Hospital-to-Home Transitions: The ACEPATH project

May 6, 2025

Madeline McCoy
Research Manager
Bruyère Health Research Institute | Isenberg Lab

Core Team

- Principal Investigator: Dr. Sarina Isenberg
- Co-Principal Investigators: Edward Fitzgibbon, Jill Rice
- Co-Investigators: Daniel Vincent, Geneviève Lalumière, Marianne Weiss, Meaghan Hagarty, Meghan Savigny, Natalie C. Ernecoff, Shirley Bush, Taylor Shorting, Vinay Kumar Mysore
- Patient and caregiver advisors: Maya Stern, Mona Kornberg, Rex Pattison

Funding

This program has received funding from:

- Canadian Institutes for Health Research (CIHR) Transitions in Care Team Grant
- The Ottawa Hospital Academic Medical Organization (TOHAMO) Innovation Fund
- Bruyère Academic Medical Organization (BAMO) Incentive Grant
- Canadian Frailty Network (CFN) Springboard Grant

Conflict of Interest

None to declare

ISENBERG LAB

Overview

- The ACEPATH project
  - The problem
  - Our solution
  - How we will measure the intervention's success
  - How we will test the intervention
- Breakout group discussion

ISENBERG LAB

The problem

Shortfalls with hospital-to-home transitions

The problem

- Transitions from hospital to home (H2H) can be emotionally distressing and logistically challenging
- A lot falls to family caregivers to fill in the gaps
- Many patients experience re-hospitalization or death in hospital following discharge
- H2H transition is a frequently considered but not often an accomplished option

ISENBERG LAB

The problem

- Previous interventions have tried to reduce hospital readmissions after transitioning home by deploying nurse navigators and case managers
- None of these H2H interventions for those experiencing palliative care and their outcomes were developed in partnership with patients and caregivers
- H2H interventions have not been tested Canada
- Without patient involvement, interventions may not capture the components needed to improve outcomes that most matter to patients and caregivers

Local background

- H2H transitions from The Ottawa Hospital (TOH) and Bruyère Health (Saint-Vincent Hospital, Élisabeth-Bruyère Hospital)
- Previous piloting of a discharge checklist for providers at TOH led by Dr. Ed Fitzgibbon
- Interest from Ontario Health atHome – Champlain (formerly Home and Community Support Services - Champlain) to improve this transition

Our solution

Co-designing an intervention to improve H2H transitions

ISENBERG LAB

The ACEPATH project

Advancing the Care Experience in PAlliative care patient Transitions from hospital to Home

Study objective

- Co-design an intervention (called ACEPATH) and outcome measures informed by patients, family caregivers, and healthcare providers that are tailored to the Canadian H2H transition process, while ensuring adaptability to local contexts.

Study sites

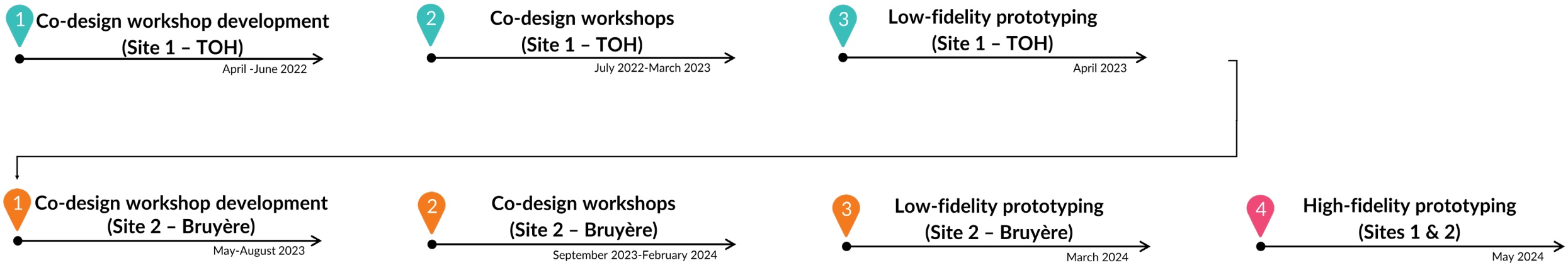
- Site 1 – The Ottawa Hospital (TOH)
- Site 2 - Bruyère Health

ISENBERG LAB

Our solution

- Leveraging **co-design**, we created an intervention informed by core interest holders: patients, family caregivers, and healthcare providers
- **Co-design** is a participatory approach, in which all interest holders are treated as equal collaborators in the design process

Overview



ISENBERG LAB

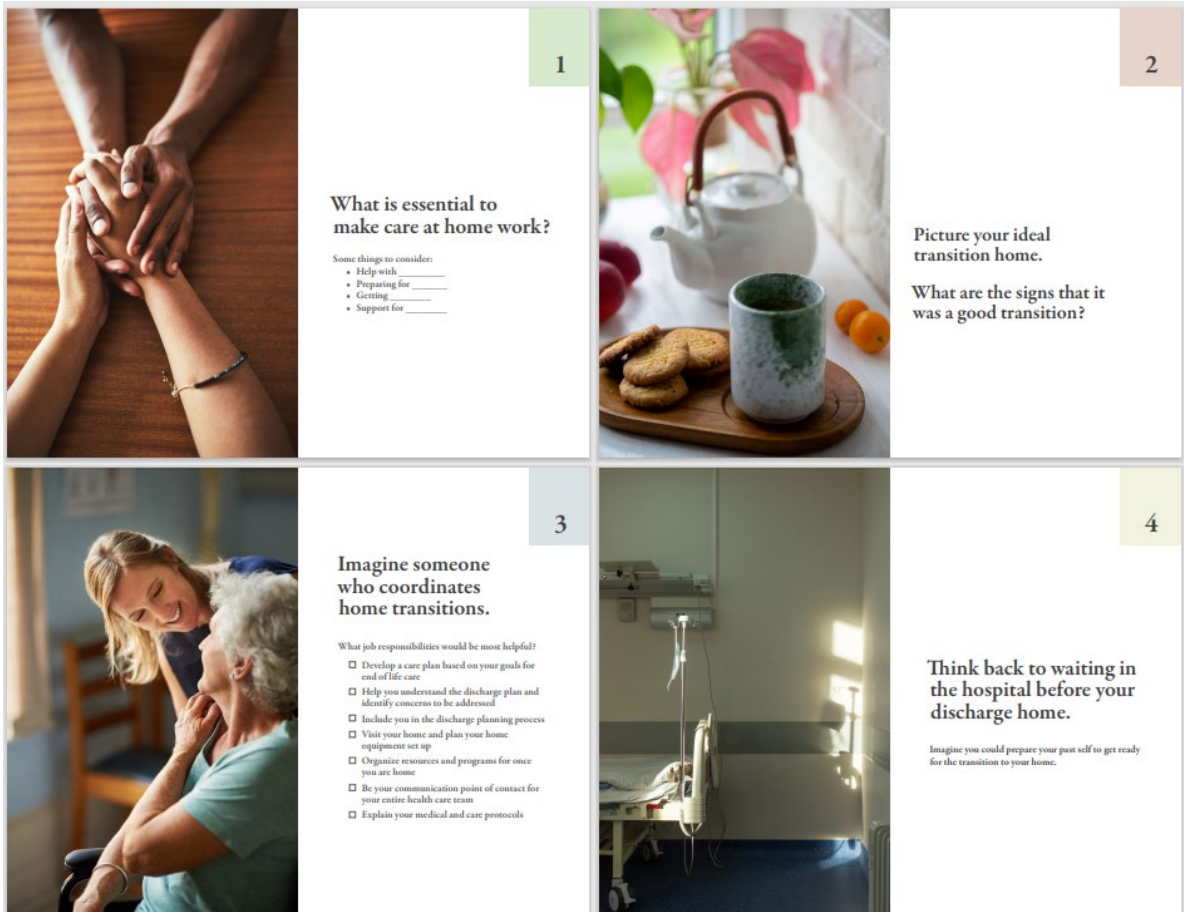
Overview

1. **Co-design workshop development (Site 1 – TOH)** — April -June 2022
2. **Co-design workshops (Site 1 – TOH)** — July 2022-March 2023
3. **Low-fidelity prototyping (Site 1 – TOH)** — April 2023
1. **Co-design workshop development (Site 2 – Bruyère)** — May-August 2023
2. **Co-design workshops (Site 2 – Bruyère)** — September 2023-February 2024
3. **Low-fidelity prototyping (Site 2 – Bruyère)** — March 2024
4. **High-fidelity prototyping (Sites 1 & 2)** — May 2024

ISENBERG LAB

Co-design workshop development (Site 1)

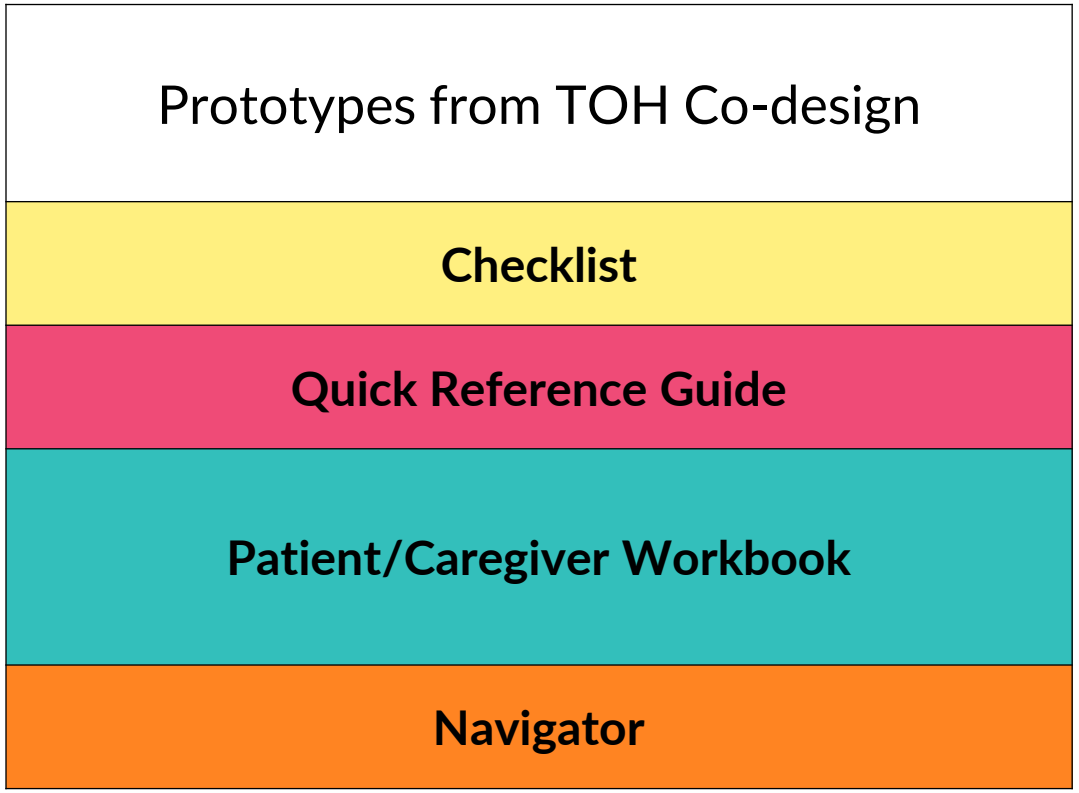
- **Method**
  - Journey mapping
- **Participants**
  - 12 participants: 3 patient/caregiver advisors, 9 healthcare providers from TOH, Bruyère, and community
- **Output**
  - Four prompt cards aiming to:
    - Understand challenges
    - Identify metrics for successful transitions
    - Identify actions that would improve the patient/caregiver transition experience



ISENBERG LAB

Co-design workshops (Site 1)

- **Method**
  - Virtual workshops
  - Physical prompt cards delivered to participants' homes
- **Participants**
  - 10 patients and caregivers in 8 workshops
  - 5 healthcare provider workshops (experience supporting diverse patients and caregivers)
- **Output**
  - Four low-fidelity prototypes



Co-design workshops (Site 1)

Feedback from participants

- Feedback:
  - Patients and caregivers noted that having a paper intervention would be beneficial
  - Belief that the Chart in the Home binder was only for care team use
  - Contact information was sometimes outdated or inaccurate
  - Cognitive load and overwhelm due to information density

- How did this feedback inform our co-design process?
  - Patients and caregivers wanted a tool in their hands
  - Patients and caregivers wanted to know: questions to ask their healthcare team and roles of members of their healthcare team, how to navigate the changes that accompany the transition, and contact information and who to contact in different scenarios
  - How can our intervention fit into healthcare providers' current workflow and work with Chart in the Home (i.e., not become another handout)?

Overview

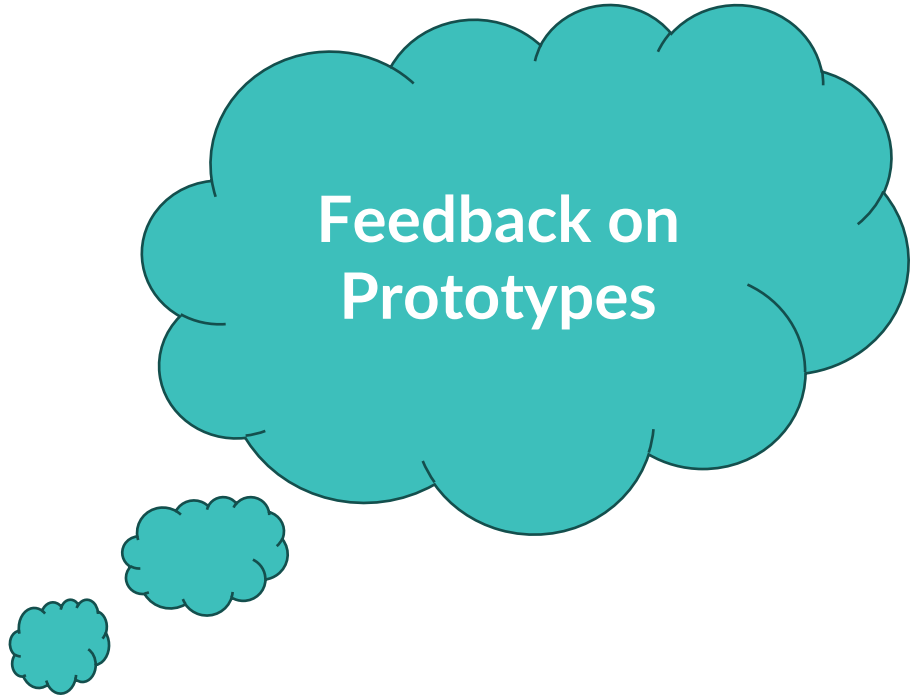

1
Co-design workshop development
(Site 1 – TOH)
April -June 2022
2
Co-design workshops
(Site 1 – TOH)
July 2022-March 2023
3
Low-fidelity prototyping
(Site 1 – TOH)
April 2023
1
Co-design workshop development
(Site 2 – Bruyère)
May-August 2023
2
Co-design workshops
(Site 2 – Bruyère)
September 2023-February 2024
3
Low-fidelity prototyping
(Site 2 – Bruyère)
March 2024
4
High-fidelity prototyping
(Sites 1 & 2)
May 2024

Key Terms

- **Low-fidelity prototype**
  - A simple prototype to facilitate early ideation and testing of ideas (e.g., concept sketches, paper prototypes, storyboards)
- **High-fidelity prototype**
  - A refined prototype that represents the look, feel, and functionality of the final product (e.g., immersive roleplays, booklets)

Low-fidelity prototyping (Site 1)

- **Method**
  - Virtual workshops
- **Participants**
  - 20 healthcare providers from TOH, Bruyère, and community (including palliative care physicians, nurses and nurse specialists, care coordinators and managers, and social workers)
- **Output: Feedback on low-fidelity prototypes**
  - Feedback on the viability of low-fidelity prototypes
  - Transition navigator role and patient & caregiver workbook were not as favorable as checklist and quick reference guide



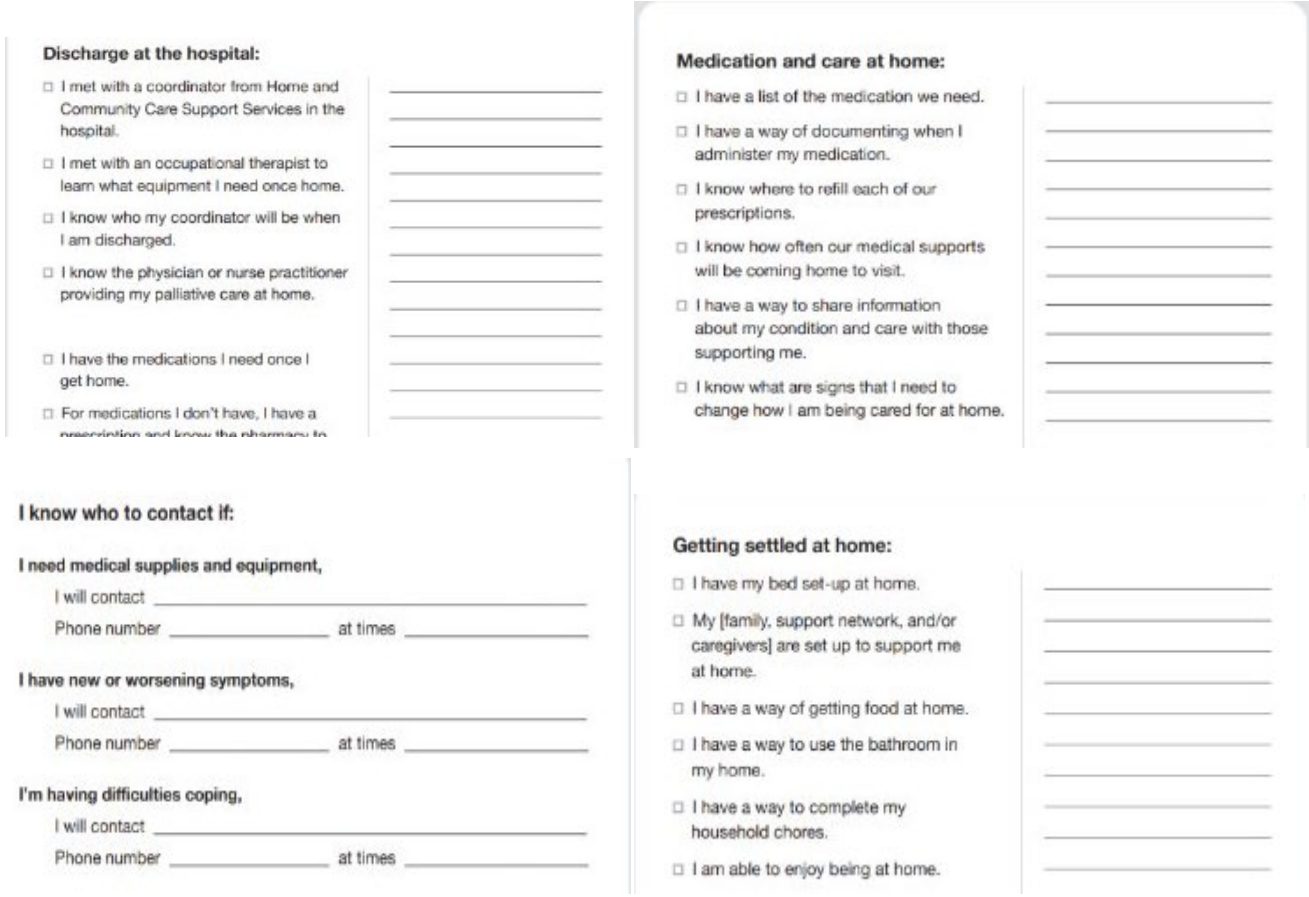
ISENBERG LAB

Overview


1
Co-design workshop development
(Site 1 – TOH)
April -June 2022
2
Co-design workshops
(Site 1 – TOH)
July 2022-March 2023
3
Low-fidelity prototyping
(Site 1 – TOH)
April 2023
1
Co-design workshop development
(Site 2 – Bruyère)
May-August 2023
2
Co-design workshops
(Site 2 – Bruyère)
September 2023-February 2024
3
Low-fidelity prototyping
(Site 2 – Bruyère)
March 2024
4
High-fidelity prototyping
(Sites 1 & 2)
May 2024

Co-design workshop development (Site 2)

- **Method**
  - Research team developed checklist and quick reference items that would be useful at key moments during a patient's H2H transition
- **Output**
  - Four prompt cards and a discussion guide as a co-design workshop activity



Discharge at the hospital:

- ☐ I met with a coordinator from Home and Community Care Support Services in the hospital.
- ☐ I met with an occupational therapist to learn what equipment I need once home.
- ☐ I know who my coordinator will be when I am discharged.
- ☐ I know the physician or nurse practitioner providing my palliative care at home.
- ☐ I have the medications I need once I get home.
- ☐ For medications I don't have, I have a

Medication and care at home:

- ☐ I have a list of the medication we need.
- ☐ I have a way of documenting when I administer my medication.
- ☐ I know where to refill each of our prescriptions.
- ☐ I know how often our medical supports will be coming home to visit.
- ☐ I have a way to share information about my condition and care with those supporting me.
- ☐ I know what are signs that I need to change how I am being cared for at home.

I know who to contact if:

I need medical supplies and equipment,

I will contact _____

Phone number _____ at times _____

I have new or worsening symptoms,

I will contact _____

Phone number _____ at times _____

I'm having difficulties coping,

I will contact _____

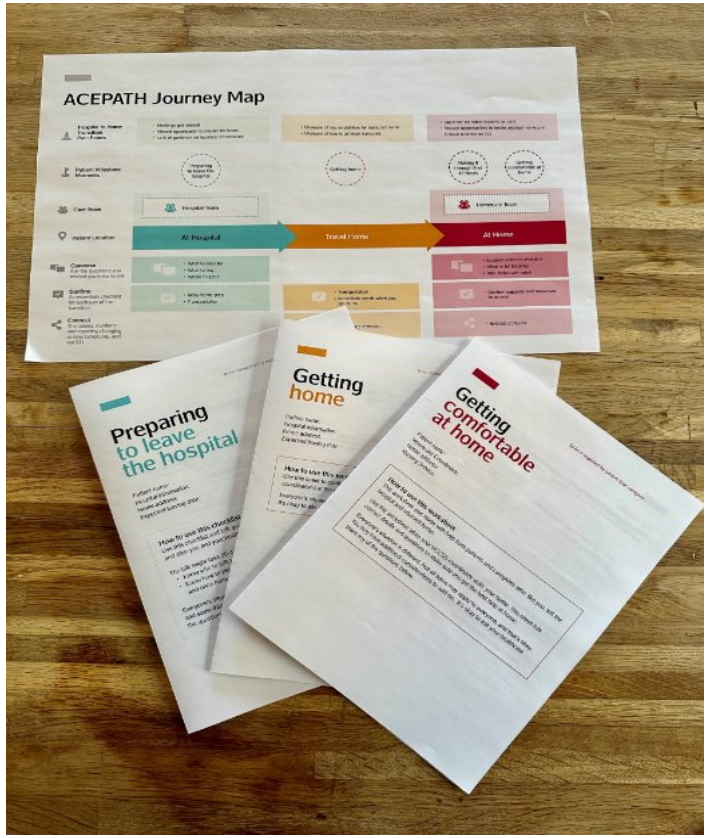
Phone number _____ at times _____

Getting settled at home:

- ☐ I have my bed set-up at home.
- ☐ My [family, support network, and/or caregivers] are set up to support me at home.
- ☐ I have a way of getting food at home.
- ☐ I have a way to use the bathroom in my home.
- ☐ I have a way to complete my household chores.
- ☐ I am able to enjoy being at home.

Co-design workshops (Site 2)

- **Method**
  - Virtual workshops
  - Physical prompt cards delivered to participants' homes
- **Participants**
  - 4 patients and caregivers in 4 workshops
- **Output**
  - Re-designed the checklist and quick reference guide items for use at three timepoints:
    - Moment 1: Preparing to leave the hospital
    - Moment 2: Getting home
    - Moment 3: Getting comfortable at home

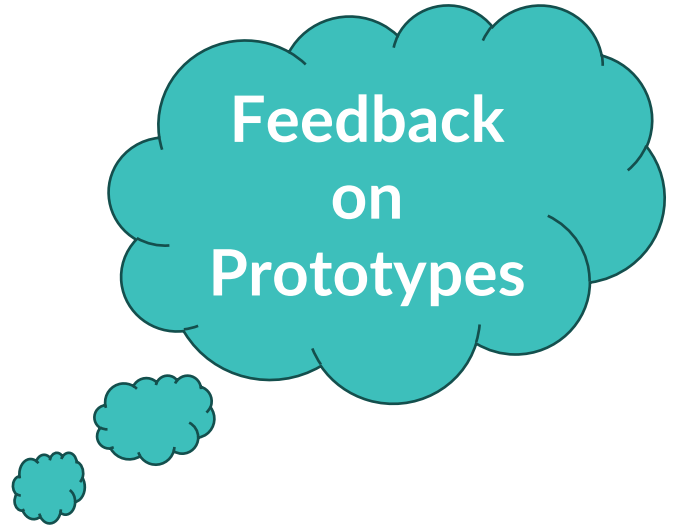


Overview


1
Co-design workshop development
(Site 1 – TOH)
April -June 2022
2
Co-design workshops
(Site 1 – TOH)
July 2022-March 2023
3
Low-fidelity prototyping
(Site 1 – TOH)
April 2023
1
Co-design workshop development
(Site 2 – Bruyère)
May-August 2023
2
Co-design workshops
(Site 2 – Bruyère)
September 2023-February 2024
3
Low-fidelity prototyping
(Site 2 – Bruyère)
March 2024
4
High-fidelity prototyping
(Sites 1 & 2)
May 2024

Low-fidelity prototyping (Site 2)

- **Method**
  - Virtual workshops
- **Participants**
  - 14 healthcare providers from TOH, Bruyère, and community (including palliative care physicians, nurses, occupational therapists, social workers, care coordinators and administrators, spiritual care providers, and physiotherapists)
- **Output**
  - Feedback on items for use at each timepoint
  - Identified healthcare providers who would be best to help patients/caregivers complete the guide:
    - Preparing to leave hospital - **social workers**
    - Getting home - **social workers and hospital home care coordinators**
    - Getting comfortable at home - **community home care coordinators**



ISENBERG LAB

Overview

ISENBERG LAB

High-fidelity prototyping (Site 1 & 2)

- **Method**
  - In-person, workshops at TOH and Bruyère
  - Healthcare providers used ACEPATH in a simulated interaction with patient and/or caregiver who had experienced an H2H transition.
- **Participants**
  - 4 patients/caregivers and 4 healthcare providers in 4 workshops.
- **Output**
  - Participants provided feedback on the intervention and metrics (Readiness for Discharge Scale and Post-Discharge Coping Scale developed though content validity testing).

ISENBERG LAB

Accessibility Assessment (Site 1 & 2)

- **Accessibility assessment provided by the Accessibility Institute at Carleton University**
  - Carleton team assessed the content of materials, and provided recommendations for ways to support individuals both delivering and utilizing the checklists, service name/number list, and instruction page

ISENBERG LAB

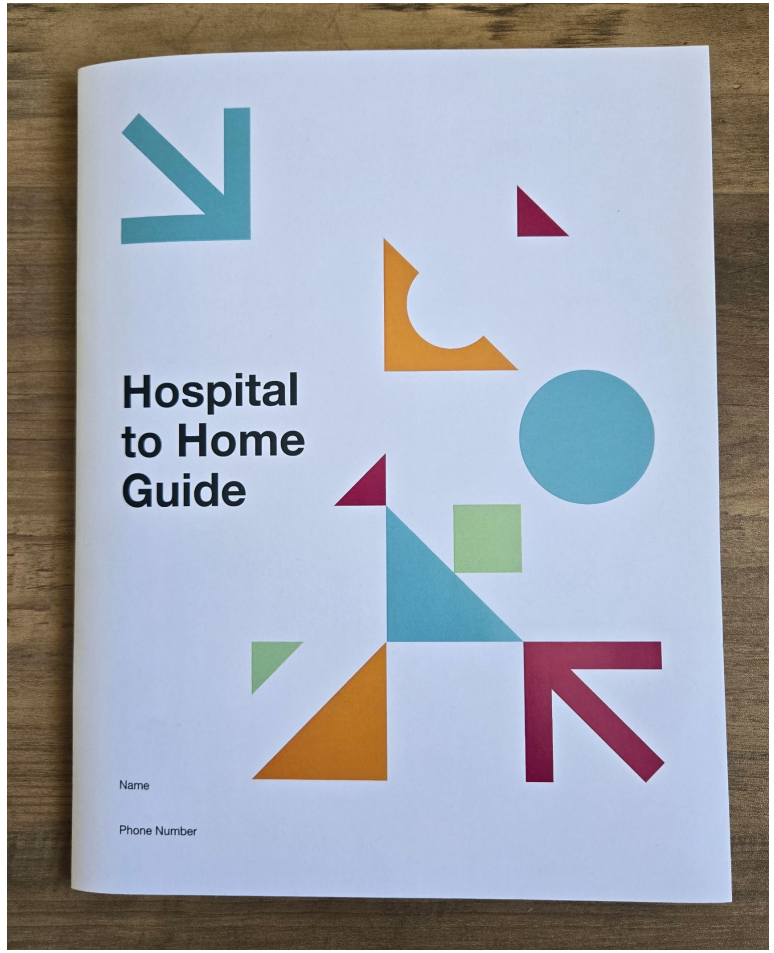
Final ACEPATH Guidebook (Site 1 & 2)

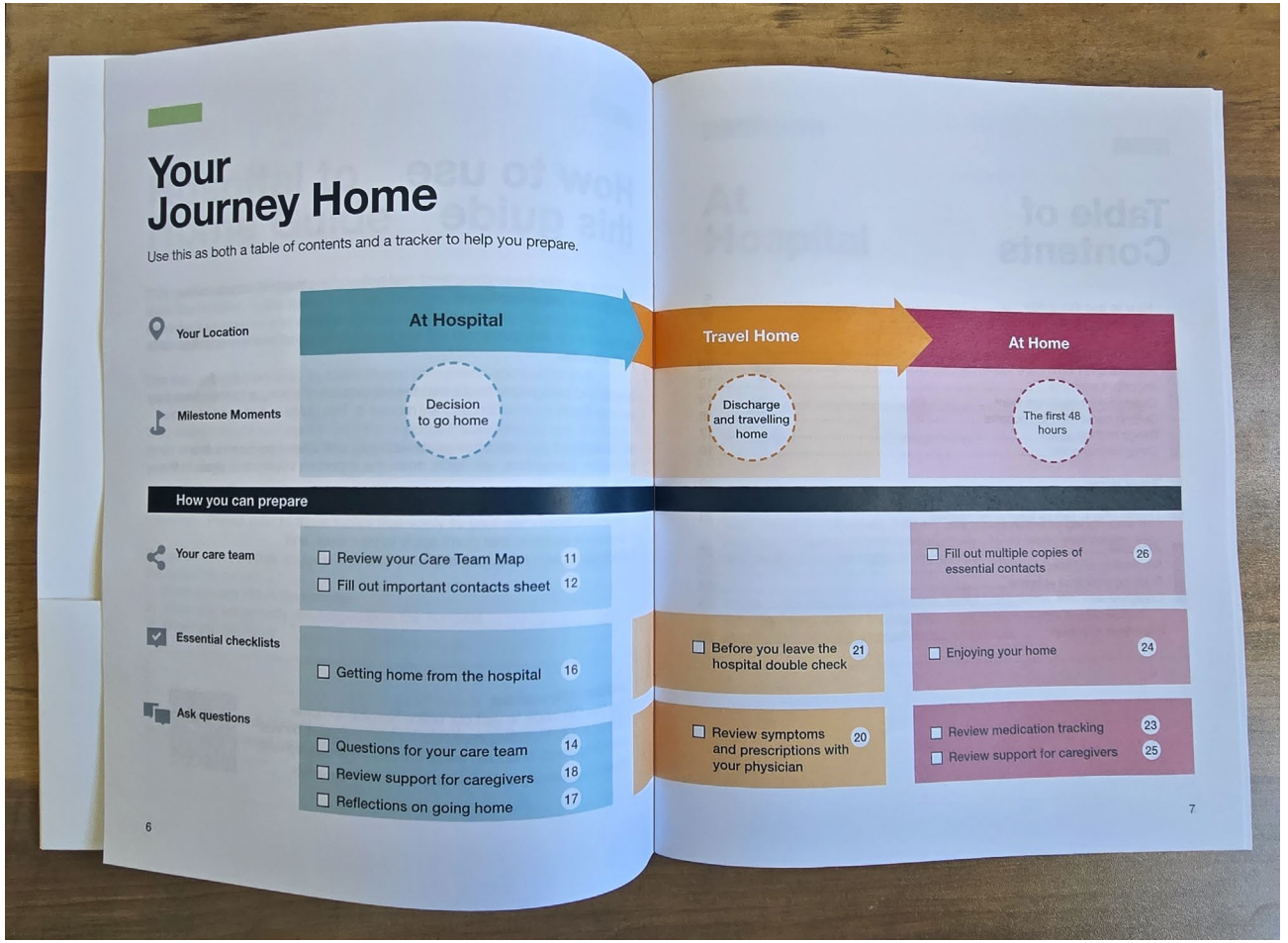
- Guidebook provided to patients and caregivers to empower them to have conversations with their healthcare providers
- Guidebook is designed to limit cognitive load/overwhelm and adapt to their circumstances
- Reducing healthcare provider workload, bridging information gap between hospital and home
- Healthcare provider partners (hired by the study team) will assist patients and caregivers with review and completion of the guidebook
- Patients and caregivers have opportunities to ask questions, receive resources, understand the transition process, and set expectations about the transition

QR code for our current guidebook on the Isenberg Lab website

ISENBERG LAB

Final ACEPATH Guidebook (Site 1 & 2)





Final ACEPATH Guidebook (Site 1 & 2)

Table of Contents

FRIDGE

Nursing service _____

Phone number: _____

Homecare Coordinator _____

Phone number: _____

Personal support worker _____

Phone number: _____

Community doctor/nurse practitioner _____

Phone number: _____

Pharmacy _____

Phone number: _____

Reliable social contact _____

Phone number: _____

ISENBERG LAB

How we will measure the intervention's success

Outcome measures (Site 1 & 2)

Content validity testing

- Scales developed by Dr. Marianne Weiss at Marquette University, Milwaukee, WI

- **Readiness for Discharge scale**
  - Measures readiness to return home from hospital
  - 4 domains of discharge readiness:
    - Personal
    - Knowledge
    - Perceived Coping Ability
    - Expected Support

- **Post-Discharge Coping scale**
  - Measures difficulty with coping at home following discharge from hospital
  - Uses 10 items

References:
https://www.marquette.edu/nursing/hospital-discharge-scales-general.php
https://www.marquette.edu/nursing/readiness-hospital-discharge-scale.php
https://www.marquette.edu/nursing/hospital-discharge-scales-post-discharge-coping.php

ISENBERG LAB

Outcome measures (Site 1 & 2)

Content validity testing

- **Method**
  - Tailored the scales to people receiving palliative care, their caregivers, and healthcare providers caring for them
  - Tested the content validity of the adaptations
- **Participants**
  - 4 patients, 4 caregivers, and 6 healthcare providers reviewed the patient-facing questionnaire
  - 5 caregivers reviewed the caregiver-facing questionnaire
  - 4 healthcare providers reviewed the healthcare provider-facing questionnaire
- **Output**
  - Ensure the selected metrics are patient- and caregiver-driven and health system relevant
  - Scales to be used as outcome measures in the implementation study

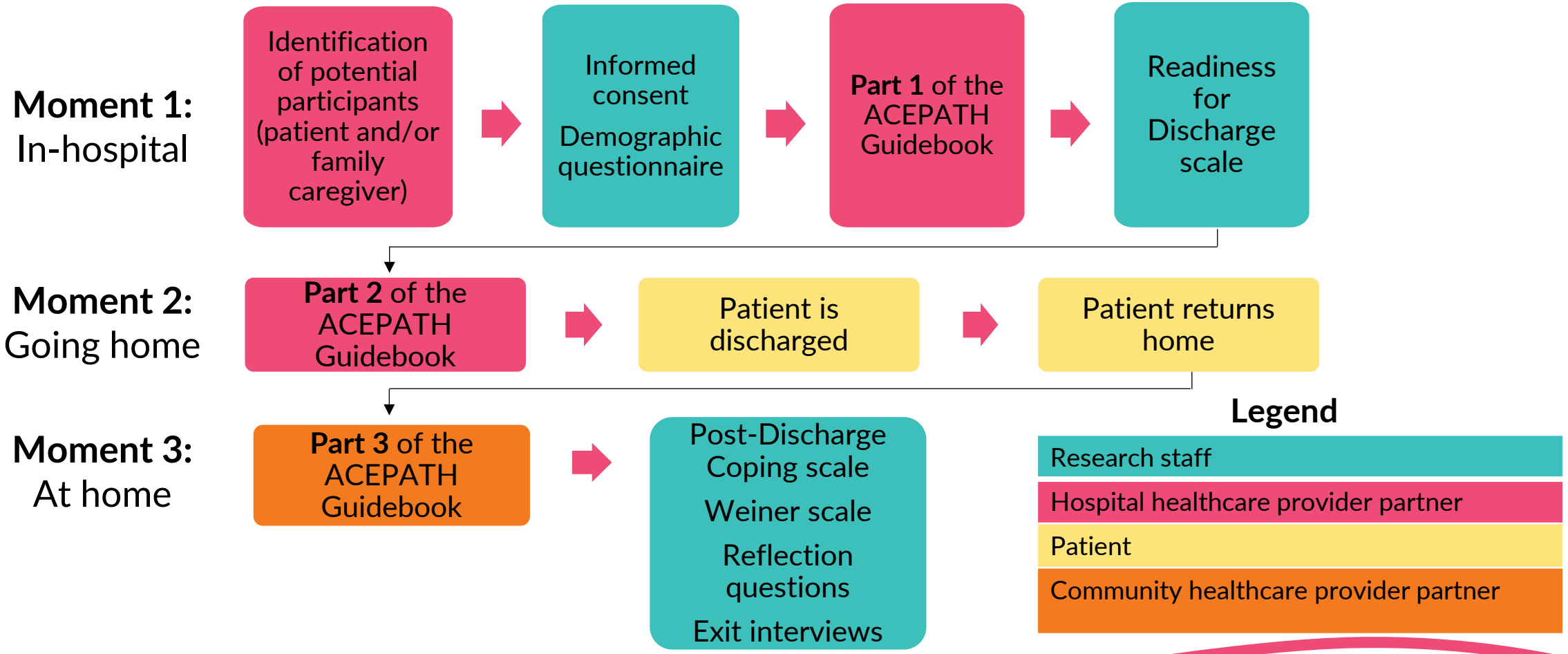
How we will test the intervention

Implementation/Pilot Study

- An implementation study will be conducted to evaluate acceptability, appropriateness, feasibility, costs, and fidelity of the guidebook (ACEPATH) at both sites
  - Readiness for Discharge scale and Post-Discharge Coping scale – patient-, family caregiver-, and healthcare provider-facing
  - Participant reflection questions
  - Weiner scales – measures acceptability, appropriateness, and feasibility of the intervention
  - Interviews with healthcare provider partners
- We have received ethics approval through Clinical Trials Ontario

ISENBERG LAB

Implementation/Pilot Study



Implementation/Pilot Study

- Stay tuned!
- Training sessions at TOH and Bruyère Health, and for community providers to introduce the intervention to healthcare providers involved in H2H transitions.
  - For information on attending training sessions or viewing recordings of the sessions, please see the handout with our contact information
- We hope our intervention can become part of regular clinical practice at TOH and Bruyère Health and possibly be scaled to other sites and regions

ISENBERG LAB

Key Messages

- Patients, family caregivers, and healthcare professionals considered current efforts to improve the hospital to home transition to be subpar
- Recruitment of individuals from equity-deserving groups was a challenge despite targeted efforts and extended recruitment timeline
- Despite the growth of apps/digital solutions in healthcare, most participants indicated a clear preference for a tangible paper solution that is facilitated by a healthcare professional
- We successfully co-designed an intervention that was amenable to patients, family caregivers, and healthcare providers
- Patients and caregivers did not want the success of their transition measured with health utilization but rather the quality of the transition, their readiness, and coping
- We hope that members of the audience today will support our upcoming implementation study and attend our training sessions, if applicable to your role

Santé Bruyère
Institut de recherche

Bruyère Health
Research Institute

uOttawa

ISENBERG LAB

The Ottawa Hospital

L'Hôpital d'Ottawa

Thank you!

MMcCoy@bruyere.org

www.isenberglab.com

ISENBERG LAB


Breakout groups

Breakout Group Questions

1. Do these findings resonate with you given your experiences with hospital-to-home transitions?
2. Would an intervention like this work at your site? What, if anything, would need to be modified?
3. We are looking to scale our intervention to the entire Champlain region, what are your thoughts on how to expand most effectively?

ISENBERG LAB