NATIONAL HEALTH LINE SYMPOSIUM
Making the Right Connections

Presentation # 3
Evaluation Aspects of Health Lines

April 27 & 28, 2006

Delta Ocean Pointe Resort
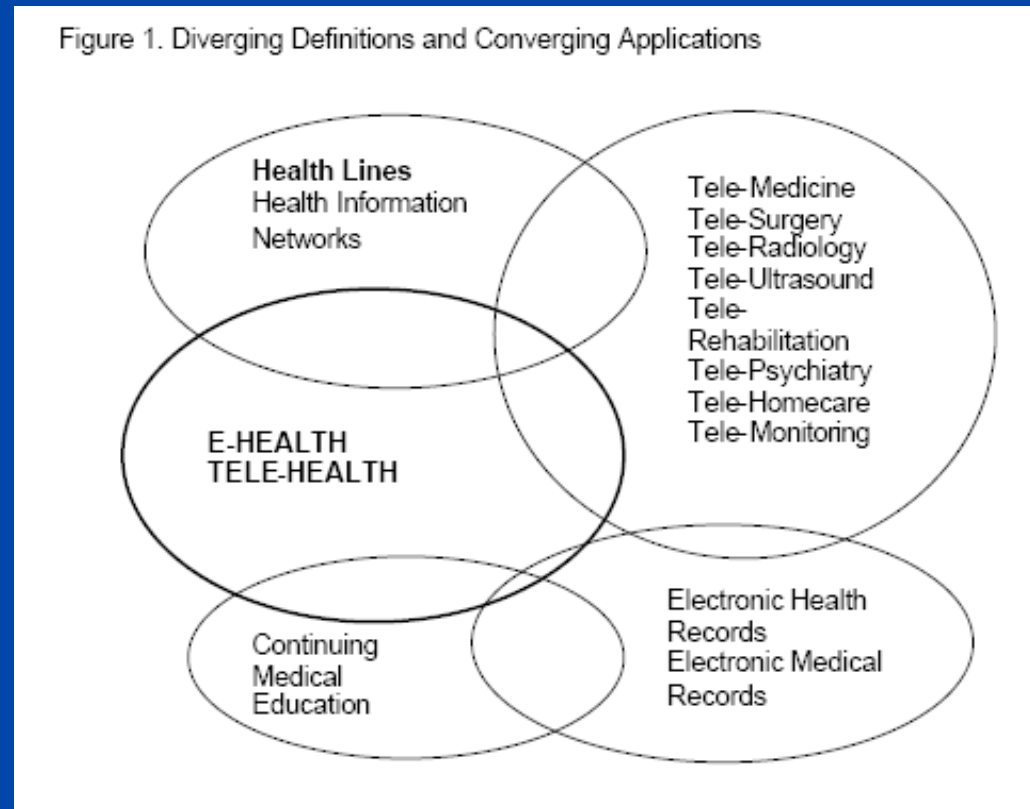
Victoria, B.C.

Dale Howard, PhD

Howard Research & Management Consulting Inc.

Evaluative Aspects of Health Lines
Scope of Activity

1. Literature Review

2. Environmental Scan

3. Unique Uses

4. Remote Agents Study

5. Non/Low User Study

6. White Paper: Improving the Sustainability of the Health Care System through Health Lines

7. Evaluation Framework

Howard Research & Management Consulting Inc.

Health Lines in Context

Figure 1. Diverging Definitions and Converging Applications

Health Lines
Health Information Networks

Tele-Medicine
Tele-Surgery
Tele-Radiology
Tele-Ultrasound
Tele-Rehabilitation
Tele-Psychiatry
Tele-Homecare
Tele-Monitoring

E-HEALTH
TELE-HEALTH

Continuing Medical Education

Electronic Health Records
Electronic Medical Records

Source: Health Lines Literature Review: Evaluative Aspects

Howard Research & Management Consulting Inc.

Health Lines Legacy

Health lines have a legacy of some 20 years and are utilized in many parts of the world including Canada, United States, Australia, New Zealand, United Kingdom, South Africa, Scandinavia, France, Belgium, Portugal, and Singapore.

Figure 2. Patient Satisfaction with Telephone Health Line Services in Canada (2003)

Patient Satisfaction (2003)	Used telephone health line services in past 12 months	Quality of telephone health line services used rated as excellent or good		Very or somewhat satisfied with telephone health line services provided	
	Number	Number	%	Number	%
Canada	2,431,008	1,981,171	81.5	2,038,585	83.9
Males	764,519	631,236	82.6	659,849	86.3
Females	1,666,489	1,349,935	81.0	1,378,735	82.7

Source: Statistics Canada

Howard Research & Management Consulting Inc.

Evaluation Frameworks

Only recently have published frameworks and outcomes indicators been systematically developed to better understand and assess the impact of telehealth initiatives.

Framework for Evaluating Clinical Telemedicine (Institute of Medicine 1996)
Balanced Score Card (1990—applied to technology implementation in the early 2000's)
Modified CIPP / Donabedian (applied to telehealth in 2001)
Canada Health Infostructure Partnerships Program (CHIPP – 2002)[3]
Telehealth Outcomes Development (proposed – 2003)
National Initiative for Telehealth Framework of Guidelines (2003)[4]

Source: Synthesis of Telehealth Outcome Literature (National Telehealth Outcome Indicators Project - 2003)

Howard Research & Management Consulting Inc.

Expectations of Stakeholders

As one might assume, the expectations stakeholders have for health lines do not stray too far from common outcome categories for telehealth. Health lines are initiated on the assumptions that they will:

1. Increase access to health care services
2. Positively impact the sustainability of the health care system, and
3. Contribute to improved health outcomes

Howard Research & Management Consulting Inc.

Access

- Appropriate access

- Out of hours / after hours access

- Timeliness of access

- Overcoming geographic barriers

- Access to specialized services

- Accessible services for population groups (remote, Aboriginal populations, ethnic minorities)

Howard Research & Management Consulting Inc.

Evaluating Access

- Call volume
- Time/day of calls
- Call duration
- Caller demographics
- Presenting problems
- Caller satisfaction
- Wait time
- Awareness

Howard Research & Management Consulting Inc.

Sustainability

- Meeting demand at a lower cost
- Reducing cost through appropriate utilization

Howard Research & Management Consulting Inc.

9

Evaluating Sustainability

- Value to users

- Value to service providers

- Systemic value

Health Lines
MJC White Paper

Howard Research & Management Consulting Inc.

Health Impacts

- Safe, timely and accurate information and advice
- Risk management
- Promote wellness

Howard Research & Management Consulting Inc.

Evaluating Health Impacts

- Appropriate service
- Timeliness of service
- Caller compliance

Howard Research & Management Consulting Inc.

12

Implementation and Management

Theme 1: Processes and Tools

- Decision support software

- Protocols/guidelines/algorithms

- Documentation

- Involvement of healthcare staff in development and implementation

Theme 2: System Management Variables

- System monitoring

- Call routing

Howard Research & Management Consulting Inc.

13

Implementation and Management

Theme 3: Nurse Variables

- Training education and experience
- Assessment
- Recruitment and retention
- Job satisfaction
- Communication

Theme 4: External Variables

- Medical legal issues

Howard Research & Management Consulting Inc.

Future Trends

Service Integration

- Co-location of service
- Increasing triage endpoints
- Clinical integration
- Communication hubs

Service Routing

- Routing to specialists
- Hot lines

Howard Research & Management Consulting Inc.

Future Trends

Continuity and Continuing Care

Taking Advantage of the Internet

- Web sites
- E-mail

Howard Research & Management Consulting Inc.

Future Trends

Professional to Professional

Media

Electronic Health Records

Virtual Call Centre / Distributed Call Centre

Howard Research & Management Consulting Inc.

The Best Health Lines

While health lines are still emerging, and new initiatives continue to enhance health line services, the literature and multi-jurisdictional experience purport a number of best practices or characteristics of a quality health line:

1. Capacity to respond to 90% of calls in 30 seconds
2. Comprehensive data collection / unique identifier
3. State-of-the-art technology
4. Standardized, formally approved protocols and procedures
5. Focus on customer service
6. Smooth transition / referral to route calls to other resources
7. Professional nurses / ongoing training /adequate backup
8. Ongoing quality control and total quality management
9. Easy to remember number / adequate advertising
10. Web-based applications

Howard Research & Management Consulting Inc.

First, Select the Questions

Questions derived from the literature (academic and grey), interviews with key informants, and discussions with Collaboration members.

1. Does our health line increase access to health services?
2. Is our health line a sustainable service?
3. Does our health line have positive health impacts?
4. Is our health line implemented efficiently?

Hand Outs

Howard Research & Management Consulting Inc.

Question Assessment

1. Have answers
2. Have partial answers
3. Have no answers

Evaluation Questions Access	1	2	3
What services do health lines provide?	√		
What is the demand for health line services?		√	
Why do callers not call health lines?			√

Hand Outs

Howard Research & Management Consulting Inc.