Knowledge Management Policy

Knowledge Management (KM) envisages capturing, creating, sharing and managing knowledge. KM comprises of three components (i) people who create, share and use knowledge as part of their daily work and help shape a knowledge sharing organizational culture (ii) Processes which include methods to acquire, create, organize, share and transfer knowledge to fit different situations and (iii) The technology including the mechanisms to store and provide access to data, information, and knowledge that must be integrated with the way people work, and address their real needs.

The implementation of any KM policy in Health sector will have essential ingredients and processes for improving the health of people by imparting benefits of various health programs to the targeted communities and improving the quality of education and research which will lead to evidence based policy. However, KM in health sector faces three major challenges:

**Unsatisfactory quality of data**

With good quality data better policies can be framed, better decisions can be made thus improving the implementation of Health care programs and quality of medical research.

**Non- availability of data for knowledge generation**

Most of the data being captured may not be available in a suitable form for creating databases. Availability of digitized data in unified format helps in improving data quality and developing standards for knowledge generation.

**Inadequate dissemination of knowledge**

There is a serious unavailability of information and knowledge to end-users which include health professionals, researchers, patients and students. Dissemination of quality information and knowledge through agencies like DAVP and appropriate media such as Internet, Information Kiosks etc. can provide relevant information to the end-users.

Health professionals should take advantage of the data, experience, and expertise available in their own and other organizations to create and share their own knowledge with others.

The policy would catalyze creation of knowledge and translation of that knowledge from research settings to real world application in order to improve the health of common man specially marginalized sector of our society.

The focus of this policy would be creating an environment for connecting knowledge related activities in health into a coherent action plan.
Mission

To develop an efficient Health Knowledge Management System for collection, dissemination and utilization of knowledge for improving the quality of Health Services, Education and Research.

Policies

Service delivery

In order to create harmony among various health service providers and to impart their knowledge and services to the public at all times, the following essential components are proposed:

Empowering end user for better access to Health Service by:

1. Making available updated information about the service infrastructure such as manpower, equipment, medicines etc. available at different levels e.g. sub-centre, Primary Health Centre, Community Health Centre, District Hospital, Zonal Hospital, medical college and other tertiary care hospital etc.
2. Providing online information about functional status of the infrastructure i.e. availability of doctors, medical supplies including devices, vacant beds, surgical/medical/diagnostics facilities etc. at a given time.
3. Providing information about geographical locations and other logistics of various health service providers.
4. Promoting overall user awareness about available information sources by training of end users.
5. Promoting access to financial resources including insurance.
6. Ensuring access to all sections of society.

Enriching health professionals with knowledge about available resources around them by standardizing and linking functional, infrastructural and logistic information available with different healthcare service providers in Government and private sectors.

Increasing accountability of healthcare professionals and services towards human life by

1. Developing a well defined referral system for efficient utilization of resources between Central, state and other public/private healthcare providing institutes.
2. Creating a mandatory forward and back referral pathway over a period of 5-10 years. Responsibilities of every individual in the pathway to be enforced to ensure perfect accountability involving human life.

Connecting remote areas and difficult terrains by effective use of telemedicine

Expert opinions of specialists need to be ensured on a structured fixed time interval basis as well as on emergency basis. The existing satellite connections and the optical-fibre-based National Knowledge Network (NKN) would be valuable in this context.

Efficiently handling health aspects of disasters by using Data Mining and Business Intelligence tools on available data for quickly finding information about available resources around disaster site and mobilizing these resources.
Establishing an user friendly but informative electronic medical record system.
This record system should be in a standardized, internationally compatible format.

Education

In order to improve the quality of medical education uniformly across the country with help of knowledge network, following policy guidelines are proposed:

Sharing knowledge by :

1. Establishing an efficient physical network, connecting all medical/dental/nursing/other health related professional colleges
2. Creating tele-education portal to house resources which can be accessed online
3. Creating and networking digital/resource libraries for educational materials such as lectures, slides, video clippings etc. which can be accessed online as well as offline
4. Organizing prescheduled interactive lectures and practical sessions by prominent teachers through tele-education through national and international networks.

Developing unified high quality standards in health education across the country

Updating knowledge of health professionals by conducting online continued medical education/special training programmes.

Evaluating quality of in-service health personnel by conducting online examinations

Training in-service health personnel by organizing localized interactive training courses

Enforcing regulations for tele-education applications by following existing guidelines of regulatory bodies like Medical Council of India, Medical Universities, Dental Council of India, Nursing Council, Pharmacy Council, various councils for alternate medical systems, other relevant bodies for Physiotherapy and other disciplines.

Research

Knowledge is both a key input for and output of health research. For increasing use of knowledge in medical research, both clinical research and basic research, following measures are proposed:

- Creating information culture by adopting recent advances in Information and Communication Technologies. Improving interaction between National and International researchers and stakeholders working in different subject areas by developing collaborative networks and alliances
- Creating an information system and a policy framework to facilitate Indian medical researchers abroad to return and join Indian medical research institutions.
- Enhancing research to policy through collaborations and exchange of information between researchers and health professionals: between researchers and other stakeholders involved in policy making (political leadership, planners and civil servants etc)
- Enhancing public-private partnership in health Preparing national information system of research funding by different funding agencies.
- Developing database of research resources such as manpower, equipment etc. available with different laboratories/medical/dental colleges/universities etc.
• Developing disease database including clinical, epidemiological, genetic, biological and social parameters.

**Achieving high impact of research by effectively communicating research outcomes.**

• Balancing between responsibility to share information for betterment of health of people and protecting intellectual property generated through research.

• Empowering health research institutions to use tools of Knowledge Management for improving quality research as per the guidelines of Medical Council/ Dental Council of India.

• Providing access to research data to other scientists and students for secondary analysis by taking care of ethical, copyright and IPR issues. Managing research priorities based on periodical in-depth analysis of existing research data.

• Creating a National Health Knowledge Repository for free access to all researchers.

• Encouraging the use of knowledge management for creation of different application groups and development of various disciplines like biomedical engineering.

**Strategy for implementing Knowledge Management Policy**

Broad strategy for implementing knowledge management policy for health is given below:

• There will be three important components/ tiers: policy framing, strategy planning and monitoring.

• An expert advisory group should be constituted under the chairmanship of the Secretary, Department of Health Research with following mandate:

  • To examine the policy document and modify it if necessary
  • To decide the priority areas
  • To classify the priority areas into short term, midterm and long term goals for implementation
  • To constitute three technical sub committees in the areas Service Delivery, Education and Research to manage knowledge network for help with following mandate:

    • To carry out feasibility study/ studies, pilot study/ studies, model projects and preparing proposal
    • To define parameters to be included in feasibility study
    • To liaison between the study group and other stakeholders of the proposed knowledge network to facilitate preparation of feasibility report
    • To examine the feasibility study report and present it to the Secretary, Department of Health Research
    • To devise a strategy for implementation along with other stakeholders
    • Monitor implementation of work

Funding of the different components of Knowledge Management Network

i) The responsibility of different stakeholders in providing infrastructure, manpower and other resources needs to be defined by consultative process among centre, state, other public and private stakeholders.
ii) While the network connectivity may be provided by central systems, department of information technology, UGC etc, the local supplementary support could be provided by State systems.

iii) A dedicated system will be required for keeping it functional all the times. For this IT connectivity will have to be ensured along with funds allocated for this purpose.

iv) A strategic plan for providing financial support for development of modules, appropriate software, professionals for data analysis on specific areas, mechanisms of review will have to be drawn for estimating the financial inputs.

Establishment of an Appropriate Authority

For developing and implementing a comprehensive plan for utilization of knowledge network for health service delivery, medical education and research, an Appropriate Authority under the Department of Health Research in the Ministry of Health and Family Welfare, Govt. of India may be desirable. Such an authority with committed resources will be responsible for strategic planning, for implementation and review of the progress from time to time. This Authority /Cell may establish units in the states for action at the local level.

Achievements

The Policy is under the consideration for Government approval. Action has been initiated for setting up of necessary infrastructure for implementation.