



Going from Good to Great: Measuring Systemness

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Learning Objectives

- Describe a new method for measuring variation across standards, processes and adherence related to quality measures.
- Develop criteria to measure adherence to standards.
- Explain the importance of well-defined standards in quality improvement work.



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What is systemness?



Cleveland Clinic Foundation 2023

Our patients and systemness



Cleveland Clinic Foundation 2023

Who we are?

- 6,665 beds worldwide
- 23 hospitals
- **275** outpatient locations



CARE PRIORITIES

- A main campus in Cleveland
- ➤ 15 regional hospitals in Northeast Ohio
- > 5 hospitals in Southeast Florida with 1,000+ beds
- A center for brain health in Las Vegas, Nevada
- > Executive health and sports health services at two locations in Toronto, Canada
- ➤ A 364-bed hospital in Abu Dhabi, United Arab **Emirates**
- > A 184-bed hospital and outpatient facility in London, United Kingdom
- > Case Western Reserve University & Cleveland Clinic Health Education Campus





3.4M 14.0M patients

worldwide

patient encounters worldwide

12.8M outpatient

encounters

admissions observations

303K

surgeries and

907K 814K virtual visits department

we will soar

Systemness Maturity Index

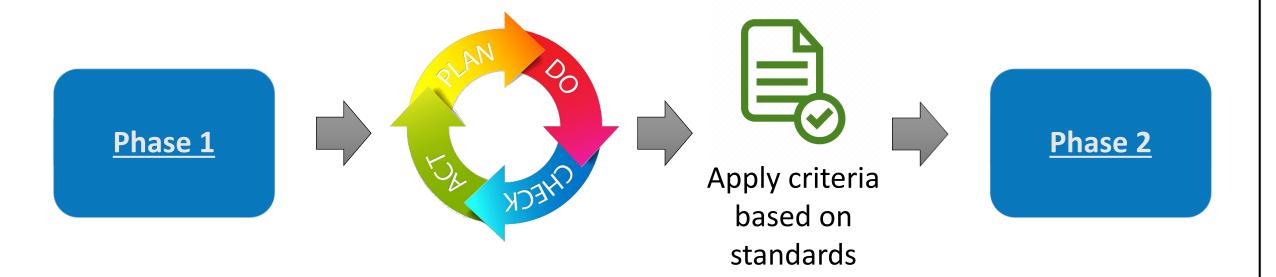
Do we provide the same care in a consistent, efficient, and highly reliable way, everywhere?

- Needed a way to evaluate our opportunities and understand where we have unnecessary variation
- Explored options across different industries
- Wanted to consider how systemness aligned to performance

Systemness Maturity Index

Score	Description
0	Not present
1	Planning phase
2	Pilot or early implementation
3	Implemented but w/ variances
4	Implemented per system standard

The Journey



The Drilldown

Quality Initiative

Based on Quality OKRs

Enterprise attention on improvement

Readmissions, Sepsis, CLABSI, & Patient Experience (plan of care visits)

Tactics

Based on active focus areas within an initiative

Specific for that OKR

Includes drivers that have impact or implemented countermeasures

Maturity Index

Criteria written for each tactic standard

Criteria based on general scale (0-4) but specific for that tactic

QIS validates index applied consistently

OKR: Objectives and Key Results

CLABSI: Central Line-associated Blood Stream Infection

QIS: Quality Improvement Specialist



Without data, it's just an opinion

Method

- Assessed adherence of tactics based on the standards criteria
- Compared to performance

Source

- Tactic process metrics (EHR, survey data, audit compliance)
- Assessment of local processes

Flexibility

- Work with what is available
- Less about precision of the score and more about directionality

CLABSI Systemness

Legend
Systemness SIR Performance
Some maturity Not meeting target
High level maturity At or above target

Baseline – Q3 2022

Hospital	A	В	С	D	E	F	G	н	1	J	К	L	M	N	0	P	Q	R
Systemness Maturity Index																		
Standard Infection Ratio (SIR)																		

Post Implementation—Q2 2023

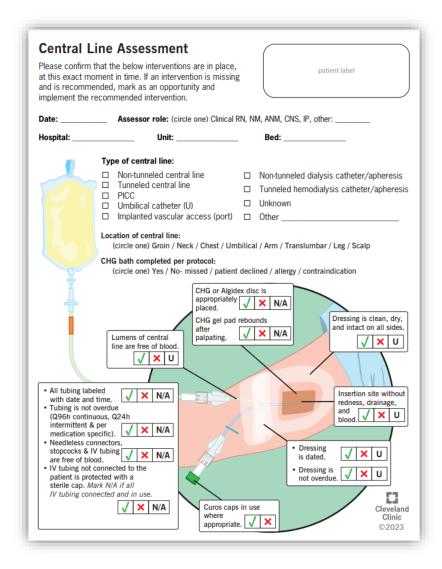
Hospital	A	В	С	D	Е	F	G	н	1	J	K	L	M	N	0	P	Q	R
Systemness Maturity Index																		
Standard Infection Ratio (SIR)																		

CLABSI Systemness

	Hospital	Tactic 1 CLA	Tactic 2 Line Rounds	Tactic 3 CHG Bathing
Systemness Maturity Index	3.67	4	4	3

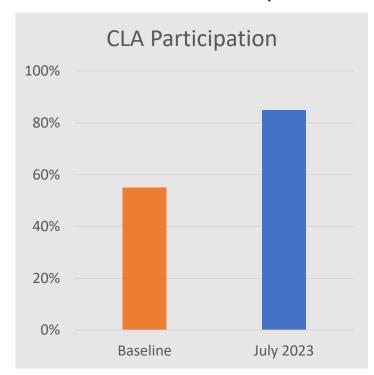
Tactic: Central Line Assessments (CLA)

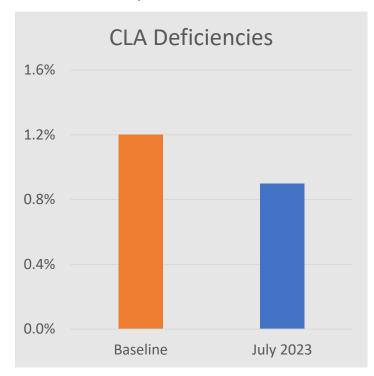
Scale	Description
0	No CLAs in place
1	Plan in place to conduct CLAs for all lines using CLA assessment tool
2	CLAs done less than 3 days per week on all lines using CLA assessment tool
3	CLAs done 3-5 days per week on all lines using CLA assessment tool
4	Daily CLAs done on all lines (every line, every day, every patient) using CLA assessment tool



CLABSI Results

Hospital E CLABSI CLA Implementation - Nov 2022 to July 2023







Decreased CLABSI SIR by 41% which equates to 65 fewer infections per year

Lessons Learned

- Start small
- Identify a way to achieve consistency in measurement
- Consider more automated and robust data collection methods
- Leaders were very focused on the score
- Great tool for internal quality discussions to understand opportunity
- Consider the right cadence to reassess

Key Takeaways

- Standards are key
- Continue to develop standards and adhere to them
- Refine the process and learn, again and again
- Communication is key
- Can be applied to other areas, other quality initiatives, new hospitals

"Without standards, there can be no improvement."

~Taiichi Ohno, Father of the Toyota Production System

Questions?



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