures
- **Sorting tools** to facilitate collaboration and network among VISNs and facilities
- **Graphic reports** to assess Relative performance vs. absolute improvement
- **Deep Dive Insight Generator (DDIG)** to offer a user friendly pyramid platform to conduct analysis, monitor progress, and prepare summary reports on key metrics
- **Why Not the Best VA** to benchmark externally with CMS Hospitals by HRR and VA hospitals by hospital complexity level
- **Trend charts** of SAIL measures
- **Metric Link table** to list improvement tools prepared by Program Offices
- **Goal Setting Calculator** to project relative performance in 6 months and set goals for improvement
- **Statistical process control charts** and trigger systems for health outcomes
- **Searchable Frequently Asked Questions**

SAIL is Accessible to All VA Staff from [VSSC](#)

VHA20\WHAPUGLIY (View Access) A-Z Index

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Patient Access and Eligibility

- + Appointments
- + Clinic Operations
- + Compensation and Pension
- + Consults
- + Enrollment
- + Patient Flow

Clinical Patient Care

- + Care Support
 - Connected Care, Telehealth, Call Centers
- + Geriatrics and Extended Care
- + Mental Health
- + Nursing
- + Prevention and Screening
- + Primary Care
- + Rehabilitation Services
- + Specialty Care Services
- + Inpatient Evaluation

Facility Administration

- + Beneficiary Travel
- + Finance
- + Healthcare Operations
- + Human Resource Management
- + Productivity and Efficiency
- + Sites and Services
- + VA Stats at a Glance

Patient Utilization


- + Care in the Community
- + Create Your Own Extract
- + Inpatient Care
- + Outpatient Care
- + Patient Diagnoses
- + Unique Patients
- + Utilization Projections

Targeted Populations

- + Clinical Cohorts
- + Homeless
- + Military Era Veterans
- + Rural Veterans
- + Women Veterans


Facility Improvement Tools

- + Employee Safety
- + Employee Survey
- + Improvement Opportunities
- + Patient Experience
- + Performance Metrics
- + **Quality of Care**
- + Trigger Reports




VSSC Top 10 Reports

- Daily Discharge Follow Up List Report
- SAIL - Strategic Analytics for Improvement and Learning
- Clinic Huddle/Planning Tool (aka Patient Appointments Planning Tool)
- Primary Care Almanac
- Active Panel List
- Patient Aligned Care Teams Compass
- Return to Clinic Order
- Primary Care Almanac Team Assignments Report
- Consult Cube V2
- PACT Panel Report (Patient Aligned Care Team Report)



SAIL Related Products

[VHA20\VHAPUGLiY](#) [\(View Access\)](#) A-Z Index

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QUALITY OF CARE























































CLICK ON A RADIO BUTTON TO FILTER BY SUBJECT AREA

☐ Performance Management

☐ Quality Management

CLICK ON AN ICON TO FILTER BY PRODUCT TYPE



TYPE	PRODUCT NAME	PHI	DATA DEF	SAMPLE REPORT	ADD TO MY VSSC
	A Guide to Trigger Reports				
	Complications				
	Hospital-Wide 30-day Readmission Cube				
	SAIL - Strategic Analytics for Improvement and Learning				
	SAIL CLC				
	SAIL Deep Dive Insight Generator				
	SAIL FAQ				
	Statistical Process Control Charts - IPEC Measures - Quarterly				
	Statistical Process Control Charts - Patient Outcome Monitors - Monthly				
	Statistical Process Control Charts - Rare Patient Events Monitors - Daily				
	Team Development Measure (TDM)				
	Why Not Buy the Best Care?				

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SAIL Report Landing Page

Document Map

SAIL

Facility

- Domain Radar
- Radar Chart
- Scorecard
- vs. 5-Star Facilities**
- FY Change Domain Scatter
- FY Change Scatter Plot
- Relative Performance vs. Absolute Imp
- Relative Performance vs. Absolute Improvement f
- Facility Opportunity Matrix

VISN

- Domain Radar Chart
- Radar Chart
- Scorecard
- vs. 5-Star VISNs
- FY Change Domain Scatter
- FY Change Scatter
- Relative Performance vs. Absolute Improvement
- Relative Performance vs. Absolute Improvement
- Facilities Sorted by Level of Quality
- Opportunity Matrix
- Opportunity Matrix by FY
- SAIL Model Previous Periods

Trends and Distributions of Individual Measures

Tools

Trigger Systems



Strategic Analytics for Improvement and Learning (SAIL)

[Sort by Level of Quality](#)[Sort by Top Quintile of a Metric](#)[Sort by Complexity Level](#)[Why Not the Best VA](#)

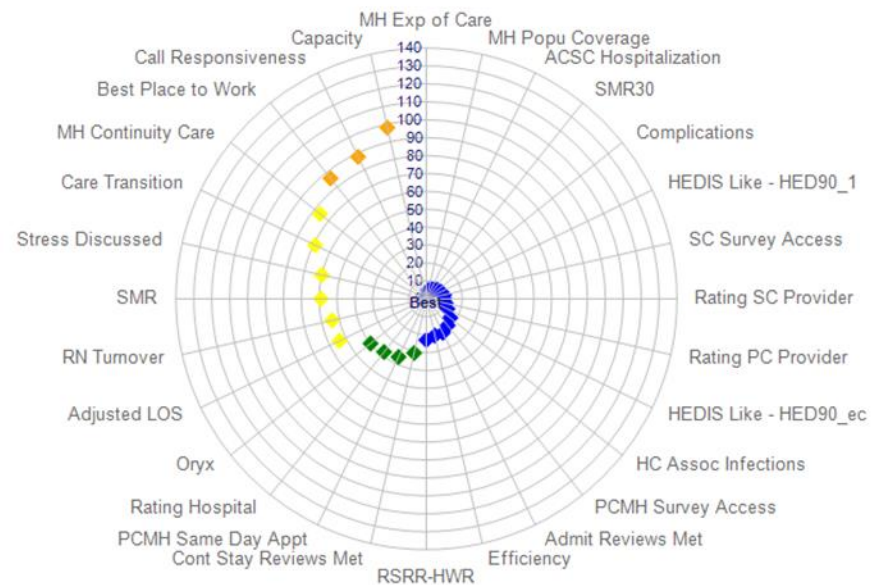
NOTE: FACILITY EFFICIENCY FOR FY2017-2018 IS BASED ON FY2017 DATA. FY18Q2 PATIENT SURVEY METRICS ARE PREPARED USING ROLLING 12-MONTH DATA ENDING FEBRUARY 2018. STARTING FY18Q2 PSI IS BASED ON ROLLING TWO YEAR. MEASURE VALUES MAY CHANGE IN ACCORDANCE WITH CHANGES IN THE SOURCE

herein, which resulted from the Center for Innovation and Analytics, VHA Office of Employment (RAPID) are confidential and privileged under the provisions of 38 USC 5705 be disclosed to anyone without authorization as provided for by that law or its regulations. Unauthorized disclosures.

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Click on links in the Document Map to navigate to specific pages in SAIL Report.

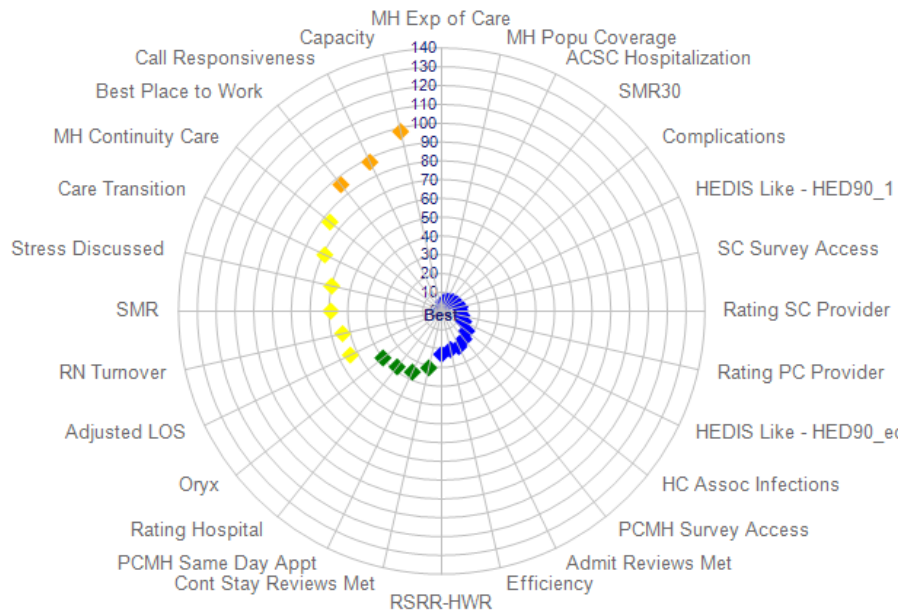
VAMC (FY2018Q2) (Metric)



Marker color: Blue - 1st quintile; Green - 2nd; Yellow - 3rd; Orange - 4th; Red - 5th quintile.

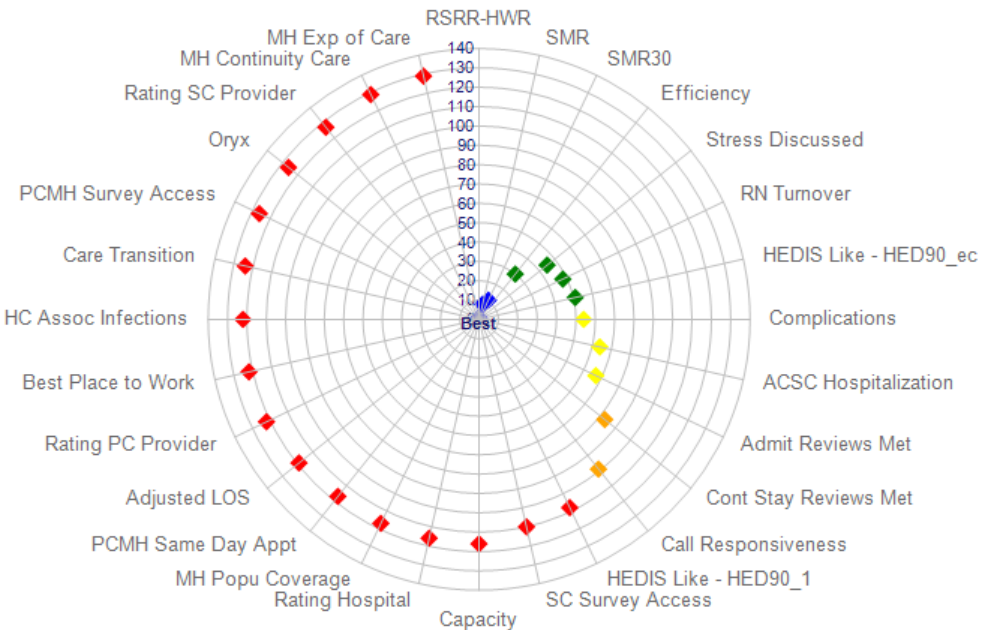
Radar Diagrams of 5-Star vs. 1-Star Facility

5-Star Facility



Marker color: Blue - 1st quintile; Green - 2nd; Yellow - 3rd; Orange - 4th; Red - 5th quintile.

1-Star Facility



Marker color: Blue - 1st quintile; Green - 2nd; Yellow - 3rd; Orange - 4th; Red - 5th quintile.

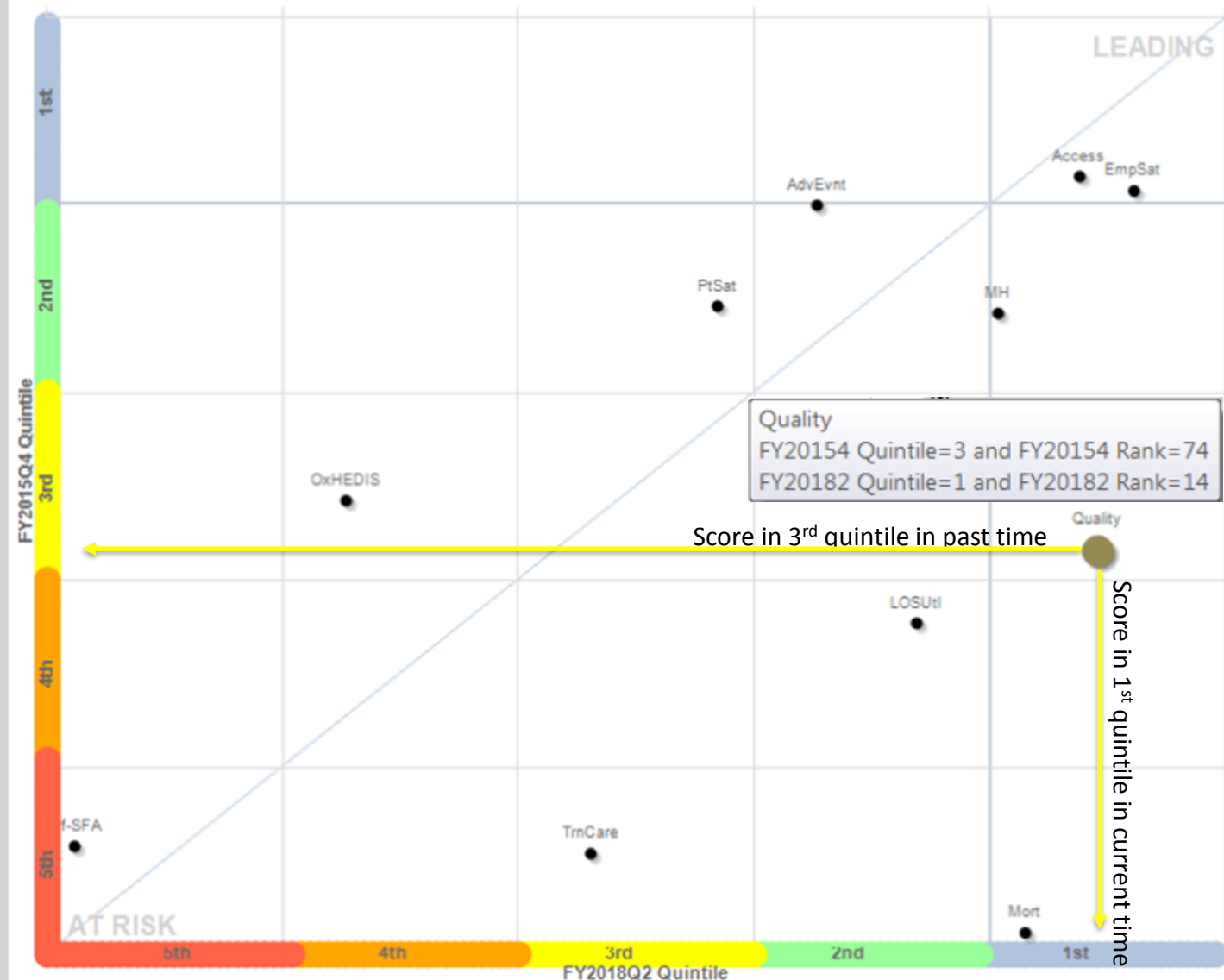
Scorecard for FY2018Q2

Measure	Measure Unit	Preferred Direction	Facility	Benchmark	10th-50th-90th ptile
Acute care mortality					
1. Acute care Standardized Mortality Ratio (SMR)	O/E	↓	0.712	0.408	0.408 - 0.846 - 1.139
2. Acute care 30-day Standardized Mortality Ratio (SMR30)	O/E	↓	0.738	0.731	0.731 - 0.928 - 1.184
Avoidable adverse events					
1. In-hospital complications	O/E	↓	1.073	0.042	0.042 - 0.838 - 1.400
2. Healthcare associated infections (HAI)					
a. Catheter associated urinary tract infection	inf/1k device days	↓	0.260	0.000	0.000 - 0.388 - 1.729
b. Central line associated bloodstream infection	inf/1k device days	↓	0.750	0.000	0.000 - 0.486 - 1.885
c. Ventilator associated events (IVAC Plus)	events/1k device days	↓	0.000	0.000	0.000 - 0.000 - 3.497
d. Methicillin-resistant Staphylococcus aureus (MRSA) infection	inf/1k bed days	↓	0.147	0.000	0.000 - 0.051 - 0.238
e. C. difficile infection	inf/10k bed days	↓	8.404	0.000	0.000 - 5.771 - 11.275
3. Patient safety indicator (PSI Average Standardized Score)	Standardized score	↑	-0.359	1.165	-0.457 - 0.329 - 1.165
4. Post acute care events	O/E	↓	0.357	0.000	0.000 - 0.844 - 1.683
Length of Stay and Utilization Management					
1. Adjusted length of stay	days	↓	4.641	3.671	3.671 - 4.332 - 5.058
2. Utilization management					
a. Admission reviews met, adjusted	%	↑	70.721	86.386	65.124 - 76.494 - 86.386
b. Continued stay reviews met, adjusted	%	↑	71.841	77.999	52.121 - 68.434 - 77.999
Care Transition					
1. Ambulatory Care Sensitive Condition hospitalizations	hosp/1000 pts	↓	22.408	20.418	20.418 - 25.773 - 31.328
2. Hospital-wide 30-day readmission rate	%	↓	11.911	9.287	9.287 - 11.404 - 12.548
a. Cardiorespiratory cohort	%	↓	14.110	8.893	8.893 - 13.322 - 16.078
b. Cardiovascular cohort	%	↓	9.812	5.266	5.266 - 10.060 - 12.169
c. Medicine cohort	%	↓	13.438	10.388	10.388 - 12.497 - 14.081
d. Neurology cohort	%	↓	8.510	0.000	0.000 - 8.893 - 12.661
e. Surgical cohort	%	↓	8.691	3.542	3.542 - 8.385 - 10.680
Patient Experience					
1. Overall rating of hospital (inpatient)	wct %	↑	71.840	76.389	55.253 - 67.240 - 76.389
2. Overall rating of primary care providers	wct %	↑	74.824	77.068	61.769 - 69.973 - 77.068
3. Overall rating of specialty care providers	wct %	↑	74.116	75.631	61.819 - 67.991 - 75.631
4. Care Transition (inpatient)	wct %	↑	53.509	58.189	45.833 - 51.981 - 58.189
5. PCMH Stress Discussed (Q40)	wct %	↑	58.532	64.498	52.387 - 58.743 - 64.498

Facility Domain Scatter Plot

FY2018Q2 Change in Quintiles from FY2015Q4 -

(Domain)



MEASURES

Access	Access
AdvEvt	Adverse Events
EffCap	Eff/Capacity
Eff-SFA	Efficiency
EmpSat	Emp Satisfaction
LOSUtil	LOS & UM
MH	Mental Health
Mort	Mortality
OxHEDIS	Oryx/HEDIS
PtSat	Pt Experience
Quality	Quality
TrnCare	Care Transition

NOTE

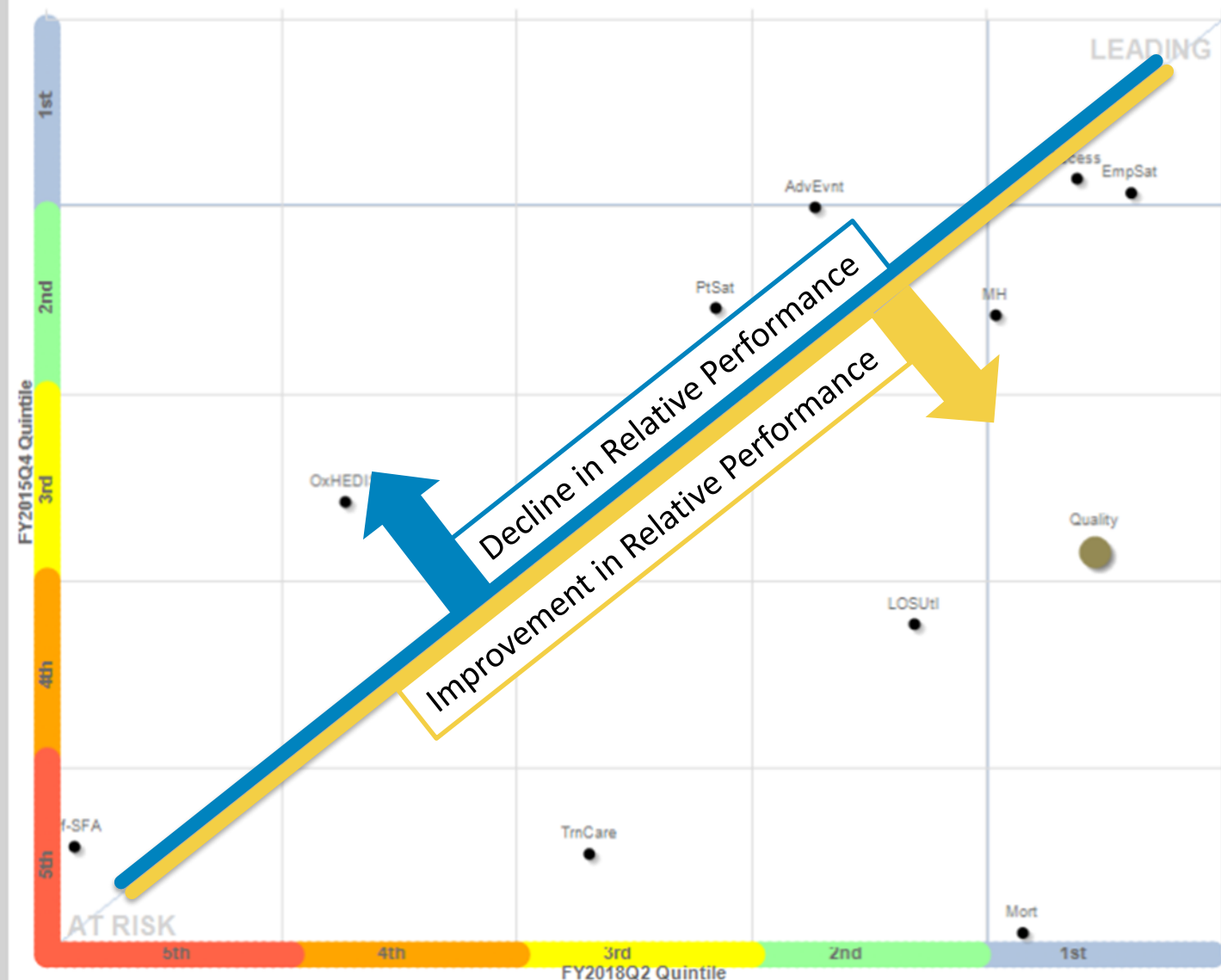
Quintiles are derived from facility ranking on z-score of a metric among 130 facilities. Lower quintile is more favorable.

DESIRED DIRECTION =>

DESIRED DIRECTION =>

FY2018Q2 Change in Quintiles from FY2015Q4 -

(Domain)



MEASURES

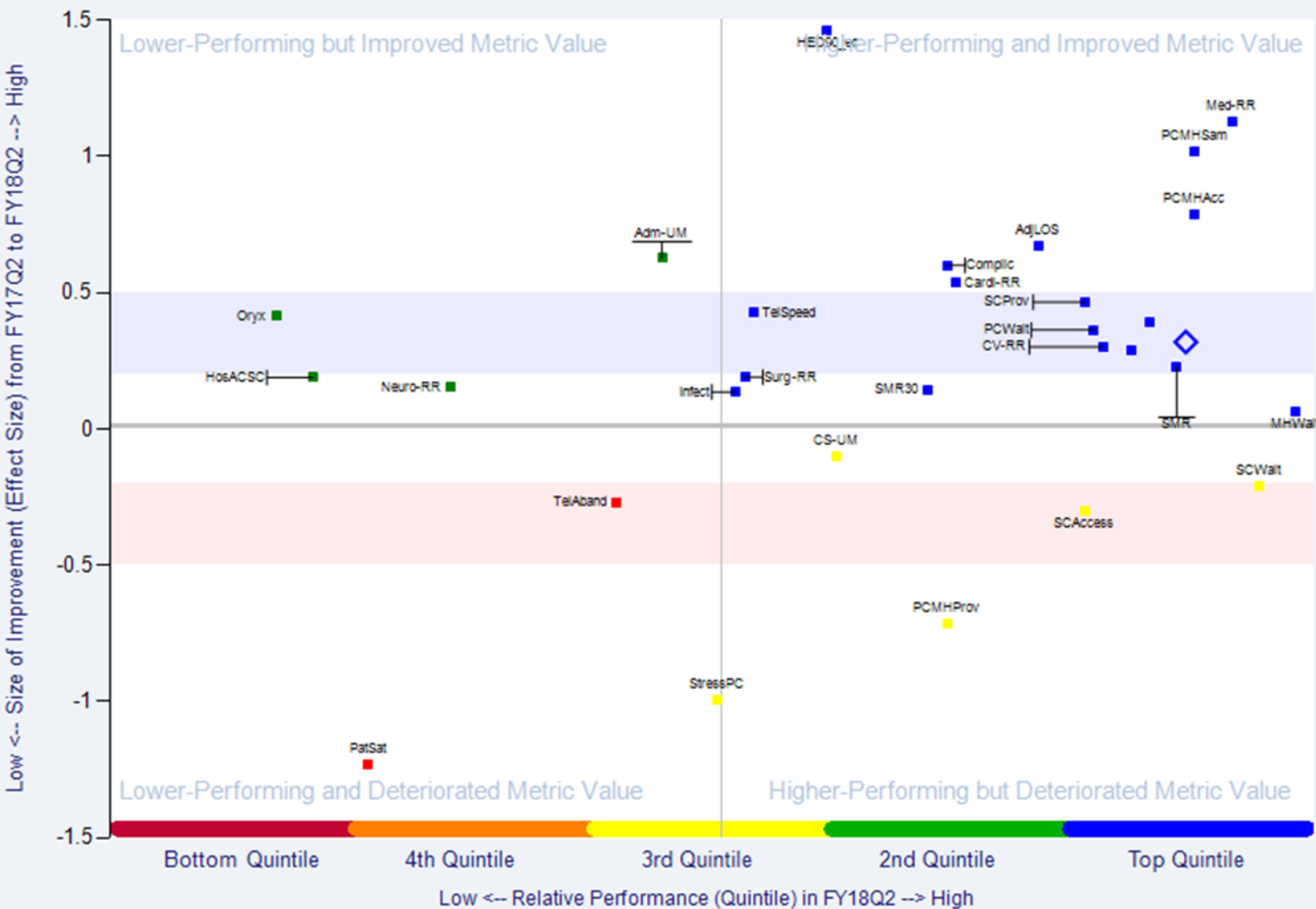
Access	Access
AdvEvt	Adverse Events
EffCap	Eff/Capacity
Eff-SFA	Efficiency
EmpSat	Emp Satisfaction
LOSUtil	LOS & UM
MH	Mental Health
Mort	Mortality
OxHEDIS	Oryx/HEDIS
PtSat	Pt Experience
Quality	Quality
TrnCare	Care Transition

NOTE

Quintiles are derived from facility ranking on z-score of a metric among 130 facilities. Lower quintile is more favorable.

Relative Performance vs. Absolute Improvement

FY18Q2 Performance and Improvement from 1 Year Ago (FY17Q2 to FY18Q2)



MEASURES

AdjLOS	Adjusted LOS
Adm-UM	%Adm Reviews Met
BPTW	Best Places to Work
Cardi-RR	RSRR-Cardio
Complic	Complications
CS-UM	%CS Reviews Met
CV-RR	RSRR-CV
HED90_ec	HEDIS-eQM Based DM IHD
HosACSC	ACSC Hospitalization
Infect	HC Assoc Infections
Med-RR	RSRR-Med
MHWait	MH Wait Time
Neuro-RR	RSRR-Neuro
Oryx	Oryx
PatSat	Rating Hospital
PCMHAcc	PCMH Survey Access
PCMHPro	Rate PC Provider
PCMHsa	PCMH Same Day Appt
PCWait	PC Wait Time
Quality	Quality
RN-Turn	RN Turnover
SCAccess	SC Survey Access
SCProv	Rate SC Provider
SCWait	SC Wait Time
SMR	SMR
SMR30	SMR30
StressPC	Stress Discussed (PCMH Q40)
Surg-RR	RSRR-Surg
TelAband	Tel Abandonment
TelSpeed	Tel Answer Speed

Facility Opportunity Matrix

[Click Here to View Opportunity Matrix by Quarter](#)

Metrics	Weight (%)	Domain	2010	2011	2012	2013	2014	2015	2016	2017	2018
ACSC Hospitalizations	7.2	Care Transitions	5	5	5	5	3	5	5	4	5
Adjusted LOS	7.2	LOS & UM							3	1	2
Complications	6	Avoidable Adverse Events	1	2	3	1	1	1	4	3	2
HC Assoc Infections	6	Avoidable Adverse Events	3	5	4	4	4	2	5	3	3
SMR	6	Acute Care Mortality							2	1	1
SMR30	6	Acute Care Mortality							2	2	2
RSRR-HWR	4.8	Care Transitions					3	5	5	1	1
Best Place to Work	4	Employee Satisfaction				3	2	3	1	1	1
MH Continuity Care	4	Mental Health					3	2	3	2	3
MH Experience of Care	4	Mental Health					3	2	1	1	1
MH Population Coverage	4	Mental Health					2	3	3	3	3
Oryx	4	Performance Measurement	3	3	5	5	4	3	5	5	5
RN Turnover	4	Employee Satisfaction	2	2	2	3	1	1	1	2	1
Call Responsiveness	3.6	Access to Care				3	1	1	2	3	3
PCMH Survey Access	3.35	Access to Care							2	1	1
SC Survey Access	3.35	Access to Care							1	1	1
Rating Hospital	3	Patient Experience	2	3	3	4	4	4	3	4	4
Rating PC Providers	3	Patient Experience						1	1	2	2
Rating SC Providers	3	Patient Experience						2	2	1	1
%Adm Reviews Met	2.4	LOS & UM				4	4	4	4	4	3
%CS Reviews Met	2.4	LOS & UM				3	3	3	3	2	2
HEDIS Like - HED90_1	2.4	Performance Measurement								5	3
PCMH Same Day Appt	1.7	Access to Care							2	1	1
HEDIS Like - HED90_ec	1.6	Performance Measurement								3	3
Care Transition	1.5	Patient Experience								4	3
Stress Discussed	1.5	Patient Experience								2	3
Capacity		Efficiency/Capacity							1	2	1
Efficiency		Efficiency/Capacity	5	5	5	5	5	5	4	5	5

Marker color: Blue - 1st quintile; Green - 2nd; Yellow - 3rd; Orange - 4th; Red - 5th quintile.

VISN Opportunity Matrix

VISN Opportunity Matrix FY2018Q2

[Click here to select a different Fiscal Year](#)

VISN Metrics - (Quintile)	Weight (%)	Domain	Facility A	Facility B	Facility C	Facility D	Facility E	Facility F	Facility G
ACSC Hospitalizations (1)	7.2	Care Transitions	2	1	5	2	1	1	1
Adjusted LOS (2)	7.2	LOS & UM	4	3	5	1	4		4
Complications (1)	6	Avoidable Adverse Events	5	3	1	2	4		3
HC Assoc Infections (2)	6	Avoidable Adverse Events	3	1	1	3	3		4
SMR (1)	6	Acute Care Mortality	2	3	2	1	1		3
SMR30 (1)	6	Acute Care Mortality	2	5	4	1	1		3
RSRR-HWR (2)	4.8	Care Transitions	2	1	2	4	4		4
Best Place to Work (2)	4	Employee Satisfaction	5	2	1	3	1	2	2
MH Continuity Care (2)	4	Mental Health	3	4	2	1	2	3	4
MH Experience of Care (2)	4	Mental Health	5	5	2	1	1	2	3
MH Population Coverage (1)	4	Mental Health	3	3	2	1	1	3	2
Oryx (1)	4	Performance Measurement	1	4	1	5	4		1
RN Turnover (3)	4	Employee Satisfaction	5	5	2	2	1	1	3
Call Responsiveness (1)	3.6	Access to Care	4	5	1	2	1	1	4
PCMH Survey Access (3)	3.35	Access to Care	3	5	2	2	2	5	4
SC Survey Access (2)	3.35	Access to Care	3	4	3	2	2	4	4
Rating Hospital (1)	3	Patient Experience	1	3	1	4	1		2
Rating PC Providers (2)	3	Patient Experience	1	4	2	2	2	4	3
Rating SC Providers (2)	3	Patient Experience	1	5	2	1	1	4	4
%Adm Reviews Met (2)	2.4	LOS & UM	2	4	2	4	4		4
%CS Reviews Met (2)	2.4	LOS & UM	1	5	3	4	2		5
HEDIS Like - HED90_1 (3)	2.4	Performance Measurement	5	4	1	5	2	4	3
PCMH Same Day Appt (3)	1.7	Access to Care	4	4	2	4	1	5	4
HEDIS Like - HED90_ec (3)	1.6	Performance Measurement	5	2	3	5	3	1	3
Care Transition (2)	1.5	Patient Experience	1	4	3	2	2		3
Stress Discussed (4)	1.5	Patient Experience	2	3	1	3	4	5	3
Capacity (1)		Efficiency/Capacity	1	4	3	1	1	1	2
Efficiency (2)		Efficiency/Capacity	2	1	4	5	3	3	4

Marker color: Blue - 1st quintile; Green - 2nd; Yellow - 3rd; Orange - 4th; Red - 5th quintile.



Strategic Analytics for Improvement and Learning (SAIL)

Top Quintile Facilities by Measure

Measure: **ACSC HOSPITALIZATION**

1a-High Complexity; 1b-High Complexity; 1c-High Complexity; 2 -Medium Complexity; 3 -Low Complexity;
98-Excluded

Site	FY18Q2	FY18Q1	FY17Q4	FY17Q3	FY17Q2	FY17Q1	FY16	FY15	Rank18Q2	Rank18Q1	Rank17Q4	Rank17Q3	Rank17Q2	Rank17Q1	Rank16Q4	Rank15
Salisbury	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	21	25	19	13	11	14	14	17
Columbus	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	3	2	2	2	1	2	2	1
Salt Lake City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9	11	10	14	15	8	10	6
Wichita	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4	7	7	6	14	7	8	2
Denver	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	15	12	15	19	10	10	9	7
Lexington	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2	2	3	3	3	3	1	1
Central Iowa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	3	3	2	4	4	4	5	18
Louisville	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10	16	6	7	8	6	3	16
Houston	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8	5	4	2	2	2	2	3
Hampton	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	13	21	12	20	17	19	12	20
Alexandria	Yes	Yes	Yes	Yes	Yes	Yes	Yes		5	6	5	8	5	9	11	27
San Francisco	Yes	Yes	Yes	Yes	Yes	Yes		Yes	16	10	14	15	21	18	31	10
Tuscaloosa	Yes	Yes	Yes	Yes	Yes	Yes		Yes	25	15	12	17	21	24	53	13
Montana	Yes	Yes	Yes	Yes	Yes	Yes		Yes	14	15	17	18	12	11	39	15
St Louis	Yes	Yes	Yes	Yes	Yes	Yes			25	17	20	17	24	17	56	71
Dublin	Yes	Yes	Yes	Yes	Yes				7	4	11	21	20	79	93	50
Erie	Yes	Yes	Yes	Yes					6	9	8	10	31	113	109	116
Detroit	Yes	Yes	Yes	Yes					20	14	21	25	43	102	97	79
Dayton	Yes	Yes	Yes	Yes					11	13	22	24	37	40	36	76
Bedford	Yes	Yes	Yes		Yes	Yes	Yes		11	14	19	33	24	4	3	74
Cleveland	Yes	Yes	Yes						18	18	24	34	39	64	44	58
Richmond	Yes	Yes	Yes						26	22	25	43	47	91	77	68
Butler	Yes	Yes			Yes	Yes	Yes	Yes	10	24	27	30	25	10	4	7
White City	Yes	Yes			Yes	Yes	Yes		26	23	63	44	13	2	2	28
Asheville	Yes	Yes				Yes	Yes	Yes	22	26	34	29	28	22	18	9
Connecticut	Yes	Yes							17	19	32	78	66	77	91	56
Little Rock	Yes		Yes	Yes	Yes	Yes	Yes	Yes	23	31	18	16	16	5	6	13
Battle Creek	Yes			Yes	Yes	Yes	Yes		19	30	39	23	13	12	17	30
Portland	Yes								24	80	127	129	129	122	129	126

Performance of individual metrics over time

Domain **Avoidable Adverse Events** ▼

2 of 2 100% Find | Next

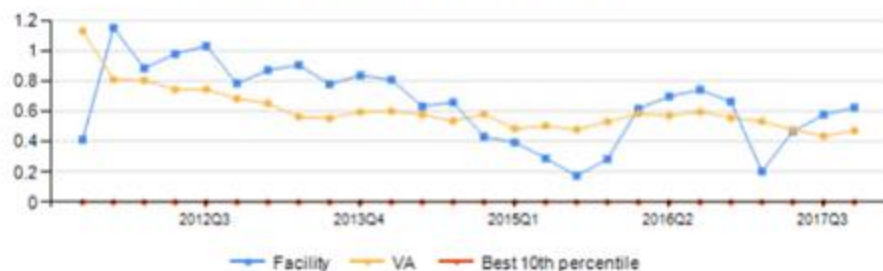


Strategic Analytics for Improvement and Learning (SAIL)

Trends of Individual Measures

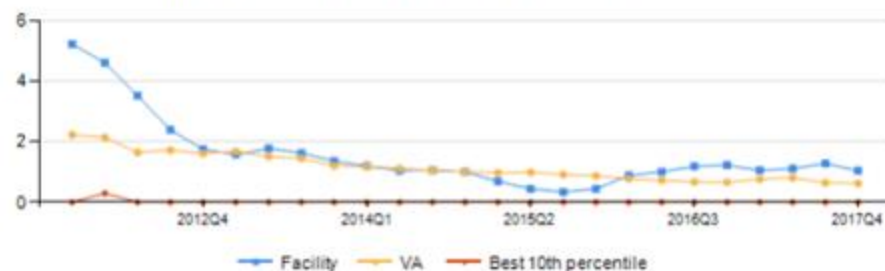


CENTRAL LINE ASSOCIATED BLOODSTREAM INFECTIONS



Note: Each data point uses rolling 12 month data. Lower value is preferred

CATHETER ASSOCIATED URINARY TRACT INFECTIONS



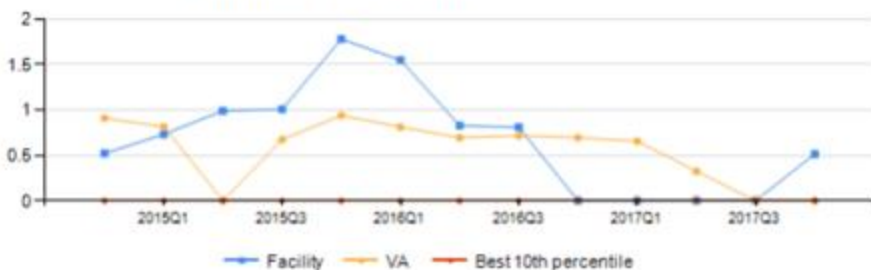
Note: Each data point uses rolling 12 month data. Lower value is preferred

METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS



Note: Each data point uses rolling 12 month data. Lower value is preferred

VENTILATOR ASSOCIATED EVENTS-IVAC+



Note: Each data point uses rolling 12 month data. Lower value is preferred

Goal Setting Calculator: Use Metric Trend Data to Help Facilities to Ensure Their Improvement Does Not Fall Behind VHA's Overall Movement

Document Map

SAIL

Facility

VISN

Trends and Distributions of Individual Measures

Tools

Why Not the Best VA

Goal Setting Calculator

Links to Relevant Tools and Reports

Trigger Systems

Strategic Analytics for Improvement and Learning

Data Definitions

Short Metric List

Metric Links

SAIL Listserv Signup

Strategic Analytics for Improvement and Learning (SAIL)

Sort by Level of Quality

Sort by Top Quintile of a Metric

Sort by Complexity Level

Why Not the Best VA

NOTE: FACILITY EFFICIENCY FOR FY2017-2018 IS BASED ON FY2017 DATA. FY18Q2 PATIENT SURVEY METRICS ARE PREPARED USING ROLLING 12 MONTH DATA ENDING FEBRUARY 2018. STARTING FY18Q2 PSI IS BASED ON ROLLING TWO YEAR. SAIL IS REFRESHED ON A QUARTERLY BASIS. MEASURE VALUES MAY CHANGE IN ACCORDANCE WITH CHANGES IN THE SOURCE DATA.

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Goal Setting Calculator (GSC)

[Click here to view GSC.](#)

The Goal Setting Calculator (GSC) is a tool that allows a facility to project its relative performance in Overall Quality among VA medical facilities in the next 6 months. The projection is based on the direction and speed of changes made by each facility on the measures reported on the Strategic Analytics for Improvement and Learning (SAIL) report. Relative performance is presented as Overall Quality rank and quintile position.

GSC provides two types of projections:

1. Relative performance of a facility if all facilities continue to move the measures in the same direction and speed for the next 6 months.

For each facility, GSC provides the current and predicted values of each measure and the predicted VA's national distribution at 25th, 50th and 75th percentiles in the next 6 months. Measures at risk of being in the worse 25% in the VA are highlighted to alert a facility to assess potential gaps and barriers and to develop improvement plans.

2. Relative performance of a facility if goals for targeted measures are met in the next 6 months.

For facilities considering moving specific measures faster than the current progress, GSC allows a facility to enter a goal for each targeted measure to see how relative performance in Overall Quality may change in the next 6 month. A facility can set a goal for each targeted measure by comparing the current and predicted measure values with the predicted VA's national distribution provided by GSC. Based on its mission, population served and available resources, a facility can use GSC to prioritize specific areas to focus improvement effort and to ensure their pace of improvement does not fall behind VHA's overall movement.

GSC will be updated every quarter following the release of the SAIL report. For questions about GSC, please use the Help Desk button to open a help desk ticket.

VSSC

VSSC Help Desk

Rate Report

FAQs

25

Strategic Analytics for Improvement and Learning (SAIL) Goal Setting Calculator (GSC)

The **Goal Setting Calculator (GSC)** allows staff to use past progress to predict overall quality position in the next six (6) month period. Predicted measure values and relative performance have taken into account the direction and speed of change of current performance.

If considering moving specific measures faster than current progress, you may enter goals in the *Set Goal For Next Period* column for each measure to see how relative performance in Overall Quality may change in the next period. Measure names are **highlighted pink** if the measure is in the bottom 25% for the next period. Domain names are also **highlighted pink** if any measure under the domain falls in the bottom 25%.

	FY18Q2	Predicted (maintain current path)	Predicted (if goals met)
Quality Quintile	5	5	
Quality Rank	123	120	

Calculate		Save
Reset	Export	Change Site

Domain/Measure	Link To Tools	Measure Unit	% Weight	Preferred Direction	Predicted Next Period 25th-50th-75th percentile	Current Period Measure Value	Predicted Next Period Measure Value (Pink-Bottom 25%)	Set Goal For Next Period
Acute care mortality								
1. Acute care standardized mortality ratio (SMR)		O/E	6	↓ L	0.638 - 0.835 - 1.028	0.922	0.922	<input type="text"/>
2. Acute care 30-day standardized mortality ratio (SMR30)		O/E	6	↓ L	0.813 - 0.941 - 1.045	0.721	0.721	<input type="text"/>
Avoidable adverse events								
1. In-hospital complications		O/E	6	↓ L	0.602 - 0.860 - 1.076	1.018	1.017	<input type="text"/>
2. Health care associated infections (HAI)								
a. Catheter associated urinary tract infection		inf/1k device days	1.5	↓ L	0.000 - 0.393 - 1.040	1	1	<input type="text"/>
b. Central line associated bloodstream infection		inf/1k device days	1.5	↓ L	0.000 - 0.486 - 0.994	2.956	2.961	<input type="text"/>
c. Ventilator associated events (IVAC Plus)		events/1k device days	1.5	↓ L	0.000 - 0.206 - 1.937	5.263	5.263	<input type="text"/>
d. Methicillin-resistant Staphylococcus aureus (MRSA) infection		inf/1k bed days	1.5	↓ L	0.000 - 0.051 - 0.132	0.106	0.106	<input type="text"/>
Care Transitions								
1. Ambulatory care sensitive condition hospitalizations		hosp/1000 pts	7.2	↓ L	22.874 - 25.856 - 28.093	29.879	29.893	<input type="text"/>

Strategic Analytics for Improvement and Learning (SAIL) Goal Setting Calculator (GSC)

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	FY18Q2	Predicted (maintain current path)	Predicted (if goals met)
Quality Quintile	5	5	5
Quality Rank	123	120	109

Calculate	Save
Reset	Export
Change Site	

Domain/Measure	Link To Tools	Measure Unit	% Weight	Preferred Direction	Predicted Next Period 25th-50th-75th percentile	Current Period Measure Value	Predicted Next Period Measure Value (Pink- Bottom 25%)	Set Goal For Next Period
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Care Transitions								
1. Ambulatory care sensitive condition hospitalizations		hosp/1000 pts	7.2	↓ L	22.874 - 25.856 - 28.093	29.879	29.893	26

Trigger Systems: Use Statistical Control Chart Method to Warn Alarming Data Patterns for Early Evaluation and Intervention

Document Map

- [-] SAIL
 - [-] Facility
 - [-] VISN
 - [-] Trends and Distributions of Individual Measures
 - [-] Tools
 - [-] Trigger Systems
 - Statistical Process Control (SPC) and Trigger S



Data Definitions

Short Metric List

Metric Links

SAIL Listserv Signup

Strategic Analytics for Improvement and Learning (SAIL)

Sort by Level of Quality

Sort by Top Quintile of a Metric

Sort by Complexity Level

Why Not the Best VA

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Outcome Measures	G Charts for Rare Events
Monthly SPC charts are available for Length of Stay and Mortality and quarterly charts are available for Mortality, Length of Stay and Case Severity.	G-Charts are available for the following outcome measures: in-hospital complications, in-hospital mortality, and AHRQ Provider level Patient Safety Indicators (PSI). Data are processed to calculate the opportunities (days) between incidences in the last 12 months for each facility providing acute inpatient medical/surgical services.
Click to view Tampa's Outcome Measures.	Click to view Tampa's Rare Events.

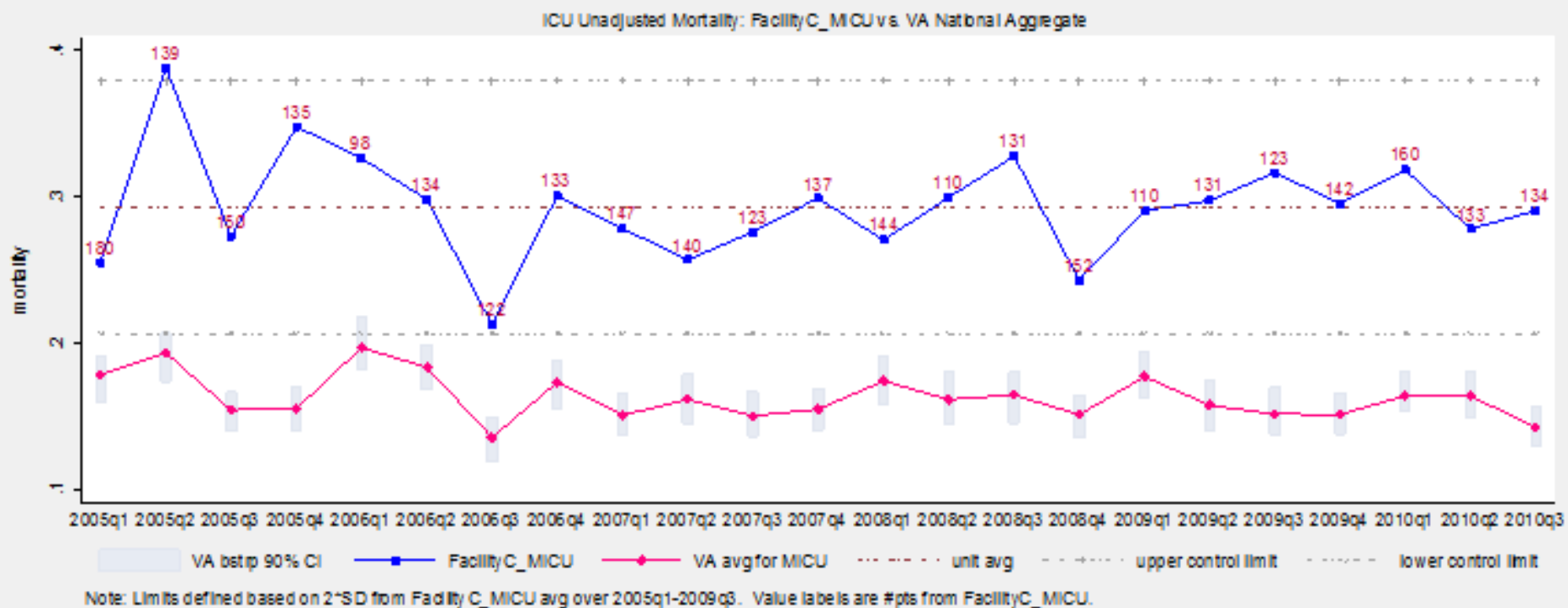
Looking at Data over Time

- Graphic view works best
- Statistical Process Control charts:
 - Analyze variation in the process being measured
 - Hybrid XMR
 - EWMA
 - VLAD
 - G-Chart
 - Funnel plot
 - Primer available on understanding the charts
- Potential early warning/trigger system

Hybrid XMR Chart

- A run chart with control limit (XMR)
- Superimposed external benchmark line (Hybrid)
- Standard deviation calculated using the range method
- Plot includes
 - Data points
 - Center line: average over time (internal benchmark)
 - Upper and lower control limits
- Each data point is calculated independent of other data

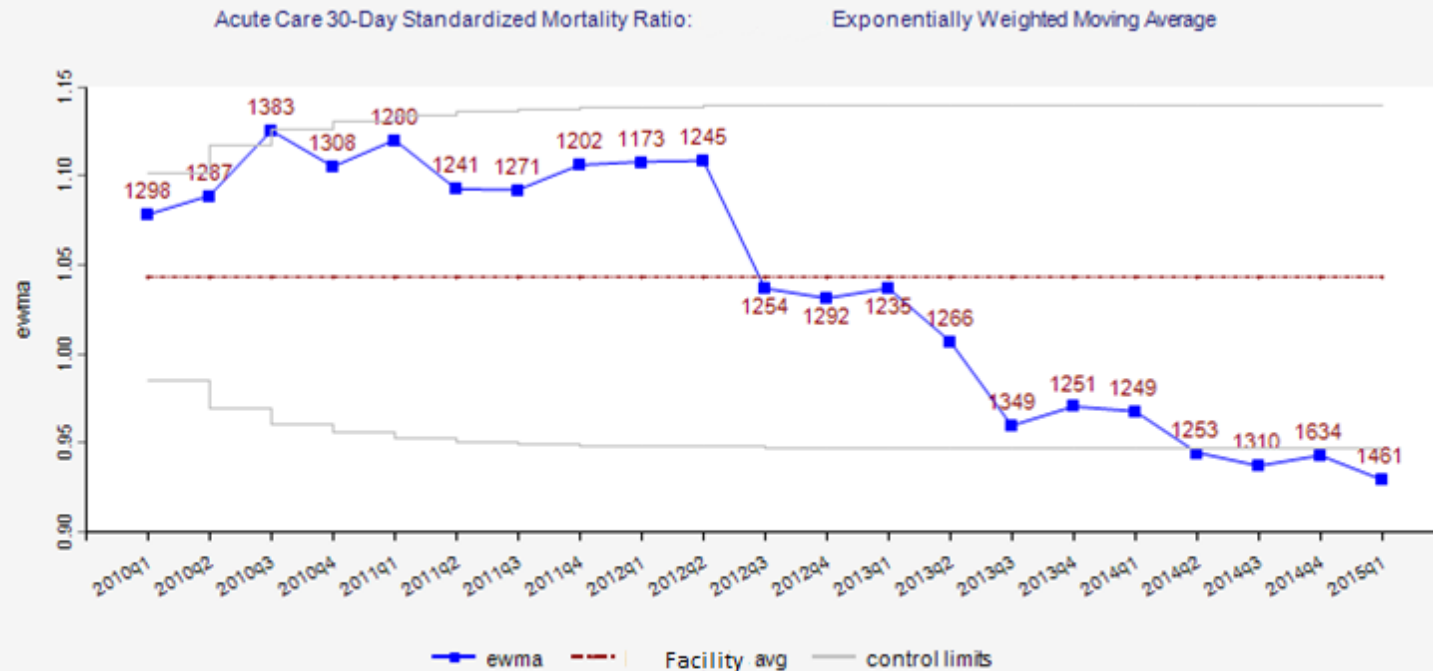
Hybrid XMR chart of unadjusted mortality at a facility where the mortality is in control but continue to be higher than peer hospitals



Exponentially Weighted Moving Average EWMA Chart

- Weighted average of all past and current performance
- Distant data have diminishing effect on current EWMA
- Sensitive to small persistent changes
- Complementary chart for XMR

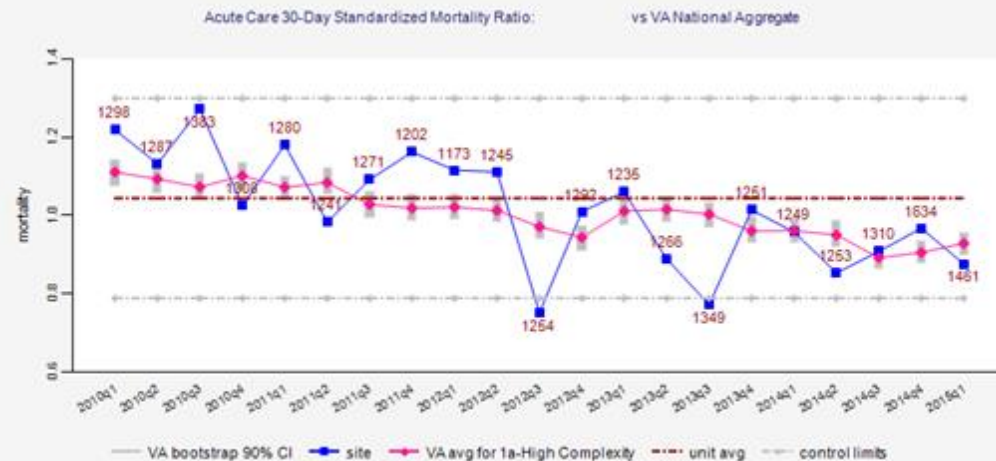
EWMA Chart shows a decrease in mortality since 2012Q3 and mortality below lower control limit starting 2014Q2



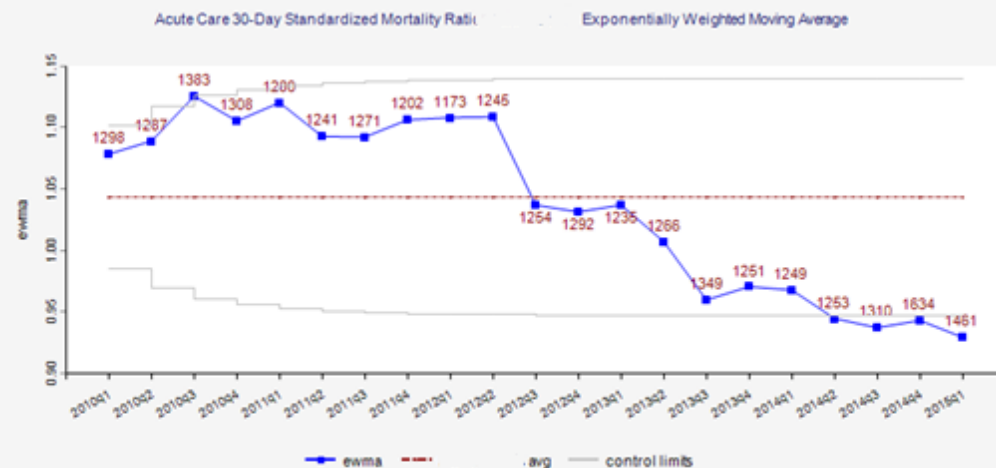
Note: Wt=.2 for current quarter. Limits defined based on L=2.
Mean & sd calculated from data over 2010q1-2014q1. Value labels are #pts from Minneapolis.

Based on the same data, EWMA gives a smoother series and shows a clearer downward trend than Hybrid XMR

Hybrid
XMR



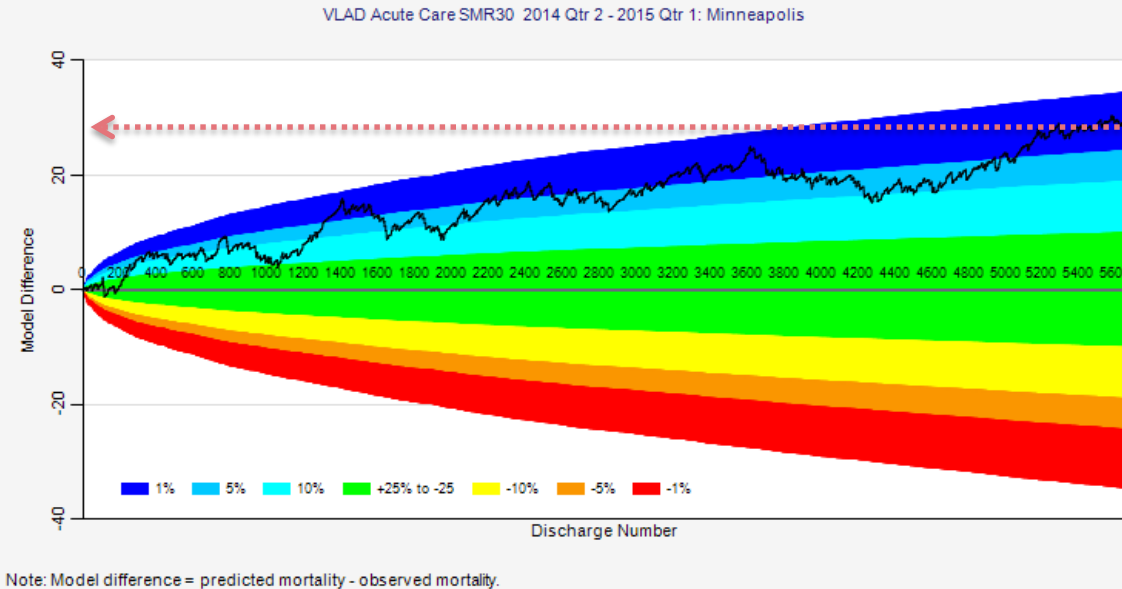
EWMA



Variable Life Adjusted Display (VLAD)

- Plot cumulative difference between predicted and observed outcomes from individual subjects
 - Outcome is risk adjusted
 - Needs 2 values to plot (observed and predicted outcomes)
 - Most often used for binary outcomes (death or live)
- Subjects plotted on the chart in the order of a select time stamp (e.g., discharge date)

VLAD Chart with color prediction intervals over 12 months



Approximately 30 less deaths than predicted over the 12-month period (i.e., predicted deaths – observed deaths ~ 30)

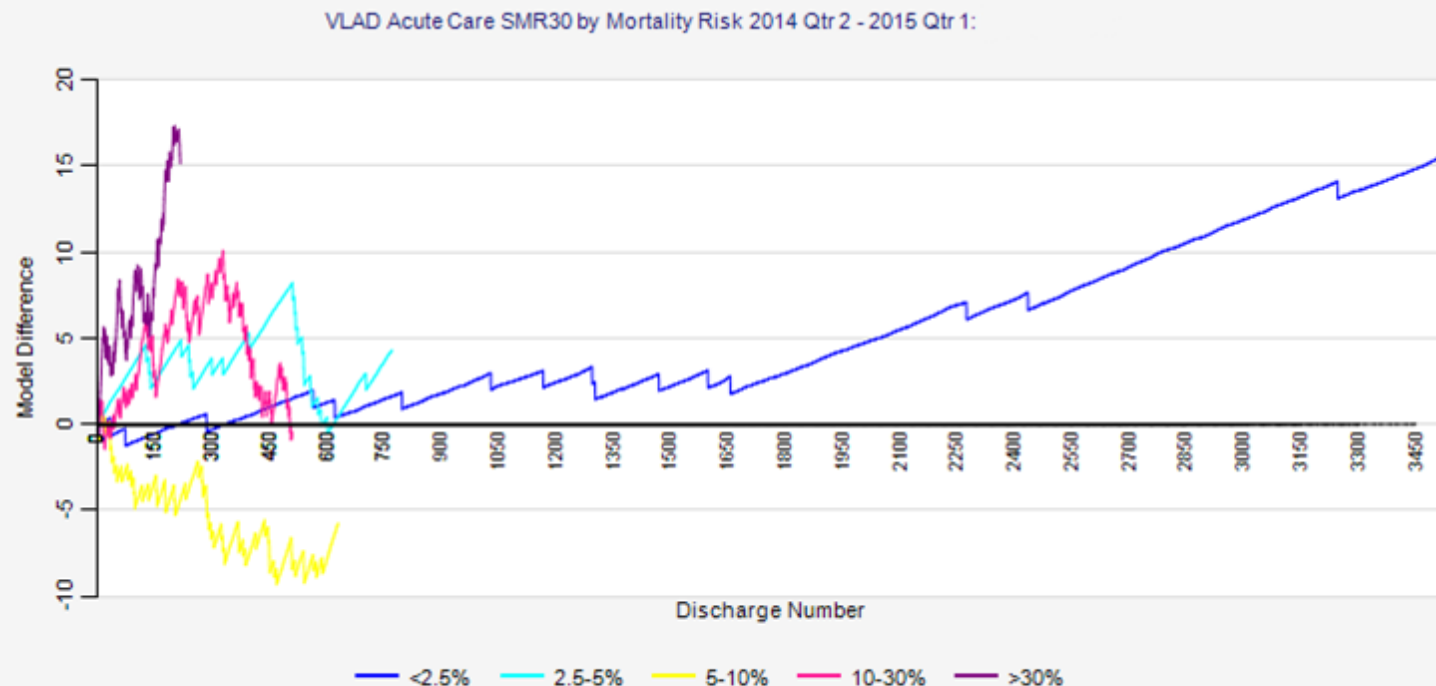
Y-axis: cumulated difference between predicted probability of death and observed death

X-axis: patients ordered by discharge date

Center line: set at 0 (i.e., observed deaths is equal to the predicted number of deaths)

Color prediction intervals: data points in the blue areas suggest performing better than expected; in the yellow, orange and red areas worse than predicted; and in the green area at the level expected

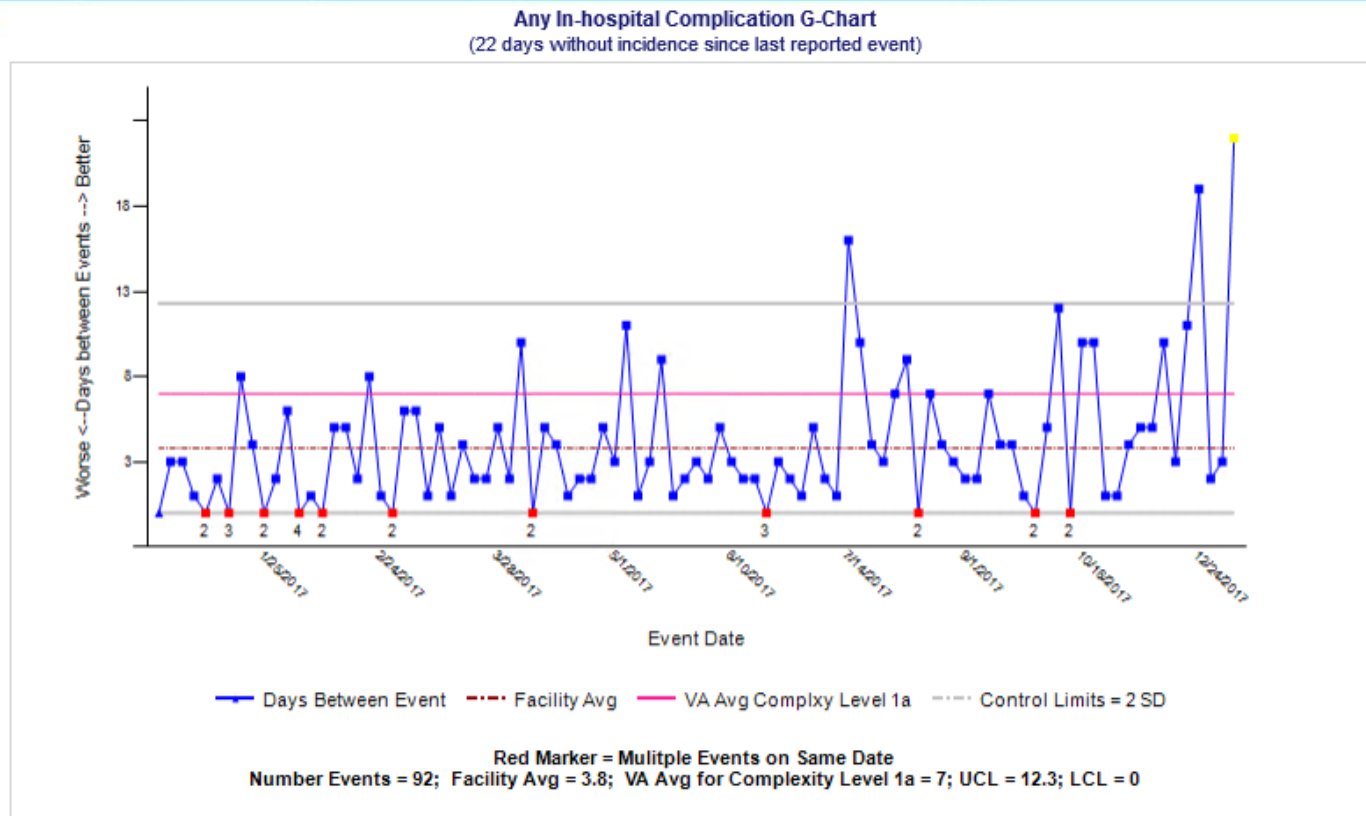
VLAD with patients grouped by severity level; patients with a risk level at 5-10% has opportunity for improvement



Note: Model difference = predicted mortality - observed mortality.

Statistical Process Control Charts and Trigger System

G-Chart for Rare Events, Refreshed Daily



- Plots days between events
- Available for in-hospital complications, mortality and patient safety indicators
- Click a blue dot to return list of patients who experienced an event
- Benchmark with facility past performance and complexity hospital average over the last 12 months
- Refreshed on a daily basis

Why Not the Best VA: Allows VAMCs to Compare Against the National and Regional Average and with Local Hospitals

- New tool to compare VA facility performance
 - Private sector by hospital referral region (HRR)
 - Within VHA by hospital complexity level
- Primary data source: CMS Hospital Compare
- Four Measure Domains
 - Readmissions, Complications and Death
 - *30-day mortality and readmission rates*
 - *Healthcare associated infections*
 - *Surgical complications*
 - Survey of Patient Experiences (HCAHPS)
 - Timely and Effective Care
 - *Acute myocardial infarction*
 - *Heart Failure*
 - *Pneumonia*
 - *SCIP*
 - *Hospital Consumer Assessment of Healthcare Providers and Systems Survey (HCAHPS)*
 - *Inpatient Psychiatric Facility Quality Report (new for FY14Q4 version)*
 - HEDIS measures (only available when compared to VA complexity peer facilities)
- Different benchmarks available for comparison
 - Hospital Average
 - National Average
 - HRR Average
 - Top 10% and 25%

VA Facility:

Type of Hospital to Compare: **HRR Hospitals**Hospitals to Compare: **BAYFRONT HEALTH DADE CITY, BRAN**Measure Domain: **Readmissions, Complications, and Deaths**Measure Sub-Domain: **Healthcare-associated infections (HAI)**Measures: **HAI-CAUTI, HAI-CLABSI, HAI-Clostridium**Add Benchmark: **Hospital Average, National Average, N**

1 of 1 100% Find | Next

Why Not the Best VA**Top Hospital Recognitions****Recognition Details****Graphics****Facility Scorecard**

Why Not the Best VA?

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	Catheter-associated urinary tract infections (CAUTI)	Central line-associated bloodstream infections (CLABSI)	Clostridium difficile (or C.diff.) infections (Intestinal infections)	Methicillin-resistant Staphylococcus Aureus (or MRSA) blood infections (Antibiotic-resistant blood infections)	Surgical site infections from abdominal hysterectomy (SSI: Hysterectomy)	Surgical site infections from colon surgery (SSI: Colon)
Data date range (Preferred direction)	7/16 - 6/17 ↓	7/16 - 6/17 ↓	7/16 - 6/17 ↓	7/16 - 6/17 ↓	7/16 - 6/17 ↓	7/16 - 6/17 ↓
National Average	0.87	0.54	0.88	0.04	7.70	22.26
National Median	0.5	0.2	0.4	0	0	12.8
Tampa (HRR) Average	0.6	0.6	0.4	0	4.7	19
Tampa (HRR) Median	0.6	0.5	0.4	0	0	21.5
National Top 10 Percent	0.00	0.00	0.00	0.00	0.00	0.00
National Top 25 Percent	0.00	0.00	0.12	0.00	0.00	0.00
VA Facility	0.63	0.33	0.86	0.03	Not Available	Not Available
BAYFRONT HEALTH DADE CITY	0.00	0.00	0.24	0.00	NA	0.00
BRANDON REGIONAL HOSPITAL	0.84	0.69	0.55	0.02	0.00	29.41
FLORIDA HOSPITAL CARROLLWOOD	0.00	0.00	0.16	0.00	0.00	22.73
FLORIDA HOSPITAL TAMPA	0.37	0.65	0.19	0.08	0.00	21.46
FLORIDA HOSPITAL WESLEY CHAPEL	0.60	0.00	0.42	0.00	26.32	22.73
FLORIDA HOSPITAL ZEPHYRHILLS	0.34	0.68	0.19	0.00	0.00	20.41
MEMORIAL HOSPITAL OF TAMPA	0.42	2.58	0.12	0.06	0.00	32.26
SOUTH BAY HOSPITAL	0.89	0.00	0.51	0.00	NA	13.89
ST JOSEPHS HOSPITAL	1.05	0.50	0.60	0.04	7.06	20.58
TAMPA COMMUNITY HOSPITAL	0.75	0.44	0.43	0.00	0.00	0.00
TAMPA GENERAL HOSPITAL	1.32	1.22	0.62	0.10	8.89	25.50

Data source is CMS Hospital Compare, except for the note below:

VA HAIs are rolling 12 month data extracted from IPEC Healthcare Associated Infection ProClarity cube, measured as number of infections per 1000 device days for CAUTI and CLAB and infections per 1000 bed days for MRSA. (4/17-3/18)



Why Not the Best VA?

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VA MEDICAL CENTER

Benchmark data with '*' is reported as average, otherwise is median or 50th percentile.

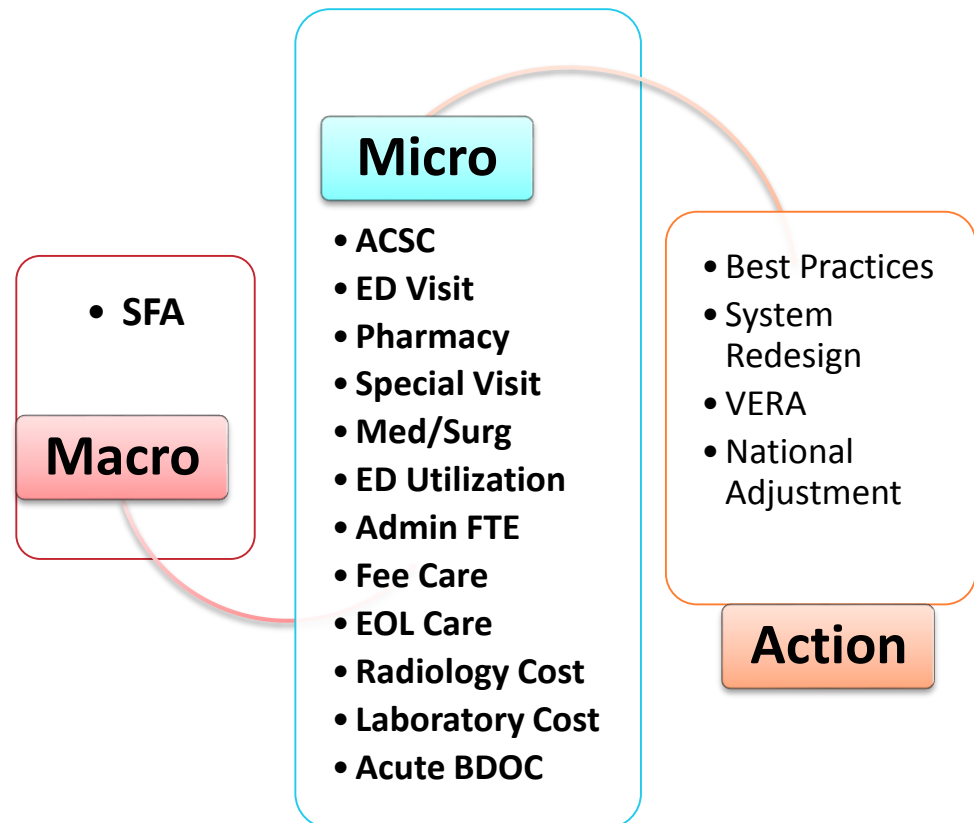
The color coding of metric values is not an indication of statistical significance. Users are recommended to use educated judgement in determining clinical and practical difference.

Measure	Measure Unit	Preferred Direction	VA MEDICAL CENTER	CMS Hospital Referral Region Median or Average	U.S. National Median or Average
Emergency Department Throughput					
1. Emergency department throughput					
a. ED-Average time in ED after admit as inpatient decision	Minutes	↓	138.00	80.000	87.00
b. ED-Median time to admit to hospital	Minutes	↓	339.00	242.000	260.00
Acute care mortality					
1. Acute care 30-day Mortality					
a. 30-day Mortality-AMI	AdjRate	↓	9.17	13.400	13.50
b. 30-day Mortality-COPD	AdjRate	↓	5.42	7.400	8.00
c. 30-day Mortality-HF	AdjRate	↓	5.63	10.700	11.90
d. 30-day Mortality-PN	AdjRate	↓	18.81	16.200	15.90
Avoidable adverse events					
1. Healthcare associated infections (HAI)					
a. HAI-CAUTI	inf/1k device d	↓	0.63	0.600	0.49
b. HAI-CLABSI	inf/1k device d	↓	0.33	0.500	0.25
c. HAI-Clostridium difficile infections	inf/1k device d	↓	0.86	0.420	0.43
d. HAI-MRSA	inf/1k bed days	↓	0.03	0.000	0.00
2. Patient safety indicator (PSI) - Observed Rate					
a. PSI-10-Kidney and diabetic complications after surgery	events/1000	↓	0.00		0.72*
b. PSI-11-Respiratory failure after surgery	events/1000	↓	7.60		9.13*
c. PSI-12-Serious blood clots after surgery	events/1000	↓	5.00		3.72*
d. PSI-13-Postoperative sepsis rate	events/1000	↓	2.41		4.26*
e. PSI-14-A wound splits open after surgery on the abdomen/pelvis	events/1000	↓	0.00		1.71*
f. PSI-15-Accidental cuts/tears from medical treat.	events/1000	↓	1.50		0.73*

Efficiency Opportunity Grid (EOG)

Applying Regression Techniques to Health Care Data

- The Efficiency Opportunity Grid (EOG) is a collection of models and sub-models that attempt to drill into specific areas of efficiency
 - Currently, the EOG has 12 models in 4 different categories of cost
 - These models are all multivariate statistical regressions that identify and explain variation within VHA facilities.



Efficiency Opportunity Grid (EOG)

Introduction to OPES Efficiency Models

The EOG is:

- A compilation of statistical models and measures
- Compiled at the administrative parent facility level
- Designed to give facility and VISN leadership teams insight into:
 - Areas of opportunity for improvement in efficiency
 - Areas of focus for data quality and validation
 - Areas of success compared to other VHA facilities
- Models address both direct cost and utilization in various areas

<div>  <div> Efficiency Opportunity National </div> </div>					
	National Click on Model Name for Model Detail Reports where available	Model Date	Observed (Actual)	Expected	O/E Ratio Click to MAP
Stochastic Frontier Analysis Model	SFA Overall	FY15Q4			1.088
	SFA Clinical	FY15Q4			1.090
	SFA Administrative	FY15Q4			1.074
Ambulatory Care Models	ACSC (All) Model	FY15Q4	85,463		1.00
	CHF ACSC Model	FY15Q4	25,989		1.00
	Pneumonia ACSC Model	FY15Q4	13,417		1.00
Specialty Care Models	Specialty Care Model	FY15Q4	59,692,907		1.00
	Medical / Surgical Model	FY15Q4	17,587,316		1.00
	ED Model	FY15Q4	2,794,035		1.00
Staffing Models	Admin FTEE Model	FY15Q4	70,557.2		1.00
Direct Cost Models	Pharmacy Model	FY15Q4	\$8,558,143,539		1.00
	Non-VA Care Model	FY15Q4	\$6,643,502,240		1.00
	End of Life Care Model	FY15Q4	\$1,464,112,170		1.00
	Radiology Cost Model	FY15Q4	\$1,008,107,020		1.00
	Laboratory Cost Model	FY15Q4	\$1,225,605,978		1.00
Inpatient Models	Acute BDOC Model	FY15Q4	4,552,330		1.00

http://reports2.vssc.med.va.gov/ReportServer/Pages/ReportViewer.aspx?/MgmtReports/OPES/OPES_EfficiencyOpGrid&rs:Command=Render



FY 2017 Physician Capacity Summary Report

Note: Quadrant data is based on productivity vs. new patient access and now uses % wait between 0 and 30 days.

[VSSC Help Desk](#)
[Data Definitions](#)
[Last Updated](#)

[Link to Capacity Reports](#)

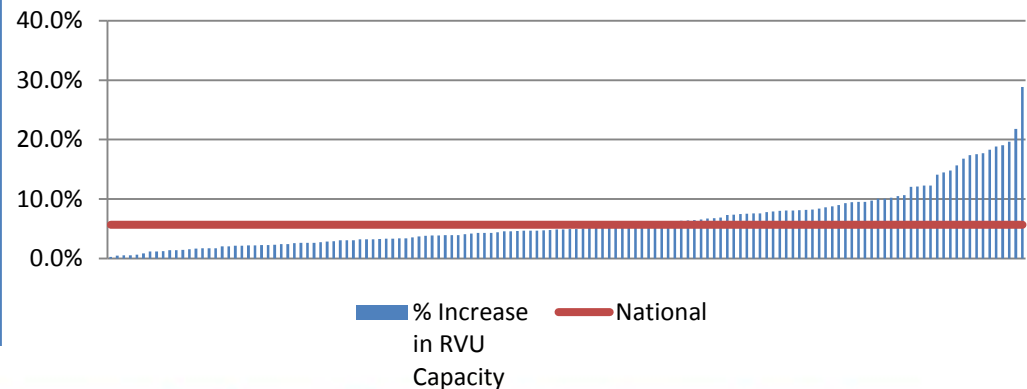
Location (Physician Specialties) <small>Click on a location to drill to specialty level detail</small>	Total Clinical FTE	Breakdown	RVU Capacity			Support Staff Capacity			SPARQ				
		% Clinical	RVU Output	Potential Additional RVU Capacity	% Increase in RVU Capacity	Total Support Staff (Admin & Clinical)	Potential Additional Total Support Staff	% Increase in Total Support Staff	Specialties in a SPARQ Quadrant	% in Quad 1 (Optimized Practice)	% in Quad 2 (Possibly Under-Resourced)	% in Quad 3 (Possibly Inefficient)	% in Quad 4 (Possibly Over-Resourced)
National	17,496.09	81.77%	67,907,421	3,859,875	5.7%	31,918.7	5,051.6	15.8 %	2,992	26.8%	19.8%	21.5%	32.0%
1V01	817.55	75.62%	3,122,822	133,539	4.3%	1,430.7	312.9	21.9 %	163	30.1%	16.0%	12.9%	41.1%
1V02	1,000.96	82.41%	3,851,019	249,023	6.5%	1,646.5	410.4	24.9 %	221	33.0%	14.9%	19.9%	32.1%
1V04	747.87	83.76%	2,784,624	155,620	5.6%	1,168.1	427.9	36.6 %	148	25.7%	19.6%	21.6%	33.1%
1V05	589.05	80.79%	2,215,604	208,900	9.4%	981.8	232.5	23.7 %	130	18.5%	16.2%	20.0%	45.4%
1V06	1,066.21	82.88%	4,065,069	245,231	6.0%	1,953.4	265.5	13.6 %	176	17.0%	25.0%	32.4%	25.6%
2V07	1,100.75	81.42%	4,281,384	163,052	3.8%	2,135.7	209.8	9.8 %	163	20.2%	30.7%	25.8%	23.3%
2V08	1,891.25	86.91%	7,817,537	396,975	5.1%	3,055.9	526.4	17.2 %	191	29.3%	18.8%	27.2%	24.6%
2V09	727.82	82.5%	2,903,983	124,806	4.3%	1,321.6	158.1	12.0 %	125	26.4%	28.8%	24.0%	20.8%
3V10	1,351.89	82.27%	5,464,176	131,861	2.4%	2,653.1	362.5	13.7 %	235	36.2%	24.7%	12.3%	26.8%
3V12	875.09	81.53%	3,338,357	243,641	7.3%	1,578.0	258.2	16.4 %	168	28.6%	11.9%	16.7%	42.9%
3V15	644.30	85.42%	2,531,614	94,428	3.7%	1,343.3	118.8	8.8 %	145	39.3%	16.6%	13.8%	30.3%
3V23	726.11	80.36%	2,745,945	181,524	6.6%	1,799.5	46.7	2.6 %	172	23.8%	16.3%	26.2%	33.7%
4V16	1,068.78	80.52%	4,430,236	215,514	4.9%	1,990.4	280.9	14.1 %	182	26.9%	24.2%	18.7%	30.2%
4V17	1,037.81	85.27%	3,993,219	178,559	4.5%	1,890.5	296.8	15.7 %	141	25.5%	17.7%	12.8%	44.0%
4V19	733.33	80.11%	2,698,499	176,679	6.5%	1,410.1	195.6	13.9 %	143	22.4%	23.1%	28.7%	25.9%
5V20	707.39	75.9%	2,470,785	191,620	7.8%	1,543.4	181.7	11.8 %	120	21.7%	14.2%	28.3%	35.8%
5V21	1,044.01	78.64%	3,696,513	433,920	11.7%	1,678.3	435.8	26.0 %	166	22.3%	17.5%	22.9%	37.3%
5V22	1,365.94	80.85%	5,496,035	334,983	6.1%	2,338.5	331.1	14.2 %	203	26.6%	19.7%	25.1%	28.6%

Framework:
 Using Productivity Targets* to determine a reasonable amount of work per Physician. Simulate provider productivity at the target and calculate additional amount of work or unused physician capacity.

*Productivity Targets are Specialty and MCG** specific

**Certain specialties where n is low use National

FY17 Station Level Physician Unused Capacity



- Total Clinical FTE = Adjusted Clinical FTE + Imputed Fee & Contract FTE.

- % Increase in Current RVU Capacity = Current RVU Capacity / Potential Additional RVU Capacity where Potential Additional RVU Capacity is calculated as (Productivity - Productivity Standard) * Total Clinical FTE. To see drill down data for the capacity calculation, click on a location.

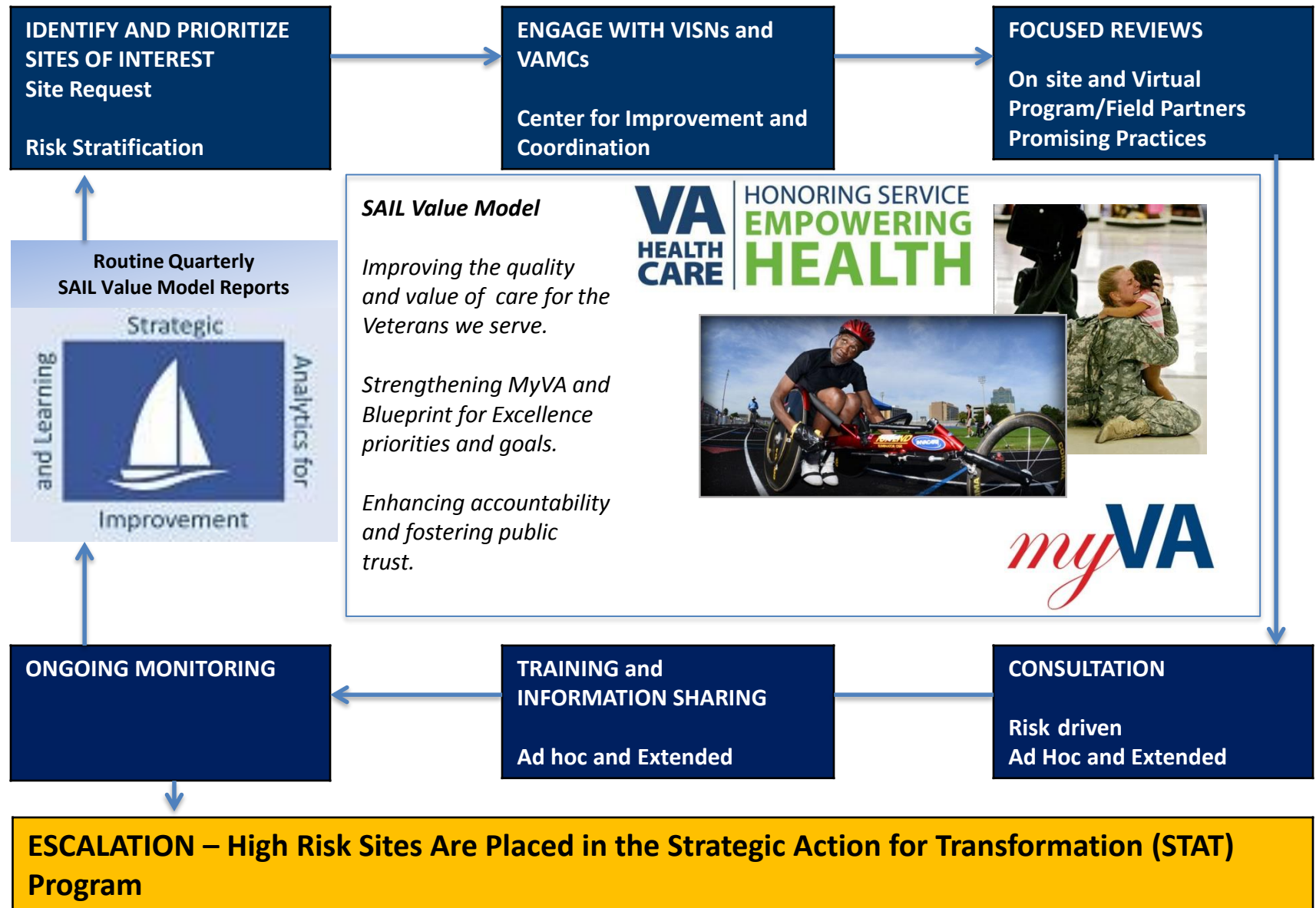
- % Increase in Current Total Support Staff = Current Total Support Staff / Potential Additional Reallocated Support Staff. To see drill down data for the support staff calculation, click on a location and then click on the Support Staff link at the top of the report.

Determining “*Improvement*”

1. Did the hospital improve on the metric itself irrespective of rank? (assuming it had realistic room to improve)
2. Did the hospital improve on both the metric and the rank? (we get the permutations)
3. Acknowledge/reward hospitals that improve **numerically** and by **rank**
4. Absolute vs. Relative Improvement

Numeric	Rank	Note
+	+	No Question
+	-	You tell me
-	+	You tell me
-	-	Get Involved

Overview of Strategic Analytics for Improvement and Learning (SAIL) Consultative Activities



VAMC Progress From FY17Q2 to FY18Q2

Absolute Improvement FY17Q2 to FY18Q2	FY18Q2 SAIL Quality Percentile Distribution					Total
	Top10%	11-30th%	31-70th%	71-90th%	Bottom10%	
Large Improvement	6	7	15	7	2	37
Small Improvement	8	18	21	13	6	66
Trivial Improvement	1	2	12	3	3	21
Trivial Decline	2	1	6	2	4	15
Small Decline	1	0	0	4	2	7
Large Decline	0	0	0	0	0	0
Total	18	28	55	29	17	146

FY17Q2 Performance and Improvement from FY17Q2-FY18Q2



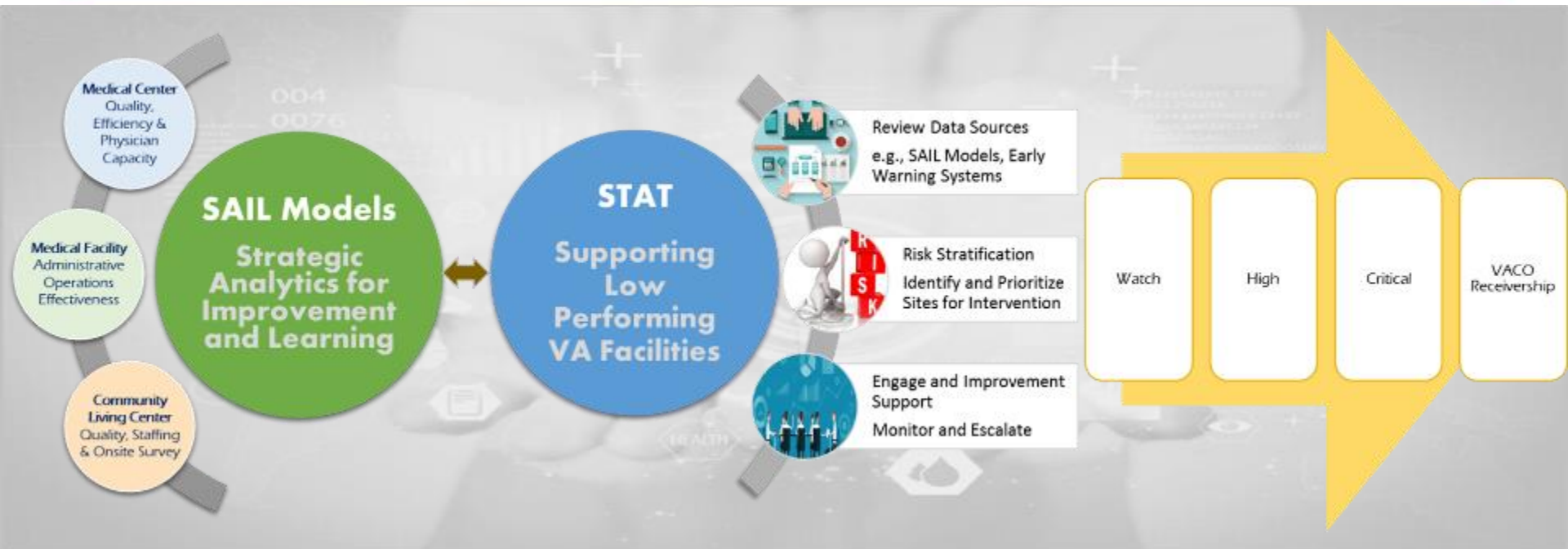
- 71% VAMCs improved overall quality
- Seven VAMCs (5%) had a small deterioration in quality
- No VAMCs had large deterioration in quality
- Most 5-Star (15 out of 18) VAMCs continue to excel, setting new bars for VHA
- Five VAMCs promoted from 1- to 2-star

Size of improvement (effect size) for each measure was truncated at -4 and 4 when falls outside of this range.
The grey area represents a small effect size (absolute value from 0 to 0.2). Data fall outside the cutoffs of +/- 0.2 suggests a meaningful change between the time periods.
Prior and current period BPTW scores are based on 2016 and 2017 data. Wait time metrics have no weights assigned.

The Good and The Really Good: What We Are Learning From Our Deep Dives

- Engaged leadership
- Empowered staff
- Reach out early for improvement and not for fear
- High performers request visits to get better
- Sense of true urgency communicated to staff
- Good knowledge and engagement of leadership all the way down to Service/Section chiefs

SAIL Models and Strategic Action for Transformation



IMPROVEMENT & LEARNING
 Benchmarking Across VAMCs
 Compare with Non VA Hospitals
 Spotlight Successful Strategies
 Identify Gaps and Opportunities
 Facilitate Improvement Network

RISK STRATIFICATION
 Relative Performance
 Absolute Improvement
 Soft Data Calculator

EARLY WARNING SYSTEM
 National Process Control
 System Triggers

ESCALATION APPROACH
 Formal Notification
 Action Plans
 Ongoing Monitoring
 Improvement Support
 VISN Engagement
 Leadership Changes (at higher risk levels)
 Progressive Escalation

Strategic Analytics for Improvement and Learning (SAIL) Links to Relevant Tools and Reports

General Tools	Relevant Tools and Reports Prepared by Program Offices	
Deep Dive Insight Generator	Deep Dive Insight Generator Pyramid Report	Deep Dive Insight Generator Pyramid Report User Guide
External Benchmark	Why Not the Best VA?	
Statistical Process Control Charts User Guide	Guide to Using Statistical Process Control Charts	
SAIL Tutorial Report Viewer	Guide to Using SAIL Report	Guide to Using SAIL Report by chapter
Trigger Systems Using Statistical Process Control Charts	SPC Charts Educational Session Slides A Guide To Trigger Reports	
SAIL Goal Setting Calculator	Goal Setting Calculator Application	Goal Setting Calculator Slides
SAIL SharePoint	SAIL SharePoint Site	
VA Diffusion of Excellence	VA Diffusion of Excellence Integrated Operations Hub	Diffusion of Excellence Fact Sheet
VA Quality of Care	VA Quality of Care external facing website	Access and Quality in VA Healthcare
SAIL Measure Domains	Relevant Tools and Reports Prepared by Program Offices	
Acute care mortality	1. Acute care Standardized Mortality Ratio (SMR)	Daily SPC Chart for rare patient events
		Monthly SPC charts for health outcomes
		Quarterly SPC charts for IPEC measures
	2. Acute care 30-day Standardized Mortality Ratio (SMR30)	IPEC Acute Care Cube
		IPEC ICU Cube
		Daily SPC Chart for rare patient events Quarterly SPC charts for IPEC measures
Avoidable adverse events	3. CMS disease specific 30-day mortality patient detail report (not scored)	
	CMS Risk Standardized Mortality Rate Drill Down Report	
	1. In-hospital complications	Daily SPC Chart for rare patient events
		In-Hospital Complications drill down report
		In-Hospital Complication Cube
	2. Health care associated infections (HAI)	SAIL educational module-Healthcare Associated Infections
		IPEC Data Management web site
		AHRQ Patient Safety Indicator technical specifications
	3. Patient safety indicator (PSI)	IPEC PSI Report
		Patient Safety Index drill patient detail report
		SAIL educational module-Patient Safety Indicators

SAIL Deep Dive Insight Generator Provides Analytic Templates for 8 Quality Domains

[Introduction](#) [Acute Care Mortality](#) [Avoidable Adverse Events](#) [Length of Stay and Utilization Management](#) [Performance Measures](#) [Employee Satisfaction](#) [Patient Experience](#) [Care Transitions](#) [Access](#)

Deep Dive Insight Generator

[Complexity Grouping Map](#)

[Deep Dive Insight Generator Updates](#)



Deep Dive Insight Generator

[SAIL Listserv](#)

[SAIL Data Definitions](#)

[SSN Access](#)

[SAIL Help Desk](#)

The Deep Dive Insight Generator (DDIG) is designed to be a repository of analytic templates to assist users in understanding the strengths and opportunities across a wide variety of metrics that are critical to high quality and efficient health care delivery. DDIG contains data from multiple Pyramid Analytics cubes prepared by Program Offices and organizes each section to represent a different domain of related clinical or system metrics. At this initial version, the pre-defined reports display information in a way that is typically used in SAIL Deep Dive exercises shared with facilities during site visits. The information may help to generate insights about improvement opportunities, areas of success that may be diffused to different clinical areas, or contextual information associated with the root cause of observed gaps and opportunities. Customers may use DDIG as a starting point and conduct further analyses by creating a New Data Discovery within the cube(s) of interest.

Instructions For Use:

Select the desired facility, time period and complexity level from the available slicers in each section.

The DDIG contains Protected Health Information (PHI)

If you have not been granted access to PHI data in the National Social Security Database (NSSD), you will not be able to view the reports containing protected health information. An 'Unable to Resolve Query' ERROR will be displayed.

Unsure of your access?

[Check PHI/SSN Access](#)

Click the button at right "Check PHI/SSN Access. The report link will show your level of access.

Don't have PHI Access?

[Request PHI/SSN Access](#)

If you do not have PHI access and need it, please click the button "How to Request PHI Access" for instructions and a list of POCs to grant access.



SAIL Training and Resources

- [SAIL Listserv](#)
 - Product Releases and Updates
 - SAIL Miniseries
 - SAIL Newsletter
- [CIA Pulse](#) Website
 - Products
 - Announcements
- [RAFT Past Training Documents](#)



Reporting and Analytics Field Training

VA



U.S. Department of Veterans Affairs
Veterans Health Administration
VHA Support Service Center

As a complement to RAMP, the #1 VHA Resource for understanding, utilizing and creating actions with data

HOME

VHA DATA & TRAINING RESOURCES

RECURRING DATA CALLS

SUGGESTION BOX

TRAINING EVALUATION

HELP DESK

BROWSE COURSES

All Courses

Getting Started

Data and Analytics Tools

Basic Analytics/Statistics

Advanced Analytics/Statistics

Subject Area Training

Applied Analytics Training

OFFICE TRAINING

CIA

Community Care

IPEC

OCAMES

OPES

VSSC



Applied Analytics

Instructor Led Classes

Courses

Course Title Start Time End Time

There are no items to show in this view of the "Courses" list.

Applied Analytics by Topics

✓ ☐ Name Description Office Training Type Training Level

▶ Applied Analytics Training Topics : Healthcare Analytics (1)

▶ Applied Analytics Training Topics : SAIL (36)

▶ Applied Analytics Training Topics : SAIL Admin (2)

▶ Applied Analytics Training Topics : SAIL CLC (1)

<http://raft.vssc.med.va.gov/Pages/PracticalTraining.aspx>

SAIL Analytics and Reporting Teams

Center for Innovation and Analytics (CIA)

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Questions about SAIL?

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Julie Morgan Julie.Morgan@va.gov

[Open a Help Desk Ticket](#)





Quality of Care

https://www.va.gov/QUALITYOFCARE/measure-up/Strategic_Analytics_for_Improvement_and_Learning_SAIL.asp

▼ Quality of Care

Quality of Care Home

About Quality of Care

► The VA Experience

► New Approach to Quality Care

► How VA is Improving

► Health Care Education

▼ How Does Your VA Measure Up?

How Does Your Medical
Center Perform?

How Does Your VA Health
Experience Rate?

Your VA Quality Scores

Why Not the Best VA?

Why Choose VA Health Care

A Second Opinion

Provide Feedback

► More Health Care

Strategic Analytics for Improvement and Learning (SAIL)

What is SAIL?

Strategic Analytics for Improvement and Learning Value Model or SAIL, is a system for summarizing hospital system performance within Veterans Health Administration (VHA). SAIL assesses 25 Quality measures in areas such as death rate, complications, and patient satisfaction, as well as overall efficiency and physician capacity at individual VA Medical Centers (VAMCs). Below you can download or view the data in spreadsheets listed by facility. SAIL data tables are updated every quarter.

>> [SAIL FY2016 Q4 Medical Center Interim Star Rating](#)

>> [Hospital Star Rating \(FY2017\)](#)

>> [Hospital Star Rating \(FY2016\)](#)

***Note:** Previous quarter's data can be found at the bottom of this page.

>> [View SAIL Value Model Measure Definitions](#)

Fiscal Year 2018 - Quarter 2 Data Tables

VISN 1	VISN 2	VISN 4	VISN 5	VISN 6
Bedford	Albany	Altoona	Baltimore	Asheville