



Identifying *local* barriers and facilitators to uptake of health care innovations

Putting evidence-based principles of Knowledge Translation into action for Advance Care Planning

Neil Hagen MD FRCPC
neil.hagen@albertahealthservices.ca

Neil Hagen, Jonathan Howlett, Jayna Holroyd-Leduc, Nakul C Sharma, Patricia Biondo, Konrad Fassbender and Jessica Simon, on behalf of the ACP Crio* Research Team



*CARIO – COLLABORATIVE RESEARCH AND INNOVATION OPPORTUNITIES

ACP CRIOTeam

Co-Leads:



Dr. Neil Hagen



Dr. Jessica Simon



Dr. Konrad Fassbender

Collaborative Membership:



Dr. Sara Davison



Dr. Sunita Ghosh



Dr. Jayna Holroyd-Leduc



Karen Macmillan



Gordon Self



Dr. Eric Wasylewko



Dr. Robin Fainsinger



Dr. Daren Heyland



Dr. Jonathan Howlett



Nola Ries



Dr. Ann Syme

Tracy Lynn Wityk-Martin

Trainees:

Dr. Shannon Cunningham
Dr. Petra Grendarova
Maryam Nesari
Marta Shaw

Support Staff:

Dr. Patricia Biondo
Maureen Douglas
Lauren Ogilvie

DISCLOSURES

None of the investigators who contributed
to the material in this presentation have
conflict of interest to report

Knowledge Translation: identifying *local barriers and facilitators*

Identification of barriers and facilitators to the uptake of innovations has been described as an essential component of the knowledge-to-action cycle.

While there is much information on this topic available, there is less information to guide KT workers on **how** to identify barriers and facilitators at the *local* level, in a manner that is impactful yet inexpensive.

Knowledge Translation: identifying *local barriers and facilitators*

In this seminar we discuss:

1. Background:

- what is Advance Care Planning / Goals of Care Designation (“ACP/GCD”)
- Principles of KT and the knowledge to action cycle

2. Methods:

- what are the issues we wrestled with in order to be able to characterize local (i.e. AHS across the province) barriers and facilitators to the uptake of the new ACP/GCD policy
- what are the approaches we used

3. Results

4. Discussion and Next Steps

Knowledge Translation: identifying *local barriers and facilitators*

Advance Care Planning (ACP) is a process of reflection and communication of a person's future healthcare preferences.

“Goals of Care Designation” (GCD) is a made-in-Alberta medical order , which uses a letter and number coding system to describe the general intent of care and providing direction on specific interventions and locations of care.

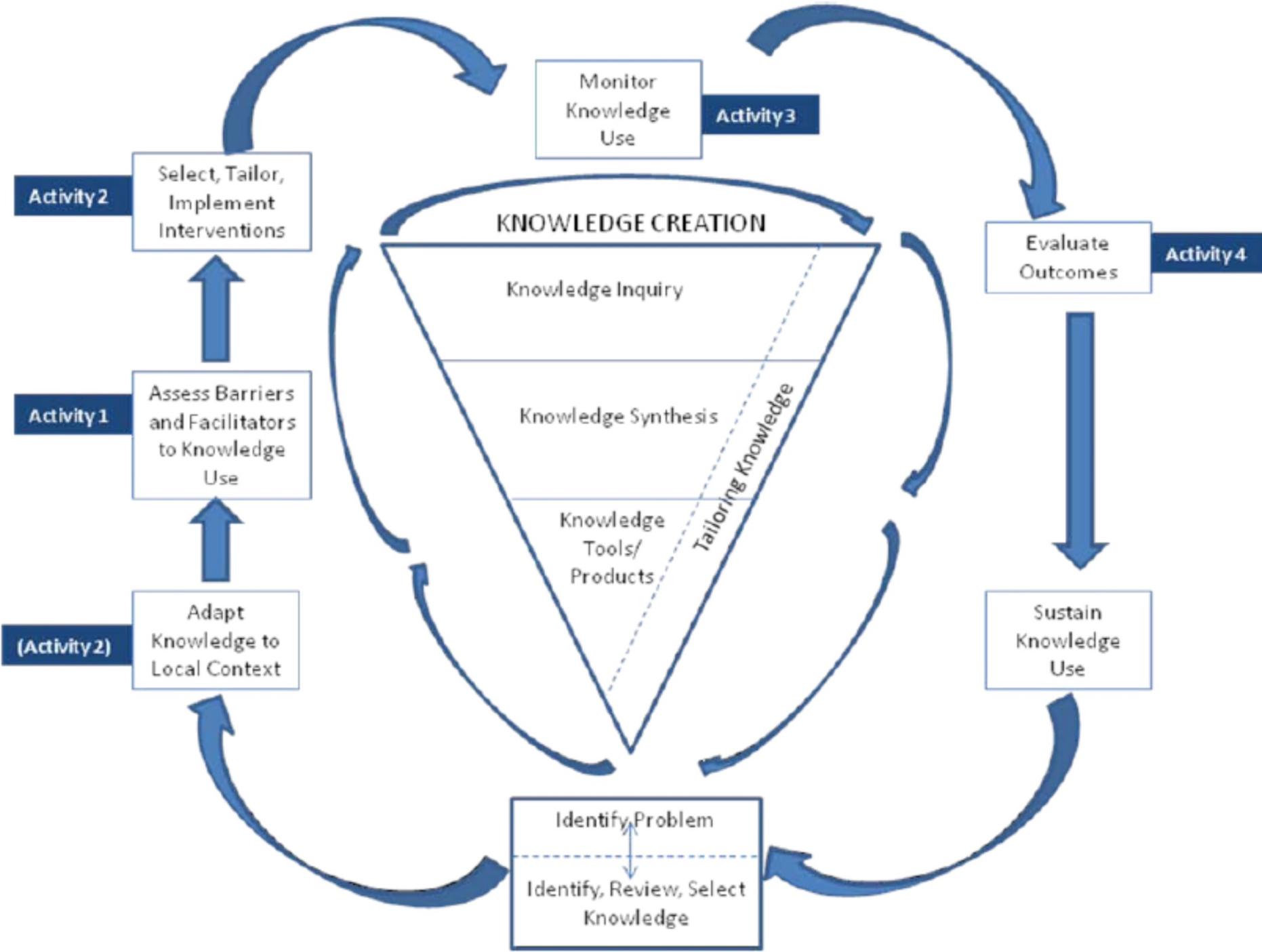
In Alberta we refer to “ACP/GCD” to describe the process of discussions and documentation that occur with a patient, over time and the determination of the GCD that is both medically appropriate and reflects that patient’s values

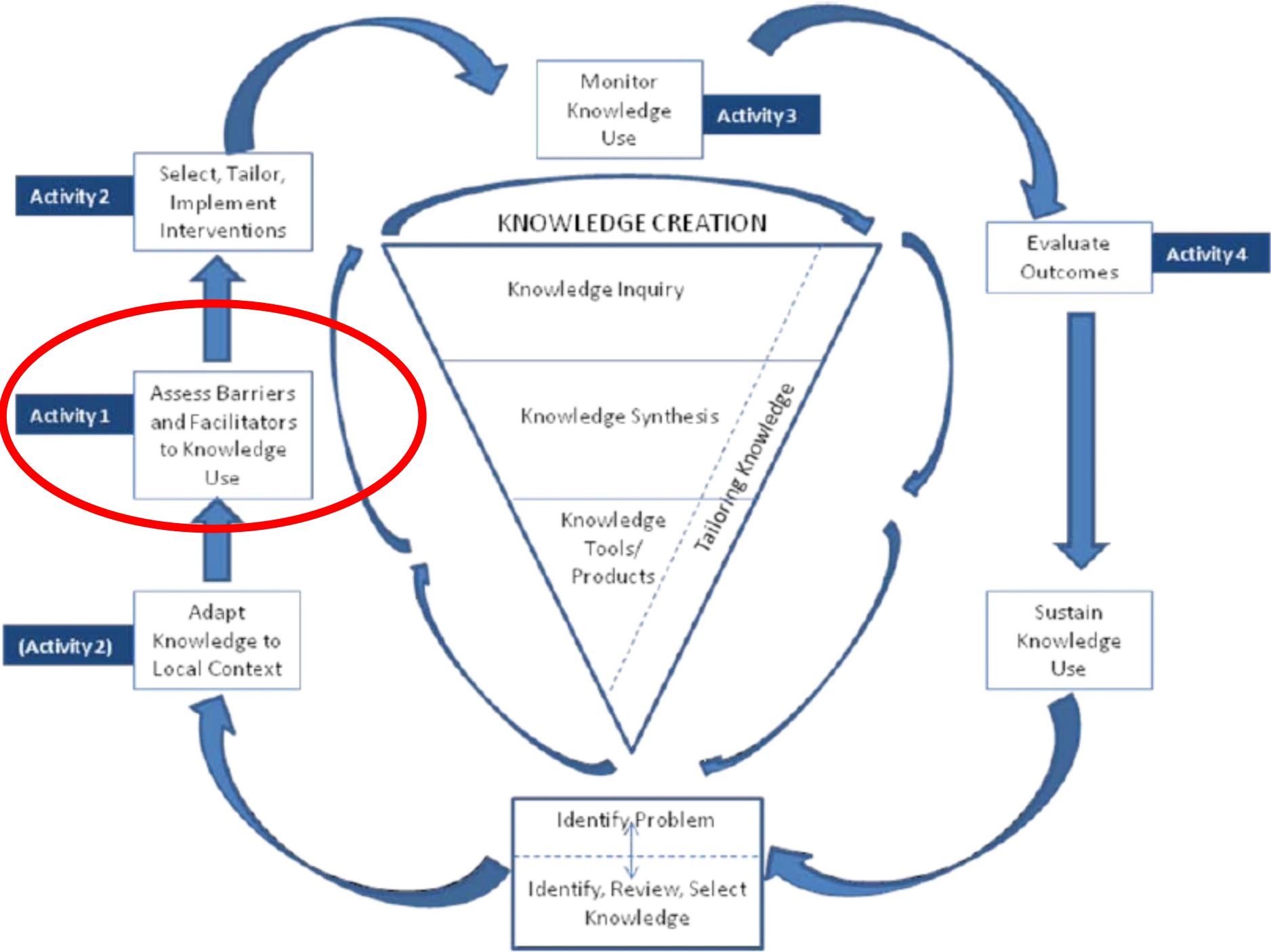
Knowledge Translation: identifying *local barriers and facilitators*

A new provincial policy to promote the uptake of ACP and GCD across Alberta Health Services (AHS) is being implemented.

The ACP CPIO research team is supporting AHS to identify ways to improve the uptake of this provincial policy

We are using the Knowledge to Action Cycle as a framework for this supportive activity





Outcome of ACP on patients and the health system (Brinkman-Stoppenburg et al 2014)

- DNR orders reduce the use of cardiopulmonary support measures, reduce hospitalizations and increase the use of hospice care
- Do-not-hospitalize orders reduce the number of hospitalizations and increase use of hospice care
- The effects of advance directives are more diverse but tend to be related to an increased frequency of out-of-hospital care that is aimed at increasing the patient's comfort instead of prolonging life
- Extensive advance care planning interventions may be more effective than written documents alone, and increase the frequency of out-of-hospital and out-of-ICU care, and increase compliance with patient wishes and satisfaction with care

Prevalent facilitators and barriers of uptake of ACP (Lovell and Yates 2014)

Specific facilitators to uptake

- older age
- a college degree
- a diagnosis of cancer
- greater functional impairment
- being white
- greater understanding of poor prognosis
- receiving or working in specialist palliative care

Specific barriers to uptake

- having a non-malignant diagnosis
- having dependent children
- being African American
- uncertainty about ACP and its legal status

Factors referable to

- healthcare providers
- public and patient
- resources
- system factors (various publications)

Implementing system-wide change

Large population-based studies of patients are required to develop the sound theoretical and empirical foundation needed to improve uptake of ACP

Prevalent facilitators and barriers of uptake of ACP (Lovell and Yates 2014)

Specific facilitators to uptake

- older age
- a college degree
- a diagnosis of cancer
- greater functional impairment
- being white
- greater understanding of poor prognosis
- receiving or working in specialist palliative care

Specific barriers to uptake

- having a non-malignant diagnosis
- having dependent children
- being African American
- uncertainty about ACP and its legal status

Factors referable to

- healthcare providers
- public and patient
- resources
- system factors (various publications)

Implementing system-wide change

Large population-based studies of patients are required to develop the sound theoretical and empirical foundation needed to improve uptake of ACP

Prevalent facilitators and barriers of uptake of ACP (Lovell and Yates 2014)

While many barriers to the uptake of ACP have been identified in the literature, less is known how to best identify *local* barriers and ways to mitigate against them.

Part of our strategy includes identifying barriers and facilitators, including the use of public surveys, surveys of health care providers, and other approaches.

Today we are reporting the results of one such survey, designed to identify *local* (Alberta) barriers and ways to mitigate against them.

Knowledge Translation: identifying *local barriers and facilitators*

In this seminar we discuss:

1. Background

- what is Advance Care Planning / Goals of Care Designation (“ACP/GCD”)
- Principles of KT and the knowledge to action cycle

2. Methods

- what are the issues we wrestled with in order to be able to characterize local barriers and facilitators to the uptake of the new ACP/GCD policy across the province
- what are the approaches we used

3. Results

4. Discussion and Next Steps

METHODS

We undertook a two-step survey process.

First: We developed a paper and pen survey that took about 10 minutes to complete, through extensive input from colleagues across the academic community. Core Committees of three SCN's participated.

Second: We collated survey results from the three SCNs, presented this material to a fourth SCN Core Committee, and had a to and fro discussion with them to identify ways to implement this information.

METHODS

Identification of local barriers and facilitators through formally inquiring of key opinion leaders needed to be:

- Well informed about the local situation, and impactful
- Inexpensive
- Live within the tight time constraints of key opinion leaders

METHODS

We reasoned that busy opinion leaders and innovators might be willing to assist us if there were a brief survey to be filled out, and if we could convince them this is worth their time.

We approached Strategic Clinical Network (SCN) Core Committees. SCNs have been tasked with implementing transformational innovation in health care across Alberta.

We asked them about factors referable to public and patient, resources, system factors and healthcare providers.

METHODS

We paid particular attention to identifying major barriers and facilitators to changes in clinicians' behavior.

To that end, we used the Michie Theoretical Domains Framework as additional background to support development of the survey instrument.

METHODS

There have been many perspectives that have been described to promote *change in clinical practice by health care providers*. One approach which aligned closely with the system-wide, culture changing approach we wanted to take was described by Michie and colleagues.

They described theories of change including *motivational, action* and *organizational* concepts, which led to identifying 14 domains called the “Theoretical Domains Framework”. These domains can contribute to or block the uptake of evidence based practice into clinical use.

Theoretical Domains Framework



Michie Theoretical Domains Framework

Cane J, O'Connor D, Michie S. *Implementation Science* 2012; 7(37).

Domains	Construct (Abbreviated)
1. Knowledge	Knowledge, Scientific Rationale, Procedural Knowledge
2. Skills	Skills, Competence, Skill Assessment
3. Social/Prof. Role/ Identity (Self Standards)	Identity, Professional Identity, Roles, Boundaries
4. Beliefs about Capabilities	Self-Efficacy, Control over Environment, Empowerment, Self-Esteem
5. Beliefs about Consequences	Outcome expectations, Regret, Attitudes, Beliefs, Rewards, Sanction
6. Motivation and Goals	Intention, Goals, Priorities, Commitment
7. Memory & Decision Process	Memory, Attention Control, Decision Making
8. Environmental Context	Resources (Material or Other)
9. Social Influences	Social Support, Group Norms, Leadership, Conformity, Supervision
10. Emotion	Affect, Stress, Regret, Fear, Threat
11. Behavioral Regulation	Goals, Target setting, Implementation Intention, Action Planning Self Monitoring
12. Nature of the Behavior	Routine, Automatic Habit or Breaking a Habit, Past Behaviors
13. Optimism	Hope for Improvement/Change
14. Reinforcement	Behavioral Reinforcement (intended and unintended)

METHODS (CON'T)

This survey was a two-step process.

First: We developed a survey that took about 10 minutes to complete, through extensive input from colleagues across the academic community.

RESULTS

First step:

51/88 (58%) of surveys were returned
completed

RESULTS

51/88 (58%) of surveys were returned completed

Professional background	n=51	Provincial Area or Zone	n/51
Administration	22*	Edmonton	17
Physician	17	Calgary	15
Nursing, Allied Health	3*	Provincial	12
Public	2	Central Zone	3
Other	8	Other	4

*self-identified as both Nurse and Administration

Table 1: Top barriers identified to the multi-sector uptake of ACP / GCD across Alberta

AREAS	ELEMENT	n=51	%
Public/patient Factors	Insufficient public engagement	43	84
	Public misunderstanding	41	80
Systems factors	Conflict because of too many other AHS initiatives	42	82
	Sufficient infrastructure to support implementation – especially expert staff	40	78
	Ineffective public awareness campaign	37	73
Resources	Adequate time for ACP/GCD conversations	40	78
	Need for electronic record capability to track GCD orders and ACP conversations	35	69
Health care Provider factors	Health Care Provider's mastery of GCD	31	61
	Ineffective staff education program	26	51
	Emotional discomfort initiating ACP / GCD conversations	25	49

Do individuals who are *very familiar* with ACP/GCD identify different barriers to uptake
(n=24)

compared to individuals *not very familiar* with ACP/GCD (n=27)?

Do individuals who are *very familiar* with ACP/GCD identify different barriers to uptake
(n=24)

compared to individuals *not very familiar* with ACP/GCD (n=27)?

Answer: NO

Select the three most important barriers to implementation of GOC Designation

Survey question number	Potential barriers	Very familiar n=24	Not very familiar n=27
3(a) i	Lack of Healthcare providers' support of the purpose of the change to ACP and GCD	5	9
3(a) ii	Incomplete uptake of AHS Staff Education Program	11	15
3(a) iii	Lack of HCP mastery of GCD and how to guide patients through the process	16	15
3(a) iv	Conflict with HCP personal beliefs (based on social and cultural influence)	3	2
3(a) v	Discomfort (emotional) with initiating conversations regarding patient health care	12	13
3(a) vi	The organizational behavior change expected is too far from current	8	14
3(a) vii	Lack of specially dedicated staff to engage patients and families in ACP and GCD conversations	12	7
3(a) iix	Need for visible AHS leadership support	2	6

Table 2: Second Step -- Key strategies to mitigate against barriers and to facilitate enablers

AREAS	ELEMENT
Public/patient factors	Develop an impactful public awareness campaign so that patients and families are better prepared to participate in discussions
Systems factors	Leadership to communicate the high priority of ACP/GCD for frontline staff (e.g. to support specific initiatives such as the electronic record)
Resources	Develop an electronic record to track ACP and GCD conversations
Health care provider factors	Provide HCP with training on conversation scripts and simple messages on ACP/GCD to promote comfort with the conversations

RESULTS

Additional lessons learned

- facilitating or mitigating factors may be too complex to be adequately identified or understood through use of a one-line free text within a pen and paper, brief survey (“First Step”)
- a to-and-fro group discussion served as an appropriate venue to outline specific mitigating factors (“Second Step”)

DISCUSSION

- Longer life spans and an aging population have pushed the agenda of ACP to the forefront.
- The need for and usefulness of the ACP/GCD process is easy to see but its implementation and uptake within a health region can be predicted to vary due to barriers and facilitators.

DISCUSSION

Key local barriers we identified appear to be rooted in

- the need for effective public education and engagement;
- lack of time and the complexity within a health care environment (i.e. competing signals and competing priorities)
- lack of a provincial electronic health record to facilitate communication between health care providers across geographic locations and time, and
- Insufficient awareness of the ACP process.

Knowing key domains which are relevant targets of change management to promote local uptake of best practices by health care providers and the health care system can serve as a compass in planning subsequent discussions.

NEXT STEPS

Mitigating strategies to these barriers appear feasible.

We are in the process of discussing the identified barriers and mitigating strategies with the leadership of the provincial ACP/GCD policy.

Through these discussions, we intend to promote inter-sectorial collaboration and reorient public policy to enhance the uptake and utilization of the ACP/GCD process by the public and practitioners.

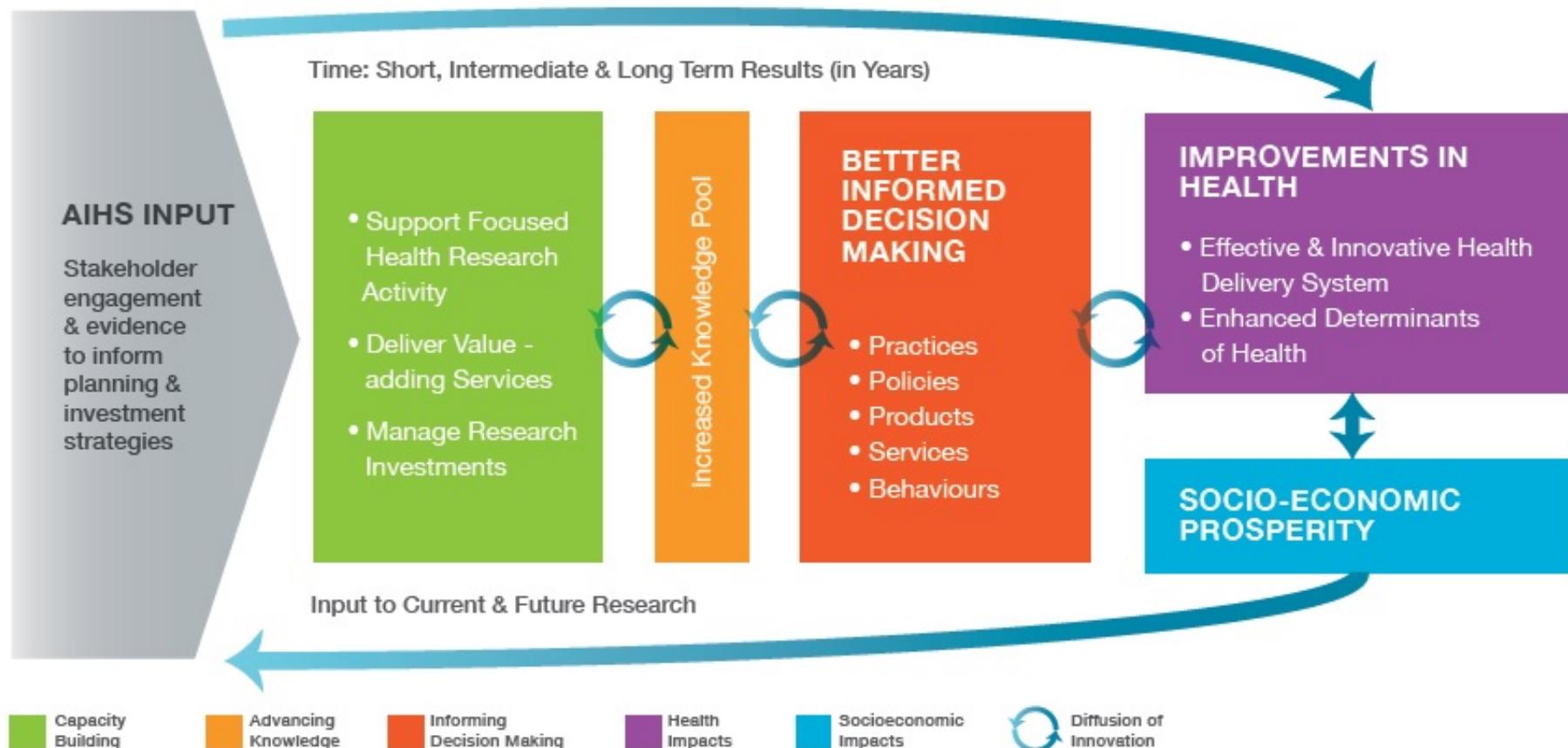
NEXT STEPS

**Question: How should these discussions occur
in a manner that is most impactful and
welcome to the end-users and decision-
makers?**

Next Steps

AIHS Health Research to Impact Framework

AIHS Mission & Vision



*Adapted from the Canadian Academy of Health Sciences (2009) model.

ACKNOWLEDGEMENTS

Funding for this study was provided by Alberta Innovates Health Solutions (AIHS) Collaborative Research and Innovation Opportunities Program Grant #201201157.

We thank Members of Alberta Health Services *Strategic Clinical Networks* for participating in the survey described in this paper.



Identifying *local* barriers and facilitators to uptake of health care innovations

Putting evidence-based principles of Knowledge Translation into action for Advance Care Planning

Neil Hagen MD FRCPC
neil.hagen@albertahealthservices.ca

Neil Hagen, Jonathan Howlett, Jayna Holroyd-Leduc, Nakul C Sharma , Patricia Biondo, Konrad Fassbender and Jessica Simon, on behalf of the ACP CRIo Research Team

Table 2: Key strategies to mitigate against barriers and to facilitate enablers

AREAS	ELEMENT
Public/patient factors	Develop an impactful public awareness campaign so that patients and families are better prepared to participate in discussions
Systems factors	Leadership to communicate the high priority of ACP/GCD for frontline staff (e.g. to support specific initiatives such as the electronic record)
Resources	Develop an electronic record to track ACP and GCD conversations
Health care provider factors	Provide HCP with training on conversation scripts and simple messages on ACP/GCD to promote comfort with the conversations