

# CO-DESIGNING PROTOTYPES FOR IMPROVING TRANSITIONS FROM YOUTH TO ADULT MENTAL HEALTH SERVICES IN ONTARIO: INTEGRATING IMPLEMENTATION SCIENCE WITH EXPERIENCE-BASED CO-DESIGN METHODS

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# Project Overview

*Hamilton Modified Experience Based Co-Design (EBCD) Study for Youth to Adult Mental Health Transitions*

- Location: Hamilton, Ontario
- Goal: Improve transition from child and youth to adult mental health services
- Method: Modified Experience Based Co-Design (EBCD)

# OVERVIEW OF EBCD

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# Experience-based Co-design (EBCD)<sup>1</sup>

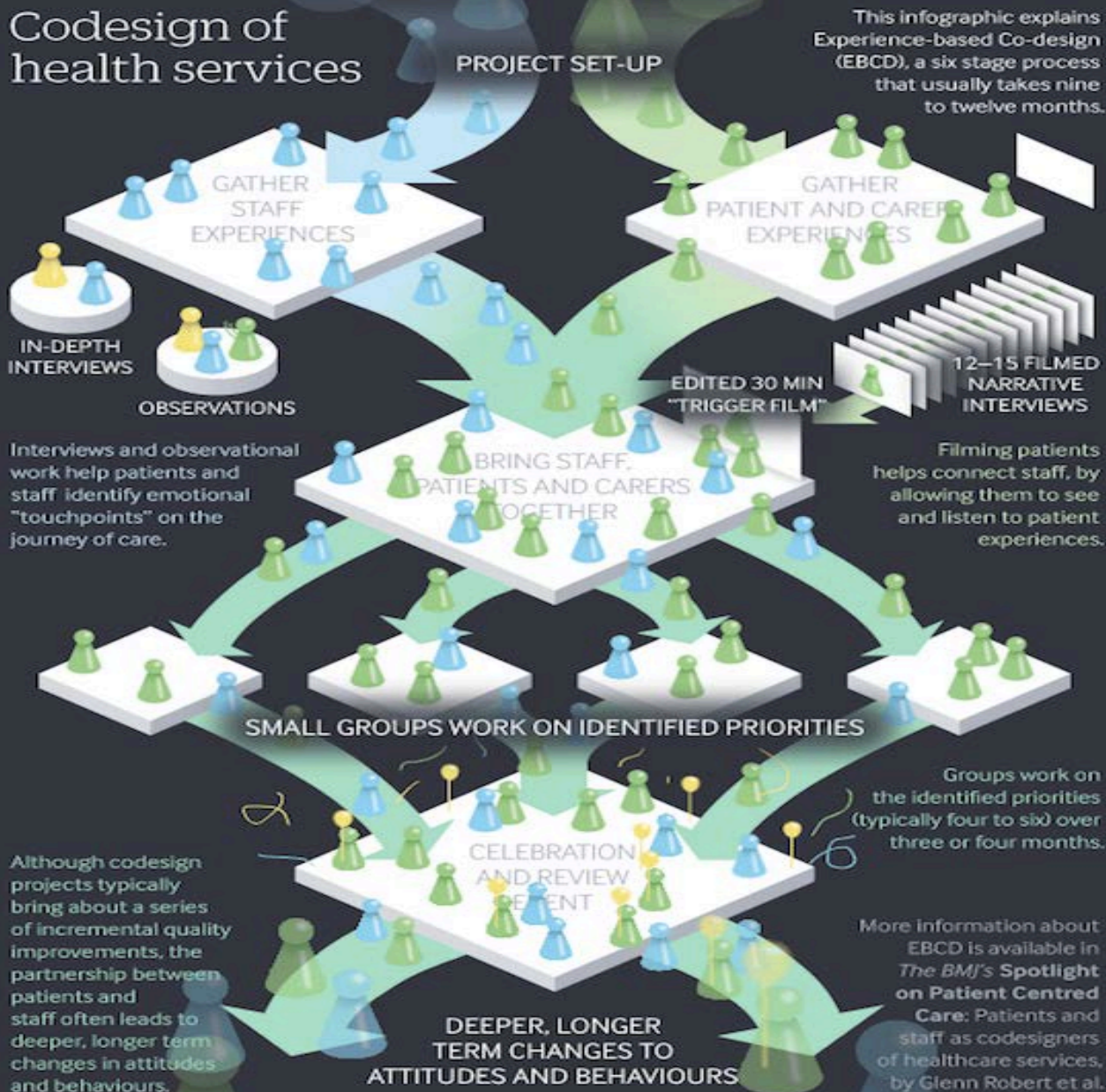
- An approach that attempts to incorporate service user experience as a key pillar of good health care design



- ‘Touch points’ are the emotionally charged, memorable moments in a patient’s journey
- Can shape the overall experiences of users, family members and service providers

<sup>1</sup>Bate P, Robert G. Experience-based design: from redesigning the system around the patient to co- designing services with the patient. *Qual Saf Health Care*. 2006;15(5):307-310

# Codesign of health services



# Stages of EBCD

## DIAGNOSTIC

- Using Informants
- Contextual Inquiry
- Ethnographic Interviewing
- Discovery Interviews
- Participant and user interactive observation
- Photographs
- Storytelling
- Videotaping
- Focus groups & listening labs
- Patient-professional action teams
- Conversational Archives

## INTERVENTION

- Step models of design
- Cognitive walk-through
- Card sorts
- Storyboards
- Metaphor elicitation techniques
- Experience motif / haiku
- Scenario development
- Creating personas
- Prototyping
- Experience prototyping
- Heuristic evaluation
- Pseudo-code
- The 'path of expression' approach

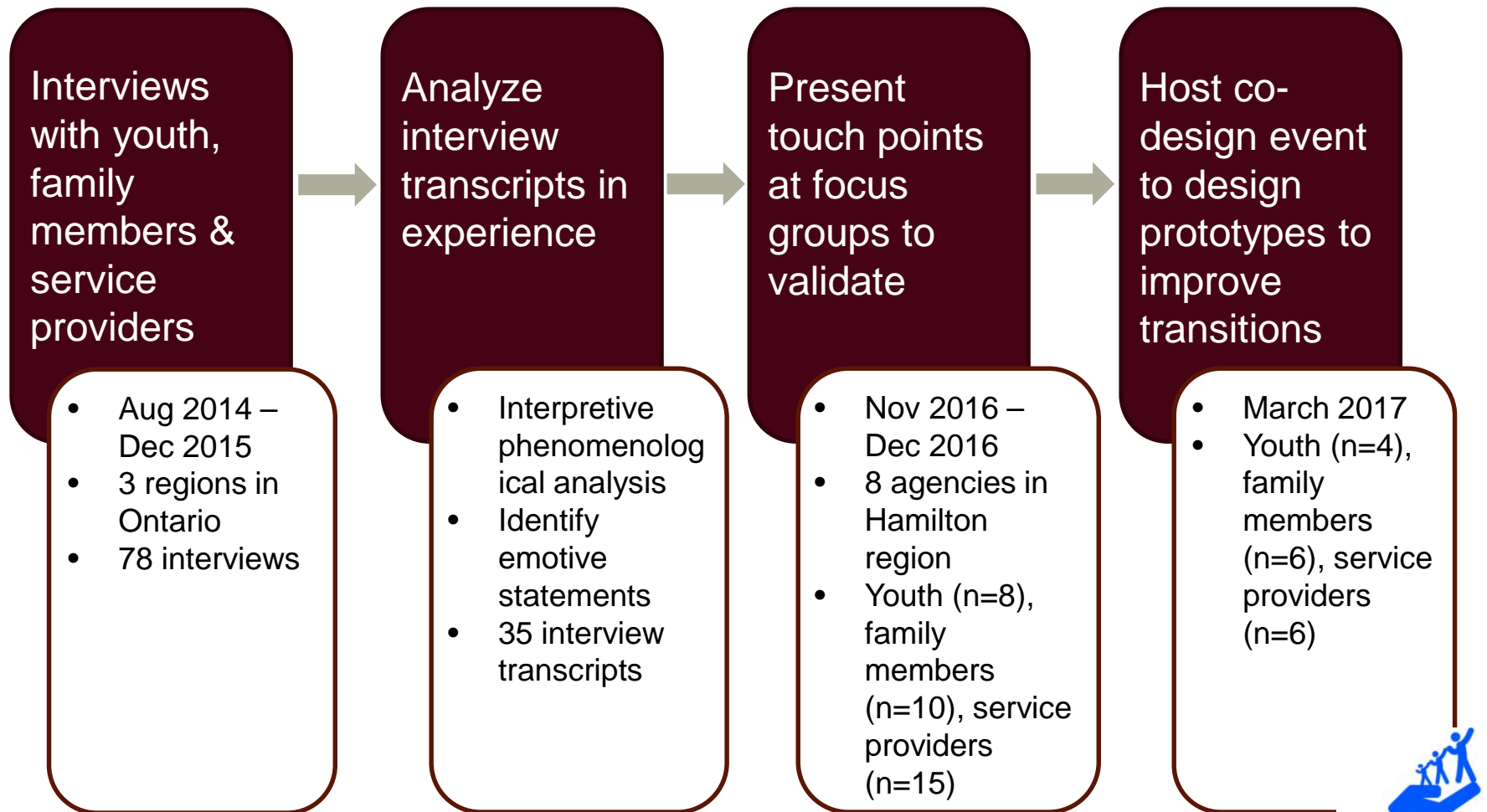
## IMPLEMENTATION

- Smaller co-design groups
- Continued Methods:
  - Storytelling
  - Experience mapping
  - Touch points
  - Creating Design Principles
  - Website creation
- Develop prescriptive design principles

## EVALUATION

- Formative evaluation
  - Action research
  - Constant feedback
  - Ongoing development
- Summative evaluation
  - Retrospective
  - Surveys, interviews, focus groups

# Project Timeline



# Co-design event

- A co-design event was held in March 2017 in Hamilton, Ontario
- Recruitment for co-design event
  - Focus group participants were invited to participate
  - Anyone who was interested in but was unable to attend the focus groups were invited to participate

- 14 participants:

Youth	Family Members	Service Providers	Organizations
4	6	6	8

- Co-designed solutions around 4 touch points
  1. Youth turn 18 and feel stuck on a waitlist or without services
  2. Service providers are trying to help youth transition but obstacles exist.
  3. Services are not matched to youth's developmental needs
  4. Families feel shut out of adult services.



# Co-Design Process

- This multi-stage process involved:
  1. honing in on WHY each problem exists, (multiple rounds digging deeper)
  2. individually brainstorming potential solutions,
  3. collectively clustering and prioritizing solutions; and
  4. developing an initial prototype.

# Two Approaches to Working Across Perspectives

- The co-design event was split into two co-design rounds:
  1. Separate groups (youth, family, service providers) tackled a touch point that was particularly important from their perspective. The other two stakeholder groups worked in turn to enhance the prototype from their perspective.
  2. Three small mixed groups worked in parallel at the same time to prototype solutions for the fourth common touch point that was important from all three perspectives.
- In both co-design rounds, the resulting prototypes were presented to the entire group for further comment and enhancement

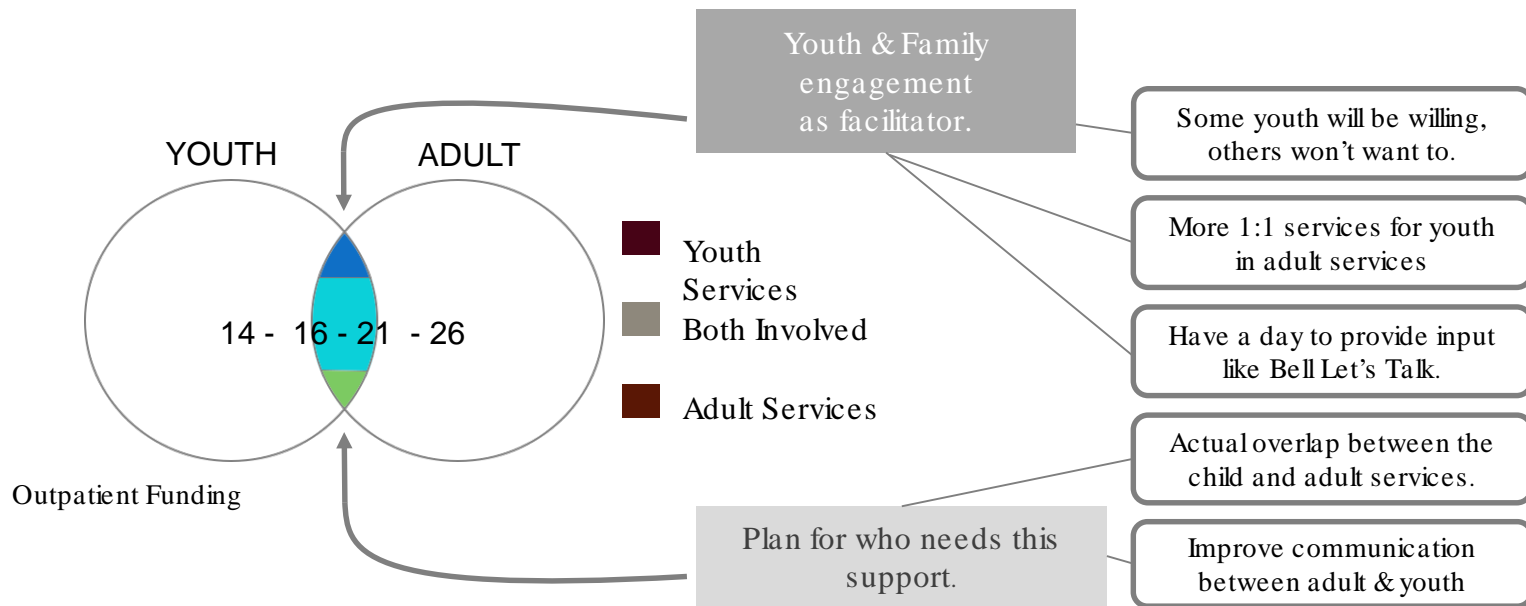
# OVERVIEW OF PROTOTYPES

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# Findings

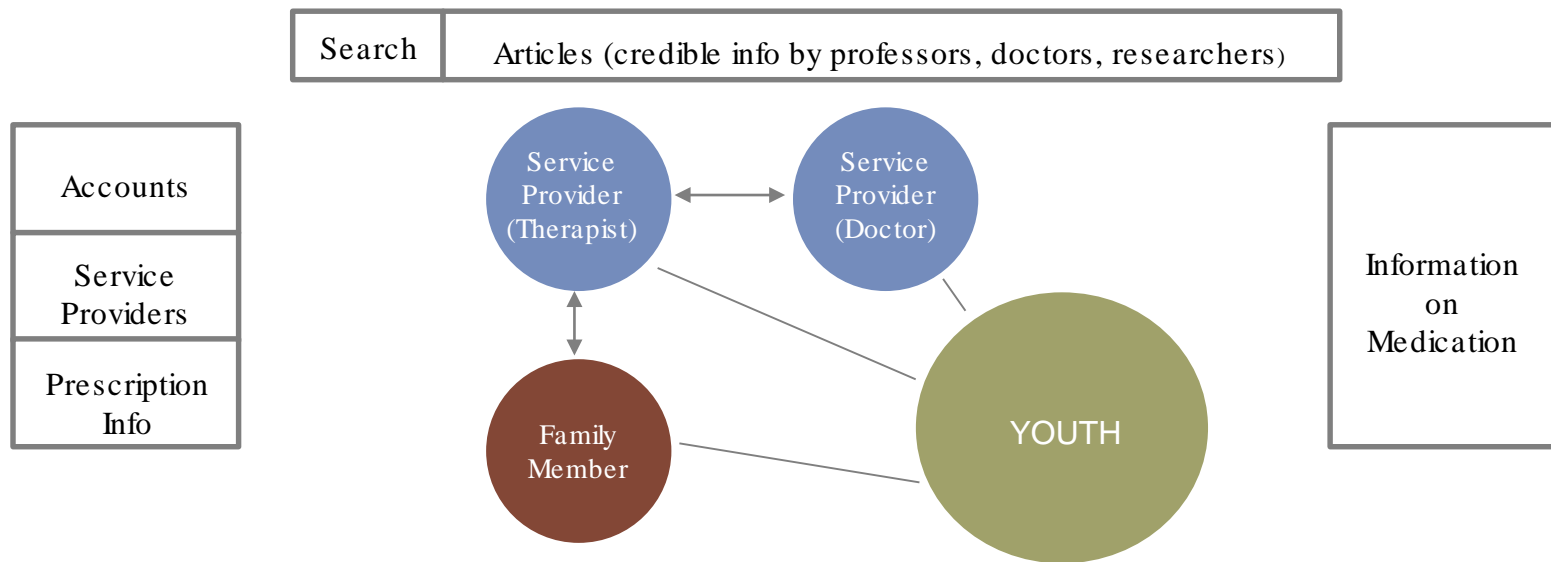
	Youth	Family Members	Service Providers
Prototype 1: REAL Overlap Between Services	3	2	1
Prototype 2: Online Portal to Improve Access & Communication	1	3	2
Prototype 3: Mental Health System Navigator Function/ Portal	2	1	3
Prototype 4: Central Agency to Monitor and Provide Real-Time Information about Access to Services and Waitlist	✓	✓	✓
Prototype 5: Transitions Planning Protocol	✓	✓	✓
Prototype 6: Eliminate Age Barriers and Address Needs Across the Lifespan	✓	✓	✓

# Prototype 1: REAL Overlap Between Services



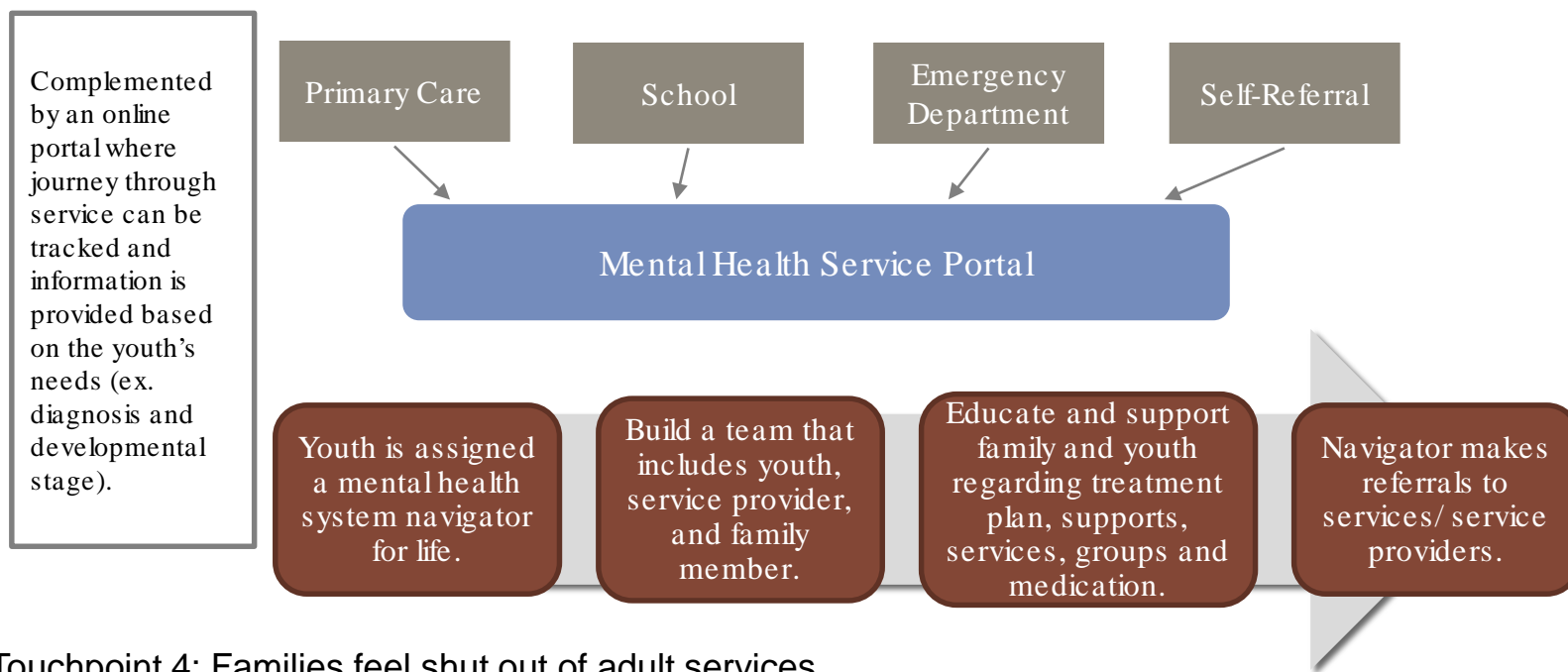
Touchpoint 2: Service providers are trying to help youth transition but obstacles exist

# Prototype 2: Online Portal to Improve Access & Communication



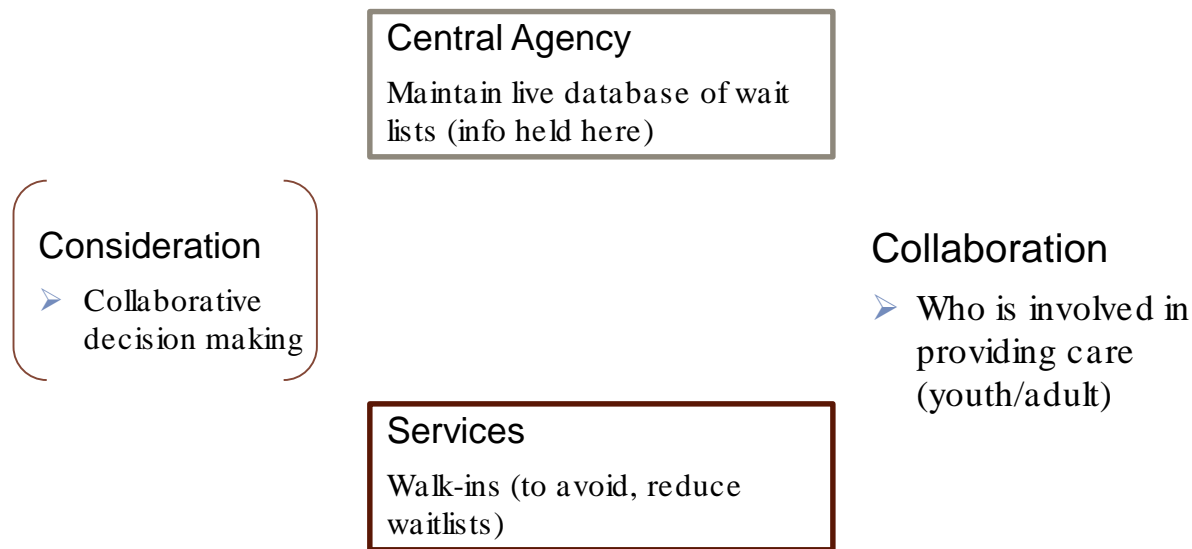
Touchpoint 3: Services are not matched to youth's developmental needs

# Prototype 3: Mental Health System Navigator/ Portal



Touchpoint 4: Families feel shut out of adult services

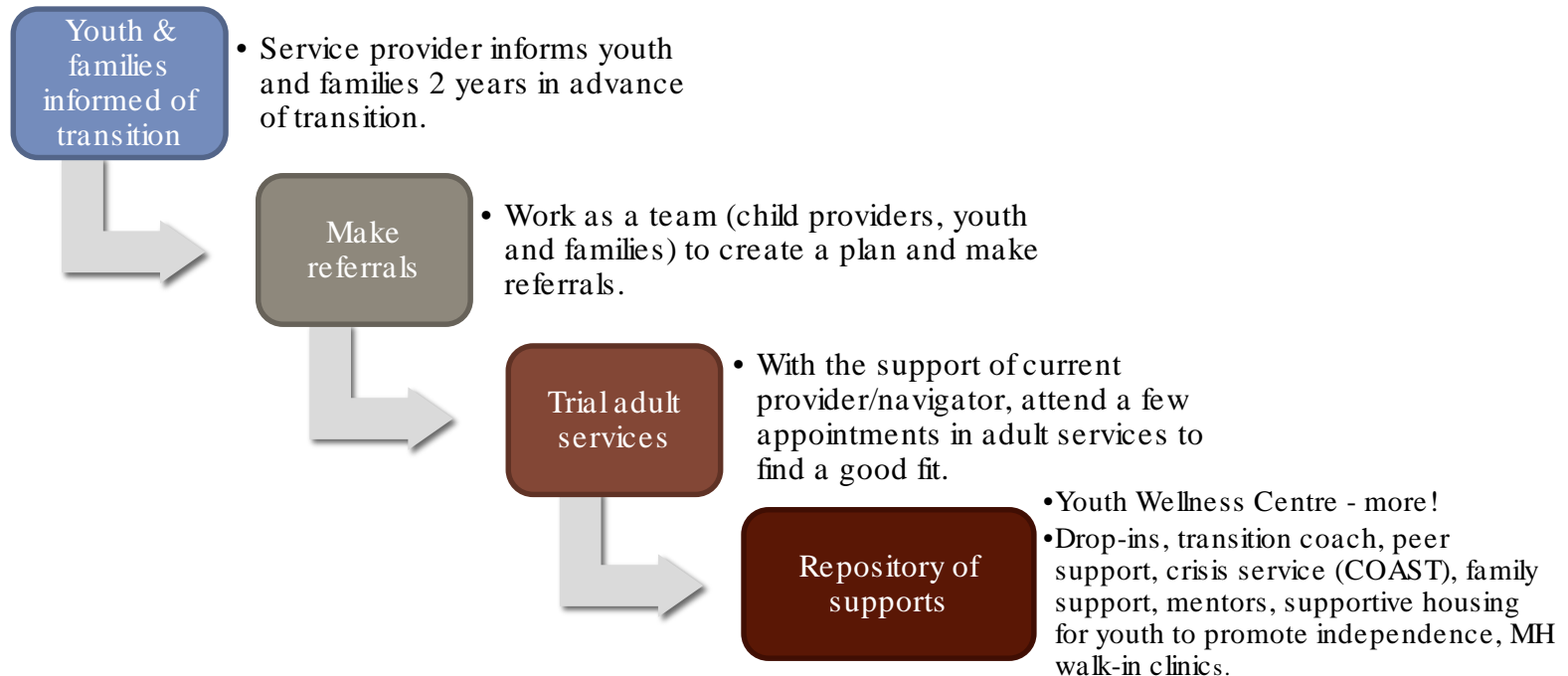
# Prototype 4: Central Agency to Monitor and Provide Real-Time Information about Access to Services and Waitlists



Touchpoint 1: Youth turn 18 and feel stuck on a waitlist without services



# Prototype 5: Transitions Planning Protocol

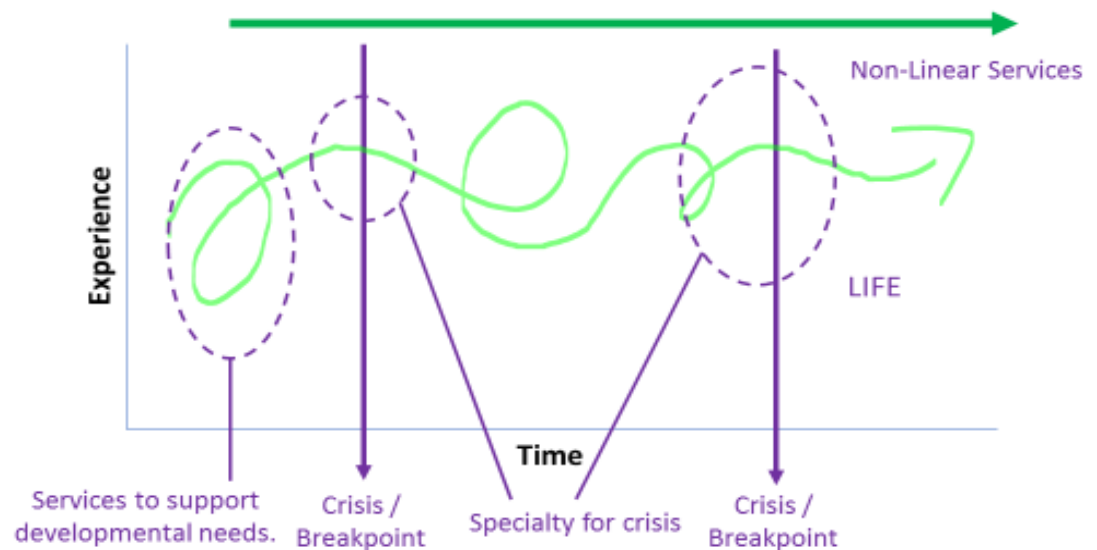


Touchpoint 1: Youth turn 18 and feel stuck on a waitlist without services

# Prototype 6: Eliminate Age Barriers and Address Needs Across the Lifespan

Uses statistics to see where at greatest risk

- Talk to youth/families
- Be responsive (not in 2 years)
- Better match to current need
- Change criteria not just clinical determinants of need
- Be non-linear
- When specialized services needed?
- Functional impact
- Coincide with this critical development stage



Touchpoint 1: Youth turn 18 and feel stuck on a waitlist without services

# SMALL GROUP WORK

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Reflect in small groups on the prototypes

# ACTIVITY 1 – Reflections on Prototypes

- Form 6 small groups
- Discuss the co-designed prototypes that were presented
- On the handout, jot down any reflections that you have about any of the co-designed prototypes.

# OVERVIEW OF IMPLEMENTATION SCIENCE

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# NIRN: Active Implementation Frameworks

**WHAT**



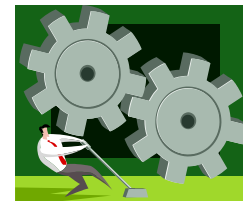
**Usable Interventions**

**WHEN**



**Implementation Stages**

**HOW**



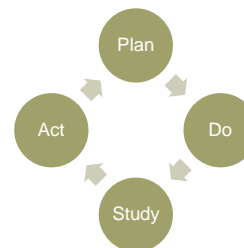
**Implementation Drivers**

**WHO**



**Implementation Teams**

**HOW**



**Improvement Cycles**



# Usable Interventions (WHAT)





*To be usable, it's necessary to have sufficient detail about an intervention. [...]*

*An intervention needs to be teachable, learnable, doable, and be readily assessed in practice*

[Blase, K., and Fixsen, D. (2013). *The National Implementation Research Network*, from <http://nirn.fpg.unc.edu>]

OUR PROTOTYPE(S)  USABLE INTERVENTION(S)

# Usable Interventions

-  Clear description of the program
-  Identified core intervention components (fidelity features)
-  Operational definitions of core intervention components
-  Practical performance/fidelity assessment

**What do we need to do next to meet these criteria?**



# Implementation Stages (WHEN)



*Conducting stage-appropriate implementation activities is necessary for successful service and system change (Metz & Bartley, 2012)*

# Stage-based Implementation

*Stages are not linear and overlap often occurs.*

*Sustainability planning is important at all stages.*



## Exploration

- Decide WHAT to adopt and implement



## Installation

- HOW will it happen? Plan what needs to be in place to implement the WHAT.



## Initial Implementation

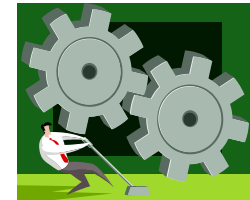
- Put the plan on the ground and implement the WHAT (continuous PDSA cycles).



## Full Implementation

- Make sure it works, then do it better (PDSA) and make it "business as usual."

# Implementation Drivers (HOW)



*Developing implementation components (a.k.a. drivers) results in an implementation infrastructure that supports competent and sustainable service delivery* (Metz & Bartley, 2012)

# What are Implementation Drivers?

Common features of successful implementation

**Competency Drivers:** Develop, improve and sustain staff's ability to implement an intervention as intended.

**Organization Drivers:** Create and sustain hospitable organizational and systems environments for effective services.

**Leadership Drivers:** Focuses on providing the right leadership for the different types of challenges.

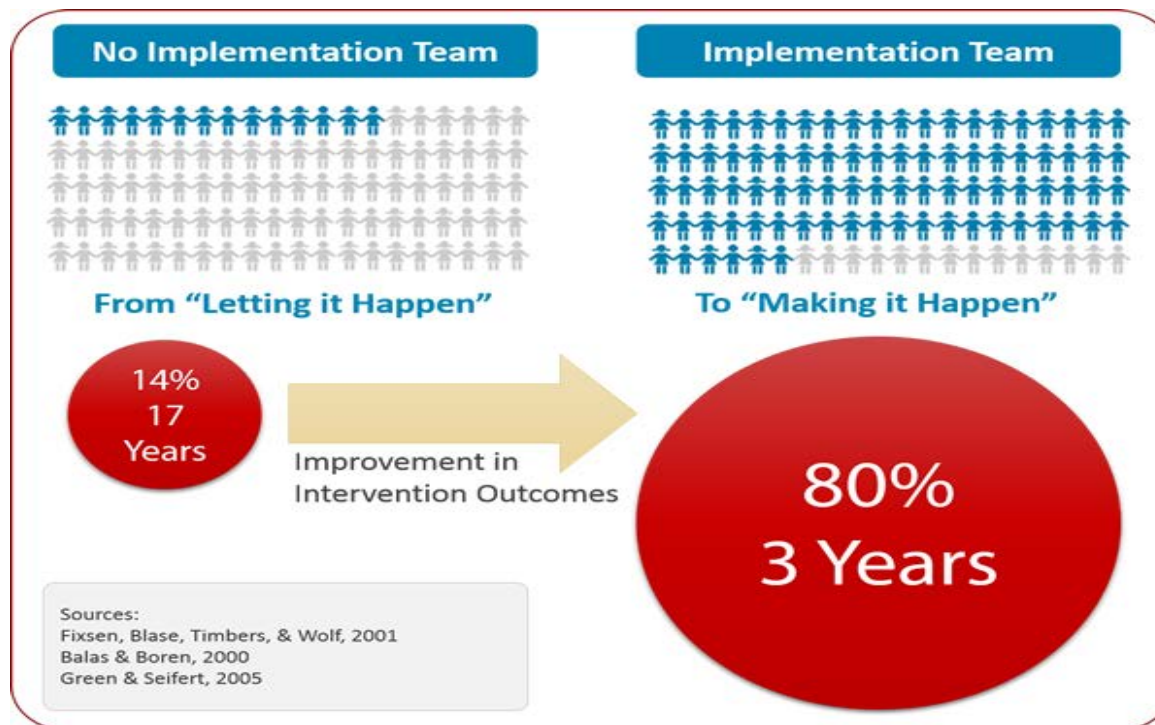
# Implementation Teams (WHO)



*Creating Implementation Teams that actively work to implement interventions results in quicker, higher-quality implementation*

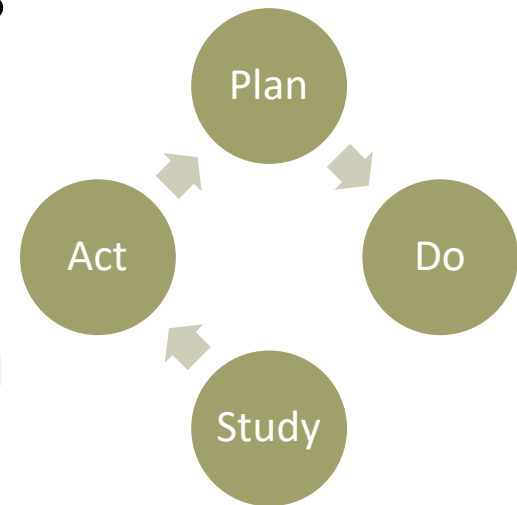
*(Metz & Bartley, 2012)*

# The Value of Implementation Teams



# Improvement Cycles (HOW)

Improvement Cycles support the purposeful process of change.









# Improvement Cycles: Get Started and Get Better

1. Rapid cycle (PDSA) problem solving (Shewhart, 1931; Deming, 1986)
2. Usability testing (Rubin, 1994; Nielsen, 2000)
3. Practice-policy communication loop (Fixsen, Blase, Metz, & Van Dyke, 2013)
4. Transformation Zones (Fixsen, Blase, Duda, Naoom & Van Dyke, 2010)



# Implementation tools: Thinking Hats

-  "The facts, just the facts."
-  Symbolizes brightness and optimism - you explore the positives and probe for value and benefit
-  Judgment - the devil's advocate or why something may not work. Spot the difficulties and dangers (most powerful & often used)
-  Feelings, hunches and intuition - express emotions and feelings and share fears, likes, dislikes
-  Creativity - express new concepts and new perceptions.
-  Manage the thinking process - control mechanism that ensures the Six Thinking Hats® guidelines are observed

# Implementation tools: Hexagon Tool

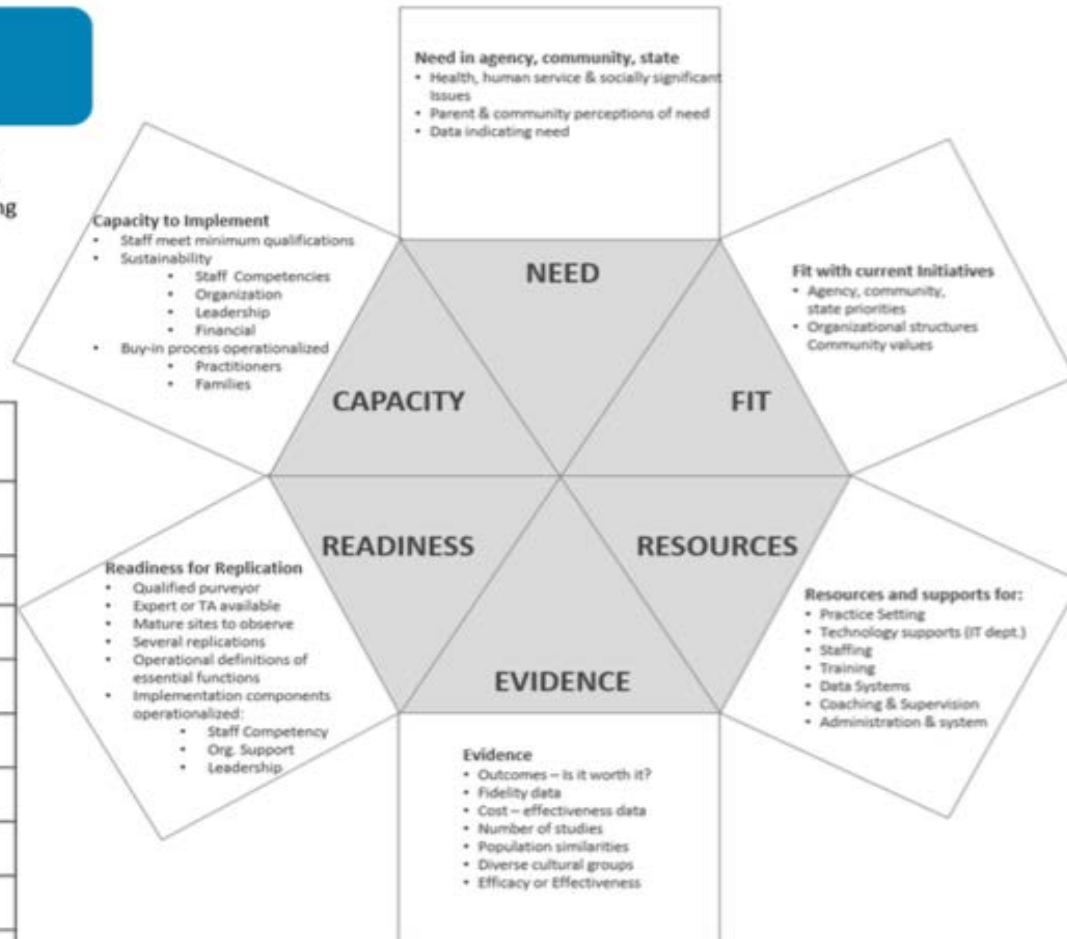
- A tool to “systematically evaluate new and existing interventions via six broad factors”:
  - **Needs** – how well will the prototype address the identified needs.
  - **Fit** – how will the prototype fit with current initiatives, priorities, structures, values
  - **Resource Availability** – training, staffing, technology supports, administration
  - **Evidence** – is there evidence to indicate what the expected outcomes may be if the prototype is implemented well
  - **Readiness for replication** – has the prototype been reproduced elsewhere, was there expert assistance to support, exemplars available for observation
  - **Capacity to implement** – can the prototype be implemented as designed and sustained over time

## The Hexagon Tool Exploring Context

The Hexagon Tool can be used as a planning tool to evaluate evidence-based programs and practices during the Exploration Stage of Implementation.

See the Active Implementation Hub Resource Library  
<http://implementation.fpg.unc.edu>

<b>EBP:</b>			
5 Point Rating Scale: High = 5; Medium = 3; Low = 1. Midpoints can be used and scored as a 2 or 4.			
	High	Med	Low
Need			
Fit			
Resource Availability			
Evidence			
Readiness for Replication			
Capacity to Implement			
<b>Total Score</b>			



©2013 Karen Blase, Laurel Kiser and Melissa Van Dyke  
Adapted from work by Laurel J. Kiser, Michelle Zabel, Albert A. Zachik, and Joan Smith (2007)



# SMALL GROUP WORK

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Apply the Hexagon tool in small groups

# ACTIVITY 2 – Considerations for implementing

- Each small group will be assigned a prototype to discuss
- Assign each member of your group one of the six *Thinking Hats*
- Work together to apply the Hexagon tool
  - Rate each of the factors on a score of 1-5
    - (1 indicated low level of acceptability and 5 indicates 5)
  - Average the scores for each factor across all group members
  - Discuss the strengths and challenges of each factor related to the prototype being discussed
- Be prepared to report back

# Wrap-up Group Discussion

- General observations – did you make headway? Where you able to overcome obstacles?
- Questions that arose for you?
- Anything that really surprised you?
  
- Is this relevant to your own activities?

# Thank you! And Contact info

- *We are grateful to the Ontario Ministry of Health and Long-Term Care, who provided funding support through a Health Systems Research Fund Grant and the Ontario SPOR Support Unit.*
  - The views expressed in the presentation are the views of the authors and should not be taken to represent the views of the Government of Ontario.
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- Thanks to the entire research team: Heather Bullock, Samantha Brandow and Christina Hackett, Christina Roussakis
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