A focus on health literacy is key to improving health equity. Figure 1.

Nearly 9 out of 10 Americans struggle to understand health information that is available.

People most at risk for experiencing health disparities are also most at risk for struggling to understand the health care system – having low health literacy.

People of all ages, races, incomes, and education levels are affected by limited health literacy. However, seniors, minority groups, and people with disabilities, low incomes, limited reading skills, or limited English proficiency are more likely to experience communication barriers and misunderstandings.

Using health literacy best practices, such as plain language, helps interpreters when trying to translate otherwise complex and confusing medical terminology.

**Health Literacy**: A patient’s ability to obtain, understand and act on health information, and the capacity of health care systems to communicate clearly, educate about health, and empower patients.

**Health Equity**: Removing unfair differences in health status or distribution of health resources between various populations which stem from the social environments where people are born, grow, live, and work in.\(^1\)

**Cultural Competency**: Cultural competence is the ability of an individual to understand and respect values, attitudes, beliefs, and mores that differ across cultures, and to consider and respond appropriately to these differences in planning, implementing, and evaluating health education and promotion programs and interventions.\(^2\)

**Cultural Humility**: A humble and respectful attitude toward individuals of other cultures that pushes one to challenge their own cultural biases, realize they cannot possibly know everything about other cultures, and approach learning about other cultures as a lifelong goal and process importance of working with diverse communities.\(^3\)
HOW HEALTH LITERACY RELATES TO HEALTH EQUITY

- Populations most likely to experience low health literacy are also most likely to experience health disparities. People of all ages, races, incomes, and education levels are affected by limited health literacy. But seniors, minority groups, and people with disabilities, low incomes, limited reading skills, or limited English proficiency are more likely to experience communication barriers and misunderstandings. We must also consider intersectionality; the overlap of social categories such as race, class, and gender as they apply to a given individual or group and how they apply interdependent systems of discrimination or disadvantage.\(^4\)

Figure 1. *Health literacy as a foundation to achieve health equity.*

Research supports need for combining efforts to improve health literacy and reduce disparities for issues affecting health such as:

**Education**

- In 2014 a health literacy study done at the Minnesota State Fair showed that individuals whose education level was some high school had statistically significantly lower health literacy scores compared to non-Hispanic, white women with a bachelor’s degree.\(^5\)
- A national study showed that of the participants who didn’t complete or attend high school, 49% of them had below basic health literacy\(^6\)
Age

- Study done with VA patients ages 65 and older with low health literacy only knew 32% of medications by name and only 61.8% knew the purpose of their medications compared to those with adequate health literacy 54.6% and 81.4% respectively.\(^7\)
- 25% of older adults (50+) in a study of over 22,000 individuals had low health literacy. Those with low health literacy were more likely to delay cares not related to cost or have no usual source of care compared to those with adequate health literacy.\(^8\)

Race

- A national study showed that compared to only 9% of Whites who had below basic health literacy:
  - 24% of Blacks had below basic health literacy
  - 25% American Indian/Alaska Native had below basic health literacy
  - 41% of Hispanics had below basic health literacy.\(^6\)
- A 2019 study that tested the health insurance literacy of participants found that:
  - Hispanics scored only 50% correct
  - African-Americans scored only 53% correct
  - Compared to Whites who scored 74% correct.\(^9\)
- African Americans were more often reported worse health outcomes and less influenza vaccinations compared to Whites.\(^5\)
- A survey from 2013-2017 demonstrated that people of color populations had higher rates of not having a personal health care provider compared to the White population (22.3%).\(^10\):
  - 28.6% of American Indian/Alaska Native
  - 30.7% Black
  - 32.6% Other adults
  - 41.4% Asian/Native Hawaiian & Pacific Islander
  - 49.4% Hispanic
- Of the 5% uninsured population in Minnesota: there are higher proportions of people of color populations versus the White population (4%).\(^11\)
  - Asian/Native Hawaiian and Pacific Islander (5%)
  - Black (7%)
  - Multiple races (8%)
  - Hispanic (18%)
  - American Indian/Alaska Native (22%)
Language

- 45% of survey respondents who had both limited English proficiency and low health literacy reported having poor health which is 3 times higher than those who had adequate health literacy and English proficiency.\(^{12}\)
- A 2012 study showed that Spanish speaking patients with low health literacy were less likely to show up for follow up appointments compared to English speakers.\(^{13}\)
- Parents with limited English proficiency were associated with 3 times the odds of having a child with fair/poor health status, as well as not bringing in children for needed care due to transportation issues, cost issues, difficulty not making appointments, clinic being too far away, and medical staff not understanding the family’s culture.\(^{14}\)

Socioeconomic Status

- American adults living below the poverty level on average have lower health literacy.\(^{6}\)
- A national study showed that of participants who have Medicaid, 30% of them had below basic health literacy.\(^{6}\)

All

**HEALTH LITERACY IS A STATE, NOT A TRAIT.**

- Adults with poor health literacy were more likely to report their health as poor, lack insurance, and greater use of services to treat health conditions rather than prevent health conditions.\(^{6}\)
- People who have basic or low health literacy in the US had an estimated increased costs of $215 billion from office visits, ED visits, and prescription medication costs compared to those with above basic health literacy.\(^{15}\)
- One study estimated that those with basic or low health literacy spend $2452 more on prescription medications compared to those with above basic health literacy.\(^{15}\)
- One Veterans Health Administration focused study demonstrated that veterans with low health literacy had significantly higher pharmacy costs ranging from $6500-$14,600 more than those with adequate health literacy.\(^{15}\) Average estimate cost of those with low health literacy vs those with adequate health literacy was $47.6 million more annually.\(^{16}\)
- Patients with lower health literacy skills were associated with worse health outcomes and less influenza vaccinations.\(^{5}\)
WHY IS THIS IMPORTANT?

**Figure 2. Triple Aim of Health Equity.** This figure was created from the Minnesota Department of Health’s “Triple Aim of Health Equity”\(^\text{17}\)

**Education**

- The average American reads at an 8\(^{\text{th}}\) grade reading level, but most health information is presented at a 10\(^{\text{th}}\) grade reading level\(^\text{18}\)

**Race**

- In Minnesota, people of color make up 20% of the population\(^\text{10}\)
- The fastest growing racial groups in Minnesota are\(^\text{10}\):
  - Black population by 29% (80,000 people)
  - Asian population by 29% (64,000 people)
  - Hispanic population 29% (50,000 people)

**Age**

- The number of older adults (65+) is expected to double between 2010 and 2030, and by then more than 1 in 5 Minnesotans will be an older adult, including all of the Baby Boomers \(^\text{19}\)
- By 2020, Minnesota’s 65+ population is anticipated to be greater than the 5-17 population for the first time in history \(^\text{19}\)
• Decline in cognitive ability or hearing/vision loss could contribute to decreased ability to process information for elderly.\(^6\)

**Language & Culture**

• From the 2013-2017 US Census Bureau survey estimate, there are 236,363 individuals in Minnesota who speak another language other than English and identify as having limited English proficiency (LEP).\(^20\)

• Patients with limited English proficiency may feel ashamed of their language skills which can deter them from seeking care, asking the provider clarifying questions, or blindly consent to treatments they don’t understand.\(^21\)

• There are nuances within a language such as dialects or more traditionally an oral language than a written language:
  - Example: Hmong people have a strong oral tradition and didn’t have a written language until 1950s.\(^22\)

• There’s not always a direct one to one translation from one language to another:
  - Example in Somali there’s not a specific word for cancer or inflammation.\(^23\)

• There are differences in cultural perspectives regarding healthcare systems which affect how patients view health:
  - Examples:
    - In the Hmong culture there are natural and spiritual causes of illnesses and that serious illnesses are associated in their culture with spirits being the cause.\(^24\)
    - In the Somali culture mental health issues and reproductive health are not typically discussed within culture.\(^15\)

**Socioeconomic Status**

• As of 2017, 21% of total population of Minnesota is 200% or below the federal poverty level.\(^25\)

• In Minnesota, poverty rates were the highest for those who are:
  - Non-Hispanic Whites
  - Hispanic 21%
  - American Indian 31%
  - Black 32%

**MINNESOTA HEALTH LITERACY ACTION PLAN**

• Adopt and use health literacy best practices across all verbal, written, and visual communication:
  - Use plain language and readable formats to deliver clear and concise health information
  - Adopt consistent terminology and standardize materials across the health system
  - Simplify explanations of insurance policy coverage
  - Engage consumers in the creation of health materials
  - Create a health literacy “seal of approval”
• **Invest in language and cultural resources**
  o Improve health care access for diverse, low-income, and rural communities
  o Provide information in more languages and improve access to interpreters
  o Work with community leaders and cultural groups to reach populations with limited health literacy
  o Improve cultural competency training and education

• **Make information about health relevant and accessible**
  o Use a variety of formats to distribute materials
  o Disseminate health resources and materials in places where people already congregate, not just where they receive care

To learn more, contact the Minnesota Health Literacy Partnership at [healthliteracymn.org/contact-us](http://healthliteracymn.org/contact-us).

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**ADDITIONAL TOOLS FROM THE MINNESOTA HEALTH LITERACY PARTNERSHIP**

**Plain Language Campaign** – The Plain language strategy is all about using simple, easy-to-understand words across all verbal, written, and visual communication.

**Numeracy and Health Literacy** - Numeracy is an aspect of health literacy that includes the quantitative skills necessary to understand numerical directions such as medication adherence or measuring blood sugar levels

**Ask Me Three** - A program that encourages patients to ask providers specific questions to better understand their health

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**RESOURCES FOR FURTHER READING AND STUDY**

**U.S. Health Literacy Data**

• [The Health Literacy of America’s Adults: Results from the 2003 National Assessment of Adult Literacy (NAAL)](http://example.com) This was the most recent national survey done on health literacy, but unfortunately, the survey has been discontinued.

• [Programme for the International Assessment of Adult Competencies (PIAAC) US Adult Literacy and Numeracy Results](http://example.com) PIAAC has since replaced the NAAL and measures adult literacy and numeracy skills and compares them internationally.

• [Health Literacy of Map of the U.S. developed by the University of North Carolina](http://example.com) Interactive map that gives health literacy scores by states and counties.
Working with Interpreters

- Tips on how to work effectively and efficiently with interpreters. Website also offers a training PowerPoint

Transcribed Health Information for Patients

- Health Reach created by the National Library of Medicine has patient education materials in various languages
- The National Institute on Minority Health and Health Disparities also has health information available in multiple languages
- The Agency for Healthcare Research and Quality (AHRQ) developed some standardized medication instructions in different languages

Previous Community Outreach Projects

- Minnesota Department of Health developed a guide for refugees available in Hmong, Somali, and English to navigate through Minnesota’s Health Care System. The website also has other useful language/cultural information
- An in-depth case study done by the National Library of Medicine of how they worked with the Hmong community in Wisconsin to improve health literacy and language resources. It also offers tips on where to apply for grant funded community outreach programs, shows specific examples of some of the work they produced, and a brief background about the Hmong culture.
- Wisconsin Health Literacy recently did a project where they worked with several other pharmacies to redesign prescription labels, so they are more patient centered. They have seen increased medication adherence after the implementation of the new prescription labels. Read more about this project here.

Cultural Competency Training & Education

- Resources from the CDC regarding health literacy and culture
- Brief cultural background information of the diverse communities in Minnesota by Culture Care Connection (aka Stratis Health)
- Free online training from CDC Effective Communication for Healthcare Teams: Addressing Health Literacy, Limited English Proficiency and Cultural Differences
- From the US Department of Health and Human Services a CME course on cultural competency.
- Multilingual Health Resource Exchange Minnesota based partnership which has multiple resources on language, race, class, etc. to make health information more accessible.

REFERENCES


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