

2011

Template for a Healthcare Knowledge Services Center

*Developed by members of the Hospital
Library Subcommittee of the Regional
Advisory Council (RAC) of the National
Network of Libraries of Medicine,
New England Region (NN/LM NER)*

Margo Coletti, Beth Israel Deaconess Medical Center, Boston, MA; Deborah Clark, Stephens Memorial Hospital, Norway, ME; Denise Corless, Norwood Hospital, Norwood, MA; Barbara Davis, Newport Hospital, Newport, RI; Anne Fladger, Brigham & Women's Hospital, Boston, MA; Mark Goldstein, NN/LM NER, Shrewsbury, MA; Mimi Guessferd, Parkland Medical Center, Derry, NH; Sheila Hayes, Portsmouth Regional Hospital, Portsmouth, NH; Alice Merrill, Northeastern Vermont Regional Hospital, St. Johnsbury, VT.



TEMPLATE CONTENTS

- **Introduction**
- **Purpose**
 - **Timeline**
- **Rationale for Making Transition**
- **Core Components**

Section I. KM Definition

Section II. Knowledge Pyramid

Section III. Attributes of the HKSC

Section IV. Competencies - Professional & Personal

Section V. Collaborations & Alliances

Section VI. Comparative Table of Services

Section VII. Addenda

Addendum A. Sample Job Description

Addendum B. Sample Mission Statements

Addendum C. Sample Strategic Plans

Addendum D. Sample Operating Budget

- **Bibliography**
- **Relevant Links - KM Academic Programs**
- **Relevant Links - Other**

"We are drowning in information, but we are starving for knowledge."
–John Naisbett

INTRODUCTION

The purpose of the HKSC model template is twofold:

- (1.) to transform the hospital library function into a health care knowledge services center; and
- (2.) to emphasize the importance of knowledge among health care professionals within the organization.

The current information explosion provides the Healthcare Knowledge Services Center (HKSC) with opportunities to become a critical player in organizational information and knowledge management. An HKSC can assist an organization maintain its competitive advantage in the marketplace. The HKSC must become an "integral player" to the organization if they are to succeed in helping their health care organization realize: 1.) exceptional quality control; 2.) high risk management standards; and 3.) optimum patient safety levels. The emergence of evidence-based practice (EBP) has become paramount to all health care organizations. EBP will provide an HKSC with increased opportunities for wider visibility within the organization.

PURPOSE

To define a sustainable model template for the Healthcare Knowledge Services Center that encompasses transitioning a traditional medical library into a "vibrant" knowledge services center, integral to the health care organization.

TIMELINE

5 years out (2010-2015); pilots (2011-12)

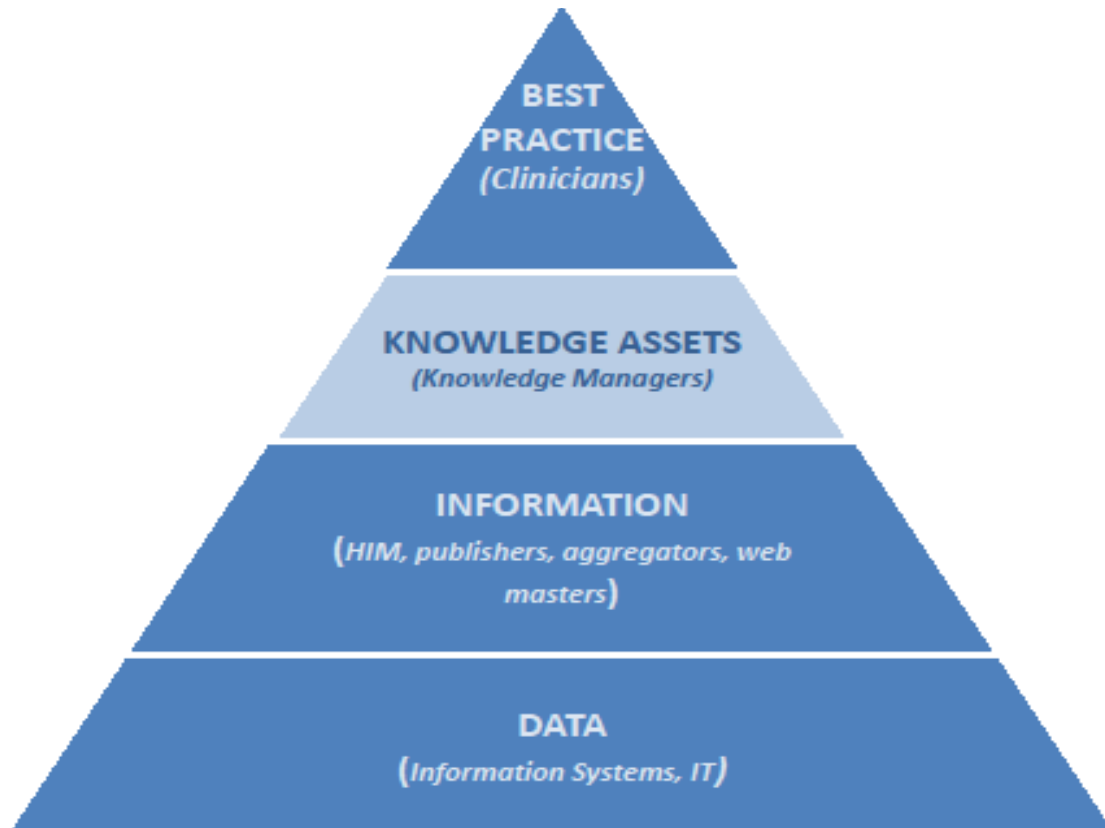
RATIONALE FOR MAKING TRANSITION

- 1.) Knowledge management (KM) provides a positive push forward;
- 2.) KM provides the "bridge" between information and best practice (see "Knowledge Pyramid", below);
- 3.) KM supports institutional goals:
 - a.) *exceptional quality control;*
 - b.) *high risk management standards;* and
 - c.) *optimum patient safety levels;*
- 4.) KM offers health care organizations a competitive edge in market; and
- 5.) KM provides hospital librarians with an ideal window of opportunity to become dynamic players in the confluence of several critical current events:
 - a.) *the information explosion;*
 - b.) *the national push for health care reform;*
 - c.) *the universal adoption of evidence-based practice;* and
 - d.) *the emerging trend of "self-directed practice", where patients take responsibility for their own personal health (e.g., EHRs).*

SECTION I. KNOWLEDGE MANAGEMENT DEFINITION

Knowledge management within a health care organization: 1.) provides both assessment of and accessibility to refined information (***i.e., knowledge assets***); 2.) serves a diverse clientele; and 3.) supports evidence based practice.

SECTION II. THE KNOWLEDGE PYRAMID



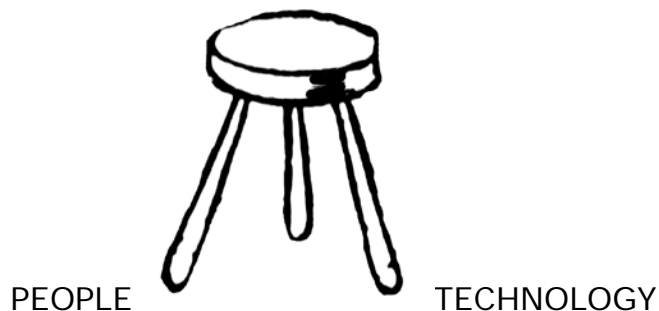
How does Knowledge fit into the realm of Health Care? Where do we fit in?

- **DATA:** Raw data is gathered by Health IT professionals to populate health information systems.
- **INFORMATION:** Publishers, aggregators, et al. turn data into useable information.
- **KNOWLEDGE ASSETS:** Knowledge managers acquire, filter, and make information accessible to our clients.
- **BEST PRACTICE:** our goal.

SECTION III.

ATTRIBUTES OF A HEALTHCARE KNOWLEDGE SERVICES CENTER

BODIES OF KNOWLEDGE



"Human capital (people), change (technology), and (bodies of) knowledge are a three legged stool which must be used together to be successful." -Goldsmith, et al. (2004)

PEOPLE / CUSTOMERS

- Administrators
- Clinicians/Staff
- Community groups
- Health care consumers
- Patients/Families
- Students/Trainees

TECHNOLOGY

- Clinical information systems
- Content management systems
- Informatics
- Library systems
- Web tools

BODIES OF KNOWLEDGE

- Adult learning/continuing education
- Applied science in health care
- Evidence based practice (EBP, includes EBM, EBN, etc.)
- Health administration and policy
- Health literacy/plain language/medical terminology
- Health sciences library practice
- Knowledge management theory & practice
- Quality improvement/patient safety

SECTION IV. COMPETENCIES – PROFESSIONAL & PERSONAL

(adapted from SLA Competencies for Special Librarians)

Professional Competencies

The Healthcare Knowledge Manager:

PROF-1. develops and manages convenient, accessible and cost-effective knowledge services that are aligned with the strategic directions of the organization.

Practical examples: (a.) develops a strategic plan linked to the business goals of the organization; and (b.) provides a support service for digital media users.

PROF-2. uses appropriate information technology to acquire, organize and disseminate information.

Practical examples: (a.) indexes internal documents and makes them available in an internal database or portal; and (b.) works with the information management team to select appropriate software and hardware for desktop access to external and internal bases of knowledge.

PROF-3. demonstrates knowledge of the health sciences.

Practical examples: (a.) conducts intermediary searches for complex or difficult topics; and (b.) conducts effective reference interviews with a diverse clientele.

PROF-4. evaluates and filters health care literature.

Practical examples: (a.) evaluates and selects key information resources for a client; and (b.) uses principles of evidence-based practice to support decision making.

PROF-5. provides effective instruction and support for users of knowledge services.

Practical example: (a.) uses appropriate instructional methodologies and technologies to create a course in systemic reviews.

PROF-6. assesses information needs and evaluates usefulness.

Practical examples: (a.) conducts needs assessments using research tools such as questionnaires, focus groups, etc.; (b.) identifies and meets information needs by becoming a member of project teams; and (c.) develops measures of frequency of use of services, customer satisfaction, along with the impact of information on organizational decision-making.

PROF-7. demonstrates understanding of the hospital as an institution.

Practical examples: (a.) studies the hospital's mission and strategic plans; and (b.) attends leadership meetings to keep up with clinical and research trends, legal and ethical issues, community obligations and activities, LEAN and other management/business practices, etc.

PROF-8. serves as an effective member of the hospital management team.

Practical examples: (a.) participates in benchmarking or re-engineering teams; (b.) informs management on copyright issues and monitors compliance with copyright law; and (c.) develops information policies for the organization.

PROF-9. develops mechanisms to maintain awareness of current health care information.

Practical example: (a.) creates an SDI system for hospital administration regarding health care policies, issues, trends, etc.

PROF-10. improves knowledge services in response to organizational change.

Practical example: (a.) adopts LEAN principles and practices in Knowledge Services in a LEAN organization.

* * * * *

Personal Competencies

The Healthcare Knowledge Manager:

PERS-1. commits to service excellence.

Practical examples: (a.) seeks out performance feedback and uses it for continuous improvement; and (b.) shares new knowledge with others at conferences and in the professional literature.

PERS-2. seeks out challenges and new opportunities for knowledge sharing.

Practical examples: (a.) takes on new roles in the organization that require an information leader; and (b.) uses knowledge and skills to solve a variety of information problems in a wide range of settings.

PERS-3. sees "the big picture".

Practical examples: (a.) sees Knowledge Services as part of the bigger process of making informed decisions; and (b.) gives the highest priority to urgent demands that are critical to the organization's mission.

PERS-4. seeks partnerships and alliances.

Practical example: (a.) looks for opportunities to work with information systems (IS) professionals through the offering of complementary knowledge and skills.

PERS-5. creates an environment of mutual respect and trust.

Practical example: (a.) creates a problem-solving environment in which everyone's contribution is valued and acknowledged.

PERS-6. communicates effectively.

Practical examples: (a.) presents ideas clearly and enthusiastically; and (b.) writes with clarity and conciseness.

PERS-7. functions effectively in a team.

Practical example: (a.) appreciates the value of teams and seeks out opportunities for team participation.

PERS-8. provides leadership.

Practical example: (a.) exercises leadership within the HKSC and as a member of other teams or units within the organization.

PERS-9. plans, prioritizes and focuses on what is critical.

Practical example: (a.) reviews goals on a regular basis, prioritizes them and makes sure that an appropriate portion of daily activities are related to the most critical organizational goals.

PERS-10. commits to lifelong learning and personal career planning.

Practical examples: (a.) takes personal responsibility for long-term career planning; and (b.) seeks opportunities for learning and enrichment.

PERS-11. uses personal business skills and creates new opportunities.

Practical example: (a.) uses the entrepreneurial spirit in the organizational environment to revitalize products and services.

PERS-12. recognizes the value of professional networking.

Practical examples: (a.) looks for opportunities to share knowledge and skills; (b.) to benchmark against other knowledge service providers; and (c.) and to form partnerships and alliances.

PERS-13. remains flexible and positive in a time of ongoing change.

Practical example: (a.) sees and uses technology as an enabler of new information ideas, products and services.

SECTION V. COLLABORATIONS & ALLIANCES

INTERNAL

Quick response service

- Immediate need
- Walk-ins and call-ins

Relationship building

- Classes and instruction
- Committee work
- Short term project support
- Promotion and marketing

Strategic alliances

- Long term project support
- Dialoguing with key stakeholders
- Information technology (HIM,IS,IT), quality improvement, patient safety, education, and administration
- Fitting into the organization's strategic plan

EXTERNAL (*outside the Institution*)

Networking & Professional development

- Affiliations
- Consortia
- Professional associations
- Professional growth

SECTION VI. COMPARATIVE TABLE OF SERVICES

Medical Library Services <ul style="list-style-type: none">• link to the outside knowledge	Knowledge Management Services <ul style="list-style-type: none">• link to both outside and inside knowledge
Current Awareness: <ul style="list-style-type: none">• TOC	Current Awareness: <ul style="list-style-type: none">• TOC <i>plus</i> blogs, etc.
Database Management: <ul style="list-style-type: none">• Journals Check-In• Book Circulation• Knowledge-Based Info: (Ovid, ISI, EBSCO databases)	Database Management: <ul style="list-style-type: none">• KBI <i>plus</i> Internal Knowledge Bases: (Abbreviations, Institutional Publications Repository, etc.)
Finding documents: <ul style="list-style-type: none">• using indexed terms	Finding documents: <ul style="list-style-type: none">• using indexed terms <i>plus</i>• Indexing and meta tagging documents so others can find them
Decision Making: <ul style="list-style-type: none">• KBI Resources	Decision Making: <ul style="list-style-type: none">• KBI Resources <i>plus</i>• Content Management Systems
Committee Work: <ul style="list-style-type: none">• Library Committee• Patient Education Committee	Committee Work: <ul style="list-style-type: none">• Patient Education Committee <i>plus</i>• Knowledge Management• IS & HIM• Patient Safety

SECTION VII. ADDENDA:

- **ADDENDUM A. Sample Job Description for a Knowledge Manager**
- **ADDENDUM B. Sample Mission Statements**
- **ADDENDUM C. Sample Strategic Plans**
- **ADDENDUM D. Sample Operating Budget**

ADDENDUM A.

SAMPLE JOB DESCRIPTION: *Knowledge Manager*

Overview

The Knowledge Manager will direct and manage the operational and strategic development of the Knowledge Services Center within the Organization (Hospital, Medical Center, Medical School, etc.)

The Knowledge Services Center informs evidence-based patient care by assisting health care professionals to access evidence-based medicine resources with skill and competence.

This department supports the education, training and continuing professional development of health care personnel employed by the Organization.

Areas of Responsibility

Knowledge Services Center

- Develop and maintain knowledge-based systems and services relevant to the organization's needs.
- Act as a point of expert knowledge in searching and evaluating health care literature.
- Ensure compliance with Copyright legislation as applicable to the Knowledge Services Center.
- Oversee the efficient operation of the Knowledge Services Center (library, information commons, etc.)

Personnel and Financial Management

- Recruit, select, train and manage a team of Information Specialists.
- Participate in formal orientation sessions for new organization staff and students.
- Manage the Knowledge Services Center budget for the organization efficiently and effectively, within delegated financial limits.

Information and Communications Technology

- Act as systems manager for the Knowledge Services Center.
- Develop training in information literacy, appropriate to users' needs.
- Produce, select and organize knowledge-based content on the organization's intranet and internet web pages.
- Work with the Chief Information Officer regarding strategic development of Knowledge Systems within the overall IT infrastructure.

Educational and Professional

- Liaise with the following departments and programs regarding their needs for knowledge-based systems and services:
 - All clinical programs
 - Organizational training
 - Continuing medical education
 - Other professional development programs
 - Research staff and administration
- Participate in committees (CME, Patient Safety & Education, etc.)
- Participate in local and regional information networks; foster good working relationships with other health care information professionals.
- Ensure professional development of the Knowledge Services Center staff.

Competencies

- Identify a strategy to meet a user's complex information needs.
- Determine the requirements for information and material.
- Market and promote the service.
- Appraise information and knowledge resources.
- Search for clinical information, evidence according to best practices.
- Provide leadership in the area of the knowledge management.
- Ensure compliance with legal, regulatory, and ethical requirements.
- Develop productive working relationships with colleagues and stakeholders.
- Allocate and monitor the progress and quality of work in the Knowledge Services Center.
- Improve organizational performance.
- Manage finance for the Knowledge Services Center.
- Monitor and review the implementation of corporate objectives, strategies and policies as regards to the Knowledge Services Center.

Professional Qualifications

Required for Knowledge Manager:

- Postgraduate Degree in Library & Information Studies, Information Management, Information Science, or Knowledge Management
- Membership (Provisional or higher level) in the Medical Library Association's (MLA) Academy of Health Information Professionals (AHIP); or one of the Special Libraries Association's (SLA) Knowledge Management or Knowledge Service Certificates.

Required for Chief Knowledge Officer or Director:

- Previous work in a health care knowledge services center or medical library; 5 years or more
- Previous work in an informatics setting

Personal Qualifications

- Excellent communication skills: demonstrated ability to clearly present information orally, visually and in writing.
- Leadership skills: demonstrated ability to manage change in a service-oriented information organization
- Knowledge management skills: demonstrated ability to perform each of the Competencies itemized above.
- Library management skills: demonstrated ability to efficiently manage day-to-day facility operations and staff.

ADDENDUM B.

SAMPLE MISSION STATEMENTS

First Sample Statement

Lane Medical Library & Knowledge Management Center

Our Mission is to enable biomedical discovery by connecting people with knowledge. Through innovative means, we create, acquire, deliver and integrate information to support excellence in research, education, and patient care.

<http://lane.stanford.edu/about/strategic-plan.html?laneNav=1>

Second Sample Statement

UCSF Library & Center for Knowledge Management

The mission of the UCSF Library is to advance science, foster excellence in teaching and learning, and promote health through the collection, development, organization, preservation, and dissemination of the world's health sciences knowledge base.

http://www.library.ucsf.edu/sites/all/files/ucsf_assets/library_stratplan_2008_2012.pdf

Third Sample Statement

USAID/Knowledge Management

Knowledge Management at USAID works to connect the development community with what and who they need to know to work smarter in accomplishing USAID's mission and strategic objectives.

Knowledge Management supports USAID and its development partners by promoting best practices and lessons learned, enriching collaborative partnerships and, assisting decision making through research and information sharing.

<http://www.usaid.gov/km/>

Fourth Sample Statement

O.S.U. Prior Health Sciences Library and Center for Knowledge Management

The John A. Prior Health Sciences Library and Center for Knowledge Management provide the highest quality information and knowledge solutions to support research, education, innovation and advances in patient care.

<http://hsl.osu.edu/2767.cfm>

Fifth Sample Statement

National Knowledge Service (NHS)

The mission of the National Knowledge Service, set out in the strategy of NHS Connecting for Health, is to ensure that every decision made by a patient or a health care professional can be supported by best current evidence.

<http://www.nks.nhs.uk/>

ADDENDUM C.

SAMPLE STRATEGIC PLANS

First Sample Plan

Lane Medical Library & Knowledge Management Center

<http://lane.stanford.edu/about/strategic-plan.html?laneNav=1>

Second Sample Plan

UCSF Library & Center for Knowledge Management

http://www.library.ucsf.edu/sites/all/files/ucsf_assets/library_stratplan_2008_2012.pdf

ADDENDUM D.

SAMPLE OPERATING BUDGET

Suggested line items:

- Equipment Rental & Lease (photocopier/scanner, etc.)
- Food Services
- Freight, Postage & Shipping
- Non-capital (minor) equipment
- Office Supplies (copier/printer paper & toner, etc.)
- Printing & Forms (brochures, business cards, letterhead, etc.)
- Professional Development (conferences, continuing education, membership dues, seminars, training, etc.)
- Publications (print & electronic journals, books, etc.)
- Purchased Services (document delivery, EFTS, online databases, etc.)
- Salaries, wages & benefits (director, knowledge manager, information specialists, etc.)
- Software Maintenance (software licenses, platform fees, etc.)
- Telephone
- Travel (Domestic, International, Local)

BIBLIOGRAPHY

Robb BG, Zipperer L. Knowledge Management in Hospital: Drawing from Experience to Define the Librarian's Role. *Journal of Hospital Librarianship*. 2009 July; 9(3): 307-317.

Sarrafzadeh M, Martin B, Hazeri A. Knowledge Management and its potential applicability for libraries. *Library Management*. 2009 March; 31(3): 198-212.

St.Clair G, Stanley D. Knowledge services: the practical side of knowledge management: how KD/KS creates value. Accessed February 28, 2011.

RELEVANT LINKS - KM ACADEMIC PROGRAMS

Kent State University

Master of Science in Knowledge Management

<http://iakm.kent.edu/>

California State University, The Tseng College

Master of Science in Knowledge Management

<http://tsengcollege.csun.edu/kmdl/>

http://findarticles.com/p/articles/mi_m4467/is_2_54/ai_59949725/

George Mason University, School of Public Policy,

Master of Science in Organization Development and Knowledge Management

<http://policy.gmu.edu/Home/AcademicProfessionalPrograms/MastersPrograms>

[OrganizationDevelopmentKnowledgeManagement/tabid/106/Default.aspx](http://policy.gmu.edu/Home/AcademicProfessionalPrograms/MastersPrograms/OrganizationDevelopmentKnowledgeManagement/tabid/106/Default.aspx)

RELEVANT LINKS - OTHER

Knowledge Management for the 21st Century Hospital System

Douglas Dotan, CRG Medical, Houston

[dotanH1.doc](#)

SLA KM Certificate Program

<http://www.sla.org/content/learn/certificates/kmcert/index.cfm>

Transforming Hospitals into Knowledge Management Centers

Howard Eisenberg, M.D., Syntrek ®, Toronto

<http://www.yntrek.com/kmppt/img019.gif>