Surgical Outcomes: Shifting the Focus From Measurement to Improvement

To the Editor:

We read with interest the publication of Glance et al., Impact of risk adjustment for socioeconomic status on risk-adjusted surgical readmission rates. This important study examined the association between safety-net hospital (SNH) status and 30-day readmission after major surgery. The authors concluded that differences in surgery readmissions between SNHs and non-SNHs are because of lower socioeconomic status (SES) in SNH hospitals rather than differences in the quality of care provided.

The impact of SES on health status is well established. SES is generally measured in terms of occupation, income, and education and through proxies in the United States such as race/ethnicity, geographic location, access to resources, homelessness, or eligibility for entitlement programs, as was used in the article by Glance et al. These variables are either not malleable at all or modifiable only through profound social change.

If we ultimately want to move beyond a focus on measurement to concrete action reducing health disparities, we need to look at variables that are potentially modifiable, Health literacy (HL) studies have identified literacy as a new variable of interest—one that illuminates the known pathway between both income and education and subsequent health outcomes. Unlike other SES variables, HL introduces factors that are modifiable and that can be enhanced with intervention. HL can be improved through education and through the modification of written and verbal communication. Enhancing the communication skills of professionals who write or present information to the public will reduce the demands of the texts and the talks and make them more accessible.

HL was originally defined as the ability “to obtain, process, and understand the basic health information and services (required) to make appropriate health decisions.” However, research inquiry has been moving beyond a focus on the skills or deficits of individuals and on the written word alone. Emerging definitions now focus on the array of literacy skills that include speaking and listening, reading and writing, and using math and numeric concepts—identified as health numeracy (HN). Over the last ten years, researchers have increasingly included measures of the actual accessibility of health information—the quality of writing and talking including measures of organization, format and display, and the use of everyday language accessible to lay audiences. More recently, research studies are including measures of the facilitating or inhibiting factors of the healthcare organizational environment—materials in use, processes, and normative behaviors that shape the accessibility of health care and services.

The literacy skill level of adults in the United States is well established and is known to be wanting. In 2006, the National Assessment of Adult Literacy reported only about 12% of US adults had a proficient score of HL. Moreover, in 2011, the Program for the International Assessment of Adult Competencies noted that US adults scored below the international average for literacy, numeracy, and problem solving in technology rich environments. This arc of HL was previously highlighted. Despite being inundated with information from healthcare professionals, patients and their caregivers have difficulty with routine self-care tasks such as compliance and adherence to medication regimens and following hospital discharge instructions. These deficiencies are known as risk factors for poor health outcomes. It is the time to readjust the faulty assumptions inherent in the development and dissemination of health information and in the measures of health outcomes. Both the Center for Disease Control and Prevention and Agency for Healthcare Research and Quality have established tools that can not only measure, but also improve or modify health literacy demands, making health information more accessible.

Neither HL nor HN has been thoroughly researched in surgical populations. We submit that surgical outcomes research should consider prioritizing the study of modifiable variables to propel us from being primarily observers of phenomena to being contributors to positive change. By focusing on modifiable factors, we can more effectively facilitate quality improvement in our healthcare system and society.

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REFERENCES


