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one person. one record. one system.
ONE
une personne. un dossier. un système.

# ONE Project
# Clinical Standardization Project

***February 28 2018***

REAL EXPERIENCE
REAL RESULTS

# Agenda

- **Background & Context ONE Initiative**
- **ONE Clinical Standards Project**
  - Overview
  - Governance and decision making
  - Project outcomes
  - Critical success factors



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# Background and Context


James and Hudson Bay Coasts
Algoma
Cochrane
Sudbury/Manitoulin /Parry Sound
Nipissing / Temiskaming



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# Current State NE LHIN

- **Sault Area Hospital**
  - MEDITECH Client Server
- **North Bay**
  - MEDITECH Magic
- **West Parry Sound Health Centre**
  - Non-MEDITECH site – use best of breed legacy systems and paper
- **NEON**
  - Partnership of other NE LHIN Hospital Site
  - Share an instance of MEDITECH Client Server hosted by Health Sciences North (Sudbury)
- **All sites have various levels of adoption of nursing and allied electronic documentation and ED triage**
- **No CPOE, closed loop medication management or provider documentation is live**

# Future State

| Reasons for moving all hospitals to a single instance of MEDITECH 6.1 |
| --- |
| Hospitals are at different stages of upgrading their current HIS systems, we have to align due to costs. |
| Implementation of Meditech v6.1 is a prerequisite for population health and enhances clinician adoption of advanced clinicals. |
| HIS Renewal Advisory Panel have put forward recommendations for hospitals within a region to move together in 'HIS clusters', leveraging current HIS installs and working in partnership with their respective LHIN. |
| NEON is working but it's time to evolve. |
| Supports patient health strategies (MOHLTC, LHIN, sub-LHIN and site level) and is aligned with eHealth 2.0, Health Links, and HIS Renewal strategy. |
| One electronic medical record is our ultimate goal for patients in the North East. |
| As our NE hospitals undertake hospital information system renewal, we have an incredible opportunity to establish a true NE hospital electronic health record. |

# High Level Timelines

| | What is in this Phase | Timelines |
|---|---|---|
| **Planning and Standards** | •Clinical and Non-Clinical Electronic Medical Record Standards Development<br>•Development of Implementation Plan<br>•Technical planning<br>•MEDITECH Contract | • February 2017 – July 2017 |
| **Order Set Design** | • Regional prototyping<br>• Regional Order Set Governance Development | • July 2017 to present |
| **MEDITECH Master System Build** | •Design & Build Master Regional MEDITECH System<br>•System set up and build standards<br>• Local workflow reviews | • January 2018 – April 2019<br>• MEDITECH READY approach |
| **Implementation Wave 1 (SAH, WPSHC, NBRHC)** | •Move to MEDITECH 6.1 and Implement Advanced Clinicals (CPOE, electronic documentation, eMAR/BMV)<br>•Local workflow review and design<br>•Stabilize system, evaluation and optimization | • April 2019 |

# ONE Clinical Standards Project

# EMR Standards Workshop

- **Project Kicked off with EMR standards workshop co facilitated by Healthtech and HISBAT**
- **Topics included:**
  - Standardization – Industry trends and best practices
  - Standardization – Experience at NYGH and Ontario Shores
  - NE LHIN EMR Vision and Guiding Principles
  - Decision Making Framework
    - Framework
    - Governance
  - The Need for Standardization in the EMR
    - Standardization recommendations



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# Required Standards

- **Sharing an EMR requires consistency in the collection and exchange of patient information**
  - Standardization needs to focus on the output of information entry in the EMR
  - Standards enhance quality of data; improve clinical care; support information sharing at transition points; increase patient safety
  - Standardization of terminology, practice and design of clinical system which includes standardization of workflow and clinical processes
- **Terminology**
  - Consistent language
  - Common nomenclature
  - Standardized scales e.g. pain scale (1-10)
- **Business Process and Workflow**
  - Consistent implementation of language, nomenclature and standardized assessments and scales in practice
- **Design**
  - Common design which incorporates standardized, language, nomenclature, assessments and scales
- **Practice**
  - Evidence based practice

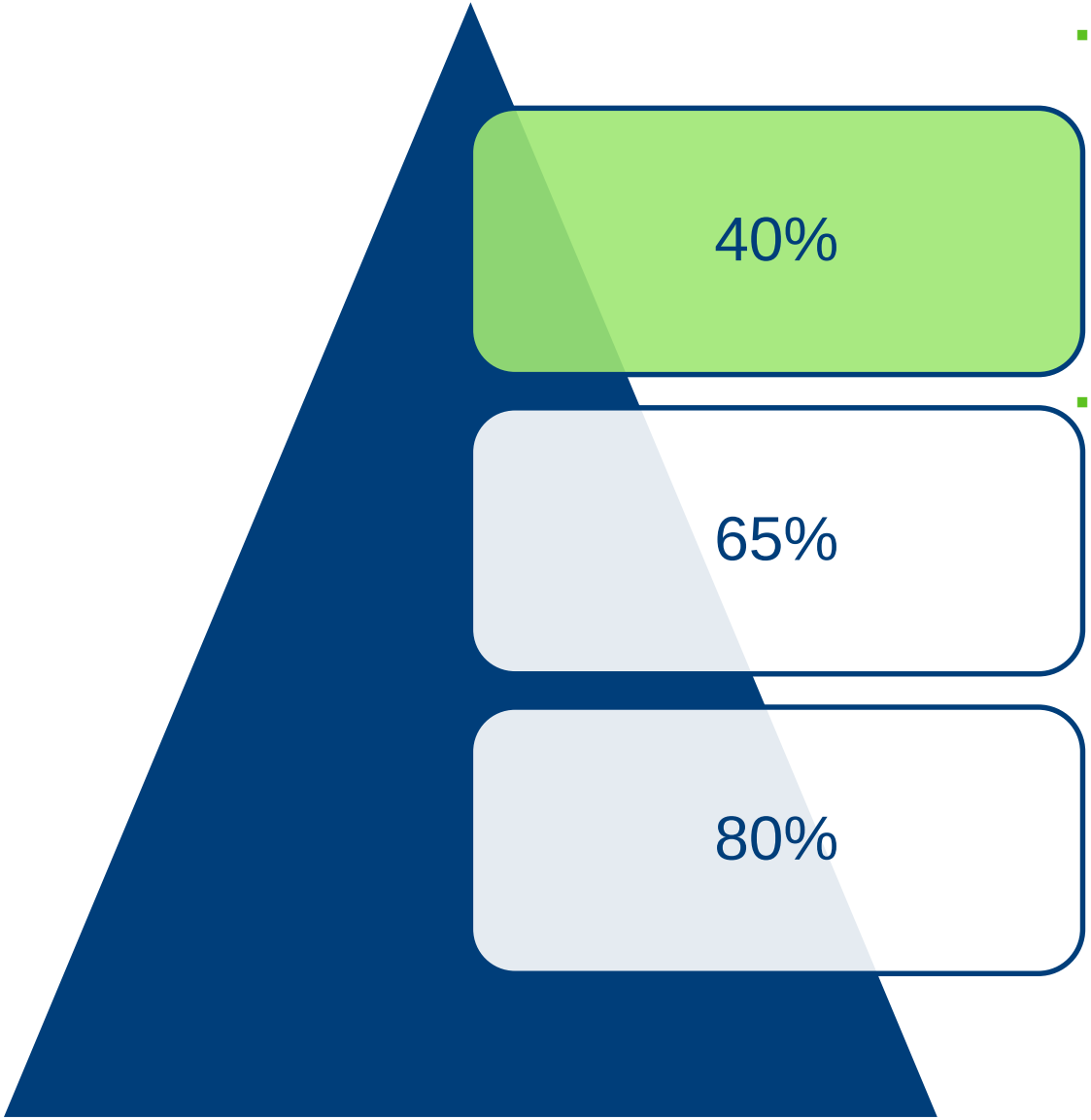
*"Clinical documentation facilitates the accurate representation of a patient's clinical status that translates into coded data. Coded data is then translated into quality reporting, statistical reporting, public health data, and disease tracking and trending"*

- AHIMA - http://www.ahima.org/topics/cdi?tabid=overview

# What level of standardization is achievable?

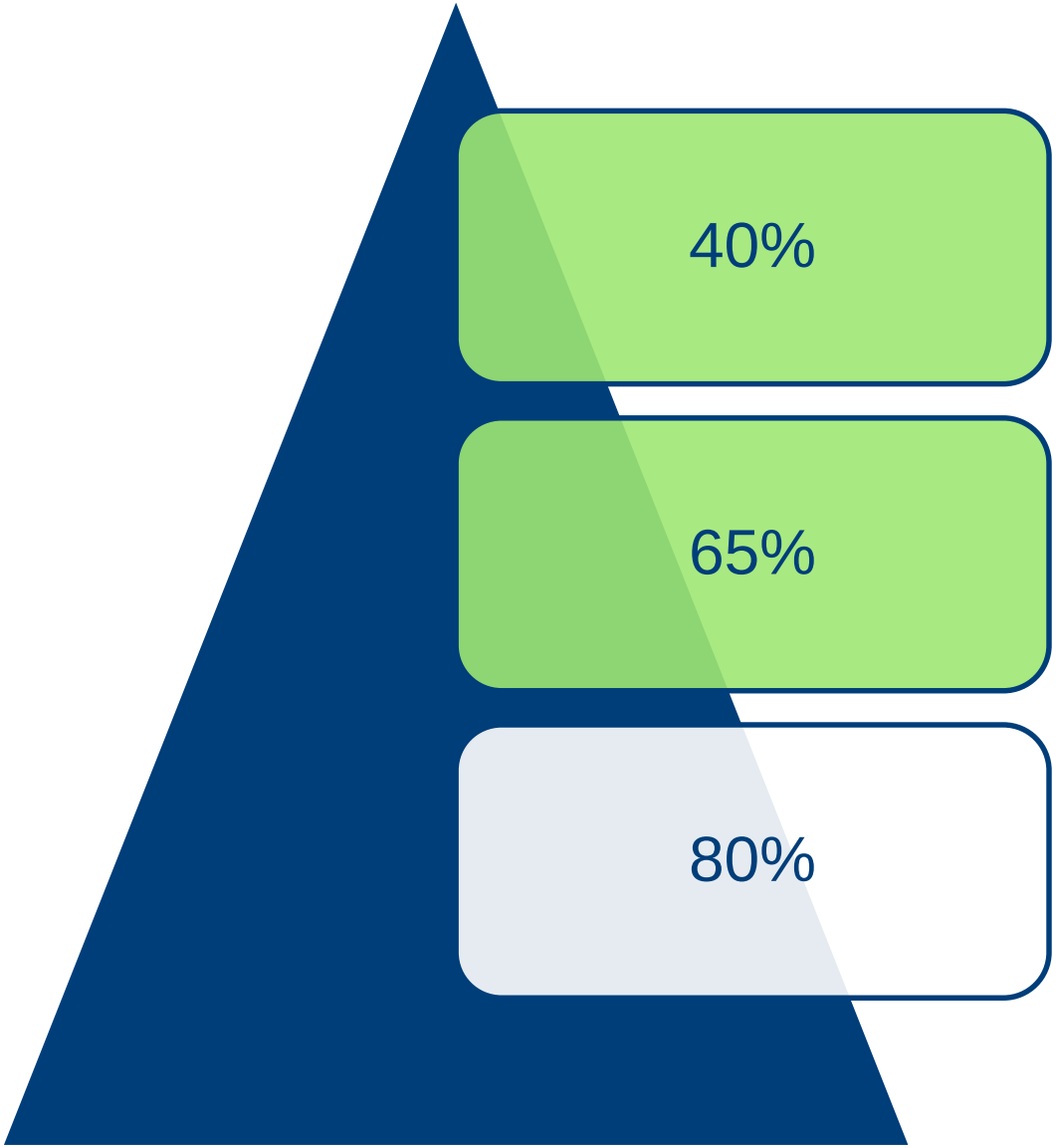
- **Approximately 40% of EMR data requires standardization based on standard design of the MEDITECH system**
  - This includes diagnostic and lab test results, allergies, medications, history, problems/diagnosis, procedures, advanced directives, demographics
- **Approximately 60% of the EMR is made up of content from clinical and provider documentation**
  - At minimum 40% of the clinical documentation requires standardization to support an EMR that is accurate, relevant and safe
  - The minimum set of documentation standards is found the corporate documentation tools
- **Therefore – 65% of EMR requires standardization**
- **Additional standards will be required to support build and maintenance activities**
  - Orders, Order Sets, Status Boards, Access, Notifications, Workload Capture
- **Recognizing economies of scale requires a high level of standardization – for example:**
  - Documentation Templates – using the same tools across facilities
  - Order Sets - 1 version versus 25 versions

# Required Standardization



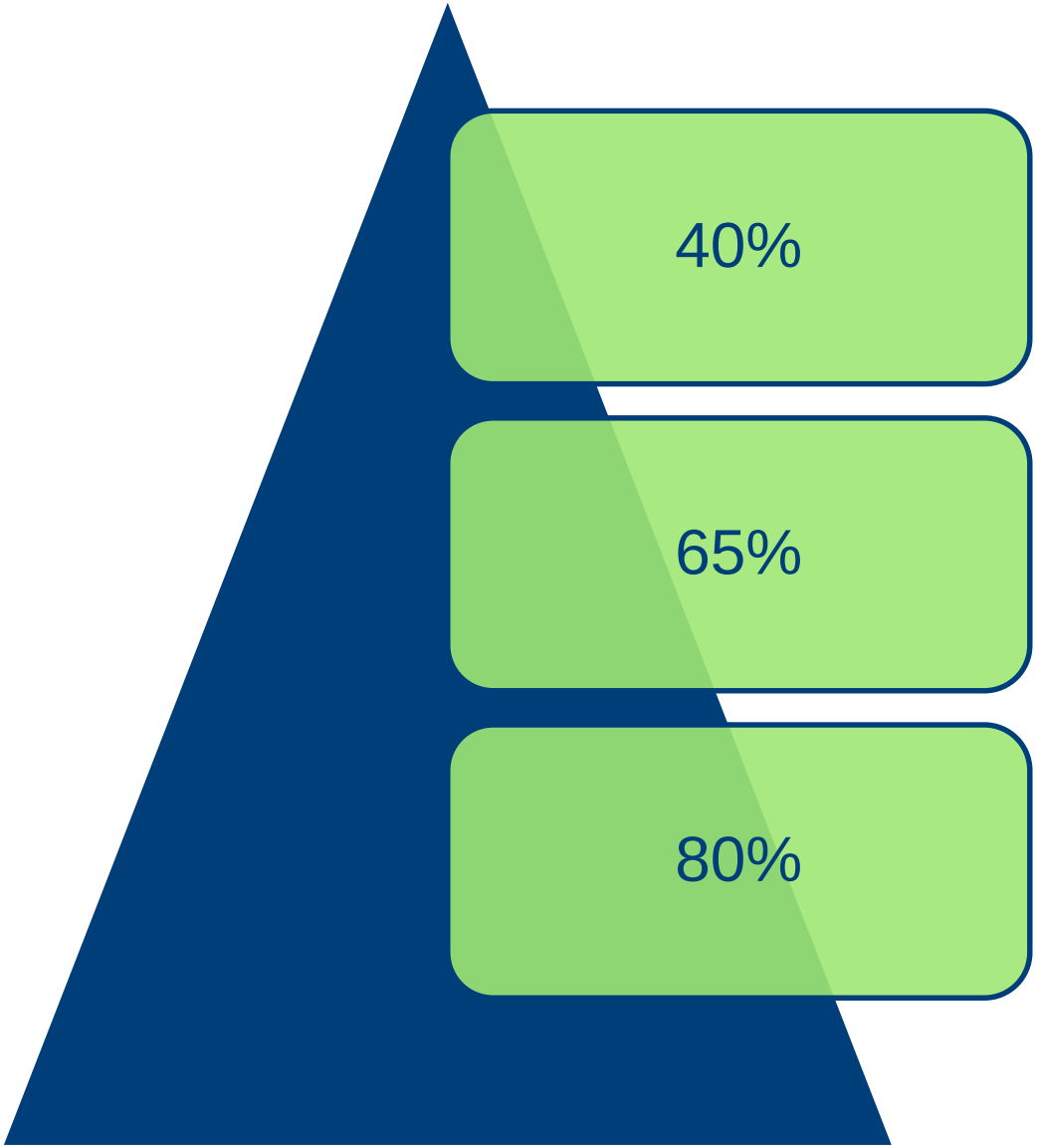

- **Patient Data**
  - Demographics
  - Allergies
  - Medications
  - Medical/Health History
    - Problems
    - Procedures
  - Family History
  - Social History
  - Advanced Directives
  - Infection Control
- **Diagnostic Tests & Results**

# Required Standardization




- **Patient Data**
- **Diagnostic Tests & Results**
- **Assessment and Exam Findings**
  - Vital Signs/O2/Pain
  - Height and Weight
  - Risk profile
    - Falls
    - Violence
    - Choking
    - Aggressive behavior
    - Mental Health Act Forms/legal status/forensic status
    - VTE
    - Sepsis
  - Intake and Output
  - Infusion therapy
  - Wounds/Drains
  - Cognitive Status
  - Functional Status
    - ADL
    - Sleep
    - Elimination (Bowel/Stool Chart)
- **Physician Documentation**
  - Admission/H&P
  - Discharge Summary
  - Consultation Report
  - Progress Notes
  - Procedure Notes
  - Emergency Department
- **Order Catalogue**
- **General/Corporate Order Sets**
- **Care Planning**
  - Consults/referrals
  - Discharge plans
  - Patient and family education
  - Chronic disease management
  - Crisis Management

# Optimal Standardization




- **Patient Data**
- **Diagnostic Tests and Results**

- **Assessment &Exam Findings**
- **Physician Documentation**
- **Order Catalogue**
- **General/Corporate Order Sets**
- **Care Planning**

- **Program/Service/Specialty Content**
  - Documentation tools
  - Standardized Assessments
  - Order Sets

# NE LHIN Vision


## Vision

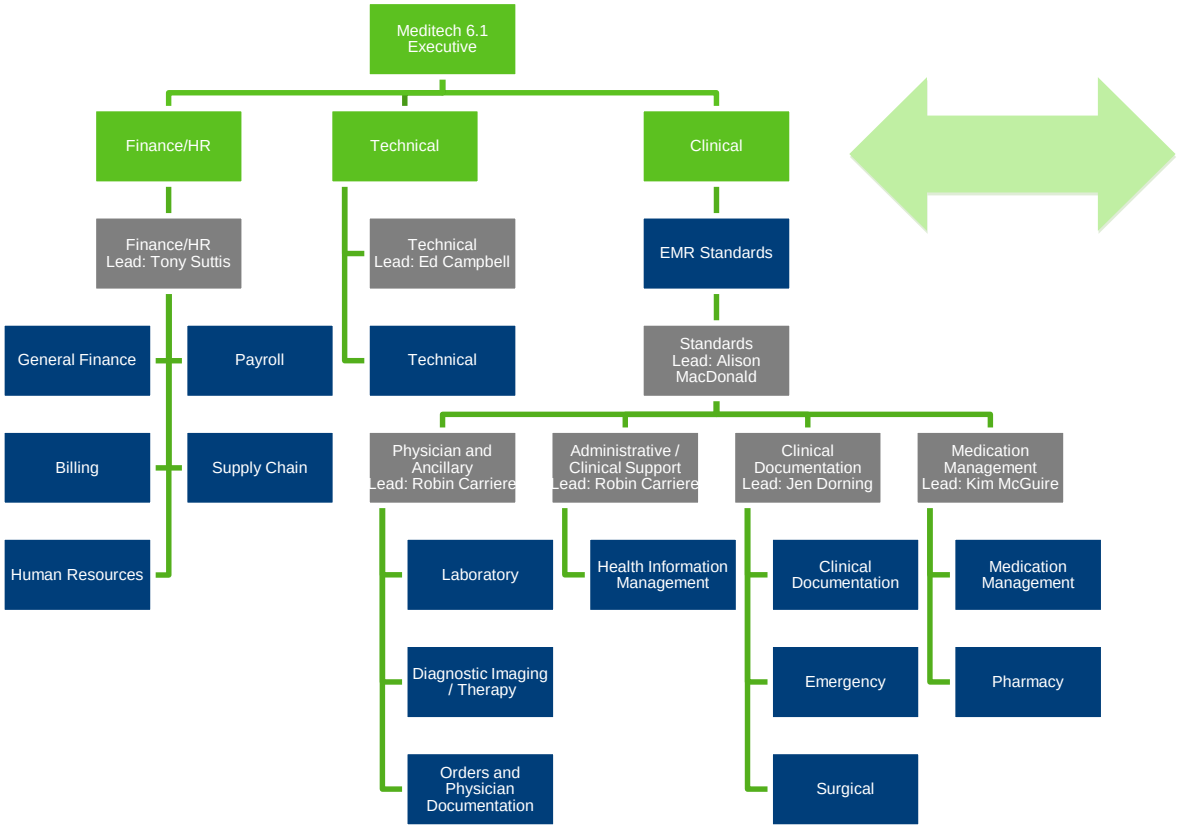
One Person. One Record. One System - Transforming Clinical Quality, Through Regional Care Standardization within a Unified Health Record.

# ONE Initiative Standardization Guiding Principles

1. Patient centered design with a focus on quality and safety – what is best for the patient?
2. Decision-making and design will be driven by our Medical Staff and healthcare delivery professionals aligning to professional standards.
3. Standardize interprofessional care on best practice and up-to-date evidence.
4. Redesign workflows in advance of implementation, to minimize gaps and capitalize on opportunities for process improvement.
5. Partners will develop minimum common data standards to enable a “one patient, one record” system which supports care decisions throughout the patient’s journey, and is “right sized” for each hospital. Clinical content will deviate from standards only when a risk to patient safety or quality is identified.
6. Sustain focus on system implementation as a top organizational priority.
7. Organizations and staff will be supported to manage change with a focus on sustainability and ongoing plans to review and optimize workflow and design.
8. The partners will share technical resources and clinical standards to enable cost-effective, efficient design, support and maintenance of our electronic systems.
9. Create a system that supports privacy and security of patient data and meets legislated requirements.
10. Joint approach to projects, planning with a focus on achieving standardization and reducing duplication. Benefits and costs will be shared equitably and transparently. Risk and liabilities of parties will be clearly articulated and appropriately apportioned.

# Governance and Decision Making

# Current Standards Governance Structure




**Site Specific Committees**

*Local Working Group reps to bring back content for vetting with site specific committees that may vary from organization to organization*


Steering Committee — Steering Committees provide oversight and decision making

Working Group — Working groups are engaged in developing standards and content

Workstream — Workstreams show how groups are organized around similar functions.





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# Clinical Standards Decision Making Framework

Decision making roles vary by committee and type of decision.

| | Working Groups | Site Specific Committees | EMR Standards Working Group | Clinical Steering Committees | Meditech 6.1 Executive Steering Committee |
|---|---|---|---|---|---|
| **EMR Standards** | Recommend | Vet | Approve | Escalation | Escalation |
| **Clinical Content Corporate-wide** | Develop/Approve | Vet/Recommend | Oversight | Escalation | Escalation |
| **Clinical Content Service or Program specific** | Develop/Approve | Vet/Recommend | Endorse/Escalation | Oversight | Escalation |
| **Timelines** | Recommend | N/A | N/A | Recommend | Approve |
| **Budget** | Recommend | N/A | N/A | Recommend | Approve |
| **Resources** | Recommend | N/A | N/A | Recommend | Approve |
| **Risk Management** | Recommend | Vet/Recommend | Recommend | Approve/Escalate | Approve |

# Objectives in Designing the Clinical Standards Process

- Local input to ensure clinical standards are “right sized”
- Engagement of physicians to drive high levels of clinical adoption
- Leverage standardized clinical content (MEDITECH 6.1 and Zynx)
- Leverage evidence (changes to standard content only if evidence based)
- Optimize time of steering committee and working group members
- Clear approval process
- Documentation of standards

# Project Outcomes

# Accomplishments Clinical Standards Project

- **1,989 Medical Imaging Procedures**
- **1,350 Laboratory, Microbiology, Blood Bank and Pathology Orders**
- **118 standardized tools for Nursing and Allied Health documentation**
  - Corporate: 23
  - Med/Surg: 28
  - ICU: 7
  - Surgical: 7
  - Mental Health: 12
  - Labour and Delivery: 3
  - Newborn: 9
  - Postpartum: 2
  - Paediatrics: 6
  - ED: 8
  - Allied Health: 10
- **Physician Documentation**
  - Defined core template structure for Admission, Consultation, Progress Note, Generic Floor Procedures and Discharge Summary
  - List of detailed floor procedures
- **Orders and Order Sets**
  - List of patient care orders
  - Regional order set policy/procedures/workflow
  - Regional order set inventory
  - Regional order set style guide
  - Continuation of order set work in a subsequent project

# Regional Physician Advisory Committee

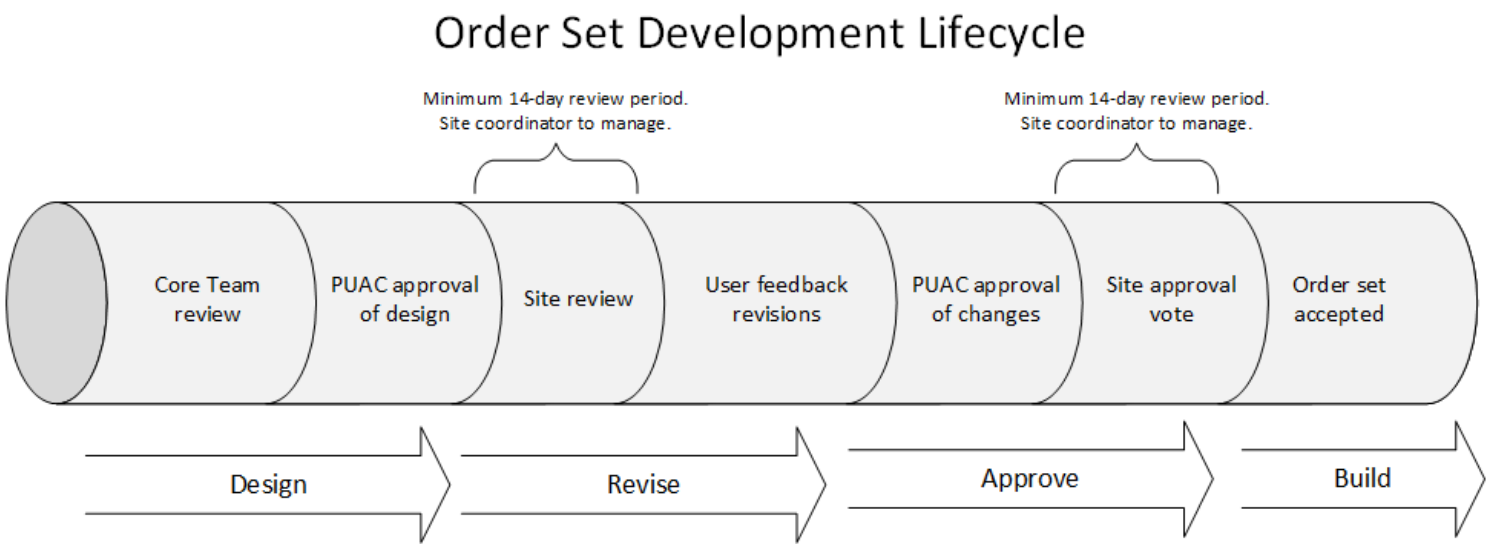
- **Current membership:**
  - Dr. Derek Garniss – Sault Area Hospital
  - Dr. Kevin Gagne – North Bay
  - Dr. Wil Smith – West Parry Sound Health Centre
  - Dr. Stephen Morgan – Timmins and District Hospital
  - Dr. Tyler Christie – Health Sciences North
  - Dr. Sara Kurki – Kirkland Lake and District Hospital (Small Hospitals)

- **Review and recommend regional build requirements for physician and other prescribing provider activities within the shared MEDITECH environment.**
- **These include orders, order sets, decision-support tools, documentation templates, applicable policies and procedures and/or pathway content.**
- **Ensure a standardized approach in relation to the development of documentation, orders, order sets and/or pathways at a regional level.**
- **Ensure that system functions and content are reviewed on regular basis to ensure that users are supported by current best practices, by-laws and/or legislation.**
- **Setup inter-professional working groups, as required, to review and develop system requirements.**
- **Provide support and advice to the project team as required.**
- **Provide advice and support to other groups or committees as requested.**
- **Ensure that patient safety, prevention of medical errors and adverse drug events is accounted for in the definition of system requirements and/or updates to existing system content.**

# Regional Order Set Working Group

- Review and recommend regional build requirements for evidence based order sets used in the shared MEDITECH environment.
- Review and create prototypes of order sets in Zynx that are distributed to local subject matter experts in NE LHIN hospitals for review.
- Members of this working group will also collate all feedback and make final revisions to order sets before being sent for approval.
- The membership will be comprised of a variety of health professionals from across the region including the order set core team and local order set site coordinators.
  - Physicians
  - Nursing/Clinical Informaticians
  - Pharmacists
- The working group reports to the Regional Physician Advisory Committee (PAC).
- *Local SME's*: Site coordinators and local CMIO's will identify local SME's who will provide review and site approval for the regional standard order sets. The numbers of individuals will vary by site depending on the specialty and requirements for each local hospital's internal review process.

# Regional Approach to Order Set Design and Approval




- Regional approach to order set development using Zynx as the vendor aligned with MEDITECH READY approach
- 27 Order Sets have been sent for review to local SME's including core admission sets and modules and a number of disease specific/procedure specific sets
- Work will continue as Regional PAC ramps up to focus on development of order sets required for the Wave 1 sites (SAH, NBRHC, WPSHC) CPOE implementations

# Lessons Learned and Critical Success Factors

# Lessons Learned

- Require clear objectives and directions to keep groups focused
- Need a clear definition of what we mean by “Standards”
- Communicate clearly and often
- No more – Because it is the way we have always done it
- Strong facilitators who can manage group dynamics
- Need time for working groups to connect with each other
- Loss of momentum with lag between clinical standards and implementation project
- There is no “EASY” button
- Recognition that this is an iterative process and plans should be designed to reflect this

# Critical Success Factors

- **Online collaboration tools**
  - Zynx for order sets
  - Mockflow for clinical documentation
- **Clinically driven**
- **Shared vision, guiding principles and decision making framework**
- **Support and advice from those with lived experience (HISBAT, Humber, Consulting Team, Vendor Contacts)**
- **Facetime!!! (not the apple kind) – in person face to face meeting time CAN NOT be replaced with teleconference especially early on**

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