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A Perspective on the Measurement of Whole Person Health

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Abstract: There is growing interest in moving away from a reductionistic view of the person and the health services they need to focus on improving the health of the whole person. However, there needs to be agreement about what this focus entails and how to measure its achievement. From this perspective, we offer suggestions for moving the measurement discussion forward. Our key suggestion is to separate the measurement of whole person health (WPH)—that is, the end goal or ultimate outcome we want to improve and/or maintain—from the measurement of WPH determinants—that is, the things that can be intervened upon to maximize WPH. We also offer some next steps toward developing a measure of WPH.

Key Words: whole person health, measurement, determinants of health

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Patients are frustrated by being treated as a cluster of separate body systems with fragmented care.[1,2] At the same time, practitioners are challenged by the complex and interconnected factors that underlie their patients' health problems.[3] As a result, there is growing interest in moving away from a reductionistic view of the person and the health services they need to focus on improving the health of the whole person.[3,4] While there is much enthusiasm for health care models that attend to the needs of the whole person, the evidence base for the effectiveness of these programs still needs to be developed. It is limited by the need for clear definitions and standardized measures of the desired outcome. From this perspective, we propose one idea that can improve the measurement of whole person health (WPH) outcomes and can help move the whole person care field forward. We propose that we separate the measurement of the end goal or outcome we want to improve and/or maintain—that is, WPH—from the measurement of the things that can be intervened upon to maximize WPH—that is, whole person health determinants (WPHDs).

DEFINING WHOLE PERSON HEALTH

The idea of WPH is not new and has been discussed using various terms.[4–6] Here are some more recent conceptualizations of what improving the health of the whole person entails. Note that each mentions multiple dimensions or domains, but the number and labels given these domains vary. The U.S. Veterans Health Administration is promoting whole health and person-centered care by "moving from what's the matter with you to what matters to you" and by embracing the notion that "engaging with the whole person, not just the physical body but the emotional, mental and spiritual aspects as well is critical to healing."[7] The National Center for Complementary and Integrative Health's position is that "we understand WPH to mean supporting the health and well-being of each person across multiple domains—biological, behavioral, social, and environmental…"[3] The U.S. Department of Defense Military Health System developed the Total Force Fitness program which "focuses on a service member's entire health throughout their career, connecting 8 dimensions of fitness"—physical, environmental, medical and dental preventive, nutrition, spiritual, psychological, social, and financial—"to optimize health, performance, and readiness holistically."[8] The National Academies' Committee on Transforming Health Care to Create Whole Health reviewed existing definitions of whole health and developed this "universal" definition: "Whole health is physical, behavioral, spiritual, and socioeconomic well-being as defined by individuals, families, and communities."[5]

There have also been a variety of definitions of whole person care—care that focuses on improving the health of the whole person. A 2018 systematic review of definitions of whole person care noted that "its precise meaning remains ambiguous" and that general practice professional organizations' "definitions vary in the explicit inclusion of spiritual/existential, cultural and ecological

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dimensions."[9] A more recent systematic review gathered clinical approaches for whole person assessment to support whole person care and found that all had "partial alignment" with models of whole person care, "but most did not adequately encompass all aspects."[10]

SEPARATING WHOLE PERSON HEALTH CARE/DETERMINANTS FROM WHOLE PERSON HEALTH

Despite considerable overlap, there remains a great deal of disagreement among leading federal entities and researchers in this field about the domains involved in measuring the health of the whole person. Agreement about a construct's operationalization and domains is essential to developing a viable measurement model. Given the range of terminology used, in this perspective, we use the term WPH to represent the end goal or ultimate outcome—that is, the thing (concept, construct) we want to improve and/or maintain. We use the term WPHD to represent what can be intervened upon to maximize WPH—that is, the targets for WPH care. Separating the interventions or influences (WPHD) from the outcome (WPH)—would benefit the measurement and study of both concepts.

In measurement parlance, we suggest separating the effect or reflective indicators from the causal or formative indicators.[11–13] Effect indicators do not alter or influence an underlying latent variable (here, WPH) but reflect aspects of that construct. Causal indicators (here, WPHD) do not reflect WPH but are likely causes of its changes. This differentiation is important for measuring and developing scales, scores, and indexes. Traditional psychometric approaches to scale development (eg, item response theory, factor analysis, and internal consistency reliability) are only appropriate for effect indicators.

WPH and WPHD also serve different purposes. Dimensions of WPHD guide providers on the range of interventions available to address the needs of the whole person (ie, the targets of whole person care). The measurement of WPH before and after an intervention can be used to determine the effectiveness of the care in improving the health of the whole person.

Both WPH and WPHD are multidimensional. The dimensions or domains of each are still to be determined but differ in content. We propose that WPH consists of the person's self-reported experience of their overall functioning and well-being (eg, across domains such as physical, mental, social, and spiritual). We further propose that although there are certainly family and community influences on WPH to consider, the measurement of WPH should be at the individual level. The dimensions of WPHD are more numerous and complex because they represent all the elements (proximal and distal) that can be intervened upon to improve WPH. WPHD includes primary, secondary, and tertiary determinants of WPH. Therefore, WPHD includes the usual targets of conventional medical and behavioral care (eg, diagnoses and laboratory values), lifestyle factors (eg, diet, exercise, and sleep), and social determinants of health (eg, income, education, and safety[14]).

Numerous authors have noted that social determinants are critically important to improving the health of the whole person,[3–5,15,16] but their improvement is a means to achieving the end of improving WPH. They are WPHD; not a measure of WPH. As we noted previously, it is essential to separate the measurement of whether the health of the whole person has been improved (WPH) from the specification of the determinants of whole health involved (WPHD).

EXAMPLES OF WHOLE PERSON HEALTH AND WHOLE PERSON HEALTH DETERMINANT IN EXISTING MEASURES

We use 2 measures from the literature to illustrate how WPH and WPHD components are included. The first is the Whole Person Health Score.[15] This measure comprises 28 questions across 6 domains: physical health, emotional health, resource utilization, socioeconomics, ownership, and nutrition and lifestyle. Of these domains, only physical and emotional health are measures of self-reported health. Depending on actual item wording almost all the items in the emotional health domain and the functional activity item in the physical health domain could capture data on the person's experience of their health (WPH). The remaining items and domains (eg, blood pressure, outpatient visits, finances, employment, etc) are WPHD. Because the tool is made up of a combination of effect and causal indicators, the authors (appropriately) did not use traditional psychometric methods for its development. Note that their tool indicates whether whole person care has been provided but not whether WPH has improved.

The second measure is the U.S. Department of Veterans Affairs Personal Health Inventory.[17] This measure has 2 parts. The first 3 items ask veterans to rate on a 1–5 scale (not so good to great) their physical well-being, mental/emotional well-being, and life: how is it to live your day-to-day life? It could be argued that these items are all reflections of patients' underlying WPH and psychometric methods could be used with these to generate a WPH scale score to measure whether WPH has improved. However, the second part of the instrument has nine items asking for each on 1–5 scales (low to high) ranging from "where I am now" to "where I want to be." This second part would be useful for clinicians because it provides valuable information on likely WPHD targets for the patient.

NEXT STEPS FOR WHOLE PERSON HEALTH RESEARCH

Important next steps involve summarizing the literature on the topic of WPH and holding stakeholder forums to arrive at a clear conceptual and measurement model for WPH. This will be challenging as in defining the underlying construct of WPH, the relationships between WPH and other concepts such as well-being[18] and other models such as the biopsychosocial model[19] must be addressed. However, without a clear definition of the target outcome (WPH), the effectiveness of whole person care approaches cannot be established. The National Institutes of Health

"Patient-Reported Outcomes Measurement Information System" might offer a good starting point for the development of a measure of WPH because it contains rigorous measurement of many of the physical and mental health-related quality of life domains likely to be included in conceptualizations of WPH and because several summary measures across these domains have already been developed.[20,21]

In summary, much work remains to measure WPH, so that approaches to care, and whether they improve the health of the whole person, can be determined. We offer this proposed disentanglement of WPH (the ultimate desired outcome) from WPHD (its determinants) as one step toward developing the measures required to study these important concepts.

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