DEVELOPMENT OF A HEALTH LITERACY RESOURCE

FOR CASE MANAGERS:

OPTIMIZING THE SUCCESSFUL TRANSITION FROM HOSPITAL TO HOME

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Abstract

Background: Health literacy is a determinant of health that plays a significant role in how patients are able to obtain, process and act upon personal health information. When health care providers determine patients' level of health literacy, they are able to develop discharge instructions focused on patients' level of comprehension and their ability to manage their health care needs at home. Case managers with the Home and Community Care division of the South East Local Health Integration Network (South East LHIN) represent the health professionals who are responsible for discharge planning and transitions from hospital to home at the Lennox and Addington County General Hospital (LACGH) in Napanee, Ontario (ON). Assessing patients' level of health literacy is currently not part of the discharge planning process and does not consider patients' level of understanding prior to discharge. **Purpose:** The purpose of this practicum project was to develop a health literacy resource for case managers who work with the Home and Community Care division of the South East Local Health Integration Network (South East LHIN). **Methods:** An integrative literature review was completed related to health literacy and highlighted the vital role it plays in discharge planning. A review of health literacy assessment tools was performed and resulted in the selection of two validated methods for assessing health literacy. Consultations were completed with case managers, and the hospital discharge planner to glean information regarding their understanding of health literacy, the role it plays in discharge planning, and what they believe should be contained in the resource manual to support the assessment of patients' health literacy.

Results: Consultations demonstrated participants have little knowledge surrounding health literacy, the significance of knowing patients' level of health literacy, and how it influences patients' discharge. A self-learning health literacy resource was developed and contains health literacy education and health literacy assessment tools. **Conclusion:** This health literacy resource may be used to increase South East LHIN case managers' knowledge through education and assessment tools. Providing health literacy knowledge needed to assess patients' health literacy will allow for case managers to provide discharge plans specific to patients' level of understanding.

Key words: health literacy, health literate, patient discharge, discharge planning, discharge summaries, transition, admission, readmission, and health literacy screening tools.

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To my Mother, Eileen, who is always by my side, proud of my accomplishments as a nurse, and always has faith in my potential to be the best I can be. Mom, you have always stood by me, providing unwavering support, encouragement, and love. Your endless prayers for me to do well are heard!

To my dearest husband, Tim, who inspires me to never give up on my academic journey and cheers me on every step of the way. Thank you for always being so proud of my successes, recognizing my dreams, and providing a motivational and loving environment for me to grow and to reach my full potential.

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Health literacy is a determinant of health that plays a significant role in how patients are able to obtain, process and act upon personal health information (Duell, Wright, Renzaho, & Bhattacharya, 2015). The Expert Panel on Health Literacy, led by the Canadian Public Health Association, identified 55% of Canadians aged 16–65 years did not have the health literacy skills required to understand and appreciate their daily health-care needs (Mansfield, Wahba, Gillis,Weiss & L'Abbé, 2018). Innis and Berta (2017) identify that only 40% of Canadians have the level of health literacy needed to safely manage their health needs. When health care providers determine patients' level of health literacy, they are able to develop discharge instructions focused on patients' level of comprehension and their ability to manage health care needs at home. When patients' are not able to sustain their health care management at home, there is a high risk of patients requiring unplanned readmissions to an acute care setting (Rymer et al., 2018). Health Quality Ontario (2013) identifies that a common error when planning patients' discharge is assuming that a person understands their disease, treatment, and post discharge instructions. Patients may not fully understand what their level of health literacy actually is and not recognize their limitations understanding health information. Managing patients' low level of health literacy is therefore critical to help reduce readmissions to hospital or emergency department visits. In order to effectively achieve this, Mansfield, Wahba, Gillis, Weiss and L'Abbé (2018) suggest that the health care system partners, that is hospitals, home care, and community support services need to put strategies in place which reflect how best to provide health-related information to

patients. Incorporating health literacy assessment into discharge planning has the potential to be an effective strategy in mitigating the risk of an unsuccessful transition from hospital to home resulting in patients requiring readmission to hospital.

Case managers with the Home and Community Care division of the South East Local Health Integration Network (South East LHIN) represent the health professionals who are responsible for discharge planning and transitions from hospital to home at the Lennox and Addington County General Hospital (LACGH) in Napanee, Ontario (ON). Patients who are ready for discharge meet with the case manager in person. The case manager reviews their discharge instructions, provides them with a written discharge plan, and promotes questioning when clarification is required. Assessing patients' level of health literacy is currently not part of the discharge planning process. Sand-Jecklin et al. (2017) completed a descriptive study using a convenience sample of registered nurses. The study identified that when health literacy is not assessed during a hospital admission, nurses may over-estimate patients' health literacy level. As a result, patients having low health literacy may not be identified. Providing discharge instructions that are not at patients' level of understanding can result in patients not maintaining their health care at home and cause a deterioration in their health requiring a return to the hospital emergency department or a hospital readmission.

The purpose of this practicum project is to improve the success of patients' hospital discharge by incorporating patients' level of health literacy into their transition plan from hospital to home. To achieve this goal, a health literacy resource was developed for case managers to support them in developing discharge plans of care that

optimizes the transition of patients from hospital to home. The project involves case managers employed by the Home and Community Care division of the South East Local Health Integration Network (South East LHIN) and the Lennox and Addington County General Hospital (LACGH). As the current discharge process does not include the assessment of patients' level of health literacy, discharge planning does not take into consideration what a patient does or does not understand about the discharge plans presented to them. This omission can result in the patient not being an active participant in their discharge plans. There is also the risk that because a patient may not understand their discharge instructions, they are not able to manage their care needs such as; medication management, prevention of high blood pressure, diabetes management, exercise programs, follow-up with primary care or specialist appointments once they return home. Developing individualized discharge plans in accordance with patients' level of health literacy should facilitate patients being better prepared and confident in their understanding related to requirements once discharged home.

Practicum Objectives

The overall goal of this practicum project is to develop a health literacy self-learning resource for case managers. This resource will provide case managers with the tools necessary to assess health literacy and improve the discharge process. The three objectives for the practicum are as follows:

1. The resource will describe the importance for case managers understanding patients' health literacy level prior to discharge through the self-learning health literacy education.

2. To provide instructions that ensure discharge plans are patient centered and at the patients' level of comprehension.

3. To identify validated health literacy assessment tools which case managers can use when assessing patients' level of health literacy.

For patients to be knowledgeable and committed to being active participants in their health care, case managers must determine patients' level of health literacy. This practicum resulted in the development of a health literacy resource to support the work of case managers in assessing, planning, and implementing discharge plans for patients returning to their homes. This resource will aid case managers in determining patients' level of health literacy to tailor planning to their level of understanding. This should result in patients being active participants in their care and achieve a successful recovery and overall optimized health status once discharged home.

Overview of Methods

In order to achieve the objectives of this practicum project, a literature review and consultations were utilized to support the development of the health literacy resource. The integrative literature review was conducted using PubMed Health, Medline, Nursing, and Allied Health Literature (CINAHL), Embase, Google Scholar and the web-based sites of Health Quality Ontario (HQO) and the Canadian Institute for Health Information (CIHI). Search terms included "health literacy", "health literate", "patient discharge", "discharge planning", "discharge summaries", "transition", "admission", "readmission" and "health literacy assessment tools". The search was restricted to publications in English, peer reviewed, and published post 2005. Exclusion criteria included articles published in languages other than English and published before 2005. Papers older than

2005 would be considered dated. The Public Health Agency of Canada (PHAC) Critical Appraisal Tool Kit was used to appraise the articles. Consultations occurred with five case managers from the South East LHIN Home and Community Care team who facilitate discharges from the LACGH, and the LACGH case manager discharge planner.

Literature Review Summary

The literature review provided a synthesis of literature related to health literacy and highlighted the vital role it plays in discharge planning. The review identified the importance of understanding patients' level of health literacy prior to a hospital discharge to ensure discharge planning is equivalent to patients' level of health literacy. The review confirmed that arming case managers with the education and resources to confidently assess patients' health literacy level would result in a significant advancement for the South East LHIN and LACGH developing patient centered discharge planning.

The literature supports the practice of assessing patients' level of health literacy. The literature review also supports the position that assessing health literacy provides insight into patients' ability to understand, appreciate, and act upon health information they receive when being discharged. Having this knowledge should assist case managers with providing discharge plans that are patient-centered and help mitigate the risk of emergency room visits or re-admissions to hospital. Sand-Jecklin et al. (2011) state that the responsibility for ensuring patients are able to understand health information needed for a safe transition from hospital to home is the responsibility of health care organizations and those managing patients' discharge plan of care. Rymer et al. (2018)

identify that hospitals who call for mandatory health literacy patient assessments trend toward a lower risk of one-year readmission to an acute care setting.

The literature identifies a number of tools to assess health literacy. The two assessment tools for the health literacy resource are The Newest Vital Sign (Pfizer Incorporated, 2011) and Teach-Back (Mansfield et al., 2018). When case managers complete discharge plans, it is important to consider length of time to administer, ease of use, and the validly and reliability of the assessment instrument when determining which one to use. Therefore, the Newest Vital Sign assessment tool is the instrument of choice for this resource due to it being a practical, valid, and reliable instrument that is designed to be completed in three minutes (Duell et al., 2015). Teach-Back is also a beneficial method to evaluate the learning outcomes of patients and the success of health teaching. Dantic (2014) proposes that Teach-Back improves the communication between patients and the health care provider which in turn promotes effective health teaching and learning. Health literacy as a modifiable determinant of health can only be impacted upon if a system wide approach is taken to address the potential risks associated with low health literacy.

Consultations Summary

Consultations were completed to glean information regarding case managers' understanding of health literacy, the role it plays in discharge planning, and what they believe should be contained in the resource manual to support the assessment of patients' health literacy. Consultations with the five case managers and the case manager discharge planner occurred by telephone due to the physical distancing requirement related to

COVID-19. Consultations were completed with one participant at a time. Prior to the consultation process, the five case managers, and the case manager discharge planner were advised of the practicum project's objectives. Each participant received an overview of the consultation purpose and format and expressed appreciation for being involved in the process. Many expressed feeling comfortable to share their personal views and opinions associated with the current discharge process at LACGH.

Through the consultations, case managers provided valuable and insightful feedback into the current discharge planning process and the role they play in preparing patients to transition from hospital to home. Consultations identified case managers' lack of knowledge surrounding health literacy. The information gathered from consultations demonstrate that the health literacy resource is a much needed resource that should support the case managers with a level of knowledge required to provide patient-centered goal orientated discharge planning.

Summary of the Resource

Based on the literature review, consultations, and informed by the principles of Knowles Adult Learning Theory, a self-learning health literacy resource was developed. The resource consists of health literacy education, a pre and post health literacy knowledge quiz, and two health literacy assessment tools (i.e. The Newest Vital Sign and Teach-Back).The Newest Vital Sign is a tool designed to quickly and simply assess patients' health literacy skills (Mansfield et al., 2018). It is endorsed by Health Quality Ontario, adapted for use in Canada, and is available in English and French in both hard

copy and electronic version (Health Quality Ontario, 2016). Of the varied assessment tools available to practitioners, the Newest Vital Sign is regarded as the most practical and reliable assessment tool at this time (Duell et al., 2015). The Newest Vital Sign is based on the nutrition label from an ice cream container. Patients are given the label and asked six questions about the label. Based on the number of correct answers, patients' health literacy level can be determined and the manner in which health education and teaching is provided can be adjusted to ensure communication is at the level of patients' understanding. According to Duell et al., (2015), the use of an ice cream label is especially relevant as poor comprehension of food labels correlate highly with low-level literacy and numeracy skills. Patients' ability to read and analyze any kind of nutrition label requires the same analytical and conceptual skills that are needed to understand and follow health care instructions.

The second method to support the assessment of patients' health literacy is Teach-Back. Teach-Back is an evidence-based, interdisciplinary strategy for supporting health literacy assessment (Dantic, 2014). The Teach-Back technique involves patients repeating back what they understand of what has been instructed to them in their own words so that comprehension can be confirmed, misunderstandings can be clarified, and health teaching can be reinforced (Kornburger et al., 2013). It is not a test of patients and their families; rather it is a way to ensure information is clearly explained. Most importantly, Teach-Back is a method used to ask a patient, in a safe non-judgmental manner, what they understood about the provided health information and discharge plans. It provides an opportunity for patients to "tell back" what they were just told by case

managers in the way they understand. Discharge planning is then conducted in a respectful manner with the patient at the center of the planning.

Health literacy education for the case managers is offered through a self-learning resource. An in-service will be provided to introduce the resource and answer any preliminary questions the case managers may have. It is critical to ensure that the education around health literacy, the rationale, and the use of the health literacy assessment tools are presented in a way that demonstrates value and worth to those who are involved in the patient discharge process. Case managers must feel confident that the resource and the specific education prepares them to complete health literacy assessments as part of patients' discharge planning.

To support case managers in learning and understanding the purpose of incorporating health literacy resources into their practice of patient discharge planning, Knowles' Adult Learning Theory (1984) was used in the development of the resource. A key component of Knowles' Adult Learning Theory that relates well to this project is the belief that adult learners need to be actively involved in the development and planning of the learning process and feel that the learning is relatable (Knowles, 1984). Engaging case managers in the consultation process was the initial step of embracing Knowles' recommendations for a successful learning process. Knowles proposed specific characteristics are required by the adult learner in order to optimize the learning process. Specifically, the adult must be internally motivated, recognized for their achievements, and experiences. Adult learners must also be goal oriented with a readiness to learn, see the benefit and relevancy of the new learning, and be motivated to take on the new

learning. Utilizing Knowles' framework ensures case managers are engaged and active participants in the creation of the resource by referencing their feedback and recommendations resulting from the consultation process. Staff are provided with information that demonstrates the benefits of assessing patients' health literacy and how this can result in positive outcomes when transitioning from hospital to home. This theory will increase case managers' knowledge of health literacy and support them in taking responsibility for their practice and the role they play in optimizing patients' transition from hospital to home.

Case managers will receive initial education as a group. This will include providing an overview of the resource and explaining how to incorporate health literacy assessment into their current practice. Taking responsibility for their individual learning and practice will also require case managers to engage in self-directed learning. Knowles states that self-directed learning involves individuals taking the initiative to identify their learning needs, formulate learning goals, implement appropriate learning strategies, and evaluate learning outcomes (Shea, 2003). Eliciting feedback and promoting questions from the case managers after they have completed the self-directed learning will ensure they understand the learning material required to incorporate health literacy assessment into their practice. The case managers who are involved in discharge planning have consistently demonstrated motivation, innovation, and a commitment to optimizing the patient experience in their practice. These characteristics reflect the autonomy, interest, and professional accountability required for success for this method of learning.

Advanced Practice Nursing Competencies

The Canadian Nurses Association (CNA) outlines primary competencies that act to guide advanced practice nurses in their clinical work (CNA, 2008). According to the CNA (2008), an advanced practice nurse must be able to develop and utilize research in order to be effective in practice. The application of the competencies of research and leadership for the development of this health literacy resource demonstrated the appropriate application of these competencies.

Research

The engagement in research for this practicum project ensured that the self-learning health literacy resource was developed using evidenced based knowledge related to health literacy education and validated assessment tools. The research competency was demonstrated through engaging in a comprehensive, integrated literature review and through case manager consultations. Both methods supported the development of the resource and demonstrated the value of such evidence-based research in advancing practice and optimizing patient health related outcomes.

Leadership

According to the CNA (2008), an advanced practice nurse must embrace and support change, endorse new and innovative practice methods, and work towards imparting change on current processes and policies within health care organizations. Demonstrating the advanced practice competency of leadership was achieved through conducting and using a literature review and consultations to identify a gap in discharge planning related to failing to assess patients' level of health literacy. Taking this

information and developing a self-learning resource to provide case managers with the tools required to carry out health literacy assessments illustrated further leadership through insight and understanding of a means to improve the current discharge process for patients.

Next Steps

With the development of the self-learning health literacy resource complete, the immediate focus will be introducing the resource to the case managers and incorporating the resource into their daily practice. The resource will be presented to the case managers at a team meeting with ample time allotted for questions and feedback. The case managers will be required to engage in the self –learning portion of the resource and take the pre and post health literacy quiz prior to the next scheduled team meeting. At the follow up team meeting, there will be a discussion surrounding their feedback regarding the material, how they performed on the quiz, and any new learnings acquired from the health literacy education. Case managers will be encouraged to ask questions or raise any concerns about the assessment tools. A separate introduction to the resource will occur with the hospital's case manager discharge planner and an opportunity for their feedback on the health literacy content will be provided. Together, case managers and the hospital case manager discharge planner will begin the process of incorporating health literacy assessment as part of the discharge planning process.

The value of the resource as an integral part of discharge planning warrants it being shared more broadly within our organization. Next steps will include introducing

the resource to other case management teams who support discharges with other hospitals within our region. Teams will be provided with the same opportunity as the team at the Lennox and Addington County General Hospital to navigate through the resource, provide feedback, and ask questions.

Once the health literacy assessments are part of the discharge process for three months for the Lennox and Addington County General Hospital team, the team of nine case managers will be asked to complete a Survey Monkey evaluation to obtain their feedback. The results of the survey will be shared at a team meeting and further opportunity for suggestions to potentially improve the assessment process will be encouraged. If the team offers recommendations to adjust the process, this will be taken into consideration based on best practice as identified from the literature review and the consultations. The formal change in practice across the organization will occur once the health literacy resource is evaluated and any recommendations from the Lennox and Addington County General Hospital team are addressed.

Beyond the incorporation of assessing patients' health literacy into case managers' discharge planning practice, dissemination of the resource will occur throughout the South East LHIN through a publication in the organization's quarterly newsletter, *The LHIN Focus*. A presentation will be made at an all staff virtual meeting to allow for questions and feedback from staff in divisions beyond Home and Community Care. When restrictions related to COVID -19 are modified and health care conferences in the South East region resume, a submission will be made to present the Self-Learning

Health Literacy Resource to other health care partners in both the hospital and community sectors that participate in conferences and stakeholder educational venues.

Conclusion

Rymer et al. (2018) identified that hospitals who call for mandatory health literacy patient assessments trended toward a lower risk of one-year readmission to an acute care setting. Health literacy as a modifiable determinant of health can only be impacted upon if a system wide approach is taken to address the potential risks associated with low health literacy. Through the completion of the integrated literature review and consultations, a self-learning health literacy resource was developed. By incorporating health literacy assessment into case managers' practice, the goal of successful patient transitions from hospital to home will be optimized. Arming case managers with the education and resources to confidently assess a patient's health literacy level will be a significant advancement for the South East LHIN and the Lennox and Addington County General Hospital developing patient centered discharge planning. Through the broad introduction of the resource across the organization, it is optimistic to believe that assessing health literacy will become part of organizational policy and procedures hence improving the discharge process for all patients. Such outcomes should equate to a reduced need for patients to return to hospital because their discharge planning was developed at their level of health literacy. It is hopeful this practice will result in patients being active participants in maintaining their own health conditions and overall personal health and well-being.

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Appendix A: An Integrative Literature Review

Development of a Health Literacy Resource for Case Managers: Optimizing the Successful Transition from Hospital to Home

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Introduction

Health literacy (HL) is a determinant of health that plays a significant role in how a patient is able to obtain, process and act upon personal health information (Duell, Wright, Renzaho, & Bhattacharya, 2015). When health care providers determine a patient's level of HL, they are able to develop discharge instructions focused on the patient's level of comprehension and their ability to manage at home. Case managers with the Home and Community Care division of the South East Local Health Integration Network (South East LHIN) represent the health professionals who are responsible for discharge planning and transitions from hospital to home at the Lennox and Addington County General Hospital (LACGH) in Napanee, Ontario (ON). Patients who are ready for discharge meet with the case manager in person. The patient's discharge instructions are reviewed, the patient receives a written discharge plan, and the patient is provided with an opportunity to ask questions. Assessing a patient's level of HL is currently not part of the discharge planning process. Sand-Jecklin et al. (2017) completed a descriptive study using a convenience sample of registered nurses. The study identified that when HL is not assessed during a hospital admission, nurses may over-estimate a patient's HL level. As a result, a patient having low HL may not be identified. Providing discharge instructions that are not at the patient's level of understanding can result in a patient not maintaining their health care at home and cause a deterioration in their health requiring a return to the hospital emergency department or a hospital readmission.

The purpose of this integrative literature review is to provide a synthesis of literature related to HL and highlight the vital role it plays in discharge planning. This

review will identify the importance of understanding a patient's level of HL prior to a hospital discharge to ensure discharge planning is equivalent to the patient's level of HL.

Background

The Expert Panel on Health Literacy, led by the Canadian Public Health Association, identified 55% of Canadians aged 16–65 years did not have the health literacy skills required to understand and appreciate their daily health-care needs (Mansfield, Wahba, Gillis,Weiss & L'Abbé, 2018). In fact, Canadians over 65 years of age have a low HL rate (60%) compared to their general reading and writing literacy (48%) (Mansfield, Wahba, Gillis,Weiss & L'Abbé, 2018). The Canadian Institute of Health Information (CIHI) (2012) report that one in twelve patients have unplanned readmissions post hospital discharge which costs the Canadian health care system an approximate $1.8 billion per year. In Ontario, the average yearly cost associated with a readmission is reported to be $700 million (CIHI, 2012). Between 2009 and 2014, Ontario's readmission rate escalated from 8.3%-9.1% which was the highest reported spike for all provinces (CIHI, 2012). Locally, LACGH report that from March to December 2017, their hospital had a 25.4 % patient readmission rate and 14.5% of patients returned to the emergency department who had been discharged within 30 days (South East LHIN, 2017).

Innis and Berta (2017) identify that only 60% of Canadians have the level of HL needed to safely manage their health needs. This is concerning because 60% of Canadians do not have the ability to understand and act upon health information that has

been provided to them to potentially make appropriate health related decisions on their own. Health Quality Ontario (2013) identifies that a common error when planning a patient's discharge is assuming that a person understands their disease, treatment and post discharge instructions. This error in judgement stems from health care providers receiving limited or no training on assessment techniques related to health literacy (Health Quality Ontario, 2013). This data identifies how readmission rates and the related costs that ensue can affect provincial and local health care systems at both the population and individual patient level.

A patient may also not fully understand what their level of HL actually is and not recognize their limitations understanding health information. Managing a patient's low level of HL is therefore critical to help reduce readmissions to hospital or emergency department visits. In order to effectively achieve this, Mansfield, Wahba, Gillis, Weiss and L'Abbé (2018) suggest that the health care system partners, that is hospitals, home care, and community support services need to put strategies in place as to how best to provide health-related information to patients. Incorporating HL assessment into discharge planning could be effective in mitigating the risk of an unsuccessful transition from hospital to home.

Zavala and Shaffer (2017) conducted a prospective randomized descriptive study and discovered 78% of patients who visit an emergency department do not fully understand their discharge instructions. The authors report that 31% were unclear of discharge instructions and required further review and clarification.

Search Methods

An integrative literature review was conducted utilizing PubMed Health, Medline, Nursing and Allied Health Literature (CINAHL), Embase, Google Scholar and the web-based sites of Health Quality Ontario (HQO) and the Canadian Institute for Health Information (CIHI). Search terms included “health literacy”, “health literate”, “patient discharge”, “discharge planning”, “discharge summaries”, “transition”, “admission”, “readmission” and “health literacy screening tools”. The search was restricted to publications in English, peer reviewed, and published post 2005 to ensure articles were current within five years publication. Articles older than 2014 would be considered dated**.** Exclusion criteria included articles published in languages other than English and published before 2005. The Public Health Agency of Canada (PHAC) Critical Appraisal Tool Kit was used to appraise the articles.

Assessment of Health Literacy

Knowing a patient’s HL level can mitigate the risk of a patient receiving discharge instructions that are beyond their level of understanding. Rootman (2006) points out there is a striking contrast between the documented contributions of physicians and health care organizations in HL research in Canada compared to that of the United States. Individual physicians and medical institutions in the United States have escalated HL to professional and political agendas in support of HL initiatives being a national focus in contributing to the improvement of health outcomes for all Americans (Rootman, 2006). In Canada, non-physician members of the health care system, primarily nurses, have been the leaders in escalating the importance of HL (Rootman, 2006).

Being that nurses led the charge on this initiative in Canada, Rootman (2006) suggests that focusing on HL was possibly considered to be beneath physicians' attention as there is still a considerable hierarchy within the medical field. Rootman (2006) further suggests that the American preoccupation with liability could play a part in the American physicians' interest in HL as a lawsuit was brought against a group of physicians for not ensuring patients understood a course of treatment and whether HL had been identified for these patients.

A Canadian study by Omariba and Ng (2011) sought to determine if there was a difference in self-rated health by immigration and generational status and the role HL played in this relationship. The authors completed a logistic regression study to examine the relationship between HL and self-reported health. They concluded that although HL is important to both immigrants and non-immigrants, not having English or French as their primary language was a risk factor for poor health outcomes.

Zanchetta, Maheu, Fontaine, Salvador-Watts and Wong (2014) carried out a qualitative evaluation of immediate learning and attitudinal change among forty-one francophone-Ontarians in health care and social services workers who attended a workshop promoting reflection on the importance of HL in healthcare. The study identified that attending the workshop escalated the participants understanding the importance of HL in healthcare and motivated them to promote HL awareness in their practice and patient interactions.

Swartz et al. (2018) engaged in a prospective observational study to identify factors associated with low HL and its relationship to health outcomes in trauma patients. The authors identified that one in four trauma patients have low HL. They concluded that identifying low HL prior to discharge and providing discharge instructions based on their level of understanding helped to improve patient outcomes.

Como (2018) performed a non-experimental, cross-sectional survey study involving chronic heart failure patients from urban cardiology practices in the northeast United States. The purpose of the study was to investigate whether HL, self-efficacy and medication adherence were predictors of health outcomes. Como (2018) identified that including HL strategies such as assessing a patient's health literacy and developing patient educational tools at the level a patient can understand may support improvements in a patient's health status with chronic heart failure.

Rymer et al. (2017) engaged in a longitudinal, observational study with 122 hospitals. The researchers hypothesized that patients discharged from hospitals who routinely screened HL would have higher rates of medication adherence and lower rates of major adverse cardiovascular events and readmissions than patients discharged from hospitals who did not receive health literacy assessment. The researchers confirmed the hypothesis and discovered those hospitals in which HL assessments were performed found patients adhered with medication compliance and had lower hospital re-admission rates.

Cox (2017) completed an observational study to assess 30-day hospital readmissions and 30- day emergency room visits post hospital discharge based on health literacy that was evaluated by the Brief Health Literacy Screener (BHLS) in an acute care heart failure population. After controlling for confounding variables such as older age, lower education level, and unemployment, the researcher discovered that low health literacy was independently associated with a 30-day healthcare use after hospital discharge. Cox (2018) identified assessing HL with the BHLS tool will identify if low HL is a concern prior to the patient being discharged.

Morris et al. (2011) completed a cross sectional study in a 400 bed Vermont hospital to determine the prevalence and demographic association of limited HL in hospitalized patients. The goal was to identify the cause of limited HL, any compensatory strategies used by patients to overcome these limitations, and strategies to prevent risk associated with low HL on health outcomes. The study identified that 60% of medical inpatients have low HL. The researchers concluded that although factors such as vision, age, cognition, organic disease, medication and literacy may contribute to low HL, health literacy is a dynamic state that can fluctuate in the presence of contextual factors such as the patient's health status, physical environment, and past lived experiences. In light of these factors, the researchers suggest identifying a patient's HL level will aid in patients receiving post discharge plans that are understandable.

It is evident the literature supports the practice of assessing a patient's level of HL. In doing so, the health care team gleans insight into a patient's ability to understand and act upon health information they receive when transitioning from hospital to home.

This knowledge should support discharge planning in mitigating the risk of emergency department visits or re-admissions to hospital that result from challenges maintaining optimal health at home. Sand-Jecklin et al. (2011) stated that the responsibility for ensuring a patient is able to understand health information needed for a safe transition from hospital to home is the responsibility of health care organizations and those managing a patient's discharge plan of care.

Health Literacy Assessment Tools

The literature identifies a number of tools to assess health literacy. Parker et al. (1995) developed the Test of Functional Health Literacy in Adults (TOFHLA) that consists of a 50-item reading comprehension and 17-item numerical ability test. It takes up to 22 minutes to administer, is a valid and reliable indicator of patient ability to read health-related materials. Hoover et al. (2012) performed a descriptive correlation design study using the TOFHLA to identify the knowledge of a parent who had a child with asthma. A weakness of this self-assessment tool is that it takes 22 minutes to complete and a patient may find this length of assessment to be overwhelming and intimidating. As a result, a patient may not complete questions and their HL would not be determined.

Davis et al. (1993) developed the Rapid Estimate of Adult Literacy in Medicine (REALM) HL screening instrument. The REALM involves asking a patient to read aloud a list of 66 medical terms ranging from the simplest to most difficult to pronounce. The REALM score is calculated by giving one point for each word pronounced correctly and takes two to three minutes to complete. A score of 59 or less identifies a patient as having

low HL and greater than 60 indicates high HL. Bryant (2011) performed a descriptive research design methodology with eighty participants from three medical clinics using REALM. Bryant (2011) identified that the REALM is only a screening tool and is not a definitive HL measurement tool. Since the screener can take up to one hour to complete, a patient may decline to commit such time to the screener. Bryant (2011) also suggested that a participant might decline to take part in the study because they were unable to read. If these factors deter a patient from completing the screener, their level of HL may not be understood.

The Brief Health Literacy Screen (BHLS) developed by Chew et al. (2004) identify patients with adequate or marginal health literacy that asks a patient to rate their ability to perform several health literacy related tasks such as filling out medical forms, reading hospital materials, and learning about one's medical condition. Cox et al. (2016) engaged in a prospective observational cohort study in a Texas medical center using the BHLS instrument to assess a hospitalized patient's level of HL. The BHLS is a useful tool as it consists of only three questions and requires only 2-3 minutes for a health care provider to complete. Because the BHLS instrument represents patient perceptions rather than responses to a test-type instrument, it is possible that study participants will respond to BHLS items in such a way as to over-or-under-represent any difficulties they may have in understanding or remembering health information. Although results of preliminary testing indicate that BHLS is a potentially efficient, effective, and patient-friendly screening tool, the authors suggest further research is needed to verify the validity and reliability of the BHLS with other patient populations.

Duell et al. (2017) suggest that although many definitions of HL exist, three fundamental elements are common to all definitions. Such elements include obtaining, understanding, and applying health information to the management of one's health care. Duell and colleagues (2017) describe the three elements as functional (accessing information), communicative (the ability to understand) and critical health literacy (ability to use). Duell et al. (2017) state that for a health literacy instrument to be reliable, it should measure all three of these elements. With a goal to identify such an instrument, Duell et al. (2017) completed a systematic review of seven databases to search for studies evaluating health literacy instruments. The review identified forty-three health literacy instruments. The quality of these instruments, based on their psychometric properties, varied considerably. The majority of health literacy instruments assessed only communicative health literacy, and the numeracy element for an assessment was often omitted. The most practical and reliable instrument identified was the New Vital Sign (NVS) assessment tool developed by Pfizer Pharmaceutical Corporation in 2011 in the United States. The tool is available in English and Spanish and is designed to assess a patient's health literacy skills in three minutes (Mansfield et al., 2018). The assessment consists of providing the patient with an ice cream nutrition label and they are asked a series of questions about the label content. A score of 0-1 suggests a high likelihood (50% or more) of limited literacy; score of 2-3 indicates the possibility of limited literacy; and a score of 4-6 usually indicates adequate literacy.

Mansfield et al. (2018) adapted the NVS for use in Canada, in English and French, and created a computerized version. The authors completed a randomized

crossover design with the objective to evaluate the reliability of the Canadian NVS as a self-administered computerized tool. The authors compared health literacy scores obtained from the computerized version with scores obtained using the standard interviewer-administered NVS. Results indicated that the computerized Canadian NVS performed as well as the interviewer-administered version for assessing health literacy levels of English and French-speaking patients. At this point, Duell et al. (2015) claim the NVS assessment instrument is the most practical and reliable instrument to use to assess health literacy.

When case managers are completing discharge plans, it is important to consider length of time to administer, ease of use, and the validly and reliability of an assessment instrument when determining which instrument to use. Therefore based on this review, the NVS assessment tool is the instrument of choice for assessment of HL and will be included in the resource manual for case managers.

When a patient is discharged from hospital, it is important for health care providers to confirm that what they have explained to the patient was clear and understood. Teach-back is a technique used to check a patient's understanding by asking them to state in their own words what they need to know about their health care (Health Quality Ontario, 2016). It is a way to confirm that providers have explained things in a manner the patient or caregiver understands. Merck, Sharpe & Dohm Corporation (2014) suggest teach-back is a communication technique that supports a patient in remembering and understanding information related to their diagnosis, treatment, and medication.

Slater, Huang and Dalawari (2017) explained that the teach-back technique involves a patient repeating back what they understand of what has been instructed to them in their own words so that discharge planners can confirm comprehension and clarify misunderstandings. This technique allows a patient to demonstrate comprehension and may offer the patient a sense of ownership of their health and health management. Slater, Huang and Dalawari (2017) maintain that despite teach-back being advocated for as part of discharge planning, this strategy has not been adopted as a consistent approach in hospital discharge planning. The authors completed a before and after study design in a Midwestern United States hospital to determine if the teach-back method would increase a patient's understanding and recall of discharge instructions. Key findings identified a significant increase in retention using teach-back with patients having a 15% point higher retention rate than those without teach-back.

Kornburger et al. (2013) describe teach-back as an evidence based interdisciplinary strategy that can support health care providers in verifying a patient's understanding of information, correct inaccurate interpretation of information, and reinforce health teaching. Kornburger et al. (2013) indicated the potential vulnerability of children being at risk for poor health outcomes related to chronic illnesses such as asthma, diabetes and heart conditions when their caregivers have unconfirmed low HL. The authors completed a survey at a Children's hospital in Wisconsin, United States of nurses who had undergone a 20-minute educational session on how to implement a teach-back methodology for discharge planning. After a four-week trial, 98% of the 51 nurses who responded to the survey agreed that patients and families better understood their

discharge instructions when teach-back was used. The technique was described as user friendly, valuable and simple. A potential weakness of teach-back is that asking a patient to relay what they have been told can place patients in an intimidating situation if they did indeed have difficulties in understanding (Ross, 2013).

It is imperative that the teach-back process not be rushed and that the environment be structured so that patients feel the health care provider is committed to the patient and ensuring they are supported (Ross, 2013). The literature identifies the teach-back technique as a beneficial way to evaluate the learning outcomes of patients and the success of health teaching. Dantic (2014) proposes that teach-back improves the communication between the patient and the health care provider which in turn promotes effective health teaching and learning.

Theoretical Framework: Knowles' Adult Learning Theory

To support case managers in learning and understanding the purpose of incorporating HL resources into their practice of patient discharge planning, the Knowles' Adult Learning Theory will be the framework for this project. A key component of Knowles' Learning theory that relates well to this project is the belief that adult learners need to be actively involved in the development and planning of the learning process and feel that the learning is relatable (Knowles, 1984). Engaging case managers in the consultation process will be an initial step of embracing Knowles' recommendations for a successful learning process. Knowles proposed specific characteristics are required by the adult learner in order to optimize the learning process.

Specifically, the adult must be internally motivated, be recognized for their achievements, and experiences. Adult learners must also be goal oriented with a readiness to learn, see the benefit and relevancy of the new learning, and be motivated to take on the new learning. This HL resource will be developed for staff by using Knowles' framework to ensure the case managers are engaged and active participants in the creation of the resource by referencing their feedback and recommendations that result from the consultation process. Staff will be provided with information that demonstrate the benefits having patient HL assessed and how this can result in positive outcomes when transitioning from hospital to home. This theory will increase the case manager's knowledge of HL and support them in taking responsibility for their practice and the role they play in optimizing a patient's transition from hospital to home.

Case managers will receive initial education as a group on the rationale to include HL assessment into their practice and an overview of the HL resource. Taking responsibility for their individual learning and practice will also require case managers engaging in self-directed learning. Knowles states that self-directed learning involves individuals taking the initiative to identify their learning needs, formulate learning goals, implement appropriate learning strategies, and evaluate learning outcomes (Shea, 2003). Advantages of self-directed learning include allowing an individual to learn at their own pace, increased active involvement, ownership of the learning, and enhanced critical thinking (O'Shea, 2003). Self-directed learning will prevent the need for multiple educational sessions in order to accommodate all case manager schedules. Self-directed learning can pose a disadvantage when leaners are not motivated to learn, they have

difficulty understanding the content, and prefer collaborative and experiential learning (O'Shea, 2003). For case managers who do not understand or accept the relevance of assessing HL, self-directed learning may not maintain their interest or commitment. Eliciting feedback and promoting questions of the case managers after they have completed the self-directed learning will ensure they understand the learning material and able to incorporate HL assessment into their practice. The HL resource will be developed as a self-learning module. The case managers who are involved in discharge planning have consistently demonstrated motivation, innovation, and a commitment to optimizing the patient experience in their practice. These characteristics should see them having the autonomy, interest, and professional accountability to be successful in this method of learning.

Conclusion

Rymer et al. (2018) identified that hospitals who call for mandatory HL patient assessments trended toward a lower risk of one-year readmission to an acute care setting. Health literacy as a modifiable determinant of health can only be impacted upon if a system wide approach is taken to address the potential risks associated with low HL. Arming case managers with the education and resources to confidently assess a patient's health literacy level will be a significant advancement for the South East LHIN and LACGH developing patient centered discharge planning. Through this focus on HL, the goal of successful patient transitions from hospital to home will be optimized.

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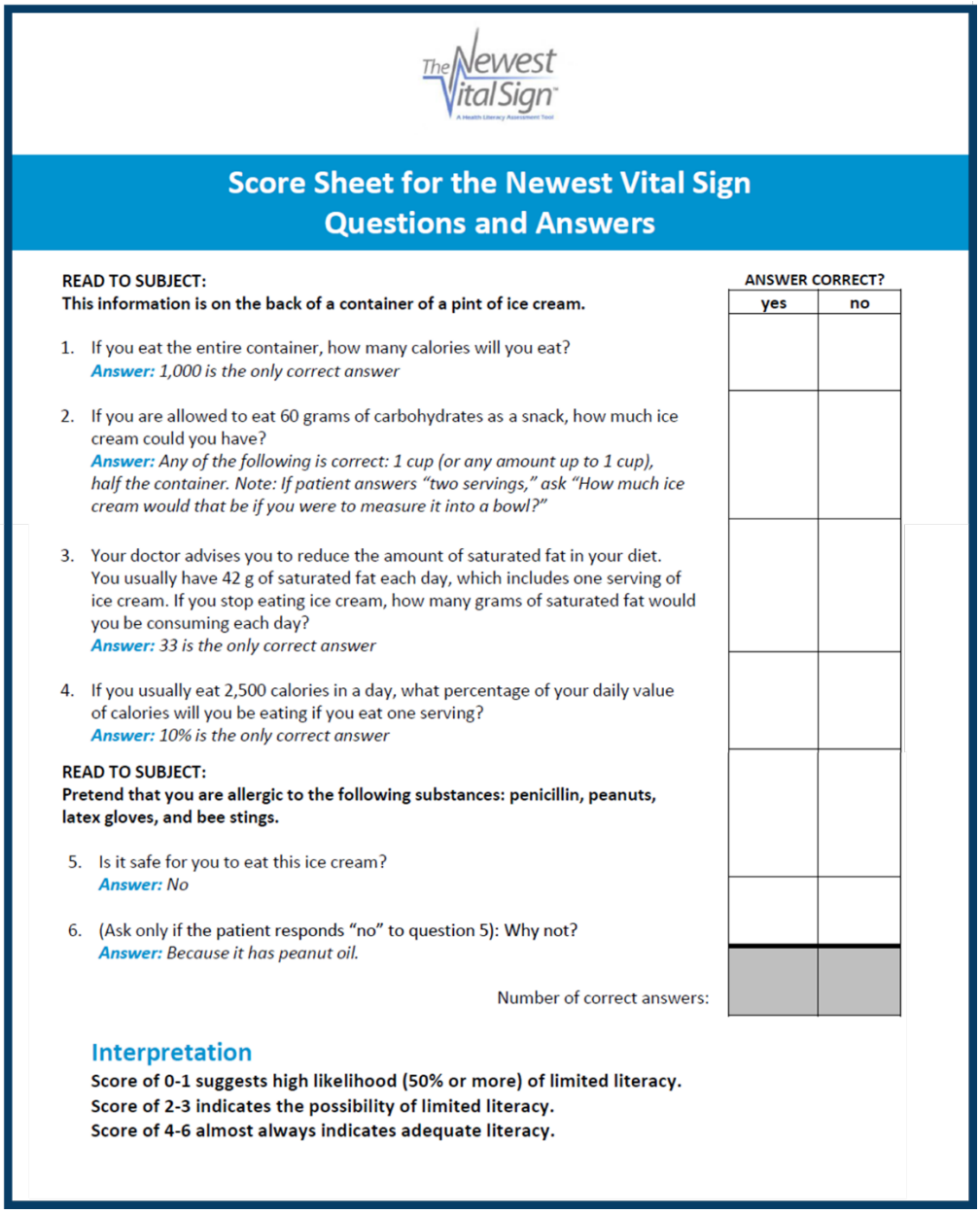
Appendix A



The Newest Vital Sign
A Health Literacy Assessment Tool

Score Sheet for the Newest Vital Sign Questions and Answers

READ TO SUBJECT:
This information is on the back of a container of a pint of ice cream.

	ANSWER CORRECT?	
	yes	no
1. If you eat the entire container, how many calories will you eat? ***Answer:*** *1,000 is the only correct answer*		
2. If you are allowed to eat 60 grams of carbohydrates as a snack, how much ice cream could you have? ***Answer:*** *Any of the following is correct: 1 cup (or any amount up to 1 cup), half the container. Note: If patient answers "two servings," ask "How much ice cream would that be if you were to measure it into a bowl?"*		
3. Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, which includes one serving of ice cream. If you stop eating ice cream, how many grams of saturated fat would you be consuming each day? ***Answer:*** *33 is the only correct answer*		
4. If you usually eat 2,500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving? ***Answer:*** *10% is the only correct answer*		
READ TO SUBJECT: **Pretend that you are allergic to the following substances: penicillin, peanuts, latex gloves, and bee stings.** 5. Is it safe for you to eat this ice cream? ***Answer:*** *No*		
6. (Ask only if the patient responds "no" to question 5): Why not? ***Answer:*** *Because it has peanut oil.*		
Number of correct answers:		

Interpretation

Score of 0-1 suggests high likelihood (50% or more) of limited literacy.
Score of 2-3 indicates the possibility of limited literacy.
Score of 4-6 almost always indicates adequate literacy.

Appendix B

Literature Summary Tables

Literature Summary Table 1

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Low Health Literacy Affecting Client's Ability to Receive Adequate Health Care Education Authors: Bryant (2011) Study Objective: The purpose of the study was to evaluate the effectiveness of current health education and information needs of client's with low health literacy and assess the client's familiarity of health terms using the REALM screening instrument.	80 participants from three clinics: Family Planning Clinic, Sexually Transmitted Disease Clinic, Immunization Clinic. • Participants 18 years and older • Lived in Metropolitan area • Capable of reading and writing	Descriptive design used to assess levels of HL of patients of different ages, gender and years of formal education. Using this design allowed description of the reading level of individuals based on their verbal response on a standardized test. The REALM was given twice to 100 subjects, 1 week apart. Participating patients were given a health screening instrument to identify, recognize, and pronounce common name and lay terms for body parts and illness	The 80 participating patients, 21 (26.3%) scored below the Grade 9 reading level. The analysis indicated a gap in the effectiveness of the educator and the use of both verbal and written information when communicating about issues of health care. Low literacy as measured by poor recognition and pronunciation skills is associated with a range of adverse health outcomes	Many health-promotion and education materials for patients; and self-care are not easily accessible for the average adult. Educational materials for patients pose one of the most complex reading challenges. Many opportunities exist to educate nursing students about health literacy and the communication skills recommended. Limitations: Results were specific to three clinics; results cannot be generalized hence threat to external validity. Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Moderate

Literature Summary Table 2

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Health literacy and health status in people with chronic heart failure Authors: Como (2018) Study Objective: To investigate whether HL, self-efficacy and mediation adherence can explain or predict the variance in health outcomes; measured as perceived physical or mental health status in patients with chronic heart failure.	Convenience sample of 175 patients were recruited from 255 potential candidates referred by 5 cardiology practices in New York City Inclusion criteria: • Twenty-one or older • History of heart failure • English speaking • Could complete instrument in one visit Exclusion criteria: • Known or obvious mental incapacity • Cognitive impairment • Visual impairment	Non-experimental, cross-sectional survey study used data gathered from 175 patient with chronic heart failure. Assessment tools: • Demographic questionnaire • Short Test of Functional HL • Self-Efficacy for appropriate medication scale • Morisky Medication Adherence Scale • Short forn-12 version, perceived physical and mental health status • Multiple hierarchical regression analyses used to analyze relationships among variables	• Significant associations between health literacy and self-efficacy and between health literacy and perceived mental HS were found ($P < .05$). • High self-efficacy was the strongest predictor of physical HS ($P<.01$). • The strongest predictor of mental HS was medication adherence ($P < .01$).	Support of self-efficacy and medication adherence may improve HS. Health literacy strategies in clinical practice may support improvements in HS in people with chronic HF. Limitations: • Some assertions not supported by results which could not be attributed to inadequate sample size. • Sample might not be able to be generalized. • Self-reporting limiting ability to verify • Limitations of numeracy and reading comprehension of the HL instrument • Untimed testing • Exclusion criteria limited understanding of broader impacts. Rating using PHAC critical appraisal tool: Study Quality: Weak Study Design: Moderate

Literature Summary Table 3

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Association between health literacy and 30-day healthcare use after hospital discharge in the heart failure population. Authors: Cox, Liebl, McComb, Chau, Wilson, Achi, Garey & Wallace (2017) Study Objective: The purpose of this observational study is to assess 30 day readmissions and 30 day emergency room visits based on health literacy evaluated Brief Health Literacy Screener in an acute care heart failure population.	300 patients enrolled: Two hundred and sixty-four patients aged 66.6 ± 14.3 (mean ± SD) years met inclusion/exclusion at a Texas Medical Centre (an extension of tertiary care being more specialized and diverse in practice). Inclusion criteria: 18 years of age or older • diagnosis of heart failure confirmed by either an echocardiogram or a diagnosis noted in medical chart • able to be contacted by telephone for follow-up post hospital discharge. Exclusion criteria: • non-English speaking • unable to see the survey questions due to visual impairment	Observational cohort study Health literacy assessed using the 3-Question BHLS The 3-Question BHLS is a validated health literacy-screening tool can be completed in less than 3 min. requires minimal instruction to clinicians. 5-point Likert scale for each of the three questions was applied Each question scored between 1 and 5 for a total score between 3 and 15. Patients categorized as either low health literacy (< 9 BHLS score) or adequate health literacy (>9 BHLS score) Patients unable to answer the questions due to inability to read or comprehend the questions were given a score of 3 and	• Twenty-five patients unable to be contacted after discharge due to a non-working or incorrect phone number • .Five patients died after enrollment with an unknown date of death • Three patients not discharged during study time frame. • 104 patients had an unplanned ED visit or readmission within 30 days of discharge. 43 (48.3%) categorized as low health literacy; 61 (34.9%) categorized as adequate health literacy • 30 days following discharge, 84 readmitted. Of the 89 patients with low health literacy, 33 (37.1%) were readmitted; 51 (29.1%) of the 175 patients had adequate health literacy	• Low health literacy increases healthcare use after hospitalization • Low health literacy affects a person's ability to properly follow healthcare instructions (medications and other interventions) • Ease of administration of the BHLS supports health-systems utilizing BHLS upon admission, during hospital stay, when medication reconciliation is being completed or part of the discharge process. Strengths: • According to the authors, first study to identify health literacy as an independent predictor of healthcare use following discharge. • Utilized a validated health literacy screening tool

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
	• hearing impaired without a telephone assist service or device diagnosed with valvular diseases. • candidate for heart transplant or received a heart transplant within the previous 12 months. • any heart function assist device (left or right ventricular assist device) • . unknown date of death post-discharge. Sample size calculated on assumptions 20% of the patient population have low health literacy and 30-day readmission or ED visits would differ by 15% between patients with high vs. low health literacy (alpha: 0.05; power: 80%) Study had a greater than 80% power to detect a difference.	categorized as low health literacy. Unplanned healthcare use after discharge including 30-day all-cause ED visits and hospital readmissions was assessed using univariate and logistic regression models. Day 31 post discharge, patient's electronic medical record reviewed for a subsequent ED visit or hospital readmission. If no ED visits or readmissions to Texas Medical Centre within 30 days, patient called to determine if an ED visit or readmission to any other hospital occurred within 30 days of their discharge. Maximum of 10 phone calls were attempted from day 31 to day 40 before coding the patient as unreachable.	• Ninety patients had an ED visit within 30days of hospital discharge: 38 (42.7%) had low health literacy: 52 (29.7%) had adequate health literacy • The univariate analysis identified 13 covariates with a possible association with 30-day healthcare use after discharge • The regression identified four variables that significantly increase risk of 30-day readmission or ED visit: Low health literacy, total admissions in the previous 12 months, history of cerebral vascular accident and lack of beta blocker therapy • After controlling for confounders, low health literacy was independently associated with 30-day healthcare use after hospital discharge.	Limitations: • Study assessed only a specific diagnostic population. • Administration of the BHLS survey conducted by two clinical pharmacy specialists who were also clinically responsible for the patients; risk of bias. • Did not include caregivers. • Did not include patients under 18 • Did not distinguish between data reflecting ED visits vs hospital admissions. Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Moderate

Literature Summary Table 4

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Relationships among functional health literacy, asthma knowledge and the ability to care for asthmatic children in rural dwelling parent Authors: Hoover, Pierce, Spencer, Britten, Neff-Smith, James & Gueldner (2012) Study Objective: An Orem-based study that examined the relationships among functional health literacy, asthma knowledge, the ability to care for asthmatic children and sociodemographic factors among rural parent/guardians.	Convenience sample of 57 parents and one guardian who cared for asthmatic children < 9 years old; 56 were female; 1 male • 55.2% had completed high school/ passed GED equivalent • 12.1% did not graduate • 32.8% had college experience • 27.7% < $10,000/ year • 13.8%$11K-$20, 000/ year • 15.5%between $21K-30,000/year • 6.9%between $31K-$40,000/year • 29.3% Income of $41K and > Recruited from three rural health districts in the eastern United States (Virginia, North Carolina, and upstate New York).	Descriptive Correlational design • Convenience sample of 57 parents and one guardian who cared for asthmatic children • Recruited from three rural health districts in the eastern United States (Virginia, North Carolina, and upstate New York) • Subjects completed the Test of Functional Health Literacy in Adults (TOFHLA) and the Asthma Questionnaire- • Parent Survey (AQ-P) and provided additional demographic and health status information.	• TOFHLA scores were directly related to asthma knowledge (AQ-P scores), p=.04. • Subjects who had not completed high school had significantly lower TOFHLA scores than those who had completed high school, and their children were hospitalized more often (p=.05). • Those with higher income had higher health literacy (TOFHLA scores) (p=.008)	The higher the level of HL, the higher the asthmas knowledge Association between asthma knowledge and education level i.e. education level increased asthma knowledge Clinicians need to take the level of a patients HL into account when care is being delivered Limitations: Failure to recruit participants who scored in inadequate range of TOFHLA Strengths: 17.2% of sample represented minority populations Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Moderate

Literature Summary Table 5

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Development of Indicators to Measure Health Literate Discharge Practices Authors: Innis, Barnsley, Berta, & Daniel (2017). Study Objective: To develop indicators of health literacy discharge practices (HLDPs) in acute care hospitals. 34 pre-approved indicators from a previous project were used as the initial set of elements that would be potentially expanded upon through this study.	• Convenience sampling used to recruit from Ontario and across North America to develop indicators of HLDPs Final panel consisted of: • 5 nurses, • 7 nurse practitioners, • 7 physicians, • 7 pharmacists, • 1 hospital discharge planner, • 2 case managers, • 4 hospital administrators, • 9 researchers who have focused on care transitions and health literacy, • Two nurse researchers who have published on hospital care transition, • Two physicians who have published care-transition interventions.	• Delphi method with two rounds of questionnaires provided to participants. • All participants (n=42) were contacted via email in 2014 and provided with a link to a Web-based survey; response was requested in 2 weeks. • Consent to participate was indicated by their choice to respond and two reminder emails were sent to each participant. • First round of the Delphi panel yielded 34 participants; panel used a 5-point Likert scale from 1 (not at all important) to 5 (very important). Panel was asked to suggest more indicators for second round.	Round One received 37 responses. All 34 indicators received a rating of three or above. Five themes were identified from the indicators; from the thematic analysis, two indicators were reworded and 2 new ones added. 39 responses and each indicator received a score of four or five. Four priorities for patients highlighted: • Prioritize discharge instructions • Provide hospital contact phone number if patient is not going to be receiving home care • Follow-up with pharmacist • Standardize discharge summary format to make information easier to find for home care providers.	Strengths: • Results can be generalized (specifically in Canada and the US) as indicators for HLDPs used in other health care organizations. • Participants were from both the hospital and community sectors providing experience in the two applicable domains of transition from hospital to home. Limitation: • Most members of the panel were from Ontario and seven were from the United States; indicators may need modifying for hospital settings outside North America. • Patients and caregivers were not included in the panel. Conclusion • Using these indicators to measure current discharge practices will highlight areas for improvement and direct educational needs.

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
	Participation was anonymous and group members never met in person; this was to ensure that no one participant was able to direct the rankings of other participants. Ethics approval was obtained from the institutional review board	• Second round, 34 participants were advised of results of first round; they asked to respond in 2 weeks and 2 reminder notices given. Indicators needed to receive a median rating of 3 or higher to be retained as an indicator for a HLDP.		Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Moderate

Literature Summary Table 6

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Using "teach-back" to promote a safe transition from hospital to home: an evidence-based approach to improving the discharge process. Author: Kornburger, Gibson, Sadowski, Maletta, & Klingbeil. Study Objective: To improve the discharge process in a mid-western children's hospital through evidence based practice.	Children's Hospital of Wisconsin Inpatient surgical unit, 40 nurses first group to experience teach back education Second, inpatient medical unit of 34 nurses 20-minute educational session on how to implement a "teach-back" methodology for discharge planning.	Evidenced Based Practice project Hospital designed educational intervention for nurses on "teach-back". Pre and post surveys to nurses (4 week post survey)	• Pre and Post survey data collected from nurses demonstrated the positive effect "teach back" could have on preventing medication errors while simultaneously identifying areas for other study. • identified the potential vulnerability of children being at risk for poor health outcomes related to chronic illnesses such as asthma, diabetes and heart conditions when their caregivers have unconfirmed LHL. • After a four-week trial, 98% of the 51 nurses who responded to the survey agreed that patients and families better understood their discharge instructions when "teach-back" was used	Educational intervention improved nurses use and understanding of the teach-back process Process is an effective strategy that supports staff in providing high quality and safe care Limitations: • Patients not surveyed for their feedback on teach-back • Nurses self- reported via surveys Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Moderate

Literature Summary Table 7

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Canadian adaptation of the Newest Vital Sign©, a health literacy assessment tool Authors: Mansfield, Wahba, Gillis, Weiss & L'Abbé, (2018). Study Objective: To evaluate the reliability of the Canadian NVS as a self-administered computerized tool	• 222 participants (112 English speakers/110 French speakers) including adults, seniors and students of various socio-economic status levels • 180 (ninety English-speaking and ninety French speaking) participants completed both the I-NVS and C-NVS. • English- and French-speaking adults aged 18 years or older were recruited from multicultural catchment areas that include families, seniors and students of varying socio-economic status levels in Ottawa, Ontario and Antigonish, Nova Scotia. • Participants had to be 18 years or older, speak English or French, and understand and sign the information and consent form that was read aloud to them.	• A randomized crossover design with a washout period was used to compare results from administration of the computer-based NVS (C-NVS) with those of the traditional interviewer-administered NVS (I-NVS). • Each participant was assigned to complete first either the C-NVS or the I-NVS health literacy assessment. After completing this first assessment, a follow-up appointment was scheduled (in3–4 weeks) to complete a second health literacy assessment using the alternative version of the NVS tool	Scores for • those who completed both assessments ranged from 0 to 6 with a mean of 3·63 (SD 2·11) for the computerized NVS and 3·41 (SD 2·21) for the interview-administered NVS. • Few (n 18; seven English, eleven French) participants' health literacy assessments differed between the two versions.	The computerized Canadian NVS performed as well as the interviewer-administered version for assessing health literacy levels of English and French-speaking participants. First time the NVS health literacy assessment tool has been adapted for use in Canada, on paper or electronically. First time the NVS has been adapted and administered in electronic form using a multiple-choice format with an integrated voice-over component Limitation: • More than 81% of higher number of individuals who scored in the limited health literacy categories (n 31) did not finish the study and complete both versions of the NVS compared with those who scored in the category of adequate health literacy Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Moderate

Literature Summary Table 8

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Prevalence of limited health literacy and compensatory strategies used by hospitalized patients Authors: Morris, Grant, Repp, MacLean, & Littenberg (2011) Study Objective: To determine the prevalence and demographic associations of limited health literacy in hospitalized patients and to identify the perceived etiology and use of any compensatory strategies	Minimum 18 years of age Able to provide consent Not incarcerated Not hospitalized for end-of-life Attending physician advised researcher of interested patients Total 103 participants • Mean age 64 • 99% English speaking • 91% white • 61% female • 27% college educated • More than half reported annual income < $30,000	A cross-sectional study was implemented of a consecutive sample of hospitalized adults admitted to the Internal Medicine Hospitalist Service at a 440-bed academic medical center (*n* = 103) in Vermont Data collected 48 hours prior to discharge to minimize the contribution of the acute illness. Health literacy was determined using the short form of the Test of Functional Health Literacy in Adults (TOFHLA). Demographic data, perceived etiology of difficulties in reading or understanding health information, and use of compensatory strategies were self-reported.	Only 40 %(n=41) had adequate level of HL. Patients in lowest group were significantly lower (p<.001), were less educated (p=.15), had lower earnings (p<.001) and less often were white (p=.03)	• The prevalence of limited health literacy is high in hospitalized medical patients. • Further study of the timing and methods of communicating information to hospitalized patients is warranted. • Assuring that the patient and/or family understand the post-discharge plans will be an important step to improving quality and safety Limitations: • Study population had higher education than others studied biasing the results to higher HL; however LHL was found • Small sample size; however small p value does indicate the statistical power is not a major deficiency • Results cannot be generalized due to small portion of low non-English speaking patients • Patients enrolled only when research staff available so eligible patients missed

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
				• Physician responsible for referring and relied on to exclude patients with cognitive deficits • Patients self-reported • Cross –sectional survey therefore did not capture observations of literacy over time. Rating using PHAC critical appraisal tool: Study Quality: Weak Study Design: Moderate

Literature Summary Table 9

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Hospital Evaluation of health literacy and associated outcomes in patients after acute myocardial infarction Authors: Rymer, Kaltenbach, Anstron, Fonarow, Erskine, Peterson &Wang (2017) Study Hypothesis: Patients discharged from hospitals that routinely screened HL would have higher rates of medication adherence and lower rates of major adverse cardiovascular events and readmission than for patients discharged from hospitals that did not routinely assess HL.	122 hospitals that treated 8, 412 patients who had an acute coronary event and were treated with adenosine diphosphate receptor inhibitors between April 2010 and May 2012 . Hospitals divided according to those that routinely assess HL (> 75% of patients), selectively assessed (1%-75% and never assessed HHL (0%).	Longitudinal, observational study Follow up phone calls made to patients at 6 week and 6 month mark and logistic regression was used to compare 6 week and 6 month patient reported medication adherence among hospital groups; high self-reported medication adherence was summed score of 0. • Cox regression was used to compare 1year occurrence of a major adverse cardiovascular event. • Collected medical bills or medical records relating to any hospital admission that included at least one overnight stay validated readmissions.	• At 6 weeks after discharge, patients discharged from hospitals that routinely or selectively screened HL were more likely to have high self-reported medication adherence than those who never screened. • Hospitals who routinely screen HL trended towards a lower risk of 1-year readmission. • No significant associations or risk of a major adverse cardiovascular event was observed for hospitals that either routinely or selectively screened.	Only 20% reported routinely screening and 41% reported never screening. Hospital screening was associated with higher medication adherence and lower readmission risk. Limitations: • Smaller hospitals were excluded affecting generalizability. • Survey only assessed hospital evaluation of HL before discharge; post discharge evaluations of HL not known. • Patients self-reported if screened • A causal relationship cannot be inferred between HL screening and health outcomes Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Strong

Literature Summary Table 10

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Incorporating Health Literacy Screening into Patient's Health Assessment Authors: Sand-Jecklin, Daniels & Lucke-Wold, 2017. Study Objective: Study purpose was to determine the feasibility of incorporating HL screening into the electronic health record (EHR) of patients admitted to a large Mid-Atlantic teaching hospital; determine relationship between patient demographics , hospital readmissions and patient HL status.	Convenience sample of RNs and all newly admitted patients in large Mid-Atlantic hospital	Cross-sectional, Descriptive study • Training provided to RNs to perform HL screening • After training, screening was implemented for all patients as part of their admission. • RNs were surveyed about the feasibility of HL screening, and patient EHRs were reviewed for HL status	After implementation, RNs were surveyed about the feasibility of HL screening, and patient EHRs were reviewed for HL status. • Results indicated that RNs were receptive to HL screening. • Approximately 20% of all patients screened were at risk for low HL, with HL scores decreasing as age increased. • Patients with low HL had significantly higher hospital readmissions, even when controlling for age and number of health conditions.	Further research needed to determine how healthcare providers alter their patient interactions if they have knowledge that patients are at risk for having low HL. Limitations: • Convenience sample of RNs and patients may not be representative of population. • Sample was white with low minority representation limiting generalizability. • Education status could not be compared with HL level due to issues extracting from EMR. Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Moderate

Literature Summary Table 11

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: The impact of teach-back method on retention of key domains of emergency department discharge instructions. Author: Slater, Huang & Dalawari (2017). Study Objective: The objective of this study was to determine if the teach-back method would increase retention of post ED discharge instructions.	Midwestern Urban, academic ED; 39,000 annual patient volume and 30% admit rate	A before-and-after study design was used at; a quality improvement Project geared to addressing nursing discharge processes • 68 nurses taught how to deliver teach-back • Pre-Stage: Patient questioned for retention of standard verbal and written discharge instructions were provided • Post-Stage: Used teach-back on combination with verbal and written discharge instructions • Follow up telephone calls post d/c: standardized questions regarding their discharge instructions via telephone interview. • Answers compared with participant's discharge instructions in the electronic medical record. • A composite score measuring mean percent recall correct was calculated in four categories: diagnosis, medication reconciliation, follow-up instructions, and return precautions. Data were collected for 1 week prior to and 1 week post intervention	The mean percent recall correct in the teach-back phase was 79.4%, or 15 percentage points higher than the pre-intervention group. After adjusting for age and education, the adjusted model showed a recall rate of 70.0% pre vs. 82.1% ($p < 0.005$) post intervention.	The teach-back method had a positive association on retention of discharge instructions in the ED regardless of age and education. Limitations: • Study not randomized • Scoring performed by one investigator; potential bias • Potential selection bias towards patients who had phones • Single site study; cannot be generalized • Participants used written discharge instructions during interviews. Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Weak

Literature Summary Table 12

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Gender differences in the impact of health literacy on hospital readmission among older heart failure patients: A prospective cohort study Authors: Son & Won (2020). Study Objective: To investigate the impact of limited health literacy on 1-year hospital readmission for both older men and women with a diagnosis of heart failure	286 patients (men=144, women=142) were included in the study Inclusion criteria: • Aged 65 years or older • New York Heart Association (NYHA) functional class I to IV (Appendix B) • Not waiting to receive a heart transplant or an implantable cardioverter defibrillator • Having sufficient understanding of the Korean language. Exclusion criteria: • pre-existing cognitive impairment due to head injury, stroke, dementia, or Alzheimer's disease • Life expectancy of 6 months or less • History of antipsychotic drug use or alcohol abuse within the past year.	Prospective cohort study The 286 patients were enrolled from June to November 2017. Patients followed until November 2018. Baseline health literacy was assessed using the validated, self –reported Brief Health Literacy Screener (Appendix A) Each item was scored on a 5-point scale (0-4). The total score ranged from 0 to 12, with higher scores indicating a greater ability to understand and use health information Limited health literacy was defined as a BHLS score ≤ 9	• Multiple logistic regression was performed to examine gender differences in the association between health literacy and 1-year hospital readmission • Prevalence rates of limited health literacy and a one-year hospital readmission for older women were 74.7% and 35.9%, respectively, compared with 48.6% and 27.1% in older men. • Limited health literacy significantly increased the risk of 1-year hospital readmission for both older men and women with heart failure.	Strengths: • Results can be generalized (specifically in Canada and the US) as indicators for HLDPs used in other health care organizations • Participants were from both the hospital and community sectors providing experience in the two applicable domains of transition from hospital to home Limitation: • Majority of panel from Ontario and seven from United States; indicators may need modifying for hospital settings outside North America. • Patients / caregivers were not included in the panel. Conclusion: • Using these indicators to measure current discharge practices will highlight areas for improvement and direct educational needs Rating using PHAC critical appraisal tool:

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
		One-year readmission after discharge assessed via medical records or telephone interview. Ethical Considerations: Study approved by the institutional research board of Wonkwang University in Cheobuk.	• Older women with limited health literacy had a much higher risk of hospital readmissions (odds ratio 10.17, 95% confidence interval 2.19-47.14) than did older men with limited health literacy (odds ratio 5.27, 95% confidence interval 2.04-13.59).	Study Quality: Medium; Study Design: Moderate

Literature Summary Table 13

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Prospective evaluation of low health literacy and its impact on outcomes in trauma patients Authors: Swartz, Jehan, Tang, Gries, Zeeshan, Kulvatunyou, Hamidi, O'Keefe, & Joseph (2018). Study Objective: To identify factors associated with low health literacy and its relationship with health outcomes in trauma patients.	Power analysis determined number of patients required in each group • Sample size estimated based on previous literature review: Sample size calculated as 30 patients per group. • Total of 140 patients in study. • 70% were white. Mean age was 45 ± 20 years, and median Injury Severity Score was 10 (6–12). • 24% (34) patients had LHL.	One year prospective observational study of all trauma patients admitted • Patients were surveyed at discharge and followed up at 4 weeks post discharge. • At discharge, patient's health literacy was assessed using the Short-Assessment of Health Literacy score. • LHL was identified when score was less than 14. • Patients were surveyed regarding their understanding of their injuries, treatment received, discharge instructions, and interaction with the physician. • Four weeks post discharge, all patients were inquired about clinic follow-up details and recovery.	• At discharge, both groups were satisfied with the time spent by a physician to explain the condition • The LHL patients were less likely to recall their injuries ($p = 0.03$) or how they were treated ($p = 0.01$). • Patients with LHL had lower follow-up rates ($p = 0.01$) with no difference in the readmission rate ($p = 0.71$) compared with HL.	• Every one in 4 trauma patients have LHL. • Low health literacy is associated with poor understanding of injuries and treatment provided to them, leading to a decrease in compliance with discharge instructions and longer time to recovery Rating using PHAC critical appraisal tool: Study Quality: High Study Design: Moderate

Literature Summary Table 14

Title, Authors, Date, Study Objective	Sample/Groups (Size, Setting, Characteristics)	Design and Methodology	Key Results and Findings	Conclusion and Rating
Title: Do Patients Understand Discharge Instructions? Authors: Zavala& Shaffer (2011) Study Objective: was to identify and describe areas of patient confusion about ED discharge instructions	Setting: Emergency department (ED) of Reston Hospital Center, Reston, Virginia Participants: Adult patients, aged 18 years or older, who were treated in ED and returned home Study Sample: obtained by picking every fifth chart from the previous day's discharge records and contacting these patients via telephone until a total of 10 patients were contacted.	Prospective, randomized, descriptive study • Telephone calls made by primary investigator on the day after discharge, between 9 AM and 7 PM • Process was repeated on 5 different days, at least 1 week apart • 155 telephone calls were required to reach 50 patients. All individuals who were contacted agreed to be interviewed, but one subject was confused and unable to communicate well enough to discuss her medical condition over the telephone. • This left a final sample size of 49	• Fifteen patients (31%) requested additional information about their discharge instructions that required further clarification by the investigator • 15 patients (31%) described a diagnosis related concern that revealed poor understanding of discharge instructions	• This study demonstrated that patients commonly remain confused about discharge instructions treatment in an ED. • Follow-up telephone calls may be useful for identifying and addressing ongoing learning needs. Strengths: • Despite small sample size, the study identified that routine discharge instructions were not sufficient to ensure that patients had a sound understanding of discharge instructions. Limitations: • Patients who were not fluent in either English or Spanish, the languages spoken by ED personnel, were excluded from the study. Rating using PHAC critical appraisal tool: Study Quality: Medium Study Design: Strong

Appendix B: Consultations Report

Development of a Health Literacy Resource for Case Managers:

Optimizing the Successful Transition from Hospital to Home

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Background

The purpose of this practicum project is to improve the success of a patient's hospital discharge by incorporating the patient's level of health literacy into their transition plan from hospital to home. The project involves case managers employed by the Home and Community Care division of the South East Local Health Integration Network (South East LHIN) and the Lennox and Addington County General Hospital (LACGH). The current discharge process does not include the assessment of a patient's level of health literacy (HL). Therefore, discharge planning does not take into consideration what a patient does or does not understand about the discharge plans presented to them. This omission can result in the patient not being an active participant in their discharge plans. There is also the risk that because a patient may not understand their discharge instructions, they are not able to manage their care needs such as; (medication management, prevention of high blood pressure, diabetes management, exercise programs, follow-up with primary care or specialist appointments) once they return home. When care needs are not successfully managed at home, there is a risk of a patient seeking care at an Emergency Department (ED) or being re-admitted to hospital. The Expert Panel on Health Literacy, led by the Canadian Public Health Association, identified that 55% of Canadians aged 16–65 years did not have the health literacy skills required to understand and appreciate their daily health-care needs (Mansfield, Wahba, Gillis, Weiss & L'Abbé, 2018). Developing individualized discharge plans in accordance with a patient's level of health literacy should facilitate patients being better prepared and confident in their understanding related to requirements once discharged home.

To support the creation of the HL resource, consultations were planned with case managers, the hospital discharge planner and the hospital chief of staff. The goal of the consultations was to glean information regarding these participants understanding of health literacy, the role it plays in discharge planning, and what they believe should be contained in the resource manual to support the assessment of a patient's health literacy.

Participants

Consultations occurred with five case managers from the South East LHIN Home and Community Care team who facilitate discharges from the LACGH, and the LACGH discharge planner. Unfortunately, due to priorities related to COVID-19, the chief of staff was unable to complete the consultation process but is supportive of the resource and believes it will prove beneficial to their patient discharge process. The practicum outcome will not be affected by this omission as the hospital discharge planner and the five case managers provided sufficient information to assist in the creation of the resource.

Methods

All consultations occurred by telephone due to the physical distancing requirement related to COVID-19. Prior to the consultation process, the five case managers, and the discharge planner were advised of the practicum project's objectives by telephone. The purpose and format of the consultations were reviewed with each participant. All expressed appreciation for being involved in the process. Consultations were completed one participant at a time. The participants expressed how this format

made them feel comfortable and not intimidated to share their personal views and opinions associated with the current discharge process at LACGH.

Data Management

Participants were asked the same questions during the consultations (Appendix A). Data management included typing the consultation responses in a Word document and saving it to a file on my laptop. Additional information obtained through probing beyond the pre-determined questions was incorporated into the overall feedback. Information gathered from the consultations will be used to guide the development of the resource manual.

Consultation Results

Each participant demonstrated interest and commitment in being involved in the consultations by expressing appreciation in having an opportunity to share their thoughts. Consultations occurred at times convenient for participants. In total, eight questions were asked.

Question 1: What is your role in the discharge planning of patients transitioning from hospital to home?

All participants identified they are responsible for assessing, planning and implementing a safe discharge plan which includes organizing home & community care services such as personal support, nursing, physiotherapy, occupational therapy, nutritional support, and social work. One participant stated she “works to establish a care

plan that would support a smooth transition home, and then follow the patient once at home to ensure sustainability of the plan of care."

Question 2: What do you take into consideration when developing the patient's discharge plan?

Participants provided similar answers to this question. They described how, when presenting patients with discharge instructions, they consider the patient and their caregiver needs, their understanding of those needs, hospital timelines for discharge, and availability of community resources. All stressed the use of individualized care plans and the care required once patients return to their home. Participants stressed that assessments for discharge plans vary in terms of time and the learning styles of patients. Both the case managers and the discharge planner stated there is currently no formal way to identify an individual's learning style and that they had to use their "gut instinct" to readjust how they presented information to help the patient and their caregiver(s) understand the discharge information and instructions. Patients were directed to contact the case manager or the discharge planner if they had questions related to the discharge instructions once at home.

Question 3: What is your understanding of health literacy?

It appears that all participants believe most patients do not understand their discharge instructions and therefore must utilize various methods and approaches to ensure patients have a clear understanding of their discharge instructions and plans. Overall, participants lacked a standardized definition and understanding of HL. For instance, participants referred to HL as the patient's ability to understand their health

needs and understand information that they receive will help attain an optimal level of health and follow the hospital or physician's instructions. One participant referred to HL as a patient's ability to know how to prevent illness or decrease the risks of exacerbations related to a chronic illness.

Question 4: What do you do when you feel the patient does not understand the information you are providing to them in their discharge instructions?

There was consensus amongst the participants that most patients do not understand the information provided to them when being discharged home. Participants stated how they adjust their approach to providing such information depending on how the patient reacts when receiving the instructions. Others describe arranging follow up meetings, providing written descriptions of instructions, and using teach-back techniques when outlining the details of discharge plans.

Question 5: How do you involve the patient in the discharge planning process?

All participants identified how discharge planning discussions occurs either face to face with patients and caregivers or via telephone with caregivers. Included in these discussions is appraisal of a patient's level of involvement in the discharge process, a patient's preference in how they received the discharge information (verbal or written), identification of what was understood or needed further review, and what patients described as their goals related to their health care once at home.

Question 6: How do you see assessing a patient's level of health literacy as supporting the transition from hospital to home?

Participants were vague in their responses to this question. They did not demonstrate a solid understanding of how knowing a patient's level of HL can improve outcomes when transitioning from hospital to home. Participants varied in how they interpreted and answered this question. Two of the participants however did state that if the patient does not understand their health condition(s) or the impact of certain decisions, they cannot make informed decisions. They realize it is important to provide patients with such information to assist with understanding their health care needs once at home. To help with this, participants suggested the development of pamphlets and providing contact information for case managers and the discharge planner for further support and guidance related to the information provided at the time of discharge.

Question 7: What suggestions do you have to improve the discharge process for a patient?

All participants agreed that including patients in the discharge process and providing education about the treatments or care needed at home would improve the discharge process. When patients had multiple co-morbidities requiring complex plans of care, all participants felt it was beneficial to have family and caregivers involved in the discharge instructions to help support the patient once at home.

Question 8: What tools or resources do you feel would support you in understanding a patient's health literacy and are you aware of any tools that exist?

Most participants are not aware of resources or tools that support their assessment of a patient's HL. It was identified however, the need for a tool to assess a patient's cognitive abilities prior to instructing them on discharge plans. One participant identified

that a cognitive test such as the MoCA (Montreal Cognitive Assessment) tool is currently being used to help identify cognitive issues. Identification of cognitive issues is important to ensure discharge instructions are tailored specifically to meet a patient's capabilities and perception level. Participants understood the importance of caregiver involvement in discharge planning to provide support and oversee the discharge process by ensuring that the patient understands information provided. Caregivers can offer valuable information for discharge plans to ensure directions, instructions, and teachings are provided in an appropriate and realistic manner so that the patient can comprehend.

Implications for the Practicum Project

The participants provided valuable and insightful feedback into the current discharge planning process and the role they play in preparing patients to transition from hospital to home. There was consensus that a HL assessment is not incorporated into the current discharge planning process. It was also evident that participants had little knowledge surrounding HL. The results of the consultations demonstrate that the HL resource is urgently needed. Based on the consultations, the resource must contain not only a HL assessment validated tool, but also education for the participants on HL. At this point, the plan for detailed HL education will be offered through a self-learning module located within the resource manual. An in-service will be provided to introduce the entire resource module and answer any preliminary questions the participants may have.

It is critical to ensure that the education around HL, the rationale, and the use of the HL assessment tool is presented in a way that demonstrates value and worth to those who are involved in the patient discharge process. Case managers must feel confident that the resource and the specific education prepares them to complete HL assessments.

References

Mansfield, E. D., Wahba, R., Gillis, D. E., Weiss, B. D., & L'Abbé, M. (2018). Canadian adaptation of the Newest Vital Sign©, a health literacy assessment tool. *Public Health Nutrition, 21*(11), 2038-2045. https://doi.org/10.1017/S1368980018000253.

Appendix A

Consultation Questions

1. What is your role in the discharge planning of patients transitioning from hospital to home?
2. What do you take into consideration when developing the patient's discharge plan?
3. What is your understanding of health literacy?
4. What do you do when you feel the patient does not understand the information you are providing to them in their discharge instructions?
5. How do you involve the patient in the discharge planning process?
6. How do you see assessing a patient's level of health literacy as supporting the transition from hospital to home?
7. What suggestions do you have to improve the discharge process for a patient?
8. What tools/ resources do you feel would support you in understanding a patient's health literacy and are you aware of any tools that exist?

Appendix C: Health Literacy Self-Learning Resource for Case Managers: Improving the Transition from Hospital to Home

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HEALTH LITERACY

HEALTH LITERACY

Health Literacy Self-Learning Resource for Case Managers: Improving the Transition from Hospital to Home

Joanne M. Browne

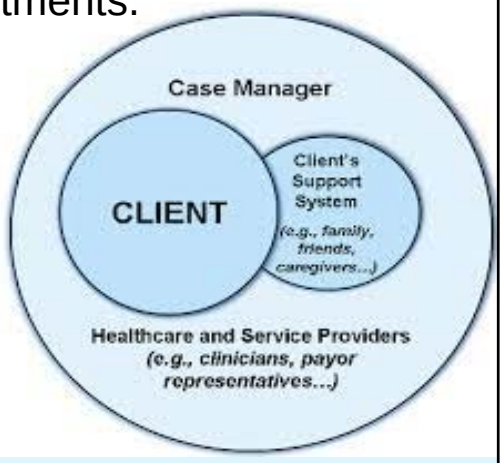
Memorial University Faculty of Nursing

HEALTH LITERACY

As case managers, you play a vital role in patients' transition from hospital to home.

►Your assessment and care planning set patients on the path to successfully managing their health care needs at home.

►Through connecting patients personal support system and the formal community supports and resources, you coordinate the provision of their health care to achieve the best possible health outcomes for the patient e.g. adherence to medication regime, appropriately following discharge instructions, follow-up on return appointments.



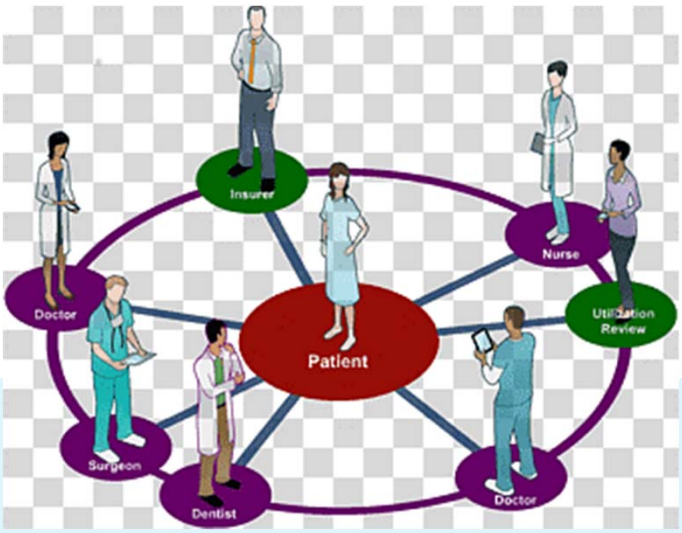
Infographic: Enhancing Health Literacy
http://hin.com/blog/2017/10/16/infographic-enhancing-health-literacy/

HEALTH LITERACY

Our Current Process

► Case Managers work in collaboration with the health care team at the Lennox and Addington County General Hospital (LACGH) to ensure patient care needs and instructions are in place to support a successful return home.

► Keeping patients at the center of this planning and actively involved in the plan is integral in achieving positive health outcomes.



HEALTH LITERACY

Do Patients Understand Their Health Care Needs?

It is critical that we include patients in this planning, but ***how do we know*** patients truly understand all they are being told?

►Do they understand what a specific illness means to their life in general?
►Do they have insight into how to perform specific self-care to achieve the best health outcomes?
►Do they understand the health care instructions provided by physicians, nurses, therapists?
►Do they understand what ***You*** the Case Manager presented to them prior to discharge?

HEALTH LITERACY

Assuming Can Be *Dangerous* to *Patients' Well-Being*

HEALTH LITERACY

Case Managers Need to Ask Themselves

"What is my patient's health literacy?"

"Am I confident patients understand what is told to them prior to discharge?"

Case Managers not only deliver and educate patients on their discharge plans, but need to know whether patients have the ability to understand and what is actually being presented regarding their health conditions.

HEALTH LITERACY

Do Patients Understand Ways to Optimize Their Health?

People make choices about their health every day:

- what to eat
- when to see a doctor
- whether or not to smoke

Generally to maintain a state of wellness, people benefit from having a good sense of how to :

- read the labels on food and medicine
- locate the nearest health center
- report physical and psychological symptoms when feeling unwell to health professionals
- understand insurance paperwork when care not covered by their province

These can be complicated tasks and the skills to achieve them are not explicitly taught by the health care system or other educational and social institutions.

HEALTH LITERACY

Case Managers are in a key position to take on this responsibility of identifying patients' health literacy.

To do this, you need to feel supported and confident in yourself to know how to address health literacy.

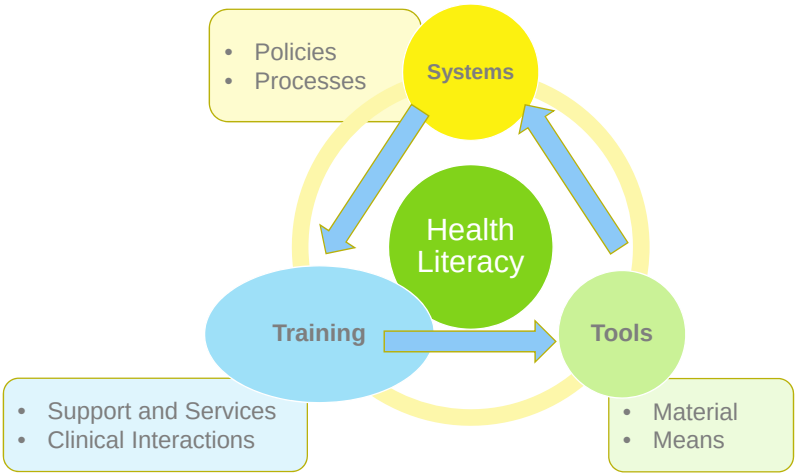
What does Health Literacy mean to you?

Have you had experiences when you felt knowing patients' health literacy would be beneficial when discussing their discharge plan?

HEALTH LITERACY

Overall Aim

- ►Understand the term “health literacy” and its’ importance in patient discharge planning
- ►Recognize the impact of health literacy on patient transitions through the care continuum
- ►Appreciate how to assess patients’ health literacy
- ►Become familiar with tools, resources, and strategies for assessment of health literacy, providing support which should optimize patients’ transition from hospital to home



HEALTH LITERACY

The practice of assessing patients' health literacy is a valuable and patient-centered tool to incorporate into your practice!

So what does health literacy actually mean ?

Health Literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health

~ World Health Organization (1988)

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.

~ Institute of Medicine; Sand-Jecklin, Daniels and Lucke-Wold (2017)

The ability to access, comprehend, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course."

~ Public Health Agency of Canada (PHAC) Rootman et al. A vision for a Health Literate Canada, 2008

Health literacy is a determinant of health that plays a significant role in how a patient is able to obtain, process and act upon personal health information

~ (Duell, Wright, Renzaho, & Bhattacharya, 2015)

HEALTH LITERACY

Analyzing our Current Process

Patients' transition from hospital to home can be optimized by incorporating patients' level of health literacy into discharge planning.

Our current process involves providing discharge plans/instructions ***without*** the assessment of patients' health literacy.

HEALTH LITERACY

Patient Risks

What can happen when we do not know patients' health literacy?

- ❑ Discharge planning may not be provided in a manner understandable to patients
- ❑ Patients may feel overwhelmed with the large amount of information provided to them
- ❑ Patients possibly feel embarrassment and refrain from asking questions when they do not understand the information
- ❑ Patients may be passive participants
- ❑ A risk of patients' care needs not met once discharged (ex.medication management, prevention of high blood pressure, diabetes management, exercise programs, follow-up with primary care or specialist appointments)

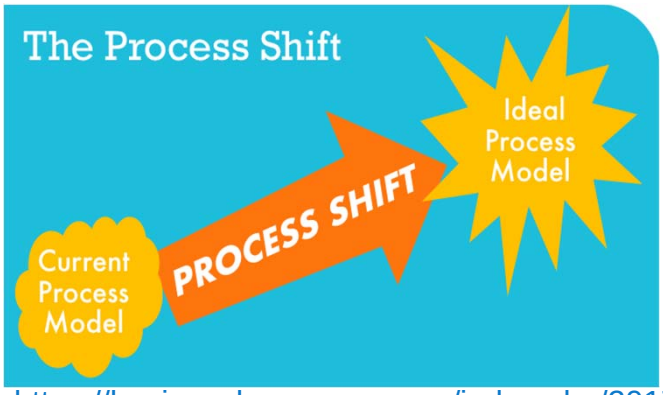
Failure to meets these needs can result in requiring care at the Emergency Department or a hospital readmission

HEALTH LITERACY

Let's Improve the Process

Including the assessment of health literacy into our discharge planning is the next step of improving our process for patients !

You are already doing a great job! Let's take it to the next level



https://businessbyprocess.com/index.php/2017/06/13/the-process-shift/

Let's Support Patients in Being Better Prepared !

HEALTH LITERACY

The Self-Learning Resource

Before starting this section, reflect on the following True or False questions and see how well you do !

You will re take this quiz again at the end.

		TRUE	FALSE
1.	Formally assessing patients' level of health literacy is part of the discharge planning process when transitioning from hospital to home at LACGH.	☐	☐
2.	Our inter-RAI assessment tools are able to generate patients' health literacy score.	☐	☐
3.	Years of schooling are a good measure of health literacy.	☐	☐
4.	Limited health literacy is associated with medication errors, increased health care costs and inadequate knowledge and care for chronic health conditions.	☐	☐

HEALTH LITERACY

The Self-Learning Resource
(continued)

		TRUE	FALSE
5.	25 % of Canadians aged 16–65 years do not have the health literacy skills required to understand and appreciate their daily health-care needs.	☐	☐
6.	Health Literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.	☐	☐
7.	Teach-Back is a technique used to check patients' understanding of health instructions whereby the health professional providing the discharge instructions will write out the discharge instructions for the patient to take home.	☐	☐
8.	Formal health literacy assessment tools are complex and should be used for patients who have a minimum grade 12 education and have a caregiver/ support person with them when the assessment is being completed.	☐	☐

HEALTH LITERACY

The Self-Learning Resource
(continued)

		TRUE	FALSE
9.	Knowing patients' health literacy level can mitigate the risk of a patient receiving discharge instructions that are beyond their level of understanding.	☐	☐
10.	Individuals with low health literacy have less knowledge about chronic diseases, poorer mental and physical health, limited use of preventative services, and higher rates of hospital admissions.	☐	☐
11.	Stress or how a patient is feeling can affect their ability to understand and act on health information.	☐	☐
12.	Using a plain language approach in providing discharge instructions can be insulting to patients and the appropriate medical terms should be used; patients can look up the information on their own if they require clarity.	☐	☐
13.	It is best to assess patients' level of health literacy just prior to discharge so that there is less time in between the assessment and the patient going home.	☐	☐

HEALTH LITERACY

Defining Health Literacy

The Case Manager's Role…

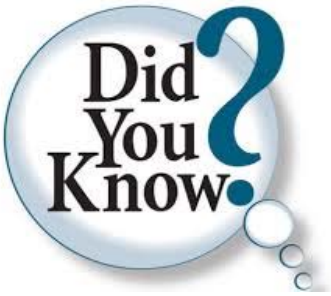
Proactively determine patients' level of Health Literacy prior to discharge planning.

This will support creation of discharge plans equal to patients level of comprehension.

A Recipe for Success!

HEALTH LITERACY

Now let's review some facts about health literacy



Health literacy in Ontario

47% of Ontarians have **low** health literacy

27% of Ontarians have **moderate** health literacy

26% of Ontarians have **high** health literacy

Public Health Agency of Canada (2016). https://www.publichealthontario.ca/-/media/documents/H/2018/health-literacy.pdf?la=en

HEALTH LITERACY

►55% of Canadians aged 16–65 years do not have the health literacy skills required to understand and appreciate their daily health-care needs

► Only 40% of Canadians have the ability to understand and act upon health information that has been provided to them to potentially make appropriate health related decisions on their own.

(Mansfield, Wahba, Gillis,Weiss & L'Abbé, 2018)

HEALTH LITERACY

True or false:
You can tell if someone has low health literacy.

False, without first completing a health literacy assessment, it is not possible to determine a person's health literacy level

It is not possible to assume a person's health literacy level based on based on appearance, socioeconomic status, or a patient's level of engagement with you.

HEALTH LITERACY

►Hospitals that call for mandatory health literacy patient assessments trended toward a lower risk of one-year readmission to an acute care setting.

Rymer et al. (2018)

►Health literacy as a modifiable determinant of health can only be impacted upon if a system wide approach is taken to address the potential risks associated with low health literacy.

HEALTH LITERACY

Let's Get Started!

Now that you know the facts and the importance of knowing patients' health literacy, let's introduce two approaches to assessing patients' health literacy:

- ***The Newest Vital Sign***

- ***Teach Back***

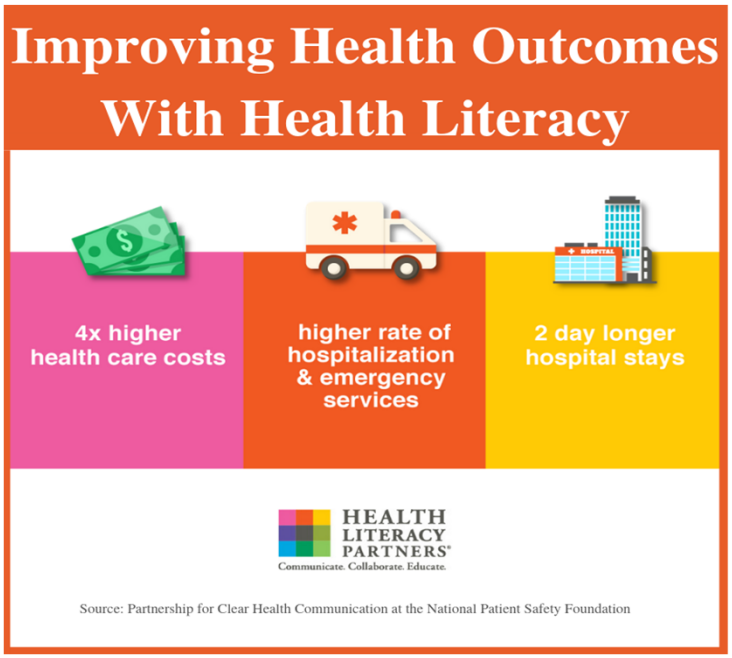
HEALTH LITERACY

The Newest Vital Sign Assessment Tool

The Newest Vital Sign™
A Health Literacy Assessment Tool

A Validated Health Literacy Assessment Tool

HEALTH LITERACY



A primary goal of the Newest Vital Sign:

Improve health outcomes through enhancing patient-provider communication

►Understanding patients' health literacy
►Discharge instructions formulated to patients' level of health literacy
►Increase patient compliance
►Increase ability to meet care needs
►Reduce system costs related to hospitalization

HEALTH LITERACY

The Newest Vital Sign:
How to Assess Health Literacy

The next slides will introduce the Newest Vital Sign and help you gain confidence in using this tool

The Newest Vital Sign only takes 3 minutes to complete!

HEALTH LITERACY

Navigating the Newest Vital Sign

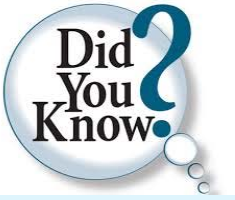
►The patient is given a specially designed ice cream nutrition label to review and is asked a series of questions about it.

►Based on the number of correct answers, health care providers can assess patients' health literacy level and adjust the way they communicate to ensure patients understand

Why Does an Ice Cream Label Work as a Predictor of the Ability To Understand Medical Instructions?

►Patients' ability to read and analyze any kind of nutrition label requires the same analytical and conceptual skills that are needed to understand and follow providers medical instructions.

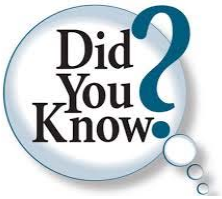
►The skills used to assess health literacy are defined as the understanding and application of words (prose), numbers (numeracy), and forms (documents).



HEALTH LITERACY

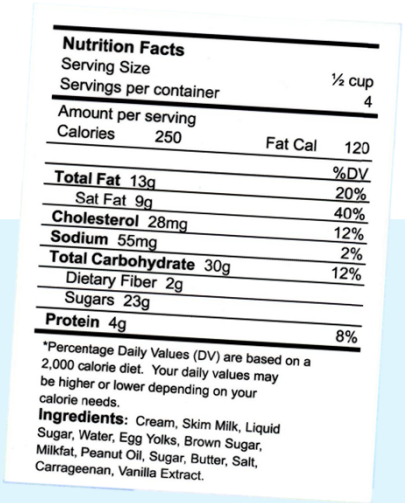
Navigating the Newest Vital Sign

The use of an ice cream label is especially relevant as poor comprehension of food labels correlated highly with low-level literacy and numeracy skills



Whether it is a label or medical instructions, patients will have certain tasks to work through :

- remember numbers and make mathematical calculations
- identify and be mindful of different ingredients that could be potentially harmful to them
- make decisions about their actions based on the given information



Nutrition Facts

Serving Size	½ cup
Servings per container	4
Amount per serving	
Calories 250	Fat Cal 120
	%DV
Total Fat 13g	20%
Sat Fat 9g	40%
Cholesterol 28mg	12%
Sodium 55mg	2%
Total Carbohydrate 30g	12%
Dietary Fiber 2g	
Sugars 23g	
Protein 4g	8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milkfat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

HEALTH LITERACY

Guiding Principles in Completing the Assessment

►Explain to patients why completing this assessment is so important for them. You have the knowledge now, feel confident and you can help patients feel at ease and eager to participate.

►Ensure the environment maintains privacy.

►Explain how doing the assessment can help the health care team develop discharge instructions and plan for care at home in a way that makes it the most supportive for patients.

►There are no time requirements to answer each question. The average time needed to complete all 6 questions is about 3 minutes.

Remember, this is not a test and patients do not have to answer every question! They may find some questions difficult to answer and you need to reassure them that this questioning is an assessment tool to help develop discharge plans unique to *their needs* .

HEALTH LITERACY

Guiding Principles in Completing the Assessment (continued)

►***Do not prompt patients who are unable to answer a question.***

If patients are unable to answer, provide them with the option of saying “pass”. Prompting may jeopardize the accuracy of the test. Just say, “*Well then let’s go on to the next question*.”

►Remember to stay positive and motivational for patients!

►If patients “pass” on a number of questions, the likelihood is that the patient has limited literacy and you can discontinue the assessment.

HEALTH LITERACY

Guiding Principles in Completing the Assessment (continued)

►Refrain from showing patients the score sheet and refrain from indicating whether they answer correctly.

►If patients ask to see the answers or want to know if they answered right or wrong, reassure them of the point of the exercise:

“This exercise is to assess your understanding of your health condition and care once you go home. The answers assist you and I in planning your discharge.”

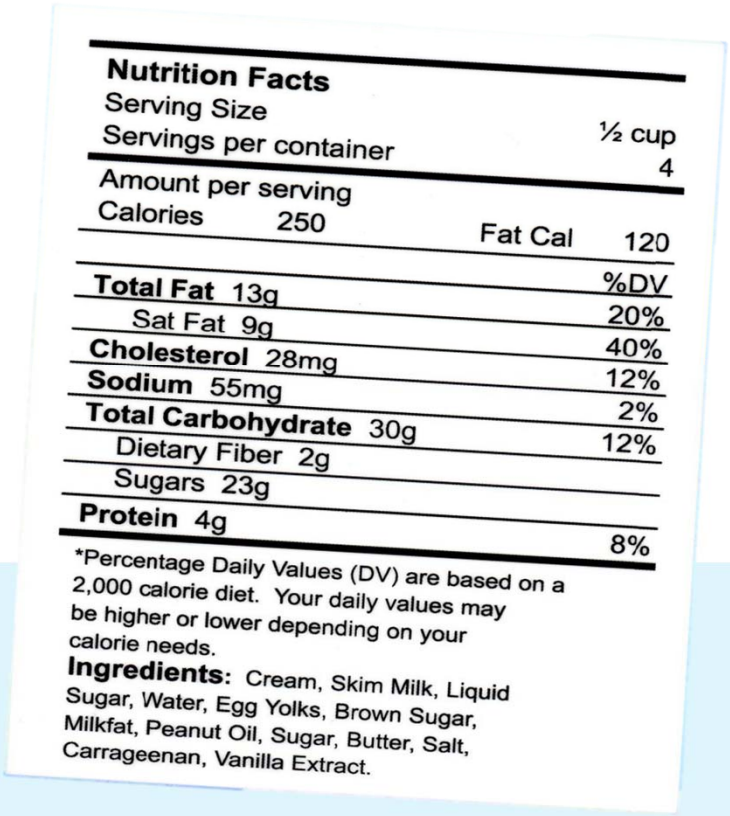
HEALTH LITERACY

Time to try it out!

Provide the nutrition label to the patient

►The patient can and should retain the nutrition label throughout administration of the Newest Vital Sign

►The patient can refer to the label as often as needed



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*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milkfat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

HEALTH LITERACY

Navigating the Newest Vital Sign

Score Sheet for the Newest Vital Sign Questions and Answers

READ TO SUBJECT:
This information is on the back of a container of a pint of ice cream.

ANSWER CORRECT?	
yes	no

1. If you eat the entire container, how many calories will you eat?
   Answer: *1,000 is the only correct answer*

2. If you are allowed to eat 60 grams of carbohydrates as a snack, how much ice cream could you have?
   Answer: *Any of the following is correct: 1 cup (or any amount up to 1 cup), half the container. Note: If patient answers "two servings," ask "How much ice cream would that be if you were to measure it into a bowl?"*

3. Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, which includes one serving of ice cream. If you stop eating ice cream, how many grams of saturated fat would you be consuming each day?
   Answer: *33 is the only correct answer*

4. If you usually eat 2,500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving?
   Answer: *10% is the only correct answer*

READ TO SUBJECT:
Pretend that you are allergic to the following substances: penicillin, peanuts, latex gloves, and bee stings.

5. Is it safe for you to eat this ice cream?
   Answer: *No*

6. (Ask only if the patient responds "no" to question 5): Why not?
   Answer: *Because it has peanut oil.*

Number of correct answers:

Interpretation

Score of 0-1 suggests high likelihood (50% or more) of limited literacy.
Score of 2-3 indicates the possibility of limited literacy.
Score of 4-6 almost always indicates adequate literacy.

HEALTH LITERACY

►Start asking the 6 questions, one by one, giving the patient as much time as needed to refer to the nutrition label to answer the questions. Patients have the option to pass on questions they do not know answers to.

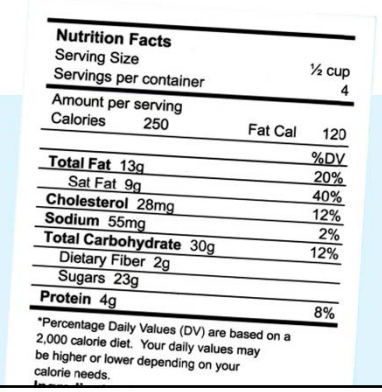
► Ask the questions in sequence.

► Continue even if the patient gets the first few questions incorrect.

If question 5 is answered incorrectly, Do not ask question 6

You can stop asking questions if a patient gets the first four correct

With four correct responses, patients have an adequate level of health literacy !



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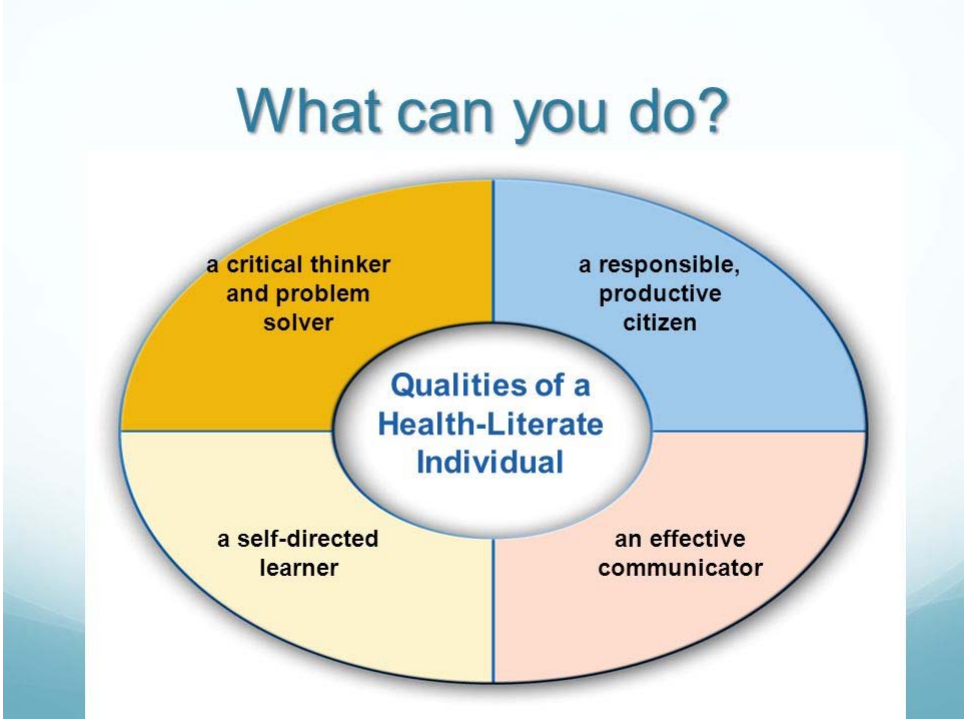
Protein 4g	8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

HEALTH LITERACY

When patients score four or above, you can be confident in the patient's ability to:

- problem solve
- take responsibility for their care
- seek support when needed
- be able to communicate effectively regarding their health needs



HEALTH LITERACY

Scoring and Interpretation of the Assessment

Score by giving 1 point for each correct answer (maximum 6 points)

- ► **Score of 0-1** suggests high likelihood (50% or more) of limited literacy.
- ► Score of 2-3 indicates the possibility of limited literacy.
- ► Score of 4-6 almost always indicates adequate literacy.

► Record the Newest Vital Sign score in patients' medical record, preferably near other vital sign measures.

► If a patient scores 0-3, the discharge planning will have to be modified to reflect that you have identified patients' low level of health literacy and their risk of not understanding their plan.

► It is important to share with patients your findings. Reassure them they are not alone and understanding health information is complex and challenging. Ensure patients understand the case manager's goal is committed to working with patients to design a discharge plan unique to their needs and level of understanding.

HEALTH LITERACY

Teach-Back – Another Tool!

Now that you have the skills needed to administer the Newest Vital Sign assessment, let's add another valuable resource to your case management tool kit !

The Teach-Back Technique

Teach-Back is an another resource tool designed to evaluate patients' understanding of the health information provided to them.

HEALTH LITERACY

What Exactly is Teach-Back?

Teach-Back is asking patients to repeat in their own words the instructions or information that you have provided.

Teach-Back is:

► An evidence-based health literacy intervention that promotes self-management, quality and patient safety

► ***Not a test*** of the patient or family. Rather it is a way to ensure information is clearly explained.

► A method to ask a patient or family member, in a safe non- judgmental manner, what they understood once case managers provide health information and discharge plans.

HEALTH LITERACY

Why Use Teach-Back?

Studies show that 40-80% of the medical information patients receive is forgotten immediately and nearly half of the information retained is incorrect!
(Jack, Chetty, Anthony, et al, 2009).

Patients, who have a clear understanding of their plan of care at discharge, are 30 % less likely to visit the emergency department or be readmitted after discharge.
(Jack, Chetty, Anthony, et al, 2009).

HEALTH LITERACY

Guiding Principles for Applying Teach-Back in your Patient Conversation

Conversation Guide

When asking a patient or family member to teach back, it can help to break the prompt into two parts:

1) Express personal responsibility for clarity.

Examples:

- I want to make sure I've explained this well.
- We've covered a lot here. I want to make sure I was clear about what's most important.
- I want to make sure I'm clear and I answer your questions.
- For your safety, I want to make sure we're on the same page.

2) Ask the patient or family member to explain or demonstrate what they understood.

Examples:

- Tell me what you heard in your own words, and then I'll know what I left out.
- How will you explain this to your wife when you get home?
- Show me how you plan to take all these different medications when you get home.

Remember: Avoid questions that can be answered with yes / no.

Ask "What questions do you have?" instead of "Do you have any questions?"

HEALTH LITERACY

Teach-Back Do's and Don'ts

Here are some things to keep in mind when engaging in Teach-Back with your patient:

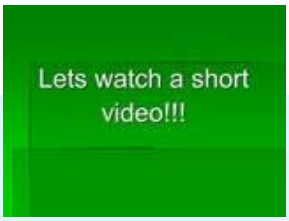
Do ask or state: ✓	Avoid asking: ✗
"What will you do if your blood sugar is low?"	"Have I been clear?"
"Show/tell me how you take your pills?"	"Do you understand?"
"Show me how you inject your insulin from the point of drawing it up into the syringe all the way to injecting it?"	"Is that OK?"
"Tell me three things you are not allowed to do when you go home from hospital?"	"Do you know what not to do when you go home?"

HEALTH LITERACY

Teach-Back Do's and Don'ts (continued)

This video will help demonstrate how Teach Back can be carried out with patients.

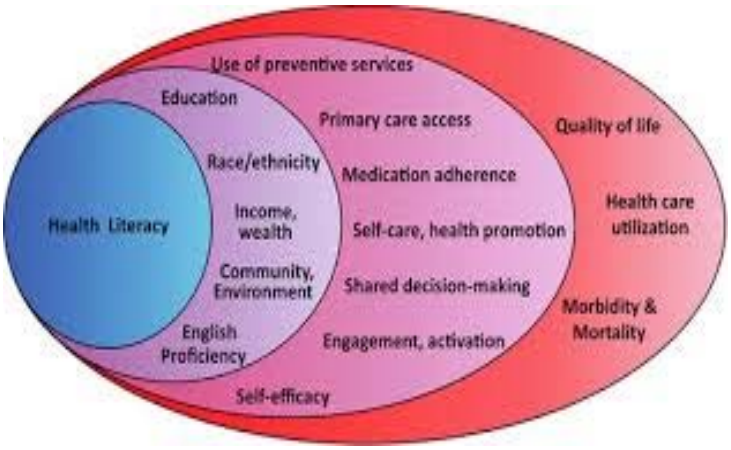
While the video references mostly physicians, all members of the health care team can use the tool. The aim of the video is to demonstrate Teach Back use in practice.



HEALTH LITERACY

Tying it all together

Now that you have learned the importance of the assessment of patients health literacy and have been introduced to new tools to assist you with determining patients health literacy, it is time to see how much you learned !



https://www.ahajournals.org/doi/10.1161/CIR.0000000000000579

HEALTH LITERACY

Let's Re-Take the Quiz and see how well you do! Check you answers in Appendix A

		TRUE	FALSE
1.	Formally assessing patients' level of health literacy is part the discharge planning process for a patient's transitioning from hospital to home at LACGH.	☐	☐
2.	Our inter RAI assessment tools are able to generate a patient's health literacy score.	☐	☐
3.	Years of schooling are a good measure of health literacy.	☐	☐
4.	Limited health literacy is associated with medication errors, increased health care costs and inadequate knowledge and care for chronic health conditions.	☐	☐

HEALTH LITERACY

Quiz (continued)

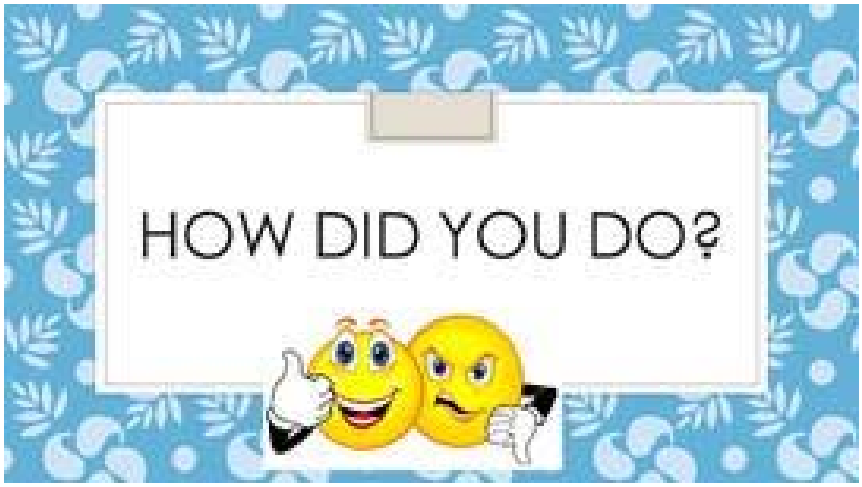
		TRUE	FALSE
5.	25 % of Canadians aged 16–65 years do not have the health literacy skills required to understand and appreciate their daily health-care needs.	☐	☐
6.	Health Literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.	☐	☐
7.	Teach-back is a technique used to check a patient's understanding of health instructions whereby the health professional providing the discharge instructions will write out the discharge instructions for the patient to take home.	☐	☐
8.	Formal health literacy assessment tools are complex and should be used for patients who have a minimum grade 12 education and have a caregiver/ support person with them when the assessment is being completed.	☐	☐

HEALTH LITERACY

Quiz (continued)

		TRUE	FALSE
9.	Knowing patients' health literacy level can mitigate the risk of a patient receiving discharge instructions that are beyond their level of understanding.	☐	☐
10.	Individuals with low health literacy have less knowledge about chronic diseases, poorer mental and physical health, limited use of preventative services, and higher rates of hospital admissions.	☐	☐
11.	Stress or how a patient is feeling can affect their ability to understand and act on health information.	☐	☐
12.	Using a plain language approach in providing discharge instructions can be insulting to patients and the appropriate medical terms should be used; patients can look up the information on their own if they require clarity.	☐	☐
13.	It is best to assess patients' level of health literacy just prior to discharge so that there is less time in between the assessment and the patient going home.	☐	☐

HEALTH LITERACY



Like any new skills, incorporating health literacy assessment into the process for patient discharge planning will take time and practice!

HEALTH LITERACY

As Case Managers, you are vital to the success of patients being prepared for discharge and not feeling confused or uncertain when at home.

Having the education and resources to confidently assess patients' health literacy will be a significant step towards our organization and the Lennox and Addington County General Hospital becoming health literate organizations.

Through this focus on Health Literacy, the goal of successful patient transitions from hospital to home will be achieved.

HEALTH LITERACY

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HEALTH LITERACY

Appendix A: Quiz Answers

		TRUE	FALSE
1.	Formally assessing patients' level of health literacy is part the discharge planning process for a patient's transitioning from hospital to home at LACGH.	☐	✓
2.	Our inter RAI assessment tools are able to generate a patient's health literacy score.	☐	✓
3.	Years of schooling are a good measure of health literacy.	☐	✓
4.	Limited health literacy is associated with medication errors, increased health care costs and inadequate knowledge and care for chronic health conditions.	✓	☐
5.	25 % of Canadians aged 16–65 years do not have the health literacy skills required to understand and appreciate their daily health-care needs.	☐	✓
6.	Health Literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.	✓	☐
7.	Teach-back is a technique used to check a patient's understanding of health instructions whereby the health professional providing the discharge instructions will write out the discharge instructions for the patient to take home.	☐	✓
8.	Formal health literacy assessment tools are complex and should be used for patients who have a minimum grade 12 education and have a caregiver/ support person with them when the assessment is being completed.	☐	✓
9.	Knowing patients' health literacy level can mitigate the risk of a patient receiving discharge instructions that are beyond their level of understanding.	✓	☐
10.	Individuals with low health literacy have less knowledge about chronic diseases, poorer mental and physical health, limited use of preventative services, and higher rates of hospital admissions.	✓	☐
11.	Stress or how a patient is feeling can affect their ability to understand and act on health information.	✓	☐
12.	Using a plain language approach in providing discharge instructions can be insulting to patients and the appropriate medical terms should be used; patients can look up the information on their own if they require clarity.	☐	✓
13.	It is best to assess patients' level of health literacy just prior to discharge so that there is less time in between the assessment and the patient going home.	☐	✓