El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

AGENDA
QUALITY, PATIENT CARE AND PATIENT EXPERIENCE COMMITTEE MEETING OF THE EL CAMINO HOSPITAL BOARD

Monday, December 3, 2018 - 5:30 p.m.
El Camino Hospital | Conference Rooms A&B
2500 Grant Road, Mountain View, CA 94040

PURPOSE: To advise and assist the El Camino Hospital (ECH) Board of Directors ("Board") in constantly enhancing and enabling a culture of quality and safety at ECH, and to ensure delivery of effective, evidence-based care for all patients. The Quality Committee helps to assure that excellent patient care and exceptional patient experience are attained through monitoring organizational quality and safety measures, leadership development in quality and safety methods and assuring appropriate resource allocation to achieve this purpose.

	AGENDA ITEM	PRESENTED BY		ESTIMATED TIMES
1.	**CALL TO ORDER/ROLL CALL**	Julie Kliger, Quality Committee Chair		**5:30 – 5:32pm**
2.	**POTENTIAL CONFLICT OF INTEREST DISCLOSURES**	Julie Kliger, Quality Committee Chair		**5:32 – 5:33**
3.	**CONSENT CALENDAR ITEMS:** *Any Committee Member or member of the public may pull an item for discussion before a motion is made.* ***Approval*** a. Minutes of the Open Session of the Quality Committee Meeting (November 5, 2018) ***Information*** b. Patient Stories c. FY19 Pacing Plan d. Progress Against FY19 Committee Goals e. Article of Interest	Julie Kliger, Quality Committee Chair	*public comment*	**Motion Required 5:33 – 5:35**
4.	**REPORT ON BOARD ACTIONS** **ATTACHMENT 4**	Julie Kliger, Quality Committee Chair		**Discussion 5:35 – 5:40**
5.	**FY19 QUALITY DASHBOARD** **ATTACHMENT 5**	Mark Adams, MD, CMO		**Discussion 5:40 – 5:55**
6.	**PSI-90 SCORES** **ATTACHMENT 6**	Mark Adams, MD, CMO		**Discussion 5:55 – 6:00**
7.	**THROUGHPUT CASE STUDY** **ATTACHMENT 7**	Cheryl Reinking, CNO		**Discussion 6:00 – 6:10**
8.	**READMISSIONS** **ATTACHMENT 8**	Mark Adams, MD, CMO		**Discussion 6:10 – 6:20**
9.	**CULTURE OF SAFETY SURVEY REPORT** **ATTACHMENT 9**	Mark Adams, MD, CMO		**Discussion 6:20 – 6:35**
10.	**HOW DOES EL CAMINO HOSPITAL DEFINE QUALITY** **ATTACHMENT 10**	Julie Kliger, Quality Committee Chair Mark Adams, MD, CMO		**Discussion 6:35 – 6:55**
11.	**HOSPITAL UPDATE** **ATTACHMENT 11**	Mark Adams, MD, CMO		**Discussion 6:55 – 7:00**

A copy of the agenda for the Regular Meeting will be posted and distributed at least seventy-two (72) hours prior to the meeting. In observance of the Americans with Disabilities Act, please notify us at (650) 988-7504 prior to the meeting so that we may provide the agenda in alternative formats or make disability-related modifications and accommodations.

	AGENDA ITEM	PRESENTED BY		ESTIMATED TIMES
12.	**PUBLIC COMMUNICATION**	Julie Kliger, Quality Committee Chair		**Information 7:00 – 7:02**
13.	**ADJOURN TO CLOSED SESSION**	Julie Kliger, Quality Committee Chair		**Motion Required 7:02 – 7:03**
14.	**POTENTIAL CONFLICT OF INTEREST DISCLOSURES**	Julie Kliger, Quality Committee Chair		**7:03 – 7:04**
15.	**CONSENT CALENDAR** *Any Committee Member may pull an item for discussion before a motion is made.*	Julie Kliger, Quality Committee Chair		**Motion Required 7:04 – 7:07**
	Approval *Gov't Code Section 54957.2.* a. Minutes of the Closed Session of the Quality Committee Meeting (December 3, 2018) ***Information*** b. Quality Council Minutes (October 3, 2018)			
16.	*Health and Safety Code Section 32155* for a report of the Medical Staff; deliberations concerning reports on Medical Staff quality assurance matters: - Q1 FY19 Quality/Safety Review	Mark Adams, MD, CMO		**Discussion 7:07 – 7:17**
17.	*Health and Safety Code Section 32155* for a report of the Medical Staff; deliberations concerning reports on Medical Staff quality assurance matters: - Serious Safety Event/Red Alert Report	Mark Adams, MD, CMO		**Discussion 7:17 – 7:22**
18.	**ADJOURN TO OPEN SESSION**	Julie Kliger, Quality Committee Chair		**Motion Required 7:22 – 7:23**
19.	**RECONVENE OPEN SESSION/REPORT OUT**	Julie Kliger, Quality Committee Chair		**7:23 – 7:24**
	To report any required disclosures regarding permissible actions taken during Closed Session.			
20.	**ADJOURNMENT**	Julie Kliger, Quality Committee Chair	*public comment*	**Motion Required 7:24 – 7:25pm**

Upcoming FY19 Meetings: February 4, 2019 | March 4, 2019 | April 1, 2019 | May 6, 2019 | June 3, 2019
Board/Committee Educational Gathering: April 24, 2019

Minutes of the Open Session of the
Quality, Patient Care and Patient Experience Committee
Monday, November 5, 2018
El Camino Hospital | Conference Rooms A&B
2500 Grant Road, Mountain View, CA 94040

Members Present
Katie Anderson
Ina Bauman
Jeffrey Davis, MD (via teleconference)
Peter C. Fung, MD
Julie Kliger, Chair
David Reeder
Wendy Ron
Melora Simon

Members Absent

Agenda Item	Comments/Discussion	Approvals/ Action
1. CALL TO ORDER/ ROLL CALL	The open session meeting of the Quality, Patient Care and Patient Experience Committee of El Camino Hospital (the "Committee") was called to order at 5:33pm by Chair Kliger. A verbal roll call was taken. Dr. Davis participated via teleconference. Dr. Fung was absent and Ms. Anderson arrived during Agenda Item 5: FY19 Quality Dashboard. All other Committee members were present at roll call.	
2. POTENTIAL CONFLICT OF INTEREST	Chair Kliger asked if any Committee members had a conflict of interest with any of the items on the agenda. No conflicts were reported.	
3. CONSENT CALENDAR	Chair Kliger asked if any member of the Committee or the public wished to remove an item from the consent calendar. No items were removed. **Motion:** To approve the consent calendar: Minutes of the Open Session of the Quality Committee Meeting (October 2, 2018); Safety Report for Environment of Care; and for information: Patient Story; FY19 Pacing Plan; and Progress Against FY19 Committee Goals. **Movant:** Simon **Second:** Reeder **Ayes:** Bauman, Davis, Kliger, Reeder, Simon **Noes:** None **Abstentions:** None **Absent:** Fung, Anderson **Recused:** None	***Consent Calendar approved***
4. REPORT ON BOARD ACTIONS	In response to Ms. Simon's question, Cindy Murphy, Director of Governance Services and Director Reeder clarified the Bylaws amendment as reported.	
5. FY19 QUALITY DASHBOARD	Mark Adams, MD, CMO, reviewed the quality metrics on the Committee's FY19 dashboard and Cheryl Reinking, RN, CNO, reviewed the HCAHPS scores. Ms. Reinking described actions in place to improve the scores and reported that the October results, which will be brought forward next month, are showing marked improvement. Chair Kliger suggested that the staff bring forward a couple examples of predictions of what our November results will be based on a particular action we are taking now. Ms. Reinking suggested that one or two actions related to ED throughput might be useful examples.	

6. CDI DASHBOARD	Dr. Adams reported on the Clinical Documentation Improvement (CDI) dashboard as presented in the materials, noting that Medicare is moving toward measuring mortality by physician.	
7. CORE MEASURES	Dr. Adams explained the CY18 Core Measure Summary Report as presented in the materials. He explained that what are reported as Core Measures changes over time and some are represented in the Summary Report. In response to a question, Imtiaz Qureshi, MD, Enterprise Chief of Medical Staff, explained that it is important to obtain CT or MRI results quickly for acute stroke patients so that appropriate treatment decisions can be made. Dan Woods, CEO, requested that staff provide an explanation and action plans in the materials for those items in "red."	
8. PERFORMANCE IMPROVEMENT – PHYSICIAN MANAGEMENT	Daniel Shin, MD, Medical Director, Quality & Physician Services, reported on performance improvement activities involving physicians in the areas of antibiotic stewardship, patient blood management, and management of alerts to physicians related to order entry in iCare. Staff was asked to provide the Committee with the paper "Ironies of Automation."	
9. HOW DOES ECH DEFINE QUALITY	Dr. Adams explained that the purpose of tonight's discussion is to introduce the topic, that Quality is often in the eye of the beholder, and there are a lot of lenses to examine this through. He also referred to various "Quality" definitions of other organizations provided in the materials. Chair Kliger commented that she would like the Committee to answer the questions: 1) what does good quality look like at ECH? 2) where is ECH performing? and 3) where does it want to be performing? Chair Kliger noted that the quality maturity model would be distributed to the Committee and others (staff and physicians) present to provide responses.	
10. PUBLIC COMMUNICATION	There were no comments from the public.	
11. HOSPITAL UPDATE	Mark Adams, MD, CMO, answered questions from the Committee members about the hospital update.	
12. ADJOURN TO CLOSED SESSION	**Motion:** To adjourn to closed session at 7:15pm. **Movant:** Reeder **Second:** Simon **Ayes:** Anderson, Bauman, Davis, Kliger, Reeder, Simon **Noes:** None **Abstentions:** None **Absent:** Fung **Recused:** None	***Adjourned to closed session at 7:15pm.***
13. AGENDA ITEM 18: RECONVENE OPEN SESSION/ REPORT OUT	Open session was reconvened at 7:14pm. Agenda Items 13-17 were covered in closed session. During the closed session, the Committee approved the Minutes of the Closed Session of the Quality Committee Meeting (October 1, 2018) a unanimous vote of all members present, (Anderson, Bauman, Davis, Kliger, Reeder, Ron, Simon: Director Fung absent).	
14. AGENDA ITEM 18: ADJOURNMENT	**Motion:** To adjourn at 7:25pm. **Movant:** Ron **Second:** Reeder **Ayes:** Anderson, Bauman, Davis, Kliger, Reeder, Simon **Noes:** None **Abstentions:** None **Absent:** Fung	***Meeting adjourned at 7:25pm.***

	Recused: None	

Attest as to the approval of the foregoing minutes by the Quality, Patient Care and Patient Experience Committee of El Camino Hospital:

_____
Julie Kliger
Chair, Quality Committee

Patient Letter

Dear [redacted]

I was a patient in your ER today. I ended up in the ER (in Los Gatos) with severe abdominal pain. [redacted] was my nurse, and she was so amazing that I had to write to you about her.

Having older parents I'm quite familiar with the process of being admitted and cared for in ERs. Not everyone is suited for the job, and the staff is sometimes shorthanded and tired. But my experience today was extraordinary. [redacted] immediately put me at ease, did everything quickly and efficiently so I could get pain medication as soon as possible. After I was more comfortable, I couldn't help but notice her interaction with an older patient next door. He was very scared and [redacted] handled his emotional as well as his physical needs. She found out that this patient had a dog left in his car, so she took it upon herself to get Security to make sure the dog was alright. In some ERs you cannot get anyone to come and tell you anything. In your ER, [redacted]'s presence was a constant. She also explained everything to me to make sure I was well informed about the next steps. She treated me with respect, compassion and kindness. She is intelligent, very competent and she really loves her job. It shows.

Thank you for building such a good team at this hospital. We live in Los Gatos and it's comforting to know your team is there in case of an emergency.

Take care.

[redacted]

City and County of
San Francisco

Department of Public Health

London N. Breed
Mayor

Zuckerberg San Francisco General
Hospital and Trauma Center
[redacted]

November 6, 2018

Dr. Vincent Gaudiani
[redacted]

Mr. Dan Woods, CEO
El Camino Hospital
2500 Grant Road
Mountain View, CA 94040

Dear Dr. Gaudiani and Mr. Woods:

On behalf of our team here at Zuckerberg San Francisco General Hospital, I wanted to sincerely thank you for your partnership in caring for [redacted]. As you know, [redacted] had a very successful aortic valvuloplasty at your hospital on [redacted]. [redacted] came to us with undiagnosed critical aortic stenosis and unfortunately was also uninsured. While our cardiology team was stabilizing her health status, our Care Coordination team worked diligently with the family to establish health coverage as well as to find a surgeon and a hospital team that would perform her surgery. Her specialized care needs and her lack of coverage made that nearly impossible.

Fortunately for [redacted] you both accepted her in your expert and compassionate care. She had her surgery and did so well that she was able to be discharged directly home. We wanted to express our deep gratitude for your expertise and dedication to community service and patient care.

With much appreciation,

[redacted]
Zuckerberg San Francisco General Hospital
and Trauma Center

cc: [redacted]

QUALITY, PATIENT CARE, AND PATIENT EXPERIENCE COMMITTEE
FY19 Pacing Plan

FY2019 Q1		
JULY 2018	**AUGUST 6, 2018**	**SEPTEMBER 5, 2018**
No Board or Committee Meetings Routine Consent Calendar Items: ▪ Approval of Minutes ▪ Patient Story ▪ Progress Against FY 2019 Committee Goals (Nov 5, March 4, June 3) ▪ FY19 Pacing Plan ▪ Med Staff Quality Council Minutes	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY18 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda Items 1. FY18 Quality Dashboard Results 2. Approve Committee Charter 3. Culture of Safety Discussion 4. LEAN Progress Report	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda items: 7. Update on Patient and Family Centered Care 8. Mortality and Readmissions Metrics (FY19 Quality Goals) 9. Annual Patient Safety Report 10. FY18 Quality Dashboard Final Results 11. Pt. Experience (HCAHPS) 12. ED Pt. Satisfaction (Press Ganey)
FY2018 Q2		
OCTOBER 1, 2018	**NOVEMBER 5, 2018**	**DECEMBER 3, 2018**
Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda Items: ~~1. Pt. Experience (HCAHPS)~~ 2. ED Pt. Satisfaction 3. Medical Staff Credentialing Process Update	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda Items: 1. CDI Dashboard 2. Core Measures 3. Safety Report for the Environment of Care 4. Quarterly Quality and Safety Review 5. Performance Improvement with Physician Management	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda items: 1. Update on Patient and Family Centered Care 2. Mortality and Readmissions Metrics (FY19 Quality Goals – With FY19 QC Dashboard) 3. Readmission Dashboard 4. PSI-90 Pt. Safety Indicators 5. Culture of Safety Survey Report (Include OR) 6. Q1 FY19 Quality and Safety Review 7. What is Quality? (Maturity Model) 8. Throughput Case Study

QUALITY, PATIENT CARE, AND PATIENT EXPERIENCE COMMITTEE
FY19 Pacing Plan

FY2019 Q3		
JANUARY 2019	**FEBRUARY 4, 2019**	**MARCH 4, 2019**
No Meeting	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda Items: 1. Q2 FY19 Quality and Safety Review 2. Physician Survey Results 3. Committee Recruitment	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda Items: 1. Update on Patient and Family Centered Care 2. Mortality and Readmissions Metrics (FY19 Quality Goals) 3. Proposed FY20 Committee Goals 4. Proposed FY20 Organizational Goals 5. Behavioral Health Services Quality Report
FY2019 Q4		
APRIL 1, 2019	**MAY 6, 2019**	**JUNE 3, 2019**
Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda Items: 1. Leapfrog Survey 2. Value Base Purchasing Report 3. Pt. Experience (HCAHPS) 4. ED Pt. Satisfaction (Press Ganey) 5. Approve FY20 Committee Goals 6. Proposed FY20 Committee Meeting Dates 7. Proposed FY20 Organizational Goals	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda Items: 1. CDI Dashboard 2. Core Measures 3. Approve FY20 Committee Goals (if needed) 4. Proposed FY20 Organizational Goals 5. Proposed FY20 Pacing Plan 6. Q3 FY19 Quality and Safety Review	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Progress Against FY19 Committee Goals 4. FY19 Quality Dashboard 5. Hospital Update 6. Serious Safety/Red Alert Event as needed Special Agenda Items: 1. Update on Patient and Family Centered Care 2. Mortality and Readmissions Metrics (FY19 Quality Goals) 3. Readmission Dashboard 4. PSI-90 Pt. Safety Indicators 5. Approve FY20 Pacing Plan

El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

FY19 COMMITTEE GOALS

Quality, Patient Care and Patient Experience Committee

PURPOSE

The purpose of the Quality, Patient Care and Patient Experience Committee (the "Committee") is to advise and assist the El Camino Hospital (ECH) Hospital Board of Directors ("Board") in constantly enhancing and enabling a culture of quality and safety at ECH, to ensure delivery of effective, evidence-based care for all patients, and to oversee quality outcomes of all services of ECH. The Committee helps to assure that exceptional patient care and patient experiences are attained through monitoring organizational quality and safety measures, leadership development in quality and safety methods, and assuring appropriate resource allocation to achieve this purpose.

STAFF: **Mark Adams**, Chief Medical Officer (Executive Sponsor)

The CMO shall serve as the primary staff to support the Committee and is responsible for drafting the Committee meeting agenda for the Committee Chair's consideration. Additional clinical representatives and members of the Executive Team may participate in the meetings upon the recommendation of the Executive Sponsor and at the discretion of the Committee Chair. These may include: the Chiefs/Vice Chiefs of the Medical Staff, physicians, nurses, and members from the community advisory councils, or the community at-large.

GOALS	TIMELINE	METRICS
1. Review the Hospital's organizational goals and scorecard and ensure that those metrics and goals are consistent with the strategic plan and set at an appropriate level as they apply to quality	- FY18 Achievement and Metrics for FY19 (Q1 FY19) - FY20 Goals (Q3 – Q4)	Review management proposals; provide feedback and make recommendations to the Board – reviewed FY18 results on 9/5/18; FY20 goals review paced for 3/4/19
2. Alternatively (every other year) review peer review process and medical staff credentialing process; monitor and follow through on the recommendations	Q2	- Receive update on implementation of peer review process changes (FY20) N/A - Review Medical Staff credentialing process (FY19) – COMPLETE - reviewed at 10/1/2018 meeting
3. Review Quality, Patient Care and Patient Experience reports and dashboards	- FY19 Quality Dashboard (Q1-Q2 proposal; monthly for review and discussion, if needed) - CDI Core Measures, PSI-90, Readmissions, Patient Experience (HCAHPS), ED Patient Satisfaction (x2 per year) - Leapfrog survey results and VBP calculation reports (annually)	Review reports per timeline – on track
4. Oversee execution of the Patient and Family-Centered Care plan and LEAN management activities and cultural transformation work	Quarterly	Review plan and progress; provide feedback to management – paced quarterly
5. Monitor the impact of interventions to reduce mortality and readmissions	Quarterly	Review progress toward meeting quality organizational goals – on the FY19 dashboard

SUBMITTED BY:

Chair: David Reeder
Executive Sponsor: Mark Adams, MD, CMO
Approved by the El Camino Hospital Board on June 13, 2018

Ironies of Automation

Lisanne Bainbridge
Department of Psychology, University College London

1983

Iron y : combination of circumstances, the result of which is the direct opposite of what might be expected.
Paradox : seemingly absurd though perhaps really well-founded statement.

The classic aim of automation is to replace human manual control, planning and problem solving by automatic devices and computers. However, as Bibby and colleagues (1975) point out : "even highly automated systems. such as electric power networks, need human beings for supervision, adjustment, maintenance, expansion and improvement. Therefore one can draw the paradoxical conclusion that automated systems still are man-machine systems, for which both technical and human factors are important." This paper suggests that the increased interest in human factors among engineers reflects the irony that the more advanced a control system is, so the more crucial may be the contribution of the human operator.

This paper is particularly concerned with control in process industries, although examples will be drawn from flight-deck automation. In process plants the different modes of operation may be automated to different extents, for example normal operation and shut-down may be automatic while start-up and abnormal conditions are manual. The problems of the use of automatic or manual control are a function of the predictability of process behaviour, whatever the mode of operation. The first two sections of this paper discuss automatic on-line control where a human operator is expected to takeover in abnormal conditions, the last section introduces some aspects of human- computer collaboration in on-line control.

1. Introduction

The important ironies of the classic approach to automation lie in the expectations of the system designers, and in the nature of the tasks left for the human operators to carry out.

The designer's view of the human operator may be that the operator is unreliable and inefficient. so should be eliminated from the system. There are two ironies of this attitude. One is that designer errors can be a major source of operating problems. Unfortunately people who have collected data on this are reluctant to publish them, as the actual figures are difficult to interpret. (Some types of error may be reported more readily than others, and there may be disagreement about their origin.) The second irony is that the designer who tries to eliminate the operator still leaves the operator to do the tasks which the designer cannot think how to automate. It is this approach which causes the problems to be discussed here, as it means that the operator can be left with an arbitrary collection of tasks, and little thought may have been given to providing support for them.

1.1. *Tasks after automation.*
There are two general categories of task left for an operator in an automated system. He may be expected to monitor that the automatic system is operating correctly, and if it is not he may be expected to call a more experienced operator or to takeover himself. We will discuss the ironies of manual takeover first, as the points made also have implications for monitoring. To take over and stabilize the process requires manual control skills, to diagnose the fault as a basis for shut down or recovery requires cognitive skills.

1.1.1.*Manual control skills.* Several studies (Edwards and Lees, 1974) have shown the difference between inexperienced and experienced process operators making a step change. The experienced operator makes the minimum number of actions, and the process output moves smoothly and quickly to the new level, while with an inexperienced operator it oscillates round the target value. Unfortunately, physical skills deteriorate when they are not used, particularly the refinements of gain and timing. This means that a formerly experienced operator who has been monitoring an automated process may now be an inexperienced one. If he takes over he may set the process into oscillation. He may have to wait for feedback, rather than controlling by open-loop, and it will be difficult for him to interpret whether the feedback shows that there is something wrong with the system or more simply that he has misjudged his control action. He will need to make actions to counteract his ineffective control, which will add to his work load. When manual takeover is needed there is likely to be something wrong with the process, so that unusual actions will be needed to control it, and one can argue that the operator needs to be more rather than less skilled, and less rather than more loaded, than average.

1.1.2.*Cognitive skills.*
Long-term knowledge . An operator who finds out how to control the plant for himself, without explicit training, uses a set of propositions about possible process behaviour, from which he generates strategies to try (e.g. Bainbridge. 1981). Similarly an operator will only be able to generate successful new strategies for unusual situations if he has an adequate knowledge of the process. There are two problems with this for machine-minding operators. One is that efficient retrieval of knowledge from long-term memory depends on frequency of use (consider any subject which you passed an examination in at school and have not thought about since). The other is that this type of knowledge develops only through use and feedback about its effectiveness. People given this knowledge in theoretical classroom instruction without appropriate practical exercises will probably not

understand much of it, as it will not be within a framework which makes it meaningful. and they will not remember much of it as it will not be associated with retrieval strategies which arc integrated with the rest of the task. There is some concern that the present generation of automated systems, which are monitored by former manual operators, are riding on their skills, which later generations of operators cannot be expected to have.

Working storage . The other important aspect of cognitive skills in on-line decision making is that decisions are made within the context of the operator's knowledge of the current state of the process. This is a more complex form of running memory than the notion of a limited capacity short-term store used for items such as telephone numbers. The operator has in his head (Bainbridge, 1975) not raw data about the process state, but results of making predictions and decisions about the process which will be useful in future situations, including his future actions. This information takes time to build up. Manual operators may come into the control room quarter to half an hour before they are due to take over control, so they can get this feel for what the process is doing. The implication of this for manual takeover from automatically controlled plant is that the operator who has to do something quickly can only do so on the basis of minimum information. He will not be able to make decisions based on wide knowledge of the plant state until he has had time to check and think about it.

1.1.3 *Monitoring.* It may seem that the operator who is expected solely to monitor that the automatics are acting correctly, and to call the supervisor if they are not, has a relatively simple task which does not raise the above complexities. One complexity which it does raise of course is that the supervisor too will not be able to takeover if he has not been reviewing his relevant knowledge, or practising a crucial manual skill. Another problem arises when one asks whether monitoring can be done by an unskilled operator.

We know from many 'vigilance' studies (Mackworth. 1950) that it is impossible for even a highly motivated human being to maintain effective visual attention towards a source of information on which very little happens, for more than about half an hour. This means that it is humanly impossible to carry out the basic function of monitoring for unlikely abnormalities, which therefore has to be done by an automatic alarm system connected to sound signals. (Manual operators will notice abnormal behaviour of variables which they look at as part of their control task, but may be equally poor at noticing changes on others.) This raises the question of who notices when the alarm system is not working properly. Again, the operator will not monitor the automatics effectively if they have been operating acceptably for a long period. A classic method of enforcing operator attention to a steady-state system is to require him to make a log. Unfortunately people can write down numbers without noticing what they are.

A more serious irony is that the automatic control system has been put in because it can do the job better than the operator, but yet the operator is being asked to monitor that it is working effectively. There are two types of problem with this. In complex modes of operation the monitor needs to know what the correct behaviour of the process should be, for example in batch processes where the variables have to follow a particular trajectory in time. Such knowledge requires either special training or special displays.

The second problem is that if the decisions can be fully specified then a computer can make them more quickly, taking into account more dimensions and using more accurately specified criteria than a human operator can. There is therefore no way in which the human operator can check in real-time that the computer is following its rules correctly. One can therefore only expect the operator to monitor the computer's decisions at some meta-level, to decide whether the computer's decisions are 'acceptable'. If the computer is being used to make the decisions because human judgement and intuitive reasoning are not adequate in this context, then which of the decisions is to be accepted? The human monitor has been given an impossible task.

1.2. *Operator attitudes.*
I know of one automated plant where the management had to be present during the night shift, or the operators switched the process to 'manual'. This raises general issues about the importance of skill to the individual. One result of skill is that the operator knows he can takeover adequately if required. Otherwise the job is one of the worst types, it is very boring but very responsible, yet there is no opportunity to acquire or maintain the qualities required to handle the responsibilities. The level of skill that a worker has is also a major aspect of his status, both within and outside the working community. If the job is 'deskilled' by being reduced to monitoring, this is difficult for the individuals involved to come to terms with. It also lead' to the ironies of incongruous pay differentials when the deskilled workers insist on a high pay level as the remaining symbol of status which is no longer justified by the job content

Ekkers and colleagues (19791) have published a preliminary study of the correlations between control system characteristics and the operators' subjective health and feeling of achievement. To greatly simplify : high coherence of process information, high process complexity and high process controllability (whether manual or by adequate automatics) were all associated with low levels of stress and workload and good health. and the inverse, while fast process dynamics and a high frequency of actions which cannot be made directly on the interface were associated with high stress and workload and poor health. High process controllability, good interface ergonomics and a rich pattern of activities were all associated with high feeling of achievement. Many studies show that high levels of stress lead to errors, while poor health and low job satisfaction lead to the high indirect costs of absenteeism, etc. (e.g. Mobley and colleagues, 1979).

2. Approaches to solutions

One might state these problems as a paradox that by automating the process the human operator is given a task which is only possible for someone who is in on-line control. This section will discuss some possible solutions to problems of maintaining the efficiency and skills of the operator if he is expected to monitor and take over control : the next section will introduce recent proposals for keeping the human operator on line with computer support.

Solving these problems involves very multidimensional decision making: suggestions for discussion will be made here. The recommendations in any particular case will depend on such factors as process size and complexity, the rate of process change, the speed and frequency of process or automatic control failure, the variability of the product and the environment, the simplicity and cost of shut down, and the qualities of the operator.

2.1. *Monitoring.*
In any situation where a low probability event must be noticed quickly then the operator must be given artificial assistance, if necessary even alarms on alarms. In a process with a large number of loops there is no way in which the human operator can get quickly to the correct part of the plant without alarms, preferably also some form of alarm analysis. Unfortunately a proliferation of flashing red lights will confuse rather than help. There are major problems and ironies in the design of large alarm systems for the human operator (Rasmussen and Rouse, 1981).

Displays can help the operator to monitor automatic control performance, by showing the target values. This is simple for single tolerance bands, but becomes more complex if tolerances change throughout batch processing. One possible solution is to show the currently appropriate tolerances on a VDU by software generation. This does not actually get round the problems, but only raises the same ones in a different form. The operator will not watch the VDU if there is a very low probability of the computer control failing. If the computer can generate the required values then it should also be able to do the monitoring and alarms. And how does the operator monitor that the computer is working correctly, or take over if it obviously is not? Major problems may be raised for an operator who is highly practised at using computer generated displays if these are no longer available in an emergency. One ironic but sensible suggestion is that direct wired displays should be used for the main process information, and software displays for quantitative detail (Jervis and Pope, 1977).

'Catastrophic' breaks to failure are relatively easy to identify. Unfortunately automatic control can 'camouflage' system failure by controlling against the variable changes, so that trends do not become apparent until they are beyond control. This implies that the automatics should also monitor unusual variable movement. 'Graceful degradation' of performance is quoted in 'Fitts Lists' of man-computer qualities as an advantage of man over machine. This is not an aspect of human performance to be aimed for in computers, as it can raise problems with monitoring for failure (e.g. Wiener and Curry. 1980), automatic systems should fail obviously.

If the human operator must monitor the details of computer decision making then, ironically, it is necessary for the computer to make these decisions using methods and criteria, and at a rate, which the operator can follow, even when this may not be the most efficient method technically. If this is not done then when the operator does not believe or agree with the computer he will be unable to trace back through the system's decision sequence to see how far he does agree.

One method of overcoming vigilance problems which is frequently suggested is to increase the signal rate artificially. It would be a mistake, however, to increase artificially the rate of computer failure as the operator will then not trust the system. Ephrath (1980) has reported a study in which system performance was worse with computer aiding, because the operator made the decisions anyway, and checking the computer added to his workload.

2.2. *Working storage.*
If the human operator is not involved in on-line control he will not have detailed knowledge of the current state of the system. One can ask what limitations this places on the possibility for effective manual takeover, whether for stabilization or shutdown of the process, or for fault diagnosis.

The straightforward solution when shutdown is simple and low-cost is to shut down automatically. The problems arise with processes which, because of complexity, cost or other factors (e.g. an aircraft in the air) must be stabilized rather than shutdown. Should this be done manually or automatically? Manual shut down is usable if the process dynamics can be left for several minutes while the operator works out what is happening. For very fast failures, within a few seconds (e.g. pressurized water nuclear reactor rather than an aircraft), when there is no warning from prior changes so that on-line working storage would also be useless, then reliable automatic response is necessary, whatever the investment needed, and if this is not possible then the process should not be built if the costs of failure are unacceptable.

With less fast failures it may be possible to 'buy time' with overlearned manual responses. This requires frequent practice on a high fidelity simulator, and a sufficient understanding of system failures to be sure that all categories of failure are covered. If response to failure requires a larger number of separate actions than can be made in the time available then some must be made automatically and the remainder by a highly practised operator.

2.3. *Long-term knowledge.*
Points in the previous section make it clear that it can be important to maintain manual skills. One possibility is to allow the operator to use hands-on control for a short period in each shift. If this suggestion is laughable then simulator practice must be provided. A simulator adequate to teach the basic behaviour of the process can be very primitive. Accurate fast reactions can only be learned on a high fidelity simulator, so if such reactions are necessary then this is a necessary cost.

Similar points can be made about the cognitive skills of scheduling and diagnosis. Simple pictorial representations are adequate for training some types of fault detection (Duncan and Shepherd, 1975), but only if faults can be identified from the steady-state appearance of the control panel. and waiting for the steady-state is acceptable. If fault detection involves identifying changes over time then dynamic simulators are needed for training (Marshall and Shepherd, 1981). Simple recognition training is also not sufficient to develop skills for dealing with unknown faults or for choosing corrective actions (Duncan, 1981).

There are problems with the use of any simulator to train for extreme situations. Unknown faults cannot be simulated, and system behaviour may not be known for faults which can be predicted but have not been experienced. This means that training must be concerned with general strategies rather than specific responses; for example simulations can be used to give experience with low probability events, which may be known to the trainer but not to the trainee. No one can be taught about unknown properties of the system, but they can be taught to practise solving problems within the known information. It is inadequate to expect the operator to react to unfamiliar events solely by consulting operating procedures. These cannot cover all the possibilities, so the operator is expected to monitor them and fill in the gaps. However, it is ironic to train operators in following instructions and then put them in the system to provide intelligence.

Of course, if there are frequent alarms throughout the day then the operator will have a large amount of experience of controlling and thinking about the process as part of his normal work. Perhaps the final irony is that it is the most successful automated systems, with rare need for manual intervention, which may need the greatest investment in human operator training.

3. Human-computer collaboration

By taking away the easy parts of his task. automation can make the difficult parts of the human operator's task more difficult. Several writers (Wiener and Curry, 1980; Rouse. 1981) point out that the 'Fitts list' approach to automation. assigning to man and machine the tasks they are best at, is no longer sufficient. It does not consider the integration of man and computer, nor how to maintain the effectiveness of the human operator by supporting his skills and motivation. There will always be a substantial human involvement with automated systems because criteria other than efficiency, are involved, e.g. when the cost of automating some modes of operation is not justified by the value of the product, or because the public will not accept high-risk systems with no human component. This suggests that methods of human computer collaboration need to be more fully developed. DelIner (1981) lists the possible levels of human intervention in automated decision making. This paper will discuss the possibilities for computer intervention in human decision making. These include instructing or advising the operator, mitigating his errors, providing sophisticated displays, and assisting him when task loads are high. Rouse (1981) calls these 'covert' human-computer interaction.

3.1. *Instructions and advice.*

Using the computer to give instructions is inappropriate if the operator is simply acting as a transducer, as the computer could equally well activate a more reliable one. Thompson (1981) lists four types of advice, about : underlying causes, relative importance, alternative actions available, and how to implement actions. When following advice the operator's reactions will be slower, and less integrated than if he can generate the sequence of activity himself, and he is getting no practice in being 'intelligent'. There are also problems with the efficient display of procedural information.

3.2. *Mitigating human error.*
Machine possibilities for counteracting human error range from simple hardware interlocks to complex on-line computation. Except where specific sequences of operations must be followed it is more appropriate to place such 'checks' on the effects of actions, as this does not make assumptions about the strategy used to reach this effect. Under manual control human operators often obtain enough feedback about the results of their actions within a few seconds to correct their own errors (Ruffell-Smith. 1979), but Wiener and Curry (1980) give examples of humans making the same types of errors in setting up and monitoring automatic equipment, when they do not get adequate feedback. This should perhaps be designed in. Kreifeldt and McCarthy (1981) give advice about displays to help operators who have been interrupted in mid-sequence. Rouse (1981) suggests computer monitoring of human eye movements to check that instrument scanning is appropriate, for example to prevent tunnel vision.

3.3. Software generated displays .
The increasing availability of soft displays on VDUs raises fascinating possibilities for designing displays compatible with the specific knowledge and cognitive processes being used in a task. This has led to such rich veins of creative speculation that it seems rather mean to point out that there are difficulties in practice.

One possibility is to display only data relevant to a particular mode of operation. such as start up routine operations, or maintenance. Care is needed however, as it is possible for an interface which is ideal for normal conditions to camouflage the development of abnormal ones (Edwards. 1981).

Goodstein (1981) has discussed process displays which are compatible with different types of operator skill, using a classification of three levels of behaviour suggested by Rasmussen (1979), i.e. skill based, rule based and knowledge based. The use of different types of skill is partly a function of the operator's experience, though the types probably do not fall on a simple continuum. Chafin (198l) has discussed how interface design recommendations depend on whether the operator is naive, novice/competent, or expert. However, he was concerned with human access to computer data bases when not under time pressure. Man-machine interaction under time pressure raises special problems. The change between knowledge-based thinking and reflex reaction is not solely a function of practice, but also depends on the uncertainty of the environment, so that the same task elements may be done using different types of skill at different times. It could therefore confuse rather than help the operator to give him a display which is solely a function of his overall skill level. Non-time-stressed operators, if they find they have the wrong type of display, might themselves request a different level of information. This would add to the work load of someone making decisions which are paced by a dynamic system. Rouse (1981) has therefore suggested that the computer might identify which type of skill the operator is using, and change the displays (he does not say how this might be done). We do not know how confused operators would be by display changes which were not under their own control. Ephraph and Young (1981) have commented that it takes time for an operator to shift between activity modes, e.g. from monitoring to controlling, even when these are under his control, and one assumes that the same problems would arise with changes in

display mode. Certainly a great deal of care would be needed to make sure that the different displays were compatible. Rasmussen and Lind's recent paper (1981) was about the different levels of abstraction at which the operator might be thinking about the process, which would define the knowledge base to be displayed. Again, although operators evidently do think at different levels of complexity and abstraction at different times, it is not clear that they would be able to use, or choose, many different displays under time stress.

Some points were made above about the problems of operators who have learned to work with computer generated displays, when these displays are no longer available in abnormal conditions. Recent research on human memory (Craik, 1979) suggests that the more processing for meaning that some data has received the more effectively it is remembered. This makes one wonder how much the operator will learn about the structure of the process if information about it is presented so successfully that he does not have to think about it to take it in. It certainly would be ironic if we find that the most compatible display is not the best display to give to the operator after all! (As usual with display choice decisions this would depend on the task to be done. A highly compatible display always supports rapid reactions. These points speculate whether they also support acquisition of the knowledge and thinking skills needed in abnormal conditions.)

A few practical points can be suggested. There should be at least one source of information permanently available for each type of information which cannot be mapped simply onto others, e.g. about layout of plant in space as opposed to its functional topology. Operators should not have to page between displays to obtain information about abnormal states in parts of the process other than the one they are currently thinking about, nor between displays giving information needed within one decision process. Research on sophisticated displays should concentrate on the problems of ensuring compatibility between them, rather than finding which independent display is best for one particular function without considering its relation to information for other functions. To end on a more optimistic note, software displays offer some interesting possibilities for enriching the operator's task by allowing him to design his own interface.

3.4. Relieving human workload.

A computer can be used to reduce human workload either by simplifying the operator's decisions. as above, or by taking over some of the decision making. The studies which have been done on this show that it is a complex issue. Ephrath and Young (1981) found that overall control performance was better with manual control of a single loop, but was also better with an autopilot in the complex environment of a cockpit simulator. This suggests that aiding is best used at higher work loads. However. the effect of the type of aiding depends on the type of workload. Johannsen and Rouse (1981) found that pilots reported less depth of planning under autopilot in abnormal environmental conditions, presumably because the autopilot was dealing with the conditions, but more planning under emergency aircraft conditions, where they suggest that the autopilot frees the pilot from on-line control so he can think about other things. Chu and Rouse (19791 studied a situation with both computer aiding and autopilot. They arranged for the computer to take over decision making when the operator had a queue of one other task item to be dealt with and he was

controlling manually, or after a queue of three items if the autopilot was controlling. The study by Enstrom and Rouse (1977) makes it clear why Rouse (l98l) comments that more sophisticated on-line methods of adapting computer aiding to human workload will only be possible if the workload computations can be done in real time. It would be rash to claim it as an irony that the aim of aiding human limited capacity has pushed computing to the limit of its capacity. as technology has a way of catching up with such remarks. Enstrom and Rouse also make the important point that the human being must know which tasks the computer is dealing with and how. Otherwise the same problems arise as in human teams in which there is no clear allocation of responsibility. Sinaiko (1972) makes a comment which emphasizes the importance of the human operator's perception of the computer's abilities: "when loads were light. the man appeared willing to let the computer carry most of the assignment responsibility: when loads were heavy, the men much more often stepped in and over-rode the computer". Evidently, quite apart from technical considerations, the design of computer aiding is a multidimensional problem.

4.Conclusion

The ingenious suggestions reviewed in the last section show that humans working without time-pressure can be impressive problem solvers. The difficulty remains that they are less effective when under time pressure. I hope this paper has made clear both the irony that one is not by automating necessarily removing the difficulties, and also the possibility that resolving them will require even greater technological ingenuity than does classic automation.

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality, Patient Care and Patient Experience Committee
From: Cindy Murphy, Director of Governance Services
Date: December 3, 2018
Subject: Report on Board Actions

Purpose:

To keep the Committee informed with regards to actions taken by the El Camino Hospital and El Camino Healthcare District Boards.

Summary:

1. Situation: It is important to keep the Committees informed about Board activity to provide context for Committee work. The list below is not meant to be exhaustive, but includes agenda items the Board voted on that are most likely to be of interest to or pertinent to the work of El Camino Hospital's Board Advisory Committees.

2. Authority: This is being brought to the Committees at the request of the Board and Committees

3. Background: Since the last Quality Committee Meeting the Hospital Board has met once and the District Board has not met.

A. ECH Board Actions

November 14, 2018

- Approved Resolution 2018-11 honoring Ganesh Krishna, MD for his innovative work in the field of Interventional Pulmonology
- Delegated Authority to the Finance Committee to approve certain physician contracts and to the Finance Committee and the Compliance and Audit Committee to approve the Annual Summary of Physician Financial Arrangements
- Approved revisions to the Quality, Patient Care, and Patient Experience Committee Charter including a refined definition of quality care and providing for the Committee to review and approve its annual quality dashboard
- Approved Revised Board and Committee Education Policy increasing the annual allowance to $5,000 per Board member and per Committee.

4. Assessment: N/A

5. Other Reviews: N/A

6. Outcomes: N/A

List of Attachments: None.

Suggested Committee Discussion Questions: None.

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality, Patient Care and Patient Experience Committee
From: Catherine Carson, Sr. Director, Quality Improvement and Patient Safety
Date: December 3, 2018
Subject: FY19 Quality Dashboard

Purpose:

To provide updated metrics for current Organization Goals, FY18 Organizational Goals, and additional quality metrics of interest.

Summary:

1. Situation: This report monitors progress toward FY19 Organizational Goals, and sustaining of FY18 Organizational Goals, and metrics monitoring sepsis.

2. Authority: The Quality Committee is responsible for oversight of quality and safety.

3. Background: Historical data is provided for 24 months for each metric for review of trends.

4. Assessment: The Mortality Index improved in September 2018 and is related to the reduction of sepsis patients and sepsis deaths. The Readmission Index is also lower and this is related to a reduction of COPD readmissions from a high of 20% in Spring 2018 to zero in August 2018. HCAHPS domains in the organizational goal are much improved with the impact of purposeful rounding, a "no pass zone," and a focus on reducing clutter in patient rooms. There was an adverse spike in both Catheter Associated Urinary Tract Infections (CAUTIs) and C. Difficile Infections (CDI) this month. One of the four CAUTIs was present on admission but not documented; one was secondary to a prolonged catheterization; two were preventable. One of the three CDIs was present on admission but not documented; two were related to prolonged antibiotic usage. No Central Line Associated Blood Stream Infections (CLABSIs) noted for four months.

5. Other Reviews: N/A

6. Outcomes: The need for surveillance and proper procedures has been reviewed with those areas affected by the Hospital Acquired Infections (HAIs).

List of Attachments:

1. FY19 Quality Dashboard

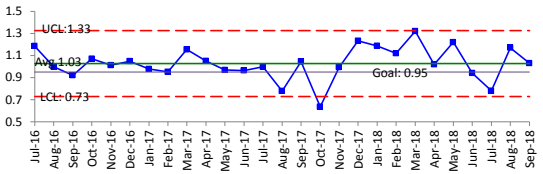
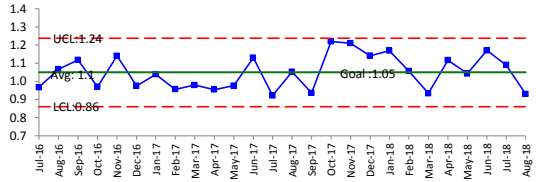
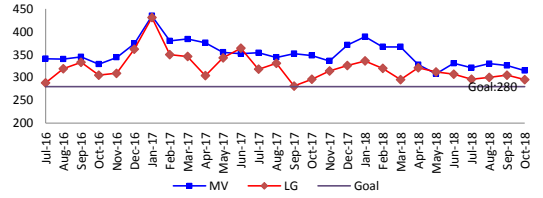
Suggested Committee Discussion Questions: None

El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

FY19 Quality Dashboard

October 2018 (Unlesss otherwise specified)

Month to Board Quality Committee:
December, 2018

		FY19 Performance		Baseline FY18 Actual	FY19 Target	Trend	Comments
Quality		Month	FYTD				
1	*Organizational Goal **Mortality Index** ***Observed/Expected*** ***Premier Standard Risk Calculation Mode*** *Date Period: September 2018*	1.03 (1.11%/1.08%)	0.98 (1.29%/1.31%)	1.05	0.95		4 Fulltime CDI Specialists in place providing more coverage with providers to improve documentation. Sepsis mortality rate low for September which affects the mortality index.
2	*Organizational Goal **Readmission Index (All Patient, All Cause Redmit)** ***Observed/Expected*** ***Premier Standard Risk Calculation Mode*** *Index month: August 2018*	0.93 (6.12%/6.57%)	1.01	1.08	1.05		COPD readmissopm rate at zero for August, and premlinary data shows zero for September. This rate was 20% in February and 16% in June. Chronic Respiratory Team now working to address Pneumonia readmission rate.
3	★Organizational Goal **Patient Throughput-Median minutes from ED Door to Patient Admitted** *(excludes Behavioral Health Inpatients)* *Date Period: October 2018*	MV: 315 mins LG: 295 mins	MV: 322 mins LG: 298 mins	MV: 350 mins; LG: 314 mins	280 mins		The team has had 3 meetings with the providers, both ED and hospitalists, to identify potential areas to target and ways to support the patient flow. In ED, Dr. Cook is looking at reducing variation during the Medical Screening Evaluation to support the front end. We are also piloting a standard for complex to support planning for flow during each shift, and a standard for nurse to nurse hand off.

Definitions and Additional Information

Measure Name	Definition Owner	Work Group	FY 2018 Definition	FY 2019 Definition	Source
Mortality Index (Observed/Expected)	Catherine Carson			UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	**Premier Quality Advisor**
Readmission Index (All Patient, All Cause Redmit) Observed/Expected	Catherine Carson			UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	**Premier Quality Advisor**
Patient Throughput- Average Minutes from ED Door to Patient Admitted (excludes Behavioral Health Inpatients)	Cheryl Reinking, Michelle Gabriel; Heather Freeman				**EPIC**

El Camino Hospital
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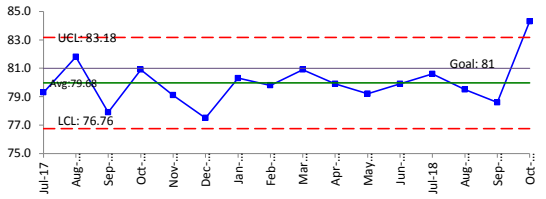
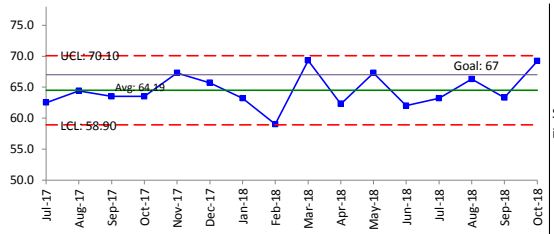
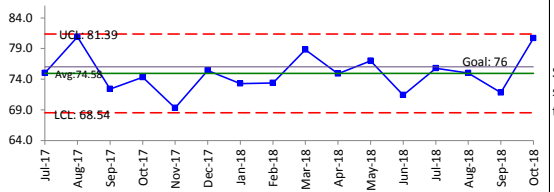
FY19 Quality Dashboard

October 2018 (Unlesss otherwise specified)

Month to Board Quality Committee:
December, 2018

	Service	FY19 Performance Month	FY19 Performance FYTD	HCAHPS Baseline Q4 2017-Q3 2018	FY19 Target	Trend	Comments
4	«Organizational Goal **HCAHPS Nursing Communication Domain** **Top Box Rating of Always** *Date Period: Octocber 2018*	84.3 (244/289)	80.9 (860/1064)	80.0	81.0		Working with Pt. Experience to expand Care Team Coaching - a peer to peer mentorship on communication skills. Also working towards implementation of best practices with rounding.
5	«Organizational Goal **HCAHPS Responsiveness of Staff Domain** **Top Box Rating of Always** *Date Period: October 2018*	69.2 (190/274)	65.6 (661/1008)	65.1	67.0		Staff focus groups completed, opportunities for improvement identified.
6	«Organizational Goal **HCAHPS Cleanliness of Hospital Environment Question** **Top Box Rating of Always** *Date Period: October 2018*	80.7 (230/285)	76 (801/1054)	74.5	76.0		Survey comments being reviewed for opportunities, and EVS staff have been engaged with scripting and communication techniques.

Definitions and Additional Information

Measure Name	Definition Owner	Work Group	FY 2018 Definition	FY 2019 Definition	Source
HCAHPS Nursing Communication Domain Top Box Rating of Always, based on Received Date, Adjusted Samples	Ashley Fontenot Cheryl Reinking	Patient Experience Committee	HCAHPS Rate Communication with Nurse Top Box Rating 9 and 10	UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	**Press Ganey Tool**
HCAHPS Responsiveness of Staff Domain Top Box Rating of Always, based on Received Date, Adjusted Samples	Ashley Fontenot Cheryl Reinking	Patient Experience Committee	HCAHPS Rate Response of Hospital Staff Top Box Rating 9 and 10	UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	**Press Ganey Tool**
HCAHPS Cleanliness of Hospital Environment Question Top Box Rating of Always, based on Received Date, Adjusted Samples	Ashley Fontenot Cheryl Reinking	Patient Experience Committee	HCAHPS Rate Cleanliness of Hospital Environment Top Box Rating 9 and 10	UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	**Press Ganey Tool**

El Camino Hospital
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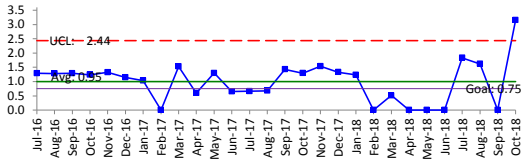
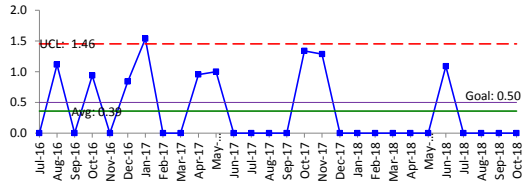
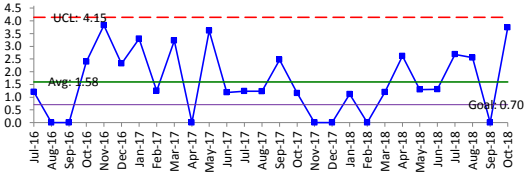
FY19 Quality Dashboard

October 2018 (Unlesss otherwise specified)

Month to Board Quality Committee:
December, 2018

		FY19 Performance		Baseline FY18 Actual	FY19 Target	Trend	Comments
Quality		**Month**	**FYTD**				
7	**Hospital Acquired Infection (Infection rate)** *Catheter Associated Urinary Tract Infection (CAUTI)* *per 1,000 urinary catheter days* *Date Period: October 2018* *SIR Goal: <= 0.75*	3.15 (4/1268)	1.72 (8/4658)	0.77	SIR Goal: <= 0.75		4 new CAUTI infections in October: 1 due to Nursing staff not obtaining urinalysis on the day ordered, result positive more than 72 hrs after admission, 2- Admission urine culture no growth, pt. with chronic UTIs, multiple myeloma, 3- UTI after 45 hospital days, foley needed, 4-UTI 4 days after admission and difficult foley insertion, policy of 2 RNs not followed.
8	*Central Line Associated Blood Stream Infection (CLABSI)* *per 1,000 central line days* *Date Period: October 2018* *SIR Goal: <= 0.50*	0.0 (0/861)	0.0 (0/3502)	0.28	SIR Goal: <= 0.50		4 consecutive months with no new CLABSI infections!
9	*Clostridium Difficile Infection (CDI)* *per 10,000 patient days* *Date Period: October 2018* *SIR Goal: <= 0.70*	3.74 (3/8018)	2.26 (7/30976)	1.13	SIR Goal: <= 0.70		3 new C.Diff. infections in October: 1-had surveillance on admission, neg. Pt. with abd pain, increasing WBCs, had 3 antibiotics with 24 doses. 2- Admit from home so no surveillance, loose stools on day 4 and 2 antibiotics with 14 doses. 3- Pt. had C.Diff surveillance postive on admission, but C.Diff toxing/antigen text not ordered until hosptial day 4 - so becomes hospital-acquired after 72 hrs.

Definitions and Additional Information

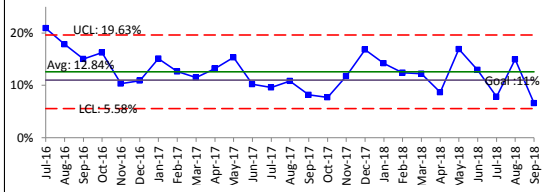
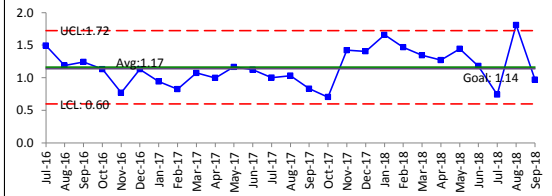
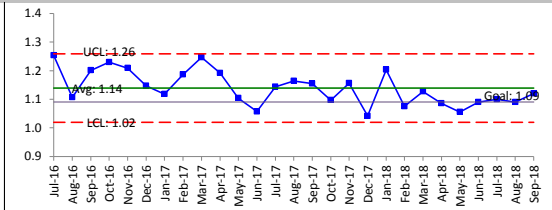
Measure Name	Definition Owner	Work Group	FY 2018 Definition	FY 2019 Definition	Source
Hospital Acquired Infection (SIR Rate) CAUTI (Catheter-acquired Urinary Tract Infection)	Catherine Carson/Catherine Nalesnik		The standardized infection ratio (SIR) is a summary measure used to track HAIs over time at a national, state, local level. This is a summary statistic that compares the actual number of HAIs reported with the baseline US experience (NHSN aggregate data are used as the standard population), adjusting for several risk factors that are significantly associated with differences in infection incidence. An SIR greater than 1.0 indicates that more HAIS were observed than predicated, accounting for differences in types of patients followed, a SIR less than 1.0 indicates fewer HAIs were observed than predicated.	UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	
Hospital Acquired Infection (SIR Rate) CLABSI (Central line associated blood stream infection)	Catherine Carson/Catherine Nalesnik			UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	
Hospital Acquired Infection (SIR Rate) C. Diff (Clostridium Difficile Infection)	Catherine Carson/Catherine Nalesnik			UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	

El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

FY19 Quality Dashboard

October 2018 (Unlesss otherwise specified)

Month to Board Quality Committee:
December, 2018

		FY19 Performance		Baseline FY18 Actual	FY19 Target	Trend	Comments
		Month	FYTD				
10	**Sepsis Mortality Rate Enterprise, based on ICD 10 codes** *Date Period: September 2018*	6.58%	10.00%	11.72%	11%		Fewer Sepsis cases and fewer deaths in September. California's mortality rate for 2017 = 14.9 % while the northern CA (Hospital Council) rate for 2017 is 13.7%. ECH rate continues close to or below this benchmark.
11	**Sepsis Mortality Index, based on ICD 10 codes** *(Observed over Expected)* *Date Period: September 2018*	0.97	1.18	1.22	1.14		Sepsis Manager working with CDI Manager to assess severity of illness provider documentation in Sepsis charts, to increase the risk of mortality.
Efficiency							
12	**Arithmetic Observed LOS Average/Geometric LOS Expected for Medicare Population (ALOS/Expected GMLOS)** *(Medicare definition, MS-CC, Inpatient)* *Date Period: September 2018*	1.12	1.10	1.12	1.09		Data points for the last 8 months clustered near or at goal, indicating a more stable ALOS/GMLOS.

Definitions and Additional Information

Measure Name	Definition Owner	Work Group	FY 2018 Definition	FY 2019 Definition	Source
Sepsis Mortality Rate Enterprise, based on ICD 10 codes	Catherine Carson			UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	**Premier Quality Advisor**
Sepsis Mortality Index Observed over Expected, based on ICD 10 codes	Catherine Carson			UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	**Premier Quality Advisor**
Arithmetic Observed LOS Average over Geometric LOS Expected (Medicare definition, MS-CC, Inpatient)	Cheryl Reinking Catherine Carson (Cornel Delogramatic)		The Observed LOS over the Expected LOS Ratio is determined by calculating the average length of stay of all Medicare financial class divided by the GMLOS (geometric LOS associated with each patient's MD-DRG.	UCL and LCL are 2+/- the Standard Deviation of 1 from the Average. LCL is not visible if value is less than or equal to zero.	**Premier Quality Advisor**

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality, Patient Care and Patient Experience Committee
From: Catherine Carson, Sr. Director, Quality Improvement and Patient Safety
Date: December 3, 2018
Subject: PSI-90 Patient Safety Indicator Scores Q1 FY19

Purpose:

To provide an update on the AHRQ Patient Safety Indicators for Q1 FY19.

Summary:

1. Situation: The Patient Safety Indicators (PSIs) are a set of indicators providing information on potential in hospital complications and adverse events following surgeries, procedures, and childbirth. The PSIs were developed after a comprehensive literature review, analysis of ICD-9-CM codes, review by a clinician panel, implementation of risk adjustment, and empirical analyses. The PSI-90 composite is one measure in the Safety domain of Hospital Value-Based Purchasing.

2. Authority: The Quality Committee is responsible for oversight of quality and safety.

3. Background: The PSIs can be used to help hospitals identify potential adverse events that might need further study; provide the opportunity to assess the incidence of adverse events and in hospital complications using administrative data found in the typical discharge record; include indicators for complications occurring in hospital that may represent patient safety events; and, indicators also have area level analogs designed to detect patient safety events on a regional level.

4. Assessment: ECH performs better than the Premier composite mean (0.80) over all of FY18 and Q1 FY19. Each of the PSI are first reviewed and validated by the CDI manager and Coding manager, and are then sent through the Medical Staff's Peer review process for trending by physician.

5. Other Reviews: N/A

6. Outcomes: N/A

List of Attachments:

1. PSI-90 Patient Safety Indicator Scores Q1 FY19 Summary

Suggested Committee Discussion Questions: None

Patient Safety Indicator

PSI-90 Composite

Facility: MV + LG

	Qtr 1, FY 2018	Qtr 2, FY 2018	Qtr 3, FY 2018	Qtr 4, FY 2018	Qtr 1, FY 2019
Facility Composite Value	0.711980	0.637857	0.811578	0.858181	0.714852
Premier PSI-90 Composite Mean*	0.80	0.80	0.80	0.80	0.80
Premier PSI-90 Composite Top Decile*	0.57	0.57	0.57	0.57	0.57

Source: Premier Quality Advisor
Report updated: 11/16/18

* Premier Population Statistics (Rate/1000)
(10-01-2015 to 09-30-2016)

QUALITYADVISOR™

PSI - 90 Total Inpatient - Flex Timeframe

Report Filter: ***AHRQ QI* 5.0**

Facility:El Camino Hospital Los Gatos (661972) (CA) (Facility:07-01-2013 to 11-07-2018) (Peer:07-01-2013 to 09-30-2018), El Camino Hospital Mountain View (635796) (CA) (Facility:07-01-2013 to 11-07-2018) (Peer:07-01-2013 to 09-30-2018)
Month:
JULY 2018, AUGUST 2018, SEPTEMBER 2018
AHRQ QI Version:5.0

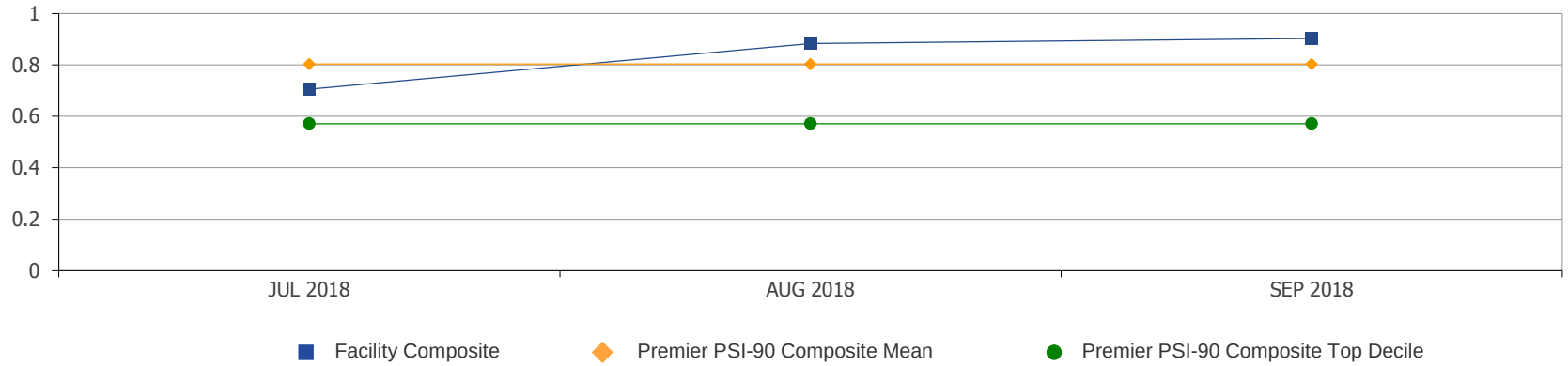
Population Size: 5,559 Drill to Numerator Patients | Drill to Denominator Patients | Switch to Analytical View | Composite by Facility

Patient Safety Indicator	Facility Composite Value	Premier PSI-90 Composite Mean*	Premier PSI-90 Composite Top Decile*
PSI-90 Composite	0.714852	0.80	0.57

Patient Safety Indicator		Numerator	Denominator	Observed Rate/1000	AHRQ Expected Rate	Premier Mean*	Premier Median*	Premier 25th Pctl*	Premier 10th Pctl*
PSI-03	Pressure Ulcer	1	857	1.17	0.54	0.47	0.00	0.00	0.00
PSI-06	Iatrogenic Pneumothorax	0	3,054	0.00	0.35	0.21	0.13	0.00	0.00
PSI-07	Central Venous Catheter-Related Blood Stream Infection	2	2,723	0.73	0.18	0.10	0.00	0.00	0.00
PSI-08	Postop Hip Fracture	0	646	0.00	0.04	0.05	0.00	0.00	0.00
PSI-12	Perioperative PE or DVT	1	1,145	0.87	5.47	3.71	3.08	1.24	0.00
PSI-13	Postop Sepsis	0	91	0.00	9.93	11.06	5.32	0.00	0.00
PSI-14	Postop Wound Dehiscence	0	157	0.00	1.74	0.09	0.00	0.00	0.00
PSI-15	Accidental Puncture or Laceration	4	3,229	1.24	2.23	0.99	0.76	0.26	0.00

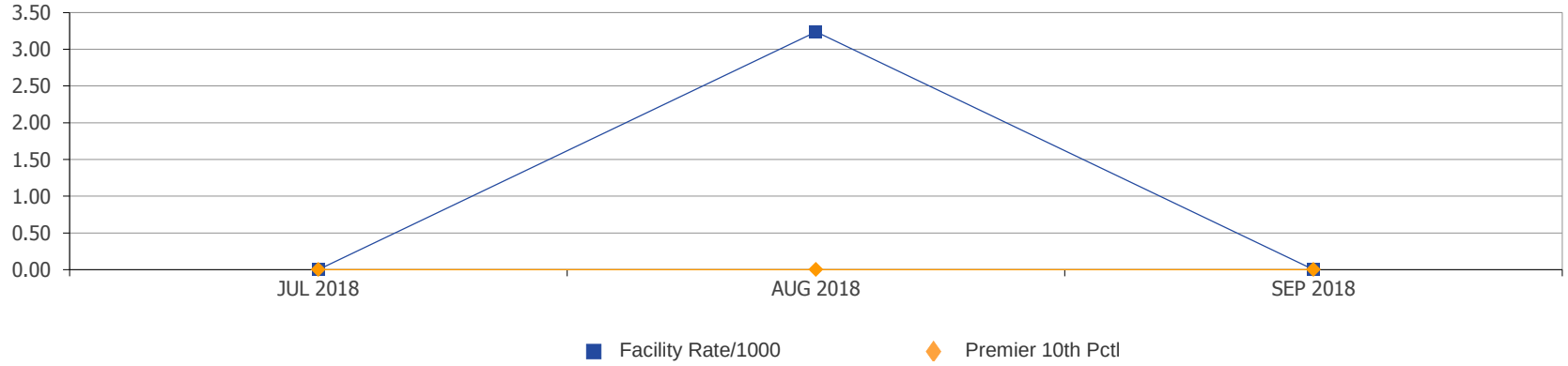
*** Premier Population Statistics (Rat**
(10-01-2015 to 09-30-2016)

PSI-90 Composite

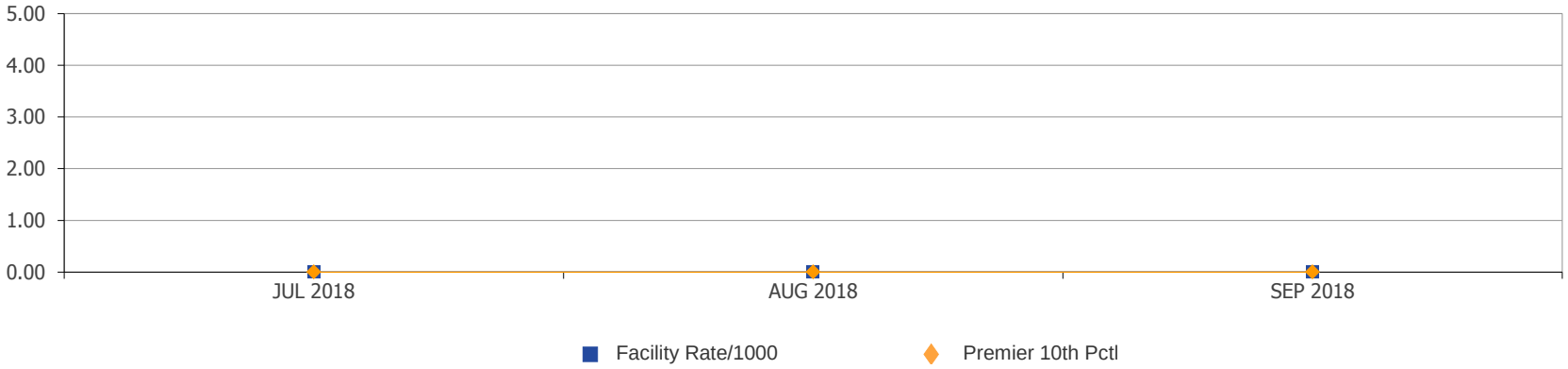


The population for each month is only a fraction of the population for the entire time period of the report. The effect of smoothing is more pronounced for the individual monthly score. Smoothing pulls each monthly score towards 1.0, so this causes the average level of the line plotted on the composite score to be closer to 1.0.

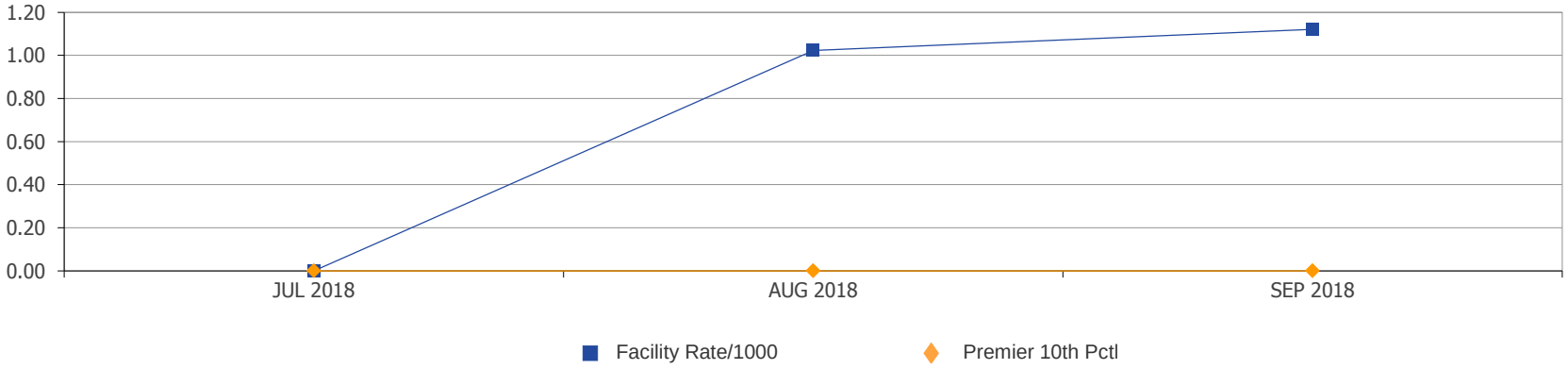
PSI-03:Pressure Ulcer



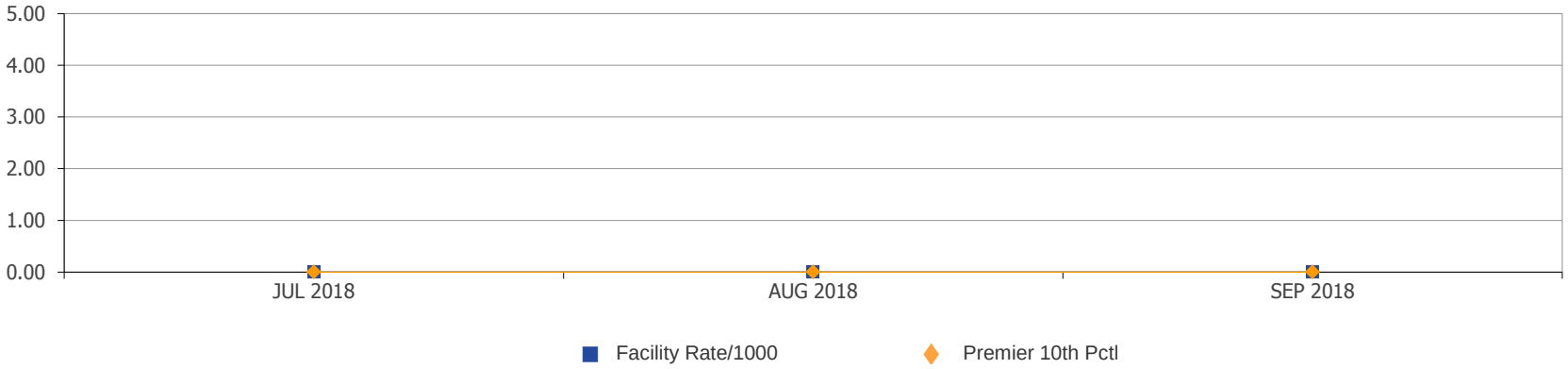
PSI-06:Iatrogenic Pneumothorax



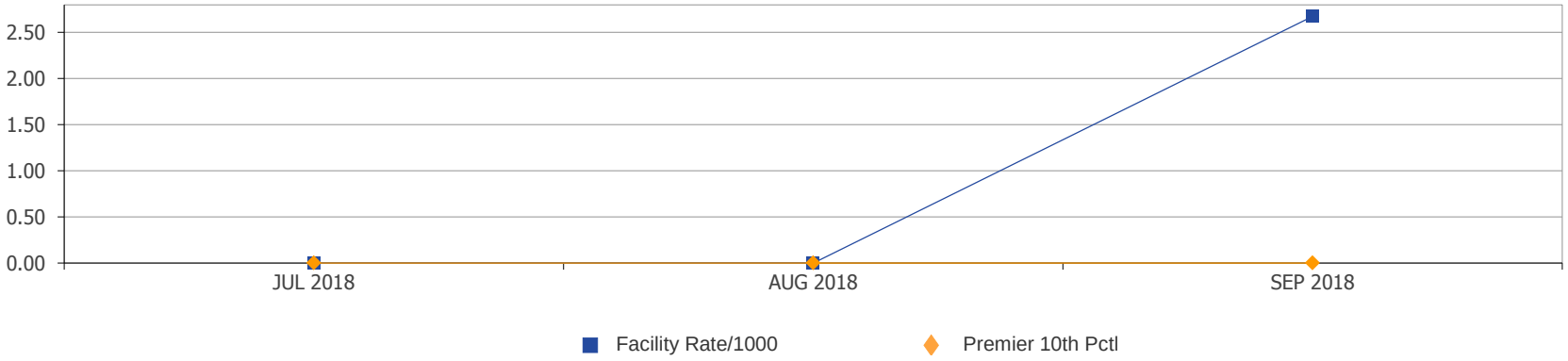
PSI-07:Central Venous Catheter-Related Blood Stream Infection



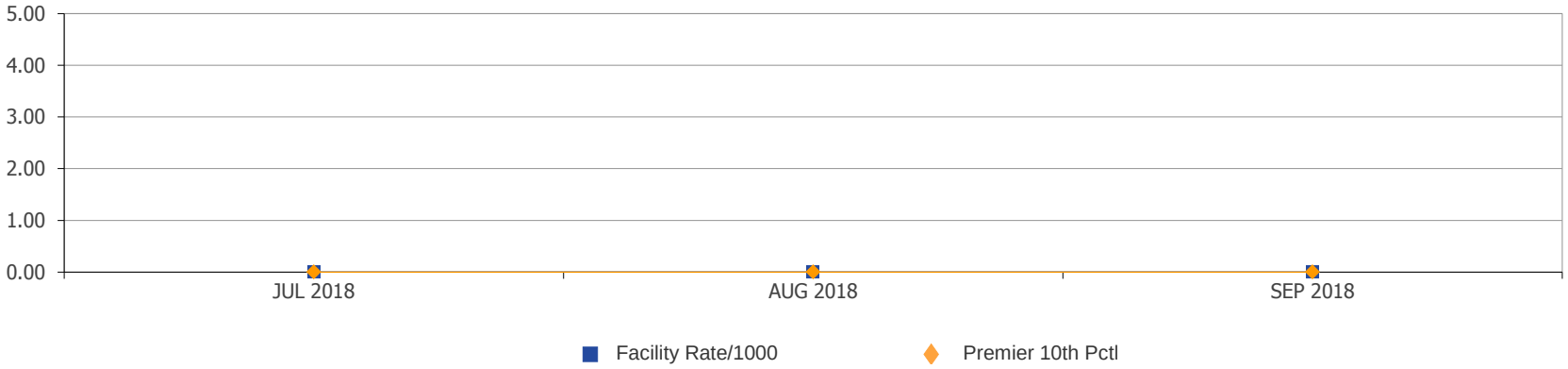
PSI-08:Postop Hip Fracture



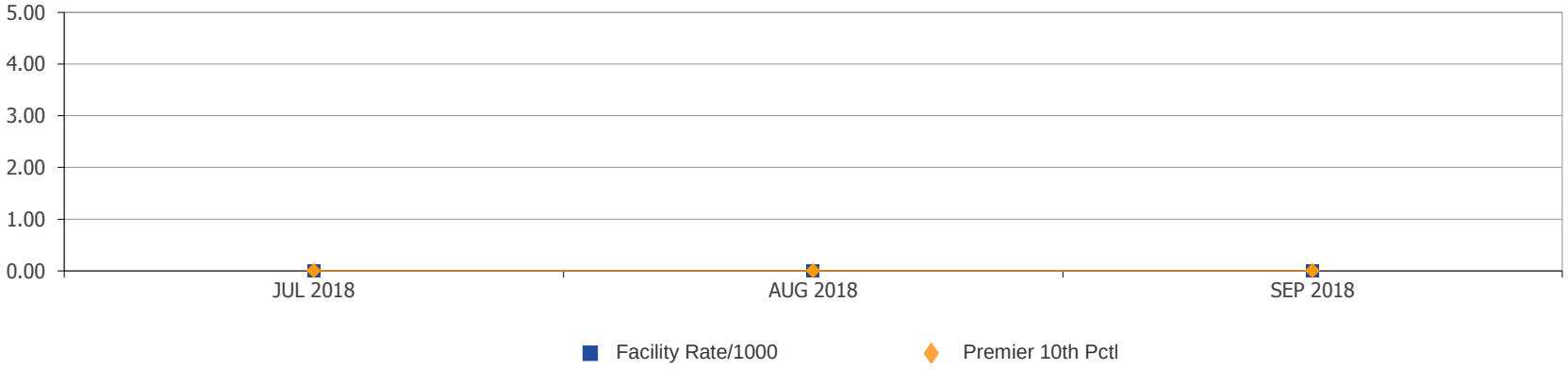
PSI-12:Perioperative PE or DVT



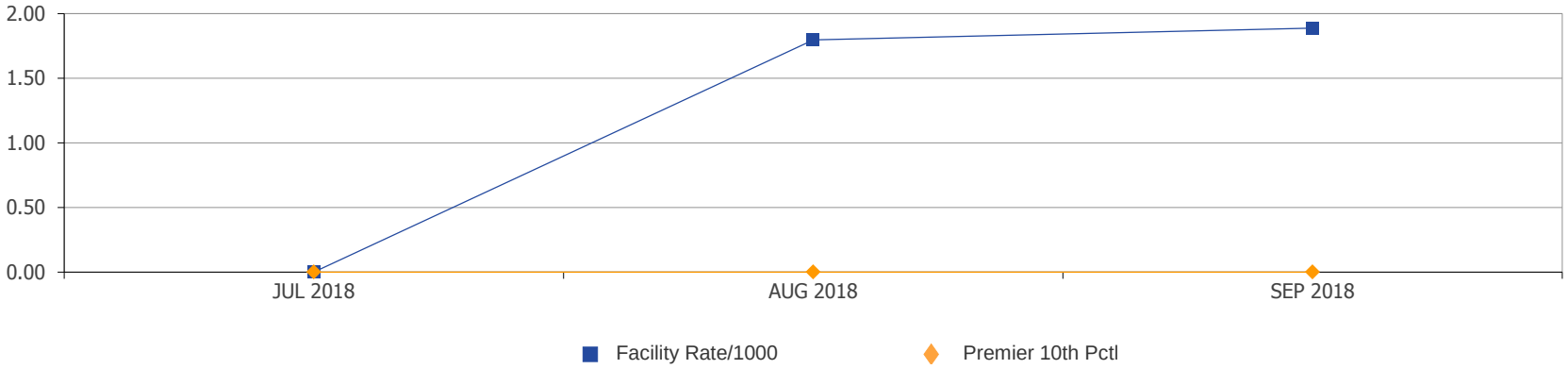
PSI-13:Postop Sepsis



PSI-14:Postop Wound Dehiscence



PSI-15:Accidental Puncture or Laceration


2.00
1.50
1.00
0.50
0.00
JUL 2018
AUG 2018
SEP 2018
Facility Rate/1000
Premier 10th Pctl

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality, Patient Care and Patient Experience Committee
From: Cheryl Reinking, MS, RN, NEA-BC, Chief Nursing Officer
Date: December 3, 2018
Subject: Throughput Case Study

Purpose:

To inform the Committee of the efforts underway using a Lean Process Improvement tool to improve ED Door to Floor, with a focus on the efforts to improve order to floor.

Summary:

1. Situation: The average time from arrival in the ED to inpatient (IP) admission to a nursing unit was benchmarked at 339 minutes (Q4 FY 17- Q3 FY 18). The target is to decrease ED to IP nursing unit flow to 280 minutes. This improvement will take us to the top quartile.

2. Authority: One of the organizational strategic priorities is to use LEAN process improvement techniques to enhance quality, safety, efficiency and patient experience. This presentation is intended to provide an example (and context) in which the organization is using LEAN process improvement tools for improvement in our patient flow processes to ultimately reach out organizational goal, which we believe will improve quality, safety, and patient experience.

3. Background: We have used our Performance Improvement team to engage staff to conduct value stream analysis and conduct RPIW's (Rapid Process Improvement Workshops) to address barriers to reach our goal. We have set goals at each interval of the process of door to inpatient floor and we measure our process change outcomes against our goal assumptions. These are complex processes that require the attention of many different caregivers and staff across the organization making change management challenging.

4. Assessment: We are early in testing our assumptions against our results of our first set of process changes.

5. Other Reviews: RPIW teams, physician leadership, and nursing leadership have all been involved in reviewing the proposed changes to the processes.

6. Outcomes: Target is 60 minutes for Admit Order to Floor baseline was 83 minutes. We are currently in the pilot period and will continue our measurement for the next two weeks, evaluate our process changes and refine as the team conducts evaluations by evaluating metric improvements, staff and patient feedback.

List of Attachments:

1. Power Point Presentation

Suggested Committee Discussion Questions:

1. What has gone well with change management in patient flow processes and what are challenges?
2. What other challenges do you see ahead that you will continue working on to push down admit to floor?

El Camino Hospital®
THE HOSPITAL OF SILICON VALLEY

Throughput Case Study: Order to Floor

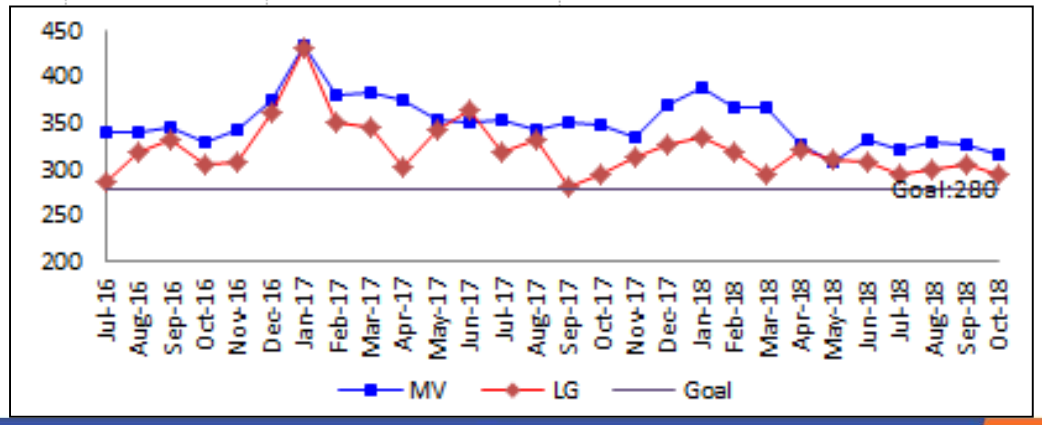
November 2018

Cheryl Reinking, RN, MS, NEA-BC
Chief Nursing Officer

Throughput Problem and Improvement Work

- Problem: Average time from arrival to the ED to admitted to an unit was 339 minutes (Q4 FY17 - Q3 FY18, enterprise)
- Target: Decrease ED Door to Pt Admitted to 280 minutes

		FY19 Performance		Baseline FY18 Actual	FY19 Target
3	★Organizational Goal **Patient Throughput-Median minutes from ED Door to Patient Admitted** *(excludes Behavioral Health Inpatients)* *Date Period: October 2018*	MV: 315 mins LG: 295 mins	MV: 322 mins LG: 298 mins	MV: 350 mins; LG: 314 mins	280 mins



Using Lean to Improve Throughput

- Conducted value stream mapping event to identify and prioritize problems to solve

- Facilitating Rapid Process Improvement Workshops (RPIW) and other Lean improvement methods with staff and leaders to identify and address root causes

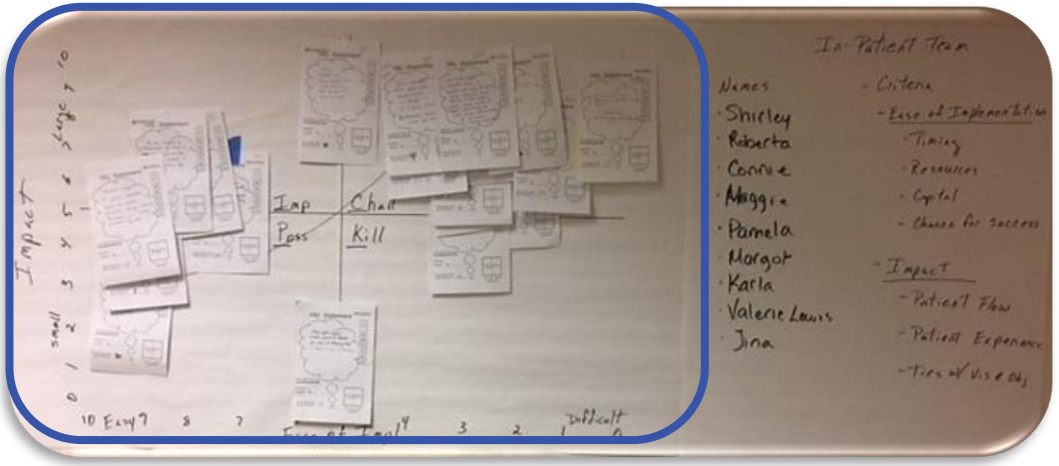
- Developing standard work and daily management of the processes including leader standard work, process checks, visual management, and huddles

Value Stream Mapping

- Held Value Stream Mapping event to identify barriers to flow. Prioritized and developed initial master schedule.

65 Barriers Identified

Prioritized 18 Processes to Improve



Continuing to refine focus as we learn through improvement work

Admit Order to Floor RPIWs

Baseline Order to Floor: 83 min, Target 60 min

Mountain View 10/23-11/2

- Pilots for flow planning and ED to floor handoff began 11/12

El Camino Hospital THE HOSPITAL OF SILICON VALLEY Date: _____ End Time: _____ THROUGHPUT COMPLEX WORKSHEET

AHM/HS				AIC			ENDOSCOPY RN			TOWER CAPACITY
FLEX NURSE				ANESTHESIA			ENDOSCOPY TECH			NEW DIRECT ADMITS
Unit	Charge RN	Census	In Actual/Potential	Out Actual/potential	# Admitting Capacity Now	# Admitting Capacity 4Hrs	Staffing Now & 4Hrs	New HAPI	PSA/VM	Restraints	Plan
2B/ CCL		Cancelled cases?		New Cases (names/locations) ?	Staffing issues?						
24 CCU 7175											
16 PCU 7135											
27 3B 7124											
26 3C 7114											

Los Gatos 11/19

- Pilots for flow planning and ED to floor handoff to begin Dec 3

ED to Inpatient Assignment and Handoff

Process starts when we have admissions order and stop is when patient has arrived

Goal: Decrease the length of time patients spend in the ED after admission orders to improve quality of care: 60 minute target, 40 minutes stretch goal.

Step	Key Points	Rationale
1. Hospital Supervisor gives heads up to Unit charge when ED IP bed request is entered	• Hospital Supervisor (HS) will deliver pink or blue slip or call	Allows Unit Charge to plan room and insure RN is available/ready
2. Charge assigns nurse and room		
3. ED charge vocera HS when admit orders are in	• HS may already know orders are in • Sometimes HS is away from the computer or busy with other duties and is not aware of orders coming in	Ensures HS is aware as soon as possible that orders are in – closed loop communication
4. Hospital Supervisor reviews orders for tele, iso, dialysis, etc. and finds appropriate room; drops and drags patient to unit manager	• HS informs unit charge of special room needs for proper placement • Charge RNs should fill semi… rooms first b…	• Assigning private rooms last

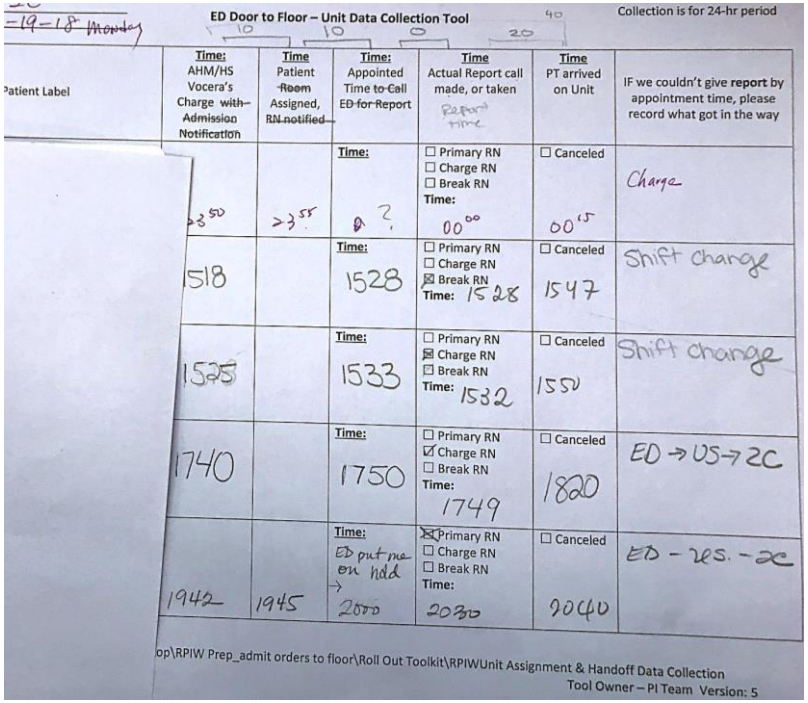
Order to Floor Pilots in Progress

- Planning for Flow
  - Charge RN assigns next 2-3 admits, staff and beds
  - Throughput Huddle at the beginning of each shift: decrease time and improve execution of plan

- Handoff
  - Scheduling time for RN to RN handoff, to reduce phone tag and increase the percentage of times the primary RN can take report
  - Handoff method improved

Checking the Processes

ED to Unit Handoff



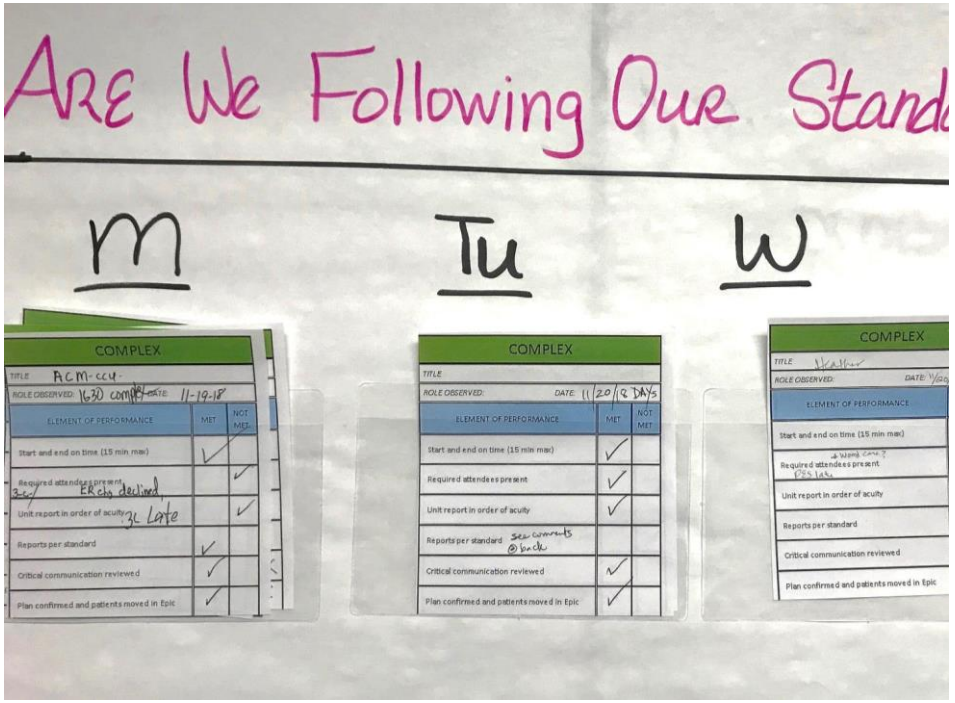
ED Door to Floor – Unit Data Collection Tool

Collection is for 24-hr period

Patient Label	Time: AHM/HS Vocera's Charge ~~with Admission Notification~~	Time Patient ~~Room~~ Assigned, ~~RN notified~~	Time: Appointed Time ~~to Call ED for Report~~	Time Actual Report call made, or taken	Time PT arrived on Unit	IF we couldn't give report by appointment time, please record what got in the way
			Time:	☐ Primary RN ☐ Charge RN ☐ Break RN Time: 00⁰⁰	☐ Canceled 00⁰⁵	Charge
	1518		Time: 1528	☐ Primary RN ☐ Charge RN ☒ Break RN Time: 1528	☐ Canceled 1547	Shift change
	1525		Time: 1533	☐ Primary RN ☒ Charge RN ☐ Break RN Time: 1532	☐ Canceled 1550	Shift change
	1740		Time: 1750	☐ Primary RN ☑ Charge RN ☐ Break RN Time: 1749	☐ Canceled 1820	ED → US → 2C
	1942	1945	Time: ED put me on hold → 2000	☒ Primary RN ☐ Charge RN ☐ Break RN Time: 2030	☐ Canceled 2040	ED - US. - 2C

op\RPIW Prep_admit orders to floor\Roll Out Toolkit\RPIWUnit Assignment & Handoff Data Collection Tool Owner – PI Team Version: 5

Throughput Huddle



Preliminary Results from Pilots

Handoff Pilot: See example below from first 2 weeks of pilot. Sample sizes small, but variation is already decreasing

	pilot sample	Baseline: assign to handoff	**1st Week Pilot: assign to handoff**	pilot sample	Baseline Median: admit order to arrival	**1st Week Pilot admit order to arrival**	pilot sample	Baseline Notified to Arrival	**1st Week Pilot Notified to Arrival**
2C (median, in minutes)	n=38	20	16	n=21	65	61	n=40	53	49

Huddle Pilot: Nov. 12-16, n = 9 audits. Yellow bolded items are most critical process measures

Start/Stop on time	All required attendees present	Reports in order of acuity	Unit reports per standard	Critical Communications Reviewed	**Plan confirmed, pts moved in Epic**
88%	38%	63%	38%	50%	**63%**

Throughput Improvement Work Summary

Completed Work FYTD:

- Improved process for locating pts in ED (ancillary services)
- Transport analysis
- Implemented IT solution to improve patient bed holds
- Analyzed hospitalist provider schedules
- Order to Floor RPIWs MV and LG
- Discharge (DC) by Noon management system work in LG Med/Surg/Ortho (MSO)

In Progress

- Direct admits improvement
- DC by Noon enterprise work
- High demand physician staffing
- Order to floor implementation and daily management
- Reducing variation in initial ED screening evaluation

Up Next

- MV Hospitalist workflows for early discharge
- LG ED bridge orders
- Evaluate potential impact of radiology turnaround times

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality, Patient Care and Patient Experience Committee
From: Catherine Carson, Sr. Director, Quality Improvement and Patient Safety
Date: December 3, 2018
Subject: Readmission Dashboard

Purpose:

To provide data on Readmissions, all payor/all cause through most current month (August 2018)

Summary:

1. Situation: ECH Organizational Goal: Readmission Index, and hospitals incur as penalty under Affordable Care Act (ACA) of up to 3% of DRG payments for Readmission rates that are above CMS calculated expected for 7 diagnosis and procedures. Penalty for FY19 based on actual performance July 2014-June 2017 = 0.36% ($354,500). Readmission Teams are focusing on readmissions in each category.

2. Authority: The Quality Committee is responsible for oversight of quality and safety.

3. Background: Readmission rates provided for FY17, FY18, and YTD FY19.

4. Assessment: This report provides the detail behind the Readmission Index Organizational Goal.

5. Other Reviews: N/A

6. Outcomes: N/A

List of Attachments:

1. FY19 Readmission Dashboard

Suggested Committee Discussion Questions: None

FY 2019 30 Day All-Cause, Unplanned Readmission Dashboard

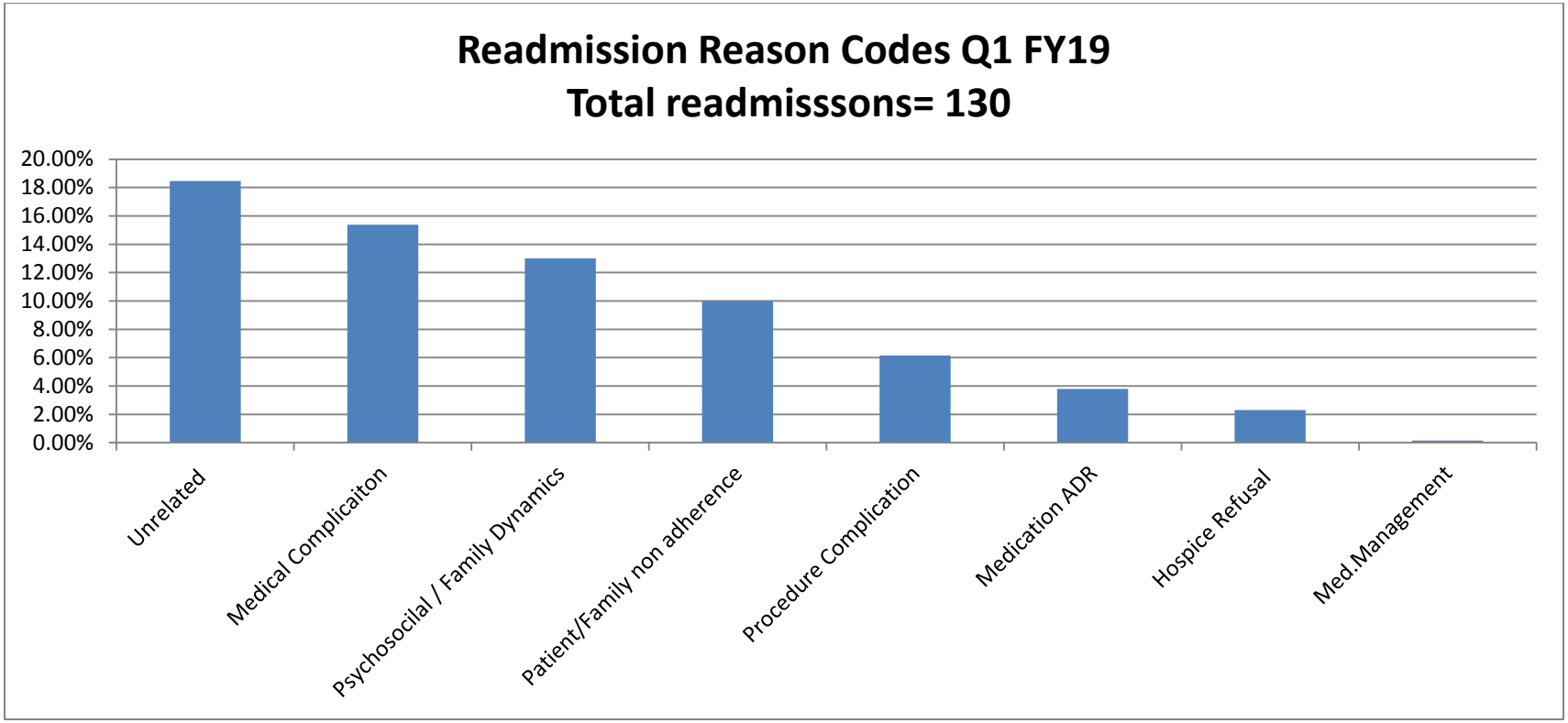
Premier All Payor, All Cause, Unplanned Readmit

		FY 2017			FY 2018			Qtr 1 (Jul & Aug), FY 2019		
		Observed Rate	*Expected Rate*	*O/E Ratio*	*Observed Rate*	*Expected Rate*	*O/E Ratio*	*Observed Rate*	*Expected Rate*	*O/E Ratio*
1	Overall	9.08%	9.08%	1.00	10.02%	9.11%	1.1	6.67%	8.15%	0.82
2	Acute Myocaridal Infarction (AMI)	7.69%	7.51%	1.02	7.72%	7.30%	1.1	3.13%	5.51%	0.57
3	Chronic Obstructive Pulmonary Disease (COPD)	14.14%	16.48%	0.86	26.97%	16.41%	1.6	12.50%	14.19%	0.88
4	Coronary Artery Bypass Graft (CABG)	11.24%	6.34%	1.77	4.63%	6.76%	0.7	6.67%	5.17%	1.29
5	Heart Failure	17.79%	15.89%	1.12	16.17%	15.52%	1.0	12.68%	14.91%	0.85
6	Pneumonia	10.31%	11.92%	0.87	12.82%	12.30%	1.0	14.06%	11.73%	1.20
7	Stroke	7.17%	6.58%	1.09	8.20%	6.77%	1.2	2.50%	6.75%	0.37
8	Total Hip Arthroplasty and/or Toal Knee Arthroplasty	2.06%	2.08%	0.99	1.63%	1.99%	0.8	0.00%	2.35%	0.00

* Source: Premier Quality Advisor-Standard CS 30 day All Cause, Unplanned Readmission methodology

Under ACA hospitals incur as penalty under ACA of up to 3% of DRG payments for Readmission rates that are above CMS calculated expected for 7 diagnosis and procedures. Penalty for FFY19 (Oct. 2018) based on actual performance July 2014-June 2017 = 0.36% ($354,500)

Weekly Readmission Team: Meets every Friday to review 100% of the previous readmissions. Team expanded to include the ACMO, UM Medical Director, Sepsis Mgr., 1 physician from each hospitalist group, Respiratory care specialist, Dir. Care Coordination, Integrative care Pharmacist, and nurse. Each patient's index and readmission are reviewed in depth prior to the meeting and discussed. Readmit Reason Codes are assigned to trend over time. See Prato chart of the most frequent Readmission Reason Codes assigned by this team. Complications and medication management issues are referred to medical staff peer review. In addition the team is following guidance from CMS Claims manual and combining admission/readmission when appropriate: "When a patient is discharged/transferred from an acute care Prospective Payment System (PPS) hospital, and is readmitted to the same acute care PPS hospital on the same day for symptoms related to, or for evaluation and management of, the prior stay's medical condition; "hospitals shall adjust the original claim generated by the original stay by combining the original and subsequent stay onto a single claim."


Readmission Reason Codes Q1 FY19
Total readmisssons= 130
20.00%
18.00%
16.00%
14.00%
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
Unrelated
Medical Complicaiton
Psychosocilal / Family Dynamics
Patient/Family non adherence
Procedure Complication
Medication ADR
Hospice Refusal
Med.Management

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality, Patient Care and Patient Experience Committee
From: Catherine Carson, Sr. Director, Quality Improvement and Patient Safety
Date: December 3, 2018
Subject: Culture of Safety Survey Report

Purpose:

To provide an executive summary of the 2018 Press Ganey Physician Engagement Survey results.

Summary:

1. Situation: ECH seeks information on its medical staff's views and perceptions of the hospital and patient safety.

2. Authority: The Quality Committee is responsible for oversight of quality and safety.

3. Background: Press Ganey conducted a Physician Voice Survey in conjunction with the Employee Engagement Survey in March 2017. This is a follow-up survey conducted simultaneously with the Employee Engagement Survey in September 2018.

4. Assessment: Physician Engagement scored in the 65th percentile, with an 18% response rate. High performing themes: ability to decompress, staffing, job stress, and ECH provided high-quality care. Areas of focus included: culture around mistakes, collaboration between and within departments, and climate that promotes patient safety.

5. Other Reviews: N/A

6. Outcomes: Engagement score = 4.20 in 2018, was 4.11 in 2017.

List of Attachments:

1. PG Physician Engagement Survey Executive Summary

Suggested Committee Discussion Questions: None

El Camino Hospital®
THE HOSPITAL OF SILICON VALLEY

2018 Physician Voice Survey Executive Overview

Quality Committee

Mark Adams, MD, Chief Medical Officer

December 3, 2018

Today's Agenda

- Summary of Key Findings
- Linking the Data to Key Findings
  - Key Drivers
  - High/low performing Items
  - Safety
  - Resilience
  - Patient Experience
- Next Steps

Executive Summary

Overall Performance

- Engagement scored in the 65th percentile
- 18% response rate

High Performing Themes:

- Ability to decompress
- Staffing
- Job stress
- Hospital provides high-quality care

Areas of Focus:

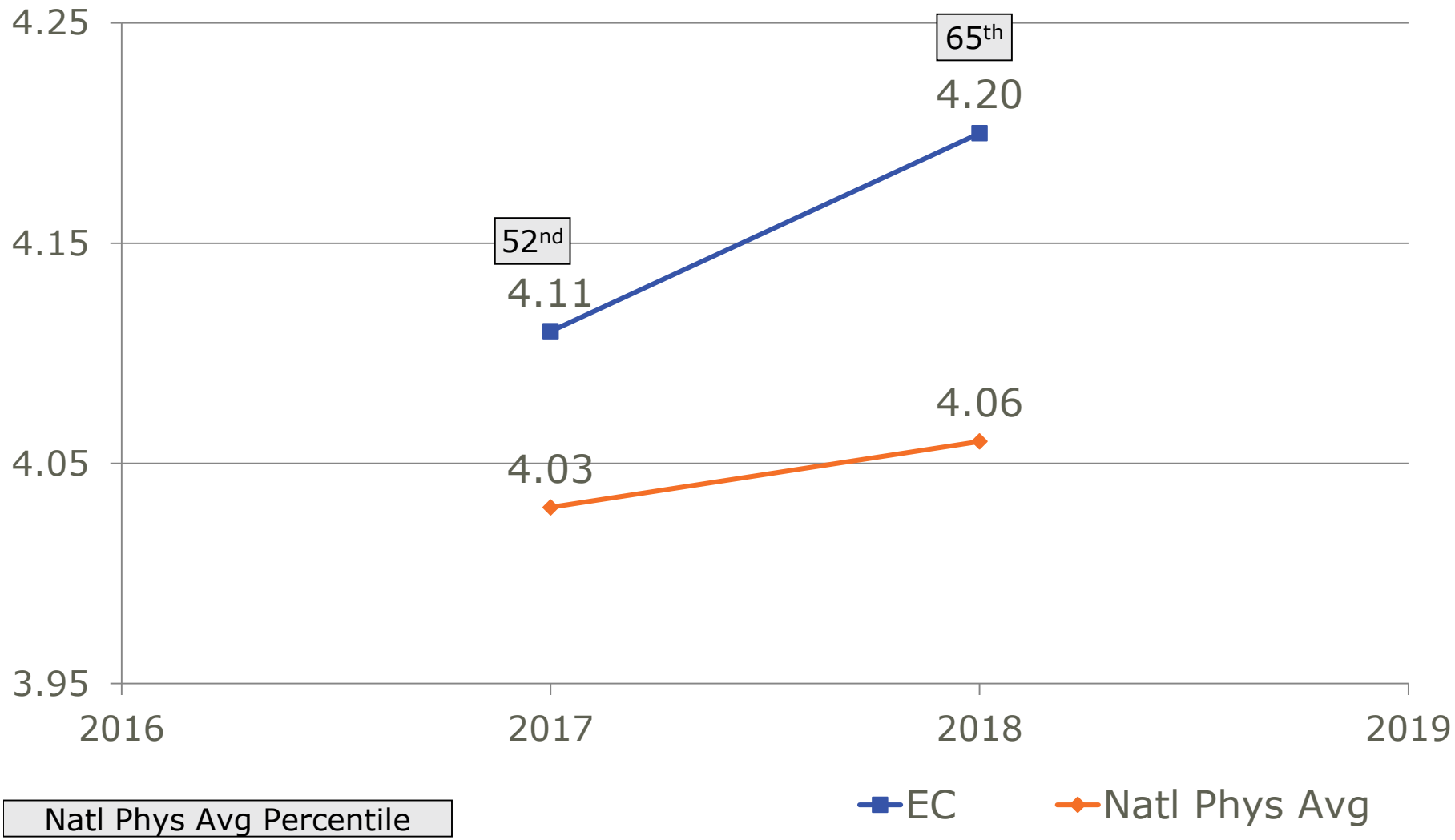
- Culture around mistakes
- Collaboration between and within departments
- Climate that promotes pt. safety

Results at a Glance

Survey Admin: September – October 2018
n=157, 18% Response Rate (2017: 23%)

Natl Phys Avg
65th
2017: 52nd

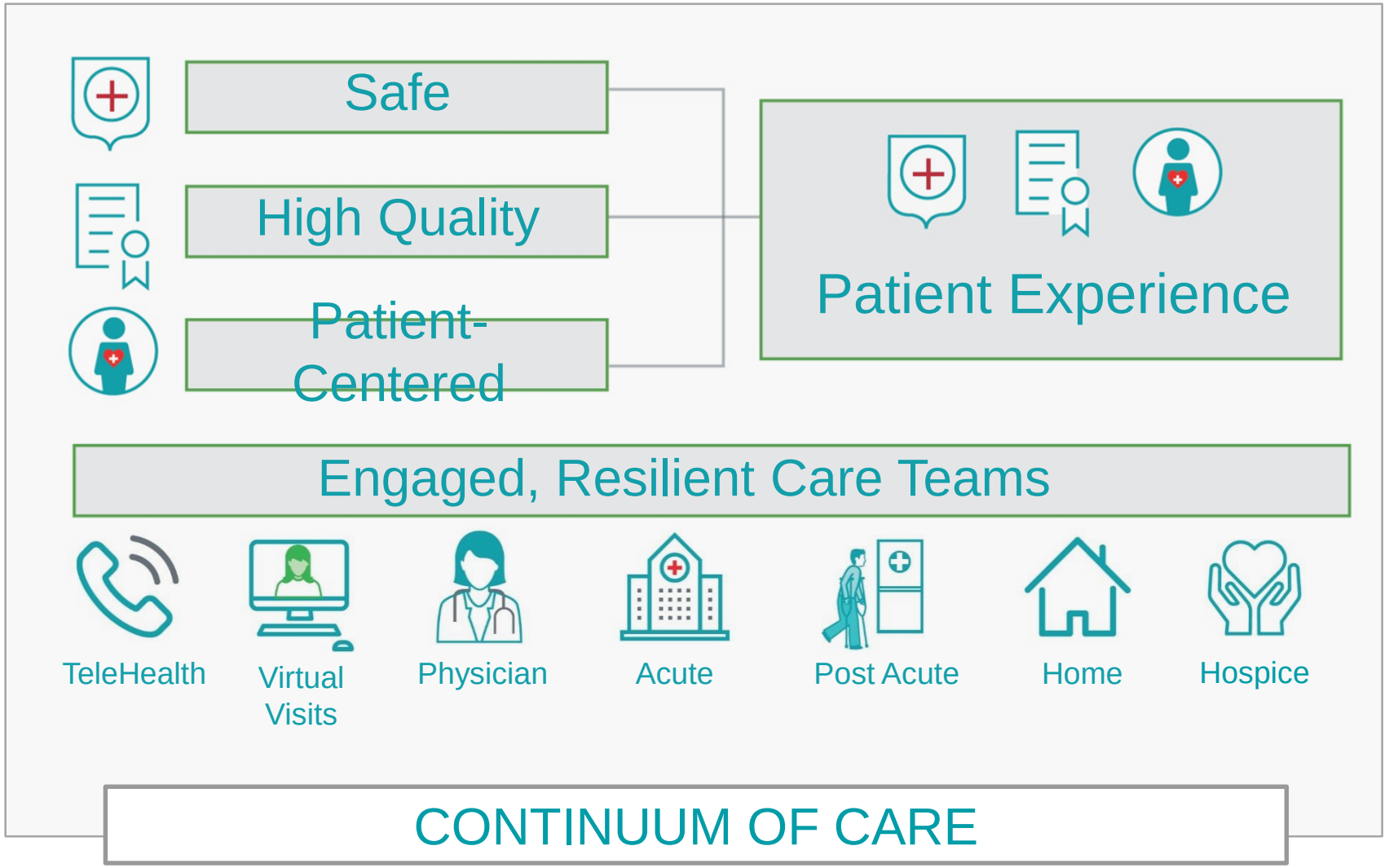
Engagement Trending



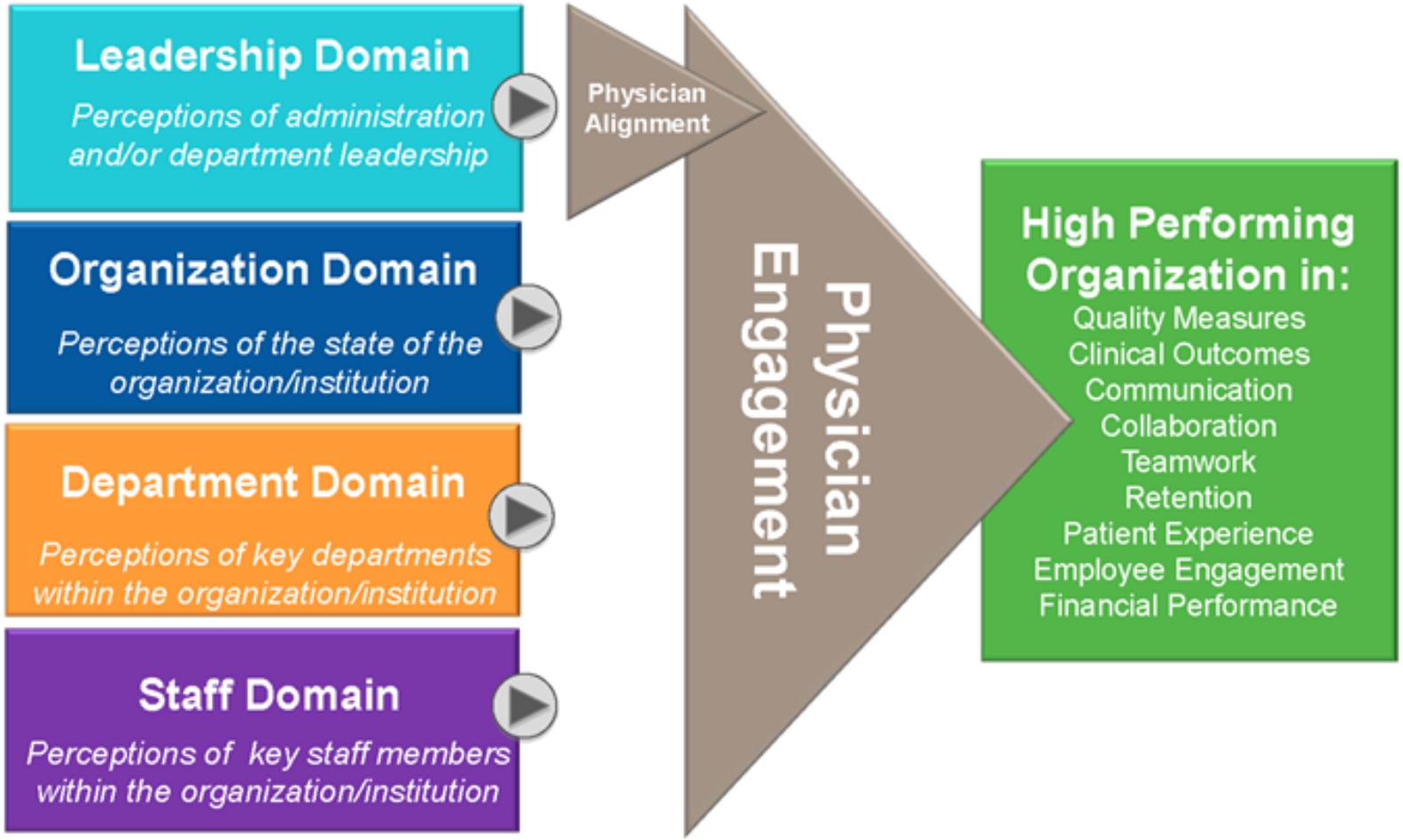
Natl Phys Avg Percentile

Note – National Physician Average based on Press Ganey's 6 engagement items.

Unified Strategy For Improving the Patient Experience



Physician Engagement Model



Survey Results

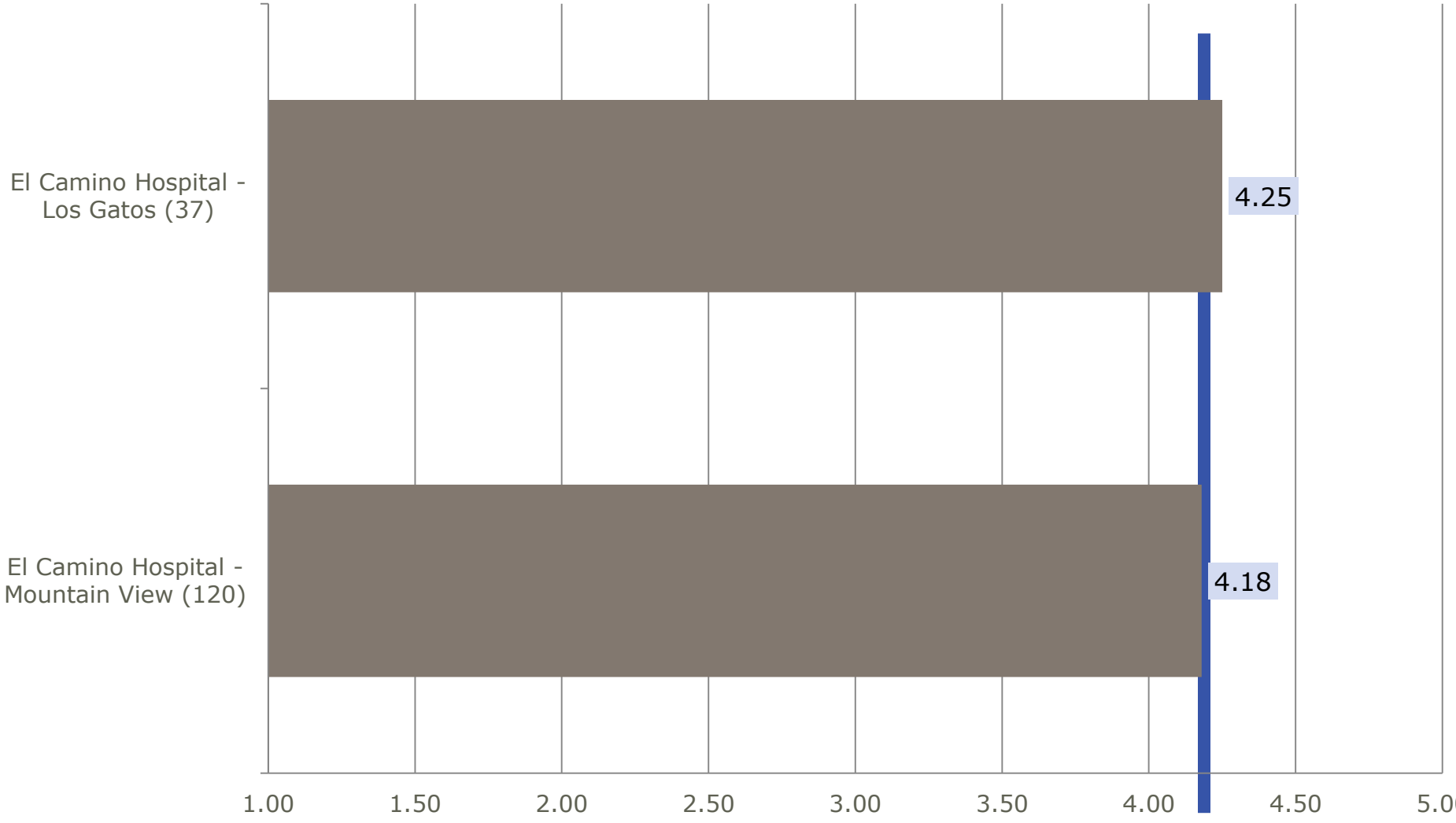
Engagement

			Difference from:	
Engagement Item	2018 EC	% Unfav	Natl Phys Avg	2017 EC
1. I would recommend this hospital to other physicians and medical staff as a good place to practice.	**4.33**	**6%**	**+.30**	**+.22**
2. I am proud to tell people I am affiliated with this hospital.	**4.35**	**5%**	**+.15**	**+.11**
5. Overall, I am satisfied working with this hospital.	**4.11**	**10%**	**+.10**	**+.08**
22. I would recommend this hospital to family and friends who need care.	**4.34**	**4%**	**+.10**	**+.06**
4. If practicing three years from now, I am confident that I will be working with this hospital.	**4.08**	**8%**	**+.10**	**-.03**
3. I would stay with this hospital if offered a similar position elsewhere.	**3.96**	**11%**	**+.09**	**+.07**
Engagement	**4.20**	**7%**	**+.14**	**+.09**

Note – In this presentation **GREEN**/**RED** notes a statistically significant difference.

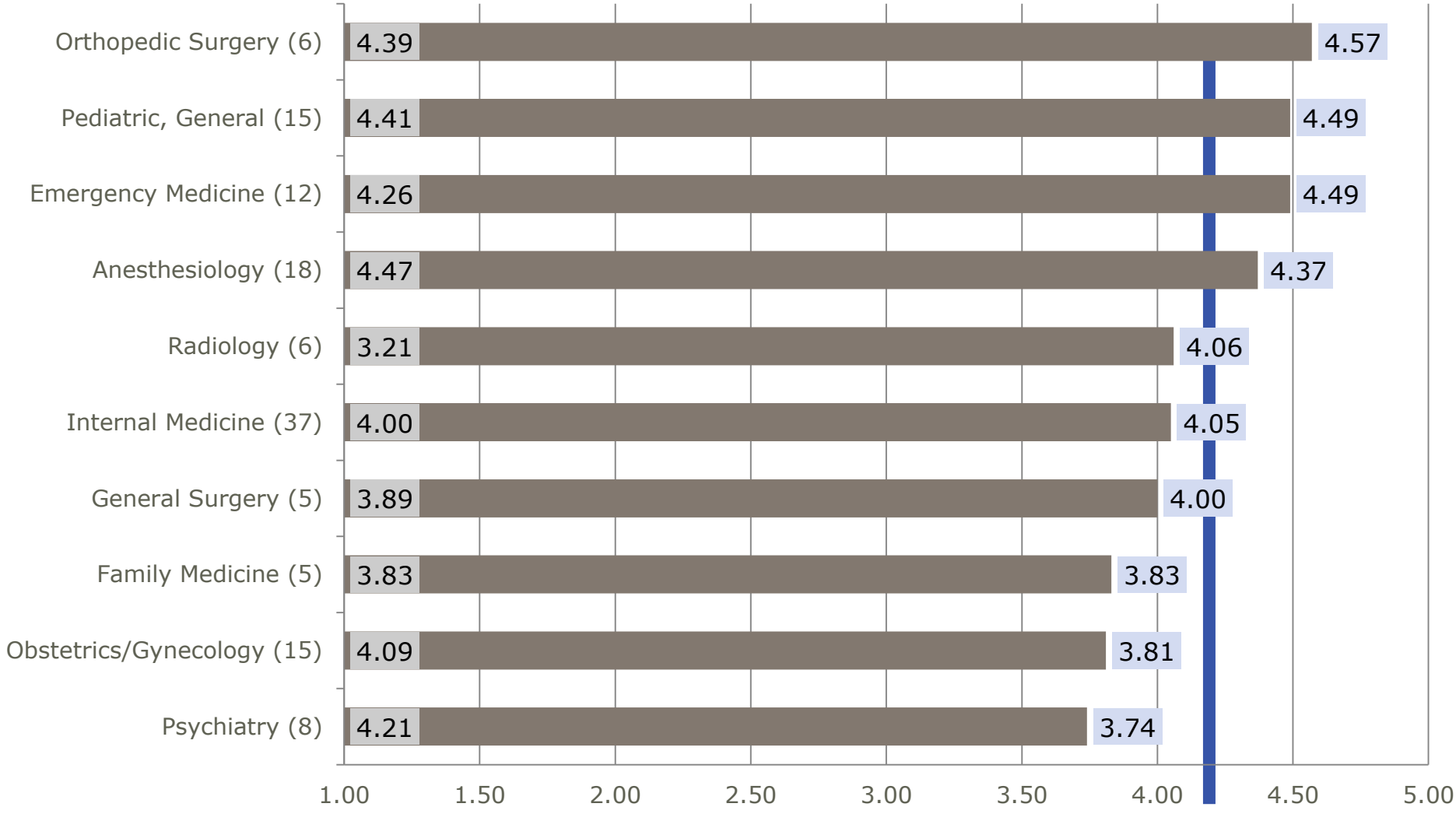
Natl Phys Avg +/- .19 History +/- .24

Engagement by Location



Line indicates your 2018 EC Engagement Score of 4.20

Engagement by Board Certified Specialty



.x = 2017 score

Line indicates your 2018 EC Engagement Score of 4.20

EC Key Drivers of Engagement

Key Observations

1. Key Drivers are the most important factors that drive improved engagement.
2. Leverage key drivers for organization-wide initiatives.
3. Key Driver theme(s): Patient safety

				Difference from:	
KEY DRIVERS of Engagement (in order of influence)	Domain	2018 EC	% Unfav	Natl Phys Avg	2017 EC
9. We are actively doing things to improve patient safety.	**ORG**	**4.07**	**8%**	**-.20**	**.00**
21. This hospital provides high-quality care and service.*	**ORG**	**4.36**	**3%**	**+.11**	**+.10**
6. I can report patient safety mistakes without fear of punishment.	**ORG**	**3.93**	**12%**	**-.34**	**-.13**

** Denotes key driver on your previous survey*

Highest Performing Items vs. Natl Phys Avg

KD = Key Driver				Difference from:	
Item	Domain	2018 EC	% Unfav	Natl Phys Avg	2017 EC
25. I can enjoy my personal time without focusing on work matters.	**STF**	**3.63**	**17%**	**+.26**	**N/A**
26. I am able to disconnect from work communications during my free time (emails/phone etc.).	**STF**	**3.33**	**31%**	**+.21**	**N/A**
17. My work unit is adequately staffed.	**ORG**	**3.43**	**23%**	**+.14**	**-.17**
19. The amount of job stress I feel is reasonable.	**ORG**	**3.57**	**17%**	**+.12**	**+.01**
21. This hospital provides high-quality care and service. KD	**ORG**	**4.36**	**3%**	**+.11**	**+.10**

Lowest Performing Items vs. Natl Phys Avg

KD = Key Driver				Difference from:	
Item	Domain	2018 EC	% Unfav	Natl Phys Avg	2017 EC
11. When a mistake is reported, the focus is on solving the problem, not writing up the person.	**LDR**	**3.25**	**26%**	**-.64**	**-.07**
13. I feel free to raise workplace safety concerns.	**STF**	**3.88**	**10%**	**-.38**	**-.10**
24. Senior management provides a climate that promotes patient safety.	**LDR**	**3.73**	**13%**	**-.34**	**-.17**
6. I can report patient safety mistakes without fear of punishment. KD	**ORG**	**3.93**	**12%**	**-.34**	**-.13**
14. My department works well together.	**STF**	**3.91**	**15%**	**-.34**	**+.04**

Greatest Improvements

KD = Key Driver				Difference from:	
Item	Domain	2018 EC	% Unfav	2017 EC	Natl Phys Avg
21. This hospital provides high-quality care and service. KD	**ORG**	**4.36**	**3%**	**+.10**	**+.11**
7. In my department, we discuss ways to prevent errors from happening again.	**STF**	**4.07**	**9%**	**+.08**	**-.19**
8. Employees will freely speak up if they see something that may negatively affect patient care.	**STF**	**4.01**	**9%**	**+.07**	**-.14**
14. My department works well together.	**STF**	**3.91**	**15%**	**+.04**	**-.34**
19. The amount of job stress I feel is reasonable.	**ORG**	**3.57**	**17%**	**+.01**	**+.12**
23. This hospital makes every effort to deliver safe, error-free care to patients.	**ORG**	**4.20**	**6%**	**+.01**	**-.04**

Greatest Declines

KD = Key Driver				Difference from:	
Item	Domain	2018 EC	% Unfav	2017 EC	Natl Phys Avg
24. Senior management provides a climate that promotes patient safety.	**LDR**	**3.73**	**13%**	**-.17**	**-.34**
17. My work unit is adequately staffed.	**ORG**	**3.43**	**23%**	**-.17**	**+.14**
6. I can report patient safety mistakes without fear of punishment. KD	**ORG**	**3.93**	**12%**	**-.13**	**-.34**
13. I feel free to raise workplace safety concerns.	**STF**	**3.88**	**10%**	**-.10**	**-.38**
11. When a mistake is reported, the focus is on solving the problem, not writing up the person.	**LDR**	**3.25**	**26%**	**-.07**	**-.64**
16. There is effective teamwork between physicians and nurses at this hospital.	**STF**	**3.88**	**12%**	**-.07**	**-.28**

Press Ganey's Safety Solution

Safety Solution: Reporting/Prevention

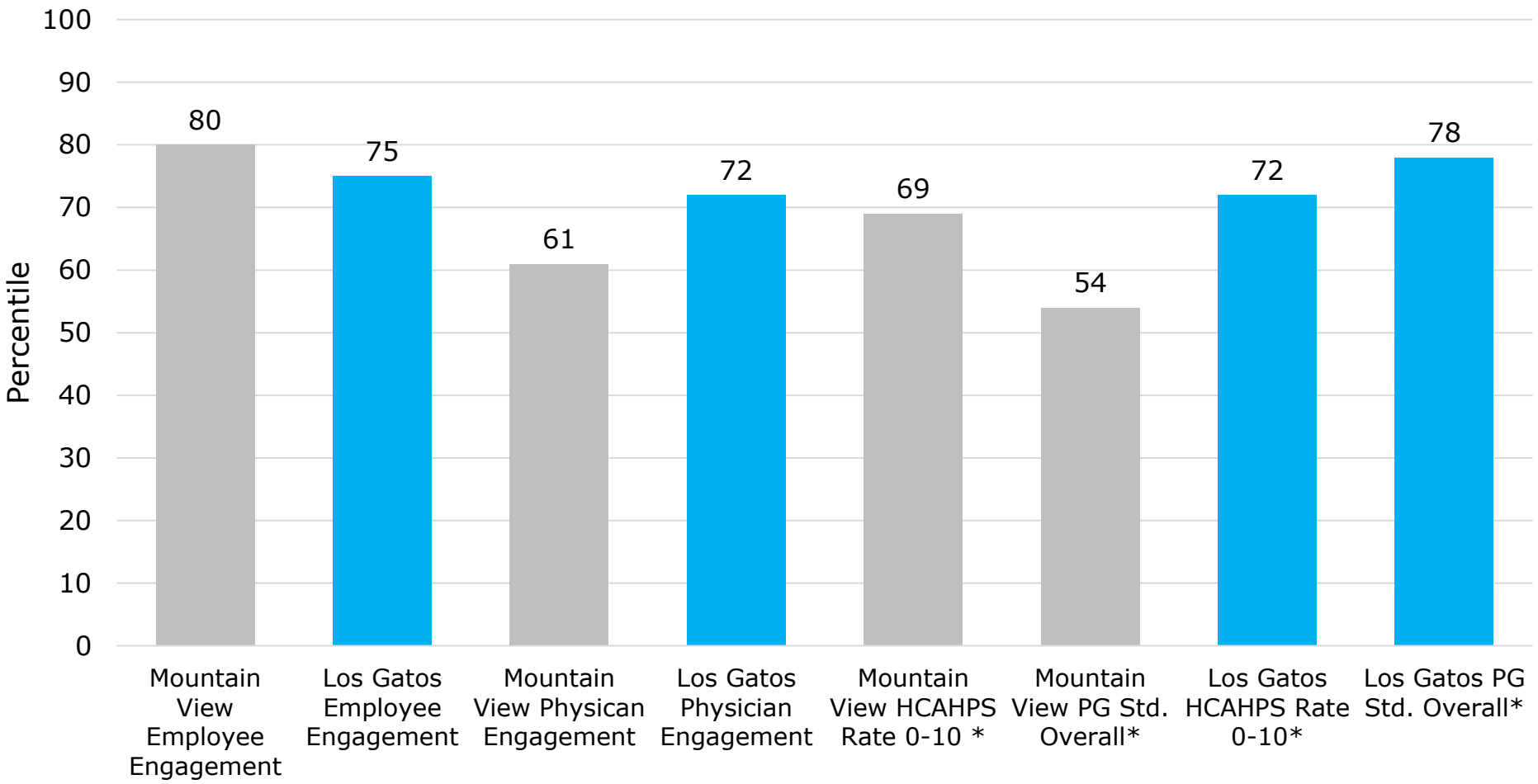
KD = Key Driver				Difference from:	
Item	Domain	2018 EC	% Unfav	2017 EC	Natl Phys Avg
I can report patient safety mistakes without fear of punishment. KD	**ORG**	**3.93**	**12%**	**-.13**	**-.34**
In my department, we discuss ways to prevent errors from happening again.	**STF**	**4.07**	**9%**	**+.08**	**-.19**
Employees will freely speak up if they see something that may negatively affect patient care.	**STF**	**4.01**	**9%**	**+.07**	**-.14**
We are actively doing things to improve patient safety.	**ORG**	**4.07**	**8%**	**0**	**-.20**
Mistakes have led to positive changes here.	**ORG**	**3.81**	**10%**	**-.02**	**-.28**
When a mistake is reported, the focus is on solving the problem, not writing up the person.	**LDR**	**3.25**	**26%**	**-.07**	**-.64**
Employees and management work together to ensure the safest possible working conditions.	**STF**	**3.79**	**14%**	**-.03**	**-.33**
I feel free to raise workplace safety concerns.	**STF**	**3.88**	**10%**	**-.10**	**-.38**

Resilience


Resilience
4.00
+.08 vs. Natl Phys Avg
Ability of employees to recover and remain engaged even in challenging work environments.
Activation
4.56
-.01 vs. Natl Phys Avg
Ability to engage patients and others as individuals and derive intrinsic value from work (at work).
Decompression
3.42
+.15 vs. Natl Phys Avg
Ability to disconnect and "recharge" (outside of work).

Engagement and the Patient Experience

Engagement and the Patient Experience



* PX Data pulled by receive date for date range 10/5/17-10/5/18; compared to the All PG Database

Next Steps

Recommendations

- **Thank physicians for taking the survey and share results with departments**
- **Address issues/perceptions related to safe, high-quality care/service and teamwork/collaboration**
  - Define and discuss "Just" culture to ensure focus is on the importance of reporting to preventing errors
  - Focus follow up to reported safety events and near misses on prevention
  - Collaborate with Physicians (and employees) to define safe, high-quality care and service
  - Follow through on any physician safety and/or quality solutions that are agreed upon and implementable
  - Be transparent with safety, quality and patient experience data to set goals and drive improvement
- **Look for ways to promote teamwork within and across departments**
  - Define 3-4 department behaviors that exemplify teamwork
  - Focus on one defined behavior per quarter.
    - At huddles, department meetings, etc., discuss defined behavior and how its practice contributes to safe, high quality care
    - Have Physicians provide peer to peer recognition when defined behavior is displayed

Discussion

Appendix

5 Steps to Drive an Engagement Strategy

1

Understand Your Current State

2

Get the Appropriate Tools and Metho-dologies in Place

3

Establish a Consistent Communica-tion Plan

4

Leverage Data to Inform and Align Talent Strategies

5

Track Integrated Metrics and Quantify ROI

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality, Patient Care and Patient Experience Committee
From: Mark Adams, MD, CMO
Date: December 3, 2018
Subject: What is Quality?

Purpose:

To continue the discussion we began at our November 5, 2018 meeting regarding how to define quality.

Summary:

1. Situation: At the Committee's last meeting, we introduced this topic and indicated it was something we would continue to discuss during upcoming meetings.

2. Authority: N/A

3. Background: At the last meeting, we distributed a "Healthcare Quality Strategy Maturity Model" and asked the Committee members, as well as staff and members of the Medical Staff who regularly attend the Committee meeting to participate in a related survey. We received responses from 12 of 17 requested participants.

4. Assessment: For each domain in the survey there was a fairly wide range of responses (2 -4 with one outlier of 5). However, the range of averages for all domains was fairly narrow (2.96 – 3.12 with one outlier of 3.44 tied to the outlier of 5 described above). As noted in the attachment, a response of 3 ("Defined") means activities/behaviors are formally defined and moderately managed (activities behaviors followed 70-80% of the time). There was no discernable trend based on the type of survey respondent (physician, leader, Committee member), at least in part because the number of survey participants was low. One Committee member commented that in many instances his/her rating based on a sense of what is happening or bits and pieces that is learned at Committee meetings. Or, there were some qualities, but not all, as defined on the grid, he/she knew about for a certain rating. This Committee member noted that it would be helpful to see evidence to justify the ratings.

5. Other Reviews: N/A

6. Outcomes: N/A

List of Attachments:

1. Healthcare Quality Strategy Maturity Model
2. Survey Data

Suggested Committee Discussion Questions:

1. What do the survey results tell us about the maturity of ECH's quality strategy?
2. Is it possible the results tell us more about perceptions than actual maturity?

Alvarez & Marsal's Healthcare Quality Strategy Maturity Model

Dimension	Description	INITIAL [1]	MANAGED [2]	DEFINED [3]	QUANTITATIVELY MANAGED [4]	OPTIMIZED [5]
		Activities/behaviors are not defined	Activities/behaviors are commonly performed but in an adhoc and reactive manner with large variation	Activities/behaviors are formally defined and moderately managed (activities/behaviors followed 70-80% of the time)	Activities/behaviors are proactively managed and measured according to defined standards (activities/behaviors followed 80%+ of time)	A consistent process exists where activities and behaviors are reviewed and improved upon. Innovation occurs to establish new frontiers
Leadership and Culture	• Role(s) of Leader(s) is/are clear to others. • Leader has set clear objectives to align the organization to its vision, mission, strategy and core values in quality **Key Themes:** • Vision/Mission/Strategy/Core values • Communication of quality goals • Priority of creating a quality plan • Quality defined	• No organizational vision, mission, strategy and core values related to quality • Quality is not a top priority • Leadership communication on quality performance does not exist • No common definition of quality exists	• Inconsistent organizational vision, mission, strategy and core values related to quality • Quality is only a priority when there are problems with reputation, funding, accreditation, or resource requests (single item issues and not strategic items) • Leadership communication on quality performance is inconsistent/adhoc • Varying views exist of what quality means in the organization	• Vision, mission, strategy and core values on quality are established and the organization is aware • Quality is a priority but no plan exists for an organization-wide quality program • Leadership communication on quality is delivered on a need basis • Organization is in alignment with the definition of quality	• Vision, mission, strategy and core values on quality are routinely communicated and goals are established related to the vision • Quality is a leadership priority, a plan is in place, and measurements are being used to determine efficacy of quality • Leadership communication on quality is consistently delivered and measured for effectiveness (surveys, open rates, adoption rates, etc...) •Organization understands the drivers of quality improvement and leaders hold the organization accountable to quality	• Vision, mission, strategy, and core values on quality are revisited on a predetermined time horizon • Results from measuring quality plan are used to identify improvements • Communication is altered to adapt to staff preferences and changing needs • Definition of quality is revisited to ensure it is relevant to the organization's vision, mission, strategy, and core values
Organizational Integration	• Shared governance of clinical activities across all Physicians, Nurses and other Service Lines • Vertical and horizontal accountability • Physician Alignment with organization's goals **Key Themes:** • Collaboration/ shared goals around quality measures • Transparency and accountability • Decision making (linked and aligned work streams)	• Collaboration is not encouraged and staff do not engage others in decision making or sharing best practices in delivering quality • No forum for collaboration exists at a department/unit/service line or organization/system-wide level	• Ad hoc collaboration takes place (hallway conversations), but drive minimal improvements • Discussions exist across services lines but with no defined follow-through • Department/unit/service line discussions on quality exists inconsistently and only on a need basis	• Pockets of collaboration exists (e.g., some clinical pathways, high performing units) • Just developing organization-wide view of shared responsibilities and sharing of best practices exist in achieving positive outcomes. • Formal department/unit/service line meetings are established and consistently held to drive improvements in quality	• Formal collaboration meetings are held department/unit/service line- wide, as well as organization-wide and yielding measurable improvements in quality	• Leadership reviews output from collaboration meetings and makes needed changes to improve quality across all lines of service • Leadership uses collaboration meetings to spur new ideas and innovation
Performance Improvement Methodology	• Common view (mental model) and operational model for executing change across organization. • Process of creating a ongoing practice of improving quality across the organization **Key Themes:** • Methodology for ongoing improvements	• Performance improvement methodologies do not exist • Staff make no efforts at improvements and performance improvement has a negative connotation	• Performance improvement methodologies are not widely known or understood • Improvement efforts are made ad hoc based on immediate needs • Some unit-based improvement efforts exist but are not consistently enforced or followed	• Leadership committed to an organization-wide approach and has set organization-wide goals • Performance methodologies are defined, deployed and managed across the organization	• Performance methodologies adoption and effectiveness are tracked • Feedback and best practice sharing is encouraged on performance improvement methodology • Policy and protocol deviation evaluated • Feedback about performance and continuing education	• Consistent review process for performance improvement methodologies are in place and changes are made where necessary or new methodologies are incorporated in the practice • Metrics are used to help improve the practice
Policy and Procedure Management	• A defined, executed and measured series of actions to deliver clinical quality through the management of clinical policies and protocols **Key Themes:** • Define, create accountability and measure for clinical quality policy and procedures	• There is no standardization or automation of processes (e.g., clinical pathways) • No policies and procedures exist or they exist and no knows where to find them, or not followed • Staff is left to determine their own method • No accountability for use or non-use of P&P	• There are some standardization and automation of processes but there is an adhoc approach to execution or adoption • Policies and procedures exist but poor adoption • Little accountability for staff to follow policies and procedures • Individuals who are held responsible lack the appropriate authority	• Processes are generally standardized and adhered to • Policies and procedures are well defined documented and followed throughout the organization • People are held accountable to policies and procedures • The appropriate people are held responsible and have appropriate authority	• Breaks in standards or possible deviations from standards are tracked and evaluated for revision root cause analysis and possible policy revision • Policies and procedures are routinely reviewed and evaluated for alignment with best practice • Process automation exists throughout the organization	• Based on best practices, lessons learned and outcomes, processes are revised and improved upon • A formal process is in place for process revision, ownership, testing and execution • All deviations evaluated with positive deviance deeply understood
Training and Learning	• Necessary training and learning opportunities delivered to aid in effective delivery of quality **Key Themes:** • Formal education/training/learning	• No training and learning opportunities exist	• Training and learning opportunities exist but quality varies and inconsistently used or organization does not provide the time for staff to take training	• Training and learning opportunities are available and valued as a skill development resource • Training is delivered to the appropriate service lines • Training supports strong adoption of quality performance drivers • Reinforcement training provided on a continual basis • Tools (guides, aids, etc…) are provided to support the training	• Continuous learning and education are in place to ensure most current evidence based practices are occurring • Training participation and achievements are tracked • Surveys or assessments are created for staff to gauge the effectiveness of training and learning opportunities • Follow-up and reinforcement training provided on a consistent basis	• Metrics are tracked and used on a regular basis to improve overall training and yield innovative approaches and improvements to quality • Materials and learning opportunities are reviewed, updated and continuously improved upon
Data Measures and Management	• Collecting, tracking and use of metrics to drive improvements • Managing data to advance quality **Key Themes:** • Data Timing • Data Type • Data Use • Data Stakeholders • Data Integrity	• Little to no data are used to inform or drive improvements • Data that are used are not defined or relevant in driving strategic goals or improvements in quality and lacking insight (i.e., lagging indicators) • Front-line staff or physicians are not informed of important stats/metrics (e.g., LWBS, sepsis rates) • Poor quality/integrity to the data. data are not believed ("my patients are sicker" mindset) • Industry performance benchmarks are not being met	• Data are generated on demand and are used for regulatory purposes only (external) • Data delivery method has an inconsistent format providing an incomplete picture • Appropriate stakeholders are not always updated on the metrics • Industry performance benchmarks are being inconsistently met for some elements	• Data generation is managed and aligns to the strategy • Data have a consistent format and delivery schedule • Stakeholders are regularly provided metrics • Industry performance benchmarks are being mostly met and showing continuous improvements in multiple benchmarks	• Data generate relevant information that is easily tailored to interest areas of stakeholders • Data are insightful with leading indicators to help in decision making or a course of action • Data are used to drive improvements • Industry performance benchmarks are being met in all categories	• Process is in place to review data to ensure it is relevant with any changes in the industry, and modifications are made if necessary '• Input and feedback is continuously obtained from stakeholders to ensure that reporting meets stakeholder needs. • Industry performance benchmarks are consistently being met in all categories year over year

Definition of Quality:
IOM- Lowering Mortality • Effectiveness • Safety • Equity • Efficiency • Patient Centered
Triple Aim- Patient Centered • Population Health • Lower Cost
Rate of Improvement- Improving Externally Reporting Metrics • Innovative • Reputation/ Name Recognition

Responses to Quality Maturity Model Survey

12 of 17 Requested Participants Responded to the Survey

Mix of Board Members, Other Committee Members, Physicians and ECH Leadership Responded

Rating	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3	3.25	3.5	3.75	4	4.25	4.5	4.75	5	Average
Domain																		
Leadership and Culture							1		5		2		4					3.13
Organizational Integration					1		2		7		1		1					2.96
Performance Improvement Methodology					1			1	4		1		4				1	3.44
Policy and Procedure Management					2			1	5		1		3					3.10
Training and Learning					2	1	2		3				4					3.02
Data Measures and Management						1			4		1	1	5					3.13

El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

Hospital Update
November 14, 2018
Mark Adams, MD, CMO

Quality and Safety

Leapfrog notified us that our hospital safety grade has improved from a "C" to a "B" in the latest iteration. We will continue to work toward achieving an "A" score. Our publicly available measures are all in the "A" category, but our self-reported measures such as electronic health record use, care for the caregiver programs, and ICU intensivist coverage are not to the level that Leapfrog demands.

Our opioid epidemic task force completed its work to develop a comprehensive new opioid prescribing policy to significantly reduce the use of these addictive and dangerous medications. We will be introducing new guidelines and restricting the use of opioids for chronic pain management.

The Medical Staff participated in a Culture of Safety and Engagement Pulse Survey from September 17th through October 8th and we are pleased to report that, although the number of physicians participating was low, the engagement scores moved from the 52nd to the 65th percentile ranking when compared to the National Healthcare Engagement Percentile Ranking, as determined by Press Ganey. Although we are encouraged by the survey results, over the next few months we will be working on improving some of the identified concerns and plan to conduct a full survey again in the late spring 2019.

Several members of the Nursing Team attended the Annual Magnet Conference in Denver, Colorado from October 23rd – 26th. This is the largest nursing conference in the world, with over 10,000 nurses sharing best practices from around the world. Following the conference, the team that attended met and determined which best practices to implement at ECH based on strategic priorities. ECH staff Chris Tarver, RN and Suann Schutt, RN presented the work we completed a year ago to a full auditorium. In addition, Debbie Smyth, presented a poster on decreasing the use of PCA (patient controlled analgesia) for pain management in total joint patients using alternative analgesia.

The Interventional Pulmonary Team with Ganesh Krishna, MD performed the first Lung Volume Reduction procedure on the West Coast early in October using the newly FDA released PulmonX valve.

Operations

Our new COO, Jim Griffith, joined us on October 29th. Jim is already engaged in following a structured learning agenda and plan to assimilate as much information as possible while building trusted and productive working relationships with all El Camino stakeholders and team members at both Mountain View and Los Gatos. He will begin to focus on supporting existing initiatives, organizational goals, refining growth plans for all service lines, and enhancing operating results at Los Gatos.

Workforce

On November 7th, we received the results of our Employee Engagement Survey taken by 87% of our employees this year. We are very proud to report that ECH received an overall score of 4.27 – up from 4.09 in 2017! This statistically significant improvement finds that we scored better on 100% of the questions in every area of the survey: employee engagement, culture of safety, and nursing excellence. When compared to the National Healthcare Average (as reported by Press Ganey), we moved from the 40th percentile to the 79th percentile.

Earlier this month, we launched the Transit Subsidy Program for employees encouraging the use of public transportation to and from work by providing a subsidy of up to $150 per month. We are pleased to report that we have close to 100 employees taking advantage of this new program helping to reduce congestion on the highways and local streets as well as creating more parking spaces for our patients and visitors. On November 12th, we will launch the East Bay Shuttle pilot program, which will transport employees to and from ECH who live in the Fremont and Milpitas areas.

We have launched an "HR Hotline" for all employees who would like to report issues or have HR-related questions.

Financial Services

As of October 24, 2018 we have implemented $1,349,516 in savings and cost avoidance of $68,368.37 of our $2.2 million goal. Savings were captured in infant care, mobility aids, auditory products, wound drainage, arthroscopy supplies, patient warming blankets, and spinal implants.

Marketing and Communications

The marketing team led or supported multiple community events including "A Healthy Mind" events at Homestead High School (parent night, staff education day, and over 5,000 students); AHA's Heart & Stroke Walk, and the first Women's Health Fair on Mountain View campus with 200+ attendees, 15 specialty tables staffed by 22 physicians/clinicians and 7 program tables plus two lectures. The team also launched the *Project Pink* digital campaign to increase breast health education and awareness while driving to long-term engagement with our primary target audience.

Information Services

We once again received the designation of **"Most Wired 2018"** which only 40% of hospitals receive for demonstrating leadership and advancement in technology and industry trends. Epic and Carbon Health, the EMR vendor for our newly acquired Urgent Care sites, will share patient record information for improving the patient care experience and interoperability workflows at ECH Urgent Care sites. Within the next four months, we will activate a new physician voice recognition system at the Winchester Clinic. This will to improve physician efficiency by enabling them to use a microphone to convert their voice into text in iCare when documenting patient information. They will also be able to control Epic with their voice.

Corporate and Community Health

CONCERN:EAP launched Luma, its new digital service delivery platform with four pilot organizations. We are now offering video counseling with 50 counselors and online scheduling.

ECH Community Benefit staff is participating on Santa Clara County Public Health Department Chronic Disease Prevention Strategic Task Force and the Santa Clara County Oral Health Collaborative.

In collaboration with our Health Library Resource Center the ECH Chinese Health Initiative staffed an information table at the Oracle Employee Health Fair on October 10th with 140 people receiving information. The Library and the South Asian Heart Center also provided information during the Women's Health Fair on October 20th at El Camino Hospital Mountain View.

Silicon Valley Medical Development, LLC (SVMD)

Silicon Valley Primary Care Community Clinic, operated by El Camino Hospital, permanently closed on November 2nd. The physicians relocated to SVMD's El Camino Health Primary Care Clinic in the Melchor Pavilion on November 5th. There will be an open house on Tuesday, January 15th, 2019 for patients to meet the medical team, see the new office and learn more about the plans for a new permanent clinic in the Integrated Medical Office Building currently under construction on the Mountain View campus.

SVMD has opened a new specialty clinic with two ENTs at 2204 Grant Road.

Philanthropy

The Foundation achieved 15% of its FY19 fundraising goal as of the end of Period 3.

Auxiliary

The Auxiliary contributed 6,391 volunteer hours in October 2018.