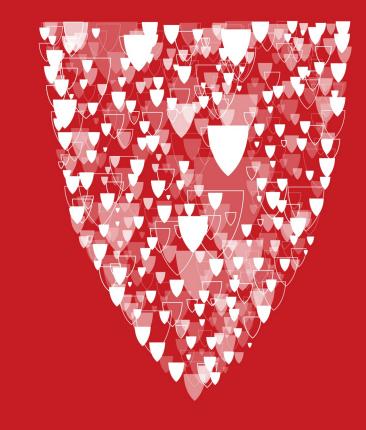
A Love Based Model of Clinical Transformation

Peter Pronovost, MD, PhD, FCCM

Chief Quality and Clinical Transformation Officer

University Hospitals
University Hospitals
Cleveland I Ohio





Clinical Transformation Model





I will stop believing I am just a housekeeper.



I will stop believing I am just a housekeeper. I will start believing I play a critical role.









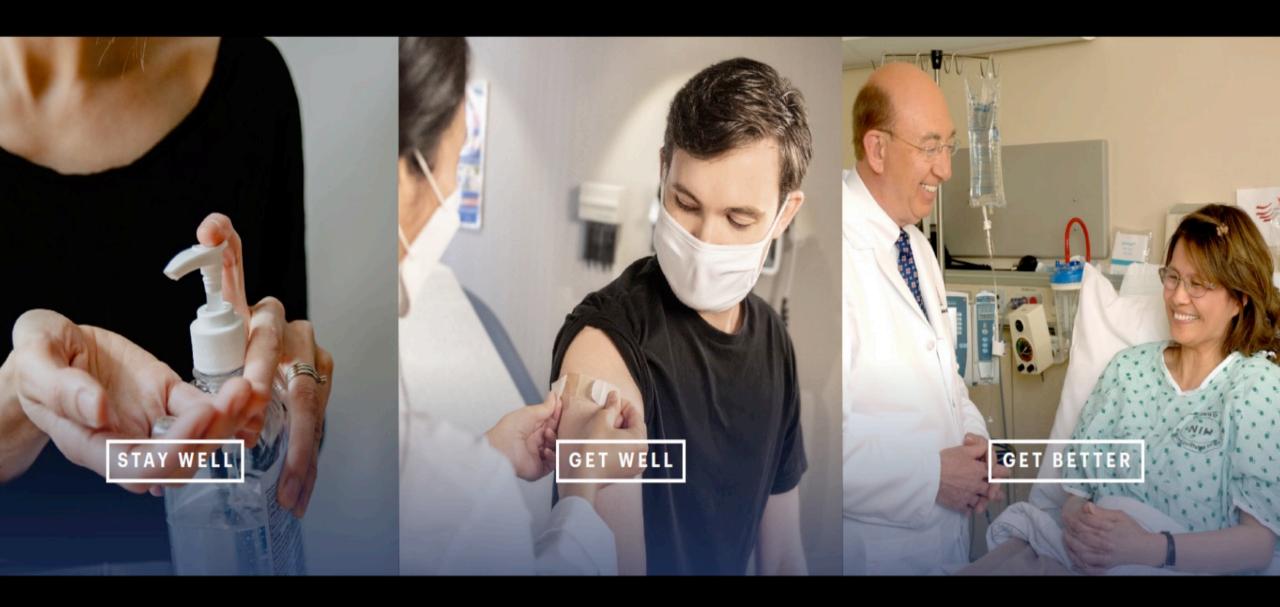




Build:







Quality – ERAS - Complications

Mortality

- ERAS: 0.0 %
- non ERAS: 6.7 %

Reoperations

- ERAS: 0.0 %
- non ERAS: 13.3 %

Complications

- ERAS: 17.9 %
- non ERAS: 33.3 %

Serious complications

- ERAS: 0.0 %
- non ERAS: 13.3 %

Anastomotic leaks

- ERAS: 0.0 %
- non ERAS: 0.0 %

ICU

- ERAS: 0.0 %
- non ERAS: 6.7 %

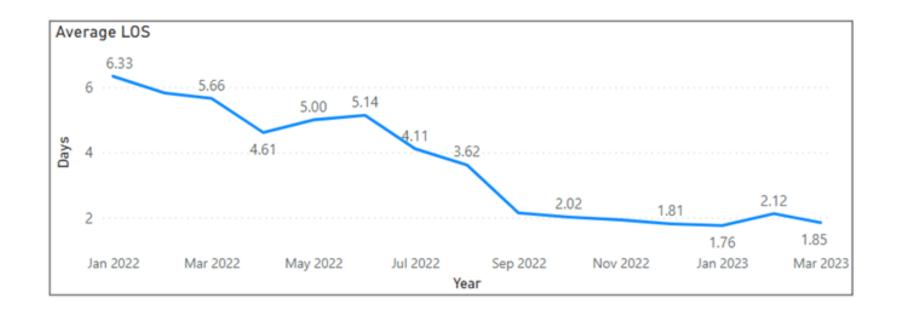
Readmission

- ERAS: 0.0 %
- non ERAS: 6.7 %



CONFIDENTIAL

System ERAS LOS January 2022-March 2023



Medication Safety

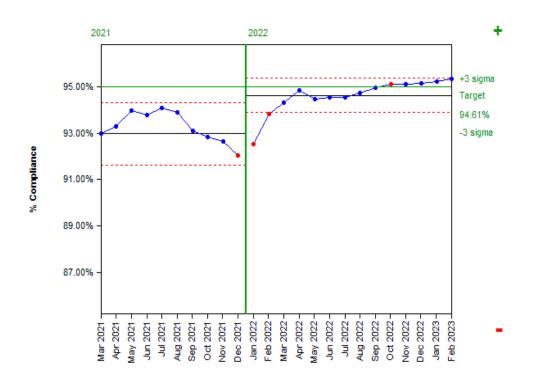
Medication Safety Program Goals

Initiative	Outcome Goal	2022 System Average Playbook Adoption	System Average (Feb 2023)
Barcoded Medication Administration (BCMA)	Scan compliance >95%	70.8%	95.33%
Alaris smart pumps	Guardrails usage >95%	51.6%	89.68%
Omnicell Safety	Overridden medication rate < 3%	78.4%	2.37%
Sterile compounding safety	USP <797> Tracer < 97% (aim for 100%)		97.61%
Adverse drug event and reaction review	100% site complete review of ADE/ADR using internal and external	67%	



BCMA Scorecard (No ED Units)- February 2023





Date	Medications Scanned	Medication Administration	% Compliance	Target
Feb 2023	636687	667853	95.33%	95.00%
Jan 2023	720898	757186	95.21%	95.00%
Dec 2022	735989	773701	95.13%	95.00%
Nov 2022	701540	737667	95.10%	95.00%
Oct 2022	736296	774102	95.12%	95.00%
Sep 2022	676112	712038	94.95%	95.00%
Aug 2022	687976	726218	94.73%	95.00%
Jul 2022	636329	673174	94.53%	95.00%
Jun 2022	688583	728512	94.52%	95.00%
May 2022	710406	752126	94.45%	95.00%
Apr 2022	691952	729612	94.84%	95.00%
Mar 2022	726586	770525	94.30%	95.00%
Feb 2022	664769	708734	93.80%	95.00%

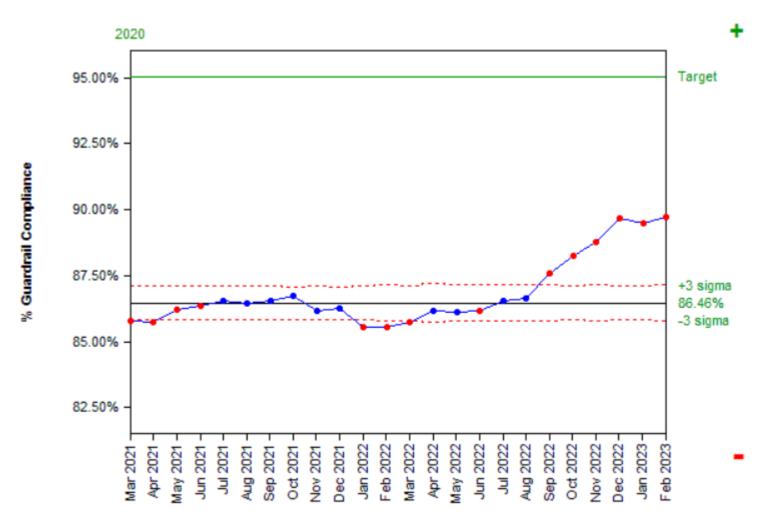
System BCMA Compliance Goal = 95%

Summary



Alaris Scorecard: Guardrail Compliance: Feb 2023

	MonthYear	# Guardrails	Total Infusions	% Guardrail Compliance	Target
ı	Feb 2023	150105	167373	89.68%	95.00%
	Jan 2023	166491	186045	89.49%	95.00%
	Dec 2022	164975	183999	89.66%	95.00%
	Nov 2022	154638	174213	88.76%	95.00%
	Oct 2022	160934	182358	88.25%	95.00%
	Sep 2022	150509	171893	87.56%	95.00%
	Aug 2022	149389	172474	86.62%	95.00%
	Jul 2022	148947	172094	86.55%	95.00%
	Jun 2022	145388	168803	86.13%	95.00%
	May 2022	149101	173153	86.11%	95.00%
	Apr 2022	128511	149206	86.13%	95.00%
	Mar 2022	151069	176240	85.72%	95.00%



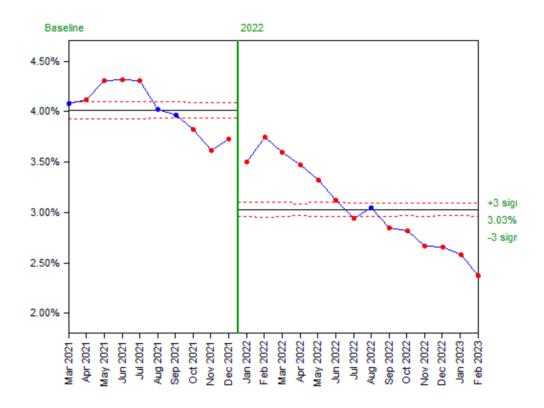
UH System Omnicell Override Rate

Omnicell Override - System Total

Facility = ALL



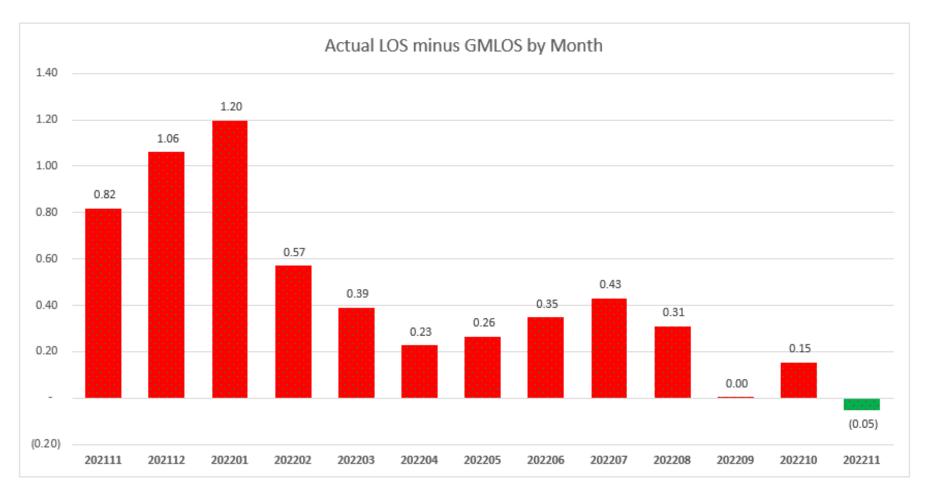
U Chart



Month	# of Overrides	Total Medications	Override Rate
Feb 2023	14360	606195	2.37%
Jan 2023	17458	676286	2.58%
Dec 2022	18293	688729	2.66%
Nov 2022	17262	648347	2.66%
Oct 2022	19306	685381	2.82%
Sep 2022	17961	630951	2.85%
Aug 2022	19247	631846	3.05%
Jul 2022	18263	620708	2.94%
Jun 2022	17875	573910	3.11%
May 2022	18746	565290	3.32%
Apr 2022	28108	811050	3.47%
Mar 2022	19813	552177	3.59%
Feb 2022	18098	483142	3.75%
Jan 2022	19449	555596	3.50%

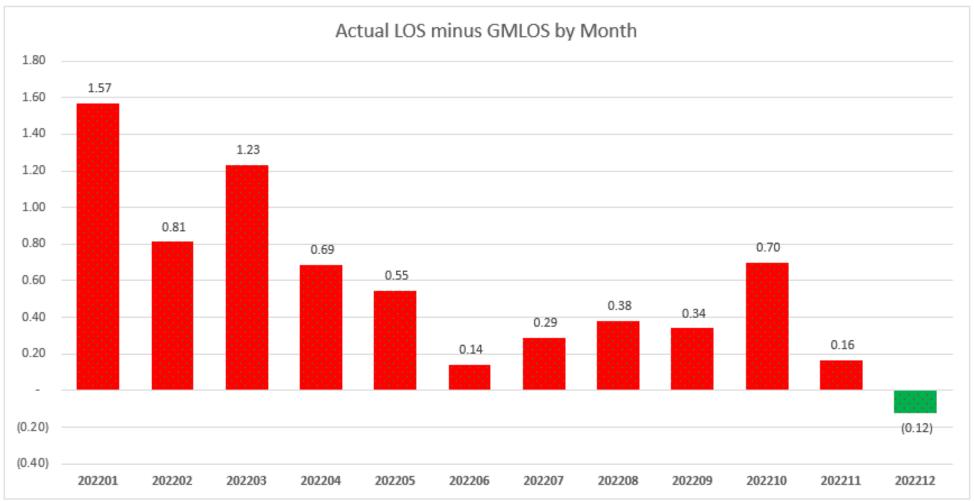


Length of Stay





Independent physician LOS General

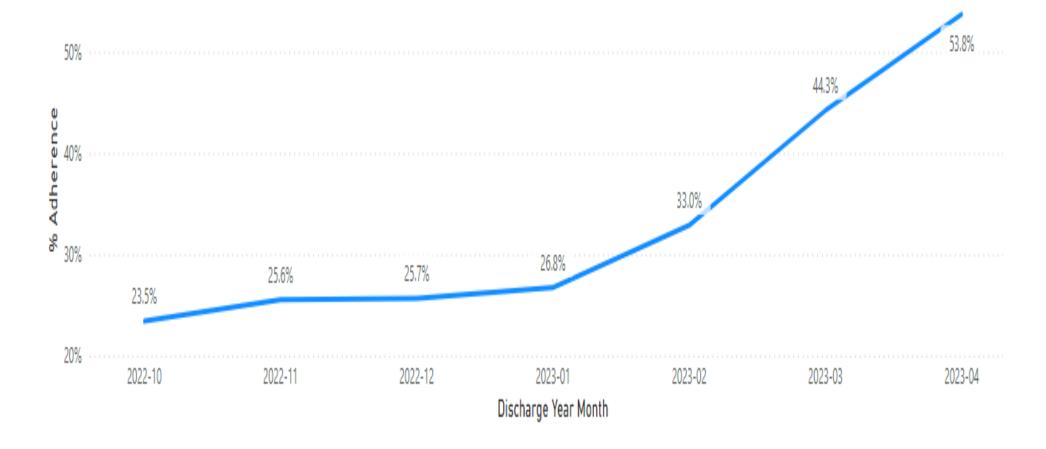




DEVELOPMENT VERSION IN VALIDATION



% Adherence by Discharge Year Month



30 and 90 day readmissions among patients with chronic dz

	With TCM and post dc med rec	Without intervention
30 day readmission	4%	22%
90 day readmission	13%	35%

Medicare Shared Savings Performance Improvement

Year-Over-Year Cost & Quality Data

70% to 100%

\$12,400 to \$8,200

Overall Quality Score Over 3 Years

33% Reduction in Total Cost of Care

Opioid Reductions

AUG. 2017-FEB. 2022

Number of Opioid Units: Internal Medicine



Ambulatory Morphine Equivalent: Internal Medicine



Emergency Department Morphine Equivalent Dose per Day



