

# EHR Benefits Realization: Island Health's Journey



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## Island Health: Who Are We?

*Excellent care for everyone, everywhere, every time.*



## What is IHealth?



One Person. One Record. One Plan for *health* and *care*.

### Anticipated Benefits:

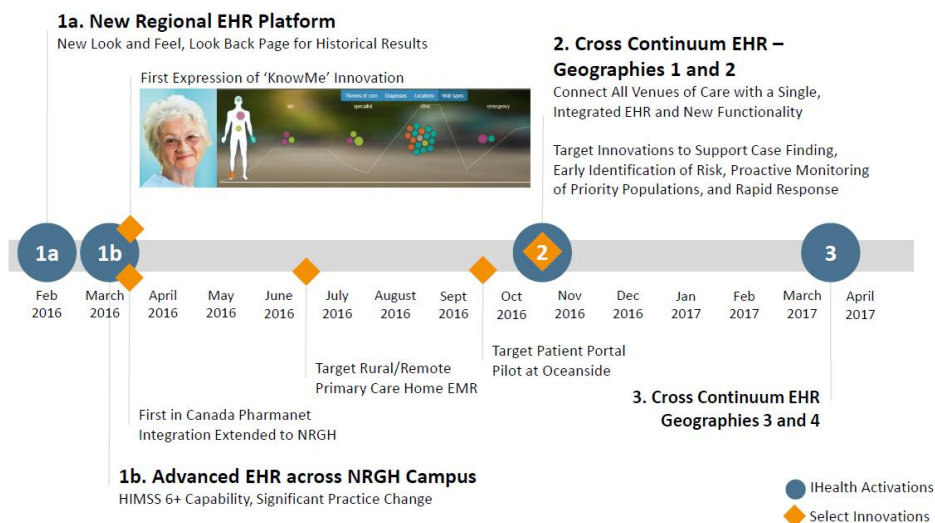
- Evidence and standards are embedded into practice to improve patient quality and safety
- Clear communication over time and space
- Through one platform and patient story, patients and providers collaborate on goals and plans for health and care, which are shared, monitored, and refined over a person's lifetime

## Definition of Journey

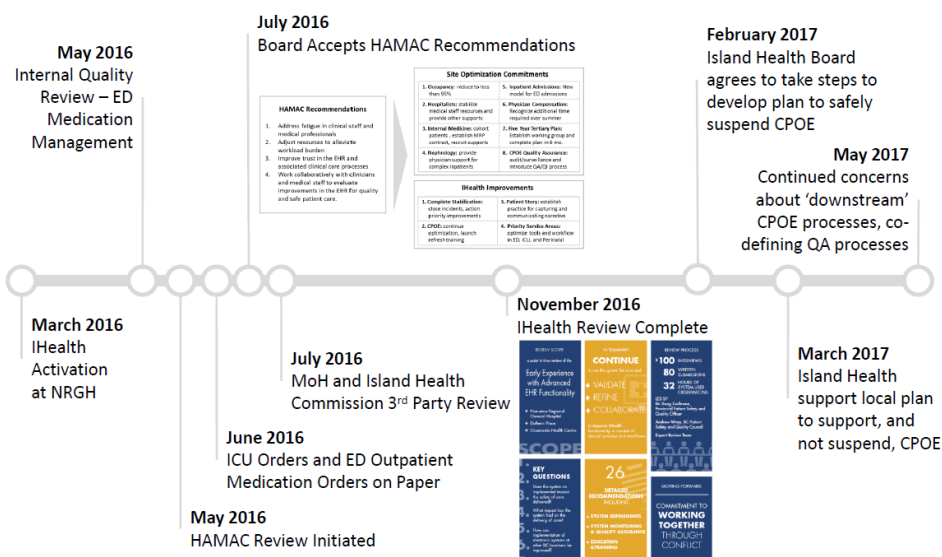
1. a. The act of traveling **from one place to another**, especially when involving a **considerable distance**; a trip.
  - b. A distance to be traveled or the **time required for a trip**.
2. A process or course likened to traveling, such as a **series of trying experiences**; a passage.



# Our **Planned** Journey Schedule



# Our **Actual** Journey Schedule

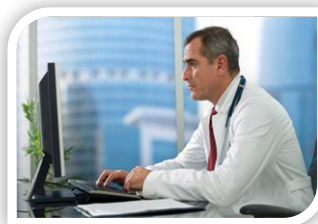


# Reaching the Summit of EHR Benefits Realization



**May 2017...**

- Embarked on the development of an **EHR Adoption and Use (EAU) Model**
- Why?
  - To realize the benefits of EHRs, there is a need for a comprehensive framework and model **to better understand the variables that contribute to EHR adoption and use**



## Framework/Model Development

- A **literature review** of existing technology adoption and use and quality frameworks was conducted from May-June 2017
- **Variables/constructs** and dimensions from the frameworks were extracted
- Similar constructs and definitions were combined and an **overarching framework** was developed

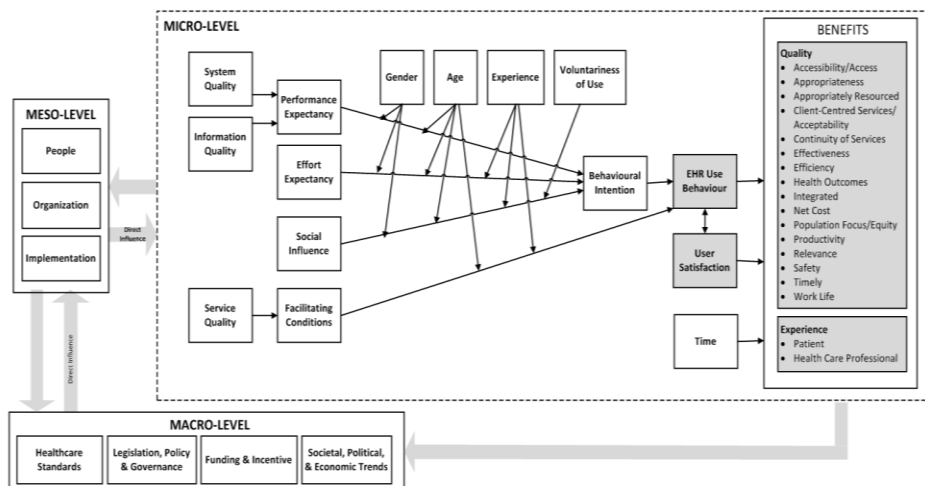


## Framework/Model Development (Cont.)

Ten technology adoption and use and quality frameworks were included in the development of the EAU Model:

1. Unified Theory of Acceptance and Use of Technology (**UTAUT**)
2. Canada Health Infoway's **Benefits Evaluation Framework**
3. UVic eHealth Observatory's **Clinical Adoption Framework**
4. Island Health's **Quality Framework**
5. **BC Health Quality Matrix**
6. Clinical Systems Transformation **Benefits Framework**
7. Agency for Healthcare Research and Quality (**AHRQ**) Domains of Health Care Quality
8. Health Quality Ontario's **Quality Attributes**
9. Accreditation Canada's **Dimensions of Quality Care**
10. Dr. Morgan Price et al.'s **Clinical Adoption Meta-Model**

# EHR Adoption and Use (EAU) Model (DRAFT)



Randhawa, G.K. & Wright, M. (2017)

## EAU Model: A “Map” To Reach the EHR Summit



- EAU model can be used by health care organizations to guide the planning, implementation, and continuous EHR evaluation
- Construct definitions available upon request

# EHR Benefits Realized



## Quality & Safety

- **2,000+ patient mismatch alerts**
  - Patient chart does not match the patient in front of the nurse at the time of medication administration
- **5,100+ drug-interaction alerts**
  - Over 890 of these resulted in a change in clinical decision
- **8,200+ drug-allergy alerts**
  - Over 2,200 of these resulted in a change in clinical decision
- **Elimination of transcription steps in ordering results in faster care**
  - Median time from ordering to antibiotic administration reduced by 55 minutes
  - X-rays taken 102 minutes faster
  - Laboratory test results obtained 112 minutes faster
  - Time to blood product administration also reduced

## EHR Benefits Realized (Cont.)

- Streamlined **Infection Control**
- Sepsis **Alerts**
- Issues of **Legibility**
- Interdisciplinary **Plan of Care**
- **Communicating** with Community Physicians

