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TURNING SCIENCE INTO ACTION

The Whole PERSON Health Score: A Patient-Focused Tool to Measure Nonmedical Determinants of Health

The following is a synopsis of "The Whole PERSON Health Score: A Patient-Focused Tool to Measure Nonmedical Determinants of Health" published in August 2022 in the *New England Journal of Medicine (NEJM) Catalyst*.

What is already known on this topic?

Social Determinants of Health (SDOH), which include health behaviors, socioeconomic factors, and the physical environment, contribute to about 80% of clinical outcomes in a community.[1,2] Yet, primary clinical care often overlooks SDOHs, thereby ignoring underlying nonmedical needs of patients and upstream factors that may impact a patient's overall well-being and quality of life. In acknowledging the importance of addressing SDOHs, the Centers for Medicare & Medicaid Services (CMS) issued guidance in 2021 to encourage state health officials to include strategies that address SDOH in Medicaid and the Children's Health Insurance Program to improve health outcomes cost-effectively.[3] Addressing SDOHs within a primary and clinical care environment may uncover nonmedical needs and improve patient engagement, patient satisfaction, adherence to treatment schedules and medication, and reduce health care costs and overuse.[4-8] Nonetheless, programs that address SDOHs are lacking, with reimbursement and identification and measurement of SDOHs cited as the primary causes for the limited number of programs.[9]

What is added by this article?

While existing survey tools to identify and address SDOH factors may identify nonmedical needs, they assume that SDOHs remain static.[10-14] Health care personnel cannot use many of these tools to track changes in SDOHs, limiting patient understanding of their own SDOH status and missing an opportunity to adopt holistic health care models. The Whole PERSON Health Score (WPHS) displays survey results through a color-coded visualization to nudge health care teams and personnel to engage patients in their own care. The simple visualization allows health care personnel to identify gaps in their holistic care, highlight which SDOH domains require attention, and prompts referrals to nonmedical resources to address the respective gaps. Additionally, the WPHS simplifies tracking of SDOHs over time, assesses the impact of staff- or patient-initiated interventions, and supports care-coordination.

The WPHS is a novel approach to measure SDOHs using a 28-question assessment to quantify a person's health in six domains: Physical Health, Emotional Health, Resource Utilization, Socioeconomics, Ownership, and Nutrition and Lifestyle (PERSON). The assessment measures patient needs based on the 6 domains of SDOH and results are color-coded into Green, Yellow, or Red to provide a visual signal of the level of need associated with the domains and is intended to prompt physicians to initiate discussions with patients and make appropriate referrals. This color system was paired with a 26-letter rating system where A–F is green and indicates low need; G–O is yellow and indicates moderate need; and P–Z is red and indicates high need, a trigger that the domain is impacting the patient's health and requires immediate attention.

The WPHS pilot at the Riverside University Health System (RUHS) in the County of Riverside, California found that the WPHS increased the recognition of the nonmedical needs of the patient. The Medical Center at RUHS primarily serves approximately 80,000 patients, the majority of whom have Medicare or Medicaid (Medi-Cal), and identify as racial and ethnic minorities.

The evaluation found that the greatest need was in the Nutrition and Lifestyle domain (15.22% of the patients assessed, but 49.79% of all red-zone triggers), followed by Emotional Health (10.59% of patients, 34.64% of red-zone triggers), Socioeconomics (9.35% of patients, 30.59% of red-zone triggers), and lastly Physical Health domain (1.35% of patients, 4.42% of red-zone triggers). The value of the WPHS in providing care was greatest for the Probationer Care Management team (84.61%), which focuses on the needs of recently released probationers (i.e., a person under county-administered form of correctional supervision), followed by the Behavioral Health integration team (66.67%), the Complex Care Management team (50%), and the Primary Care team (44.82%). Possible benefits included decreased clinic utilization, more intake of preventive care, decreased ED utilization (due to early interventions), and decreased mortality and morbidity.

What are the implications of these findings?

The WPHS was created to support a holistic model of health care that encourages providers to acknowledge and tailor treatment of their patient population based on nonmedical and upstream factors, i.e., SDOHs. The visual and scoring elements of the WPHS nudges health care teams to prioritize nontraditional upstream patient needs, including emotional health, ownership, and SDOHs, and encourages engaging patients in their own care. Where a patient may have previously been deemed "non-compliant", the WPHS instead recognized unaddressed holistic needs. The nature of WPHS as a quantified metric allows for tracking SDOH changes over time, simplifies the

interpretation of a patient's SDOH status, and allows for the comparison and ranking of possible areas needing interventions. Health systems, health plans, and policy makers can use the quantified results to evaluate and prioritize interventions based on their efficacy and cost-effectiveness. Finally, the WPHS may help to recognize and financially quantify the contributions of nonbillable health care providers and stakeholders.[15, 16] As lack of reimbursement is cited as the primary barrier to implementing SDOH-related programs in health care settings, this recognition allows the provider workforce involved in the intervention, who would have otherwise gone unrecognized, to receive due credit and reimbursement based on their efforts within the care team.

Resources

Centers for Disease Control and Prevention
Social Determinants of Health | CDC

Riverside University Health System
RUHS Pilot of The Whole PERSON Health Score

The Gravity Project
Gravity Project (thegravityproject.net)

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Citation

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