

KNOWLEDGE MANAGEMENT FRAMEWORK

Health Research and Knowledge Management Unit

KwaZulu-Natal Department of Health

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Background

Knowledge is a vital resource for any organization or society. Using knowledge enables organizations to increase their efficiency, effectiveness and relevance, and is as important a resource as staffing and finances. However, it is often not valued as such. Although human resources and finances receive considerable attention, with whole Departments and career paths specializing in their management, knowledge as a resource has been relatively neglected in the past, on a global, national and institutional level.

In the past few decades, the importance of knowledge management has increasingly come to the fore in the international literature, including that of health and health care. Knowledge in health changes rapidly, because the field is active in research. It is crucial that the KwaZulu-Natal Department of Health accesses and uses this knowledge, in order to optimize its functionality and delivery of services to the provincial population. Therefore this framework is intended to guide the management of knowledge in the Department, at all levels.

Literature review

Knowledge management can be defined as “the systematic management of an organization's knowledge assets for the purpose of creating value and meeting tactical & strategic requirements; it consists of the initiatives, processes, strategies, and systems that sustain and enhance the storage, assessment, sharing, refinement, and creation of knowledge” (Frost 2010).

There are two main types of knowledge in any organization. These are explicit knowledge (which is easily articulated, codified, stored and transmitted to others) and implicit knowledge (which is not written down or categorized in any way, but which influences the way an organization works).

This framework will include both explicit and implicit knowledge, although the focus will be on explicit knowledge.

There are two types of explicit knowledge that are crucial for the KZN Department of Health. The first is knowledge generated by research, which guides the Department's provision of health services, and the second is institutional knowledge in terms of policies, frameworks and guidelines, which governs its functionality.

Research knowledge

Research knowledge is produced in vast amounts and at a fast rate both globally and in South Africa. It is important that the Department is aware of this knowledge and able to incorporate it, when relevant, into its service provision. In order to optimally utilize this knowledge, the Department

should have some influence over what knowledge is produced (so that research knowledge is relevant for the Department), should protect and encourage its production, and should be aware of the results and their applicability and usability for the Department's policies and practices. This means that the Department of Health should be involved in the whole research cycle, from conceptualization of research projects, to their conduct and finally to the dissemination and utilization of their results.

Unfortunately, such involvement in the production and utilization of research knowledge seldom happens in the health environment in South Africa (Mekwa et al 2016; Seedat 2014; Myburgh 2013, Mayosi et al. 2012; Gilson 2012, Orgill et al. 2013; Senkubuge and Mayosi, 2013). The metaphorical distance between government managers and researchers, and the gap between what is known and what is done, remain wide. In order to reduce these gaps therefore, this framework will outline the steps that need to happen at each stage of the research process, allocating roles and responsibilities to both researchers and Department of Health managers and staff.

Research knowledge

Conceptualization of research questions

Conceptualization of the research question is a vital stage of the research process. Deciding what should be researched, that is, what the important questions are that are most deserving of enquiry, is crucial in that it determines what knowledge will ultimately be produced. If government departments, and specifically the KZN Department of Health, do not actively participate in this process with researchers, then the research questions that are asked may not be those that are of most concern for the Department. Increasing "demand driven" research is an important responsibility of the KZN Department of Health (Orgill et al. 2013).

Dissemination of research results

This is a pivotal stage in the research process, where the users of research knowledge are made aware of the new knowledge generated, so that it can be applied in policies and practice. In spite of its importance, dissemination of research results is rarely properly done, both internationally and in South Africa (Senkubuge and Mayosi 2013). Dissemination of results should be done in a form that most useful to the "consumers" of research results. Thus the media in which results are presented, the language used and the opportunity for communication over the results are all crucial components of this stage of the research process.

Utilisation of research results

The final stage of research, where results are put into practice, is probably the most difficult to perform optimally, and evidence across the globe attests to this. Literature confirms the importance of this stage, which has even acquired its own terminology ("knowledge translation"). In spite of the tools that have been developed to facilitate this stage (Wilson et al 2010), the utilisation of research results even in high income countries is poorly done (Emanuel et al 2004).

Storage of and access to knowledge (institutional and research based)

Knowledge is typically stored in a repository – there may be one or more such repositories in an organization but it is crucial that access to these is free for all relevant employees. Knowledge may be stored as a document (e.g. a policy or standard operating procedure), a report (e.g. a research report or publication), in a database (e.g. a list of employees or a list of journals) etc. The most obvious and useful place for the storage of knowledge is a library, of which the Department of Health has more than one. In a library, knowledge is categorized and stored to facilitate easy retrieval and is staffed by information specialists who enable easy access to knowledge for every level of user.

In the KNZ Department of Health, institutional knowledge in the form of policies and procedures may be housed in a variety of directorates and components. It is important that the existence of this knowledge is known to all employees, and that access to it is facilitated by systems which cut across component boundaries.

Directives

Creating knowledge: participating in the formulation of research questions

It is important that the KZN Department of Health participates in the process of conceptualizing and prioritizing research questions. In order to formalize the contribution of the Department to these processes, the following are suggested.

1. The development of lists of research questions. Programmes, districts and facilities should be invited to develop a list of research questions which pertain to the delivery of service or the functioning of the Department of Health at any level. These questions should be developed in collaboration with the Health Research and Knowledge Management Unit of the KZN Department of Health, so that this unit can offer guidance on the wording and formulation of the question, and can collate and publicize the research questions to all research and academic organizations in the province. This process should be conducted annually, so that at the beginning of each academic year, research and academic institutions can use these research questions as the bases for their own research work.
2. Prioritization of research questions and areas. The prioritization of research themes or individual research questions is important because it ensures that scarce research resources are spent on those areas of highest priority to the province. Participation in these prioritization exercises should be broad to ensure that representation from all sectors of KZN society takes place, and the resulting questions reflect the interests and concerns of the whole population of KZN. Thus the Health Research and Knowledge Management Unit of the KZN Department of Health should organize a comprehensive and inclusive priority setting exercise every five years in the province, resulting in the development of research priorities which will similarly be publicized to all relevant individuals and organizations, so that the research conducted in KZN reflects the articulated priorities of the province.

Dissemination of research results

The responsibilities for this stage of the research process fall both on the researcher and on the user of research results (that is, Department of Health representatives and employees). The responsibilities of the researcher are to:

1. Ensure that research results are sent to the relevant managers and staff within the KZN Department of Health, within a reasonable time frame after the completion of the research. The Health Research and Knowledge Management Unit of the KZN Department of Health should assist with the identification of relevant managers, and the facilitation of knowledge sharing meetings.
2. These results should be presented in media which facilitate the accessing and understanding of the results, for example in videos, presentations, policy briefs etc.
3. The results should be presented in language that is understandable to the “expert” layperson, i.e. in language that is clear and non-technical.
4. If results are not presented in face to face meetings, the researcher should make him/herself available for these meetings if requested by the Department of Health.
5. If questions are raised regarding any aspects of the research, the researcher must answer these within a reasonable time frame and fully.

The responsibilities of Department of Health representatives and employees are to:

1. Ensure that all communication regarding research results are read or otherwise assimilated timeously, and all communication from researchers is acknowledged.
2. Make themselves reasonably available for meetings for the discussion of research results, and must during these meetings engage with researchers on issues relevant to the Department.

The responsibilities of the Health Research and Knowledge Management Unit are to:

1. Produce a monthly Research Bulletin, summarizing new research outputs in a readable form and disseminating this to all employees of the KZN Department of Health through the various electronic systems available.
2. Facilitate meetings between researchers and Departmental managers for the dissemination and feedback of research results. These should be ad hoc meetings as well as an annual Research Day where current research conducted in KZN is presented and discussed.

Utilisation of research results

The responsibilities of the researcher are to:

1. Specifically outline the relevance and applicability of their research for the KZN Department of Health. In this regard, the formal letter of permission to conduct research in KZN health facilities should state that researchers should outline this applicability and relevance in a summary of their research, disseminated to the KZN Department of Health. This outline

should describe the researchers' impressions of how their results may be incorporated into the policies and practice of the Department.

2. Make themselves available for face to face meetings or, if not feasible, engage in conversations over electronic or telephonic media, with representatives of the KZN Department of Health regarding the utilization of their research results within the Department.

The responsibilities of Department of Health representatives and employees are to:

1. Actively apply the research results to their spheres of work; the assistance of relevant researchers can be requested in this regard.

Storage of and access to knowledge (institutional and research based)

Research knowledge

Research knowledge should be stored in central repositories (libraries) within the KZN Department of Health. Such libraries may be located in individual health facilities or in district or the provincial office; however, all libraries within the Department should be open to all employees of the KZN Department of Health, and all should communicate and share resources freely.

The available knowledge resources within all libraries should be made public to employees of the KZN Department of Health, so that users can assess and choose the resources that they need. An electronic catalogue of material at each library is available through a link to the online library on the Department's intranet, and updated regularly.

Information stored in these libraries should be available electronically if possible, so that electronic access is available to all potential users no matter what their location within KZN.

If information is not available electronically, existing messenger and transport systems of the Department should be used to enable users from different parts of the province to access the information.

The library at Head Office should be linked to other South African and international libraries, so that resources not available within the provincial library can be accessed. The availability of this service should be advertised on the Departmental intranet.

Institutional knowledge (policies and procedures)

All Departmental policies and procedures should be enumerated and stored in a central repository.

A list of all policies and procedures, with dates of origin and updates, should be available on the Departmental intranet.

This list should be updated regularly.

All Departmental policies and procedures should be available electronically to all employees of the KZN Department of Health.

Where policies or procedures are not available electronically, a system should be in place whereby employees can access hard copies of these. This system should be outlined on the Departmental intranet.

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