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You've Got Information!

Findings from an Evaluation of a Provincial Health Information Program

October 22, 2005

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You've Got Information! Findings from an Evaluation of a Provincial Health Information Program

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> Society for the Social Studies of Science October 22, 2005





Presentation Overview

- Description of ACTION for Health grant
- Research Framework: Health Information & Technology & Individuals
- Summary evaluation findings BC HealthGuide Program

ACTION for Health Grant

- Aims to fill gaps about existing knowledge of Canada's health info-structure.
 - Health technology in Canada is reviewed in terms of its clinical and costeffectiveness.
 - ACTION for Health goes beyond the limits of such traditional assessment by considering the social, ethical and legal aspects of introducing new technologies into the health sector.
- Three themes:
 - The role of information technology in the public consumption of health information
 - The effects and challenges of increasing computerization in health sector work environments
 - The legal and ethical issues associated with information technology in the health sector
- Working closely with decision-makers, health practitioners, community groups and other stakeholders to bridge the gap between academic findings and real-world issues

Research Questions Around Layusers Include:

- 1) What is the role of information technology in layusers search for and use of health information?
- 2) How does the information they locate through means such as the Internet affect their lives and their health outcomes or those of their family members?
- 3) What is the role of intermediaries in the search for and use of health information by laypersons?

Formal vs. Informal intermediaries

- 4) What is the link between individuals' capacity for seeking and using health information, their interactions with health care systems, and their health outcomes?
- 5) What is the impact of culture and ethnicity?
- 6) How does access to and use of information technology affect an individual's ability to interpret and make decisions based on complex health information?

What the Literature Says About Teletriage...

- □ Teletriage (Summarized by Cochrane Review, volume (3), 2005)
 - Process where calls from people with health problems are received, assessed and managed by giving advice or by referral to more appropriate services
 - Growth in many countries, including Australia, New Zealand, Sweden, Canada, the UK as well as the United States
 - Reasons for growth
 - Reduce the burden on GPs and ERs
 - It has been estimated that more than half of after-hours calls can be handled by telephone advice alone
 - Caller Satisfaction
 - NHS Direct found to be high (Munro, 2000a; O'Cathain, 2000)
 - Seniors, ethnic minorities, disadvantaged groups less apt to use
 - Some studies suggest it actually increases use of service (George, 2002)
 - A recent review of teletriage programs indicated that caller satisfaction ranged from 55% to 90% for RN teletriage provided through call centre programs (CCOHTA, 2004)

Enter the Internet...

- Health information seeking is popular "hobby" in Canada
 - After email and general browsing
- Top three medical conditions researched online are:
 - Depression
 - Arthritis
 - Diabetes
 - Next come...allergies, migraine headaches & heart conditions
- 29% of CDNS say they would stop taking the drug if they found negative information online
- Canadians are divided on the question of whether drug advertising is a "good source of information"

The BC HealthGuide Program

BC HealthGuide Handbook

400 page handbook distributed free of charge to BC households

BC NurseLine (24/7 access to nurses)

- Nursing advice is guided by the Healthwise® Knowledgebase, a computerized decision support tool that uses clinical support algorithms and protocols to determine the appropriate response to care needs, and includes decision points for callers to guide their choice of treatment.
- Translation services in more than 130 languages and services for the deaf and hearing-impaired

BC HealthGuide Online (www.bchealthguide.org)

BC Healthfiles

Population Health Role for Health Information Programs

United States

HMO organizations

Closed systems

Gatekeeper...to determine whether you can go to the ER under certain conditions

Canada

Open system

Canadians can see any GP who is taking new patients

Availability of walk-in medical clinics

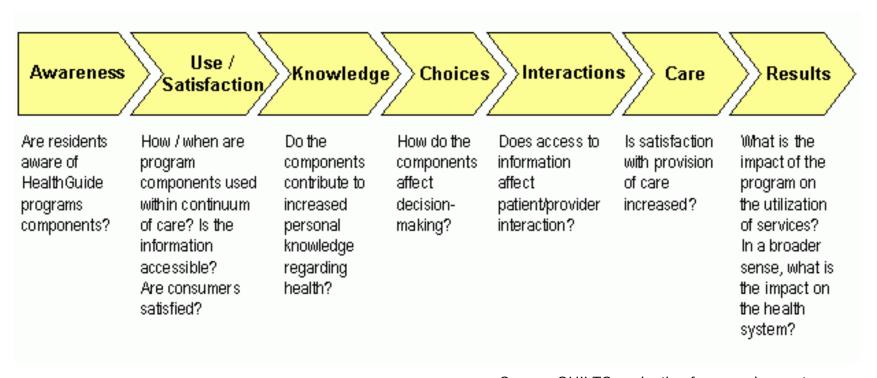
No gatekeeper to accessing providers and/or the ER

Program Goals

The BC HealthGuide Program has four stated objectives:

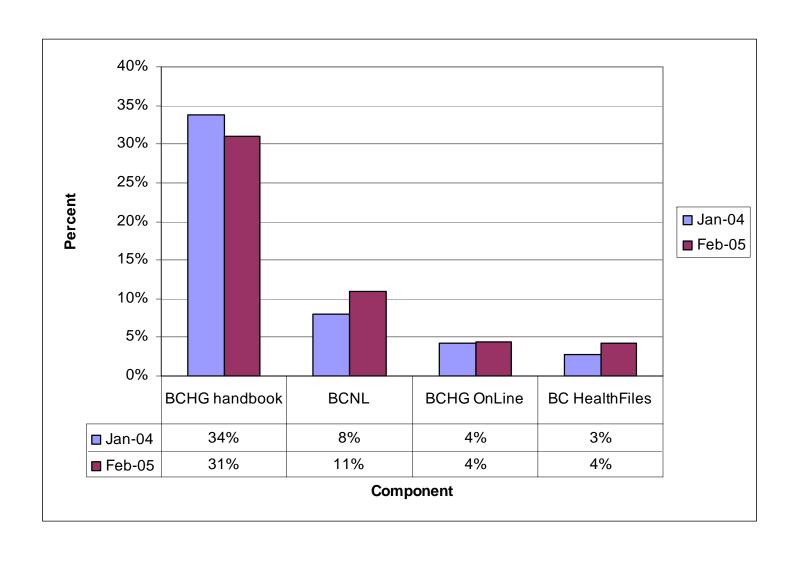
- To improve consumer access to timely and accurate health information and advice.
- To expand consumer knowledge in managing personal health risks and conditions.
- To alleviate pressure on emergency and physician services due to inappropriate use.
- To reduce costs due to inappropriate use of the health care system.

Health Information's Role in Primary Care Experience



Source: QUILTS evaluation framework report

Utilization Rates for BC HealthGuide Program Components 2004-2005



Self-Reported Satisfaction with BCHG Program Components

	BCHG handbook	BC NurseLine	BCHG OnLine	BC HealthFiles
Had the information I needed	86%	93%	81%	93%
I understood the information	96%	98%	97%	97%
The information was helpful	92%	91%	87%	93%
Overall satisfaction [1]	81%	86%	71%	71%

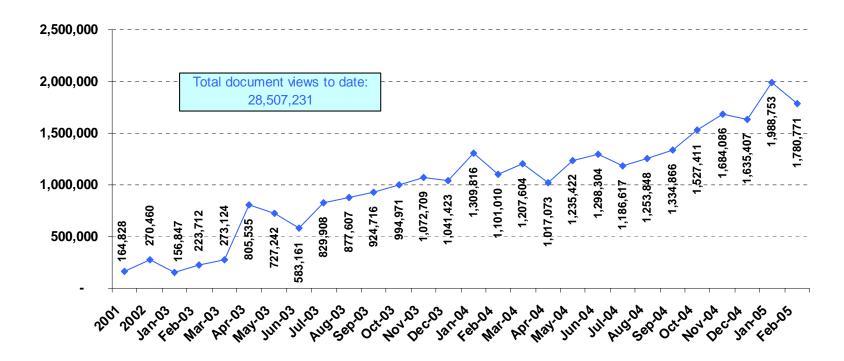
BC NurseLine Calls

- Highest utilization between 6pm and 11pm
- Lowest in early morning (6 to 7:00am)
- Twenty problems (out of a list of over 450) account for 50% of the calls to the NurseLine
- The most common health issues overall are
 - fever as primary symptom
 - nausea and vomiting
 - abdominal pain
 - rash and hives
 - prescription and over-the-counter medications and products

Conclusions – BC NurseLine Call Back Survey

- Evidence that BC NurseLine supports callers in building competence to manage common health conditions on their own, particularly when the health issue involves infants under <u>less than</u> one year of age.
- Most useful supporting decisions around self-care and physician visits.
- Least helpful when determining whether a visit to an emergency department is necessary.
- Resources were particularly effective in facilitating decisions about family members, especially children under 14.

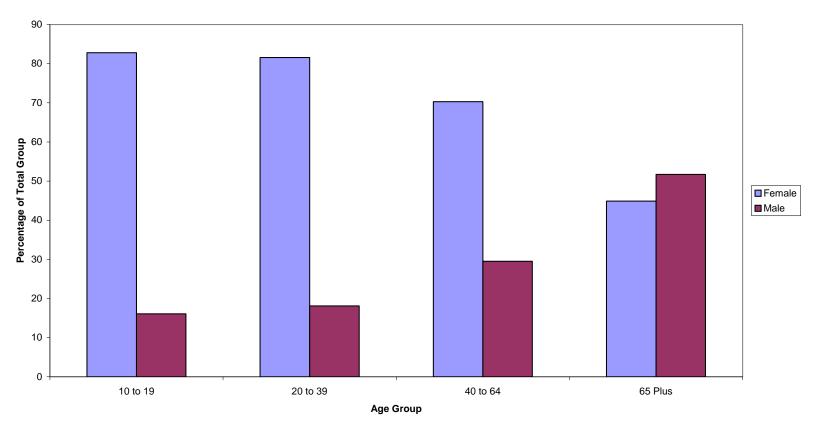
BC HealthGuide Online



Source: BC Ministry of Health, 2005

BCHealthGuideOnline By Sex and Age

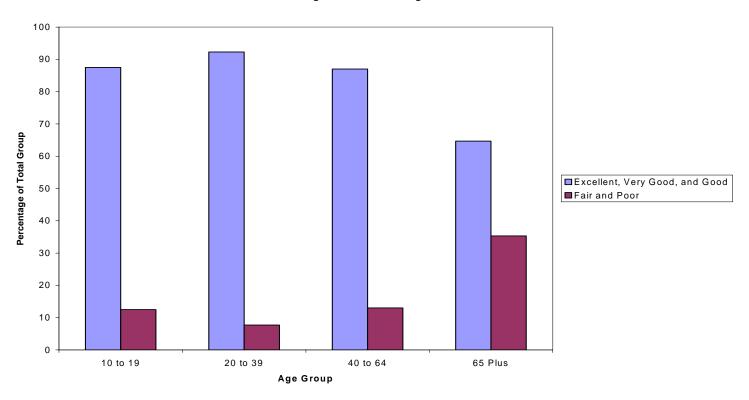
Percentages of Female and Male Respondents - by Age Group



Source: QUILTS evaluation team, Web Survey

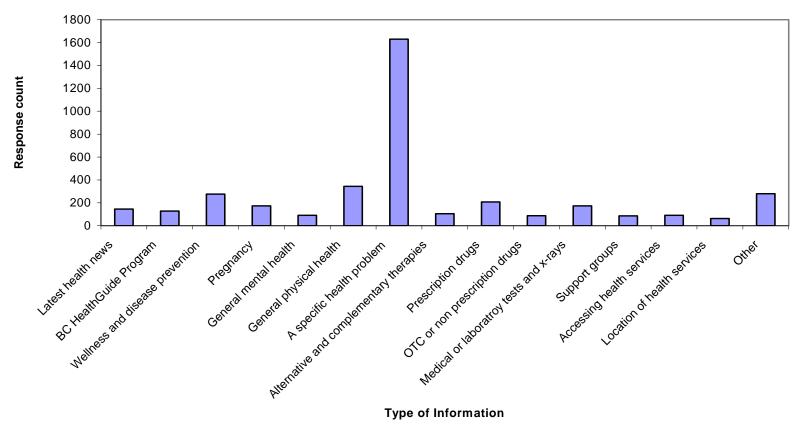
Self-Reported Quality of Health By Website Users

Percentages of Self Rating of Health



Source: QUILTS evaluation team, Web Survey

Types of Health Information Sought on Website



Source: QUILTS evaluation team, Web Survey

Summary

- BC HealthGuide program
 - increases access to high quality health information and advice, particularly for residents of rural and remote areas of the province, and for those looking for advice and information during evening, night and weekend hours, when many health services are not readily available.
- BC NurseLine appears to provide a fairly efficient service, responding to 52% of callers without need for further referral, and advising 48% of callers to seek further assessment and/or care.
- Pre- and post-call intent information captured by the BC NurseLine database suggests regional access issues influence care-seeking decisions and behaviour.
- The data suggest that BCNL has an impact on reducing emergency department and physician office visits for infant and child health concerns.