Health literacy is recognized as an integral component of high-quality health care. However, health literacy has been understudied in the context of cancer care delivery and surgical decision making. The goal of this article is to outline a process for implementation of a health literacy screening assessment within the routine practices of an academic breast surgical oncology clinic. The self-reported health literacy assessment is feasible, particularly with integration of the health literacy screen in the electronic health record. The authors’ estimated clinic prevalence of low health literacy was 22%, which has numerous implications for communication and shared decision-making processes.

**AT A GLANCE**
- Patients with low health literacy may be at risk for impaired treatment decision making in busy clinical settings.
- Health literacy assessment and screening is necessary to provide patient-centered interventions.
- Clinical assessment of health literacy and integration within the electronic medical record is feasible in the outpatient surgical oncology setting and has numerous implications for enhanced shared decision making for limited-literacy populations.

**KEYWORDS**
health literacy; breast cancer; surgical oncology; cancer education; quality

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**Health Literacy Assessment**

Feasibility in a breast surgical oncology clinic

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Health literacy is the ability to obtain, appraise, and integrate health-related knowledge, and is an integral component of high-quality health care. In adults, limited health literacy can be a critical indicator of adverse health outcomes, such as diminished health-related knowledge, increased measures of morbidity, poor adherence to medication regimens, and high use of healthcare resources (DeWalt, Berkman, Sheridan, Lohr, & Pignone, 2004). An estimated 20%–36% of all adults in the United States have limited health literacy, and that prevalence rises to closer to 50% among those who are also from a low-income background (Nielsen-Bohman, Panzer, & Kindig, 2004). DeWalt et al. (2004) demonstrated that adult patients with limited health literacy are less likely to participate in shared medical decision making and are more likely to experience shame, low self-esteem, and limited social support.

Although it has been understudied, health literacy is particularly important in the context of patients navigating through cancer treatment and surgical decision-making. Han, Huh, Kim, Kim, and Nguyen (2014) assessed the relationship of health literacy to breast screening and found that patients with limited health literacy do not follow recommended screening practices. Patients with limited health literacy may have difficulty when relying on written clinical materials that often are provided in the context of patient appointment, providing informed consent for treatment and clinical trial participation, and acting on potentially serious complications of their treatment (Cox, Bowmer, & Ring, 2011).

To date, few assessments have been conducted on the prevalence of limited health literacy in specific oncology populations. To the authors’ knowledge, only one previously reported quality report described the measurement of health literacy in a surgical clinic (Komenaka et al., 2014), and that assessment did not include electronic health record (EHR) integration. Surgical oncology clinics, in particular breast oncology clinics, are a particularly important place to implement screening practices for limited health literacy because of the complex decision-making processes that often follow diagnosis and initial consultation. This article describes a health literacy screening implementation process and provides initial clinic-based prevalence estimates of health literacy at a breast surgical oncology practice in an academic medical center.

**Implementation Considerations**

**Instrument Selection**
Numerous health literacy assessments have been developed, validated, and used among chronically ill, well, and diverse populations (Rudd, Jennie, Anderson, & Nath, 2007). The Test of Functional Health Literacy in Adults (TOFHLA) and the Rapid Estimate of Adult Literacy (REALM) are both considered gold standards of health literacy assessments, but
How often do you have someone help...
concept in research terms, and few have operationalized assessment of health literacy in the clinical setting.

Health literacy has been understudied in the context of cancer care delivery and shared decision making for cancer treatments (Morris et al., 2013). Surgical-oncology is a clinical area where assessment of health literacy is feasible, and clinicians are in a unique position to apply best practices for patients with low health literacy using evidence-based oral and written communication strategies (Ballard & Hill, 2016). In addition, this type of assessment can and should be incorporated into the patient’s EHR so other specialty and primary care providers can access this information.

Modalities such as the use of plain language, written communications and drawings that use plain language, and the use of teach-back (where a patient performs return demonstrations or gives a summary of the conversation) are all strategies that can be tailored for patients with low health literacy (Ballard & Hill, 2016). In addition, integration with nurse care coordination and enhanced navigation may be particularly useful for patients with low health literacy (Ballard & Hill, 2016). These tailored measures are critical during times of enhanced stress (e.g., after a new cancer diagnosis) and during times of patient uncertainty (e.g., during shared surgical decision making).

**Conclusion**

The measure and integration of health literacy as a quality assessment strategy has been understudied in cancer care delivery settings. Health literacy assessment and integration in the EHR is feasible and can be incorporated to tailor communication strategies. Health literacy offers a novel point of intervention within a vulnerable patient population.

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