



UTAH DEPARTMENT OF
HEALTH

Patient Safety Surveillance and Improvement Program (PSSIP)

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December 18, 2020

MISSION & VISION



The Utah Department of Health's mission is to protect the public's health through preventing avoidable illness, injury, disability, and premature death; assuring access to affordable, quality health care; and promoting healthy lifestyles.

Our vision is for Utah to be a place where *all* people can enjoy the best health possible, where *all* can live and thrive in healthy and safe communities.



STRATEGIC PRIORITIES



Healthiest People – The people of Utah will be among the healthiest in the country.

Optimize Medicaid – Utah Medicaid will be a respected innovator in employing health care delivery and payment reforms that improve the health of Medicaid members and keep expenditure growth at a sustainable level.

A Great Organization – The UDOH will be recognized as a leader in government and public health for its excellent performance. The organization will continue to grow its ability to attract, retain, and value the best professionals and public servants.

ABOUT THE OFFICE OF HEALTH CARE STATISTICS



Office of Health Care Statistics oversight includes:

- **Collect:** We collect and produce data that are relevant and useful to our stakeholders
- **Analyze:** We create valuable enhancements to our data resources and our systems have the analytic capacity to transform them into useful information
- **Disseminate:** We make the data and information we collect and produce available to the *right people* at the *right time* for the *right purposes*



The rules that apply are:

- [R380-200. Patient Safety Surveillance and Improvement Program \(PSSIP\).](#)
- [R380-210. Health Care Facility Patient Safety Program.](#)
- [R434-150. Adverse Events from the Administration of Sedation or Anesthesia; Recording and Reporting.](#)

TODAY'S GUEST SPEAKER



Robin Betts, RN, CPHQ, MBA-HA

Vice President, Quality, Clinical Effectiveness & Regulatory Services

Kaiser Foundation Hospitals and Health Plan

Kaiser Permanente Northern California

ABOUT THE OFFICE OF HEALTH CARE STATISTICS



Responsible for the following data series:

- **Healthcare Facilities Data:** Includes all institutional “patient encounters” that are provided in the State of Utah by qualifying licensed facilities
- **Surveys of Customer Satisfaction with Health Plans (CAHPS):** Health plans (commercial and Medicaid, medical and dental) conduct annual surveys of their members (Required by statute - implemented by rule)
- **Self-reported Quality Metrics for Health Plans (HEDIS):** Quality of care measures - Healthcare Effectiveness Data and Information Set (HEDIS), which is developed and maintained by the National Committee for Quality Assurance (NCQA).
- **All Payer Claims Database:** Includes claims paid on behalf of Utah residents for the majority of health plans, Medicaid, Medicare Advantage, and third party administrators including PBMs.
- **Patient Safety Surveillance and Improvement Program (PSSIP):** A reporting mechanism which captures patient safety events (injuries, death or other adverse events) associated with healthcare delivery and administration of anesthesia, which fosters conversations on how to minimize adverse patient safety events in Utah.

Kaiser Foundation Health Plan & Hospitals Northern CA – High Reliability in Action

12/18/2020

Robin Betts, RN, CPHQ

Vice President Quality, Clinical Effectiveness and Regulatory Services

Our Model: Care and Coverage Together



Northern California Overview



KP Northern California Snapshot

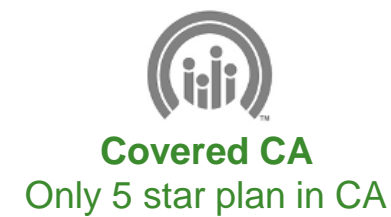
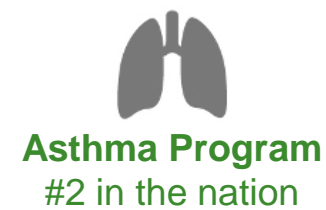
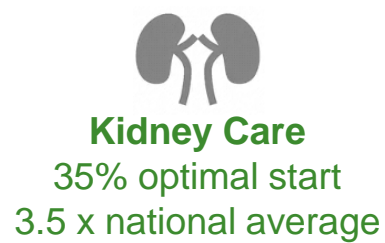
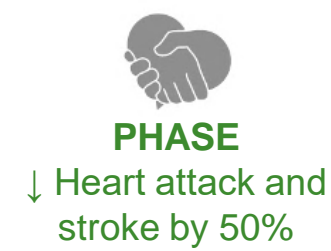
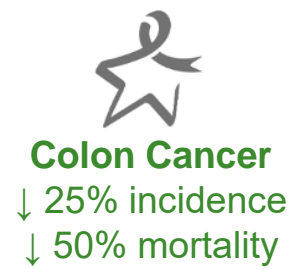
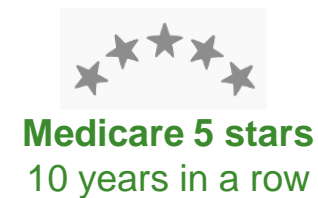
75 years providing care & coverage
4.4 M members

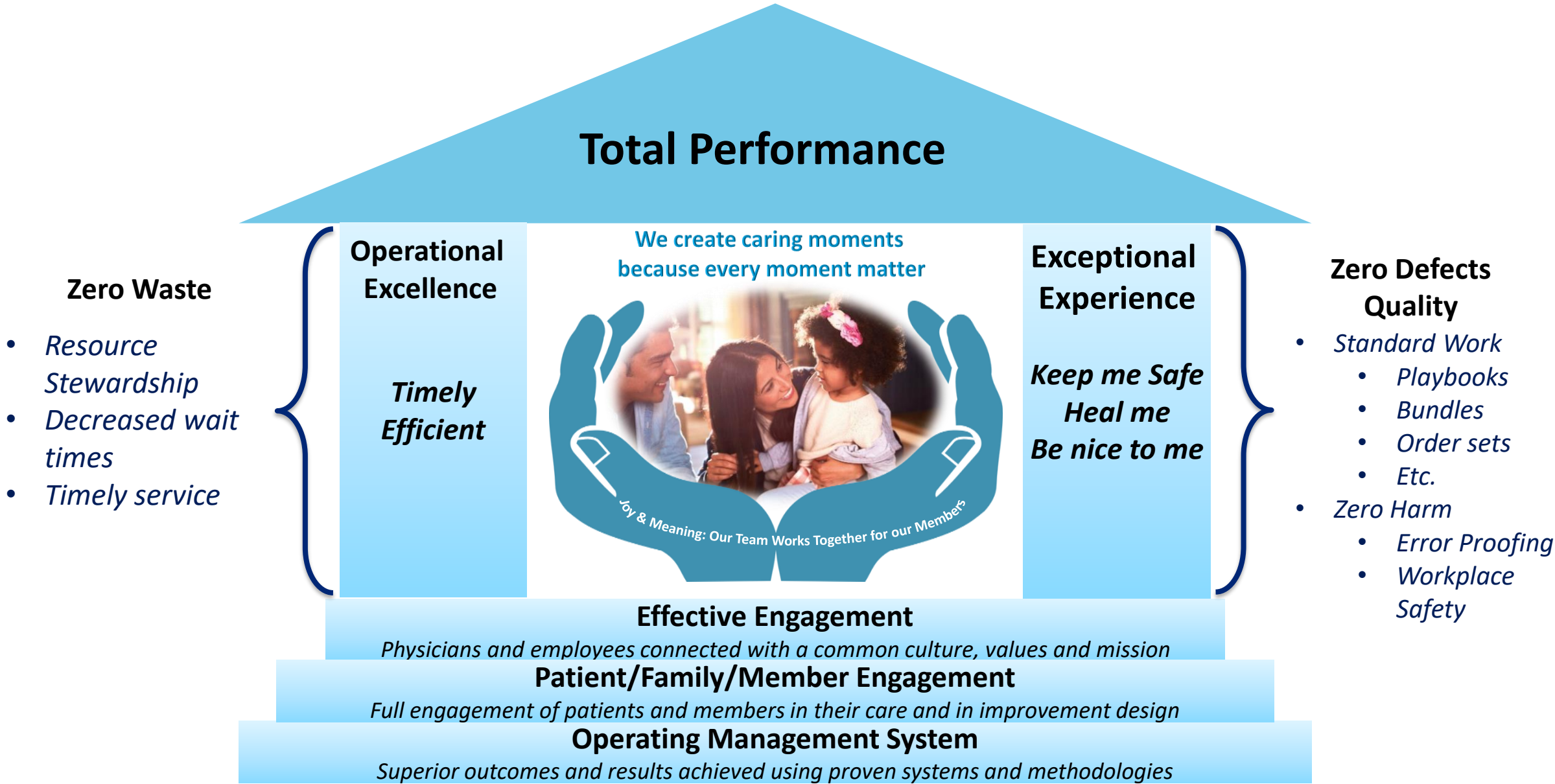
50% Commercial market share
65% Medicare SA market share

21 hospitals
251 medical offices

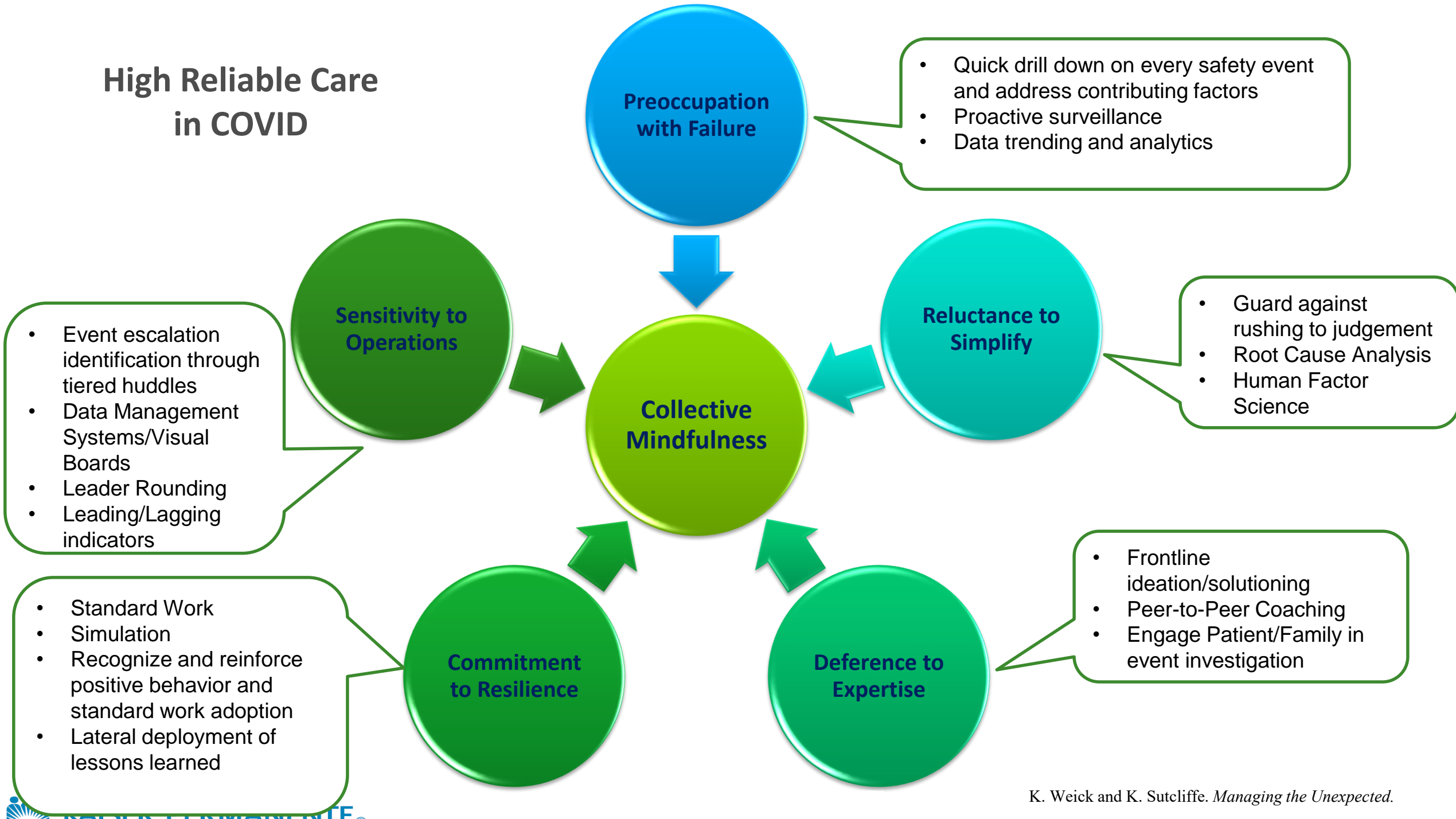
250,000 hospital admissions
27.8 M outpatient visits
45,000 inpatient surgeries
40,000 births

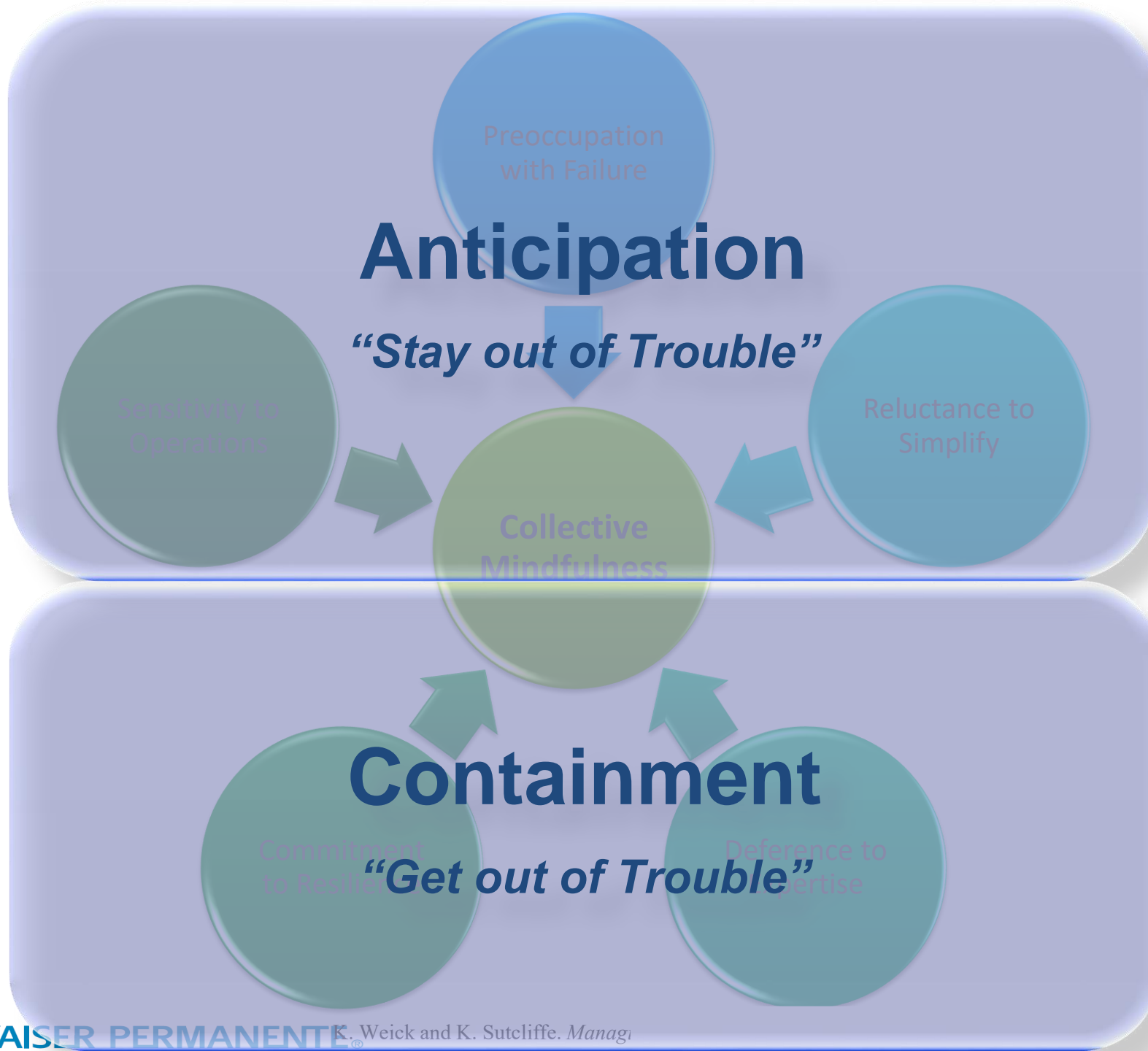
Leading the Nation in Quality Performance





High Reliable Care in COVID





High Reliable Care

NCAL Risk & Patient Safety HEROES



Local HEROES Structure Recommendations for 2020

HEROES Sustainability Journey

Hospital and Emergency Department Reliability in Operational Excellence and Safety

- 2016 implemented
 - Testing Algorithm
 - Best practice alert
 - PCR workflow
- Results in statistically significant improvement
- ? – How do we sustain?

SIR

All Facility CDIF SIR



Two facts we want to acknowledge

1. Sustainability in healthcare is variably and poorly-defined
2. Healthcare is a complex system

Assumptions we are making:

1. Sustainable healthcare is critical for us to meet the needs of the present without compromising our ability to provide the needs of the future
2. Sustainability is a process rather than an outcome
3. Sustainability requires a system that can adapt, learn, and continuously develop

Our definition of sustainability:

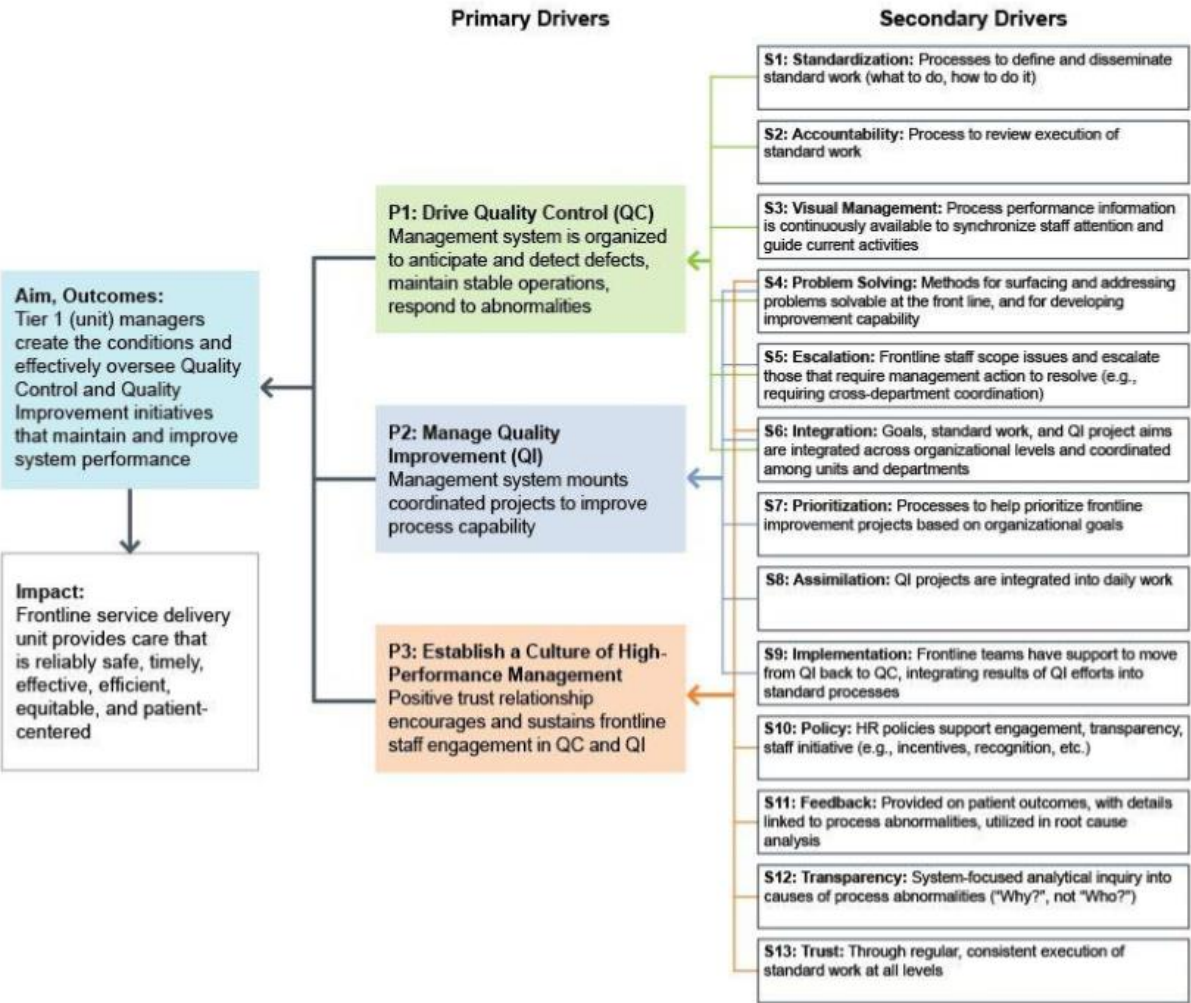
*The general continuation and maintenance of a desirable state of an initiative or performance and its associated outcomes, and the process/es taken to adapt and develop in response to emerging needs of the system**

- *Dynamic, agile, learning, responsive*

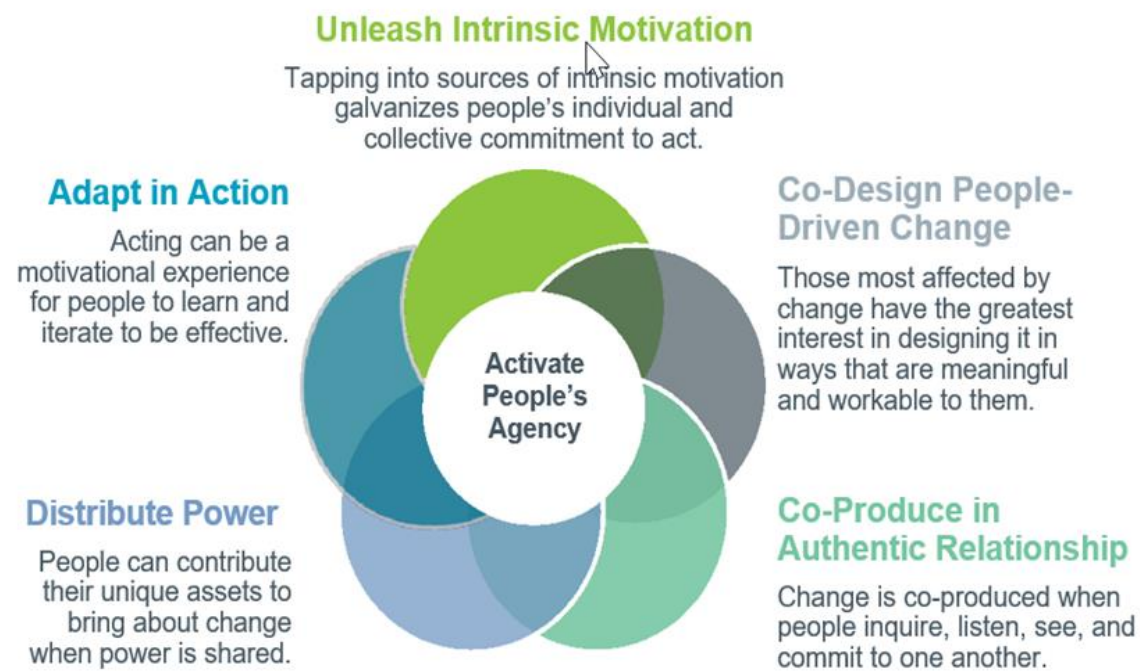
*Source: Lennox, et al. *Implementation Science* (2018) 13:2

What does sustainability of improvement in healthcare means:

Drivers of Sustained Improvement



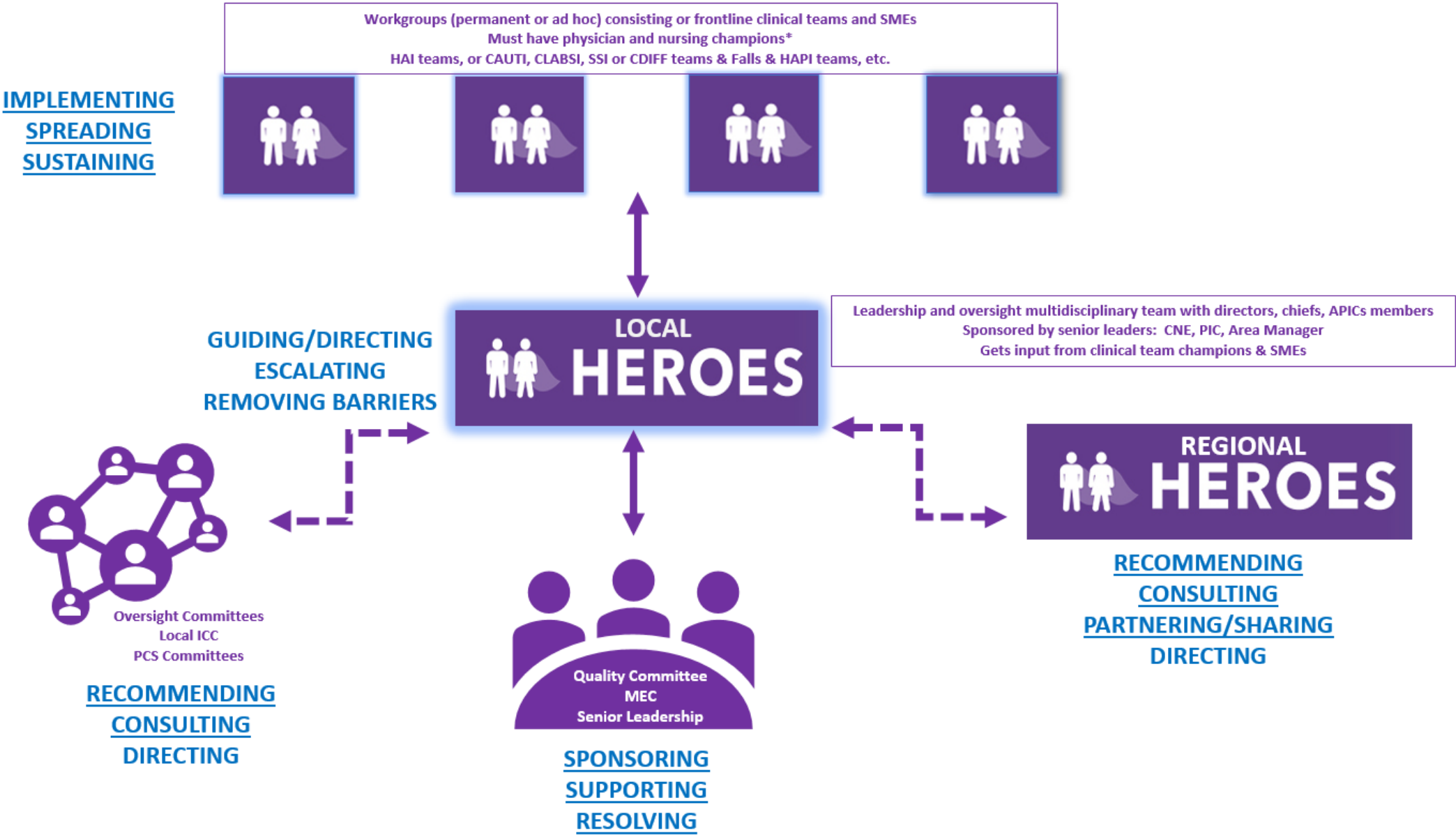
IHI Psychology of Change Framework



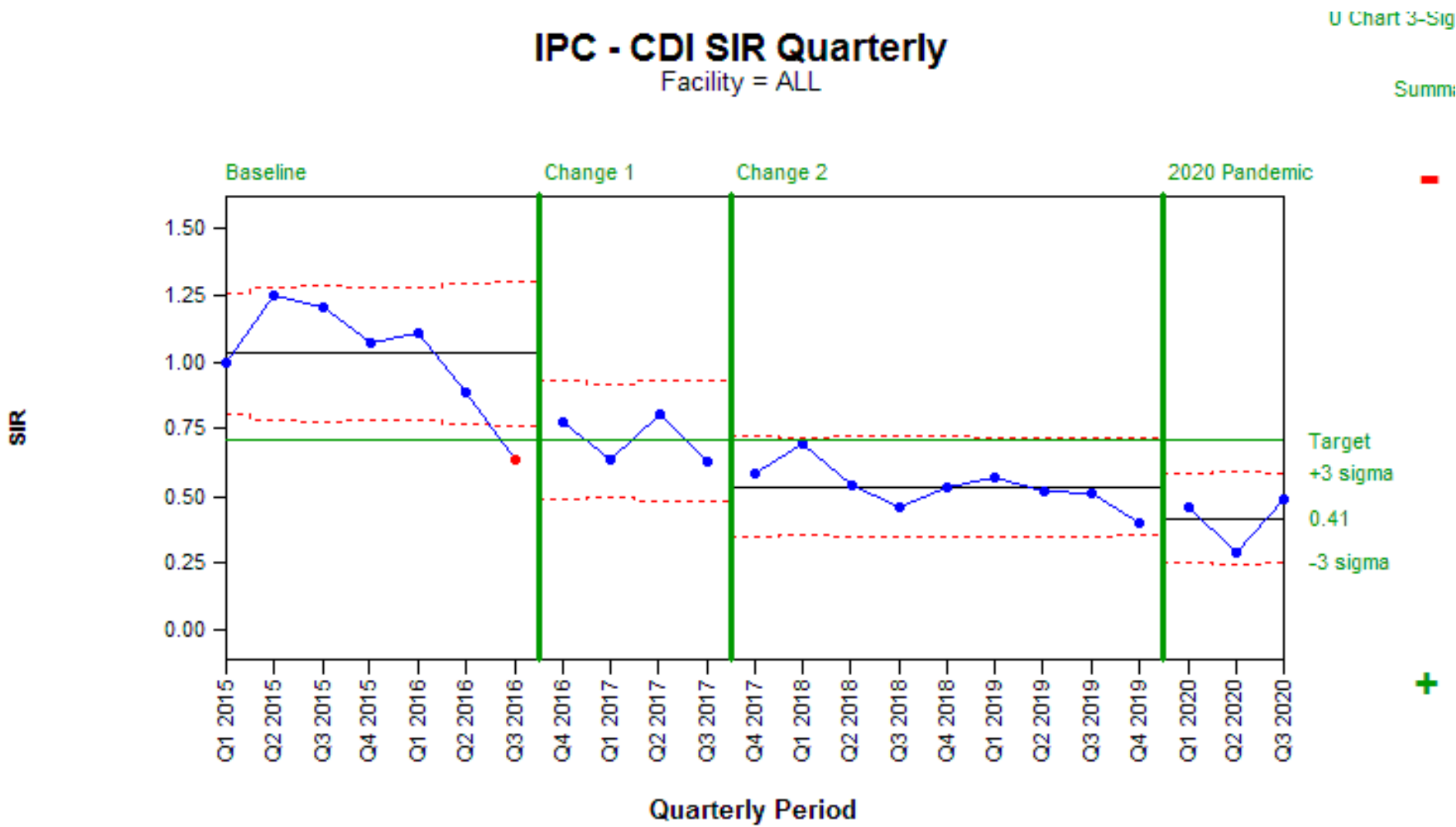
Source: Hilton K, Anderson A. *IHI Psychology of Change Framework to Advance and Sustain Improvement*. Boston, MA: Institute for Healthcare Improvement; 2018. [ihi.org/psychology](https://www.ihi.org/psychology)



Recommended Local HEROES Structure

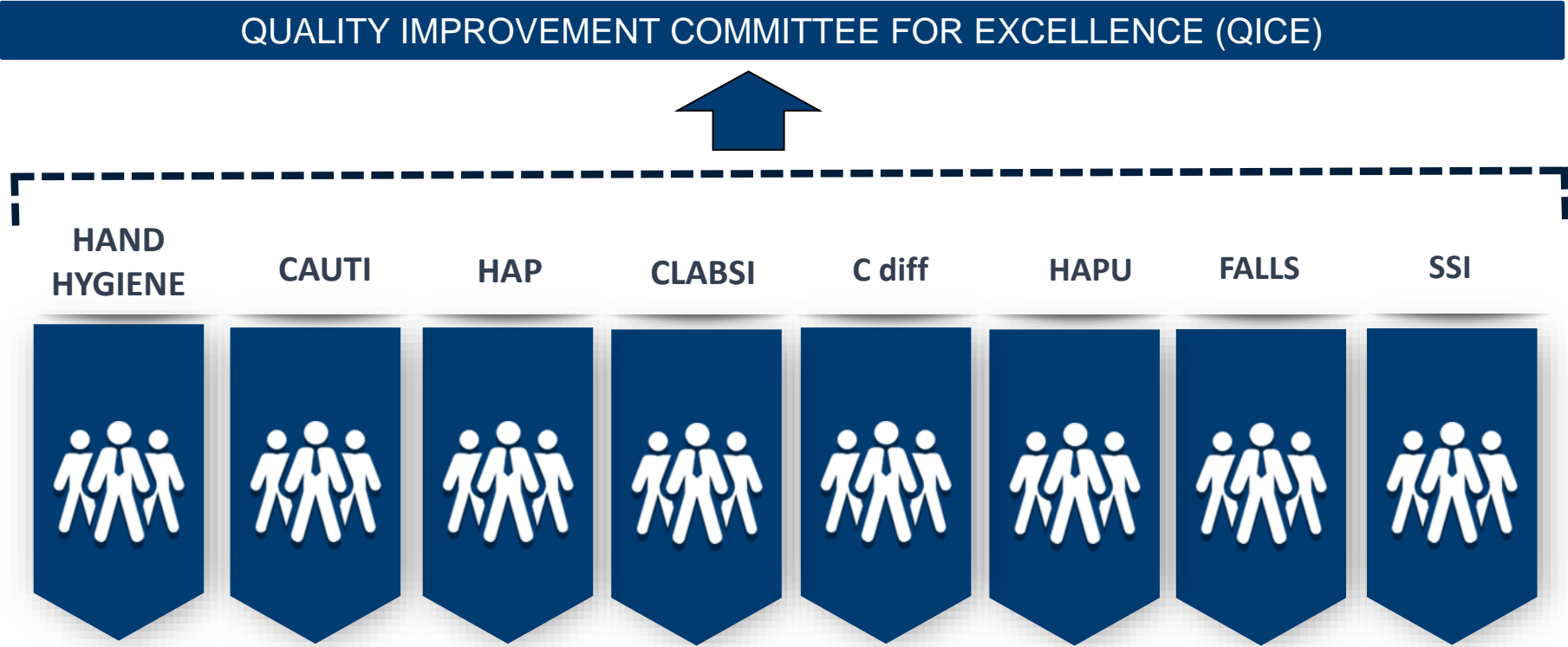


HEROES proved to be a model for sustainability



Expanded HEROES Focus Areas

Quality Improvement Committee for Excellence (QICE)



Each Team Comprised of:

- Executive Champion
- PCS Lead
- Quality Lead
- MD Lead
- IA
- Quality Support Staff
- Frontline staff

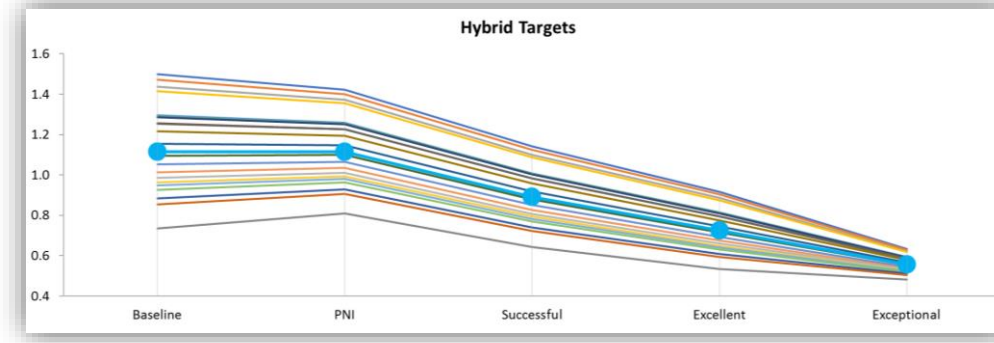


The **Safety Priority Index** is a comprehensive Key Performance Indicator for Patient Safety.

It is designed to encourage both **continuous improvement** and **sustained vigilance**.

- The PY20 Safety Priority Index and its components use the new **Hybrid Target Setting Model** to create fair and consistent medical center target sets. Compared to the manual tiered models used in the past, this is:

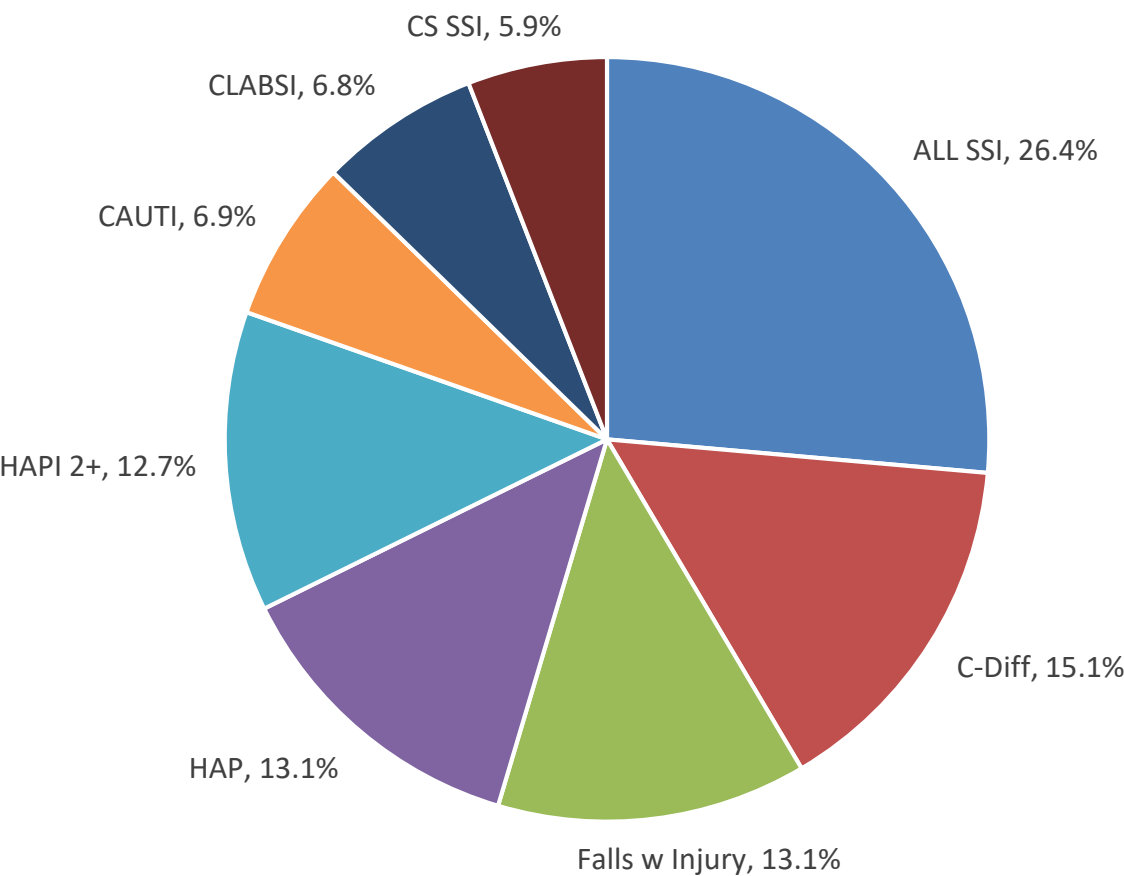
- Faster
- Easier
- More adjustable
- Less prone to error
- Consistent with other metrics



- Regional SPI component targets are aligned with **CQC targets** wherever possible
- All **medical center targets** are based on:
 - **Regional** targets
 - **Prior** performance
 - Desired reduction in **variation** (rewarding high performers for sustaining)
 - **Work in progress or pipeline** to improve performance

The Safety Priority Index is composed of 8 types of patient safety events.

PY20 Safety Priority Index Components & Weighting



Logarithmic weights are calculated as: $\text{LOGN} (\# \text{ Expected Events } / \# \text{ Expected CS SSI}) + 1$

PY20 Safety Priority Index | Logarithmic Weight Calculation

With a logarithmic scale, high-volume components get less weight than they would if all events were weighted equally. More volume still means more weight, but there are diminishing returns to scale.

Event Type	Expected Events	LOG LOGN(Ratio)+1	Weight LOG / Sum of LOGs	Average Impact of 1 Event on SPI
All Cases SSI*	3769	4.50	26.4%	0.001
C-Diff	546	2.57	15.1%	0.006
Falls w Injury	392	2.23	13.1%	0.007
HAP	390	2.23	13.1%	0.007
HAPI 2+	361	2.15	12.7%	0.007
CAUTI	136	1.18	6.9%	0.011
CLABSI	133	1.15	6.8%	0.011
CS SSI	114	1.00	5.9%	0.011

*All Cases SSI uses an “odds ratio” instead of O/E, but the difference is insignificant.
Actual weights are calculated as: LOGN (# Expected Events / # Expected CS SSI) + 1

PY20 Safety Priority Index | Target and Forecast Calculation

Safety Priority Index targets are the average of the event type O/E targets, weighted as described above

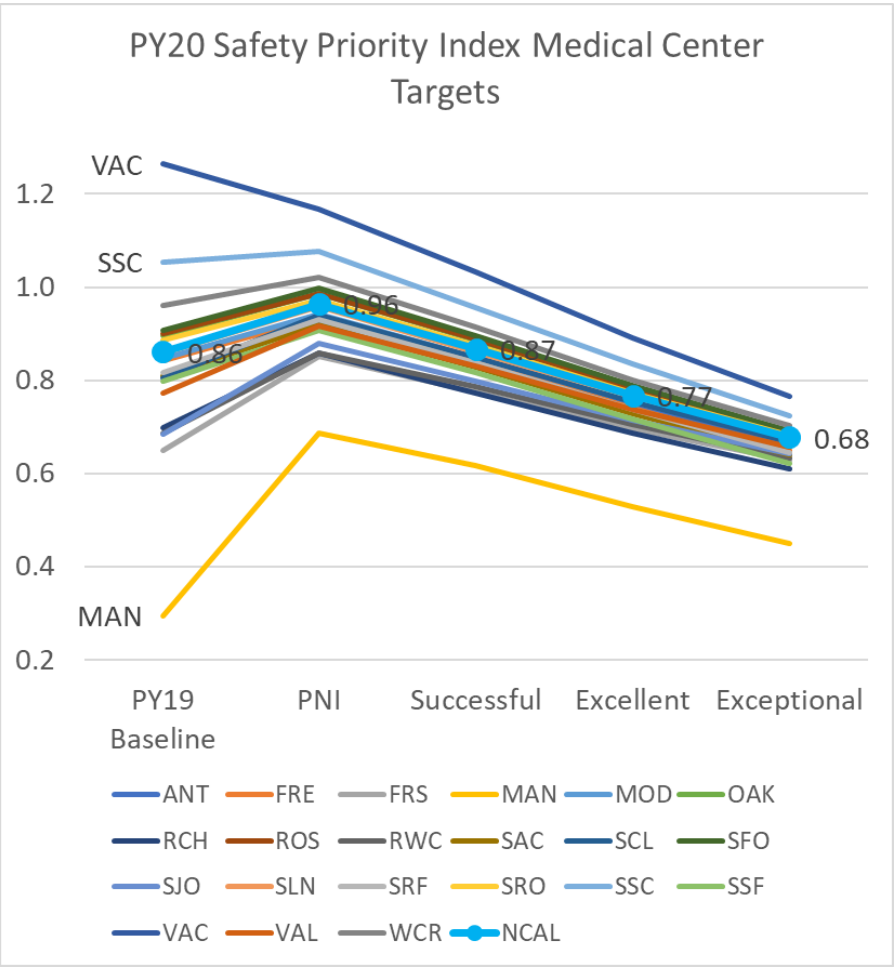
PY20 NCAL Targets

Event Type	PY20 NCAL O/E Target	Weight	PY20 NCAL SPI Target
All Cases SSI*	0.94 odds ratio (2.21% “smoothed” rate)	x 26.4%	+ + + + + + = 0.87
C-Diff	0.70	x 15.1%	
Falls w Injury	0.89 (0.46 rate)	x 13.1%	
HAP	0.80	x 13.1%	
HAPI 2+	1.00 (0.48 rate)	x 12.7%	
CAUTI	0.75	x 6.9%	
CLABSI	0.50	x 6.8%	
CS SSI	1.34	x 5.9%	

*All Cases SSI uses an “odds ratio” instead of O/E, but the difference is insignificant.

	PNI	Successful	Excellent	Exceptional
Improvement	-12%	-1%	11%	21%
Gap Reduction	51%	57%	62%	68%

21 Facilities	PY19 Baseline	PNI	Successful	Excellent	Exceptional
	0.81	0.93	0.84	0.75	0.66
	0.84	0.94	0.84	0.74	0.65
	0.65	0.85	0.77	0.70	0.63
	0.30	0.69	0.62	0.53	0.45
	0.85	0.94	0.85	0.75	0.67
	0.90	0.99	0.89	0.78	0.69
	0.70	0.86	0.77	0.69	0.61
	0.90	0.99	0.89	0.78	0.69
	0.69	0.86	0.79	0.70	0.63
	0.81	0.92	0.83	0.73	0.64
	0.80	0.94	0.85	0.75	0.67
	0.91	1.00	0.90	0.79	0.69
	0.69	0.88	0.80	0.71	0.64
	0.86	0.96	0.86	0.77	0.68
	0.82	0.93	0.84	0.74	0.65
	0.89	0.97	0.87	0.77	0.68
	1.05	1.08	0.96	0.84	0.72
	0.80	0.91	0.82	0.72	0.62
	1.26	1.17	1.03	0.89	0.76
	0.77	0.92	0.83	0.74	0.66
	0.96	1.02	0.91	0.80	0.70
NCAL	0.86	0.96	0.87	0.77	0.68



PY20 Safety Priority Index | Current Performance and Projections

NORTHERN CALIFORNIA

I. EXECUTIVE SUMMARY

Northern California		Please Select Medical Center								
Metric	Period	Prior Year End	Month to Date				Year to Date			
			Actual	Target	Gap to Target	Month Variance	Actual	Target	Gap to Target	YTD Variance
Quality										
All SSI	August-2020	1.05	1.12	0.94	(0.18)	●	1.07	0.94	(0.13)	●
CDIFF	August-2020	0.53	0.50	0.70	0.20	●	0.40	0.70	0.30	●
Falls	August-2020	0.82	0.88	0.89	0.01	●	0.72	0.89	0.17	●
HAP	August-2020	0.62	0.90	0.80	(0.10)	●	0.80	0.80	-	●
HAPI	August-2020	0.93	0.60	1.00	0.40	●	0.82	1.00	0.18	●
CAUTI	August-2020	0.92	0.46	0.75	0.29	●	0.74	0.75	0.01	●
CLABSI	August-2020	0.79	1.16	0.50	(0.66)	●	0.67	0.50	(0.17)	●
C-Section SSI	August-2020	1.29	1.02	1.34	0.32	●	0.95	1.34	0.39	●
Safety Priority Index ³	August-2020	0.86	0.85	0.87	0.02	●	0.80	0.87	0.07	●
Key: 1 Month-to-date actual reflect latest quarterly result and Year-to-date actual reflect latest YTD results. 2 Month-to-date targets reflect year-end performance targets. 3 Safety Priority Index (SPI) and its components use a "performance year" that begins in October. The time period of "July 2020" indicates that the MTD data is for July 20, and the YTD is for Oct 2019 to July 2020.										

Region	NCAL						
	Weight	Baseline Actual SSIs in Sample	PY20 Forecasted SSIs in Sample*	NSQIP Expected SSIs in Sample (carried over from Baseline)	Baseline Odds Ratio (actual / expected)	Forecast PY20 Odds Ratio**	PY20 Target (Successful)* **
All SSI	26.4%	623	628	594.99	1.05	1.06	0.94
	Weight	Baseline Actual Events	PY20 Forecasted Events	Expected Events (carried over from Baseline)	Baseline O/E Ratio (actual / expected)	Forecast PY20 O/E Ratio	PY20 Target (Successful)
C-Diff	15.1%	288	220	545.65	0.53	0.40	0.70
Falls w Injury	13.1%	322	293	391.61	0.82	0.75	0.89
HAP	13.1%	238	286	389.63	0.61	0.73	0.80
HAPI 2+	12.7%	335	289	361.48	0.93	0.80	1.00
CAUTI	6.9%	125	104	136.32	0.92	0.76	0.75
CLABSI	6.8%	105	95	132.78	0.79	0.72	0.50
CS SSI	5.9%	159	134	113.91	1.40	1.18	1.34
SPI	-	-	-	-	0.86	0.81	0.87

Feedback ---- Questions ----Discussion

