It's time to talk about

Our Relationship With Research (*and the people who do it for a living*)

A guide to making research activities and investments work for—rather than overwhelm—**your health organization**

Typical researcher.... tells us "it's time to talk" and then hands us a report. Probably doesn't even see the irony in it.

Sarah Bowen Ian D. Graham Ingrid Botting

Health research can be a real asset, but...

We need to reimagine the *R* word

Health organizations are increasingly urged to become more involved in ***research***: to use findings from existing research and, especially in recent years, to "partner" with academics on proposed research projects. Not only does this expectation create additional demands on organizations already under stress, there is often an assumption that engagement in research will bring direct benefits to the organization. This is not necessarily the case: there is emerging evidence that we need to reimagine research in ways that make it more relevant and useful to those whose role it is to ensure quality care to patients and communities.

Appropriate research action can:

Improve patient quality of care;

Optimize organizational performance;

Help ensure that operations are aligned with the organization's strategic plan;

Inform difficult management decisions; and,

Support health equity initiatives.

Appropriate, quality research, designed in consultation with health care organizations, can yield important organizational benefit. Further, integrating research skills within operational activities can significantly strengthen existing services. Taking appropriate research action can help improve alignment between operations and the organization's strategic plan; improve patient quality of care; optimize organizational performance; inform difficult management decisions; and support health equity initiatives.

But these benefits are only likely to be achieved if an organization (or program) makes proactive decisions around its research role and approach, rather than simply responding to external demands or maintaining traditional practice.

Think of this as a toolbox, not a template

This resource is designed to support those providing both formal and informal leadership within health organizations in thinking through, and navigating, the various approaches to research involvement. Rather than provide a template to guide a particular type of organization (or suggest a one-size-fits-all model), it outlines issues and principles for consideration by organizations of diverse size, maturity, and focus, as they work to develop responses appropriate for their own unique contexts.

This guide is also based on the recognition that there are many different kinds of research that may be needed to help an organization function better—not only clinical and patient-oriented research, but also research focused on improving health service provision, or population health.

Disparate roles, starting points and goals

The issues raised herein, and the frameworks presented, are relevant not only to Board Members and Senior Executives, but also to Clinical and Program leads, and to those in research roles within an organization. Different portfolios within an organization may be at different points in developing appropriate research action, and action may be taken at many different levels within an organization.

While this resource may perhaps be of most interest to those beginning to grapple with their response to demands for research involvement; those responsible for established research-related initiatives may also benefit from a review of the various approaches to inform the evaluation of current activities.

> ***By the time you have the question, you set up the research and get the results, the system has already changed. The results we get will be a statement of what we were doing 12, 18 months ago. But when we get them, we're not there anymore. So what is the value of that? And when you have a lack of resources you need to be very mindful of where you are going to concentrate your energy.***

- All quotes used in this guide are excerpts from interviews with healthcare personnel. **References on page 32.**

What's your role in research as a health organization leader?

Reconsidering what has traditionally been a responsive research role

Historically, with their focus on quality health care delivery, health organizations have played a largely responsive role in research. They have been expected to use research that has been produced by academics, and also to provide access to their data, staff, patients, or sites in order to support university-based research projects. In recent years (reflecting the intent of health research funders to make certain forms of research more relevant to the health system, and to benefit from health professional and management expertise), there have also been increasing requests for health organizations to 'partner' on research activities. These developments have led many health organizations to clarify their role in research in order to determine what research-related activities they will engage in, and how.

Motivations for thinking about research

Many are motivated to explore their role in research by the desire to ensure that patient care reflects the latest in quality research, and that they meet accreditation standards. Others find that they need a plan for responding to an increasing number of requests from academics, either for access to the organization's data, staff or patients; or to collaborate on research projects. Some may be motivated by research questions arising from challenges they experience in health care provision or a desire to improve organizational performance.

There's little to turn to for advice

While many health organizations experience increasing pressure to play a role in research, there is little guidance to assist them in deciding what actions are best for their organization. Recent reviews have found almost no resources for organizations that wish to take a more active role in research; want to influence research agendas to be more useful to them; or are feeling under pressure or under–resourced to respond to external requests for research partnership.[1]

...Until now (we hope)

This resource is designed to support health organizations (as well as specific programs within them) in making decisions about their role in research. It is informed both by current evidence on research partnerships between health organizations and academic researchers (including the perspectives of health leadership, management and staff on those partnerships), and the practical experience of those working within the health system in research and management roles.

Given the limited evidence on this topic, the suggestions in this guide will need to be trialed and evaluated in a range of health organizations. We encourage organizations to use this resource as a starting point: we hope it will serve as a base on which stronger, evidence-informed guidance can be developed.

> *"Collaborations on paper—I've seen that a lot to be quite honest. Almost to the point where I say: 'I'm sorry, we can't provide a letter of support.' When you're asking for a letter of support and you're alluding to collaboration, what does that look like if you get funding? Because what will happen most times is the funding will come through and we'll never hear from them again."*

fig 1.

[1] *De Moissac D, Bowen S, Botting I, et al. Evidence of commitment to research partnerships? Results of two web reviews. Heal Res Policy Syst. 2019;17(1). doi:10.1186/s12961-019-0475-5*

What exactly do we mean by the word research?

Most organizations will face a major challenge when they begin discussions about planning a research role:

There are often major differences—even within the same organization—in individual understandings of what "research" is and how it relates to other knowledge-generating activities such as Quality Improvement (QI) and evaluation in a learning organization.

For some, research is contained in a small sandbox

Individual staff may define research quite narrowly, limiting it to only one area of research (for example, basic laboratory research or clinical research) or certain methods of research (e.g. randomized controlled trials), and may not fully appreciate all the potential contributions an expanded research role may bring.

Even organizations with established research programs may have a limited understanding of the many types of research and range of research skills needed to address the diverse questions facing their organizations. For example, a large health authority may have a well-established research institute specializing in clinical research; but there may be limited understanding of approaches to health services research.

Many staff may see research (and research expertise) as limited to formal research projects supported by research funding agencies, usually initiated by university-based researchers.

For others, research blurs the boundaries

On the other hand, some refer to any kind of investigation as "*research*" including undertaking internet searches on a particular topic. Many confuse research with ***data analysis***. Some may even view research as competing with evidence emerging from provider or organizational experience, not recognizing how research methods can ensure that valuable experience is integrated as an essential form of evidence (or help determine whether a particular research study is even relevant in a specific context).

Some view activities such as ***Quality Improvement*** (QI), ***evaluation*** and research as points on a continuum, others as distinct activities that 'belong' in different places (e.g. *QI* as an organizational responsibility, *evaluation* delegated to external contractors, and *research* belonging to the world of academia).[2] There may not be an understanding of how research skills may support other knowledge-generating activities or ongoing operations.

A matter of relevance & experience

A related challenge is that many leaders, managers, and staff have not found research relevant to their work, or responsive to their needs.[2,3] They may have experience with researchers who they see as out of touch with the realities of health care provision, or with research processes insensitive to the real time demands of healthcare delivery.[4] Negative experiences range from frustration at token roles given to health system personnel, to feelings of being 'used' or disrespected, to major incidents that have required legal or human resource intervention.[2]

A common language is needed

This suggests that many organizations will need to consider strategies for engaging leadership, clinicians and staff in developing a shared understanding of research and related concepts. **Appendix A** offers some suggested definitions to support these discussions.

[2] *Bowen S, Botting I, Graham ID, et al. Experience of health leadership in partnering with university-based researchers in Canada - A call to "re-imagine" research. Int J Heal Policy Manag. 2019;8(12):684-699. doi:10.15171/ijhpm.2019.66*

[3] *Barnes RO, Holmes BJ, Lindstrom R, Trytten C, Wale MCJ. Evidence-informed healthcare through integration of health research. Healthc Manag forum. 2015;28(2):75-78. doi:10.1177/0840470414562637*

[4] *Bowen S, Martens P. Demystifying knowledge translation: learning from the community. J Health Serv Res Policy. 2005;10(4):203-211. doi:10.1258/135581905774414213*

Section 1

Knowing our limits

What do we want out of our relationship with research?

Identify what we want out of our relationship with research

Before taking any action, it's important to consider the organization's commitment to research, the visibility of this commitment, and its readiness to engage in research development activities.

Determine where you are now

Organizational research-related initiatives (whether in response to external requests or initiated from within the organization) are sometimes developed reactively, without consideration of where the organization finds itself at any particular point in time. As a result, an organization may resort to adopting initiatives similar to those found within other organizations, whether or not these are the best fit for their particular context.

It is also helpful to reflect on the organization's current position(s) on its role in research, recognizing that organizational engagement with the different "pillars" of research (clinical, health services, population health) may vary significantly.

Some common positions are outlined in **Table 1** on the following page, which also includes suggestions of how research can support the organization in each of these positions, and implications to consider for each. These positions are not mutually exclusive (an organization or program may adopt more than one), and various areas or levels within the organization may be at different positions at a specific point in time.

> ***"What we more often find are researchers who have research interests that are not exactly aligned to those of the organization, to the organization's needs. Then, collaboration is harder to establish."***

Questions to consider

Is commitment to research, or specific research-related activities, clearly identified in the organization's mission, values, and strategic plan?

Is more discussion needed?

What is the commitment of those in key leadership (board, executive) roles to the importance of research to the organization?

How knowledgeable are organizational leaders about the range of research approaches and methods?

What is the organization's (or program's) current involvement in research? Is there a comprehensive inventory of research projects or collaborations with which the organization is involved?

How did these come about? How are they intended to help the organization achieve its goals? How are they supported?

fig 2.

Table 1: How research can help address common organizational challenges

Current position	Current challenges	What issues should we consider?	How can research help meet this challenge?
We depend on standards set by other bodies (e.g. provincial/ professional standards and guidelines) to ensure quality care.	Ensuring that standards are met	Without careful attention to implementation in our specific context, standards may not be met. We may also be approached by external players with research-related requests, how will we respond?	There is research that has explored the most effective ways to communicate standards in ways that are relevant to the audience (often called ***knowledge translation***) and identify effective Implementation strategies (***implementation science***). Evaluation research expertise can inform quality assurance and improvement efforts.
We are committed to ensuring our programs reflect the latest research in order to optimize the care we provide.	Accessing and evaluating current research in a timely and ongoing manner Ensuring findings are assessed, in collaboration with organizational leadership, for applicability to the local context Facilitating uptake of findings (including needed organizational change)	Research must be assessed for its applicability in our specific organizational/program context. We may also be approached by external bodies for research-related requests.	There is research on effective ways of assessing and adapting research for applicability to a specific context, and facilitating uptake and effective implementation (knowledge translation and implementation science).
We want to respond appropriately to requests from external sources for access to our data, patients or sites, or to partner with them on research projects.	Clarifying organizational goals and priorities related to research Developing, implementing, communicating, and evaluating organizational policy, processes and structures to support consistent organizational research action	Without organization-wide policy and associated procedures, our managers and clinicians may make individual decisions. This may result in a) additional stress on burdened staff/ programs, b) overcommitment of organizational resources, c) unforeseen issues requiring management intervention, and d) missed opportunities to share findings with potential relevance to other areas of the organization. Responding to external requests alone does not address our internal needs for knowledge: we may want to focus on our own priorities rather than be placed in the reactive position of responding to external requests.	Evidence-informed research policy can provide structure for consistent action in response to organizational priorities. Effective research ethics and access/impact review processes ensure policy is followed, the organization is protected, and research useful to the organization is facilitated. Research coordination skills facilitate processes, positive communication, and organizational knowledge of research partners.
We would like to play an active role in research activities that could help address the major problems facing our organization.	Developing a model for research participation that is feasible for the organization and supports organizational goals and priorities	We need to be clear on our priorities, and realistically assess the needs/potential for developing in-house research expertise, or ability to play an active role as effective research partner with external research bodies. We will also need to develop strategies to ensure all program areas are supported in staying current with quality research in their areas, and to respond to external research-related requests.	Research expertise to undertake, coordinate and oversee activities Knowledge of research evidence on effective research partnerships

Section 2

Making sure the conditions are right

What needs to be addressed before we start developing a research strategy?

First, ensure these three interwoven preconditions are met

There are three interconnected preconditions associated with the development of effective organizational research-related action

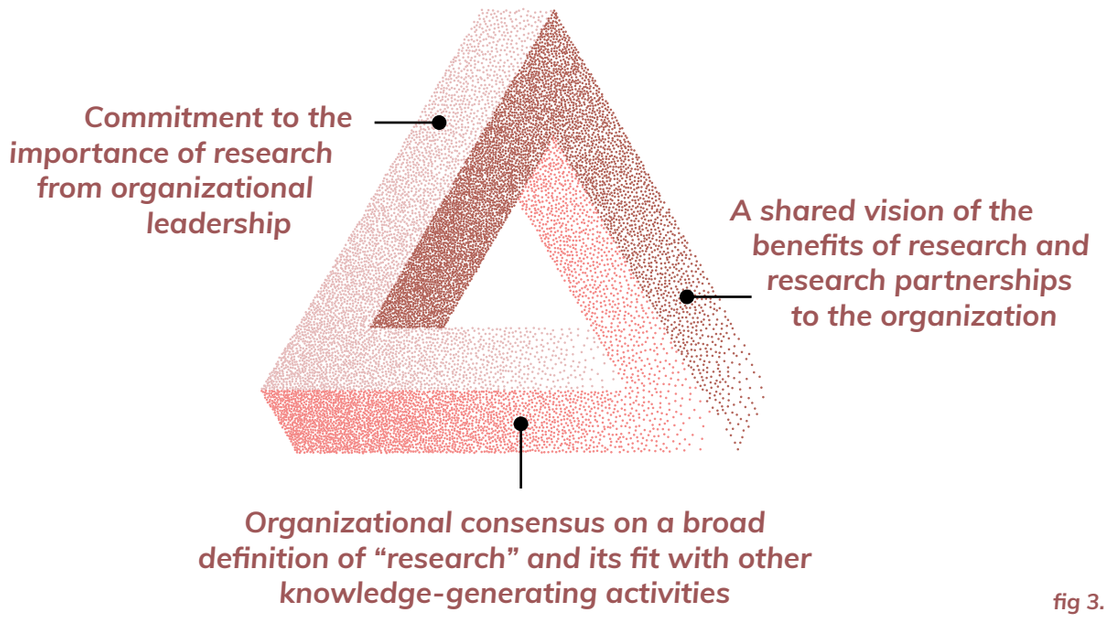


fig 3.

Organizations are advised to undertake activities to ensure these three preconditions are met before moving on to developing a concrete plan. While discussed separately, these can most usefully be considered as iterative, interwoven activities.

Commitment to the importance of research

Commitment, as well a broad understanding of various types of research, from the highest levels of organizational leadership—Board, CEO, executive management, and clinical leads—is essential. Recent research has identified organizational leadership as a critical factor in establishing and supporting effective research partnerships, as well as in creating a research-positive organizational culture.[2] If initiatives to promote greater research involvement are generated from staff or middle management, an early task will be to develop a strategy for enhancing research awareness and capacity at the Board and Executive levels.

> *"I've come to be a big believer that there has to be understanding from the most senior leadership within the organization. I don't think I could emphasize that enough, that if the leadership doesn't buy in, I don't think there's a chance of success."*

[2] Bowen S, Botting I, Graham ID, et al. Experience of health leadership in partnering with university-based researchers in Canada - A call to "re-imagine" research. Int J Heal Policy Manag. 2019;8(12):684-699. doi:10.15171/ijhpm.2019.66

Organizational consensus on a broad definition of "research" and its fit with other knowledge-generating activities

Because most organizations will find that there are diverse definitions of research within the organization, it will be important to develop a broad, inclusive understanding of research that includes the diversity of research approaches, fields of focus, and methods. The questions facing health organizations are complex, and addressing them requires many different methods. Epidemiology, evaluation research, and qualitative approaches to health services or community research may be of great relevance to the current needs of the organization but not considered in organizational research discussions. These discussions should begin—but not end—with Board, senior management, clinical leads, and those within the organization with research experience.

Research, quality improvement and evaluation

It is difficult to develop shared support for organizational research initiatives if there is not a common understanding of the relationship between research, QI and evaluation. Some may feel that a strong QI and Learning department removes the need for evaluation and research expertise, and not recognize the contribution research expertise may make to QI efforts. All of these approaches to ***organizational learning*** are needed—and none is more important than another. We propose that "research"—research expertise even more than research activities—should not be considered as separate from these other essential knowledge-generating activities, but as a resource to be integrated with them in an effective learning organization. For example, research skills can improve methods (and resulting interpretation) used by data analysts, and strengthen evaluation design and method selection.

Same word, new shared meaning

It is useful to develop simple tools that propose an organizational definition of research (Appendix A provides a starting point for discussion). The definition selected should encompass the many different types of research, and also challenge managers and staff to distinguish between "how research (and research expertise) could help me/my organization," and "my personal experience of one researcher or research project." While much research may not have been experienced as helpful in the past, this can change with effective organizational action.

We need to reimagine research in ways that not only promote useful research activities within the organization, but also support and enhance other established organizational knowledge-generating activities.

A shared vision of the benefits of research and research partnerships to the organization

More than a shared understanding of 'what research is' is needed; however, there is also a need to develop, throughout the organization, an appreciation of the potential benefits of research involvement in creating a learning health system (the contributions it can make to developing an effective strategic plan, to meeting organizational objectives, and to supporting the work of staff). If research-related activities are viewed as just one more demand on limited time and resources, they are not likely to be prioritized. Any research initiative must fit as a 'solution' that helps the organization meet its goals.

Promoting research thinking

Integration of "research and evaluative thinking" into discussions is one way to begin to illustrate, in practical ways, the broad scope of research and the useful roles it could play within the organization. **Appendix B** provides some examples of how emerging issues and questions can be used to promote in-depth discussion.

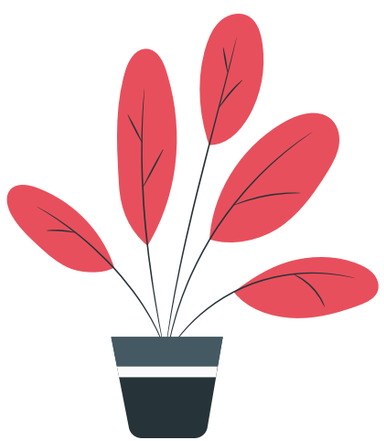
Where the conversation should start

While, ideally, discussions should begin with the organization's Board and senior management, more is needed. Clinical and program leads—as well as those with research responsibilities—should also be included early in the process, as these individuals may have significant experience and insights that will help ensure a broadly-based discussion that reflects the specific organizational context. It is also essential to develop a plan for engagement of staff by site or program area.

Other strategies include:

- Ensuring that the issue of research is integrated with Board and senior management agendas;
  - Providing relevant research reports, and reports from research-related committees as standing items on meeting agendas, either 'for discussion' or for information;
  - Preparing questions to support evidence-informed discussion around agenda items;
- Taking advantage of emerging issues or opportunities to promote the potential value of research;
- Creating ad hoc committees to prepare research-informed drafts for discussion around major decisions.

> *"Creating a culture of learning and innovation… Research, evaluation, innovation need to be built into our system so that it is at the heart of it and it feeds everything, as opposed to something you parachute in."*



Building a strong foundation

As an organization moves from undertaking preparatory work to developing a model appropriate for its particular context, care will be needed to ensure:

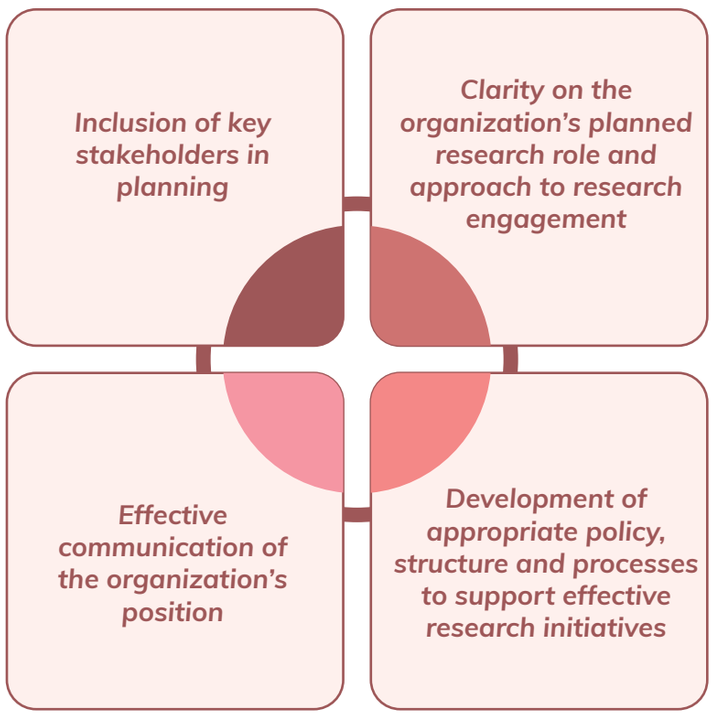


fig 4.

Inclusion of key stakeholders in planning

As discussed earlier, there are many different kinds of research, and no one research approach or single researcher can bring the breadth of skills that an organization may need, either now or in the future. This can present challenges for planning, as discussions may be limited to, or dominated by, certain research areas, specific types of research questions, or one or two research methods. A research team with strength in randomized controlled clinical trials may not appreciate the importance of, or have the expertise to conduct, multi-method community-based research. A researcher specialized in mental health may not have an interest in responding to organizational concern about infectious disease.

There's value in diversity and flexibility

It is important to have a range of voices around the planning table, including diversity of: research experience and expertise, the catchment community, and staff units and point-of-care providers. At a time when there is increasing recognition of the exclusion of many sectors of society from decision-making activities, it is particularly important to ensure that selection of research priorities (and framing of research questions) is not limited to certain research approaches, or to the perspectives and experience of those currently in decision-making roles.

While it is important for organizations and programs to have a strategic approach, there must also be openness to benefiting from unplanned opportunities, and from insights and initiatives that might emerge from various parts of the organization or the larger community. Research can be an invaluable tool for integrating the voices of community, staff and point-of-care to inform change.

Strategies to consider include:

- Providing invitations to academic centres to make presentations on types of research;
- Including staff in outreach / community development roles;
- Ensuring meaningful participation of clinical and program areas, as well as agencies and services outside of the organization.

Clarity on the organization's planned research role and approach to research engagement

It is essential to be clear about what the organization or program wants to achieve through its research involvement, and how such involvement will provide a strategic advantage. There are a number of potential organizational benefits—both to developing more internal research capacity, and to actions taken to develop and strengthen productive research partnerships.

One size does not fit all

However, health organizations reflect tremendous diversity in size, complexity, focus, budget, staffing, organizational research leadership, and previously developed research relationships: all of these factors affect the role that an organization may decide to play. Not all organizations (or programs within an organization) will have the same goals or capacity. Clarity on the goals of the activity will help health organizations determine what models may be the best fit for their organization. Table 2 provides some examples of common objectives (an organization may have one or many objectives) and related actions, along with potential pitfalls.

Table 2: Organizational research objectives

Common Objectives	Description	Common Actions	Potential Pitfalls
Ensure organizational planning is informed by most recent high-quality research	The priority for some organizations is to ensure that appropriate research is identified, assessed for fit and integrated into direct health service provision and organizational operations (i.e. optimizing use of existing research).	Hiring a "knowledge translation expert" or "knowledge broker" Arranging with university library services for searches on specific topics	Achieving this objective relies on knowledge translation expertise: it requires highly developed skills not only in literature synthesis or review/analysis, but also in analyzing research findings in the specific organizational context (as published research often fails to directly address the question and environment in which the organization finds itself). Because, to be useful, research must be appropriately integrated with other organizational evidence, it is necessary that these KT roles are integrated and valued within organizational decision-making processes.
Ensure appropriate data analysis for decision-making	Many organizations struggle with analysing, interpreting and using the vast amounts of data produced within their organization. Some identify using the data they have to better manage operations as their greatest need.	Hiring data analysts Relying on decision support staff to provide analysis on complex issues	While organizations need to have skills internally to conduct timely data analysis, data analysis is not—in itself—research. Linking data analysis capacity with larger agendas of Performance management, QI, Evaluation and Research can bring many benefits to the organization: failing to have research oversight may lead to overly simplistic analysis and even misinterpretation of data. Skills are also needed to synthesize and contextualize data for it to contribute to effective decision-making.
Address key challenges facing the organization	Some organizations recognize that research could play a role in addressing key issues facing their organizations, but because of the absence of published research to address their questions they are interested in promoting research that addresses these questions.	Establishment of internal research units Outreach to academic researchers for research support	Both of these options bring potential benefits, but both also require significant planning and resources if they are to be implemented effectively and achieve their goals. The organization will also need to develop processes that enable it to identify the research questions of priority.

(more)

Table 2: Organizational research objectives

Common Objectives	Description	Common Actions	Potential Pitfalls
Better manage requests / expectations from academic researchers	The immediate issue facing many organizations is to develop systems for responding to external requests for research assistance or partnership.	Individual agreements between a researcher and a manager of a program area, based on manager judgement Policy requiring impact and access assessments, formal 'sign-off' Policy requiring 'registration' of research projects Use of internal or co-ordinated (e.g. provincial, regional) ethics review bodies	Most organizations have a process for reviewing, from an ethics perspective, proposed research that will take place within the organization or use organizational data. Some also have processes for assessing impact of research on organizational resources. Fewer have internal processes for assessing research projects for their importance and potential usefulness to the organization. Health organizations are rarely compensated for the contributions they make to research activities, which can result in increased staff stress and financial costs to the organization. Many organizations are unaware of the extent of commitments made to individual research projects, and approval may reflect an agreement between an individual manager and researcher rather than organizational priority. Responding to external requests requires clarity of organizational goals and priorities, criteria for engagement, and skilled communication and negotiation skills.
Provide enriched learning experiences for research students	Recognizing the long-term benefits to the health system from direct involvement in student education, many organizations welcome a range of research activities within their walls.	Acceptance of individual student research placements Creation of affiliation agreements between a health organization and academic institution	Supporting students can impose high demands on organizational resources, as initiatives are often organized around university calendars and preferences. There may be little benefit to this investment—for either organizational staff or students—if such activities do not reflect organizational priorities, or there is insufficient support for all involved.
Increasing staff "research literacy"; providing development opportunities for staff	Increasing staff knowledge of research concepts, and encouraging them to further develop skills in their area of expertise, may be an organizational priority.	Internal 'capacity building' initiatives for staff (e.g. Lunch and Learn sessions) Support for staff to become involved in academic research learning Specific management research training programs (e.g. EXTRA: Executive Training Program)	While improved staff research literacy can be of benefit to both individual staff and the organization, training initiatives can also place demands on staff time and resources. Training initiatives are unlikely to be effective unless supported by a research-positive organizational culture, and processes to support and integrate training activities. Some prefer to emphasize engaged approaches to research, which recognize and integrate the diverse skills of researchers and managers/clinicians.

> *"[Previously] the academic person would kind of come into [the region] and—this is the story I was told—kind of terrify people into having them do what they wanted... So [now] we say to the institutions: your researcher can come here and play in our sandbox. Here are our rules. So it keeps everyone kind of honest."*

Effective communication of the organization's position

Once an organization is clear on its objectives for research action, these objectives will then need to be clearly communicated—first throughout the organization, and then to potential partners and key organizations in the community. It is critical for any organization to be clear about what its stance will be with the research community. Is the organization happy to respond to researcher requests and assess these requests on a case-by-case basis? Will it establish criteria for research collaboration, and policies to ensure that criteria are met? Will it contribute only to research activities that answer questions of priority to the organization, and in the time frame the organization requires it? If it develops internal research capacity (e.g. hiring evaluators, researchers or knowledge brokers) how will these individuals/units relate to academic research bodies? **Appendix C** includes some sample messages.

Development of appropriate policy, structure and processes to support effective research initiatives

It is critical to ensure that key policies, structures and processes are in place to support the organization's research initiatives. Without adequate and appropriate infrastructure, initiatives can easily become vulnerable to changes in leadership; to being downgraded in the face of organizational crises; and to marginalization from organizational decision-making. Even small, initial efforts need the support of basic policy, structure and clear processes and procedures.

> *"Lay out your expectations explicitly at the start of a partnership... defining how you expect the researchers to engage with you... talking about what are issues you anticipate could occur and how will you mitigate those."*

fig 5.

Policy – clear policy with associated procedures to address:

- Organizational role in research;
- How research will be used to inform policy development, strategic planning, and priority-setting;
- Relationships with external entities (e.g. government, university);
- Responsibility for research oversight;
- Site, data, personnel and patient access;
- Criteria for organizational participation in research;
- Access and ethics review process;
- Requirements for research reporting.

Structure – organizational structure to support research

- Identified roles for research responsibility and accountability at the most senior level;
- Position descriptions for responsibility areas;
- Clarity on relationships with Quality Improvement, evaluation and other knowledge-generating activities.

Processes – clear processes for decision-making around research

- Identifying organizational research priorities;
- Approving researcher access;
- Approving participation in research collaborations;
- Assessing and approving use of organizational resources;
- Reporting research results;
- Reviewing, updating, amending existing structures and processes.

Responding to requests for research collaboration

Some of the questions you should consider when developing a response

In **Section 3** we outline some considerations in developing a research strategy. However, while this planning is proceeding (and even if the organization does not develop a proactive plan for research involvement) it is likely that staff will be approached by academic researchers to collaborate on a particular research project initiated from outside the organization. This section outlines some of the questions to consider in responding to such requests. ***Figure 6*** on the following page outlines a decision tree to assist organizations in evaluating such requests.

What exactly is the organization being asked to do?

- Provide access to data?
- Provide access to site, staff or patients?
- Write a letter of support and/or interest?
- Act in an advisory capacity?
- Help design a research proposal?
- Support the project, either through direct financial support, or with in-kind resources?
- Undertake specific research activities?

What will the costs be to the organization of such involvement?

- Has there been realistic assessment of all costs, including in-kind use of organizational resources?
- Will the direct costs be reimbursed through the research budget?
- What is the expected "in kind" contribution? Will this be compensated?
- If the research-related costs are not compensated through the research budget, what are the opportunity costs to the organization of supporting this activity? Could it detract from the organization's own priorities?
- What is the process for approving commitment of funds (or in-kind resources) to the project?

What is the proposed structure and process to support the collaboration?

- Is the proposed structure and process appropriate and convenient for the organization?
- How will communication around the project occur?
- How will any difficulties or misunderstandings around the project be resolved?

Are there any potential benefits to the organization of this research? What are they?

- If there are no direct benefits, what is the rationale for involvement? (There may be good reasons to support a project with great societal benefit even if there are no direct advantages to the organization. However, agreement should not be automatic).

What are the organizational policy and processes for such requests?

- Who should be making the decision?

Who in the organization will be affected if the project goes ahead? (e.g. Managers, point of care staff, data analysts, other?)

- How will they be involved in decision-making around approving the project?

Will the collaboration be with one individual researcher/research team, or with a university department/unit?

- Does the organization have an existing relationship with this unit?

If there are potential benefits, is there openness to adapting the research question to better reflect organizational interests?

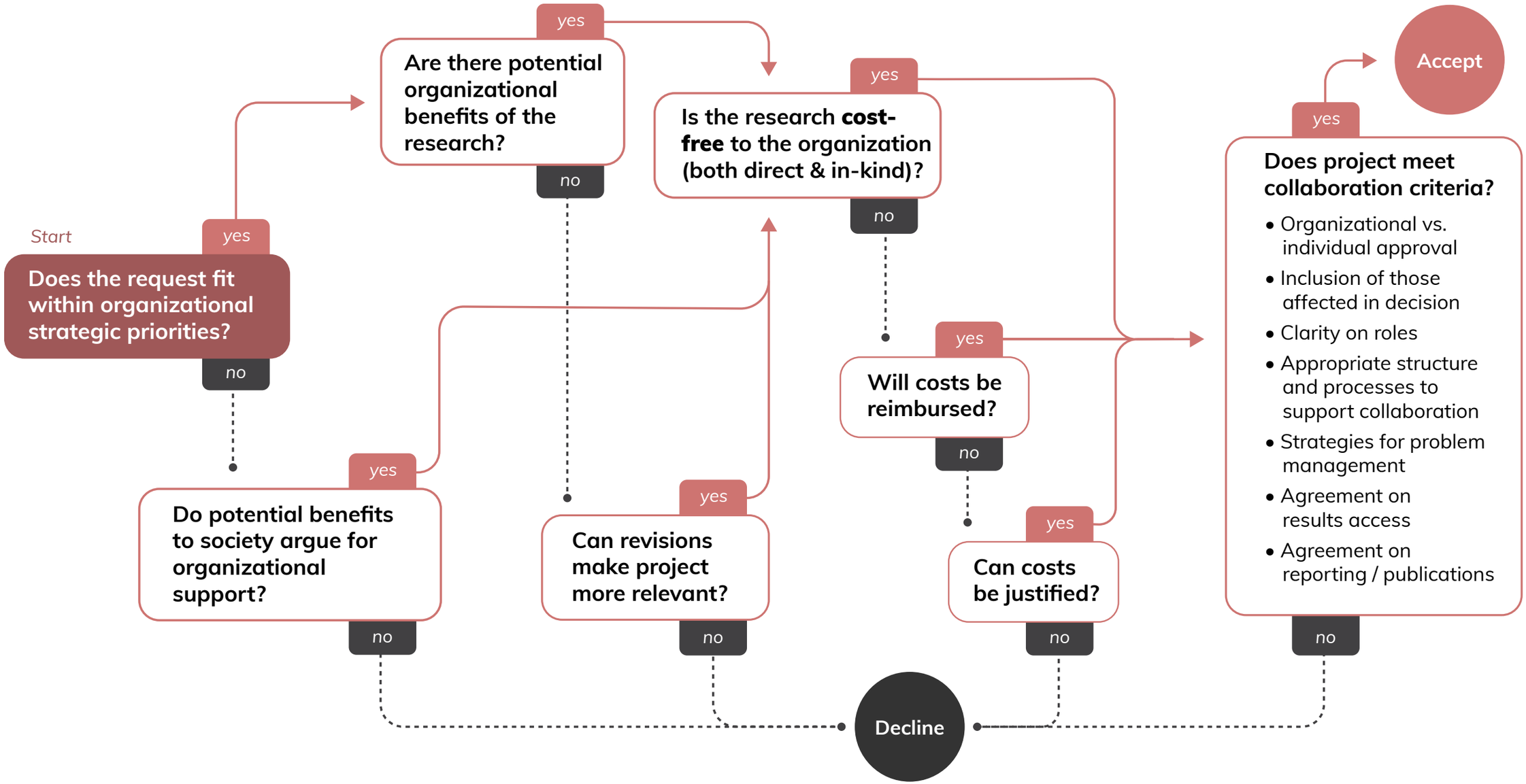
What will be the role of the organization in developing, reviewing and approving reports and publications?

How does the research question fit within organizational strategic priorities?

Will the organization have access to early results from the project?

Is the proposed role acceptable to the organization?

Fig. 6: Decision tree to assist organizations in evaluating requests for research collaboration



Section 3

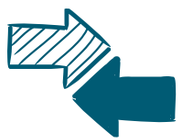
Developing a research strategy

What's the best approach for our organization?

Developing a research strategy

Two major approaches to building research capacity & responsiveness within an organization

Careful attention to initial planning activities (Section 2) will effectively position the organization to begin development of concrete research action. While there are a wide range of alternative actions, there are two major approaches to building research capacity/responsiveness within an organization. These two approaches are not mutually exclusive and organizations may undertake initiatives with aspects of each. However, it is important to be clear on what approach is being taken and why, and to avoid potential competition for scarce research resources.



Create an interface with academic and/or research bodies

This interface may take many forms: joint committees; liaison offices within either the organization or another institution; discussion tables; planning days held in collaboration with provincial health departments, universities and other bodies; regular research days that showcase relevant academic and/or inhouse research; or negotiating for specialized library services.

Assumptions: Universities (and other research institutes) are the centre of research expertise: the focus of the health system should be on health care delivery. The most practical approach is to collaborate with them around organizations' research needs and interests.

Embed additional research capacity within the organization

This may include creation of some form of a "Research and Evaluation" unit, or embedding various forms of research (or expertise in accessing, assessing and communicating research), within existing departments (e.g. expanding the role of Organizational Learning).

Assumptions: Organizations can best meet their research needs if responsibility and accountability for research activity rests within the organization.

Alternate approaches

There are also creative initiatives that do not fit neatly into either of these two major approaches. For example, a number of health regions may collaborate to form a regional research resource, or resources may be situated within a provincial department of health or national body. An organization may negotiate academic appointments for senior staff, or creative arrangements for sharing research staff with academic centres. The principles (and cautions) for developing 'interface' and 'embedded' responses can also help frame the planning of these alternate or 'mixed' responses.

Each broad approach has potential advantages and disadvantages that should be considered as an organization sets about to design an initiative appropriate for a particular context. In addition, the critical challenges in effective implementation and management of each approach are distinct. In the following section we review potential advantages and disadvantages of each approach; identify important issues in planning; and outline potential strategies for avoiding and mitigating common pitfalls.

Creating a health system-academic interface

Collaboration on paper is different than in practice

In considering this approach to meeting the organization's research needs, it is important to recognize that many within the organization may have had relationships with external academic researchers, or have been invited to "partner" on specific activities. How this so-called partnership was expressed in practice may have varied greatly: it may have been limited to writing a letter of support, or agreeing to provide access to organizational data. It may also have included more expanded roles: e.g. serving on advisory committees to the research project, helping frame the research question, assisting in interpretation of results; or planning for ***dissemination*** and implementation. While there is evidence that health personnel, in general, view research collaboration as a positive thing, the actual experience of those involved in research partnerships has often been, unfortunately, less than positive. A major concern is the demands on organizational time and resources, which are rarely compensated for by research funding, even when there is little or no benefit to the organization of the research activity.[2,5]

Pitfalls of relationships with individual researchers

Many organizations begin to strengthen their research role by establishing, or further developing, relationships with individual researchers. Often these relationships are not with the organization, but between one or two researchers and individual managers within the organization. While this approach may result in positive experiences with a specific research project, it is not equivalent to developing effective collaborative initiatives at the system level. Potential disadvantages of one-on-one collaborations include risks of staff turnover to research continuity; lack of organizational awareness of staff time and other resources allocated to support the collaboration; and less likelihood of organization adoption of relevant research findings. Because the organization as a whole may be unaware the project is underway, it may not be in a position to benefit from findings that may have implications for other units or areas.

The beginning of a beautiful collaboration?

As indicated in **Table 3** on the following page, there are a number of potential advantages to the organization of creating linkages with academic research centres at the system level. At the same time there are a number of barriers to effective operation of such collaborations, key among them being:

- rigid approaches to definitions of research;
- lack of researcher flexibility in the complex world of health care;
- dependence on funding from research funding organizations (which may take years to secure);
- lack of responsiveness to organizational timelines; and,
- the pressure to fall into a reactive mode based on researcher interests.

Organizations that have developed successful collaborations often report that for such interfaces to become effective, years of discussion and interaction, skills in negotiation, and academic commitment to learning about health care needs and realities are needed.

In addition, organizations often come to realize that support for key research-related activities (e.g. evaluation, time-sensitive evidence reviews) are not met by this shared structure, and that the just-in-time input they need for decision-making cannot be provided. The generally unresponsive time frames of research funding cycles, and the common lack of priority given by research funding agencies to applied research, may result in organizational needs not being a priority for university researchers who are evaluated on their ability to obtain research grants and have their research published.

When more than one linkage is required

Larger organizations, or those within major urban centres, may also be faced with the opportunity (and the challenge) of establishing linkages with a number of different academic centres. While internal policy and processes supporting such partnerships may be consistent, different actions and external processes may be required.

> ***"Now, we have certain structures in place to involve academics... it's where we communicate to say 'here is what the burning issues are on the operations side, and if you'd really like our support, stand behind us'."***

[2] Bowen S, Botting I, Graham ID, et al. Experience of health leadership in partnering with university-based researchers in Canada - A call to "re-imagine" research. Int J Heal Policy Manag. 2019;8(12):684-699. doi:10.15171/ijhpm.2019.66

[5] Bowen S, Botting I, Graham ID, Huebner L-A. Beyond "Two Cultures": Guidance for Establishing Effective Researcher/Health System Partnerships. Int J Heal Policy Manag. 2016. doi:10.15171/ijhpm.2016.71

Promoting effectiveness of the interface: questions to consider

For these collaborative initiatives to be effective, it is helpful for the organization to consider the following questions in planning:

- What are the objectives and scope of the 'interface' initiative?
- Is the organization interested in linkages with more than one academic centre? If so, how will these various relationships be structured?
- How will activities be funded (if other than investment in time from both parties)?
- How responsive will initiatives be to organizational priorities? How will this be assured?
- At what level of the organization is the initiative developed? Senior leadership of both? (CEO, Dean, President)? Research Coordinator, Community relations officer?
- How will organizational staff have input into decisions?
- How will differences and misunderstandings be handled?
- How will the organization address the additional research-related needs (e.g. 'just in time' evidence reviews, evaluation) not addressed by the interface?

Recognizing potential challenges and pitfalls (**Table 4** on the following page) can also help achieve the goals of the collaboration, enabling proactive action that may help prevent or mitigate future problems.

Table 3: Advantages & disadvantages of health system-academic interface

Potential Advantages	*Potential Disadvantages*
University-based researchers have dedicated time, expertise, and knowledge of research funding opportunities.	Current research funding programs are rarely responsive enough to meet the real-life time frames for health system decision-making.
Universities have expertise that health service organizations do not.	University-based researchers are often unwilling to work with an organization unless funded to do so through specific grants.
Organizations may gain access to researchers with more diverse methodological skills and areas of program expertise than the organization could secure internally.	Participation of university researchers may be limited to traditional (funded by research agency) projects: they may be unable or unwilling to use their research expertise to support organizational decision-making in less structured ways. E.g. Many research activities of interest to health organizations are evaluation research: many researchers do not consider this research, and it may be difficult to obtain funding for it.
The time-consuming work of designing research, submitting applications, and coordinating activities falls to academia rather than the organization.	Academic courses often do not prepare researchers with the range of methodological and interpersonal skills to be effective partners.
There are benefits to academia in participating in real life research questions of importance to health organizations: increased researcher skill set and learning opportunities for students.	Reward and recognition systems within universities are often at odds with those of the organization, which may make it difficult for researchers to focus on the 'deliverables' the organization needs.
Credibility of findings may be enhanced if research led from outside the organization.	If relationships are formed with individual researchers rather than the institution or university department, there may be no organizational recourse if objectives are not achieved or difficulties are encountered.
Respectful, collaborative work may build increased awareness, capacity of all partners.	Research funding (in many or most cases) is controlled by the university, weakening organizational control over joint projects.

Table 4: Potential pitfalls, positioning for success

Potential Pitfall	Characteristics associated with success
Collaborations limited to research questions for which there are current research funding opportunities rather than organizational priorities	Recognition that the collaboration will likely not address all organizational interests and needs Investment in internal resources to address broader research-related needs Investment of all partners into co-development of ongoing relationships that will enable proactive action
Research findings not timely	Investment in internal resources to address immediate needs Negotiating access to preliminary findings
Failure to negotiate the different agendas, expectations, and cultures of the academic and health services world	Initial in-depth orientation for all participants that includes not only orientation to research and research processes, but also to the organization's structure, decision-making processes and priorities Ensuring strong negotiation skills on leadership team Clearly identifying areas of expertise of each team member Clear processes for addressing emerging problems Academic commitment to recognizing and rewarding diverse forms of research, dissemination and measurement of impact[6]
Collaborations developed at a personal, individual (e.g. researcher and manager) level rather than institution-to-institution level	Negotiated organization-organization agreements Written organization-to-organization memorandums of understanding, and/or specific contracts Ensuring appropriate organizational policy Succession plan to address potential loss of organizational leads
Failure to involve appropriate partners with interest, skills in partnership	Guidelines for partnership that include requirements and expectations of partners Consideration of identifying an organizational 'relationship broker' with skills and responsibility to develop partnerships[5] Proactive identification and recruitment of researchers with partnership experiences and approaches
Inadequate time and resources dedicated to initiative	Ensuring identified staff have protected time to participate Clear communication of organization meeting time preferences and availability, as well as preferred communication strategies (e.g. email, phone, in-person. meeting) Negotiation of compensation for participation where appropriate (e.g. time in proposal development)
Projects driven by researcher interest or funding availability rather than organizational need	Appropriate planning dedicated to clarifying goals of the collaboration and organizational expectations, including requirement of academic commitment to addressing organizational priorities Clear terms of reference Clear processes and approval criteria for decisions on joint activity
Failure to monitor and evaluate development of the interface and participant experience with it	Joint development of plan to monitor and assess participation, satisfaction and impact Regular check–ins at senior leadership levels

[5] [5] *Bowen S, Botting I, Graham ID, Huebner L-A. Beyond "Two Cultures": Guidance for Establishing Effective Researcher/Health System Partnerships. Int J Heal Policy Manag. 2016. doi:10.15171/ijhpm.2016.71*

[6] *Canadian Academy of Health Sciences. Academic Recognition of Team Science: How to Optimize the Canadian Academic System. 2017. https://www.cahs-acss.ca/academic-recognition-of-team-science-how-to-optimize-the-canadian-academic-system/?%0Ahttps://www.cahs-acss.ca/wp-content/uploads/2017/07/2017-06-22-Team-Science-Report-Eng-FINAL-Web.pdf%0Ahttps://www.cahs-acss.ca/wp-content/uploa.*

Embedding research capacity within the organization

Before building in-house research capacity

Given the costs and time needed to develop and maintain an effective collaborative relationship with academic bodies, as well as the unmet research needs the organization may continue to face, many organizations decide that the best way to have their needs met is to invest in building internal research resources. This approach also has a number of advantages and disadvantages, as outlined in **Table 5**. At the same time, it is important to recognize that internal research units are unlikely to be able to address all the organization's research-related needs. It is necessary to clearly identify organizational research priorities, and to recognize that some priorities may be better addressed through some form of collaboration or contracting with academic centres.

Advantages include the potential of embedded roles to focus on the topics and types of research most needed by the organization; the ability of a well-designed internal research initiative to support and integrate QI initiatives; and the fact that accountability for researcher time is to the organization, not to an external body. Staff can be recognized and rewarded for doing work that contributes to the organization.

Potential disadvantages include the difficulty of funding internal research capacity; protecting the vision and scope of staff roles; and challenges in positioning research resources to be of most benefit to the organization.

Table 5: Advantages & disadvantages of embedding research within the organization

Potential Advantages	*Potential Disadvantages*
Can be designed to address organization's priorities	There may be challenges in obtaining and maintaining sustainable, secure funding. Direct organizational funding of research roles may be prohibited or discouraged in some jurisdictions.
Research staff are responsible to the organization, not an external body	The organizational need for diverse methodological expertise requires a variety of research skills not found within one or two people.
Allows the organization to address organizational questions that may not receive research funding (e.g. evaluation research, rapid reviews for executive decision-making)	Embedded roles may be viewed as competing with university-based researchers.
Facilitates research relevance and use	Action must be taken to protect research activities from internal political pressure that might affect credibility.
Research activities more easily designed to benefit from health provider expertise and reflect health care realities	Careful planning and monitoring is needed to ensure shared clarity on research staff role, and relationship with QI activities.
Greater flexibility and nimbleness in providing timely evidence	It may be difficult to ensure appropriate support to research staff.
Can provide a contact point for coordination of research-related activities, and facilitate appropriate, supervised research placements, student projects	

> *"We have also hired... organizational researchers. These are folks we ask to do research, like any other researcher. They don't have teaching obligations, obviously, they are paid for by the organization. We don't expect them to apply for salary grants, but we do ask them to submit research projects to funding agencies and align their research program to the organization's priorities and needs."*

Promoting effectiveness of embedded research actions

To optimize the likelihood of an effective embedded response, preliminary organizational planning should consider the following:

- Is there consensus within the organization on the purpose and focus of the embedded capacity? What organizational objectives is the action meant to address? Is an embedded initiative the most appropriate for these objectives?
- Given that it is unlikely that an internal research capacity can meet all the organization's research needs, what other actions (e.g. external collaborations) are needed?
- What action is needed to ensure that the embedded research skills are an integral part of the organization? Will the initiative survive a change in current leadership?
- How will the initiative be resourced? How sustainable is the source of funding?
- What kinds of staff are needed to meet the objectives of the initiative? What qualifications do they need to have?
- What practical measures are needed to ensure that these roles are effectively integrated into organizational decision-making and practice?
- What will be the relationship of the new roles with existing data management, performance measurement, quality improvement, and decision-support functions?
- How will these internal staff relate to the larger research community?

Embedded research initiatives also commonly face four critical challenges:

- Stability and sustainability of funding;
- Appropriate and supported staffing;
- Integrating the initiative into organizational decision-making and operations;
- Relationships with academia and other research bodies.

Attention to these issues in planning can help prevent or mitigate some commonly experienced difficulties. These critical challenges are explored in more detail in the following pages.

Critical challenge

Stability and sustainability of funding

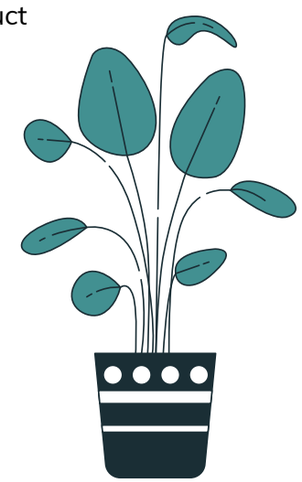
While not all research initiatives require significant funding, an initial challenge faced by most organizations is ensuring sustainable funding for research-related positions. Traditionally, research support has not been integrated into health system budgets, and in times of increasing fiscal restraint even established research programs may be under pressure. It may be difficult to retain experienced staff, or even a clear focus on the objectives of the initiative if funding is uncertain.

Framing research roles and positioning them for success

An important strategy for addressing this challenge is to position research as an essential (not optional, add-on) component of quality health care delivery, and resist efforts to have it framed as an administrative function.

Creativity may be needed to identify sources of funding and grow initial actions into a sustainable initiative. Strategies that have been used by other organizations include:

- Having a small core of permanent staff for which funding can be assured; supplementing this with contract employees based on availability of funding for specific projects;
- Ensuring that initial hiring includes experienced researchers with expertise in proposal development in order to facilitate unit ability to obtain external research funding;
- Using internal program funds that would otherwise have been used to pay for external evaluation to fund internal staff to conduct these activities;
- Active strategies to demonstrate the 'value added' of the research activities to organizational functioning and performance; and,
- Centralizing research support functions (such as data analysis) to create greater efficiencies.



Critical challenge

Appropriate and supported staffing

Selecting staff for an internal research unit can also present a number of challenges. Researchers are often not well prepared to work in the rapidly evolving world of health care delivery: such roles require flexibility, responsiveness to organizational priorities and knowledge of a range of research methods. Effective embedded researchers recognize that the research unit exists to support organizational priorities: personnel selected for the unit must have both the orientation and skills for this specialized approach to research. These roles are not appropriate for researchers with interest in only one research topic; with limited experience with multi-method approaches; or who cherish their independence to pursue curiosity-driven research. Excellent interpersonal skills, including the ability to negotiate diverse perspectives, are essential.

It's often tough to be embedded

There are also challenges in supporting embedded research personnel in what is often a stressful role—they are asked to straddle the expectations of both the academic and health services worlds. Their roles may not be that well understood or appreciated within the organization, and some find that both university-based tenure and promotion committees, and their academic colleagues, may undervalue their research contributions.

Some practical steps that may be helpful in addressing these challenges include:

- Clearly articulating, both within the organization and to prospective research staff, the organization's vision of research as a responsive, integral aspect of the organization's strategic plan.
- Appointing a senior position first. While a junior position may cost less initially, there are benefits to engaging experienced personnel who have skills to help the organization to continue to clarify staffing needs, explore research funding opportunities, and provide support to junior staff in the future. The person selected for this lead role should have both health service experience and the expertise to provide leadership in growing internal capacity.
- Ensuring research positions are designed to address current organizational priorities and goals of the initiative. Different choices may be needed depending on whether the focus is on conducting internal program evaluations; ensuring assessment, dissemination and implementation of relevant published research; conducting rapid assessments/reviews for organizational decision-making; or leading original research projects.
- Carefully developing position descriptions that highlight the unique aspects of the embedded research role. Methodological skills are important but not sufficient—those selected must respect the role and expertise of health care personnel and have the flexibility to respond to the fast-paced health care reality.
- Paying attention, as organizational capacity to engage more staff grows, to the need for diverse experiences and methodological skills: avoid hiring "more of the same."
- Evaluating, in collaboration with research staff, how the embedded unit is evolving, and how the organization can best support them in their unique roles.

Those involved in planning and hiring for any kind of embedded unit will benefit from reviewing the differences between PhD prepared researchers, and those with an M.A. or M.Sc. degree, also keeping in mind that some Masters degrees are professional, not research, degrees.

Critical challenge

Integrating the initiative into organizational decision-making and operations

It is also often a challenge to integrate embedded research roles effectively into organizational planning, decision-making and operations. An initiative will not achieve its objectives if there is confusion about: where research 'fits' within the organization; what the relationship is with QI, performance management or accreditation processes; or if the initiative is not 'championed' and led from the executive level.

Early strategies to promote effective integration include:

- Ensuring clarity throughout the organization on the objectives of the embedded initiative, the role of staff, and where it fits into the organizational structure;
- Ensuring that the embedded unit reports directly to senior management in an appropriate portfolio. Examples might be Vice President, Research and Quality; Director, Organizational Learning and Staff Development. A position many layers down in the reporting structure indicates lower status of the role, and makes it less likely that research activities will be integrated into organizational planning and operations;
- Careful delineation of roles with Quality, Decision Support units;
- Developing practical processes to integrate research expertise with planning and decision-making processes;
- Using agenda-setting and decision-making processes that promote evidence-informed decision making.

Critical challenge

Relationships with academia and other research bodies

It is also important to consider how the organization hopes its research personnel will relate to other organizations. Some embedded researchers will already have established relationships with universities or other research bodies: PhD prepared researchers will often wish to maintain academic 'credentials' as well as relationships (including university appointments) with academia. This can be challenging as the deliverables valued by health organizations (e.g. just-in-time evidence summaries, evaluation research) may not be credited in academic recognition and reward systems.

Academia's relationship with embedded units

Many health organizations will also want to develop and/or enhance their organizational relationships with academia. Research personnel can play an important role in facilitating research collaborations, identifying future research partners, and ensuring access to research evidence. However, university response to internal units may vary: while some embedded units find good support, others may be viewed as being in competition with academic centres or other research institutes.

Straddling the health service and academic worlds

While some organizations report a positive experience 'sharing' research staff with academic institutions (e.g. joint appointments), such arrangements require caution. Often staff can be torn between the competing needs and expectations of two very different employers, or the organization may simply end up subsidizing a position that is still focused on academic, vs. health organization, deliverables.

Suggestions for promoting positive relationships with academia include:

- Communicating at an organization-to-organization (Senior Executive) level on the purpose and focus of the internal research unit;
- Extending formal and informal invitations and opportunities for collaboration;
- Supporting research personnel in representing the unique work they do to an academic audience, through presentations, other forms of dissemination, and academic-health system collaborations;
- Exploring and advocating for adjunct positions for organizational research staff. Academic affiliations can support staff retention as well as provide additional linkages for the organization;
- Advocating for recognition of health system research contributions within academic recognition and reward systems.[6]

> ***"We wanted to embed researchers into the healthcare system but no one thought it through... the implications of that for them as an academic."***

[6] *Canadian Academy of Health Sciences. Academic Recognition of Team Science: How to Optimize the Canadian Academic System. 2017. https://www.cahs-acss.ca/academic-recognition-of-team-science-how-to-optimize-the-canadian-academic-system/?%0Ahttps://www.cahs-acss.ca/wp-content/uploads/2017/07/2017-06-22-Team-Science-Report-Eng-FINAL-Web.pdf%0Ahttps://www.cahs-acss.ca/wp-content/uploa.*

Planning for implementation and evaluation

It's all about the follow through

A well-designed plan for research involvement is not, in itself, sufficient for success. Any research initiative—whether focusing on development of effective collaborations, or building embedded research capacity—must be implemented effectively, and this implementation process must be evaluated. Often failure of an initiative is not the result of a poorly thought out idea, but rather the result of failures in implementation.[7]

Key elements of an effective implementation plan include: meaningful engagement of all those affected by the initiative; adequate resourcing to achieve the objectives of the initiative; clear communication; and ongoing monitoring of implementation progress and emerging issues. There are a wide range of implementation guides available, many of which are linked to specific implementation tasks or program areas.

A comprehensive evaluation plan is needed, and should be designed and ready to implement at the time any research initiative is launched.

Without evaluation, opportunities can be missed

Too often, evaluation is an afterthought, with little or no allocation of resources to support it. Without effective and ongoing evaluation, opportunities for early identification (and remediation) of problems may missed; and opportunities for growth and improvement of early research action may pass unrecognized.

Evaluation plans may be developed at two levels: at the level of an individual project (e.g. Did our collaboration with University X on Chronic Disease accomplish what we were hoping for? How would we handle a similar request?) and the level of the overall research plan. Evaluation at this level addresses the larger question of whether the research response plan developed by the organization is meeting its needs, or whether adaptations or changes are needed.

It is important for organizations to ensure that they have access to competent evaluation expertise, whether in-house or external, for undertaking evaluation activities. In addition, it is useful to build awareness and appreciation of the range of evaluation purposes and approaches among staff and managers.

Understanding the evaluation process

There are a number of practical resources that can guide an organization through the evaluation process. One useful starting point for further exploration is the website Better Evaluation (https://www.betterevaluation.org), which provides straightforward definitions and many resources including a Managers Guide to Evaluation.

A Guide to Evaluation in Health Research (https://cihr-irsc.gc.ca/e/45336.html#a10) provides the steps to planning and implementing a collaborative evaluation, including an evaluation checklist and planning matrix.

Making sure you have the right tool for the job

A useful form of evaluation in this context is ***developmental evaluation***. The purpose of developmental evaluation is to support the continued development of an initiative within the organization. Reflecting the principles of complexity theory, developmental evaluation engages organizational members in the evaluation process, supporting an ongoing process of innovation. This approach also promotes evaluative thinking, and provides opportunities for consensus development around the program or service to be evaluated.

***Utilization-focused evaluation* is an important orientation for any evaluation activity as it keeps the focus throughout all evaluation stages on the question of how the organization or program plans to use the findings. Health organizations do not have the resources to devote to evaluation activities undertaken simply out of curiosity.**

The focus of evaluation can be expected to change over time. The first phase of any evaluation should be implementation evaluation, designed to assess to what extent the initiative has been implemented as intended. This allows for early intervention and re-direction if needed, optimizing the potential for effective functioning.

[7] *Bauer, Mark S.; Kirchner J. Implementation science: What is it and why should I care? Psychiatry Res. 2020;283. https://doi.org/10.1016/j.psychres.2019.04.025.*

Conclusion

Time for Action

Conclusion

It's time to move from thinking to acting

As discussed in the introduction, few resources are currently available to support health organizations in their work of developing a plan for their research role,or responding to requests for research involvement. This resource attempts to address this gap. It has suggested important considerations for organizations as they prepare to make decisions around research action, and outlined two broad 'approaches' to help organizations think through their options. It is expected that, in many or most cases, an organization may take more than one action, and responses may adopt more than one of these approaches.

Health organizations are complex and there is great diversity between them, including the degree to which planning for research has already been undertaken, previous research involvement, and available resources. Organizations will, and should, select different approaches and take different actions depending on organizational context and available resources: there is not, at this time, sufficient evidence to recommend specific models of response.

There is, however, emerging evidence on the principles that should guide development of any plan to respond to organizational research needs. Organizations are encouraged to first focus on 'getting their house in order'—to undertake the internal planning work that will facilitate both actions taken internally, and effective linkages with external research bodies. This requires clarity on purpose of the action taken; and commitment to (and understanding of) research and the role it can play in optimizing health care delivery.

Effective leadership from the highest levels of the organization is critical.

There must also be willingness to invest the time needed to undertake internal assessment, to develop organizational processes for ongoing research integration, and give thoughtful consideration to how research can best help the organization achieve its strategic goals.

This resource is intended as a starting point for further exploration and evaluation. We hope that organizations will share their experience with various initiatives in order to build a broad knowledge base that will assist organizations in the future as they work to clarify their research roles and activities.

> *"Relationship is key. Relationship, relationship, relationship. Getting to know each other, building trust, understanding where the challenges are for our partners in interfacing and having the same understanding for our clinical and health services people... and basically having all of the things that go into building a trusting relationship... being open, being transparent, sharing information, mobilizing knowledge, being able to resolve, to identify potential pinch points... That's all soft skills."*

Who wrote this booklet, and what inspired them to do so?

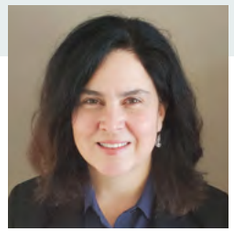
Sarah Bowen

Sarah Bowen's early career focused on designing and managing community health programs. Frustrated with the lack of useful research available to inform such programs, she obtained a PhD in Community Health Sciences, and went on to become the founding director of an embedded Research and Evaluation Unit within a large Canadian health authority. This multidisciplinary unit—designed to undertake, coordinate and synthesize research activities useful to health system decision makers—was directly involved with many of the challenges (and unsatisfactory experiences) faced by health system managers and staff in their interactions with academic researchers. This experience led her to accept an invitation from SEARCH Canada and the School of Public Health at the University of Alberta to design Engaged Scholarship educational initiatives to better prepare researchers to work in partnership with the health system.

Ian D. Graham

Ian Graham has been involved in research partnerships since, as a PhD student in medical sociology, he approached the federal minister of health offering to address a research question that would be useful to government. His research (in the areas of health services and implementation research) routinely includes clinicians, patients, health system managers and policy makers as co-investigators. In a six-year secondment to the Canadian Institutes of Health Research as Vice President of Knowledge Translation, he developed a suite of funding opportunities to promote researcher-knowledge user collaborations (also known as integrated knowledge translation). These initiatives required knowledge user participation both as co- or co-principal applicants on the grant applications, and on the grant review panels. He is currently leading a seven-year CIHR funded research program (the Integrated Knowledge Translation Research Network) studying research co-production through which he has built a network of health system leaders and university-based researchers committed to making research useful.

Ingrid Botting



Finding ways to get research-thinking and research into health system decision-making, planning and implementation has been a focus for Ingrid Botting, who has been working full time in a large health services delivery organization for the past 16 years. Ingrid came to healthcare following PhD in social history and postdoctoral work in applied health research. She spent years interviewing individuals living in communities experiencing extensive social, environmental and economic change, and heard their stories of struggle with their health and well-being. Because of the lack of opportunities for this work to influence policy or health system design, she left the University to work within the health system, where she felt she could have greater impact. She also maintains an appointment in the Department of Community Health Sciences, University of Manitoba, where she uses her combination of practical and academic experience to help bridge the university and health delivery worlds.

A few final words

Acknowledgements

The authors are deeply grateful for the contributions of the many health system leaders, managers, staff and interns who—through interviews and workshops associated with the "Building and Managing Effective Partnerships in Canadian Health Research" research project (PI Ingrid Botting)—shared their insights on, and experiences with, health system-academic research partnerships.

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- Jed Duff, Professor and Chair of Nursing at the Metro North Hospital and Health Service and Queensland University of Technology.
- Bernard Leduc, Président-directeur général / President & CEO Hôpital Montfort, Ottawa;
- Wendy Nicklin, Formerly Vice President of Clinical Services, Chief Nurse Executive, The Ottawa Hospital, President and CEO of Accreditation Canada, and Past President (Board Chair) of the International Society for Quality in Health Care (ISQUA);
- Cathy Ulrich, President & CEO, Northern Health, British Columbia.

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Bowen S, Graham Ian D, Botting I. It's Time to Talk About Our Relationship With Research., 2021, Ottawa. The Integrated Knowledge Translation Research Network. Available at https://iktrn.ohri.ca/resources/ikt-resources

All additional references

All quotes used in the guide were taken from interviews with healthcare personnel and are documented in the following publications:

- Bowen S, Botting I, Graham ID, et al. Experience of health leadership in partnering with university-based researchers in Canada - A call to "re-imagine" research. Int J Heal Policy Manag. 2019;8(12):684-699. doi:10.15171/ijhpm.2019.66
- Bowen S, Botting I, Graham ID, Huebner L-A. Beyond "Two Cultures": Guidance for Establishing Effective Researcher/Health System Partnerships. Int J Heal Policy Manag. 2016. doi:10.15171/ijhpm.2016.71

We welcome your feedback on this document

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Appendix

And a few more things...

a - Definitions

b - Promoting Research Thinking

c - Sample Key Messages

Appendix A Definitions of common terms

Research	The creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings. This could include synthesis and analysis of previous research to the extent that it leads to new and creative outcomes. Research can be conducted on many different types of health questions. For example, CIHR describes the four pillars of research as: bio-medical research; clinical research; health services research; and social, cultural, environmental and population health research. Different methodologies may be selected to design research to best answer the research question. Quantitative research focuses on measurement and testing of data (good for answering questions such as "How much, how many?"). Qualitative research deals with phenomena which can be observed but not measured and is used to help answer questions such as "Why is this happening?". Mixed method methodology attempts to combine the best of both qualitative and quantitative methodologies. Many methods may be found within each methodology. Examples of methods are surveys, interviews, experiments, secondary data analysis, observation, and research synthesis. Some methods may be either quantitative or qualitative. For example, a survey with defined answers (a, b, c, d) would use quantitative methods of analysis, where a survey asking open-ended questions of opinion would be analysed qualitatively. One methodology is not better than another, nor are some methods better than others. What is important is that the best research design and most appropriate methods are selected for the specific research question. Because there are so many research approaches, methodologies and methods, it is not possible for one researcher to be an expert in all research areas.
Evaluation	Evaluation: The systematic collection of information about the activities, characteristics, and outcomes of program, services, policy, or processes, in order to make judgments about the program/process, improve effectiveness, and/or inform decisions about future development. Program evaluation focuses on learning for the purposes of program management. Evaluation research can generate knowledge potentially applicable to other settings. **Developmental Evaluation** is an approach to evaluation (not a specific method or tool) designed to support decision-making for innovation. Innovations can take the form of new projects, programs, products, organizational changes, policy reforms, and system interventions. **Utilization-focused evaluation** can be used in any kind of evaluation; it is based on the principle that an evaluation should be judged on its usefulness to intended users.
Research & Evaluation Skills	Research and evaluation skills are the ability to search for, find, collect, analyse, interpret and evaluate relevant information that is relevant to the subject being studied.
Data Analysis	Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data.
Quality Improvement	Quality Improvement can be described as a systematic approach to making changes that improve clinical practice and health system performance, enhance professional and/or organizational development, and improve patient and population health outcomes. (Health Quality Council).

(more)

Organizational Learning	Organizational Learning is the process by which an organization improves itself over time through gaining experience and using that experience to create knowledge. The knowledge created is then transferred within the organization. An organization may use quality improvement activities, and many different research and evaluation methods (including systematic consultation with staff and community) to contribute to this learning.
Dissemination	Dissemination is a process that involves consideration of target audiences and the settings in which research findings are to be received and, where appropriate, communicating and interacting with wider policy and health service audiences.
Knowledge Translation (KT)	Knowledge Translation (KT) activities aim to close the gap between research and implementation by improving the use of research evidence in practice, policy and further research. It involves more than dissemination.
Implementation Science/ KT Science/ Research	Implementation Science/KT Science/Research is the scientific study of methods to promote the systematic uptake of what works in promoting the uptake of research findings (and other evidence-based practices) into routine practice by patients, health care providers, managers, and policy makers.

> ***"I think there needs to be that re-imagination... this can't be seen as something distinct from QI... I believe there has to be ongoing and regular communication between universities and academics with the universities and the senior leadership both within regions and within governments... to develop these relationships and sustain them."***

Appendix B Using emerging issues and questions to promote research thinking

Presenting Problem	*Sample discussion questions*
How will the organization respond to the request from University X to sign on as a partner for their research proposal?	Do we have a clear research policy? What are our priorities for research involvement? Are our procedures for reviewing requests adequate to protect the organization? What will be demanded of staff time and organizational resources? What are our expectations of the research team?
Do we need to have an external evaluation/ review of Program X?	What are we hoping to learn? What skills are needed to answer this question? What questions require an external review rather than internal evaluation or original research? How often do such questions come up and what guidelines do we have for how to respond to them? What are advantages and disadvantages of internal vs. external evaluations? How do we find a research partner to help us?
We don't have the information we need to know how to respond to the crisis in our ER: what do we do?	What information do we have in-house? Which program areas need to be involved in coming up with a solution? How do we find a research partner who can help us solve this problem?
The X Institute has just released a report on the costs of chronic disease management: what do we need to do as a health service organization?	Who can provide a rapid assessment of the report to appraise its applicability to our organization? Should we develop inhouse capacity to do this? Can we find a research partner to help with this? What is the evidence on the effectiveness of our existing programs' and services' ability to respond to current disease prevalence? What is the latest evidence of effective interventions? Do we need an evaluation?
Should we change Policy X in light of COVID-19?	What is the latest evidence on this question? How strong is this evidence? How do we remain current in a rapidly evolving environment? What strategies do we have for communicating policy to staff, patients and community? What skills are needed to support us in this?
How can we best design a comprehensive service to address mental health needs among the elderly?	What do we know about this population in our catchment area? Is more investigation needed? If so, what is the best way to do it? What can we learn from the literature about effective mental health services for this population? What is the evidence that these interventions would be appropriate in our context? What different forms of expertise and experience must be involved in designing our response? How do we plan for effective implementation? How do we ensure appropriate and on-going evaluation of any initiatives?
As we do not have the budget to continue to fund both Program X and Program Y, which one will we cancel?	On what evidence do we make this decision? Are the programs reflecting latest evidence or are changes needed? Why is the choice only between these two programs? What can we learn from the literature about most effective interventions for the issues the programs are meant to address?
Should we approve funds to hire another data analyst?	What is the purpose of this role? Do we need another analyst or are other roles to support use of evidence (knowledge dissemination, evaluation specialist) of higher importance? What can these roles do that a data analyst cannot do?

Appendix C Sample key messages for academic research bodies

After an organization has clarified what it wishes its role in research to be (and what challenges it is currently facing with research requests and potential research partnerships), leaders will want to carefully consider how they will communicate their stance around health organization-academic collaboration.

Scenario	*Example message*
An organization is getting many, and varied, requests for partnership. The staff approached are not always the appropriate contacts.	"As an organization we are deeply committed to supporting research, but have clear policies for approving staff and organizational resources for any particular project. These policies and procedures can be found at..."
An organization wishes to communicate some limits on the type of research activities in which it will become involved.	"Given all the demands on the organization at present, we will only become involved in research activities that our senior management feels addresses our current priorities. The proposal for X will need to be submitted to Y for review."
An organization is open to engaging in research partnerships and making contacts with researchers but wants to proactively communicate what they expect from those looking to partner.	"We are most interested in working with researchers who are willing to take on the priorities of our organization, and work with us to ensure that results are available in a timely way. We encourage researchers to become more familiar with our programs and priorities by (X)."
An organization wishes to take a proactive role in proposing potential research projects and encouraging appropriate research partnerships.	"We want to develop ongoing relationships with researchers who are interested in working collaboratively with us to address issues of concern to us. We would also be interested in hearing about your research interests and experience. We would invite you to (X)..."
An organization has decided its main research focus will be to develop in-house research expertise.	"In order to better fulfill our mandate of quality health care delivery, we will invest in in-house research capacity to ensure that we can address key issues as they arise, and help build longer term research relationships. We hope that you may be open to collaborating with us on our organizational priorities in the future."