CanIMPACT: Canadian Team to Improve Community-Based Cancer Care along the Continuum

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CanImpact®
Improving Cancer Care Together

Research Objectives

CanIMPACT is a multidisciplinary pan-Canadian team of researchers, PCPs and cancer specialists. The overall goal of CanIMPACT is to elucidate gaps in care, and develop and test strategies to enhance the capacity of PCPs to provide care to cancer patients and improve integration and coordination of care along the cancer care continuum. Using a mixed methods approach, CanIMPACT is comprised of three lines of inquiry currently underway:

1. Population-based studies using administrative health databases to describe variations and gaps in care.
2. Qualitative studies to understand context.
3. An environmental scan through key-informant interviews and review of the grey and published literature to catalogue existing evidence, programs and tools.
4. Pilot testing an intervention using pragmatic randomized controlled trial (pRCT).

Cross cutting Themes

- **Shared Care** –CBPHC providers, specialist providers, patients/families through self-management approaches.
  - develop a framework for shared care that can be tailored to the unique needs of patient at different phases, with different types of cancer, stage of disease, treatments
- **Continuity of Care/Coordination of Care** - a major challenge in cancer care; many health professionals; from multiple settings, thus leading to fragmented and uncoordinated care, which can jeopardize quality and patient safety
  - key variables and outcome measures will align with broader CBPHC initiative
- **Vulnerable populations** – elderly; northern/rural/remote; low income; immigrant

Cross cutting Methods

- Population based administrative health databases
- Qualitative methods
- Knowledge translation
- Pragmatic trial
- Capacity building

Four streams of inquiry: diagnosis, treatment, survivorship, and personalized medicine

- The diagnosis, treatment, and survivor phases are particularly critical, and interventions to improve care have been understudied relative to prevention/screening and end-of-life care.
- PM is also an emerging area of importance.
- Hence, diagnosis, treatment, survivorship and PM will be the focus of our research.

Overall Objective

- To develop an inter-disciplinary multi-jurisdictional coordinated program of research and knowledge transfer to enhance the capacity of primary care to provide care to cancer patients and improve the link between primary care and cancer specialty care along the cancer care continuum.
  - → Inter-disciplinary multi-jurisdictional coordinated program of research
  - → Examine current practices, identify care gaps across healthcare sectors, and develop and test an approach to shared care for comparative evaluation across jurisdictions to address those gaps.
  - → Special focus will be on breast cancer and specific vulnerable populations.

Specific Programmatic Objectives

1. To establish a coordinated program of research, that will develop, test, and refine a shared care approach, tailored to patients' unique needs along the cancer care continuum.
2. To build capacity and collaboration across Canada in mixed methods research by generating opportunities for academics, knowledge users, trainees and staff in several provinces, and by developing standardized research approaches.
3. To facilitate effective knowledge translation and exchange (KTE) through meaningful integration of researchers, knowledge users and patients.

Research Approach/Mixed Methods

- Step 1a (months 1 to 24) – Population-based studies using administrative health databases in 5 provinces
- Step 1b (months 1 to 24) – Qualitative methods in 7 provinces
- Step 1c (months 1 to 24) – Environmental scan of existing programs and tools in 7 provinces
- Step 2 (months 25 to 30) – Synthesis and KTE (formative KTE)
- Step 3 (months 30 to 54) – Testing the approach (pragmatic trial)
- Step 4 – Summative KTE

Cross cutting Themes

- **Shared Care** –CBPHC providers, specialist providers, patients/families through self-management approaches.

  → develop an approach to shared care that can be tailored to the unique needs of patient at different phases

- **Continuity of Care/Coordination of Care** - a major challenge in cancer care; many health professionals; from multiple settings, thus leading to fragmented and uncoordinated care, which can jeopardize quality and patient safety

- **Vulnerable populations** – elderly; northern/rural/remote; low income; immigrant

Cross cutting Methods

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- Qualitative methods
- Knowledge translation
- Pragmatic trial
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CanIMPACT across Canada

9 Trainees across Canada

CanIMPACT Organizational Structure

Strategic Advisory Committee
Eva Grunfeld, Craig Earle, Jon Kerner, Sandy Buchman, Carol Sawka, Fiona Walks, Jamie Meuser, Melissa Brouwers, Stephen Taplin, Sharon Matthias, Others (TBD)

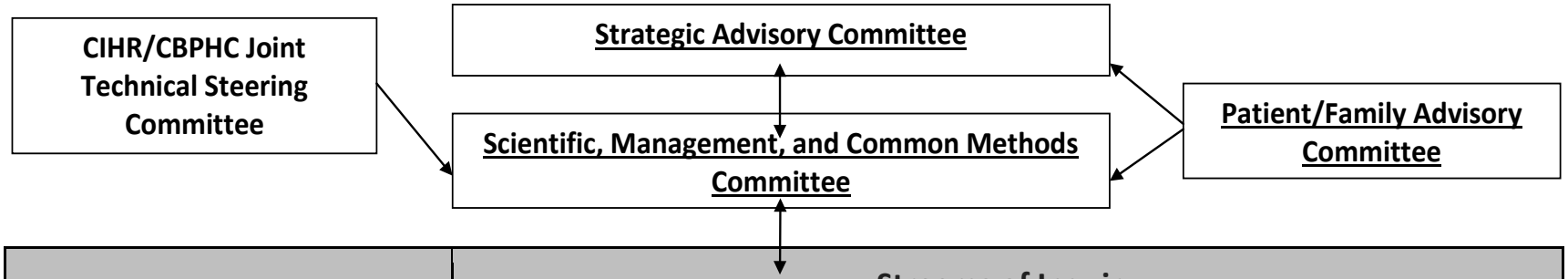
CIHR/CBPHC Joint Technical Steering Committee

Patient/Family Advisory Committee
Margaret Fitch (Co-Lead)
Sharon Matthias (Co-Lead)

Scientific, Management, and Common Methods Committee
NPI: Eva Grunfeld supported by Coordinator/Knowledge Broker
Leads from each Cross-Cutting Subgroup and Theme: J. Sisler, G. Porter, E.Grunfeld, M Brouwers, M. Krzyzanowska, J.Sussman, M. Aubin, B. Miedema, M.Winget, P.Groome, J. Carroll, E. Eisenhauer , Marg Fitch, Sharon Matthias

Cross-Cutting Methods and Themes	Streams of Inquiry			
	Diagnosis	**Treatment**	**Survivorship**	**Personalized Cancer Medicine**
Population based administrative health database **Team Members:** Marcy Winget and Patti Groome (Co-leads), Mary McBride, Rahim Moineddin, Eva Grunfeld, Aisha Lofters, Nicole Mittman, Monika Krzyzanowska, Donna Turner, Margaret Jorgensen, Cynthia Kendell	**PCP Lead:** Jeff Sisler **Specialist Lead:** Geoff Porter **Method:** Patti Groome **Decision Maker:** Julie Gilbert **Team Members:** June Carroll, Ruth Heisey, Eva Grunfeld, John Maxted, Marcy Winget, Donna Manca, Aisha Lofters **Int'l Liaison:** Peter Vedsted (Denmark) **Patient Rep:** Bonnie Vick **KTE Rep:** Fiona Webster **Knowledge User**: Claire Holloway	**PCP Lead**: Eva Grunfeld **Specialist Lead:** Monika Krzyzanowska **Method:** Rahim Moineddin **Decision Maker:** Donna Turner **Team Members:** Geoff Porter, Jonathan Sussman, Marcy Winget **Int'l Liaison:** Michel Jefford (Australia) **Patient Rep:** (TBD) - from PAC **KTE Rep:** Eva Grunfeld	**PCP Lead:** Michele Aubin **Nurse Lead:** Lise Fillion **Specialist Lead:** Jonathan Sussman **Method:** Mary McBride **Decision Maker:** Margaret Fitch **Team Members:** Ruth Heisey, Jennifer Jones Bo Miedema, Jeff Sisler, Lise Fillion, Eva Grunfeld **Int'l Liaison:** Kevin Oeffinger **Patient Rep:** Julie Easley **KTE Rep:** Margaret Fitch **Knowledge User**: Julie Gilbert **Knowledge Broker:** Robin Urquhart	**PCP Lead:** June Carroll **Specialist Lead:** Elizabeth Eisenhauer **Method:** June Carroll **Decision Maker:** Carol Sawka **Team Members:** Jeff Sisler, Eva Grunfeld, Bo Miedema Donna Manca, Monika Krzyzanowska, Fiona Miller, Mary Ann O'Brien, Jeff Sisler, Jonathan Sussman, Ruth Heisey **Int'l Liaison:** Sandaya Pruthi **Patient Rep:** Nancy Schneider, Catarina Versaevel **KTE Rep:** Mary Ann O'Brien **Knowledge Broker:** Robin Urquhart
Qualitative Methods **Team Members:** Bo Miedema (Lead), Mary Ann O'Brien, Donna Manca, Fiona Webster, June Carroll, Lise Fillion				
Pragmatic Randomized Trial **Team Members:** Eva Grunfeld (Lead), Rahim Moineddin (biostatistics), Paul Krueger (methodologist), whole team				
Shared care/continuity of care **Team Members:** Michele Aubin (lead), Jonathan Sussman, Amna Husain, Lise Fillion, Jennifer Jones				
Vulnerable populations: **Team Members:** Bo Miedema (Lead), Donna Manca, Aisha Lofters				
Knowledge translation **Team Members:** Melissa Brouwers (Lead), Mary Ann O'Brien, Margaret Fitch, Fiona Webster, Robin Urquhart, Jennifer Tomasone				
Capacity building **Team Members:** Trainee Subcommittee, Whole team				

CanIMPACT Organizational Structure



Cross-Cutting Methods and Themes	Streams of Inquiry			
	Diagnosis	Treatment	Survivorship	Personalized Cancer Medicine
Population based administrative health database	Includes the following roles: Primary Care Physician Lead Oncology Specialist Methods Expert Decision Maker Int'l Liaison Patient Rep KTE Rep Knowledge User Additional Team Members	Includes the following roles: Primary Care Physician Lead Oncology Specialist Methods Expert Decision Maker International Liaison Patient Rep KTE Rep Additional Team Members	Includes the following roles: Primary Care Physician Lead Nurse Lead Oncology Specialist Methods Expert Decision Maker International Liaison Patient Rep Knowledge User Knowledge Broker KTE Rep	Includes the following roles: Primary Care Physician Lead Oncology Specialist Method Decision Maker Team Members International Liaison Patient Rep KTE Rep Knowledge Broker
Qualitative Methods				
Pragmatic Randomized Trial				
Shared care/continuity of care				
Vulnerable populations:				
Knowledge translation				
Capacity building				

Includes the following roles:
Primary Care Physician Lead
Oncology Specialist
Nurse Lead (Survivorship)
Methods Expert
Decision Maker
International Liaison
Patient Rep
Knowledge User
Knowledge Broker
KTE Rep

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Four Streams of Inquiry

Streams of Inquiry align with the cancer care trajectory:
- Diagnosis, Treatment, Survivorship
- plus Personalized Medicine

Cancer diagnosis

- Timely diagnosis of suspected cancer is important for three reasons.
  - Cancer stage at diagnosis is highly correlated with eventual patient outcomes.
  - More timely diagnosis may alleviate the psychological distress felt by patients and their families during this period.
  - Diagnosing cancer in primary care is an important patient safety issue.
- **Our aim** is to optimize the diagnostic process for breast and other high prevalence cancers in primary care by enhancing coordination of care and reducing inefficiencies.

Cancer Treatment

- Available data suggest that patients continue to see their FP while receiving cancer treatments but there is limited interaction between primary care and oncologists, increasing the risk of poor coordination of care.
- **Our aim** is to improve coordination of care to optimize the role of primary care in providing care to breast and other cancer patients during active cancer treatment.

Cancer Survivorship

- The survivorship phase represents a major point of care transition from specialist care to primary care.
- Healthcare systems are challenged on a number of fronts to provide the most appropriate care to cancer survivors, including coordination among providers for:
  - cancer follow-up care for surveillance for recurrence, late effects and second cancers;
  - rehabilitation and management of pre-existing chronic health conditions; and
  - general preventive care.
- **Our aim** is to improve coordination of care through an approach to shared care to improve the quality of care provided to cancer survivors.

Personalized Medicine

- 'Personalized Medicine' (PM) is used to signify stratification of cancer risk with recommendations for screening and risk reduction; determination of eligibility for genetic testing; awareness of prognostic tests used to guide treatment decisions; and potential of serious drug interactions associated with cancer treatments.
- Personalized cancer risk assessment has the potential to identify a sub-population of individuals at increased risk on the basis of family history (FH) or genetic risk factors.
- **Our aim** is to understand primary care providers' experiences, desired roles and precise needs regarding education and practice tools in PM, specifically related to personalized cancer risk assessment and management, prognostic indicator testing, and awareness of serious potential drug interactions associated with personalized cancer treatments.

Patient and Family Engagement

- Patient engagement strategies will aim to continuously involve patient perspectives in a meaningful and sensitive manner recognizing that patients are not a homogenous group.
- The primary role for the PAC will be to ensure patient and family perspectives are brought forward.
- KTE activities will draw on their advice about messages for the targeted audiences, format of communication vehicles, and approaches to connecting with audience members.
- The PAC will be composed of patients, survivors and family members who have lived through a cancer experience.

Research Approach/Mixed Methods

- Step 1a (months 1 to 24) – Population-based studies using administrative health databases
- Step 1b (months 1 to 24) – Qualitative methods
- Step 1c (months 1 to 24) – Environmental scan of existing programs and tools
- Step 2 (months 25 to 30) – Synthesis and KTE (formative KTE)
- Step 3 (months 30 to 54) – Testing the framework (pragmatic trial)
- Step 4 – Summative KTE

Step 1a: Population-based studies using administrative health databases

- Specific research objectives:
  - To conduct inter- and intra-provincial comparisons of cancer diagnostic, treatment and survivorship phases of cancer care with a focus on patterns of care, quality of care, outcomes, and the role of extant CBPHC multi-disciplinary team practices in achieving optimal outcomes at each phase.
  - To identify subgroups of patients at risk of sub-optimal outcomes with a special focus on the identified vulnerable populations.
  - Capacity building to conduct cancer health services research across five provinces (Nova Scotia, Ontario, Manitoba, Alberta, BC)

Step 1b: Qualitative methods

- <u>Specific Research Objective:</u>
  - To explore, using qualitative methods, stakeholder perspectives and contextual factors related to the coordination of care between CBPHC and specialist care.
  - Qualitative approach will use *Constructive Grounded Theory* (CGT), through exploratory interviews and focus groups with patients and healthcare providers to examine the context of continuity/coordination of care between primary care and specialists that will lay the foundation for developing the approach to shared care.

Step 1c: Environmental scan of existing programs and tools

- Specific Research Objective:
  - To explore, at a provincial level, current and new models of care aimed to improve co-ordination between CBPHC and cancer specialists.
  - To develop an inventory of existing tools to facilitate shared care specific to cancer diagnosis, treatment and survivorship.

Step 2: Synthesis and KTE

- Specific Research Objectives:
  - To synthesize the findings from Step 1 – describe the challenges and enablers of achieving continuity/coordination of care

    - Establish the baseline of extant shared care patterns, tools, program
  - To hold a consultation workshop for KTE and input on the shared care framework ➔ **February 18, 2016**
  - To develop an approach to shared care and tools to support the framework.

    - This will define the intervention to be tested in Step 3

Personalized cancer medicine

- Specific Research Objectives:
  - To explore, using qualitative methods, CBPHC providers' experiences, desired roles and precise needs regarding education and practice tools in PM, specifically related to personalized cancer *risk assessment* and management, *prognostic indicator testing* and awareness of potential drug interactions associated with personalized cancer *treatments*.
  - To explore the perspectives of oncologists in the formal cancer system on what they perceive to be the potential roles of CPBHC providers in the areas listed above.
  - To explore CBPHC providers' perspectives, contextual factors and new models of care related to the coordination of care between CBPHC and specialist care in cancer PM
  - To develop and evaluate a personalized cancer medicine primary care toolkit and pilot test an implementation strategy.

Step 3: Testing an approach to shared care

- Specific Research Objective:
  - To test an approach to shared care and toolkit to enhance continuity/coordination of care and optimize clinical, psychosocial and health service outcomes.

Step 4: Knowledge Translation

- Synthesis of findings (months 57 to 60) from Steps 1 to 3, with a summative KTE workshop at month 60.

CanIMPACT Trainees

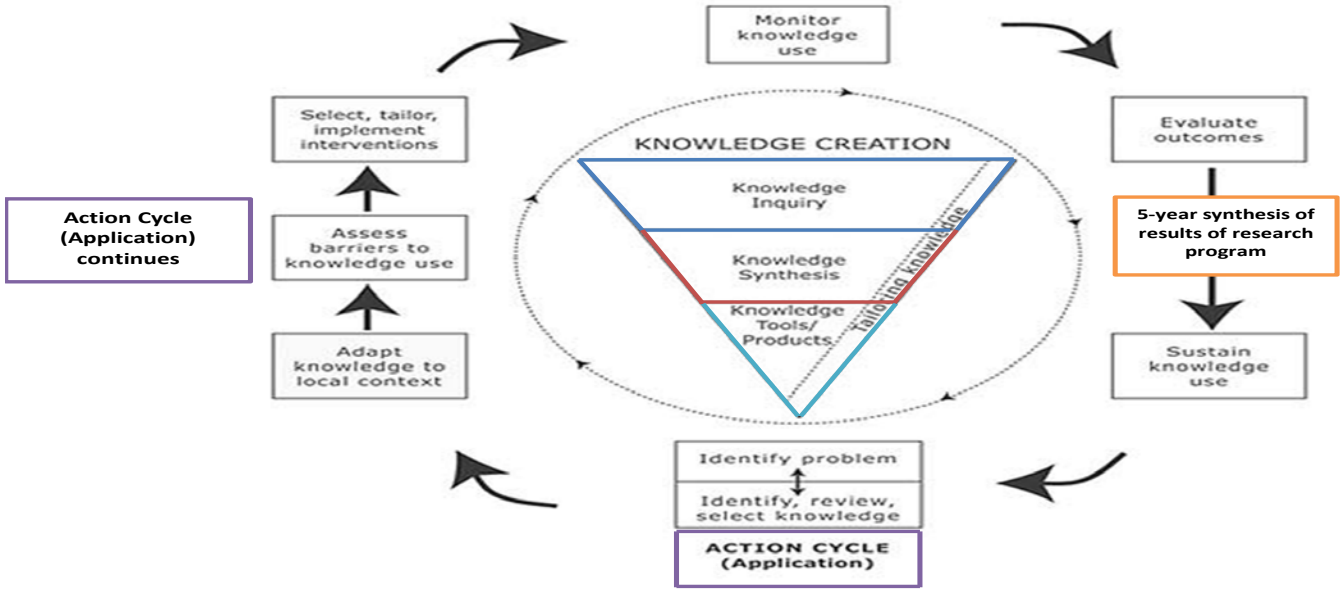
Budget accommodates for:

- Admin Data Trainee
- Qualitative Trainee
- Personalized Medicine Trainee

Graduate Students in:

- Nova Scotia
- New Brunswick
- Ontario
- Alberta
- British Columbia

Figure 4: CanIMPACT mapped onto Knowledge to Action Cycle



Knowledge Inquiry
Step 1 (Sections 4.2.1 – 4.2.3)
- Population-based studies using administrative health databases
- Qualitative methods to understand context
- Environmental scan of existing programs

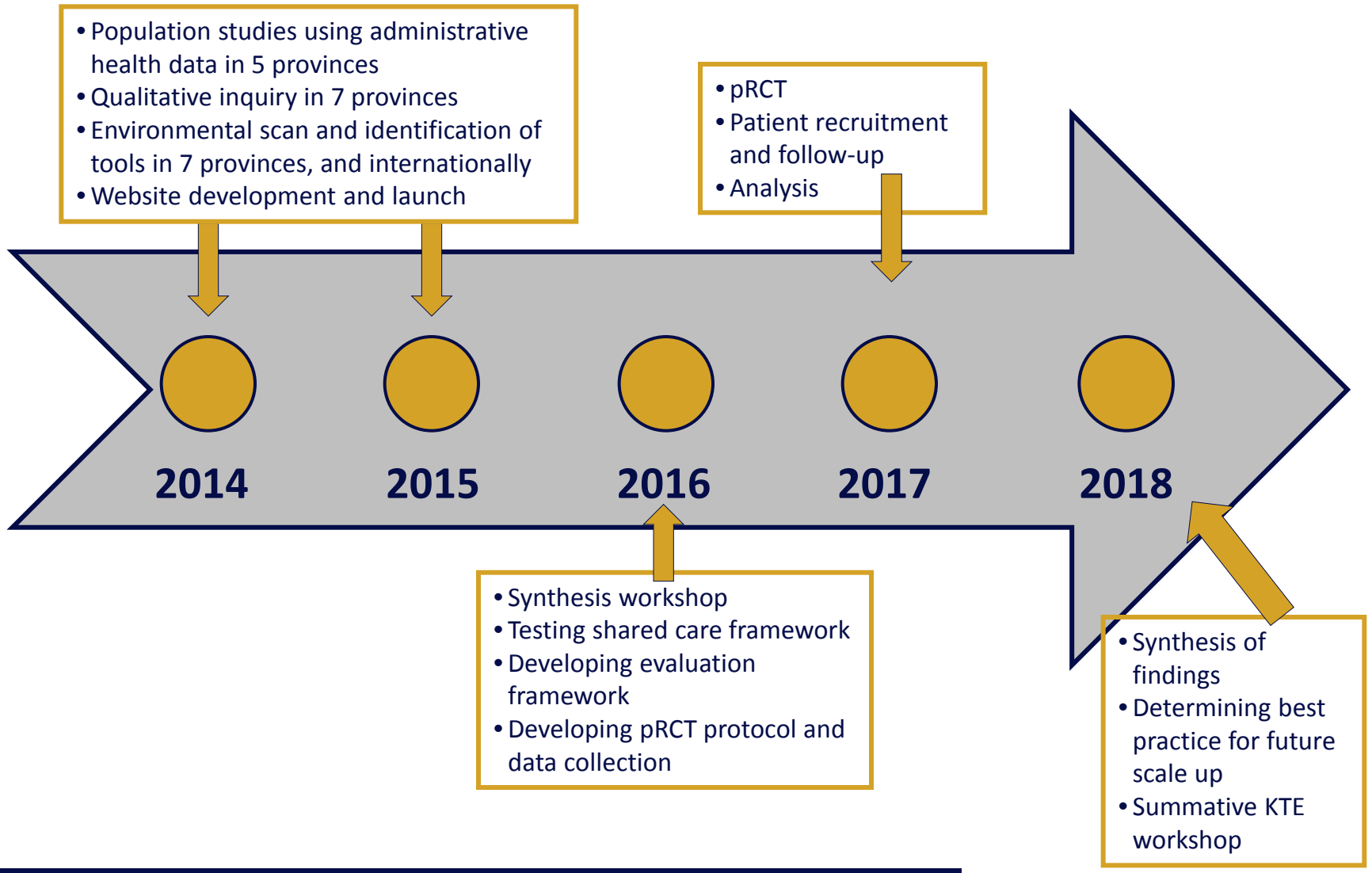
Knowledge Synthesis
Step 2 (Section 4.2.4)
- Synthesis and KTE (across patient, healthcare provider, practice, provinces, inter-provinces)
- Synthesis of findings from Step 1
- Consultative workshop for KTE and development

Knowledge Tools/Products
Step 2 (continued) (Section 4.2.4)
- Develop shared care framework and tools

Action Cycle (Application)
Step 3 (Section 4.2.6)
- Design (pragmatic randomized trial)
- Intervention: adapt to local context (designed to be flexible for different jurisdictions; will test in at least 2 jurisdictions)
- Evaluate outcomes

Action Cycle (Application (continued))
Step 4 (Section 5.2.7)
- 5-year synthesis of results

Overview of Timelines and Deliverables



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