Knowledge Mobilization Evaluation Frameworks and Methods

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Report for the Ministry of Children and Family Development

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Executive Summary

Background

British Columbia's provincial Ministry of Child and Family Development (MCFD) mandate is to support all children and youth in British Columbia to be in safe, healthy and nurturing families and be strongly connected to their communities and culture. MCFD relies on the Strategic Policy and Research (SPRe) Team to bring together scientific evidence, understanding of wise practices, and voices of youth and their families needed to deliver on these outcomes. Knowledge mobilization (KM), which connects research results and findings to policy and practice, is the keyway to translating these complex and diverse sources of evidence and data into leading-edge policies and programs. Conducting knowledge mobilization evaluation drives transparent, evidence-based policymaking, allows organizations to benefit from lessons learned within and outside their organizations, and enhances the trust of stakeholders that the decisions made by the organization are rooted in expertise and the consideration of feedback from multiple sources.

This report aims to provide information on relevant frameworks, metrics, and methods to support the SPRe team in developing an approach to internal knowledge mobilization evaluation, including an assessment of the areas of compatibility with the ministry's Aboriginal Policy and Practices Framework (APPF).

Research Questions

The findings in this report were developed through a literature review and jurisdictional scan guided by the following research questions:

- What processes, methods, or frameworks have other jurisdictions used to evaluate KM activities, particularly in the provision of social services to children, youths, and fami-

lies?

- What KM evaluation processes, methods, or frameworks are suggested by the body of relevant literature?
- Are the approaches suggested by the literature review and jurisdictional scan compatible with the APPF?

Findings

A full jurisdictional scan was not possible because of the dearth of information publicly available on this subject. Information on intrainstitutional KM either is kept internal or is not assessed by institutions. Either of these scenarios implies that this area would benefit from more research and collaboration within and between government organizations.

The body of literature was not conclusive on what criteria should be used to evaluate the impact of KM. While a lack of standardization is sometimes construed as a problem, others frame it as a strength and a necessity in that KM evaluation must be flexible and adaptive to different circumstances. Effective KM evaluation is that which realizes there is no

one-size-fits-all solution. The diversity of indicators presented in the literature indicates that it is necessary to use a mix of quantitative and qualitative elements.

This emphasis on the process behind evaluation rather than concrete metrics was repeated across other key findings. Known as the systems approach, this conceptualization of KM places evaluation within a broader context that recognizes that evaluation is not a final step in KM but rather part of an ongoing, iterative dialogue. This includes identifying broader organizational goals around KM to evaluate individual efforts based on how they contribute to these overarching goals, and evaluating the openness of the institutional environment to analyze whether interventions are designed in a way that is conducive to desired results.

These findings are in alignment with the APPF foundational principles, the first being "keeping the circle strong," which in this case manifests as integrating stakeholder and researcher engagement throughout the policy process. The findings also reflect the importance of a SPRe knowledge mobilization approach to be developed and implemented with the concept of "listening, assessing, and finding solutions" at the forefront since actively responding to participant feedback is a crucial part of successful knowledge mobilization techniques. The proposed evaluation framework also speaks to the need for policies and practices to be inclusive, equitable, collaborative, and accountable as per the Aboriginal Equity & Inclusion Policy Lens.

Recommendations

It is recommended that SPRe develop a knowledge mobilization evaluation strategy that includes the following elements:

1. Quantitative and qualitative metrics that are context-specific and adapted to each activity
2. Identification of broader KM goals so that activities can be judged according to how they contribute to these
3. Evaluation of the environment in which KM activities take place

Introduction: SPRe and Knowledge Mobilization

The overall mandate of British Columbia's provincial Ministry of Child and Family Development (MCFD) is to support all children and youth in British Columbia to be in safe, healthy and nurturing families and be strongly connected to their communities and culture. To bring together the information and perspectives required to deliver these outcomes, MCFD relies on scientific evidence, stakeholder relationships, understanding of wise practices, and the voices of youth and their families. In terms of research specifically, MCFD conducts internal research and leverages other Canadian and international sources of information to advance its understanding of the scientific and socio-economic factors that can be leveraged to maintain and enhance the province's role in supporting children and youth.

The function of the Strategic Policy and Research (SPRe) team is to support the research-building capacity of MCFD. The three primary aspects of the SPRe team are: research as a foundation, internal research, and external research. A key component of research as a foundation is knowledge mobilization, which entails implementing creative approaches to share and integrate findings from research into policy, practice, and decision making. Given this definition, KM is also imperative for the successful bridging of internal and external research to practical policy outcomes.

This definition is similar to many of those given for KM by various organizations; its exact definition can vary accordingly because it refers to a diverse range of activities. The most concise and straightforward definition I came across is the one by Knowledge Translation Australia (n.d.), which defined KM as "getting the right information, to the right people, at the right time, and in a format they can use, so as to influence decision making". This speaks to an active conceptualization of KM where information is shared to influence specific outcomes, rather than the more passive role suggested by terms such as "research dissemina-

tion." If the purpose of KM activities is to actively engage others in communities of practice and produce tangible results, then "knowledge mobilization" is an accurate term to use.

KM activities range from presentations and reports where researchers share their findings with broader communities of practice to emails within organizations to building knowledge-sharing relationships with partners. The definitive list of activities is limitless, as any activity where information is shared for a practical purpose can constitute KM. Regardless of how different the exact process of KM may look depending on the agents involved and the type of activity, one constant is that evaluation should be an integral component. KM is impact-oriented as such what matters most is that knowledge-sharing engenders an outcome that is concretely helpful to those involved (Central Queensland University, 2021). Consequently, measuring that outcome or otherwise validating its use is highly important.

While it is tempting to envision KM evaluation as the final stage of a linear KM process, this conceptualization is inaccurate and unlikely to produce the best results (Haynes et al., 2020[2]). In reality, not only is the entire KM process not neatly linear, but also its evaluation tends to generate more useful results if it is more like an ongoing, iterative dialogue about improvement with stakeholders. While the following paper discusses KM evaluation as a reflective, retroactive activity, it is essential to consider at what stages of the KM process outputs might be assessed to then engage in evaluation activities accordingly.

As noted, KM is far from a homogenous concept, occurring in a multitude of settings for varying purposes. This report focuses on knowledge mobilization as it relates to policy, not practice. In the context of this report, "practice" refers largely to healthcare settings where information is shared to ensure healthcare professionals provide services according to the most up-to-date information. It can also be generalized to any clinical setting where KM is used to

affect how something is practiced or implemented. In contrast, KM occurs in *policy* scenarios, where information sharing aims to influence policy processes and outcomes. Given the policy-forward context of MCFD and the SPRe team and the research needs this paper addresses, this paper primarily discusses KM evaluation ideas, frameworks, and methods that stem from a policy context.

Research questions

The findings in this report were developed through a literature review and jurisdictional scan guided by the following research questions:

- What processes, methods, or frameworks have other jurisdictions used to evaluate the success of knowledge mobilization, particularly in the provision of social services to children, youths, and families?
- What evaluation processes, methods, or frameworks are suggested by the body of relevant literature?
- Are the approaches suggested by the literature review and jurisdictional scan compatible with MCFD's APPF framework?

Methodology

Research on knowledge mobilization is partly complicated by a broad variety of terms being used to describe the same activities. "Knowledge mobilization" and "knowledge translation" are commonly used interchangeably, as is "research translation," despite potential subtle differences in meaning. Because these are the most common terms, the jurisdictional scan and literature review were conducted by searching for some combination of these key terms plus "evaluation" or "assessment."

The jurisdictional scan entailed searching the government websites of Australia, New

Zealand, Canada, the United States, Ireland, and the UK for results related to the key terms outlined above. Specifically, a Google advanced search was conducted to find those terms on the domains ending in .gov.au, .govt.nz, .gc.ca, .gov, .gov.ie, or .gov.uk.

The decision to restrict the set of government websites reviewed to those of the countries listed above was made based on considerations of time (i.e. not being able to peruse the government websites of every official country) and language, as these are the primary countries whose bodies of research are communicated in English. This does, however, constitute a severe limitation of this report, as many non-English-speaking countries undoubtedly also have research contributions in this field. Prioritizing these countries also introduces an Eurocentric bias to the work as it privileges voices that have had and continue to have hegemony on research discourse.

The literature review was conducted using the same combinations of search terms in University of Victoria library database. Some supplementary research was undertaken using the same search terms on Google and Google Scholar. The searches were meant to encompass both academic (peer-reviewed) and grey literature.

As mentioned previously, KM takes place in both practice and policy settings. Most of the body of literature on KM evaluation focuses on KM in practice, but this paper requires a policy lens as that is the focus of the SPRe team. As such, material relating to policy was prioritized in the literature review, but some material pertaining to practice was also selected if the findings were deemed transferable.

Findings

Jurisdictional Scan

The jurisdictional scan yielded limited results, and the available material concluded that this is an underdeveloped area of public research and communication. The wise practices

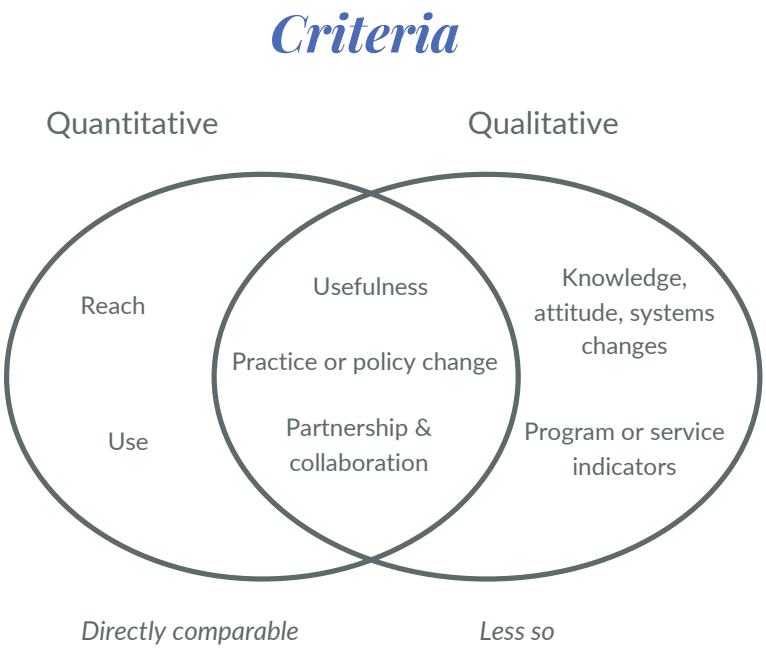
suggested by the few articles discussed are limited by the caveat that conclusions about how KM is or ought to be evaluated should not be based on such a small sample size. Some relevant material, such as that from New Zealand's Ministry of Business, Innovation & Employment, was incorporated into the literature review findings (rather than being presented on its own) for clarity's sake.

A full jurisdictional scan was not possible because of the dearth of information publicly available on this subject. Information on intrainstitutional knowledge mobilization is either kept internal or not assessed by institutions. Either of these scenarios implies that this area would benefit from more research and collaboration within and between government organizations.

Literature Review

Criteria

The image below summarizes the information described in the next 3 subsections.



Quantitative. Much of the literature on measuring the quantitative impacts of KM activities refers to mobilizing research on clinical health interventions. This makes sense as ensuring health practitioners are incorporating the most up-to-date information in their practices is crucial to delivering improved patient care; furthermore, the impacts of these activities on patient outcomes are more readily quantifiable. For example, if the goal is to have healthcare practitioners stop prescribing antibiotics for mild upper respiratory infections (as per Wensing & Grol, 2019), a reasonable approach would be to disseminate that information and note whether a decreased number of physicians are subsequently prescribing those medications in those contexts.

Contrastingly, policy-related KM can be much more challenging to measure because of the complicated nature of policy systems and overlapping and competing influences. Much of the early literature pointed to the need for standardized KM evaluation criteria, and even the progress made to date is far from cohesive. Cooper et al. (2020) found that dissonant metrics were the top issue facing knowledge translation institutions. This tension is understandable as KM criteria are most valuable when tailored to a specific situation. Given the broad variety of scenarios in which KM is used, one set of criteria cannot be expected to fit all. However, it does make standardization and intrainstitutional comparison tricky. Often, these calls for standardized metrics envisage a set of quantitative metrics because those can be more directly compared amongst institutions and situations as quantitative metrics can be measured in numbers (Qi and Levin, 2013).

One of the most concise yet helpful resources on KM evaluation criteria comes from the Knowledge Institute on Child and Youth Mental Health and Addictions (2019). Other sources mentioned similar criteria, often in more specific terms like the examples in the table below (such as Cooper, 2015). As this is meant to be a resource that sparks conversation on

what criteria would be most beneficial for the SPRe team, rather than prescribing what these ought to be or look like, the categories are non-exhaustive and deliberately open-ended. The criteria that SPRe could use in assessing quantitative aspects of KM are as follows:

Table 1: Quantitative Criteria

Metric	Description	Examples
Reach	Number of community members whom the KM product reaches	Number of people who attend a conference or presentation, number of views on a social media post or website
Use	Number of community members who use the KM product	Number of downloads, number of a sample population surveyed who reported actively using the KM product

While some institutions prefer to focus on quantitative metrics, as discussed above, it is important to note that there are several crucial aspects of experience that academics and other researchers and institutions are not capturing if they choose to rely solely on the quantitative data. This concept was explored in a joint report on the future of KM issued by the Canadian Commission for UNESCO and the Social Sciences and Humanities Research Council (2020). It was stated that "metrics-based evaluation of research performance (mainly through bibliometric indicators) has reinforced incentives to avoid risks, stay within disciplinary territories, and prefer short-term deliverables over long-term ones." While these are not objectively bad outcomes in and of themselves, they discourage relationship building, and collaboration that the report noted is key to long-term KT success.

Qualitative. While quantitative metrics are adept at measuring some aspects of KT, one of the main takeaways from the body of literature is that to use only quantitative metrics would be to ignore the depth and breadth of experience associated with KM activities (Cooper et al., 2020). It would not be presenting an accurate picture of the entire story, and the quality of the as-

sessment would suffer as a result.

As with the quantitative criteria, this table of criteria below is meant to inspire conversation on what criteria would be most useful for the SPRe team. This list is even less exhaustive than the previous one because while the metrics at one's disposal are often limited, valuable questions about the KM process and experience are not. Many of these criteria are taken from the document created by the Knowledge Institute on Child and Youth Mental Health and Addictions (2019); other sources include McDonald et al. (2016) and Labbé et al. (2020).

Table 2: Qualitative criteria

Criteria	Description	Examples
Knowledge changes	Changes in subject knowledge on the part of those affected by KM activities	Did the KM activity share information that people did not know already? How did this change their understanding of the subject material?
Attitude changes	Changes in attitudes on the part of those affected by KM activities	How did people's views change? How did the KM form affect how people's ideas changed?
Systems changes	Changes in the systems environment in which KT took place	Is there recognition of more forms of knowledge? How did the conceptualization of what constituted knowledge influence the KT outcome?
Community engagement	Assessment of the degree and impact of community engagement in KT	What was the role of community engagement? What was its effect on the KT outcome?
Program or service indicators	Changes in how services or programs are delivered	How are programs or services delivered differently due to the KT activity? Is this a long-term or short-term change? What are the implications for the broader organizational environment?

Some organizations rely heavily on surveys as a qualitative data source. For example, as Haynes et al. (2020 [1]) described, the Australian Prevention Partnership Centre conducted KT evaluation by surveying policy partners on perceptions of resource allocation, governance, leadership, engagement, and collaboration at 0, 15, and 36 months after KT activities. This strategy is not extremely prevalent, nor is it recommended that the SPRe team adopt it as its sole KT evaluation activity because, as Qi & Levin (2013) point out, the quality of survey data (especially that collected 3 years after the fact) can easily fall prey to cognitive biases of respondents. They might have a hard time providing accurate feedback or tracing current outcomes to events that happened a significant while ago.

Overlap. An important consideration is that some criteria can be quantitative *or* qualitative depending on what function they are fulfilling. For example, "usefulness" can capture a myriad of metrics and experiences because it is so broad an idea. If used to measure the number of people who find a shared resource useful, this could be a quantitative metric, or it could be qualitative if the time is taken to record *how* participants found something useful. Both of these metrics can be helpful or informative to an organization in their own right, and there is nothing to say that one is unilaterally better than the other. The quantitative and qualitative aspects of a metric can be considered in a KM evaluation should it be suitable.

Ensuring that a sensible combination of quantitative and qualitative evaluation methods would go a long way towards resolving one of the most significant points of contention within the literature: whether quantitative *or* quantitative ought to be used. Indeed, much of the existing literature is devoted to calling out the need for consistent quantitative measures to be established or to defending the development of qualitative metrics on the grounds that this better captures the necessary richness of KM activities (Gold and Taylor, 2007). While there

certainly are some limitations on how much material can be contained within the scope of a single evaluation — there's no sense in putting too much material in for no reason as it would detract from the salient elements — this does not preclude the inclusion of *both* qualitative and quantitative components.

Table 3: Criteria with quantitative and qualitative overlap

Metric	Quantitative description & examples	Qualitative description & examples
Usefulness	Number of people who found the KM product useful	Ways in which respondents did or did not find the KM product useful
Practice or policy change	Number of practitioners or policy partners exhibiting modified behaviour	Observed changes in practice/service delivery; intent or commitment to change on behalf of policy partners
Partnership and collaboration	Number of partners engaged in policy practice; number of products jointly produced with policy partners; number of staff exchanges with policy partners	Partner perceptions of collaborative relationship; contribution to national or international communities

Public Health England (2015) published a report on KT in the context of public health research that examined how research partnerships can be evaluated, which was incorporated into the last criteria in the table.

Although it can generate extra work to consider whether an ambiguous metric should be quantitative and/or qualitative, this process is likely beneficial as it forces careful consideration of what is meant to be captured and the purpose or usefulness of a metric. This reflection is integral to successful KM. Essentially, designing the "right" evaluation for any specific program "requires interaction, negotiation, and situational analysis" (Gold and Taylor, 2007).

A closing note on criteria is that while the "what" of KM evaluation can be consid-

ered, the "how" is still blank in the literature: how should useful impact data be collected and recorded? No sources were found that classified what vehicles of KM evaluation exist, investigated their respective pros and cons, or analyzed the impact that data collection methods can have on the outcome. Again, KM is not a one-size-fits-all situation, so, likely, these methods vary so incredibly much from case to case that they are difficult to describe.

Principles of Impact Measurement: how to choose which criteria to use

The tables presented above are starting points for deciding evaluation metrics rather than a prescriptive list. This begs the question of how to choose which to use in any given context. As mentioned in the discussion of mixed quantitative-qualitative criteria, careful reflection is a precursor for successful KM evaluation. This means that the process behind choosing the metrics can be as important as the metrics themselves. One prevalent theme in the literature is that selecting criteria by which to judge the "success" of knowledge translation activities is a reflective rather than prescriptive practice and one that is wholly context dependent. Blanket statements about which criteria an institution should use in KM evaluation are thus not possible to make. A general approach, however, can be suggested.

The Center on Knowledge Translation for Disability & Rehabilitation Research (2005) put forth this series of steps to reflect on a program's needs and ensure that evaluation activities are tailored as best as possible to a given situation:

1. *Determine who the intended users of the evaluation are.* While the stakeholders in any given policy scenario can be many and diverse, it is vital to identify the primary users of the evaluation so that the criteria can be tailored to their needs. This is not to say that the needs of others in the community should be ignored, but rather that there should be a reflection on what metrics would make the most sense to the primary stakeholders and

give them the needed information to make positive changes as necessary.

2. *Identify the purpose of the evaluation*. Purposes typically fall under three umbrellas: rendering judgements, facilitating improvements, or generating knowledge. There is also very often overlap between these categories. When rendering judgements, evaluation requires explicit and determined criteria before the beginning of the program. In contrast, facilitating improvements often require a more adaptive approach focused on dialogue. Questions about the strengths and weaknesses of an activity are usually easier to conceptualize and make applicable post-occurrence. Measuring impacts after generating knowledge was not addressed by the researchers.

3. *Specify the questions the evaluation should answer.* This can relate to the quantitative criteria discussed previously or specify what questions metrics are supposed to answer with the captured data elements. Regarding improvement-oriented assessments, the questions should be formulated to not only judge the program's performance but also to motivate conversations on how policies and the experiences of those they serve can be improved.

New Zealand's Ministry of Business, Innovation & Employment (2019) suggested a similarly reflective process. Their suggestions come not in the form of steps to take in selecting criteria but rather essential ideas to keep in mind while doing so.

The primary principle is that impact is messy to untangle. This seemingly straightforward statement is perhaps the most important to note in all preceding or following considerations. In getting caught up with the determination of which metrics are "best," it is easy to forget that the impact we are attempting to measure may not even exist as hypothesized. Multiple factors contribute to any outcome in the policy world; rarely can an outcome exist solely as the product of one activity/decision/etc. Impacts may thus look different from these competing in-

fluences, making it harder to determine beforehand what criteria ought to be used in their assessment. Furthermore, this makes it inaccurate to attribute impact to a single research activity. This is not to say that a causal link between activities and impacts should not be explored, but it should be done with caution and a caveat regarding the limitations of tracing impact lines.

In a related fashion, it is important to acknowledge this potential measurement error also extends to lags, data gaps and data biases toward large or easily measured impacts. Impacts may take longer to appear than expected, complicating the time horizon of evaluation. It may be tough to time assessments when it is not known precisely when KM activities will have an effect, if ever. Another complicating factor in identifying impacts is that they may appear in forms or previously unthought-of areas. Even if primary impacts are as expected, spillover effects (positive or negative) may go unexamined because they are not traced back to the activity in question.

Another point raised by New Zealand's Ministry of Business, Innovation & Employment is that the unit of analysis chosen should allow for failures, risk-taking and distributed impact pathways. This is to say that given all of the causes and consequences of uncertainty described above, the definition of success should not be so rigid as to rule out possibilities not imagined in the initial evaluation framework. Value can still exist; research value can and should be corroborated by talking to end-users and collecting evidence.

In summary, if the improvement is truly more valuable than judgement, the process behind the metric selection is equally as important, if not more so, than metrics themselves.

Placing Evaluation in a Broader Context

Systems Thinking. Perhaps the most important point established in the literature on wise

practices in KM evaluation methods would be that evaluations, and the metrics they rely upon, cannot exist in a silo. Context and further consideration of the broader environment in which KM evaluation is taking place are crucial (Gold and Taylor, 2007). As mentioned in the previous section, impacts can be tricky to untangle because of the competing influences at play. It is precisely this orchestra of various policies, stakeholders, and environmental influences that systems thinking seeks to understand.

This idea of multitudinous factors being the norm in policy creates what is referred to as "wicked problems." As described by Head and Alford (2015), this concept explores how it is relatively easy for government institutions to provide services to citizens when the tasks are clearly defined, repeatable, and high volume; however, policy problems and services that are less clearly delineated or understood are much harder to tackle. The latter constitute wicked problems: policy issues that are "complex, unpredictable, open-ended, or intractable" (Head and Alford, 2015). Wicked problems are such because they include multiple layers of interacting subproblems and thus require consideration of these *systems* of problems to be solved. KM-related issues are wicked problems because they embody precisely this type of multidimensionality, so they also require a broader consideration of the systems at play.

Haynes et al. (2020 [2]) are one of the key groups of researchers to emphasize just how important systems thinking is. They apply the caveat that their work is non-prescriptive as KM problem solving requires careful reflection rather than pushing specific solutions. They note that one of the primary elements in systems thinking in this context may include identifying who has the power to produce how knowledge is defined, used, and valued. In KM, what we consider valuable knowledge influences the very core of what is determined to be a KM activity worth evaluating.

This is important because it demonstrates how effective KM evaluation involves assessing the impact of particular initiatives and the environment in which they took place. After all, improvements to a particular activity can only yield so much benefit when the system itself requires redesigning. It is important to question institutionalized structures of value and power (Haynes et al., 2020 [2]). Because knowledge is produced and becomes meaningful through social processes, it is precisely those social processes that must be continually called into question in a KM context.

Considering all of the above essentially leads to a core question that evaluation should raise or attempt to answer: how can an organization best include the voices of people to whom the knowledge is intended to benefit? This question succinctly encompasses considerations of power structures: how are traditional structures of power and value impeding the provision of better services for those marginalized by these structures?

Assessing the Environment. As previously stated, self-reporting can be tricky to rely on because of cognitive biases that distort survey results. It can be difficult to accurately assess KM impacts through these means (Levin, 2013). After all, it is hard for receptors of information to precisely recall and disentangle what information came to begin with and to what degree it shaped their work. To circumnavigate the issue of finicky recall altogether, some researchers, like Brousselle et al. (2009), advocate for assessing the KT environment to assess KT impact.

This approach is, in some ways, similar to systems thinking in that it recognizes that what matters in KT evaluation isn't only the KT activity itself but also the environment in which it took place. The difference is that while systems thinking examines the environment to assess how it might affect KT activities and their impact, this approach studies the environment to determine if it was conducive to KT in the first place.

Brousselle et al. (2009) used logic analysis to answer whether an intervention is designed in a way that can logically produce the expected results rather than measuring those results themselves. Their foundational premise was that most evaluations of KM at a system-wide level rely either on indicators that are quite remote from actual use or rely on users' self-reported use. Their theoretical framework instead sought to gauge the utilization potential of KM activities, which they then tested by comparing to elements identified as maximizing utilization potential at a Montreal art institute. This assessment focused on the management and governance levels of decision-making.

By looking at the qualities of the following factors, they were able to identify whether each one was likely to contribute to a KM-friendly organization or not; by piecing together the entirety of these factors, they got a better idea of what KT activities were likely leading to (i.e. the desired outcomes or not). The following table is pulled directly from their work.

Dimensions for Evaluating the Potential for Information Utilization

Legend:
(+) indicates a variable positively associated with utilization.
(−) indicates the opposite.
(+/−) indicates that no consensus exists in the scientific literature.

1. Characteristics of the context

- The system is open (deliberation) (+/–) or closed (mediation of credible actors) (+/–)
- The topic of the information is on the agenda (+)
- There is political uncertainty surrounding the topic of the information (symbolic utilization +) or programmatic uncertainty (conceptual and instrumental utiliza-

tion +)

2. Traits of the information carrier

- There is recognition/credibility of the carrier (+)
- There is proximity to the decision-maker (+)

3. Characteristics of the process

- There is significant personal involvement of the decision-maker (co-building of knowledge, knowledge brokering, etc.) (+)
- The information is submitted to a process of deliberation that includes different types of expertise: (+) according to the knowledge transfer movement; (–) according to the literature on lobbying
- Researchers and decision-makers are mutually valuable (source of information/interest in the decision and decisional power) (+)
- The message is adapted to the needs of the targeted decisional environment (+), i.e., a) formulated to convey the possible and probable consequences of decisions (+) according to the lobbying school; or b) formulated to provide advice on relevance, interests, needs, objectives, concerns, contextual information, and consequences (+)
- The main messages are formulated synthetically, concisely and attractively (+)

4. Externalities related to the utilization of processes

- The process may produce results of another type (creating an exchange network, new alliances, etc.)

While such an approach is unlikely to meet SPRe needs in isolation, considering the environment similarly could yield benefits when paired with other criteria-geared approaches.

Assessment Within a Larger Framework of KM Objectives. One example of systems

thinking in action is the work of Cooper (2015), who analyzed the websites of 105 educational organizations to assess their KM efforts. They used a matrix of criteria that considered types of KM activities (products, events, networks, and the balance between these activities) as visible/described on an organization's website. Their criteria were different types, ease of use, accessibility, the focus of the audience, and collaboration. This method corroborates the key idea explored earlier in this paper that evaluation must be tailored to different types of KM activities or, more broadly, different situations, and contexts.

While this approach is useful, it is perhaps not the most applicable to SPRe and MCFD if the goal is intrainstitutional KM evaluation. MCFD will not gain much insight from analyzing its own website. The most pertinent point from their work is that individual initiatives should be judged based on how they contribute to overarching organizational goals. This suggests that to effectively analyze the contribution of each KM initiative, the SPRe team should first have defined goals at an organizational level, and impact criteria should reflect the notion that individual initiatives have value in how they advance these goals. For example, if engaging research partners is deemed to be of relative importance, then the "number of research partners engaged" can be a criteria, and it can be made clear that initiatives that are contributing to this are part of a broader goal.

There is no set or prescribed way for SPRe to incorporate the systems thinking-related literature review findings into a KM evaluation strategy. Instead, these are considerations that should be included in creating such a plan. It should be determined based on specific policy contexts if and how each of the mentioned elements should be reflected in the plan.

Compatibility with APPF

The Aboriginal Policies and Practices Framework (APPF) is a crucial mechanism by which MCFD recognizes its obligations to Indigenous groups, both in working relationships

and as part of efforts toward national reconciliation. It promotes the Circle as a way to meaningfully incorporate respect for, understanding of, and learning about Indigenous peoples and cultures into Ministry activities. The Circle process involves Gathering the Circle; Listening, Assessing and Finding Solutions; Creating Security, Belonging and Well-Being; and Keeping the Circle Strong. The Circle's purpose is to ensure Indigenous children, youth, and families receive the support and services they need from MCFD. The primary findings from the literature review are inherently compatible with many of these elements. In particular, the findings have many parallel themes with Gathering the Circle; Listening, Assessing and Finding Solutions; and Keeping the Circle Strong.

Gathering the Circle: This element creates appropriate engagement with Aboriginal children, youth, families and communities. The most directly relevant implication in a KM context is that all people implicated in a policy scenario must be heard when engaging in policy development and decision-making. Qualitative criteria are thus important to include because, unlike quantitative criteria, they can capture more depth of stakeholder experience to ensure all relevant details are being captured and considered. This also underscores the importance of questions that systems thinking raises, such as whether relevant stakeholders were identified and included in the KM process.

Listening, Assessing and Finding Solutions: This Circle component is about incorporating a necessary spirit of collaboration, sharing, respect and learning. Much like the previous principle, this is deeply connected to the notion that qualitative criteria that capture the stakeholder experience should be included in KM evaluation. Furthermore, from a foundational perspective, evaluation is reinforced as a necessary step in KM because it introduces active dialogue with stakeholders and continuous efforts for improvement.

It is crucial to note that listening means receiving feedback and being actively open to suggested changes. Thus, to be truly compatible with the APPF, KM evaluation efforts need to include a genuine willingness to learn and adapt policy practices based on the feedback received.

Keeping the Circle Strong: This principle speaks to the importance of creating and maintaining meaningful relationships. As perceived from a systems view, KM evaluation is strongly connected to this idea because both recognize the value in networks and assessment of initiatives from a holistic perspective that encompasses interpersonal dynamics. Such a view suggests that engagement with policy stakeholders needs to be consistently integrated into KM evaluation, as merely collecting data does not contribute to building relationships.

The Circle values also highlight perhaps the most important takeaway from the literature review: that criteria in and of themselves do not constitute an entire plan for KM evaluation. For KM evaluation to be successful, reflection and consideration of broader systemic elements must be reflected. Criteria alone are not enough to incorporate stakeholder voices, understand all aspects of KM impact, or enable meaningful improvement. Therefore, for a SPRe KM evaluation strategy to be compatible with the APPF, the recommendations in the following section must be considered in their entirety, and strategies that consider more than criteria selection must be created.

A further consideration is the Aboriginal Equity and Inclusion Policy Lens. Much like the Circle, its core concepts of interconnectedness, reflection, and community underscore the need for KM evaluation to include qualitative criteria that seek to understand better stakeholders' experiences and a holistic consideration of power and value systems within KM efforts. The additional theme of accountability is in line with one of the central themes of KM evalua-

tion: to provide a record of knowledge-building activities for improvement and transparency's sake.

Recommendations

It is recommended that SPRe develop a knowledge mobilization evaluation strategy that includes the following elements:

1. Quantitative and qualitative metrics that are context-specific and adapted to each activity

These may include some or all of the criteria suggested in this report; these may also be stepping stones in developing further appropriate criteria for SPRe needs.

2. Identification of broader KM goals so that activities can be judged according to how they contribute to these

Prior to conducting KM evaluation, it is suggested that the SPRe team identify what goals it has for KM at an organizational level. KM evaluation should help address the foundational question of what MCFD is attempting to accomplish through KM.

3. Evaluation of the environment in which KM activities take place

This entails assessing the environment to determine whether it is conducive to KM and undertaking a deeper reflection on systems of value and power within existing KM frameworks.

Conclusion

In conclusion, KM evaluation is a multi-faceted process whose complex nature mirrors KM as a whole. Because of this complexity and the inevitably diverse policy contexts in which it takes place, there is no singular answer to what constitutes the "best" KM evaluation strategy. Instead, the best strategy is one that recognizes and seeks to better understand the broader policy environment and chooses criteria to measure impact accordingly. Predeter-

mined principles of impact should guide both qualitative and quantitative criteria selection measurement. Considering broader factors—namely the KM environment, MCFD's KM goals, and systems of knowledge and power—are fundamental to a successful KM evaluation compatible with the APPF. By considering these factors, the SPRe team is well poised to strengthen MCFD policymaking and, in turn, create better outcomes for the children, youth, and families whom MCFD supports.

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