

Public Engagement with eHealth Services: The Current and Future Role of Library and Information Services

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Including Everyone in Electronic Health Information Services

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Review Aim

(Hardiker et al 2009)

- To examine literature relating to the use of eHealth services
- To identify and explore factors (barriers and facilitators) that may influence engagement with those services by the public

2622 Unique Abstracts

- MEDLINE, CINAHL, EMBASE
 - Computer applications
 - Modes of evaluation
 - Health services
- 70 papers were obtained for further analysis
- 50 identified as meeting ALL of the review inclusion criteria:
 - Named or identifiable examples of eHealth services
 - Used by the public
 - Barriers or facilitating factors influencing use
 - Readily and freely available online
 - Published in English

Four Named or Identifiable eHealth Services

- Health information on the Internet
- Bespoke online health information
- Online support, mailing lists and online communities
- Telehealth services

Barriers, Facilitators and Motivators

- 100 themes emerged from the literature
- 29 higher level categories
- 5 overarching themes
 - Characteristics of users
 - Technological issues
 - Characteristics of eHealth services
 - Social aspects of use
 - eHealth services in use

29 Higher Level Categories

- Access to information
- Access to resource
- Age
- Belonging
- Content issues
- Educational attainment
- Empowerment
- Ethnicity
- Fit with everyday life
- Health status
- Information needs
- Interpersonal issues
- Literacy levels
- Miscellaneous
- Motivation
- Operational issues
- ***People as enablers***
- Physical distance
- Reassurance
- Security and privacy
- Shared experience
- Shared responsibility
- Skills and knowledge
- Social contact
- Socio-economic status
- Technological issues
- Trust
- Usability and usefulness
- User response

Literature Review 1985-2005

(McMullan 2006)

- Methodology ambiguous
 - English language papers
 - Database searches of PubMed, British Nursing Index, CINAHL (Ovid), AMED
 - Inclusion criteria?
- Active consumers of Internet-based health information
- Health professionals collaborate in obtaining and analysing information
- Guide patients to reliable resources (Internet prescription)

Quality of Internet Access

(Skinner et al 2003)

- Canadian study
- 27 focus groups held in 2000
- 210 young participants
- Health and education professionals as ‘gatekeepers and solution enablers’
 - Fostering their use the Internet effectively and safely
 - Recommending quality health information web sites

One-to-One Training

(Edgar et al 2002)

- Canadian study
- One-to-one training delivered by a health librarian
- 28 one hour sessions
 - Searching for cancer-related information web sites
 - Appraising cancer-related information
- The teaching sessions were reported as being well received
 - Would register for another session

People as Adjuncts to eHealth Services

- Coaches
- Enablers
- Gatekeepers
- Trainers

Supplementary Searches

- Reworked original searches, November '09
- Library and Information Science Abstracts (LISA)
 - 324 records
- Library, Information Science & Technology Abstracts (LISTA)
 - 4042 records
- Citation tracking

324 Unique Records

- Independently reviewed by me
- 16 papers were obtained for further analysis
- 5 meeting ALL of the review inclusion criteria:
 - Named or identifiable examples of eHealth services
 - Used by the public
 - Library or information worker or setting
 - Published in English
- Content summarised
- 5 themes/roles emerged

Library as a Construct

(Diefenbach et al 2004)

- USA based study
- Evaluation of an interactive educational system mimicking a 'virtual health centre' for survivors of prostate cancer
- Focus groups
 - 3 with prostate cancer survivors (n=18)
 - 2 with prostate cancer survivor spouses (n=15)
- 473 questionnaires (70% response rate)
- Overall, participants were very interested in the software and appeared to prefer it to print material
- Tailoring of information according to individual needs
- Ability to access information in any order

Respondents appreciated the use of metaphors, that is, the notion of a virtual health centre with a consulting room, **a library** and a support group room

Advocating the Role of a Library/Information Service *(Bonniface et al 2007)*

- Australian based mixed method study of the HeartNET online support group
 - 50 semi-structured in-depth interviews
 - Analysis of 600+ members discussion board data
 - Other information exchanges
- Dealing collectively with difficult questions
- Patients may benefit from being given a contact point to communicate with others in similar situations

Advocate that a library could signpost these resources

LIS Worker as Provider

(Becker et al 2010)

- 3 part study of free internet use in public libraries in the USA
 - Dual-frame random digit dialling telephone survey and a cell phone sample
 - 1,131 service users and 2,045 non-users. Calls were places from April 28, 2009 through August 1, 2009.
 - Web survey in 401 public libraries across the country
 - N= 45,000 between 6 April 2009 - 12 June 2009
 - Case studies in 4 public libraries
 - One-week long site visits which included interviews and focus groups with service users, staff and local agencies between March and May, 2009 and resulted in 280 interviews
- Expertise of librarians in directing enquirers to reputable resources
 - Online and print materials
- Two levels of expertise
 - How to use computers
 - A model of good practices in finding quality sources of health information

‘Many librarians have embraced this change as a natural extension of their role as highly trained information guides’

LIS Worker as Facilitator

(Edgar et al 2002)

- Canadian study
- One-to-one training delivered by a health librarian
- 28 one hour sessions
 - Searching for cancer-related information
 - Appraising cancer-related information
- Sessions includes:
 - Booklet on finding quality health information and list of recommended sites/resources
 - Presentation/demonstration
 - Hands-on searching tailored to patient need
- Pre- and Post- evaluation
- 2-3 month telephone follow-up
- The teaching sessions were reported as being well received
 - Would register for another session
- Patients felt empowered and in a better position to ask questions of clinicians

Library provided a valued non-illness-focused environment

LIS Worker as Researcher

(Williams et al 2003)

- Scotland based study
- Department of Health funded study
- Investigated use of health information kiosks in GP surgeries
- In-depth interviews with females aged 55-74 (identified as an under-represented group)
- 13 non-kiosk-using, primary-care out-patients
- 2 consecutive days
- Unaware of the presence of the kiosk or assumed that it was not for patient use

Researcher based in a Dept. of Information Science

Emerging Findings on Current and Future Roles

- Evidence of diversity of roles for LIS services and workers
 - Library as a Construct; Advocates
 - Facilitators; Providers; Researchers
- Across the academic, health service and public library sectors
- Global phenomenon
 - Australia, Canada, Scotland, United States
- Practice level
 - Some embracing an extension of their role

UK Public Library Service

(Hicks et al 2010)

“Consideration should also be given to the creation of a designated health and well-being function within library structures’ and the ‘setting up of “health zones” in [public] libraries.” p8

Equality and Excellence

(Department of Health 2010)

‘Increase NHS spending in real terms to meet the costs of demographic and technological change’. p14

Equality and Excellence

(Department of Health 2010)

‘We will make care more accessible
by... using technology to help
people communicate with
their clinicians.’ p21

Value and Impact

- Employs existing skills base
- Provides a valued non-illness-focused environment
- Exposes potential non-users to eHealth services which improves both the perceptions of non-users and their frequency of use
- Empowers patients to be in a better position to ask questions in consultations, optimising their contact with services

An Ongoing Review...

- Library, Information Science & Technology Abstracts
 - 4042 records
- Confirm roles
- Potentially identify new roles

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