## Z-Codes: The First Step in Overcoming Barriers to Social Determinants of Health Documentation

Michael J. Luke, MD, Philip V. Scribano, DO, MSCE

From "walked into lamppost" to "struck by duck," the 2015 revision of the *International Classification of Disease* (ICD-10) offered new codes to describe some of the obscurest circumstances for medical documentation. Perhaps less widely recognized, this edition also gave birth to a subset of codes to document problems of undoubtedly higher prevalence: health-related social needs (HRSN). Despite the well-known clinical significance of social determinants of health (SDOH), several studies in adult inpatient literature show that these "Z-codes" are vastly underutilized.<sup>1–5</sup>

In this issue of *Pediatrics*, McQuistion et al<sup>6</sup> compared 2016 and 2019 data from the Kids Inpatient Database to identify differences in use of SDOH Z-codes or related ICD-10 codes recommended by the American Academy of Pediatrics, stratified by patient and hospital characteristics. Similar to adult literature, they found that SDOH code use increased with time but remained underutilized, with the most documentation seen for adolescents, Native Americans, and those with mental health diagnoses and in freestanding children's hospitals (likely given proximity to urban environments).<sup>1</sup>

This study offers a critically important benchmarking approach toward robust, accurate documentation of HRSN. As health systems launch strategies to address SDOH, such as inpatient HRSN screening, electronic health record (EHR) data will be essential to tracking process metrics and mapping interventions to health outcomes. As these interventions are implemented, health systems need sustainable reimbursement strategies to incentivize continued commitment to addressing SDOH; documentation to track this work is an integral step. And, as we forge toward the healthcare quality quintuple aim by prioritizing health equity, the subsequent growth in population health data will quantify disparities and accelerate interventions to improve health outcomes for all patients.<sup>7</sup>

McQuistion et al hypothesized that policy changes in 2018, which permitted more health professionals to use Z-codes, could have led to noteworthy changes in documentation. Unfortunately, the modest increase in SDOH code use from 1.4% in 2016 to 1.9% in 2019 suggests that documentation privileges may not be the most significant barrier to Z-code usage. If we are to expect meaningful advancement, including provider and patient experiences, the human factors contributing to usage are critical. Recent studies exploring caregiver and provider perspectives have elucidated 4 core barriers to SDOH documentation: lack of financial incentives, lack of provider awareness, concern for patient privacy, and limitations in EHR capabilities. <sup>2,8–10</sup>

The lack of financial incentives to address SDOH is a key barrier. With the 2019 National Academy of Science report calling for the integration of social care into healthcare delivery, <sup>11</sup> major regulatory bodies like the Joint Commission, the National Commission for Quality Assurance, and the Center for Medicare and Medicaid Services have released new SDOH requirements for hospitals to include HRSN screening and intervention quality measures and have set standards to drive this initiative forward. <sup>11–13</sup> Although these requirements may not yield immediate

<sup>a</sup>Children's Hospital of Philadelphia, Philadelphia, Pennsylvania and <sup>b</sup>Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

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Address correspondence to Michael J. Luke, MD, Children's Hospital of Philadelphia, 3500 Civic Center Blvd, Philadelphia, PA 19104. E-mail: LukeM1@chop.edu

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financial benefit, aligning incentives to the desired clinical practice will be critical to ensure a means to financially support this transformation of social care integration. Moreover, the use of Z-codes can facilitate population health approaches to improving health outcomes with a resultant cost savings.

Certainly, many providers are unaware of the existence of Z-codes, but, perhaps more important, providers are likely unaware of how HRSN relate to common diagnoses. As McQuistion et al discuss, just as we understand the association between HRSN and mental health conditions, we must similarly build this cognitive bridge of the impact HRSN may have on common pediatric disorders to influence our documentation accordingly. This is where systematic screening for HRSN may accelerate our understanding and more directly incorporate HRSN in our treatment approaches. <sup>14–16</sup>

Although caregivers have supported initiatives, such as HRSN screening, as more efforts are implemented, we must be cognizant of potential unintended consequences on patient privacy. 9,17,18 Caregivers of pediatric patients may have fears about how HRSN documentation could bias their future providers or result in mandatory reporting of identified circumstances to child protective services. Additionally, the advent of the 21st Century Cures Act raises new risks related to the release of information through patient portals, which may reveal disclosures of sensitive information that could cause unintended harms, especially to caregivers ensnared in child custody battles.

Addressing these barriers requires thoughtful, patient-centered use of technology. Leveraging technology for systematic screening that could automate HRSN capture would reduce the need for provider education and additional health-care resources but raises its own privacy concerns. With financial incentives on the horizon, we must ensure our EHR is prepared to navigate these delicate hurdles. This requires EHR innovations that are not only functional for providers but also transparent and trustworthy for caregivers. To achieve effective SDOH documentation, Z-codes are just the beginning. Creating an infrastructure suitable for social care integration requires specific attention and partnership with technology companies to innovate EHRs as we know it, keeping the patient perspective in mind at every step.

## **ABBREVIATION**

SDOH: social determinants of health

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