



Project Joy at UCHealth in Colorado

Bonnie Adrian, PhD RN-BC

Clinical Informatics Research Nurse Scientist

Bonnie.Adrian@uchealth.org

uchealth

Project Joy focused on what's most in our control

The Six Domains of Burden: A Conceptual Framework to Address the Burden of Documentation in the Electronic Health Record

Position Paper of the American Nursing Informatics Association Board of Directors

American Nursing Informatics Association



Authors:

Patricia P. Sengstack, DNP, RN-BC, FAAN
Bonnie Adrian, PhD RN-BC
David L. Boyd, DNP, RN, CNS, RN-BC
Avaretta Davis, DNP, RN-BC
Mary Hook, PhD, RN-BC
Shannon Lea Hulett, DNP, RN, CNL
Eva Karp, DHA, MBA, RN-BC, FACHE
Rosemary Kennedy, PhD, RN, MBA, FAAN
Laura Heermann Langford, PhD RN
Teresa Ann Niblett, RN, MS, RN-BC

1. **Reimbursement** – Documentation, coding and other administrative data entry tasks required for payment
2. **Regulatory** – Accreditation agency documentation requirements
3. **Quality** – Documentation required to demonstrate that quality patient care has been provided. This includes documentation requirements by the healthcare organization itself, as well as by governmental and regulatory agencies
4. **Usability** – Limited and insufficient use of human factors engineering and human-computer interface principles resulting in extra time spent entering data, scrolling, clicking and searching for pertinent information in the record
5. **Interoperability/Standards** – Insufficient configuration standards resulting in duplication and re-entry of data even though it resides elsewhere, either internal to the organization or in an external system.
6. **Self-Imposed** - (by the healthcare organization) aka - “We’ve Done it To Ourselves” - Organizational culture’s influence on what should be documented can exceed what is needed for patient care, including fear of litigation, “we’ve always done it this way”, inadequate education, and misinterpretation of regulatory standards.

Outcomes



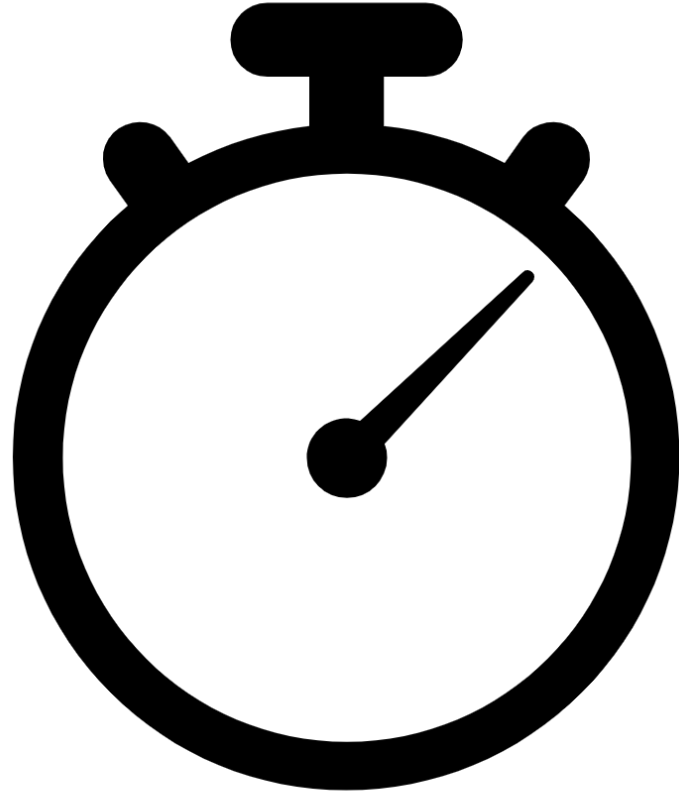


496

Flowsheet rows eliminated

18

Fewer minutes in flowsheets
per inpatient RN 12 hour shift
(21% reduction)



Objective, Comprehensive Time in system Data from EHR Vendor

Time in system by activity for all users over a 3-week period

January 2018 (pre-Joy):

- 2309 distinct inpatient RNs
- 15,807 shifts captured

January 2020 (post-Joy):

- 2774 distinct inpatient RNs
- 15,941 shifts captured

**64,800 RN hours
worth over \$2.8M annually**

360 Million fewer “clicks” a year

Workflow analyzer results, charting same real patient case before and after.

Scale Matters...

About UCHealth

12

Hospitals
5 Northern Colorado
3 Denver Metro
4 Southern Colorado

1987

Available
hospital beds
618 Northern Colorado
799 Denver Metro
570 Southern Colorado

More than

7,500 registered nurses

6,000 affiliated or
employed providers

>24k employees

136k inpatient admissions and
observation visits

13k babies
delivered

86k surgeries

4.4 Outpatient, urgent care and
emergency room visits



Magnet Designation, American Nurses Credentialing Center

Medical Center of the Rockies, Poudre Valley Hospital and University of Colorado Hospital have all been awarded multiple Magnet designations for nursing excellence.



#1 in CO: University of Colorado Hospital

#5 in CO: Medical Center of the Rockies

#10 in CO: Poudre Valley Hospital



Only organization to ever achieve back-to-back #1 overall quality ranking from the University Health System Consortium

**HEALTH CARE'S
MOST WIRED
ADVANCED**
(1 OUT OF 27 NATIONALLY)

himss Analytics **7**
EMRAM

uchealth

Optimizing EHR data entry and retrieval is a prerequisite to marriage of doing to documenting.



How we did it







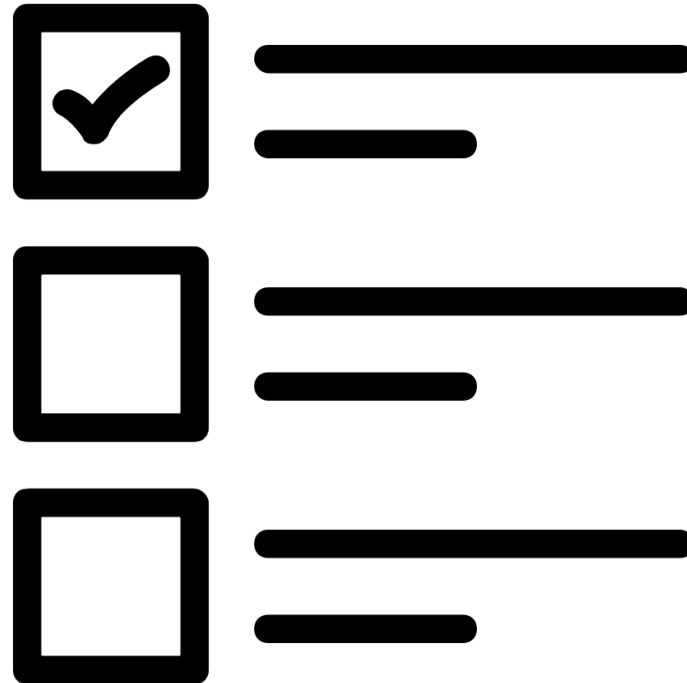
Marie Kondo asks
“Does it spark joy?”

What sparks joy in EHR optimization?

Our Guiding Principles & Inclusion Criteria*

*with thanks to HCA and Jane Englebright

Provided in full in the addendum to the posted slides











Emergency Department Medical-Surgical
Notes Flowsheets
Reports Care Plans Labor and Delivery
Physical Assessment Admission Banner
Stepdown RN Interventions Discharge Lines, Drains,
ICU Airways
Patient Education Risk Assessments
I/Os CNA OR and
Treatment Team Vital Signs Procedural Areas
Postpartum Orders

Emergency Department
Notes **Flowsheets**
Reports **Care Plans** **Labor and Delivery**
Physical Assessment **Admission** **Banner**
Stepdown **RN** **Interventions** **Discharge** **Lines, Drains,**
ICU **Airways**
Patient Education **Risk Assessments** **OR and**
I/Os **CNA** **Vital Signs** **Procedural Areas**
Treatment Team **Postpartum** **Orders**

Flowsheets Notes
Care Plans Banner
Patient Education
Physical Assessment
Admission I/Os
Interventions Reports
Discharge
Risk Assessments
Vital Signs LDAs
Orders
Treatment Team

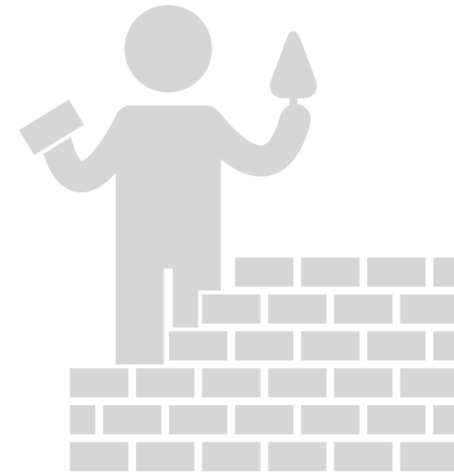
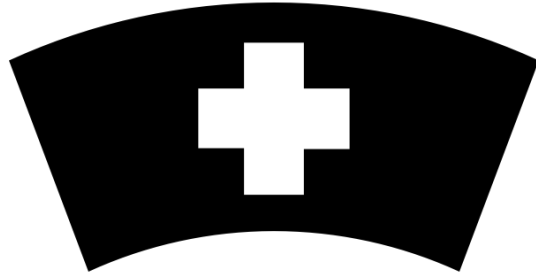
Medical-Surgical
Emergency
Stepdown
Labor and Delivery
ICU
Ante/Postpartum
OR and Procedural
Areas
RN
CNA

Flowsheets Notes
Care Plans Banner
Patient Education
Physical Assessment
Admission I/Os
Interventions Reports
Discharge
Risk Assessments
Vital Signs LDAs
Orders
Treatment Team

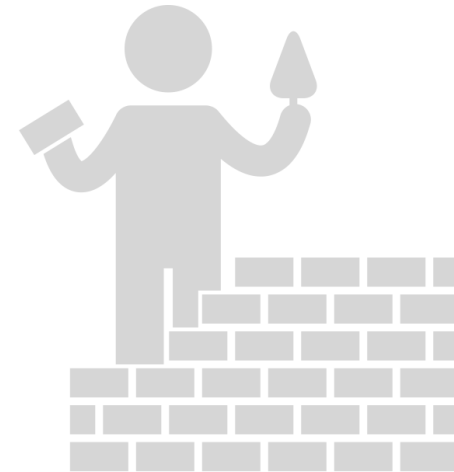
Medical-Surgical
Emergency
Stepdown
Labor and Delivery
ICU
Ante/Postpartum
OR and Procedural

RN
CNA

Clinical SMEs

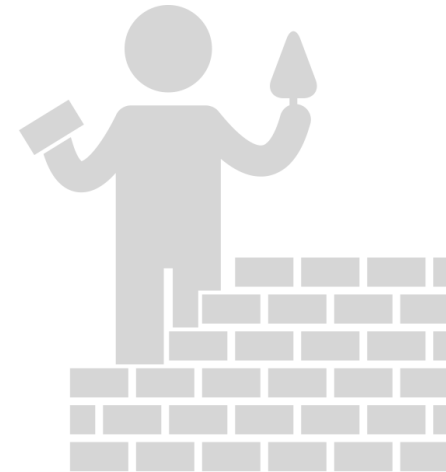
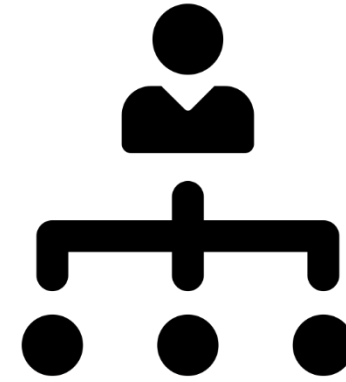


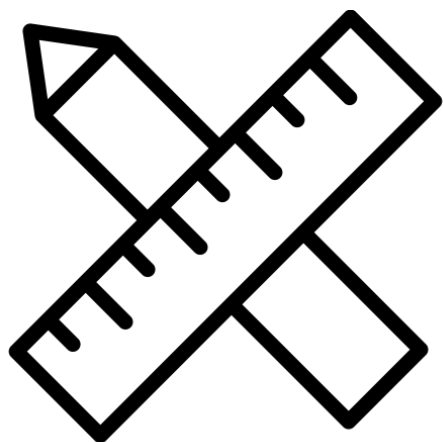
Guardrails



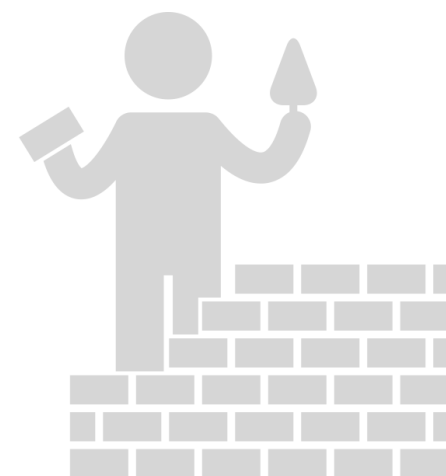


Senior Leaders



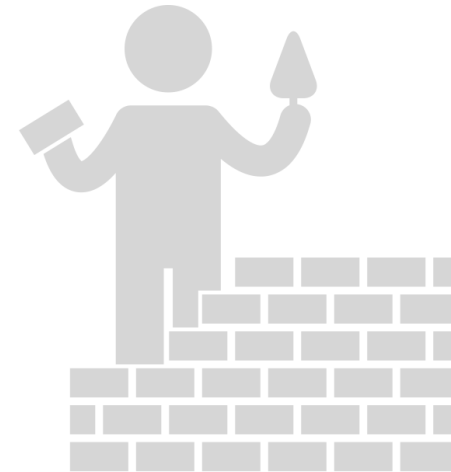
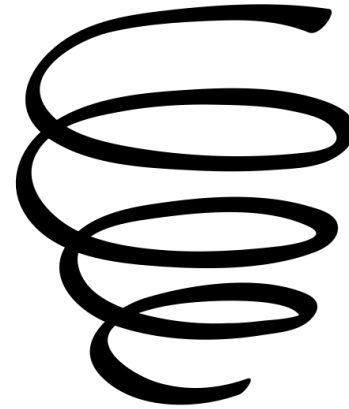


Designers





Builders

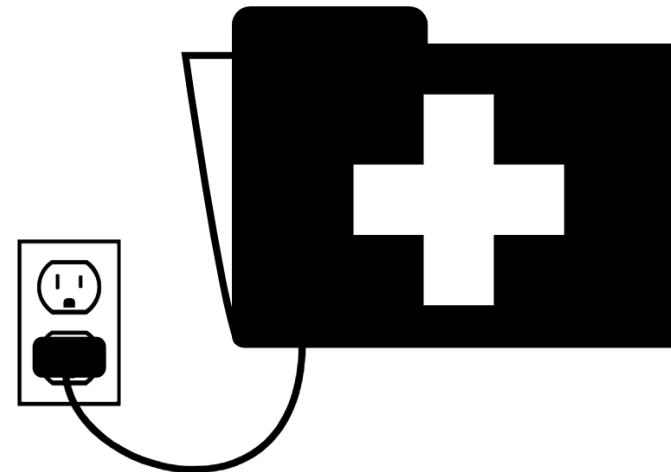
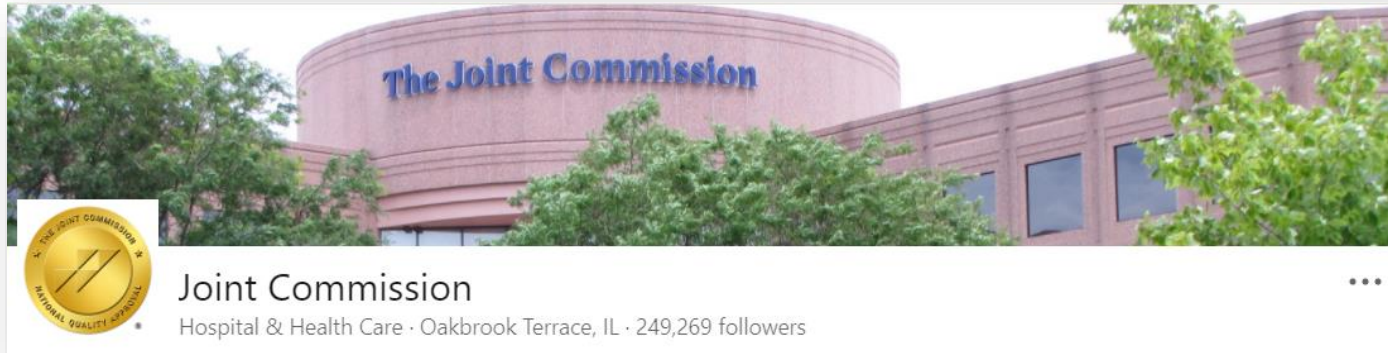


Coordinator

Closet not to scale



We cannot fix this at the level of the health system. Just a few examples.



uchealth



Thank you!

Addendum

Resources shared by UCHealth



Project Joy Guiding Principles

(with thanks to HCA for sharing their guiding principles to inspire us)

- Documentation accurately captures relevant information about the clinical picture and clinical care
- Practicing clinicians define content
- Maintains patient-centered focus and avoids excessive documentation to keep the time and attention of nurses on the patient, at the bedside
- Regulatory experts evaluate content for compliance to standards
- “If it wasn’t documented, it wasn’t not done” is a myth and “If it was documented, it might have been done” is the legal reality
- Routine practices and measures defined by policy are not needed in the medical record (e.g., hand washing, standard precaution, routine emotional support and explanations of care processes, documentation of completion of routine care processes such as handoff)
- We will look for an efficient process to allow nursing staff to document that ordered care is being implemented
- We will pursue alternate means to achieve the spirit and letter of requirements without requiring nursing staff to manually enter data
- Information that does not meet any one of the “criteria to keep” (next slide) will be marked for final, higher level review for deletion

Criteria to Keep an Element

If none of these criteria is met, the element will be identified for a final review by Guardrails Team for removal from nursing documentation.

- It is needed to provide care to the patient and is accessed by other care team members and/or by the patient
- Nursing staff collection and entry of the information is the best or only way to capture it
- It is not documented elsewhere in the chart
- It is required by external reporting mandate or regulatory compliance
- It populates the patient header or is pulled into a meaningful, useful, and necessary report
- It triggers a meaningful, useful, and necessary practice alert
- It provides convenience by triggering an action by another care team member, such as consult
- It is required for billing or reimbursement
- It is necessary to document that the patient refused ordered care

NPS Point Gains (Pre vs. Post Joy)

Flowsheet	Gain in NPS Points
Med Surg Assessment	72
Med Surg Interventions	41
ICU Assessment	47
ICU Interventions	82
ICU Vitals	5
Admission	53

Minutes spent in flowsheets per 12 hour shift before and after Project Joy

Nursing Area	January 2018	January 2020
Acute Care	80	61
Critical Care	83	69
Progressive Care	78	64
Rehabilitation	89	58
Capacity Surge Units	63	57
Maternal Care	107	86
Total	83	65

**Decreased by 18
Minutes**

Includes UCHealth's Four Largest Legacy Hospitals
MHC, AMC, MCR, and PVH

Includes only shift durations 12 hours or greater in which the RN administered at least 10 meds

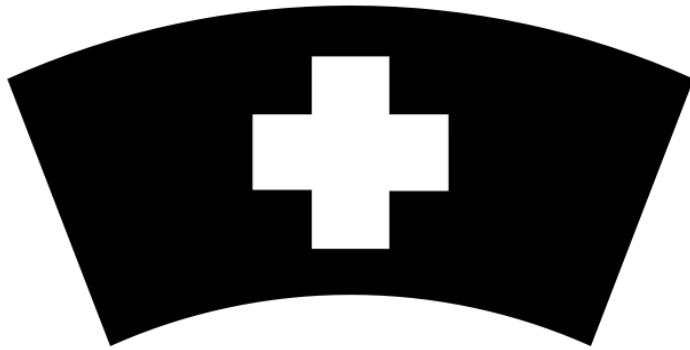
Excludes other sites for reasons of consistency, e.g. all time in Rover is excluded

Savings in Rows

In Year 2 Project Joy addressed a total of 6 flowsheets

Reduced these 6 flowsheets down to 4 flowsheets, provides improves clinical documentation standardization across critical care and simplifies maintenance

Project Joy Year	Combined reductions	Before	After	% Reduction
2	Initial / Default Rows	322	199	38%
2	Total Rows	701	532	24%
2	Approx Rows on eliminated flowsheets	600	0	100% (eliminated entirely, impacts IT more than the staff RN)
1	Initial/Default Rows	92	32	65%
1	Total Rows	471	267	43%
Combined	Total Rows	1772	799	55%



RN Subject Matter Experts / Champions

Who? Clinical RN End Users of Epic and frontline leaders including Educators, Nurse Managers/Associate Nurse Manager, and Clinical Nurse Specialists

What? Define content needs for patient care, including team communication needs. Responsibilities include participating in meetings, speaking with staff they represent to include discovery and user testing, providing input into specifications/requirements, defining content, reviewing and providing input on content and design/solution proposals, and voting on proposal acceptance.

When? Virtual meetings approximately every other Friday 0800-0900, plus in-person quarterly meetings held in the Metro Denver area.

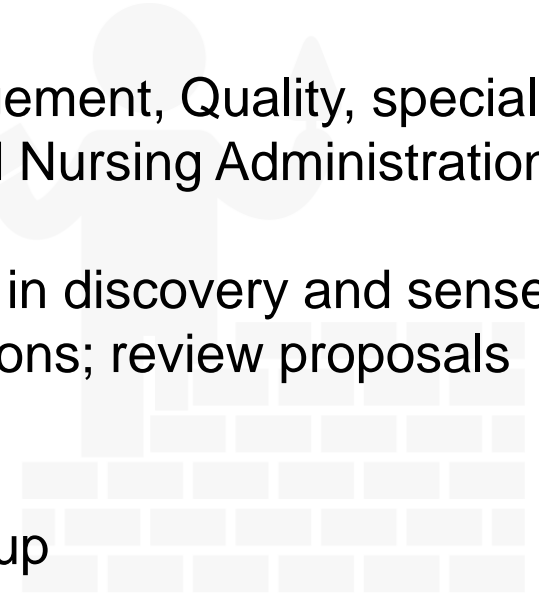


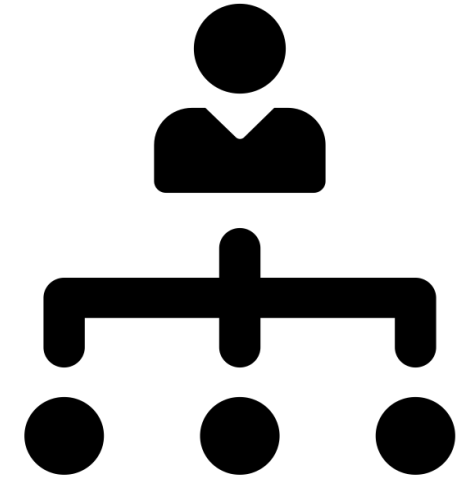
Guardrails

Who? Representatives for Legal, Risk, Regulatory Compliance, Care Management, Quality, special programs, Informatics, Epic, Health Information Management, Providers, and Nursing Administration

What? Role responsibilities: identify and communicate institutional priorities in discovery and sense making stage to provide guardrails as requirements are defined with Champions; review proposals and decisions for consistency with institutional priorities.

When? Meeting participation is PRN for most members of the Guardrail group



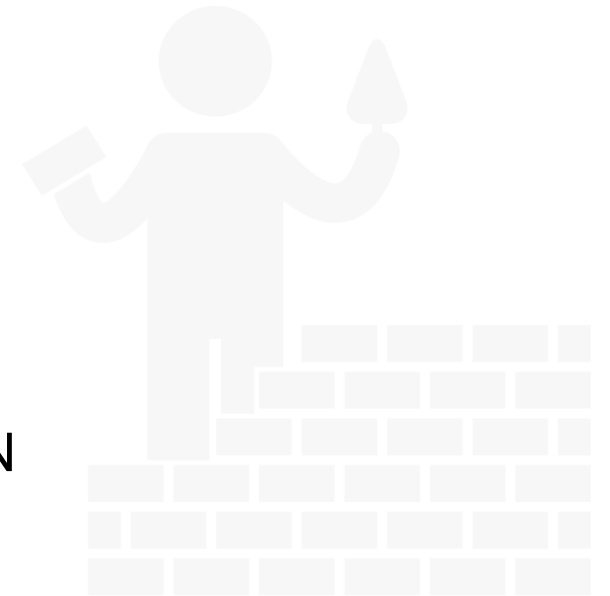


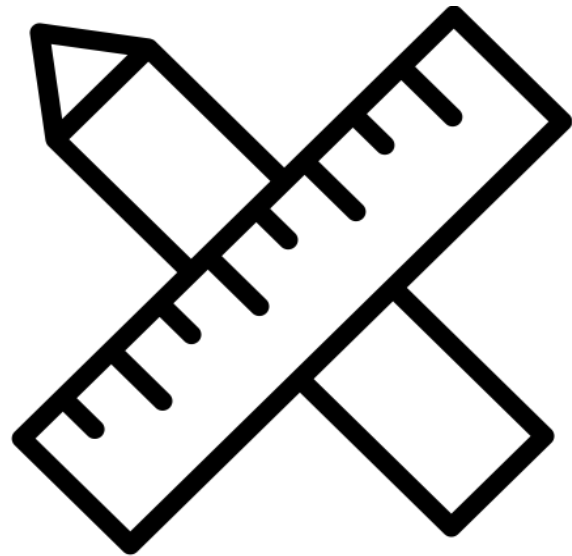
Executives

Who? Chief Nursing Executive and the Chief Nursing Officer Council

What? Final decision-making authority

When? By SBAR memos to CNE and presentations to CNO Council PRN



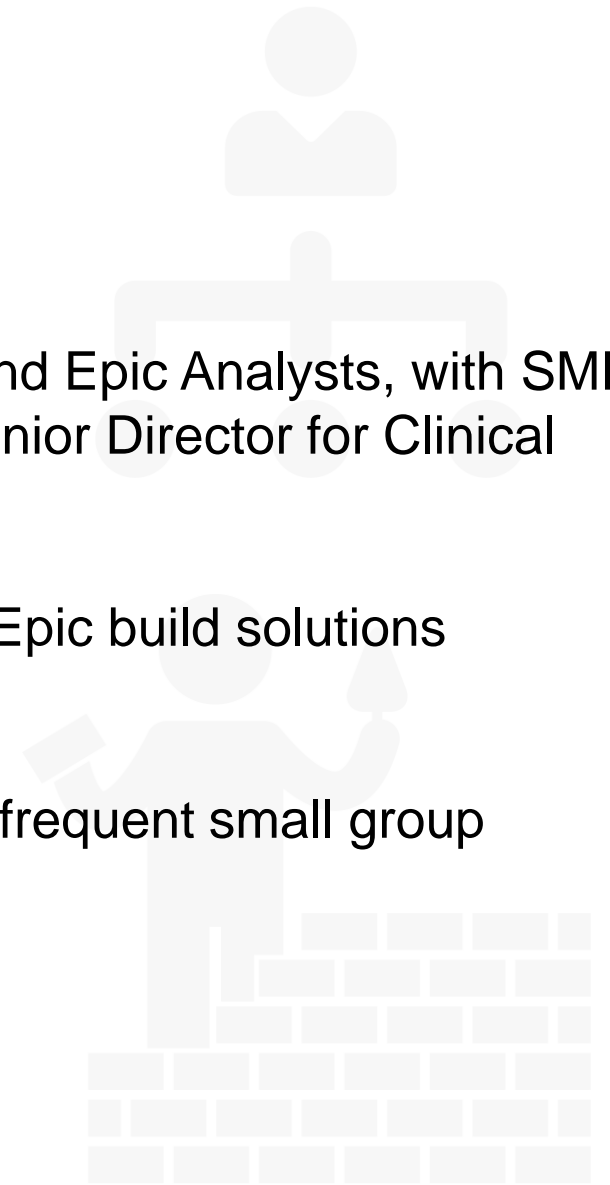


Design Team

Who? Clinical Informaticists and Epic Analysts, with SME support PRN and direction of Senior Director for Clinical Informatics, Alice Pekarek

What? Designs proposals for Epic build solutions

When? Collaboration through frequent small group meetings scheduled PRN





Build Team

Who? Epic Analysts under direction of Epic Architect, Sandra Koehler

What? Builds approved proposals, solicits feedback for finalization

When? PRN

Chair

Who? Bonnie Adrian

What? Coordinates it all

When? Daily

