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Validation of the Policy Advocacy Engagement Scale for frontline healthcare professionals

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Abstract

Background: Nurses, social workers, and medical residents are ethically mandated to engage in policy advocacy to promote the health and well-being of patients and increase access to care. Yet, no instrument exists to measure their level of engagement in policy advocacy.
Research objective: To describe the development and validation of the Policy Advocacy Engagement Scale, designed to measure frontline healthcare professionals' engagement in policy advocacy with respect to a broad range of issues, including patients' ethical rights, quality of care, culturally competent care, preventive care, affordability/accessibility of care, mental healthcare, and community-based care.
Research design: Cross-sectional data were gathered to estimate the content and construct validity, internal consistency, and test–retest reliability of the Policy Advocacy Engagement Scale.
Participants and context: In all, 97 nurses, 94 social workers, and 104 medical residents (N = 295) were recruited from eight acute-care hospitals in Los Angeles County.
Ethical considerations: Informed consent was obtained via Qualtrics and covered purposes, risks and benefits; voluntary participation; confidentiality; and compensation. Institutional Review Board approval was obtained from the University of Southern California and all hospitals.
Findings: Results supported the validity of the concept and the instrument. In confirmatory factor analysis, seven items loaded onto one component with indices indicating adequate model fit. A Pearson correlation coefficient of .36 supported the scale's test–retest stability. Cronbach's α of .93 indicated strong internal consistency.
Discussion: The Policy Advocacy Engagement Scale demonstrated satisfactory psychometric properties in this initial test. Findings should be considered within the context of the study's limitations, which include a low response rate and limited geographic scope.
Conclusion: The Policy Advocacy Engagement Scale appears to be the first validated scale to measure frontline healthcare professionals' engagement in policy advocacy. With it, researchers can analyze

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variations in professionals' levels of policy advocacy engagement, understand what factors are associated with it, and remedy barriers that might exist to their provision of it.

Keywords
Acute-care hospitals, medical residents, nursing, policy advocacy, scale validation, social work

Introduction

The purpose of this study was to develop and validate a scale to measure the extent of engagement in policy advocacy by nurses, social workers, and medical residents in acute-care hospitals because none other could be located in existing literature. Without a tool to measure policy advocacy by these three groups of frontline healthcare professionals, it is not possible to analyze why variations exist in their levels of policy advocacy engagement, to understand what factors are associated with their involvement in it, nor to remedy the barriers that might exist to their provision of it.

Advocacy is an activity prioritized worldwide to ensure patients' well-being and the highest quality standards of care. In Canada, Stafford et al.[1] point out that advocacy is one of the seven roles mandated by the Canadian Royal College of Physicians and Surgeons. In the United Kingdom, Baldwin[2] identified patient advocacy as one of the nursing's most important contemporary issues and developed a comprehensive model of advocacy for members of that profession. In Australia, Seal[3] identified advocacy as an important facet of nursing's most basic tenet—care of others—and explored the advocacy role among nurses in the advanced care planning process. In Finland, Vaartio et al.[4] argue that advocacy is one of the key concepts of nursing ethics and provide a robust review of the literature on advocacy definitions, activities, and consequences. In Sweden, Josse-Eklund et al.[5] argue that advocacy is at the core of the nurse–patient relationship and is especially important in the care of older patients who are vulnerable.

This study focuses on policy advocacy in hospitals specifically in the United States where the well-being of patients is greatly influenced by an array of federal, state, and local policies; regulatory bodies; and budgets.[5,6] It is also influenced by internal hospital policies related to eligibility, services, personnel, referrals, and discharge.[6] Many theorists and researchers contend that members of vulnerable populations are at heightened risk of experiencing adverse policies in hospitals, including persons of color,[7–11] low-income persons,[7,10,12] immigrants, women (particularly women of color),[13] older persons,[14] youth and young adults with special healthcare needs,[15] persons with disabilities,[16] and persons with chronic diseases.[17,18] Policy advocacy by frontline healthcare professionals is particularly important when considering the number of adverse events that injure patients or lead to fatalities each year,[19] and widespread fragmentation of services.[20]

This study focuses on policy advocacy by members of three groups of healthcare professionals in acute-care hospitals: nurses, social workers, and medical residents. These "frontline healthcare professionals," as we call them, are well positioned by virtue of their daily contact with many patients to observe the effect of specific policies upon patients and to identify policies that adversely affect patient care. Given their various roles in providing both medical and psychosocial care to patients, these professionals are equipped to observe the effect of policies on patients' ethical rights, the quality of their care, the extent their care is culturally appropriate and attentive to any existing mental health conditions, as well as a range of other aspects of their care. Moreover, all three groups are ethically mandated to engage in advocacy (as we describe below). Thus, these frontline healthcare professionals—if bought into their ethical mandate and sufficiently trained and supported to engage in policy advocacy—could serve as a powerful force for the betterment of acute-care provision in general and to vulnerable populations in particular.

Defining policy advocacy

Based on Jansson,[21] policy advocacy was defined as an intervention "to change dysfunctional policies in institutions, communities, and government that may create the need for patient advocacy in the first place. These policies include: statutes, regulations, budgets, organizational mission and culture, eligibility requirements, and organizational policies" (p. 3). Policy advocacy is contrasted with patient advocacy, which Jansson[21] defined as an intervention "to help patients obtain services, rights, and benefits that would (likely) not otherwise be received by them and that would advance their well-being" (p. 3). The distinction between policy advocacy and patient advocacy is made clear by these two definitions: if patient advocates help specific patients, policy advocates seek changes in policies in hospitals, communities and legislatures that will improve the well-being of significant numbers of patients.

Jansson[21] further asserts that policy advocacy has the potential to prevent patient problems in seven categories:

1. Violations of ethical rights
2. Poor quality of services
3. Lack of cultural responsiveness
4. Lack of preventive care
5. Unaffordable and inaccessible care
6. Failure to address patients' mental health problems
7. Failure to provide care linked to patients' households and communities.

We chose to adopt Jansson's[21] definition and theoretical framework as they are the only that could be located that view patients holistically and that encompass a broad range of adverse policies often faced by patients. The seven categories described by Jansson[21] include those discussed in biopsychosocial frameworks,[22] ecological or person-in-environment paradigms,[23] patient rights perspectives,[24,25] and patient-centered models.[26,27] Furthermore, these categories are also acknowledged in health literature that documents negative effects on patients related to the failure of hospitals to emphasize mental healthcare,[28] health prevention,[29] and quality of care.[30] Jansson[21] developed these seven categories from 800 sources that confirmed that specific policies often harm patient outcomes in these categories. Our review of the literature revealed no competing frameworks as comprehensive as Jansson's[21] to select from as the basis for developing an instrument to measure frontline healthcare professionals' engagement in policy advocacy.

The importance of policy advocacy

Physicians,[31–33] nurses,[34,35] and healthcare social workers[21,36] have contended that they and their colleagues have an ethical obligation to engage in advocacy to change policies that hinder patient well-being and promote policies that enhance patient well-being. The preamble of the American Medical Association's[37] Code of Medical Ethics states that physicians should "participate in activities contributing to the improvement of the community and the betterment of public health" (para. 8), whereas Provision 6 of the Code of Ethics of the American Nurses Association[38] mandates members of that profession to "participate in establishing, maintaining, and improving health care environments ... conducive to the provision of quality health care." The Standards for Social Work Practice in Health Care Settings[39] require social workers to "advocate for the needs and interests of clients and client systems in health care, including advocating for larger system change to improve access to care and improved delivery of services" (p. 24). A chapter of the Joint Commission's[40] accreditation standards for hospitals requires hospitals to develop written policies on patient rights and involve patients in care, treatment, and services.

Patient advocacy can improve the quality of decision-making in hospitals as espoused by adherents of participatory management.[41,42] Policy advocacy can further increase the extent to which patient care conforms to the patient-centered model by developing policies and programs that address a broad array of patient problems.[43] Further research is needed to demonstrate it, but it is reasonable to assume that policy advocacy by frontline healthcare professionals could have positive effects on patients and hospitals, such as by improving the healthcare provided to patients, increasing patient satisfaction, and cutting unnecessary costs.

Scant research has measured the extent to which physicians, nurses, and social workers engage in policy advocacy. A survey by Gruen et al.[44] found that more than 90% (more than 1600) of physicians reported that community participation, political involvement, and collective advocacy were important to them; yet, one-third of them had not participated in any of these activities during the previous 3 years. Dodd et al.[34] surveyed acute-care social workers and nurses to ascertain the extent to which they had engaged in ethical activism, that is, the use of policy advocacy to reform hospital policies that impede healthcare professionals' responses to ethical problems experienced by patients, such as seeking written protocols to promote participation by social workers and nurses in ethical deliberations, promoting norms that encourage participation in ethical deliberations, and educating physicians about the role of social workers or nurses in ethical deliberations. Dodd et al.[34] discovered that about half of participating nurses had not engaged in these policy advocacy activities during the prior 6 months; only somewhat higher engagement was detected among social workers.

The purpose of this study was to develop and validate an instrument to measure the extent frontline healthcare professionals engage in policy advocacy. The research team and project stakeholders ultimately seek to gain a better understanding of frontline healthcare professionals' engagement in policy advocacy and to design professional development curricula to enhance their policy advocacy skills in order to remedy a wide range of problems experienced by patients. This necessitated designing and validating an instrument with which to measure frontline healthcare professionals' engagement in policy advocacy as a first step.

Methods

Research environment

The research context/environment for this study was the School of Social Work at the University of Southern California (USC), with support from the Hamovitch Center for Science in the Human Services, and inter-University collaboration with the California State University Northridge's (CSUN) Department of Social Work. The research team consisted of the Principle Investigator (a Professor of Social Work and senior faculty member at the USC School of Social Work, a Co-Investigator who is an Associate Professor at CSUN, the Associate Dean of Research at the USC School of Social Work, a Postdoctoral School at the USC School of Social Work, a Biostatistician at the USC School of Social Work, and a Project Coordinator at the USC School of Social Work.

An expert stakeholder group served in an advisory capacity during all stages of the research process and included the following nine individuals, all of whom are separate from the research team: a social worker who supervised a hospital case management program for 20 years, a breast cancer survivor who successfully lobbied for state legislation to enhance the care of breast cancer patients with dense breast tissue, a physician who pioneered advocacy training for individuals with withdrawal symptoms from substance abuse, a nurse who headed a university-based center on bioethics with expertise in patient advocacy for individuals at end-of-life, a social worker who pioneered advocacy for discharged patients at a major public hospital for 30 years, the head nurse of a major hospital who had been named the nurse of the year by the American Nurses Association and who founded an annual award for nurses who excelled in patient advocacy, an

associate professor of social work with research expertise on advocacy with respect to ethical issues in acute-care hospitals, a clinical associate professor of social work with expertise in advocacy for senior citizens in acute-care hospitals, and a professor of nursing who had conducted extensive research related to advocacy for persons with HIV/AIDS.

Methodological approach

The Policy Advocacy Engagement Scale (Policy-AES) was constructed using an applied model of classical test theory proposed by Nunnally and Bernstein.[45] Nunnally and Bernstein's methods[37] are comprehensive, providing a "road map" for assessing an array of psychometric properties of measurement instruments in the social sciences. Their methods have been used by other researchers to develop and validate instruments related to healthcare advocacy[46,47] and were thus viewed as suitable for this study.

Our approach included two primary stages: instrument development and instrument validation. The development stage included three distinct steps: (1) preliminary planning, (2) generating a draft scale, and (3) refinement of the scale. The validation stage included four steps: (1) data collection, (2) estimation of content validity, (3) estimation of construct validity, and (4) estimation of reliability. We relied on Goodwin's[48] conceptualization of instrument validity as the degree to which the interpretation of the scores of a proposed test is supported by evidence and theory.

Instrument development

Step 1: preliminary planning. With the support of the expert stakeholder group, the research team met in summer 2012 to consult the existing literature on policy advocacy in healthcare settings and discuss the development of a scale to measure frontline healthcare professionals' engagement in policy advocacy. The research team and stakeholder group selected a 6-month time frame to capture the extent of policy advocacy engagement by respondents on grounds that policy advocacy opportunities and issues do not arise on a daily or weekly basis, in contrast to unresolved patient problems that nurses, medical residents, and social workers often see in their daily work.

Step 2: generating a draft scale. The research team initially developed a set of 23 items. They are as follows:

- Seven items that asked respondents to indicate the extent they had engaged in policy advocacy during the previous 6 months with regard to each of the seven categories of patient problems identified by Jansson;[21]
- Seven items that measured the extent respondents had taken specific actions to change policies in their hospital;
- Four items that measured the extent respondents had taken specific actions to change policies in their community; and
- Five items that measured the extent respondents had taken specific actions to change policies in government settings.

The seven hospital-related items were engaging in any form of policy advocacy, helping organize forums on specific policy issues, discussing a hospital policy with a hospital administrator, developing a protocol to improve patient services, seeking greater hospital resources for a specific program, developing a new service program in the hospital, and developing a multiprofessional training program. The four items at the community level were engaging in any form of policy advocacy, participating in community outreach (e.g. health fairs), developing joint programs with health providers in the community, and identifying and working to address community factors that have negative health consequences. The five items at the

government level were engaging in any form of policy advocacy, communicating with professional associations about a policy issue, working with an advocacy group to lobby legislators, seeking government resources for a new program (e.g. securing grant money), and communicating with public officials about unaddressed health problems. All items employed a 5-point frequency scale where $1 = $ never, $2 = $ seldom, $3 = $ sometimes, $4 = $ frequently, and $5 = $ always.

The scale was pared from 23 to 7 items in two phases. Some items were removed during the refinement stage and some during a preliminary statistical analysis; both are described in the next section.

Step 3: refinement of the scale. Three of the nine expert stakeholders were asked to judge whether the 23 items were repetitive, inappropriate or poorly worded, and confusing or irrelevant to the construct. The stakeholders retained the seven items that measured the extent frontline healthcare professionals engaged in policy advocacy with respect to the seven categories of patient problems during the prior 6 months. They retained three items that described policy advocacy in hospitals, but removed four items on the grounds that they are beyond the scope of frontline healthcare professionals' policy advocacy mandate. Stakeholders excluded all of the items that measured policy advocacy in community and government settings on the grounds that frontline healthcare professionals working in hospitals are not mandated to engage in policy advocacy outside of their hospitals. These modifications of the draft Policy-AES yielded a scale with 10 items that measured policy advocacy with respect to the seven categories of patient problems (7 items) and three kinds of policy advocacy in hospitals (3 items).

A preliminary confirmatory factor analysis (available on request) resulted in the removal of the 3 items that describe policy advocacy engagement in respondents' hospitals from the 10-item scale approved by the stakeholders. Thus, the Policy-AES was winnowed to a seven-item instrument that measures the extent of policy advocacy engagement by frontline healthcare professionals in relation to seven categories of patient problems.

Instrument validation

Stage 1: data collection. Institutional Review Board (IRB) approval was obtained from the University of Southern California and eight hospitals in Los Angeles County. An online Qualtrics survey was launched in September 2013. Data collection took place during the succeeding 5 months.

We obtained data from frontline healthcare professionals in eight acute-care hospitals of different types so that idiosyncratic characteristics of specific kinds of hospitals would not bias measurement of frontline healthcare professionals' responses to questions in the online survey. We also selected hospitals in which stakeholders and members of the research team had contacts to allow expeditious IRB approvals. Heads of professional hospital departments (including nursing, medical education, and social work) were contacted by phone by members of the research team who subsequently met with these individuals in person to gain their hospital's participation in the study. The eight participating hospitals included a community-based nonprofit hospital, a university-affiliated nonprofit general hospital, a public children's hospital, a public general hospital, a veterans' hospital, a nonprofit university-affiliated cancer hospital, and two church-affiliated hospitals.

Approximately, 300 respondents were needed to ensure sufficient effect size for statistical analyses, including roughly 100 respondents from each of the three professional groups to enable comparisons among them on the many variables and constructs being measured. The target group consisted of frontline healthcare professionals who had worked for at least 6 months in their hospitals to enhance the likelihood they were familiar with its personnel and policies. The target group also consisted of frontline healthcare professionals who were positioned to serve large numbers of patients rather than those assigned to relatively few patients. For example, medical residents were selected instead of attending and consulting physicians

because residents serve considerable numbers of patients in specific units and wards rather than a caseload of patients for whom they are specifically responsible. Similar to nurses and social workers, medical residents could act as "case finders" as they make rounds in their respective units. Thus, they were in a similar position to nurses and social workers to detect patient problems and devote time to resolving them or changing policies that contribute to them (i.e. engaging in advocacy). The research team did not put any restrictions on medical residents' area of specialty such as their unit or area of specialization. The expert stakeholders of this project agreed with these choices.

Criteria for participation of the sample of frontline healthcare professionals included the following: (1) participant must work full time, part time, or per diem; (2) have worked in their current hospital setting for at least 6 months; and (3) participant must be a nurse, social worker, or medical resident in the acute-care hospital. Medical residents were required to have an MD degree, nurses were required to have a registered nurse (RN) degree, and social workers were required to have a master of social work (MSW) degree. Temporary and student workers were excluded.

The research team obtained the staff rosters of all nurses, social workers, and medical residents at each participating hospital. All social workers were contacted in each participating hospital because only one social work department had 14 or more members. This large social work department was oversampled to obtain participation of roughly 100 social workers. A random number generator was used to generate a pool of nurses and medical residents from staff rosters of the eight hospitals. These individuals were contacted via email and provided with information about the study and a link to the online survey. Informed consent was obtained via electronic signature on Qualtrics and covered the purposes, risks, and benefits of the study; the voluntary nature of participation; participant confidentiality; and information regarding compensation. Participants received US$100 after completing the survey, which contained more than 400 items and took approximately 1 h to complete. This incentive was considered appropriate given the extensive nature of the survey and its necessary time commitment. The study was approved by the IRBs of all participating hospitals and the University of Southern California.

Participants were given 1 month to complete the study once they started the online survey, which they could leave and resume at any point during the month. Response rates varied by site and among the three professions. The research team invited 732 professionals to participate, of whom 40% consented to participate and completed the online survey. Totally, 15 individuals were ineligible for the study and an additional 29 started but did not complete the survey. A full report of the number of social workers, nurses, and medical residents invited to participate in each of the eight hospitals, the number who completed the survey, and the response rate for each profession is available elsewhere.[46] The final sample of 295 participants ensured adequate statistical power for estimating reliability and validity.[49]

Stage 2: estimating content validity. Estimating content validity is a process during which the appropriateness, quality, and representativeness of each item is evaluated to determine the degree to which the items, taken together, constitute an adequate operational definition of a construct.[50,51] A panel of seven experts[i] was asked to rank the items in the scale as (1) *not relevant*, (2) *somewhat relevant*, (3) *relevant*, or (4) *very relevant* to estimate content validity of items, subscales, and overall scale. These seven experts were different from the three experts who reviewed the instrument during the previously discussed refinement stage. Using these ratings, the item-level content validity index (I-CVI) and scale-level content validity index (S-CVI) were assessed.

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[i] Five of these experts were members of the expert stakeholder group and two were recruited from contacts at participating hospitals, because not all stakeholders were available to participate in this stage.

I-CVI reflects the proportion of items that achieved a rating of 3 or 4 by the panel of expert reviewers. Polit et al.[52] proposed criteria that take chance of agreement into account and recommended that when there are seven experts, an I-CVI score above .71 can be considered good and a score above .86 can be considered excellent. We follow this criterion of .71 being the minimally acceptable standard for I-CVI.

Polit et al.[52] further summarized two approaches for computing S-CVI. The first approach defines the S-CVI universal agreement (S-CVI/UA) as the proportion of items that achieve a rating of 3 or 4 by all experts, whereas the second approach involves computing the average of I-CVI across all items (S-CVI/Ave). The S-CVI/UA is overly stringent and difficult to achieve as the number of experts increases. S-CVI/Ave is more acceptable because it inherently embodies information about the performance of each item and avoids the risk of chance disagreement. Thus, we used the S-CVI/Ave approach in this study.

Stage 3: estimating construct validity. Confirmatory factor analysis was performed to test the structure of the scale. One factor was hypothesized pertaining to policy advocacy to address seven categories of patient problems. Goodness-of-fit indexes, including chi-square with degrees of freedom, comparative fit index (CFI), Tucker–Lewis index (TLI), and root mean square error of approximation (RMSEA) were obtained and evaluated. Although the ratio of chi-square to degrees of freedom has been reported in many studies,[47,53] there is no universally agreed-on standard of model fitness. A CFI or TLI > .90 is generally accepted as indicative of good model fit.[53] MacCallum et al.[54] have suggested a RMSEA <.08 indicates mediocre model fit.

Stage 4: estimating reliability. Two types of reliability were assessed: internal consistency and test–retest reliability. Internal consistency indicates the extent to which each item in a measure is correlated with every other item in the measure[55] and was assessed using Cronbach's α.

Test–retest reliability indicates the extent to which a measure is consistent, or stable, over time.[56] Test–retest reliability was assessed using Pearson's correlation coefficient, which was obtained by calculating the correlation between two administrations of the survey to 50 participants. Retest participants were recruited by the project coordinator, who reached out to all original 295 participants via email to seek participation in the repeat questionnaire. The first 50 participants to respond and consent—regardless of professional affiliation—comprised the convenience sample of retest participants.

Results

Participant demographics

A sample of 94 social workers, 97 nurses, and 104 medical residents completed the online survey, constituting a sample size of 295 frontline healthcare professionals. Of them, 207 (70.2%) were women, 135 (45.8%) were Caucasian, 79 (26.8%) were Asian, 39 (13.2%) were Latino or Hispanic, 15 (5.1%) were African American, 9 (3.1%) were Middle Eastern or Arab, and 18 (6.1%) were multiracial or other. The median age of the sample was 33 ($M = 37.5$, standard deviation (SD) = 11.15). Nearly half of the participants (49.2%) had worked in their respective hospitals for less than 5 years; 20% between 5 and 9 years, 14.6% between 10 and 19 years, 10.8% between 20 and 29 years, and 5.4% for more than 30 years.

Content validity

Table 1 displays the results of the content validity analysis. The I-CVI for each of the seven items was greater than or equal to .86 and S-CVI was .93.

Table 1. Item-level and scale-level content validity index for the Policy Advocacy Engagement Scale.

Item	CVI
"During the last 6 months, how often have you engaged in policy advocacy related to"	
Patients' ethical rights may be at risk	1.00
Patients' quality of care may be at risk	1.00
Patients' cultural content of care may be lacking	.86
Patients' preventive care may be lacking	1.00
Patients' affordable or accessible care may be problematic	.86
Patients' care for mental health conditions may be lacking	.86
Patients' community-based care may be lacking	.86
Overall Policy-AES	.93

Policy-AES: Policy Advocacy Engagement Scale; CVI: content validity index.
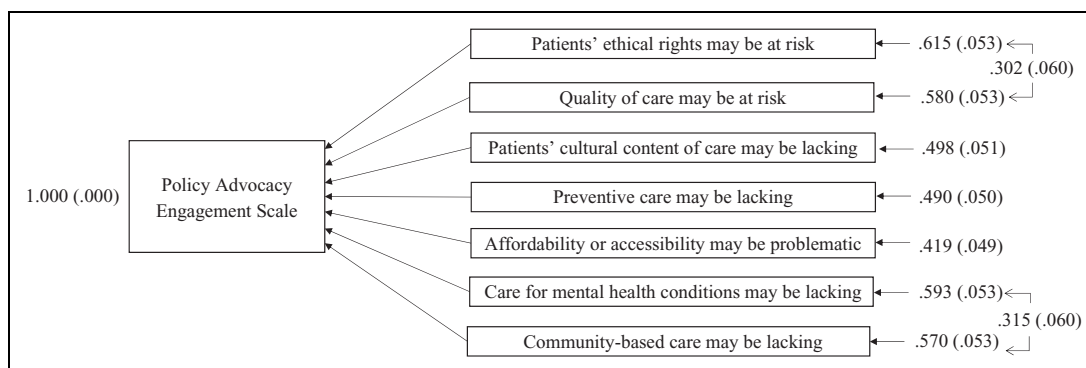

Figure 1. Patient Advocacy Engagement Scale.
Chi-square = 27.207, df = 12, CFI = 0.98, RMSEA = 0.066.

Construct validity

Confirmatory factor analysis was conducted to verify the latent structure of the hypothesized unidimensional model (Figure 1). The chi-square (df), CFI, and RMSEA values of the final model were 27.207 (12), .92, and .07, respectively, indicating adequate fit. Consistent with our hypothesis, the measure captured a single domain of policy advocacy, with seven items loading on the latent factor of policy advocacy engagement. The factor loadings from the confirmatory factor analysis of all seven items ranged from .62 to .76 (Figure 1). There were two correlated errors in the model, as indicated in Figure 1. The first correlated error was between indicators of patients' ethical rights and patients' quality of care (.30, .06). The second correlated error was between indicators of patients' mental healthcare and patients' community-based care (.32, .06).

Reliability

Overall, 50 frontline healthcare professionals completed a repeat questionnaire an average of 41 days after the initial survey (median = 34 days, range = 14–115 days). The test–retest Pearson correlation coefficient for the Policy-AES was .36. The Cronbach's α for the scale was .93.

Discussion

The Policy-AES demonstrated satisfactory psychometric properties in this initial test. Results supported both the validity and reliability of the scale for measuring policy advocacy engagement by nurses, social workers, and medical residents in acute-care settings in the United States with respect to seven categories of patient problems. Confirmatory factor analysis supported the unidimensional structure of the Policy-AES.

The Policy-AES fills a gap in available advocacy measures. It is based on a definition of policy advocacy—"interventions to change dysfunctional policies that may create the need for patient advocacy in the first place"[21] (p. 3)—that clearly connects policies with a range of problems in seven categories that frontline workers are likely to observe in their daily work with patients. The Policy-AES is the first scale to measure frontline healthcare professionals' engagement in policy advocacy in acute-care hospitals with respect to seven categories of patient problems that reflect biopsychosocial, person-in-environment, patient rights, and patient-centered frameworks.[22,23,25–27] It is the only scale to our knowledge that has been validated to measure policy advocacy by nurses, social workers, and medical residents. Given international interest in the topic of healthcare advocacy and worldwide calls for frontline healthcare professionals to engage in it,[1–5] the Policy-AES may prove useful to researchers and healthcare administrators in many countries who wish to ascertain the extent to which nurses, social workers, and medical residents among their ranks are working advocate for policies that improve patient care and healthcare systems overall. Its adoption outside the United States would likely require language translation, and its psychometric properties would need to be tested before general use.

The Policy-AES was developed in a broader research project that examined frontline healthcare professionals' engagement in patient advocacy. When examining descriptive data from the survey, the research team discovered that many respondents indicated that they often engaged in patient advocacy with respect to specific unresolved problems falling in the seven categories of patient problems. By contrast, respondents indicated low levels of policy advocacy engagement.[46] This may suggest a need for policy advocacy training for frontline healthcare professionals. The Policy-AES may provide useful baseline and post-test data to evaluate whether such training increases participants' levels of policy advocacy engagement.

Limitations

The study's findings should be considered in the context of its limitations. The eight participating acute-care hospitals may not be representative of hospitals in Los Angeles County or other regions. Our participant recruitment strategy yielded a low overall response rate and differential response rates by hospital and profession. We surmise this is related to acute-care healthcare professionals' heavy workload. Other researchers have reported similarly low response rates.[34]

The study relied on respondents' self-reports rather than other sources of data, such as medical records and patient reports. Participant confidentiality was protected by this project's recruitment strategy but not their anonymity because they were recruited by name from hospital rosters. Thus, their responses may have been biased. We could not collect retest data within 4 weeks of the survey's completion, which is the optimal time frame for tests of reliability, because of the time it took to recruit participants for retesting.

The Policy-AES was validated only for use with nurses, social workers, and medical residents. Future research should explore its applicability with attending and consulting physicians and other health professions such as occupational therapists, physical therapists, and speech-language pathologists. Further research is also needed to validate this scale, or a modified version, for outpatient settings. The Policy-AES does not measure the duration, content, or effectiveness of policy advocacy engagement. It does not

measure the effect of policy advocacy on patients, healthcare professionals, or hospitals. Future research is needed to remedy these limitations.

It should be noted that policy advocacy is not a panacea. Frontline healthcare professionals are burdened by heavy workloads that make it difficult to engage in policy advocacy at hospital, community, or government levels. Some hospital administrators may view policy advocacy as falling within their exclusive purview. Many health policies are fashioned in government settings in which many interest groups, such as ones representing providers, insurance companies, and pharmaceutical companies, have extraordinary power. Many policies are difficult to change in hospitals due to budget constraints, vested interests, and lack of empirical data about how specific policies affect patients. If frontline healthcare professionals do not engage in policy advocacy, however, they may ignore the ethical imperative to improve patient well-being by modifying dysfunctional policies.

Using the Policy-AES in hospital settings and research

This study validated the Policy-AES, which may prove useful in measuring the extent to which frontline healthcare professionals in acute-care settings engage in policy advocacy. It may provide baseline and post-training scores to evaluate policy advocacy training. It may provide useful content for advocacy training. The Policy-AES may establish policy advocacy norms if it is administered to frontline healthcare professionals in many hospitals. It may facilitate understanding of factors that promote or discourage policy advocacy in specific hospitals if it is administered to large numbers of frontline healthcare professionals in those hospitals and if data are collected about organizational factors hypothesized to influence levels of policy advocacy.

We speculate that increased engagement in policy advocacy among frontline healthcare professionals may benefit patients and hospitals. Hospital administrators may obtain insights from frontline healthcare professionals about why certain patient problems exist in the first place, allowing them to take remedial action. It may increase the extent to which frontline healthcare professionals participate in their hospitals' management that may in turn improve hospital policies and improve staff morale by giving professionals a voice in shaping these policies.[41,42] The Policy-AES may facilitate future research that measures whether policy advocacy engagement yields these kinds of effects.

Conclusion

This study sought to develop and assess the psychometric properties of a scale to measure nurses', social workers', and medical residents' engagement in policy advocacy in acute-care settings with respect to a broad range of problems, including those related to patients' ethical rights, quality of care, culturally competent care, preventive care, affordability and accessibility of care, mental healthcare, and community-based care. Results of validity and reliability analyses demonstrate that the Policy-AES has acceptable psychometric properties. Confirmatory factor analysis supported the unidimensional structure of the Policy-AES; seven items loaded onto one component with indices indicating adequate model fit. In two administrations, a Pearson correlation coefficient of .36 supported the scale's test–retest stability while a Cronbach's α of .93 indicated strong internal consistency. The Policy-AES appears to be the first validated scale to measure health professionals' level of engagement in policy advocacy. It can be used in acute-care settings to test the efficacy of advocacy training curricula designed to enhance the extent health professionals' seek to chance dysfunctional policies within their hospitals that cause or exacerbate a broad range of patients' problems.

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