

Health Literacy: Background and Best Practices 2016

A. THE SITUATION

- 30% of the population is not engaged in health and wellness; not enough time, not engaged in Health and wellness.
- NAAL data: 1 tenth of American adults lack the skills needed to take care of their own health and most do not know how to prevent disease.; misunderstanding of prescriptions, medication errors,
- 55% have difficulty reading and understanding health information
- Average reading level is 8-9th grade, newspaper is 12th grade and health consent forms 18th year of schooling
- 88% have poor understanding of nutrition labels and have difficulty with the way health information is currently provided. Adults below the basic literacy levels were the least likely to use any written material to obtain information on health topics
- 80% forget their doctor's advice as soon as they leave the office
- NO SINGLE TYPE OF PRINT MATERIAL IS AS IMPORTANT AS NON PRINT-radio or TV

Low health literacy means that prevention methods are limited: few studies that look at low health literacy and effect on primary prevention that target risk factors for chronic disease

- 88% of adults have difficulty with the way health information is presented and most do not have the ability to understand risks, sort through conflicting information, Act on information and navigate our complex health systems
- Look at variables to reduce chronic disease:
- Smoking, alcohol use, diet, BMI and exercise
- ADD VARIABLES: fasting blood sugar, blood pressure, cholesterol, immunizations and screening for cancer etc.
- WORK on SKILLS AND ABILITY –people slow down as they approach tasks as they don't understand and don't know what to do because of the demands and complexity of the health info (doctors, written material)

B. OUR RESPONSE

Health literacy is our ability to access, understand and act on health information

Literacy=prose, documents (charts and forms), numeracy

OUR RESPONSIBILITY IS TO COMMUNICATE IN SUCH A WAY SO THOSE WE SERVE

CAN HEAR, UNDERSTAND, EMBRACE AND ACT ON THE SCIENCE/EVIDENCE BASED PROFESSIONAL ADVICE, SO THEY MAKE BETTER HEALTH DECISIONS

(‘Integration health Literacy into Primary and Secondary Prevention Strategies. Ratzen Sept 2009)

Health Literacy Person and Families’ engagement in getting and staying healthy

Everyday/Daily health Barriers and Solutions

- Seniors-
 - adapt print and picture size
 - Sharp contrasts (Healthy Older people Campaign)
 - Grade 3-4 reading level
- Use people from different cultures for FB posts and Health Habits

Cultural Differences in Perception and Causes of Pain		
Culture	Perception of Pain	Causes of Physical Illness
Afghans	Elderly may see pain as God's punishment or as an expected part of life; non-pharmacological method for reducing pain is to listen to the Koran	Illness can have natural causes such as germs or seasonal changes
African Americans	Expression of pain generally open; all forms of pain management acceptable	View illness as a state of disharmony; may view as God's punishment for improper behavior
Chinese	Patient may not complain of pain; may use acupuncture to treat pain	Imbalance of yin and yang
Germans	Tend to be stoic and may not report pain or ask for pain medication	Most believe that poor nutrition, stress, or inadequate rest cause illness
Hmong	Do not use pain scales well; readily accept analgesic medications	Believe that illness can have natural or supernatural etiologies
Mexicans	May want pain relief as quickly as possible	May view physical illness as an act of God
Vietnamese	Maintain self-control and do not complain	Belief in spiritual causes is common; will not reveal such beliefs to Western healthcare professionals

Source: Lipson and Dibble, 2008.

- Newcomers, both language AND culture
- Teens who smoke knowing the risk eg the Truth Campaign(thetruth.com)

Consumer Health skills and Caregiver Skills: using doctors, understanding the health system and the skills to use it

- Finding a good doctor
- Advocacy skills
- Complex health information
- Compliance with prescriptions and treatment
- Understanding forms (consent forms
- Understanding complex medical terms eg inserts with over the counter and prescription drugs

Behaviour Change What are the barriers to action?

Knowledge, engagement then action sustained over time how do people learn connect with others and change over time?

- People they trust, Community Assistants who work with them over time to help them use what they already know, improve their health and understand and use health services
- Oral (other people, friends and family, radio)
- Visual (pictures, TV, Videos)
- Culturally appropriate
- Text, email
- Automated Telephone Messages/Short Message Services (taped messages in different languages)
- Videos, links, interactive games
- Print
- Reading writing
- Graphs/visuals
- Computer literacy, operating and doing searches for health information
- Complex information; Reading nutrition labels, prescription bottles
 - Adult learning principles to develop programs, health Planner and events
 - Safety and risks- warnings, signs, dosage, drug information sheets, order forms, complicated instructions, instructions for taking drugs on pill bottles

Look at: Community Interventions.....Build a supportive environment

- The person as an ACTIVE AGENT in a
 - CONDUCIVE(positive) ENVIRONMENT
 - Or HOSTILE
- Individualized Tools (Health Planner)
- Interactive Tools
- Relationships over time(Community Assistants)
- Lobby Festivals to build networks within CMT
- Train models/leaders (WISEWOMAN Program)

Broad Interventions: look at seat belts, car seats and tobacco use

- Warnings about the health risk
- Labels
- Increased prices
- Tax on cigarettes
- Inconvenient to smoke (Public health and city By laws eg smoking banned in restaurants and 30 ft from buildings)

(Evans et al 2010)

Define Audience.....Advisory Group (ideas, design and review).....Define Issues from Research/Best practices (health literacy, prevention, media and behaviour change).....Draft content (users).....Design and test usability and outcomes....Evaluate

HEALTHY PEOPLE 2020 Health communication: [hhs.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology](https://www.hhs.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology)

- ☐ Supporting shared decision-making between patients and providers.
- ☐ Providing personalized self-management tools and resources.
- ☐ Building social support networks.
- ☐ Delivering accurate, accessible, and actionable health information that is targeted or tailored.
- ☐ Facilitating the meaningful use of health IT and exchange of health information among health care and public health professionals.
- ☐ Enabling quick and informed action to health risks and public health emergencies.
- ☐ Increasing health literacy skills.
- ☐ Providing new opportunities to connect with culturally diverse and hard-to-reach populations.
- ☐ Providing sound principles in the design of programs and interventions that result in healthier behaviors.
- ☐ Increasing Internet and mobile access

Consumer self management= Meaningful materials that are easy to read PLUS meaningful interactions with their health professionals

1. Locate the health information
2. Understand it
3. Ask pertinent questions
4. Describe symptoms in a way health providers understand
5. Evaluate the information for credibility and quality
6. Analyse risks and benefits

C. Media Approaches

1. NO SINGLE SOURCE OF PRINT MATERIALS WERE AS EFFECTIVE AS TV AND RADIO (journalist do NOT get training on how to report health research) especially adults with low literacy levels
2. Nutritional labels Check out eatbetterearly.com
3. Healthy mindhealthybody interactive program with health info and recipes Destination heart healthy eating: used focus groups to see what worked for Hispanic families bellinstitute.com
4. Focus on kids: used cartoons: Go with the Whole Grain for Kids
5. Web based incentive systems: people with low literacy have higher mortality, and use more healthcare resources:
6. Medincentive: use of online information therapy, person given an incentive for complying, using behavioural science to get the patient to show the doctor that they are literate and compliant and the doctor to show they practice good care

How do we communicate key messages? The messages have to be achievable, eg recommend health food that is not affordable? Find ways to promote access and distribute affordable food (eg Foodshare)

D. Health Literacy & Communications Methods

Health information and health care are becoming more complex. For people with limited literacy skills, the challenge can be overwhelming. Lack of understanding can lead to poor health outcomes, excess hospitalization, and increased costs.

Health Research for Action, Berkeley, California <http://www.healthresearchforaction.org/consumer-reports-best-buy-drugs-fact-sheets>

We need to use a combination of:

1. Media Literacy: help analyse sponsor's motives, how to compose key messages to targeted audiences
2. Public Relations How to include messages in the media
3. Media advocacy Influence the selection and debate about health topics
4. Advertising Public service health messages in media and public spaces
5. Education Entertainment Include/eliminate health messages in entertainment and news
6. Individual and group instruction
7. Partnership development Increased perception and support of health messages

Toolkit

- A. Readability Assessments -the grade level of written information, using validated readability tests. And we provide extensive feedback on the many aspects of readability and usability that are not addressed in tests of grade level, including content, organization, cultural appropriateness, and design
 - Literacy Levels 1- Grade 5,
 - 2 Grade 8
 - 3 Grade 10
 - 4+5 12 through college, University
- B. Health Literacy tests TOHELA, WRAT, CLOZE (understanding), Vital signs(annfammed.org), REALM (medical terms)
- C. Writing & Designing for Readability & Usability-
 - Improve readability,=: look at gender, class, cultural issues, grammar, design of material
 - Measure readability: SMOG, SAM, Flesch-Kincaid
 - [Health Communication Tips \(PDF\)](#), • [Consumer Reports Best Buy Drugs Fact Sheets](#)
- D. Health Literacy Trainings & Audits
 - What health literacy is and why it is important
 - 2. Planning and processes for developing clear materials
 - 3. Organizing information for clarity

4. The basics of readability and usability testing
5. Identifying and assisting people with limited literacy

- E. Linguistic & Cultural Adaptation A broader of “Interpreting”
- Prescriptions
 - Canadian health System
 - Accompaniment
 - Prepare for doctor’s visits, using pharmacists
 - Self help groups
 - Adapt media content and images, illustrations and communication methods
 - SIMPLIFY
 1. Speak clearly and slowly
 2. Short sentences
 3. Pause every 60 seconds
 4. Use common words
 5. No jargon
 6. Take a health partner

TABLE 5.3: CULTURAL REFLECTION CONCEPTS APPLIED TO HEALTH LITERACY

Cultural reflection	Application to health literacy	Example of what this may mean in practice
Cultural awareness	Health information provider realizes importance of culture in information exchange	Creation of language-appropriate written materials
Cultural competence	Health information provider realizes importance of culturally supportive environment	Involvement of linguistically and culturally congruent navigators/interpreters in health information exchange
Cultural safety	Health information provider actively creates environment where individual feels culturally safe and without risk	Provision of safe physical, emotional, and spiritual space where health and cultural conversations are not compromised; traditions are valued and encouraged

- F. Translate and adapt materials in _____, and over 12 other languages, including American Sign Language, easy-to-read content that is culturally appropriate. Focus groups and usability tests in these languages to improve the readability, usability, and cultural appropriateness of materials.
- Parents Guide (California)
 - Medi-Cal Access Project Part 1
 -
- G. Alternative Formats & Accessible Design in Braille, audio (MP3, CD, and cassette), large print, text-only, and DVD for people with disabilities. Graphic design techniques to create materials that are both usable and appealing.
- DMHC Website Redesign
- H. Design considerations

- Reaction to promotions (across programs)
- Price sensitivity(Foodshare)
- Product (brand associations (CMT brand: healthy person)
- Placement to fit audience lifestyle

BEST PRACTICES Use of Media

- Look at the California Kit for New Parents- a multimedia kit and approach leading to improved knowledge and skills
- California Medicaid Access Guide-healthcare guide for different cultural groups
- USE THE STANFORD CHRONIC DISEASE SELF MANAGEMNT PROGRAM- a health literacy curriculum for self help groups
- Better You from Blue-promoting health literacy
- Next Steps- preventative lifestyle management plus Health Dialogue (47f0 pre recorded messages
- Healthy body Health Mind- public television health shows/videos
<http://www.itvisus.com/programs/hbhm/>
- Mjedencentive using information therapy with incentives:
https://medencentive.com/Independent_Studies.aspx
- <http://www.canyonranchinstitute.org/>

BROAD CAMPAIGNS- Multi layered

TOBACCO USE

- Warning about Health Risks
- Labelling
- Increased Prices
- Tax on cigarettes
- Made it inconvenient to smoke (Public Health and Municipal by laws) eg smoking banned in restaurants, 30 feet from buildings
- Broad Campaigns eg Race for the Cure

E. Outcome and Evaluation

- Consumer product companies- ask them to work with you to craft messages using their marketing savvy
- Look at the Canyon Ranch Institute***
- Did families/participants share written or other information with others?
- Use of more visual charts and graphs

- E. Do they now prepare for visits to the doctor?
 - F. Use of HP in the context of a comprehensive approach
 - G. Research: Shabana- parent health education
 - H. Promoting health literacy to encourage prevention and wellness: Workshop summary
- Chapter 4

Measure Behaviour change

- 1) HEDIS system-measure performance of quality for prevention(ncqa.org/tabid/59/default.aspx)
- 2) Behavioural economics: Healthy choice is the EASY choice- the default condition, eg car seats
Communicate about risks through doctors etc but what changed behaviour was legislation(ie need advocacy to help with change) Seat belts- combination of engagement and policy change(Community Health Number p21)
- 3) Use the aggregate HP data to create a health number/benchmark for St JT
- 4) Divide by postal code(240, 280, 650, 260)
- 5) Measure those behaviours most critical to change

APPENDIX A Health Literacy Bibliography

- Understanding Health Literacy: An Information Science Perspective (IFLA Publications)
May 15, 2016 Amazon \$90 order from TPL or Amazon in 2016
- Understanding Health Literacy: Implications for Medicine and Public Health Joanne G Schwartzberg
Jan 1, 2005 Amazon\$40 and Toronto Reference Library
Marg and Bhavana pp101, 141,181
- Advancing Health Literacy: A Framework for Understanding and Action
Jun 5, 2006 by Christina Zarcadoolas, Andrew Pleasant and David S. Greer
Amazon and TRL
- Practical patient literacy : the medagogy model
Stewart, Melissa N. **2012**. 230 p.
TPL ordered
- The Medical Library Association guide to providing consumer and patient health information
2014. xv, 224 pages
TRL

- Community health education methods : a practical guide
2nd ed. Book, 2003. xxi, 417 p.
TRL
Marg and Bhavana multicultural chapters p 83, 109, 209, 233, 255, 383
- Health literacy from A to Z : practical ways to communicate your health message
Osborne, Helen, 2005. xx, 293 p
TRL
- Health literacy in Canada : a primer for students Hoffman-Goetz, Laurie, author.
2014. 248 pages
TPL ordered
- Health Literacy: Developments, Issues and Outcomes Hardcover – Oct 10 2013 Amazon \$184
Chapter 6 - Ways to Integrate Health Literacy into Health Professional Practice: New Trends to Enable Clients' Empowerment and Participation (pp. 127-142)
Authors / Editors: (Mélanie Levasseur, Annie Carrier, School of Rehabilitation, Faculty of Medicine and Health Sciences, Université de Sherbrooke, Sherbrooke, Québec, Canada, and others)
- Ways to Integrate Health Literacy into Health Professional Practice: New Trends to Enable Clients' Empowerment and Participation (pp. 127-142) \$100.00

Authors: (Mélanie Levasseur, Annie Carrier, School of Rehabilitation, Faculty of Medicine and Health Sciences, Université de Sherbrooke, Sherbrooke, Québec, Canada, and others)

Abstract:

This chapter aims to report ways of integrating health literacy into health professional practice to enable clients' empowerment and participation. Health literacy is defined as the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in various settings over the life-course. A scoping study of the scientific and grey literature on health and, specifically, health professional and health promotion was done from 1980 to March 2013. Four databases were searched by combining key words 1) "health literacy" with 2) "rehabilitation", "occupational therapy", "physical therapy" or "health promotion". Data were extracted from 44 documents: five textbooks, nine reports and 29 articles. The literature on health literacy needs enhancing in both quantity and quality. Nevertheless, six ways of integrating health literacy into health professional practice were identified (frequency; %): health professionals should 1) be informed about and recognize health literacy (27; 61.4), 2) standardize their practice (10; 22.7), 3) make information accessible (37; 84.1), 4) interact optimally with clients (26; 59.1), and 5) intervene (29; 65.9) and 6) collaborate to increase health literacy (21; 47.7). Since health literacy can directly impact clients' empowerment and participation, further studies are needed on how to integrate health literacy into health professional practice.

Health Education is Health Literacy: Maximizing the Impact of Health Education Interventions by Focusing on How Individuals Acquire Skills for Behavior Change (pp. 175-188) \$100.00

https://www.novapublishers.com/catalog/product_info.php?products_id=45272

(found Ariela Freedman's thesis and downloaded it under Best practices, HL Onedrive)

Authors: (Ariela M. Freedman, Katharina V. Echt, Kathleen R. Miner, Ruth Parker, Hannah L. F. Cooper, Rollins School of Public Health, Department of Behavioral Sciences and Health Education, Emory University, Atlanta, GA, USA, and others)

Abstract:

The goal of health education and behavior change interventions is often to teach skills that participants can use, not just to impart facts. These are considered functional health literacy skills – the basic health-related skills needed for daily living activities to ensure health. Health behavior theories are useful for developing psychosocial targets of health promotion, such as self-efficacy, yet they do not address the mechanisms by which individuals learn information and acquire skills. While a scientific approach is often taken with behavioral theories in developing interventions, the same scientific considerations are not applied to an instructional approach. Without attention to the process of knowledge and skill acquisition, the potential impact of health behavior interventions is sharply limited. Recent literature suggests that health education interventions might increase their effectiveness by incorporating theories from other

disciplines, such as education or communication. This chapter proposes a novel integrated approach of cognitive psychology and adult learning theory to foster the acquisition of functional health literacy skills in health education and behavior change interventions. This chapter will provide a foundation on key terms and concepts of health literacy, followed by a primer on concepts from cognitive psychology and adult learning theory as related to health behavior change. Key concepts include sensory perception, depth of information processing, schema theory, and collaborative learning. Ultimately, this chapter demonstrates how the integration of cognitive psychology and adult learning theory can lead to the acquisition of functional health literacy skills to increase the effectiveness of future health education interventions.

Marg and Bhavana-website design

- Community food Centres The Knowledge Exchange A very good example of how to organize the information we collect for our media strategy and knowledge transfer about health information for our audiences: residents and community partners/groups://thepod.cfccanada.ca/
- [Health Literacy Portal: Canadian Public Health Association](http://cpha.ca)
cpha.ca
Marg and Bhavana to check out

- Health Literacy Studies: Harvard School of Public Health
Overview of the field, research findings, policy, practice and resources.

hsph.harvard.edu

Marg and Bhavana to check out

- Own your health : choosing the best from alternative & conventional medicine : experts to guide you, research to inform you, stories to inspire you Weisman, Roanne, 2003

Includes alternative and complementary medicine-good for CAs

TRL

APPENDIX B

Understanding Access to Health Services: <http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services>

Access to health services encompasses four components: coverage, services, timeliness, and workforce.

Coverage

Health insurance coverage helps patients get into the health care system. Uninsured people are:

- Less likely to receive medical care
- More likely to die early
- More likely to have poor health status ^{4, 5, 6}

Lack of adequate coverage makes it difficult for people to get the health care they need and, when they do get care, burdens them with large medical bills. Current policy efforts focus on the provision of insurance coverage as the principal means of ensuring access to health care among the general population. Other factors, described below, may be equally important to removing barriers to access and utilization of services.

Services

Improving health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs.^{7, 8, 9}

Having a primary care provider (PCP) as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community.¹⁰ Having a usual PCP is associated with:

- Greater patient trust in the provider
- Good patient-provider communication
- Increased likelihood that patients will receive appropriate care^{11, 12}

Improving health care services includes increasing access to and use of evidence-based preventive services.^{13, 14} Clinical preventive services are services that:

- Prevent illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention).
- Detect a disease at an earlier, and often more treatable, stage (secondary prevention).¹⁵

In addition to primary care and preventive services, emergency medical services (EMS) are a crucial link in the chain of care. EMS include basic and advanced life support.¹⁶ Within the last several years, complex problems facing the emergency care system have emerged.¹⁷ Ensuring that all persons have access to rapidly responding, prehospital EMS is an important goal in improving the health of the population.

Timeliness

Timeliness is the health care system's ability to provide health care quickly after a need is recognized. Measures of timeliness include:

- Time spent waiting in doctors' offices and emergency departments (EDs)
- Time between identifying a need for specific tests and treatments and actually receiving those services

Actual and perceived difficulties or delays in getting care when patients are ill or injured likely reflect significant barriers to care.¹⁸ Prolonged ED wait time:

- Decreases patient satisfaction.
- Increases the number of patients who leave before being seen.
- Is associated with clinically significant delays in care.

Causes for increased ED wait times include an increase in the number of patients going to EDs, with much of the increase due to visits by less acutely ill patients. At the same time, there is a decrease in the total number of EDs in the United States.¹⁹

APPENDIX C Health Literacy Media Sites

[Canadian Fitness and Lifestyle Research Institute / Institut canadien de la recherche sur la condition physique et le mode de vie](http://cflri.ca)

Published by a non-profit research institute, this site offers information and statistics on the physical activity and fitness levels of Canadians (both adults and children). Also provides lifestyle t ...

cflri.ca

[Alzheimer's Information: ADEAR](#)

Information about Alzheimer's disease and related dementias. Press releases announcing Alzheimer's disease research findings. Quarterly newsletter "Connections" available online.

nia.nih.gov

[National Institute of Arthritis and Musculoskeletal and Skin Diseases \(NIAMS\)](#)

Information on various musculoskeletal disorders for health practitioners, researchers, and laypersons. For general information, follow the link to "Health Information", and then "NIAMS Brochures & Ot ...

niams.nih.gov

[Cochrane Consumer Network](#)

"The Cochrane Collaboration is an international not-for-profit research organisation that aims to help people make informed decisions about health care ... The Cochrane Consumer Network's site contain ...

consumers.cochrane.org

[Women's Health Issues: Merck Manual Home Edition](#)

merckmanuals.com

[Heart & Blood Vessel Disorders: Podcasts for Patients and Families](#)

Information on vascular conditions, tests and treatments. Directory of vascular specialists in the U.S. and Canada (searchable by province).

vascularweb.org

[Eat Right Ontario: Ministry of Health Promotion](#)

eatrightontario.ca

[CDC Reproductive Health](#)

cdc.gov

[American Social Health Association \(ASHA\)](#)

ashastd.org

[Women's Health Issues: Merck Manual Home Edition](#)

merckmanuals.com

[Canadian Association for the Advancement of Women and Sport and Physical Activity \(CAAWS\)](#)

CAAWS Mission: to ensure that girls and women have access to a complete range of opportunities and choices and have equity as participants and leaders in sport and physical activity.

caaws.ca

Categories:

[Health Topics from A to Z](#) > [S](#) > [Sexually Transmitted Diseases](#)

cdc.gov

[Fight Bac! Keep Food Safe from Bacteria](#)

Site sponsored by a nonprofit group of US government, food industry, and consumer organizations. Information on foodborne illness, safe food handling and preparation. Educational brochures for downloa ...

fightbac.org

[The Merck Manual Home Health Handbook for Patients and Caregivers](#)

Online version of the 2003 second edition of this popular consumer text.

merckmanuals.com

[Smoking & Tobacco Use: CDC](#)

cdc.gov

[Eat Right Ontario: Ministry of Health Promotion](#)

eatrightontario.ca

[Teen Health: Canadian Paediatric Society](#)

caringforkids.cps.ca

[Men's Health: Mayo Clinic](#)

mayoclinic.org

[Obesity: MedlinePlus](#)

Categories:

[Health Topics from A to Z](#) > [O](#) > [Obesity & Weight Control](#)

nlm.nih.gov

[British Columbia Ministry of Health Services](#)

Programs and services for families, children, seniors and women. Listing of toll-free information lines. Electronic forms for health related requests. The "Health files" provide information on a va ... gov.bc.ca

BHAVANA is there a similar site for Ontario PLUS add TELEHEALTH SITE

[Stress: InteliHealth](#)

intelihealth.com

[Thecareguide.com](#)

Thecareguide.com is a guide to seniors' housing and care services in Ontario including retirement homes, nursing homes, home health care, adult lifestyle retirement communities, supportive housing and ...

thecareguide.com

Breast Cancer

Breast cancer survivors serve as trained volunteers to listen, to provide referrals to various services, provide support and assistance with decision-making. A toll-free line is available for callers ...

willow.org

[High Blood Pressure](#)

Describes the symptoms of high blood pressure and provides links to information on diseases that can result from it. Causes, diagnosis, and complications are also discussed.

mayoclinic.org

[COPD: National Heart Lung Blood Institute](#)

nhlbi.nih.gov

[Heart and Stroke Foundation of Canada](#)

Search using the term "cholesterol" to find many useful multilingual and multicultural resources.

heartandstroke.com

[eMedicine Consumer Health](#)

Covers a range of topics relating to diseases/conditions, lifestyle and wellness, first aid and emergencies.

emedicinehealth.com

[TorontoCentral healthline.ca](http://torontocentralhealthline.ca)

“It is designed by Sick Childrens Hospital and CCAC as a one stop info hub for newcomer access to health information especially for children and youth services.”

torontocentralhealthline.ca