### Let's Talk Informatics



#### People, Process and Physical Space: Building the Branches of the OPOR Tree

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Virtual WebEx Presentation, Halifax, Nova Scotia



Please be advised that we are currently in a controlled vendor environment for the One Person, One Record project.

Please refrain from questions or discussion related to the vendor for the One Person, One Record program.



## Informatics...

"utilizes health information and health care technology to enable patients to receive best treatment and best outcome possible."



# Clinical Informatics...

"is the application of informatics and information technology to deliver health care."

AMIA. (2017, January 13). Retrieved from <a href="https://www.amia.org/applications-infomatics/clinical-informatics">https://www.amia.org/applications-infomatics/clinical-informatics</a>



# Objectives

At the conclusion of this activity, participants will be able to:

- Identify what knowledge and skills health care providers will need to use information now and in the future.
- Prepare health care providers by introducing them to concepts and local experiences in Informatics.
- Acquire knowledge to remain current with new trends, terminology, studies, data and breaking news.
- Cooperate with a network of colleagues establishing connections and leaders that will provide assistance and advice for business issues, as well as for best-practice and knowledge sharing.



# Session Objectives

- Discuss the Building Branches methodology used across NS Health and IWK Health to inform the clinical requirements and the change readiness of units/teams before the upcoming technical build of the Clinical Information System (CIS) (One Person One Record-CIS).
- Demonstrate the electronic tools the OPOR team is using to achieve optimal and efficient information gathering and presentation
- To discuss the establishment of clinical standards and protocols for the management of patients
- Overview of lessons learned and next steps



### Conflict of Interest Declaration

We do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device, commercial health care informatics organization, or other for-profit funder of this program.



## One Person, One Record

### One Person, One Record-The Vision

Guiding **Principles** 





Focus on Patient & Family Centred Care: partner with patients and families



Based on clinical best practice, evidence, and outcomes

Clinician Driven: integration of interprofessional collaboration



3

Documentation is an outcome of care



Variation in care should be minimized. intentional and be measurable



Leverage work already done across the organization and by other jurisdictions – not reinventing the wheel



Learn by doing - a continual improvement process

Patient safety, privacy, confidentiality and data security are foundational



### Readiness

#### Readiness is the **internal work required** for the successful implementation of OPOR-CIS

Remember:

- OPOR is not an IM/IT project, it is a **clinical project**.
- Without adequate leadership from physicians any technical solution will not meet the needs and wants of the clinical community.
- Clinical subject matter expertise coupled with best evidence will inform OPOR's clinical standards.
- We want clinicians to determine the needs and perspectives of your profession. In turn, we request that you disseminate information to your colleagues, identify issues and participate in developing solutions.
- The CIS is a tool to realize our clinical objectives.



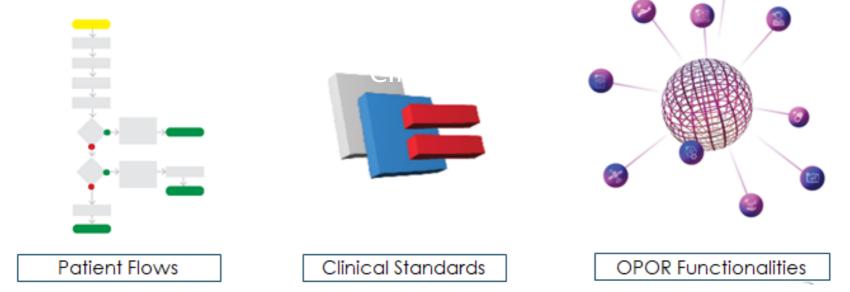
# **Building Branches**

#### Building One Person, One Record

In order to start the OPOR program and build the Clinical Information System, NSHA and IWK must understand and identify clinical requirements.

There are three variables that affect OPOR: patient flows, clinical standards and the OPOR functionalities. Integrating these variables will help NSHA and IWK understand and identify clinical requirements for the different disciplines, programs, zones, organizations and the health system.

**Clinical Requirements Initiative** 





### Building Branches of the OPOR Tree

- Our Organizational Change Management Lead-Vizarath Ali- developed the framework and process for the Building Branches engagement exercise
- The exercise allows the OPOR program to directly hear front-line experiences regarding patient information flow
- It creates a platform, rooted in active listening, where all participants can identify opportunities for transformation- foundational for readiness



### Building Branches of the OPOR Tree

An engagement exercise to gather the necessary Clinical Requirements to build an integrated Clinical Information System

#### Purpose

The 'Building Branches of the OPOR Tree' engagement session seeks to gather a preliminary list of Clinical Requirements, from several program areas, to facilitate discussions regarding integration and standardization.

#### Outcomes

The 'Building Branches of the OPOR Tree' engagement session has three outcomes:

- 1. Engineer stakeholder buy-in
- 2. Identify clinical requirements for the CIS build
- 3. Engender system thinking

#### Types

There are four types 'Building Branches of the OPOR Tree' exercises

- 1. Current state single-service area patient flow
- 2. Current state multi-service area integrated patient flow
- 3. Future state multi-service area integrated patient flow
- 4. Future state single-service area patient flow



### Building Branches of the OPOR Tree

#### Methodology

The 'Current State Single-Service Area Patient Flow' engagement session has four steps:

- 1. Preparing for the engagement
- 2. Assembling the appropriate participants
- 3. Executing the engagement
- 4. Categorizing the feedback



Registration; Admission; Admission Assessment; Care Planning; Orders; Requisitions; Consult; Ongoing Assessment; Transfer; Rounds; Discharge; Patient Education







- Interprofessional- promotes collaboration and allows understanding of other's role and their relationship with the patient and information
- Different perspectives generate rich data
- Start with a blank page and end with a diagram of all the complexities clinicians manage each day. Empowering for participants
- Exceptional quality care becomes evident to all providers and facilitators of the exercise







- Focus on "Pain Points"
- Team discusses what obstacles occur in their day-to-day, and where they struggle to access or move information
- Generates Clinical Requirements for Clinical Information System in real time



### Engagement to Date

Zone	Complete	In progress	Planned	Grand Total
CZ	39	4	5	48
EZ	29	5	1	34
IWK	25	13	1	39
NZ	21	7	1	29
WZ	24	9	1	33
TBD	0	0	95	
Grand Total	138	38	104	280

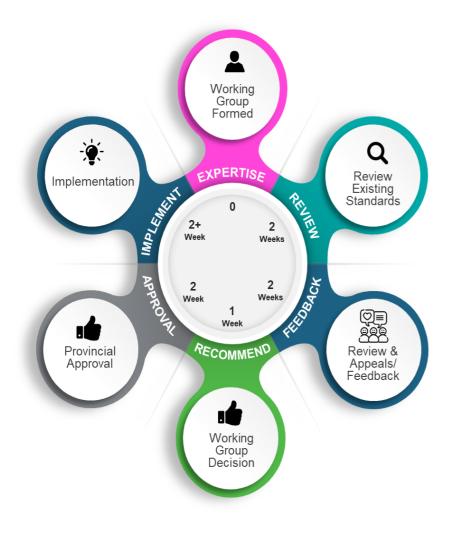


# Clinical Requirements

# Clinical Requirements Examples

- The CIS must allow multiple users to access the system at the same time
- The CIS must transmit pharmacy orders from smaller sites to the hospital from which restocking occurs. Ie: Annapolis Community Health Center to VRH; ESMH to DGH; Sacred Heart to ICH
- The CIS must allow nurses at Eastern Shore Memorial and Sacred Heart to access both the ED platform as well as the Inpatient unit platform.
- The CIS must populate nursing documentation for CTAS 1, 2 and 3 when the patient has a CTAS level assigned in Triage.
- The CIS must provide a quick access electronic reference for a Broselow Tape in all Emergency Departments when a pediatric patient is registered.





A Clinical Standard is developed by Subject Matter Experts, or clinicians, from specific programs. A Clinical Standard is a set of guiding documents that include quality statements, best practice guidance, order sets, policy, and documentation tools. The standard can include ROPs, KPIs and analytics required for a given program. The development of Clinical Standards is facilitated by the Clinical Lead from the OPOR team for the program or care area/team.



- The Clinical Information System (CIS) is a tool to realize our Healthcare objectives
- Practice change cannot wait for OPOR
- Each program area will need to prioritize the standardization work such as nursing documentation or order sets specific to a disease process
- We are working with teams across the province to implement change now.
  - Gyne/Oncology Pilot, Adult Inpatient Essential Data Set



 Provincial Clinical Standardization needs to occur before implementation so that education can focus on how to best utilize the CIS to enhance care delivery



 The first two should be standardized prior to implementation leaving the electronic platform as the final and only piece of adjustment required for clinicians



- Diagnostic Imaging is just one area that has already begun the work of standardization
- Standardized procedures for image storage and retrieval are just one of many examples
- Working groups and provincial committees are an integral piece to creating standardization within a clinical area
- The newest working group to Diagnostic Imaging is the "Power Scribe Auto text" group.
- It is provincial in scope and discusses ways in which the radiologist's reporting templates can become standardized



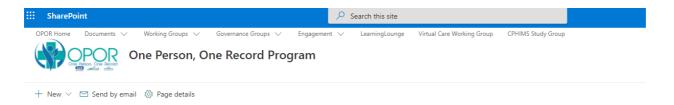
# How Do we Incorporate Informatics?

# SharePoint

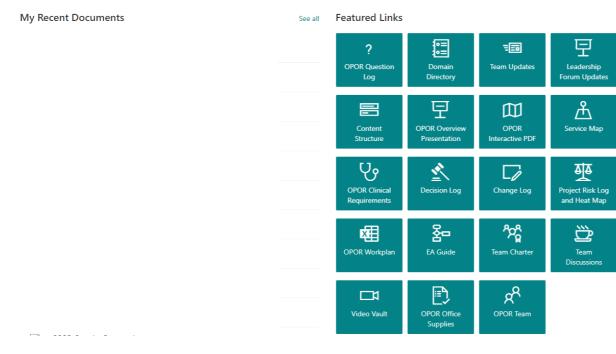
- The OPOR team uses SharePoint mainly as a document repository
- Clinical decision logs and change logs as well as presentations and documents of all varieties are stored on this SharePoint
- The team has recently transitioned to Office 365 and Windows 10 so that we can ensure we are standardized within our own tools and devices



## SharePoint



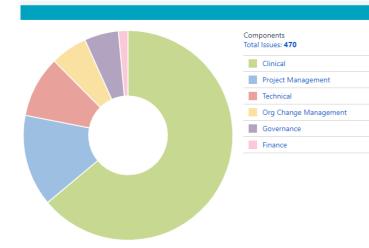
#### Right Information, Right Person, Right Time and Place

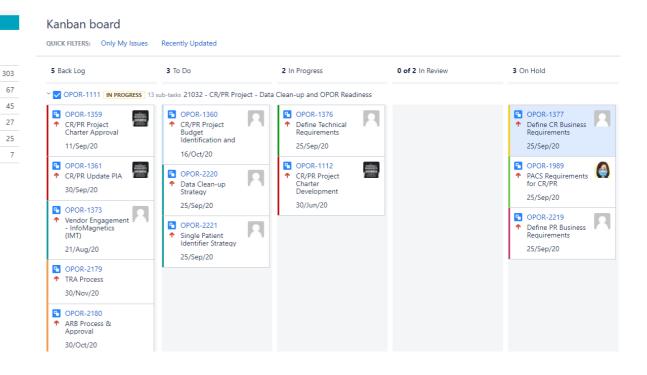




### JIRA

- Here is a high-level Pie Chart view sorted by JIRA components
- Here is a Kanban view showing the progression of tasks throughout a project







### OneNote and OneDrive

- Being able to collaborate easily and efficiently is essential among the OPOR team
- Documents can be shared and accessed by the entire team rather than saving to individual desktops or personal drives
- Real time collaboration is possible when editing documents



# Enterprise Architect (EA Sparx)

Manage Complex Information

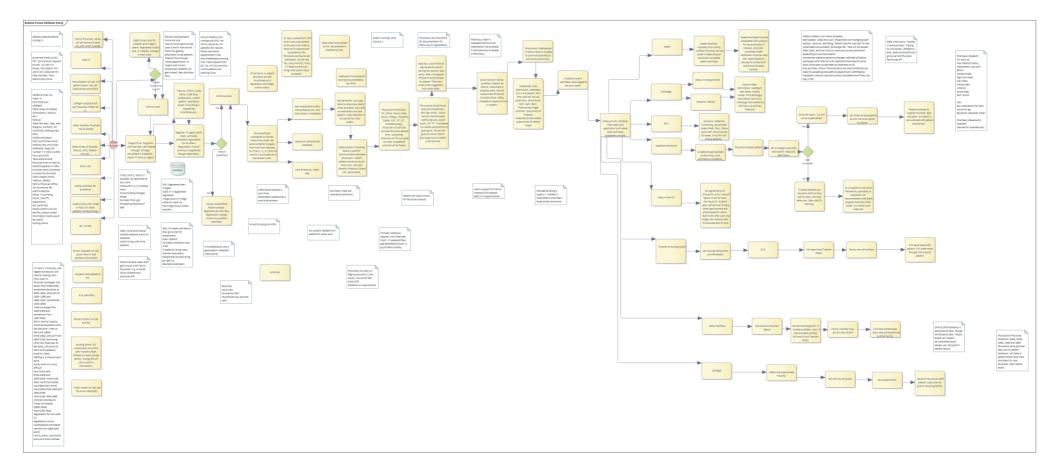
- Create diagrams for modeling strategic and business level concepts
- Create organized and interactive requirements models
- Trace the implementation of system requirements through a model
- Search and report on requirements





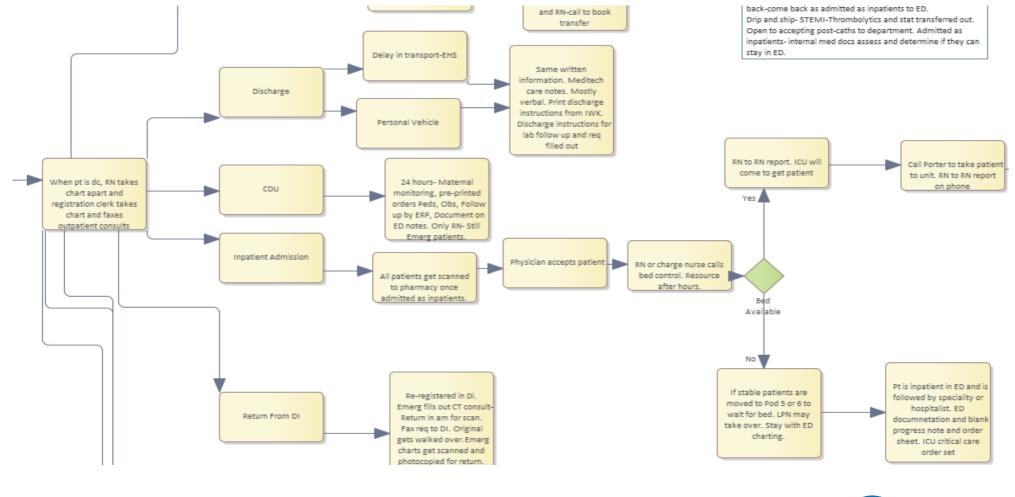


### EA Sparx-Building Branches Mapping





### Enterprise Architect (EA Sparx)



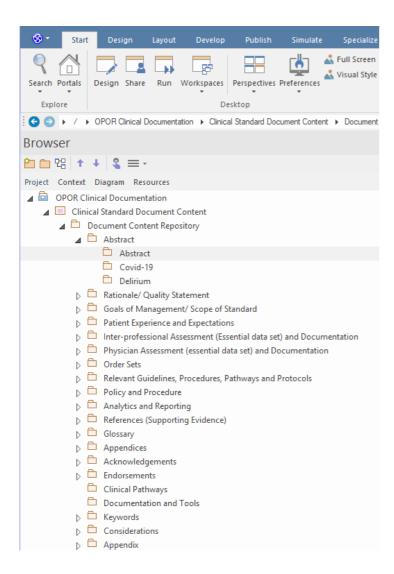


### Future State-Bringing it all Together

- The OPOR team may be using EA Sparx for modeling workflows
- This tool is still being used as a proof of concept but is showing great promise
- EA Sparx was also used to develop a standardized template for creating a Clinical Standards document



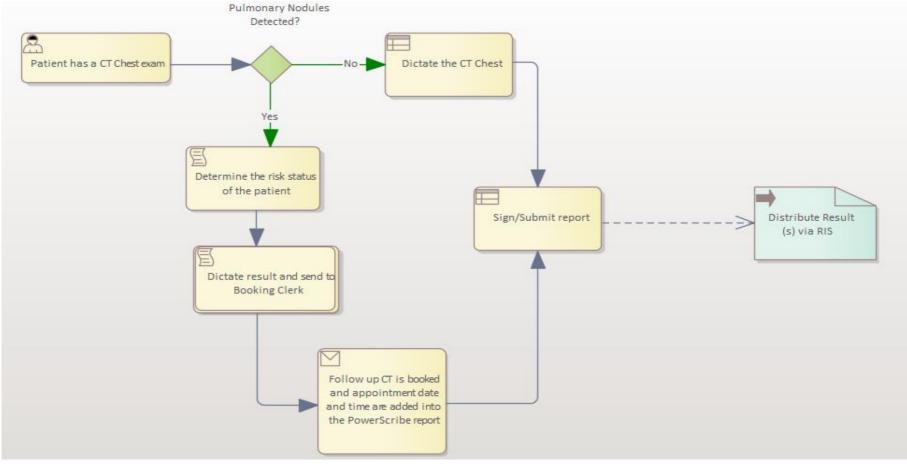
#### Future State-Bringing it all Together



- EA Sparx allows you to program step by step how you want the document to flow
- Elements can be reused in different documents
- This allows us to stay standardized within our own documentation



## Future State with EA Sparx





## Prolaborate

- Prolaborate allows users to view EA Sparx models from any device without the need to install software
- The OPOR team is currently using Prolaborate on a 3-month proof of concept
- This application will allow easy access to clinical documents, standards, workflows, etc
- The goal of Prolaborate is to provide an electronic visual of the information gathered during a Building Branches engagement session
- Clinical staff can interact with the EA Sparks dashboards and leave comments and feedback on workflows and areas in the patient's care journey that need to be improved upon



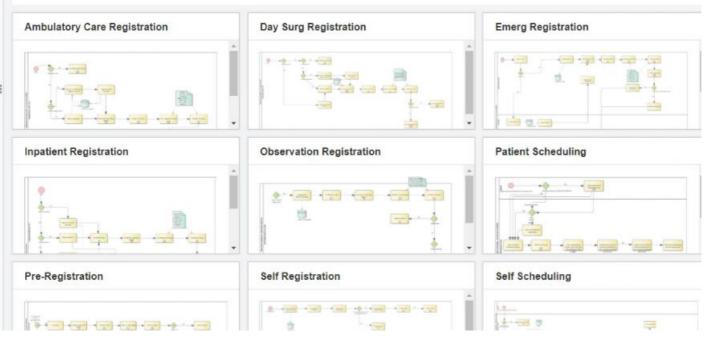
## Prolaborate

#### Dashboard

#### OPOR Scheduling and Registration [Set as Default]



Dashboard for validating Scheduling and Registration Information.

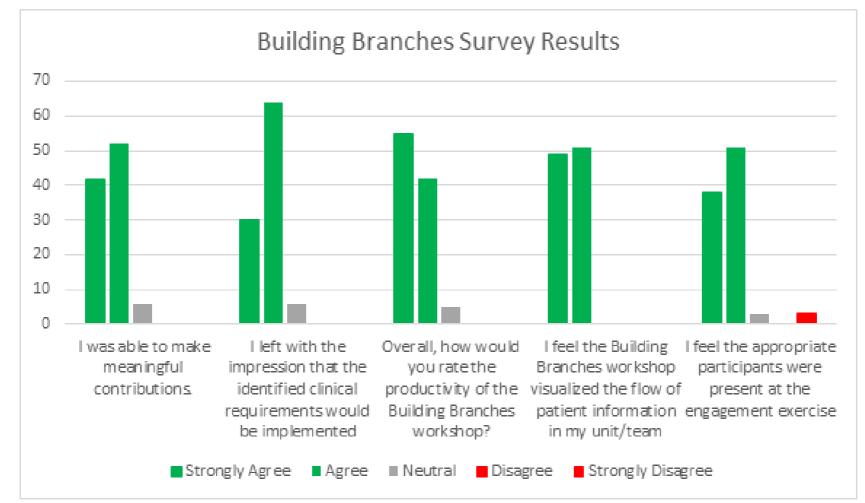




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## Lessons Learned

#### Survey Results





2020 Building Branches Statistics		Site Visits
One Person, One Record One Person, One Record Distribution	Building Branches Workshops attendees stated workshops were productive	91 unit visits complete
<b>Provincial Standards</b> <b>in progress:</b> DI Catalogues Lab Catalogues Medication List Essential Data sets	The best part of the workshop was "The organization is listening to the needs of the employees" "Having current state organized on paper is very valuable. Facilitators were skilled at identifying anomalies"	22 unit visits in progress Goal- 250 Workflows



#### Survey Results

- 2. We were a very small group. More voices may have been able to contribute more to the picture.
- 3. I left with a clearer understanding of the inner workings of the unit
- 4. It was very well run. I'm impressed with the process
- 5. Even though I work in what we discussed about almost every day, it was so interesting to share it all with you and I am eager to see what your workshop comes up with!
- 6. no
- Work shop was excellent, leaders were excellent. Please add spiritual care with the rest of the professional team and not as other.
- 8. A short explanation of how our presence was going to be utilized prior to the start of the day, it felt like we jumped right in and figured out what we were meant to do as we went.
- 9. Great visual using the long white paper sheet.
- 10. I would like to have more specifics re actions and timelines for next steps
- 11. I feel if had a better understanding of purpose of workshop prior to session would have been more prepared with explaining patient treatments and processes
  - It likely would be helpful to review the pathway with different team members again at a later date.
- 12. Although four hours was adequate, new ways a patient interacts within the could've been explored with greater depth with benefit to the Workshop.
- 13. Facilitators were very easy to work with.

HAVE A MORE ORGANIZED FLOW FOR THE DAY. THERE WAS MISCOMMUNICATION REGARDING14. LOCATION AND LUNCH, AND START TIME. WRITING MATERIALS WERE MISSING.

JUST HAVING THESE BASIC TASKS ORGANIZED WOULD HAVE MADE FOR A MORE PRODUCTIVE DAY.





# Next Steps

- Engage with patients and families
- Engage physicians
- Complete workflows in a sampling of care areas
- Embed standardized documentation and processes within workflows EA Sparx
- Continue Engagement Strategies



### THANK YOU!

#### Questions?

Reach out to us at <u>OPOR@nshealth.ca</u> if you have any questions, are engaged in standardization work in your area or would like to inquire about a Building Branches session for your care area.



The Let's Talk Informatics series meet the criteria outlined in the Manipro+ Certification guide for non-certified credits by providing content aimed at improving computer skills as applied to learning and access to information.

To receive a certificate of attendance for today's session, there is a place for you to provide your email address in the evaluation survey.

Thank you for attending today's event.

