

Knowledge Exchange-Decision Support (KE-DS) Toolkit

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KNOWLEDGE EXCHANGE – DECISION SUPPORT (KE-DS) MODEL

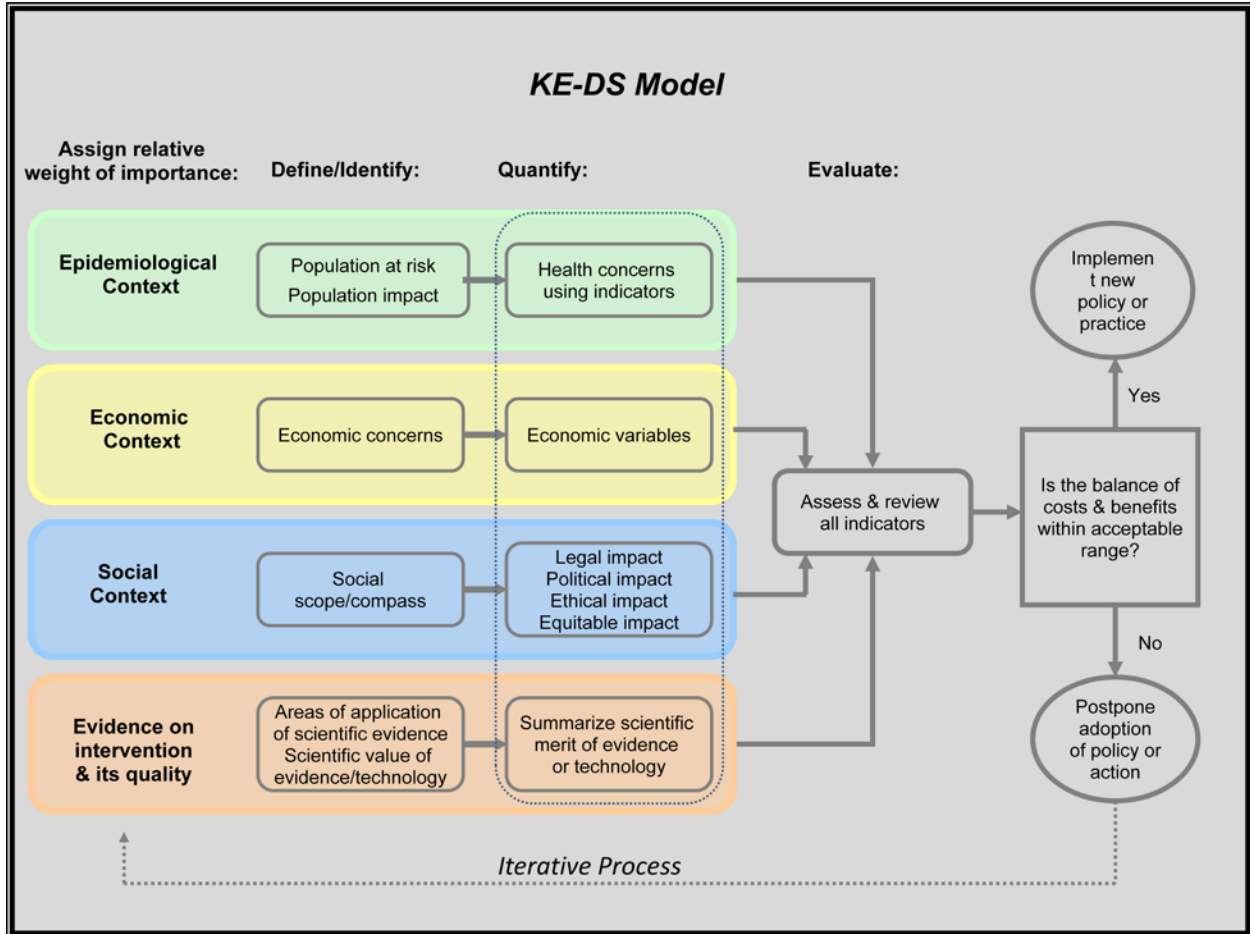
The term Knowledge Exchange (KE) is based on the premise that a gap exists between the production of research knowledge and its implementation as evidence-based practice, planning and decision making. The process of bringing research evidence to practice has yielded various frameworks, models and toolkits. All delineate, in various ways, a complex set of interactions between the creation of new knowledge, assessment, evaluation and synthesis of that information, dissemination and translation of information for a broad range of stakeholders, as well as the collection, storage and facilitation of access to information for all users.

Our understanding of KE is best described by the Canadian Health Services Research Foundation, who defines the concept as “collaborative problem-solving between researchers and decision makers that happens through linkage and exchange. Effective KE involves interaction between decision makers and researchers and results in mutual learning through the process of planning, producing, disseminating and applying existing or new research in decision making” (Canadian Health Services Research Foundation). This definition highlights the dynamic and complex set of relationships between knowledge producers and users, and recognizes the importance of contextualizing knowledge and adapting it to the local setting (Baumbusch, 2008; Straus et al., 2009). In order for researchers to translate data and evidence into a meaningful product for knowledge users, and for knowledge users to inform the research agenda so that meaningful questions and issues are investigated, dialogue and interaction at all stages of the research process is key (Lavis, 2006; Ross et al., 2003). Recognizing the importance of collaboration, we designed the Knowledge Exchange – Decision Support (KE-DS) Model to facilitate the exchange of information, expertise and evidence.

The KE-DS Model (fig. 1) summarizes the essential components of knowledge generation and exchange and delineates the iterative set of interactions between the creation of new information, strategies for dissemination and translation, and activities related to implementation of new knowledge into current practice. The KE-DS Model is designed to facilitate the inclusion of all stakeholders throughout the development and implementation of research work, and encourages the alignment of local health needs with population health initiatives. The KE-DS Model reflects the principles of evidence-informed medicine and, while initially developed for use in supportive cancer care, can be used in other areas of health policy and practice. For a discussion of the development of the KE-DS Model and its application in a number of supportive cancer care project and research settings, see Kazanjian et al. 2009a, Kazanjian et al. 2009b.

This document explains the KE-DS Toolkit as a tool to facilitate knowledge exchange. Worksheets for use by research team members serve to organize and document the planning, implementation and evaluation stages of research or project work, and assist in bringing transparency and understanding to these complex and multidimensional activities.

Figure 1



How to use the KE-DS Toolkit

The KE-DS Toolkit is designed as a series of steps to facilitate the incorporation of the KE-DS approach into the process of research and/or program planning, development, implementation, and evaluation. While formatted as a stepwise process for ease of use, the KE-DS approach is iterative and requires the user to continually revisit steps and reconsider information (such as stakeholder members or defining the population of interest). As such, it can be implemented at any time during the research / project timeline, from project inception to end of project reflection. The steps have been framed as action oriented activities. Those using the model are encouraged to record their progress with each activity on the worksheet provided as this will encourage both the conceptualization and articulation of research planning and implementation. The goal here is not to come away with new information, but rather to utilize a framework through which to organize and track the supports and challenges encountered during the planning and implementation processes. Some steps might be very straightforward, while others might take considerable thought and consideration to fully capture the various elements associated with that dimension.

As the impetus for this Model is the facilitation of *knowledge exchange* and the transfer of *knowledge into action*, the Toolkit can be used as a medium through which to share project experiences and lessons learned with team members, as well as other project teams working in a similar field or environment. What are the valuable lessons learned and issues that emerged during your experience? The Toolkit can serve as a vehicle to track and organize these issues, both for the purposes of your project team and for other teams in the future.

KE-DS TOOLKIT

Notes on how to use the KE-DS Toolkit and worksheets

SUMMARIZE THE INTERVENTION

Create an overview of the Intervention (project/program/initiative) that is under consideration (prospective) or provided (retrospective).

ESTABLISH THE CURRENT LITERATURE/EVIDENCE TO CONSIDER

Document the resources, tools, reports in the current literature, experiential knowledge etc. that support the choice of the program.

- Delineate what is known from existing research.
- Consider the research evidence alongside ethical concerns, the socio-cultural norms of end users and specific health systems.
- Delineate what is known from clinical experience.
- Delineate what is the experiential and cultural knowledge.
- Are the interventions or supportive care services identified as best practices or evidence based?
- What is the merit/value of the evidence/technology?
- What is the impact value of evidence for stakeholders?

IDENTIFY STAKEHOLDERS

Create a list of current stakeholders: the individuals, organizations or systems that will contribute to the research / project; that will participate in the planning and implementation; that will affect the program or be affected by it (supporters and naysayers).

- Does your site have a broad-based, balanced stakeholder group that includes people from each of the suggested groups?
- Are these individuals available and willing to contribute to the planning and development processes?
- Are there a decision-making body/team, project timelines, communication strategies and logistical plans in place?

CONSIDER POPULATION CONTEXTS

A) IDENTIFY PROGRAM SPECIFIC POPULATION OF INTEREST

- Who are the people you are targeting with the research, program or initiative? Who is the “population at risk”?
- Define the groups using socio-demographic, geographic, and/or ethnic /cultural factors.
- Confirm that this population group is the focus of the current priority in macro and micro Health Care environments.
- Consider the logistical issues of targeting this population - what are the challenges you might encounter? What are the supports?
- Quantify health concerns using indicators based on the natural history of the disease, the size of the population, the ability to access the population etc.

B) IDENTIFY PROGRAM SPECIFIC POPULATION IMPACT

- What do you hope to accomplish for the population of interest?
- Describe anticipated population impact-in terms of population health and health systems research. Describe how it fits with big picture and small picture focus.

C) QUANTIFY HEALTH CONCERS USING INDICATORS

- What are relevant measures to gauge improvement?
- What are appropriate and relevant program, process, or intermediate outcome measures? (e.g. the number of patients screened vs. mental health outcomes).

CONSIDER ECONOMIC CONTEXTS

Assess economic concerns and variables at individual, community, and organization levels.

Things to consider:

- Unit costs versus total costs, direct, direct non-health, indirect, intangible care costs,
- Potential costs to the individual, community and organization and impact on other services and supporting groups
- Allocative versus distributive costs
- Opportunity costs
- Medical Cost Offset
- Outcome measures: future use of services
- Morbidity
- Mortality

CONSIDER SOCIAL CONTEXTS

Assess the social scope at an individual, community, and organizational level

Things to consider:

- Power /status and dominance issues
- Personal/public values
- People's perspectives that will influence the success of the program

RE-VISIT THE INTERVENTION: EVALUATE HOW MUCH AND FOR WHOM?

Assess the intervention in light of all contextual issues (population, economic and social) developed. Consider documented and experiential evidence in order to confirm goals and uptake.

STRATEGIES FOR DISSEMINATION

Identify all of the end users of the newly framed knowledge and understanding of the program or intervention. What strategies will be used to engage them? At what point during the work will these strategies be employed?

KE-DS TOOLKIT

Team members:

Date:

SUMMARIZE THE INTERVENTION

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ESTABLISH THE CURRENT LITERATURE/EVIDENCE TO CONSIDER

Type of Evidence	Source
Scientific	
Experiential	
Reports	
Other	

IDENTIFY STAKEHOLDERS

Stakeholder	Name	Method of engagement
Service agency		
Community organization		
Health professional		
NGO		
Patients/Supporters		
Cultural Representative		
Other		

POPULATION CONTEXT

Context	
Population of interest	
Anticipated Population Impact	
Indicators used	

ECONOMIC CONTEXT

Level	Issue / Example	Measure Used
Individual		
Community		
Organizational		
Systems		

SOCIAL CONTEXT

Context	Challenge/Opportunity	Strategy to overcome/engage
Clinicians		
Hospital staff		
Patient & Supporters		
Organization		
Systems priorities		
Cultural issues		
Public perceptions and/or priorities		
Ethical acceptance		
Legal framework		
Other		

INCLUSIVITY

How much and for whom?	
How will the program improve this population's well-being or quality of life?	
Describe the methods in place to measure the improvement to this population's well-being or quality of life?	
How will the project have an impact within different social contexts?	
How will the project have an impact within different geographic contexts?	
How will the project have an impact within different demographic contexts?	
How will the project employ norms of utility, (the greatest good and equity to the largest number of people)?	

STRATEGIES FOR DISSEMINATION

End User	Strategy	Time point for dissemination
Clinician		
Patient		
Decision Maker		
Researcher		
Public		
Other		

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