



Thompson Rivers University

Low Literacy Solutions

Addressing Every Need



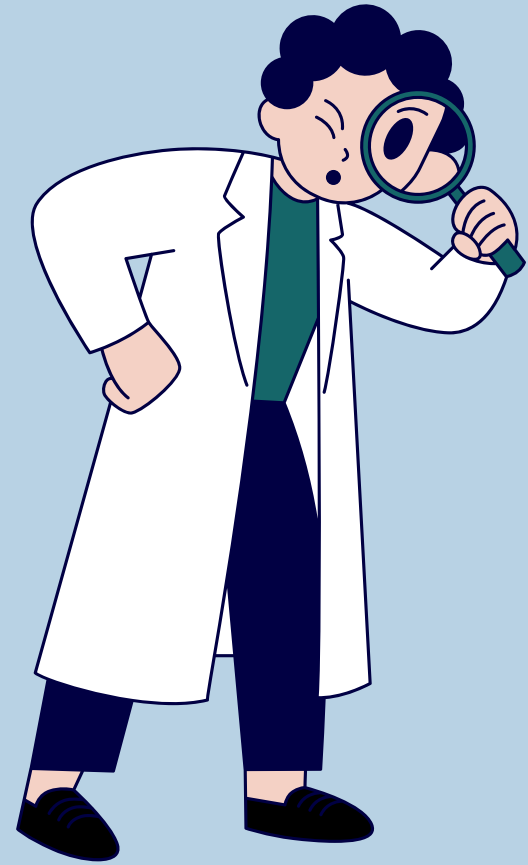
Introduction

Population: Low health literacy related to Indigenous populations and diabetes management

Problem:

- Low literacy is a **barrier to effective communication** between patients and healthcare providers (Varcoe et al., 2022).
- This **impacts** the response to traditional education messages, access to disease prevention services, and the successful management of chronic illnesses such as Diabetes (Varcoe et al., 2022).
- Those with low literacy tend to have **poor experiences in the emergency department (ED)**, which can lead to them receiving **inadequate care, returning repeatedly** for unsolved problems, and/or **avoiding seeking care** (Nutbeam & Lloyd, 2021)





Environmental Scan



01.

EU: Interventions specifically tailored to different health literacy levels

02.

Mobile Health Tools for underserved rural communities

03.

Self- Management Interventions

04.

Organizational Change: Policy making in Australia

05.

Communications Development for HCP

EU: Interventions Tailored to Different Health Literacy Levels

1. Interventions aimed at improving health literacy

- Group training sessions – effective at increasing knowledge and confidence to make health-related decisions
- Tele-health interventions - increased feelings of control, freedom and greater awareness of symptoms
- Interventions to develop numeracy skills to help people better understand numerical risk information

2. Interventions specifically tailored to different health literacy levels

- Training programs tailored to low health literacy levels within specific health problems led to better outcomes

3. General interventions

- aim to improve health outcomes which described specific effects for patients of various literacy levels

Three factors for success

- Tailor activities to the needs of patients
- Address interactive/critical skills rather than just knowledge
- Present information in an appropriate way – interactive, animated, spoken text

(Visscher et al., 2018)

Mobile Health Tools for Underserved Rural Communities

The study was conducted in Texas. Participants were individuals who had attended free diabetes screening events in the community.

Participants who were previously diagnosed with Diabetes or who were deemed high-risk participated in motivational interviewing and enrolled in the **6-week mobile health program**

6-week program **accessed by smartphone or tablet with weekly interactive lessons** to develop lifestyle modification knowledge and skills

SMS text messages were used to send reminders and health tips relevant to the week.

At the end of the 6 weeks, **participants reported high levels of satisfaction** as well as increases in their abilities and priorities to improve physical activity and diet. The acceptability and feasibility of the program were high. Positive effects on lifestyle modifications were found.

(Yin et al., 2020)



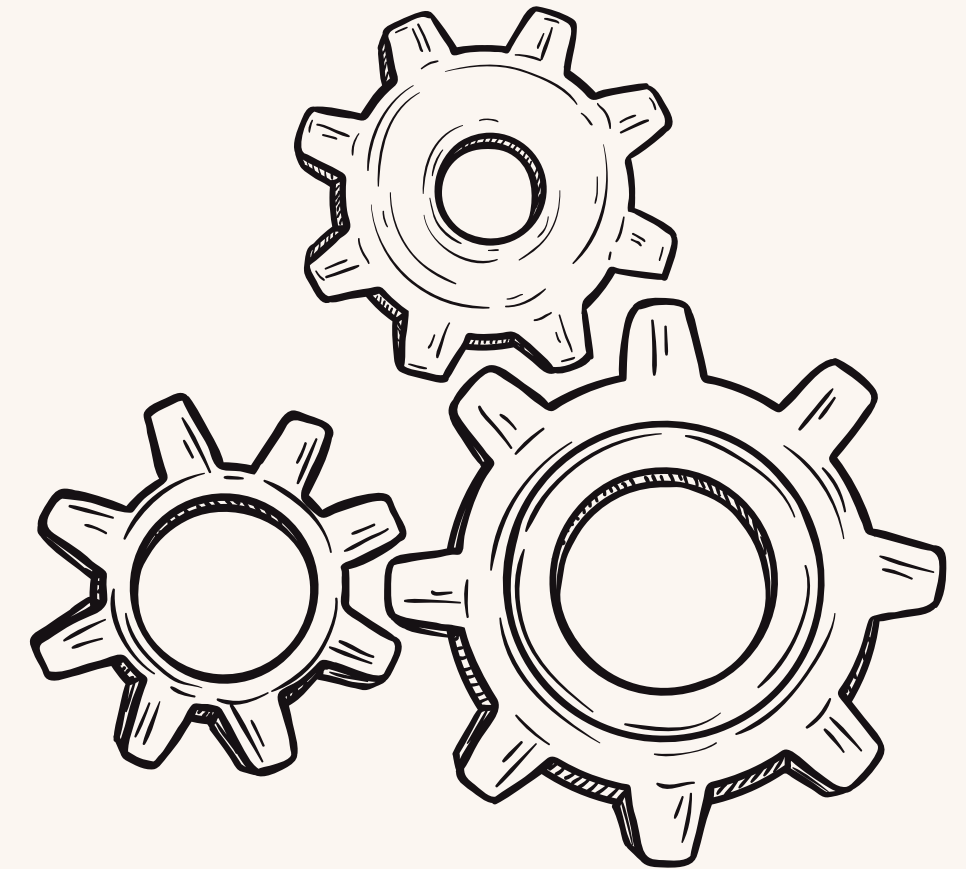
Top 3 Solutions



**Self-Management
Support**



**Modifying
Communication**



**Organizational
Change**

Self-Management Support

- Facilitates the development of knowledge and skills that are required for the successful self-management of diabetes (Lambrinou et al., 2019).

- **Six core skills:** Decision-making, problem solving, utilizing resources, forming a client-healthcare provider partnership, taking action, and self tailoring (Allegrente et al., 2019).

- **Problem-solving** enables learners to identify and understand the important elements of their illness, understand the relationship between elements, and facilitates improved decision making, communication, and collaboration (Schaffler, 2018).

- **Strengths:** Empowers and prepares patients to manage their health by being patient centered (Lambrinou et al., 2019).

- Patients are encouraged to set goals, identify barriers and challenges, and monitor their own conditions (Lambrinou et al., 2019).



- **Strengths continued:** Patients are encouraged to set goals, identify barriers and challenges, and monitor their own conditions (Dineen-Griffin et al., 2019).

- Improves metabolic control and quality of life and reduces the risk of complications, hospitalization and mortality (Lambrinou et al., 2019).

- **Challenges:** Lack of motivation, absence of social support and disease-related implications, such as fatigue, are the main reasons for non-adherence to effective self-management of people with diabetes (Lambrinou et al., 2019).

- Sufficient diabetes-related knowledge is required in order to increase patients' empowerment (Lambrinou et al., 2019).

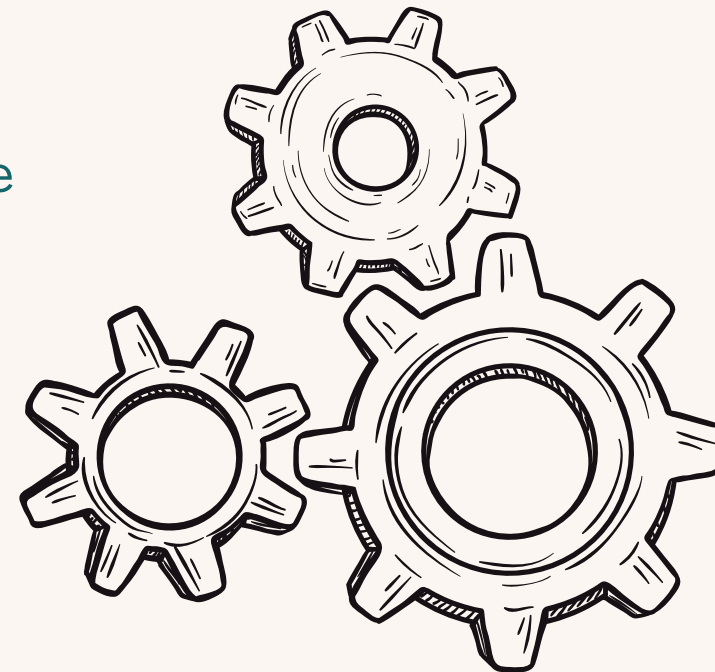
- Requires that the healthcare provider be creative and innovative in order to increase patients' interest in care (Lambrinou et al., 2019).

- Economic constraints an/or lack of resources (Dineen-Griffin et al., 2019).

Organizational Change

Description:

- Australian Government develops National Diabetes Development Scheme in 2006 (Murfet et al., 2023)
- Implements 24 health literacy-related policies over 15 years to **enhance peoples capacity** to self manage disease resulting from a national survey that indicated only 2 in 5 adults have adequate health literacy (Murfet et al., 2023)
- Diabetes Australia creates multidisciplinary advisory committee to appraise Diabetes Self Management materials (Murfet et al., 2023)
- Through constant reviews & revisions, additional advisory bodies, and policies, Diabetes Australia was able to vastly improve the **understandability, actionability, and awareness of Diabetes Self Management Tools** in Australia (Murfet et al., 2023)
- Goals of Canada's Framework for Diabetes includes **increasing the public's understanding of diabetes and building capacity for individuals**, but lacks a visible plan of targeting health literacy to achieve this (Public Health agency of Canada, 2022) though health literacy numbers are poor (BC Cancer, 2018).



Rationale: Transforming the health-care system through a strengthened Primary Health Care approach is vital to **increasing access** to community-based care, **improving chronic disease prevention and management** (Canadian Nurses Association, 2015)

Successes: Vast improvement of understandability, actionability and awareness of materials for Diabetes self management (Murfet et al., 2023)

Failures: The **absence of visual aids** on earlier Diabetes self management material was identified as a key contributor to the lower understandability and actionability of diabetes information (Murfet et al., 2023)

Priority: Shifting to a health literate organization is incredibly **complex and multifaceted** (Murfet et al., 2023). Health literacy is rarely integrated into healthcare organizations' vision and strategic planning (Murfet et al., 2023), as is seen with Canada's Diabetes Framework (Public Health Agency of Canada, 2022). This is a change we would advocate for, but it would take a long time to see the progress.

Modifications to Communication

Description:

It improves comprehension and leads to better patient outcomes and enhanced health system use (Nutbeam & Lloyd, 2021)

Interventions include:

- **Reduce literacy demands** (Nutbeam & Lloyd, 2021)
 - **Health literacy universal precautions** (Han, 2021).
 - **Teach back method** (Nutbeam & Lloyd, 2021).
 - Use of **different communication formats** (Nutbeam & Lloyd, 2021).
- Adapt “**organizational health literacy**,” a new concept focusing on the health care system and its organization's interactions with patients (Han, 2021).
 - CDC health literacy link for using plain language principles (Han, 2021)

Rationale:

- 40-80% of medical information given during office visits is forgotten immediately, and nearly half of the information retained is incorrect (AHRQ Health Literacy Universal Precautions Toolkit, 2020)
- Improving communication helps patients successfully manage common clinical challenges such as medication adherence, self-management of chronic conditions, and hospital discharge instructions (Nutbeam & Lloyd, 2021).



Strengths:

- Help patients better understand how to manage their diabetes or chronic illness more effectively (AHRQ Health Literacy Precautions Toolkit, 2020).

Challenges:

- HCP's had difficulties recognizing low health literate patients & 50% rarely used health literacy-specific materials (Han, 2021).
- Tools to address limited health literacy aren't well utilized if an organization's leadership doesn't emphasize these tools regularly (Han, 2021).
- Specific communication strategies, such as using simple language, providing printed materials, and speaking slowly, are not routinely incorporated into clinical practice (Han, 2021).

Priority Solution? Yes!

Modifying communication is a solution for any successful or unsuccessful interaction. We can control it independently as individual's right now, and improving comprehension leads to better patient outcomes and enhanced health system use.

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