

# Take Charge of Your Health



## A report from the Minnesota Health Literacy Partnership

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## Health Literacy

Health literacy is the “degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions”.<sup>1</sup> Health literacy requires people to have a wide range of abilities, they need to be able “to read, comprehend, and analyze information; decode instructions, symbols, charts, and diagrams; weigh risks and benefits; and, ultimately, make decisions and take action”.<sup>2</sup> Understanding, processing and taking action using health information is complicated by specialized health terminology, English competency, understanding of the health care system, stress and many other factors. These factors can leave all of us with questions and struggling to understand health information provided.

In fact, nearly half of all adults in the United States — 90 million people — cannot understand and use the information shared by their health care providers.<sup>3</sup> The 2003 National Assessment of Adult Literacy (NAAL) shows that only 12 percent of adult English speaking Americans have proficient health literacy skills.<sup>4</sup> NAAL health literacy items focused on commonly encountered health care situations such as care of illness, dealing with preventive care, and navigating the health care system. Three percent of adults were unable to participate because of an inability to communicate in English or Spanish or they had a mental disability which prevented them from being tested.

Low health literacy impacts a person’s health status more than any other factor, including education, income, employment or race.<sup>3</sup> Those with low health literacy represent all segments of society. Even those who speak English well and are highly educated may have low health literacy, and research shows that all patients, not just those with limited literacy skills, prefer easy-to-understand health information<sup>5</sup>. Low health literacy may lead to medication errors, problems with insurance, inability to access health care and poor health choices<sup>6</sup>.

While low health literacy can affect any patient, those most at risk are older adults, person with limited education, members of ethnic minorities and recent immigrants to the United States. See Figure 1 for the percentage of below basic health literacy found in these at risk populations.

<b><i>Population</i></b>	<b><i>Percent in Below Basic Health Literacy</i></b>
<b><i>Did not graduate from high school</i></b>	49
<b><i>Hispanic Adults</i></b>	41
<b><i>Black adults</i></b>	24
<b><i>Age 65+</i></b>	29

Figure 1

Low health literacy not only impacts a person’s health but it also has financial impacts both to individuals and the public. This drains both health care system resources and the individual patient’s financial capacity. Low health literacy increases health care costs in the United States by \$106-238 billion annually.<sup>7</sup> Research shows that in-patient spending for a patient with inadequate health literacy was \$993 higher than that of a patient with adequate reading skills.<sup>8</sup> Those with low health literacy have an average health care cost of \$13,000 compared to only \$3,000 for those with higher health literacy levels.<sup>9</sup> All of these individual costs lead to higher health care costs for everyone. Everyone must work together to improve health literacy and provide clear health communication, in order to improve access to health care, eliminate excess health care spending and control the rising cost of health care. Low health literacy is a problem that affects all of us.

## Health Literacy in Minnesota

Minnesota is one of three states with 6% of people lacking basic prose literacy skills, which is much lower than California (23%), Florida (20%) and New York (22%).<sup>10</sup> Minnesota’s percentage of those lacking basic prose literacy skills is similar to surrounding states: North Dakota (6%), South Dakota (7%) and Wisconsin (7%).<sup>10</sup> The seven Minneapolis/St Paul metro counties range from 4-7% of people lacking basic prose literacy skills (Figure 2).

### National Center for Education Statistics

Indirect estimate of percent lacking *Basic* prose literacy skills and corresponding credible intervals in Anoka County: Minnesota 2003

Location	FIPS code <sup>0</sup>	Population size <sup>1</sup>	Percent lacking <i>basic</i> prose literacy skills <sup>2</sup>	95% credible interval <sup>3</sup>	
				Lower bound	Upper bound
Anoka County	27003	235,907	5	2.2	9.3
Carver County	27019	57,796	4	2.0	8.4
Dakota County	27037	280,002	4	1.8	8.0
Hennepin County	27053	862,191	5	2.7	10.0
Ramsey County	27123	378,973	7	3.1	12.9
Scott County	27139	79,283	5	2.2	8.6
Washington County	27163	159,801	4	1.8	7.6
Minnesota	27000	3,852,097	6	4.1	8.0

<sup>0</sup> The state and county Federal Information processing Standards (FIPS) codes are standardized unique state and county identifiers. The first two positions identify the state, and the last three positions identify the county. For more information, see <http://www.census.gov/geographies/www/fips/fips.html>

<sup>1</sup> Estimated population size of persons 16 years and older in households in 2003.

<sup>2</sup> Those lacking *Basic* prose literacy skills include those who scored *Below Basic* in prose and those who could not be tested due to language barriers.

<sup>3</sup> The estimated percent lacking *Basic* prose literacy skills has a margin of error as measured by the associated credible interval. There is a 95% chance that the value of the percent lacking *Basic* prose literacy skills is contained between the lower and upper bound.

**SOURCE:** U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003 National Assessment of Adult Literacy

Figure 2

Minnesota may have higher literacy levels than many other states. But even with only 6% percent having below basic prose literacy levels this still translates to 231,125 people lacking basic prose literacy skills. This is roughly the population of St. Paul and is not a number which can be easily ignored.

While there are no state level health literacy statistics for Minnesota we can look at data for the populations most at risk for low health literacy: older adults, person with limited education, members of ethnic minorities and recent immigrants to the United States.

### **Older adults**



Minnesota is aging. According to the 2008 census estimates, 12.5% of Minnesotan's are 65 years of age or older.<sup>11</sup> The Minnesota state Demographic Center estimates by the year 2035, the number of Minnesotans greater than equal to age 65 will increase by 125%.<sup>12</sup> The elderly represent a population that is surviving longer with more complex and long-term medical needs.

### **Limited education and poverty**



Nearly 12% of Minnesotans over the age of 25 lack high school equivalency according to the 2000 U.S. Census.<sup>11</sup> The Minnesota Department of Education reports there are about

75,000 adults enrolled in adult literacy programs around the state each year.<sup>13</sup> It is estimated that 200,000 adults are in need of English as a Second Language services.<sup>14</sup> And, according to 2008 data, almost 10% of Minnesotans are living below the poverty level.<sup>12, 15</sup>

### Ethnic minorities and immigrant populations



The face of Minnesota is also changing. In 2009, over 18,000 immigrants moved to Minnesota.<sup>16</sup> Minnesota is the home to the largest urban Hmong and Somali populations in the United States.<sup>17</sup> In fact, 31% of Somalia immigrants (4,173) listed Minnesota as their intended state of residence with the U.S. Department of Homeland Security.<sup>16</sup> In Minnesota, the Hispanic/Latino population is projected to nearly triple by 2035, from 196,300 in 2005 to an estimated 551,600 in 2035 according to the Minnesota State Demographic Center.<sup>18</sup> Two-thirds of this population is projected to live in the seven-county Twin Cities area, although all regions of the state are expected to see increases.<sup>18</sup>

### Why focus on the Internet?

In Minnesota, 67-71% of people are Internet users.<sup>19</sup> Eight million US American adults use the internet to find health information on a typical day. Eight out of ten Internet users go online to find health information (Figure 3).<sup>20</sup> With more and more people using the Internet to find health information it is important to know what they are looking for, if they are finding it and if the information they are finding is accurate and useful.

Most US Americans start their health searches using a search engine such as Google.<sup>19</sup> The most common

Online Health Search 2006: Summary of Findings at a Glance
Eight in ten internet users go online for health information.
Eight million American adults look online for health information on a typical day.
The typical search for health information online starts at a search engine, includes multiple sites, and is undertaken on behalf of someone other than the person doing the search.
Most health seekers are pleased about what they find online, but some are frustrated or confused.
Three-quarters of health seekers do not consistently check the source and date of the health information they find online.
Successful health information searches may bolster health seekers' confidence.
<small>Source: Fox, Susannah. <i>Online Health Search 2006</i>. Washington, DC: Pew Internet &amp; American Life Project, October 29, 2006.</small>

Figure 3

search was for information about a specific disease or medical problem (Figure 3).<sup>20</sup> Thirty-one percent of health information seekers say “they or someone they know has been significantly helped by following health information or medical advice found on the Internet”. Forty-eight percent of people are searching on behalf of someone other than themselves. Over half of US adults said the information found on the Internet influenced a decision about how to treat an illness or condition; changed their approach for maintaining their health or the health of someone they take care of; or led them to ask their doctor new questions or to get a second opinion. Thirty-five percent say the information affected their decision about whether or not to see a doctor.<sup>20</sup>

Even though more and more people are turning to the Internet to find health information, some are still frustrated or confused about the health information they find online. Even if the individual is satisfied with the information found on the Internet, 75% of people do not consistently check the source and date of health information found online.<sup>20</sup>

Part of the reason people do not check sources and dates of health information is because the information is not readily available. A recent study conducted by the Office of Disease Prevention and Health Promotion, which is part of the Department of Health and Human Services, reviewed 102 health websites. None of these websites met all six of the criteria outlined in Healthy People 2010 objective 11-4 and the lowest levels of compliance were content sources and date updated.<sup>21</sup> People are finding health information online but is it accurate and useful? We intend to bridge this gap by providing people with information about how to use the internet to find accurate and useful health information.

## **Needs Assessment on Internet Use in Minnesota**

### **Background**

A needs assessment was conducted to determine how Minnesotans are using the Internet to find health information. The needs assessment consisted of a voluntary and anonymous survey of library visitors. Libraries were chosen as a common community resource and for their potential to be visited by a diverse population. Between January 5<sup>th</sup> and February 1<sup>st</sup>, MHLP’s Social Media Coordinator visited 8 libraries in the Minneapolis/St Paul metro area. During a two to three hour time period, Social Media Coordinator asked visitors to the library if they would be willing to complete the survey. The libraries visited in St Paul include: Central, Highland Park, Rondo and Sunray. The libraries visited in Hennepin County include: Brookdale, Central, Ridgedale and Southdale. Over 130 participants completed the survey.

The needs assessment survey consisted of 11 questions. Four questions were demographic, 6 questions were about Internet use and 1 question asked about interest in attending a class about using the Internet to find health information. The demographic questions and the question about attending a follow-up class were multiple choice with an option to select one answer. The Internet use questions were multiple choice with the option to select more than one answer.

## **Results**

Participants varied in educational background, ethnicity, age and sex (Figure 5). The majority were Caucasian (59%). The participants were almost evenly split between Male (48%) and Female (47%). Most had at least some college with only 14% having a high school diploma/GED or less. Almost 50% of participants were between the ages of 26 and 55.

The majority of participants used the Internet. Most accessed the Internet at home (65%), at the library (53%) or at work (33%). According to the Pew Research Center, 79% of US adults are online<sup>22</sup>. Participants in our survey pool had much higher Internet usage rates (94%) than United States as a whole. A small percentage (4%) of participants said they did not access the Internet in any way.

Many of the people online are using social media. The Pew Research Center found that 46% of US adults use social networking, and of those who use online social networks 73% have a Facebook account.<sup>22</sup> Facebook (44%) and YouTube (30%) were the top two social media sites used by the people we surveyed. Social media is being used in many new and exciting ways. The respondents of our survey revealed that connecting with family and friends (61%) is the number one reason for using social media. They are also using social media to connect professionally (23%) and to find health information (23%). Thirty percent reported they did not use social media of any kind.

People are looking for many different types of health information online. They are using a variety of sources and they are searching for a variety of reasons. The majority of the people surveyed, 62%, reported using Google when searching for health information online. WebMD with 42% and MayoClinic with 31% were the top sites used after Google. About 20% report they are not using the Internet to find health information. Participants surveyed are using the Internet to find information about living a healthy lifestyle (52%), to look up health information for family members (44%), to educate themselves about current health topics (41%), to diagnose their symptoms (37%) and to determine if they should visit a doctor (29%).

There is an abundance of health information on the Internet, a mixture of good and bad information. The majority of participants feel confident they can find accurate health information on the Internet (68%). Only 7% did not feel they could find accurate health

information on the Internet. *Believing* that one can find accurate health information does not mean he or she is really *finding* accurate health information.

Many of the participants (52%) indicated they would be interested or possibly interested in attending a class about finding health information on the Internet. Health literacy and Internet usage levels in Minnesota, as well as results from the needs assessment indicate creating a class to present at libraries would be a logical and welcomed next step.

## **Creating an Adult Basic Education Health Literacy Program**

### **Program Development**

The health literacy program includes an educational class focusing on skills adults need to better understand and take charge of their own health care. The class consists of three sections. The first section focuses on motivating attendees to ask questions in all situations and what questions to ask. Resources used for this section are from the Partnership for Clear Health Communication's Ask Me Three campaign and the Agency for Health Care Research and Quality's Questions are the Answer campaign, both campaigns focus on motivating health care consumers to ask question of their health care providers. The second section focuses on creating a visit plan and preparing individuals for their medical appointments. This section adapts information from the National Institutes of Health's Senior Health webpage as well as other health literacy information in the public domain. The third section focuses on using Medline Plus to find health information on the Internet. Medline Plus is a health information website maintained by the National Library of Medicine and the National Institutes of Health and is considered a reliable and accurate source for health information by health care professionals.

The program is called **Take Charge of Your Health Care: Asking Questions, Getting Answers**. The focus of the program is to empower individuals to ask their health care providers questions and enable people to use the Internet to find accurate and useful health information. The program lasts about an hour and is available as a powerpoint presentation on the Minnesota Health Literacy Partnership website [www.healthliteracymn.org](http://www.healthliteracymn.org).

Hennepin County libraries and the St Paul libraries were approached as possible locations in which to provide the program. A partnership was created with the St Paul public libraries. Classes were initially scheduled at seven libraries in St Paul. In order to increase attendance and awareness of the program, additional St. Paul library programs were added for

a total of 12 programs. Classes were unable to be scheduled at Hennepin County libraries due to scheduling issues. The Hennepin County libraries are interested in hosting classes from MHLP in the future.

## **Program Evaluation**

The **Take Charge of Your Health Care** program was presented 12 times at St. Paul libraries during the months of May, June and July 2010. An additional class is scheduled during the month of October at the West 7<sup>th</sup> library. Total attendance for the classes was xx. Although attendance was lower than anticipated, the participant's reaction to the program was positive. Eight out of 12 participants completed a survey about the class. After completion of the class, 75% of those surveyed reported feeling comfortable finding health information on the Internet. One hundred percent felt confident in their ability to obtain, understand and act on health information, as well as their ability to know what questions to ask at their medical appointments. Ninety percent felt more empowered to ask questions of their health care providers. The majority said they were interested in learning more about taking charge of their health care and would recommend the class to their friends.

## **Discussion**

Overall the turnout of the program was lower than anticipated. Even with the additional 5 classes and increased promotional efforts, the turnout was still much lower than our initial goal of 50 attendees during the first year of the program. Although attendance was low the classes were well received based on the participant surveys. The majority of attendees felt empowered by the class, indicated they would recommend the class to their friends and were interested in learning more about taking charge of their health care.

When conducting the needs assessment we asked participants to indicate their interest in attending a class at a local library. We did not include a way for the participants interested in attending a class to be notified beyond fliers at a local library. Several other factors may have contributed to the low attendance. There are a few things we learned and could adjust in the future to achieve higher attendance.

- Classes could be offered in the fall, winter or spring. Summer classes at libraries have lower attendance levels, than classes held during the rest of the year. This applies even to well-attended classes during the rest of the year, let alone new programs such as ours.

- Classes could be offered several times at the same location. Providing classes at several times would allow for multiple opportunities to take the class at each location. This could increase awareness about the class and could allow interest in the class to grow.
- Class could be taught as a series of 3-4 classes. Each class could present a different topic: locating health insurance, finding health information on the Internet, importance of preventive care, creating a visit plan, etc.
- Classes could be offered to groups that already meet regularly, such as well attended adult-basic-education classes. In October, we are conducting a class for a senior exercise group.
- A web version of the class could be created for people to view. This would allow people to fit the class into their own schedule.

Overall the program was well received by the people attending the classes. The pilot of the Take Charge of Your Health Care program provides valuable information to MHLP and will help guide future efforts focused on consumer empowerment.

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To learn more about this program or to download materials, please visit the Minnesota Health Literacy Partnership website at [www.healthliteracymn.org](http://www.healthliteracymn.org).