

A Sisyphean task: Developing and revising public health nursing competencies

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Abstract

Background: Competencies are intended to enhance the public health workforce's skills. Competencies used to evaluate public health nursing (PHN) practice and education have been promoted by several nursing organizations. Having multiple sets of competencies raises questions about redundancies and their usefulness in evaluating PHN, as well as the central question about the value of the competencies themselves.

Methods: A literature review of psychometric evaluation research of the competencies was performed. Qualitative content analyses were conducted of seven documents: Association of Community Health Nursing Educators', 2000 and 2010 essentials; Quad Council Coalition's 2004, 2011, and 2018 competencies; and the American Nurses Association's, 2013 and the 2021 draft of PHN scope and standards of practice with respect to competency definition, conceptual basis, and use of an established taxonomy.

Results: No psychometric evaluations of the competency sets were found. Textual content analysis revealed inconsistent and or missing competency definitions and theoretical frameworks with competencies proliferating over time. Taxonomy analysis identified minimal competencies at higher complexity levels according to Bloom's revised taxonomy.

Conclusions: Analyzed competencies lack reliability and validity testing, making assessment difficult for PHN educators and practitioners. Multiple and competing competencies further erode PHN's visibility, even among public health nurses. With unending revisions of PHN competencies and lack of supporting evidence regarding their effect and their integration into education or practice, recommendations for future efforts are offered.

KEYWORDS

Bloom's revised taxonomy, competency, content analysis, public health nursing

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1 | INTRODUCTION

In Greek mythology, the punishment the gods dealt to Sisyphus for his cheating death was “futile and hopeless labor” (Camus, 1955, p. 119; Hard, 2020). Sisyphus perpetually pushing a rock up the hill only to see it slide back down just short of the crest may remind some of the labor that goes into developing and revising public health nursing (PHN) competencies. From our perspective, pursuit of nursing competencies, including those for PHN education and practice—while perhaps not reaching the futile labor of the misbehaving mortal Sisyphus—represents never quite completing the job at hand. Ongoing efforts to crystalize the essence of PHN practice into a set of accepted competencies seem a Sisyphean task as academics and practitioners offer new competencies, which then undergo multiple revisions with limited evidence that they are used to guide either education or practice (Joyce et al., 2018). The unceasing efforts given to PHN competencies without similar attention to evaluating and weaving them into education and practice requires examination.

In the health professions, it is expected that practitioners have the requisite knowledge and abilities to carry out their expected roles. However, assessment of practitioners, as well as students preparing for practice, can be challenging given the complexity of today's practice arena. Nevertheless, competencies have proliferated across numerous settings, disciplines, and specialties: management (Morse & Warsawsky, 2021), informatics (Ahonen et al., 2018), diabetes care (Shah et al., 2020), global health (Battat et al., 2010), and emergency preparedness (McNeill et al., 2020) represent only a small sample of existing competencies. Within nursing, there are competencies for numerous practice specialties, including PHN.

While competencies have ballooned, the definition and meaning of “competency” remain unsettled. Numerous authors have noted lack of clarity about “competence” and “competency” such that development of competencies happens sans an accepted and shared definition (Axley, 2008; Khan & Ramachandran, 2012; Pijl-Zieber et al., 2014). Uncertain of the exact meaning of “competency”, nursing, nevertheless, has declared competency an “essential” element of the discipline (Axley, 2008). For example, the American Association of Colleges of Nursing (AACN) recently established competency-based education (CBE) as a “foundational element” of the AACN *Essentials* (2021, p. 4).

We posit that rather than focusing on delineating PHN competencies, PHN organizations should spend more of their limited resources demonstrating how PHN improves population health. In this paper, we consider the toil that has gone into creating multiple PHN competencies, including an overview of their history and results of an analysis of PHN competencies in which we compared seven competency sets to Anderson et al.'s (2001) revised version of Bloom's (1956) taxonomy of educational objectives. We conclude with a discussion of how PHN is affected by multiple and expanding competency sets and whether this approach, as a mechanism to guide practice and education and evaluate the competency of students and public health nurses, ought to be re-examined before the specialty continues to push up the metaphorical competency hill.

2 | BACKGROUND

2.1 | Development of U.S. PHN competencies

In U.S. nursing, PHN competencies can be traced to original work done in 1931 by the National Organization for Public Health Nursing (NOPHN) (Abrams, 2004; Campbell et al., 2020). Although NOPHN language is no longer used, according to Abrams, the earlier terms are what is now “described as competencies” (p. 507). Following revisions in 1936 and 1944, there was a lull in the PHN competency movement until Jones et al. (1987) issued a report on PHN on behalf of the U. S. Division of Nursing, Bureau of Health Professions, Health Resources & Services Administration (HRSA). Included in the final report was a set of competencies used to facilitate and guide focus group discussions; missing, however, was a description of how or where the competencies were derived (Jones et al., 1987).

The Institute of Medicine's (IOM) (1988) publication, *The future of public health*, galvanized creation of the Public Health Faculty/Agency Forum [Forum], which circulated “Universal Competencies” intended to improve public health education and practice (King & Erickson, 2006). In 1992, the Council on Linkages (COL), established to implement Forum recommendations, developed an inventory of public health competencies that all public health professionals were to adopt (King & Erickson, 2006). The Quad Council Coalition of Public Health Nursing Organizations (QCC) tailored the COL competencies for PHN as tenets in 1997 (QCC, 1997). Four years later, the COL released its Core Competencies for Public Health Professionals (King & Erickson), followed by the IOM's report, *The future of public health in the 21st century* (Institute of Medicine (2002), which endorsed CBE. By 2004, the QCC had released its first of what would be three sets of PHN practice competencies.

Several other U. S. nursing organizations also worked on PHN-related competencies. In 1990, the Association of Community Health Nursing Educators (ACHNE) released its first set of essentials of baccalaureate nursing education for entry level community health nursing, followed by two additional sets of essentials that included competencies (2000, 2010). The American Nurses Association (ANA) also formed a group to develop guidelines for specialty nursing practice organizations, which promulgated the first set of PHN practice standards in 2007, a second set in 2013 that included competencies, and is in the process of revising a third version, due for release in 2022 (ANA, 2021). In addition to these organizations' efforts, PHN competencies were generated in Canada (Schofield et al., 2018) and Taiwan (Kuo et al., 2021), and by various independent entities including state government (Cross et al., 2006) and individuals (Polivka et al., 2008).

2.2 | Contemporary application of PHN competencies

The centrality of competencies within PHN is illustrated by the large number of publications describing competencies for both education



and practice. PHN core competencies have been applied to a residency program (Larsen et al., 2018), in a service-learning course (Brown, 2017), and in PHN curricula (Carter et al., 2006; Foss et al., 2004; Schoneman et al., 2013). Levin et al. (2013) cross-mapped QCC competencies with four specialties (home health, occupational health, environmental health, and school nursing) to ensure that graduates of the developed curriculum were well-prepared across areas of community-based nursing. QCC competencies have been used to develop an online course for improving public health nurses' population practice (Jake-way et al., 2006), while other researchers explored faculty and public health nurses' knowledge of QCC competencies (Harmon et al., 2020; Issel et al., 2006; Joyce et al., 2018). In the U. S., tools to measure public health nurses' competencies include the Public Health Nursing Competency Instrument (Cross et al., 2006; Reckinger et al., 2013), Kalb et al.'s (2009) evaluation tool for public health nurses working in King County, Washington, and the Public Health Nurse Professional Competency Scale (Lin et al., 2010).

2.3 | Debates around competencies

Disagreement about and critiques of competencies have appeared in the literature since their inception. These discussions generally organize themselves around conceptualization (definitions, theoretical framework, assumptions); measurement and psychometrics; and implementation strategies (Sherbino et al., 2021). Multiple literature reviews and analyses reveal inconsistencies in definitions of competency and its associated terms with respect to medicine (Boyd et al., 2018; Lochnan et al., 2020; Talbot, 2004) and nursing (Axley, 2008; McCreedy, 2007; Pijl-Zieber et al., 2014; Watson et al., 2002). For example, authors of a 2021 Canadian study found that health leaders offered no consistent definition or theoretical basis for competency based medical education (CBME) (Sherbino et al.). This happened despite development of key standard definitions by the International CBME Collaborators (Frank et al., 2010). Axley (2008) noted that determining a nurse's competency should begin with a "clear theoretical definition" (p. 221). Without such a definition, Axley concluded that "ambiguity as to the true meaning of competency will remain open to interpretation" (p. 217) by invested stakeholders, including nurses, educators, employers, regulators, and patients, making competency measurement and evaluation difficult at best.

Not only is an accepted definition elusive, but the many differing competency definitions contribute to another unintended consequence—the inability to precisely measure a competency's effectiveness (Larsen & Reif, 2019; Pijl-Zieber et al., 2014). Additional critiques center on the reliability and validity of methods to determine and evaluate competence (Franklin & Melville, 2015; Kane, 1992) and the position that the "top-down, prescriptive process" of competency assessment fails to provide the "objective" assessment that its proponents' claim it offers (Brooks, 2009, p. 94).

These critiques compelled us to examine PHN competency documents to ask: (a) what psychometric evaluation of the competencies themselves has been conducted? (b) what definition of competency is

used? (c) what is the theoretical or conceptual basis for the competencies? and (d) how do published PHN competencies compare with an established taxonomy? If PHN is committed to quality care and making a difference in population health, then PHN is obligated to think and reflect deeply on the advancement of competencies, and if and how necessary changes can occur.

3 | METHODS

Analysis began by establishing criteria for selecting the competencies, which included: (1) their authors labeled them as competencies; (2) they were published by a nationally recognized organization linked to PHN; and (3) they were frequently cited as the basis for published nursing studies related to competency development or evaluation. Seven sets of competencies developed by three organizations—QCC, ACHNE, ANA—met these criteria. Early sets of standards (ANA, 2007) and essentials (ACHNE, 1990) did not include competencies, so these were not included. Also not included were the 1997 PHN *tenets* as they were not labeled as competencies, as well as a 2013 AACN document on recommended baccalaureate competencies for PHN given its minimal appearance in the literature (AACN, 2013). Competencies promoted by QCC (2004, 2011, 2018) and ANA (2013, 2021) address PHN practice, while those from ACHNE (2000, 2010) address education. When the analysis was conducted, the ANA, 2021 competencies were in draft form, with the final version not due until at least 2022.

The primary method of analysis was content analysis as this is a common research method for analyzing documentary evidence. This form of analysis assists in structuring data analysis and is used to make valid inferences from the data to their context. Data in the form of text can be presented as frequencies; data also can be presented in words and themes (Bengtsson, 2016; Krippendorff, 2019; Polit & Beck, 2021). The first step began by determining if the PHN competencies had undergone psychometric testing. A literature search of the PubMed and CINAHL databases for the past 30 years was accomplished using the search terms: *competenc**, *psychometric*, *evaluation*, *PHN*. We also read each competency set to identify if any evaluation studies of previous competencies were cited by the organizations' authors.

The next step was a textual analysis of each competency set to determine if: (a) a definition of "competency" was included; (b) a theoretical framework supporting the competency set development was identified; and (c) a taxonomy or other structural framework was used to develop the competencies. Since the literature on competency has identified inconsistent and or missing definitions of competency, we decided this second analytic step was important to conduct. Additionally, since the nursing discipline, in general, considers itself to be theoretically grounded and evidence-based (Polit & Beck, 2021), this part of the analysis provided an avenue to examine these foundations in relation to competency development. To conduct the textual analysis, each author independently read each competency set to determine if the three criteria outlined previously were met and completed a table to track results. Following this independent review, we compared the

TABLE 1 Taxonomy for cognitive process dimension

Category	Coding scheme	Definition	Associated cognitive processes (Verbs)
Remember	1	Retrieve relevant knowledge from long-term memory	Recognizing/Identifying Recalling/Retrieving
Understand	2	Construct meaning from instructional messages (oral, written, and graphic communication)	Interpreting/Clarifying/Paraphrasing/Representing/ Translating Exemplifying/Illustrating/Instantiating Classifying/Categorizing/Subsuming Summarizing/Abstracting/Generalizing Inferring/Concluding/Extrapolating/Interpolating/Predicting Comparing/Contrasting/Mapping/Matching Explaining/Constructing models
Apply	3	Carry out or use a procedure in a given situation	Executing/Carrying out Implementing/Using
Analyze	4	Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose	Differentiating/Discriminating/Distinguishing/Focusing/ Selecting Organizing/Finding coherence/Integrating/Outlining/Parsing/ Structuring Attributing/Deconstructing
Evaluate	5	Make judgements based on criteria and standards	Checking/Coordinating/Detecting/Monitoring/Testing Critiquing/Judging
Create	6	Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure	Generating/Hypothesizing Planning/Designing Producing/Constructing

Anderson et al. (2001). A taxonomy for learning, teaching, & assessing: A revision of Bloom's taxonomy of educational objectives. Longman.

completed tables and determined that because all results were consistent, no further analysis was required.

The third step of the content analysis was an examination of the competencies themselves. First, we limited the competencies to those at the generalist level; this level requires both an education (preparation at the baccalaureate) and practice (consisting of "roles, responsibilities, and functions") component (QCC, 2018, p. 5). PHN competencies have been created for both education and practice; as such, we used an existing taxonomy that has been applied to both domains as the analytic framework (Anderson et al., 2001; Tractenberg et al., 2019). Bloom (1956) is credited with creating the first "framework for categorizing educational objectives" (Anderson et al., 2001, p. xxi) with a focus on the cognitive learning domain, including measurable objectives situated within a learning hierarchy or taxonomy. Anderson and colleagues revised Bloom's original *Handbook* to assist educators and others responsible for the "design and implementation of accountability programs, standards-based curriculums, and authentic assessments" (2001, p. xxii), all applicable to nursing education and practice.

Although Bloom's (1956) original taxonomy is one of the most well-known and often used tools by educational professionals, it has been replaced, especially in the health sciences and the current competency-related literature, with the more recent revision by Anderson et al. (2001). Rosenberger and colleagues (2017), for example, conducted a content analysis of the competency verbs used in the American Association of Colleges of Osteopathic Medicine's competencies, and then categorized the verbs according to Anderson et al.'s revised taxonomy. Using Rosenberger et al. as a model with respect to the cognitive pro-

cess dimension, Table 1 presents the revised taxonomy, including definitions for each category, associated verbs used to measure learning outcomes, and the coding scheme employed for analysis purposes.

Anderson et al.'s (2001) taxonomy provided the a priori framework for coding the PHN generalist competency verb statements. A numeric coding scheme was developed with each category assigned a number, from 1–6, reflecting the increasing complexity of the taxonomy (Table 1). To capture as much complexity within the competency statements as possible, we coded competency statements with more than 1 verb according to the highest category. For example, if the statement included "identify" (*remember* category) and "use" (*apply* category), it was coded as 3 to coincide with the higher category of *apply*.

We piloted the coding scheme with a small number of competencies. From this pilot testing, a seventh category was created for competency verb statements that did not "match" with any of the six categories. These no-match statements were labeled "unclassified" to be consistent with Rosenberger et al.'s (2017) analysis as these authors also encountered competencies that did not align with the established taxonomy categories. Each author then independently evaluated all the competency statements ($n = 812$) for the three organizations, coding each verb according to the number assigned to the seven categories. Following independent coding, we compared coding and resolved any discrepancies. Due to the large number of competency verbs falling within the "unclassified" category, we reanalyzed these statements according to Bloom's (1956) original taxonomy, since this was the inspiration for the Anderson et al. (2001) revision. We repeated the coding process for the 463 unclassified competency statements, comparing

**TABLE 2** Textual content analysis

Competency	Definition-Yes/No If yes, include	Theoretical framework- Yes/No If yes, include evidence & framework	Taxonomy used to develop Yes/No If yes, include	Published evaluation of competencies Yes/No quantitative (psychometrics) or qualitative
ACHNE, 2000	No	No	No	No
ACHNE, 2010	No	No	No	No
ANA, 2013	No	No	No	No
ANA, 2021 (Draft)	Yes <i>A competency is an expected level of performance that integrates knowledge, skills, abilities, and judgment.</i>	No	No	No
QCC, 2004	No	No	No	No
QCC, 2011	Yes <i>The individual skills desirable for the delivery of Essential Public Health Services.</i>	No	No	Yes; however, the authors (Larsen & Reif, 2019) revised the competencies, rearranged them, & incorporated less than half in their instrument (41/99).
QCC, 2018	Yes <i>The combination of observable and measurable knowledge, skills, abilities and personal attributes that contribute to enhanced employee performance and ultimately result in organizational success.</i>	No	No	No

them to Bloom's taxonomy: knowledge (lowest level), comprehension, application, analysis, synthesis, and evaluation (highest level).

4 | RESULTS

Content analysis results are presented according to the three steps previously outlined: literature review, textual analysis, and analytic framework analysis.

Step 1: Literature review

A search of CINAHL and PubMed databases of the past 30 years for psychometric evaluations of the seven sets of competencies analyzed revealed one published study of the QCC, 2011 competency set. Larsen and Reif (2019) planned to use this competency set to evaluate the public health abilities of undergraduate nursing students. Needing a measurable instrument to conduct the analysis, the authors revised the QCC competencies and rearranged them to include only measurable items; these changes resulted in the incorporation of less than half (41/99; 41%) of the original competencies in their instrument. Although not specific to the seven competencies reviewed, our search identified three related studies, one by Cross et al. (2006) detailing development of a PHN competency instrument, a later study by Reckinger et al. (2013) describing efforts to test a revised version of

the Cross et al. instrument, and a study by Harmon et al. (2020) in which they referenced the Cross et al. instrument.

At the time Cross et al. (2006) began their efforts, they were unable to locate a valid tool that measured population-based nursing competencies. The authors, therefore, developed the Public Health Nursing Competency Instrument (PHNCI), a tool with 195 measurable PHN activities (Cross et al., 2006). In a 2013 follow-up study, Reckinger and colleagues revised the PHNCI to a final scale of 81 items and six factors and reported psychometric properties, including reliability testing.

Step 2: Textual analysis

Textual content analysis of the competency documents revealed that 57% (4/7) of the competency documents did not provide a definition of "competency." ACHNE did not include a definition in either of the two developed sets. QCC did not provide a definition with its original set published in 2004, but did with the subsequent sets (2011, 2018). ANA provided a definition in the draft of its second set (2021), but none for the first set (2013) (Table 2).

A theoretical or conceptual basis to guide competency development appears in none (0/7) of the competency sets, nor did any (0/7) employ an existing taxonomy to support competency measurement. Although authors of the QCC, 2018 set stated that "an attempt was made to use the revised Bloom's Taxonomy Action Verbs (Anderson et al., 2001) for each competency statement" (p. 3); this "attempt" was not described

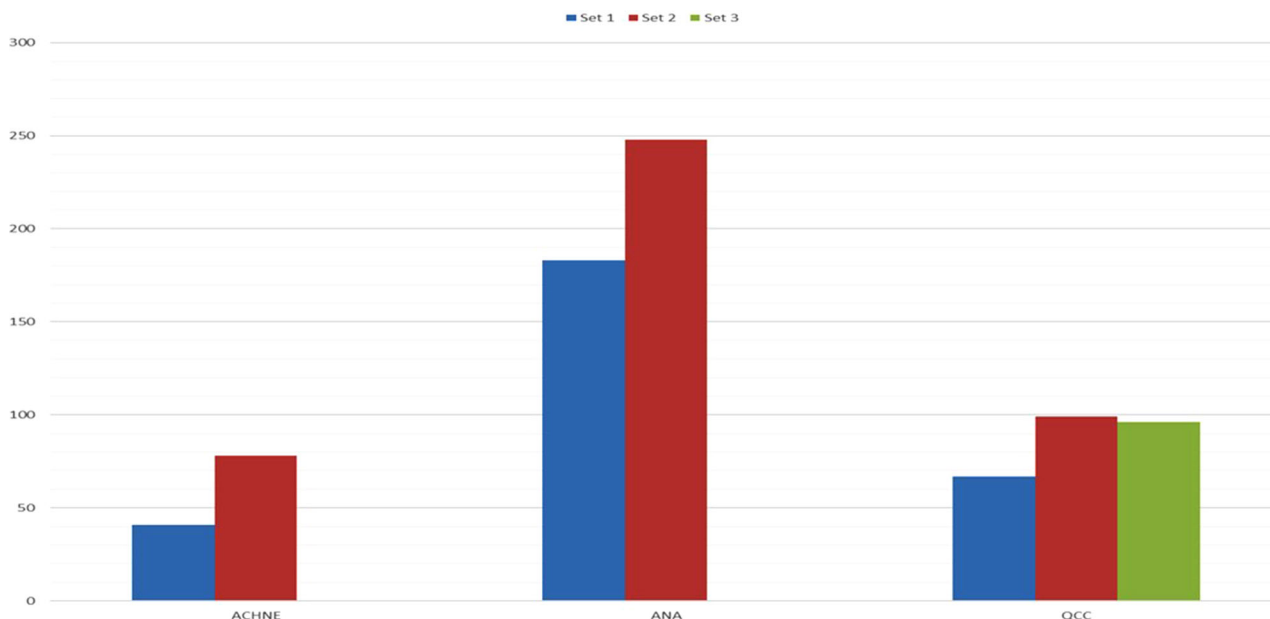


FIGURE 1 PHN competencies total set numbers [Color figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.com)]

TABLE 3 Taxonomy competency counts

Organization	Competency date	Remember	Understand	Apply	Analyze	Evaluate	Create	No Match Unclassified	Total # Competency statements
ACHNE	2000	2	4	7	1	1	3	23	41
ACHNE	2010	6	6	14	1	2	3	46	78
ANA	2013	14	2	28	11	6	2	120	183
ANA	2021 (Draft)	30	5	47	8	8	3	147	248
QCC	2004	9	7	13	0	5	2	31	67
QCC	2011	16	5	17	0	1	0	60	99
QCC	2018	12	10	33	3	0	2	36	96
Totals		89	39	159	23	22	15	463	812

specifically, and the taxonomy was not explicitly incorporated into the document (Table 2).

Step 3: Analytic framework analysis

As seen in Figure 1, there has been an increase in the total number of competencies over time, from a low of 41 competencies created by ACHNE in 2000 to a high of 248 in the 2021 draft ANA competencies.

Although there has been a general increase in the number of competencies over time (Table 3), the complexity of the competencies has been inconsistent in terms of action verbs used.

Counts for the two lowest levels of learning—*remember* and *understand*—were nearly equivalent to the third competency—*apply*, demonstrating increasing complexity. This trend was reversed however, with the next three categories, where a steep decline occurred. Although the *apply* category had the largest number of competencies based upon the Anderson et al. (2001) categories, most PHN competencies were in the *unclassified* category across all organizations' competencies (Figure 2). Analysis using Bloom's (1956) original taxonomy of the 463 unclassified competencies barely changed the complexity

counts, with only 6 (ACHNE, 2010: $n = 1$; ANA, 2013: $n = 1$; ANA, 2021: $n = 4$) unclassified verbs being reclassified (6/463; 0.01%).

Since neither Bloom nor Anderson et al.'s taxonomy was explicitly applied in any of the competency sets, it was not unexpected that *unclassified* would be the largest category. Examples of the verbs used within the *unclassified* category included: "influence others" (QCC, 2018); "appropriately delegates" (ACHNE, 2010); and "abides by the vision" (ANA, 2013).

5 | DISCUSSION

In reviewing the various competency sets published over the past 35 years, there was a notable absence of definitions of key concepts (e.g., competency) and specific theoretical or evidence-based frameworks on which to ground the created competencies. For example, when HRSA contracted with Research Triangle in 1987 to study PHN from practice and education perspectives, no explanation was provided for

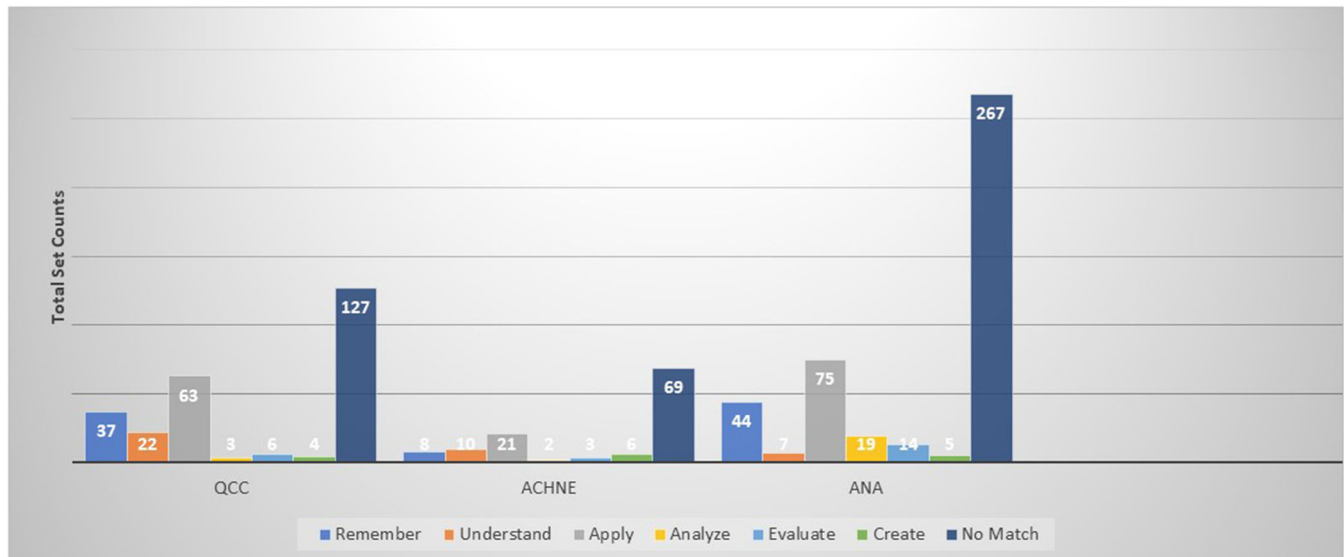


FIGURE 2 PHN competencies & taxonomy for learning [Color figure can be viewed at wileyonlinelibrary.com]

how the competencies were derived (Jones et al., 1987). Our results follow this pattern; the competency sets did not include a theoretical model or a priori framework as the basis for development in the document or reference list, with only one-half including a competency definition.

PHN competencies have multiplied as more organizations developed their own set of competencies; yet adding more competencies has done little to address problems associated with competencies. Besides missing definitions of competency—an issue identified by others (e.g., Pijl-Zieber et al., 2014)—most competencies were not at the higher level of complexity, nor did the organizations supporting the competencies follow existing, evidence-based taxonomies to enhance measurability. Our results are consistent with those of Rosenberger et al. (2017), who also reported that most verbs analyzed in their data set were in the *apply* category, followed by the *understand* and *remember* categories.

Lack of psychometric evaluation of any of the competencies undermines nursing's proclamations that its practice is evidence-based (ANA, 2013; Polit & Beck, 2021). Such evaluations have established validity of competencies for public health professionals (Edgar et al., 2009), as well as identified discrepancies in psychometric properties (Andrew et al., 2008). There remains the ongoing problem of minimal evaluations completed of either the competencies themselves or the tools developed to measure competencies (Pijl-Zieber et al., 2014).

When others have attempted to apply competencies, they encountered similar problems to what we have reported. For example, Larsen and Reif (2019) stated that evaluation instruments not based on the core competencies “leads to confusion”; as such, in order to evaluate how well students reached the 2011 QCC tier 1 core competencies, they revised the competencies to create a usable instrument to “enhance the measurability of the statements...and decrease the overall number of competency statements” (p. 746). The authors moved some competencies to other domains for “better alignment”; changed

and separated verbs to ensure “items only measured one skill”; and added new items (Larsen & Reif, 2019, p. 746). With so many changes to the QCC, 2011 competencies, one could argue that they were evaluating students' learning based on a new set of competencies.

There is minimal published evidence that the growing number of competencies have been integrated into PHN practice or education. Although a 2006 national study found a majority (75%) of surveyed public health nurses were aware of the QCC competencies (Oppewal et al., 2006), later research revealed limited familiarity with QCC competencies by public health nurses and faculty, with 38% and 36% having little to no knowledge of the QCC competencies respectively (Harmon et al., 2020; Joyce et al., 2018). Not only has knowledge of PHN competencies declined, but gaps exist between PHN job descriptions and PHN competencies (Issel et al., 2012; Polivka & Chaudrey, 2014), suggesting that, based on the published literature, limited, if any progress, has been made in integrating and applying PHN competencies into practice settings.

Walker's (1995) comment that the language of competency is so “hopelessly ambiguous [that it] creates a category of ‘performance’ inherently unable to be measured or judged” (p. 90) underscores the difficulty of using competencies to guide PHN education and practice. Walker's concerns are echoed recently by some who question if competencies can ever hope to achieve what their supporters imagine (Foth & Holmes, 2017; O'Connell et al., 2014; Racine & Vandenberg, 2021). It is unclear across the three nursing organizations what each organization hopes the competencies will help them do. Neither ANA nor ACHNE provided explicit “purpose” statements with respect to competencies. The QCC (2018) competency document does provide direct guidance, but guidance that is inconsistent. At one point, the document points to competencies as needed “to guide three levels of practice” (QCC, 2018, p. 3). Later, the document has the following sentence: “competencies are useful to guide and revolutionize practice, education, research, and policy” (QCC, 2018, p. 5). Given that the literature is clear that the

purpose of competencies is to determine the competence of a particular individual, it is hard to see how PHN competencies will be able to “revolutionize” such wide-ranging aspects of the discipline.

If the ultimate goal of the PHN organizations developing competencies is the establishment of a competent student and PHN workforce, it is questionable if this goal can ever be achieved when there are so many competing and parallel competency efforts, with none demonstrated to be measurable. Based on the analysis, it appears to us that PHN organizations have no shared agreement about the purpose of the competencies, differ about which competencies should be used, and continue to proliferate their own sets of competencies. Without organizational agreement, the goal of determining the competency of students and practicing public health nurses will remain out of reach. The many challenges encountered in using competencies raises serious questions about the merits of plodding up and down the competency hill.

6 | RECOMMENDATIONS

Given that competencies are fraught with problems and, based on current, published literature, not adequately incorporated in either PHN practice or education (Harmon et al., 2020), some may feel that continuing to develop and revise PHN competencies amounts to “punishment” (Camus, 1955) and might seek to end using competencies altogether. On the surface, this position seems possible given the challenges currently facing PHN—pandemics, decaying infrastructure, declining numbers of public health nurses—with the specialty having many important issues to address beyond competencies. Ending the use of competencies is extremely unlikely however, given their extensive support within the discipline writ large, particularly in light of AACN’s (2021) recent decision to incorporate competencies into nursing education. Camus wrote, for Sisyphus “his rock is his thing” (p. 123). It seems clear that competencies currently are nursing’s “thing.” As such, we offer suggestions on how nursing, especially PHN, might improve how it understands and deals with its competency “thing.”

First, we suggest that one organization select one competency set and devote energies to its promotion, uptake, and application within PHN practice and education. The Council of Public Health Nursing Organizations (CPHNO) (2021) is a recently formed PHN coalition that subsumed the QCC, and includes ACHNE, the Alliance of Nurses for a Healthy Environment, the National Association for School Nurses, the American Public Health Association-PHN Section, the Rural Nurse Organization, and the Association of Public Health Nurses. Although ANA’s 2+-year effort led to an expanded competency set, the latest draft set appears to compete with two other sets developed by QCC. One could argue that since ANA and QCC focus on practice and ACHNE focuses on education, they are not in fact competing. We contend however, that much as nursing has no unified voice (ANA for practicing nurses, AACN for university nursing education, American Association of Nurse Practitioners for nurse practitioners, etc.), there is no clear voice for PHN with respect to competencies. Missing such a united voice limits opportunities for PHN educators and practitioners’ concerns to be heard beyond their own echo chamber.

It is ironic that although many competency statements include wording that expect students and public health nurses to collaborate—with communities, with stakeholders, with colleagues—the three organizations appear to be competing, revising competencies in parallel, without a clear goal for what these unending revisions will accomplish. It would be beneficial for organizations to collaborate as one, select one set of competencies, and work together to educate practitioners and educators alike about integrating the selected set into their respective domains. Such collaboration could be an important step towards a more unified approach towards competency utilization.

Second, we believe it is important that the overall number of competencies be greatly reduced and that those that are retained follow a standardized framework. Having an inordinate number of competencies makes assessment difficult, if not impossible (Larsen & Reif, 2019). Established principles help assure that the developed competencies can be evaluated. For example, Covert et al. (2019) recommend that each competency include five elements: (1) Focus on the performance of the end product or instructional goal; (2) Reflect what is learned in the instructional program; (3) Be expressed in terms of measurable behavior; (4) Use a standard for judging competence independent of others’ performance; and (5) Inform learners and other stakeholders about what is expected of them (p. 321).

These five elements could form the basis for a revised, single set of PHN competencies. As an example, consider the ANA competency within Resource Utilization Standard 15.9 (2013): the PHN *Assists the population to become informed about the options, costs, risks, and benefits of policies, programs, and services*. As written, it is unclear what policies, programs, and services the PHN should be knowledgeable about or what knowledge would be reflected upon; “assists” is not a measurable behavior making it unclear how the public health nurse would demonstrate its achievement; the public health nurse’s performance could not be independently evaluated as it would need to be judged against the representativeness of specific populations being informed; and it is not clear what the expectations are since the competency is very broad. Reducing the number of sets of competencies to one, reducing the overall number of competencies within that set, and then revising each competency to meet the Covert et al. (2019) framework, would be steps toward creating a manageable, measurable set of competencies.

For some, the reasonable next step would be to propose that the selected competency set undergo psychometric evaluation and testing. Lack of published literature evaluating PHN competencies raises many concerns, not the least of which is the contradiction between the discipline’s claim that education and practice arise from an evidence-based position (Polit & Beck, 2021), while the competencies themselves have not been demonstrated to be psychometrically sound or formatted according to scientifically based taxonomies or measurable frameworks. Without psychometric evaluation, including reliability and validity testing, many would argue that competencies are nothing more than statements to guide practice, rather than measurable outcomes for improving the health of individuals, groups, and populations. Given the literature about the conceptual problems associated with evidence-based practice (Holmes et al., 2006; Mitchell, 1999), we neither endorse nor reject psychometric testing; we do, however, point out that the specialty fails to do what it says is important to do.



Finally, a key aspect of understanding competencies requires being aware of the critiques of the competencies themselves, as well as “the idea behind the concept of competency” (Foth & Holmes, 2017, p. 8). Too often nursing ‘jumps on a passing bandwagon’ without taking into full consideration the ramifications and meanings such action engenders. Although there is inadequate space here to provide a full discussion, concerns raised by those who are critical of competencies center around compartmentalizing nursing practice into discrete parts and the valorization of *doing over thinking* (O’Connell et al., 2014; Racine & Vandenberg, 2021). In the first instance, competencies often operate as blunt tools that inadequately capture the complexity of nursing practice (O’Connell et al., 2014). O’Connell and colleagues offer capability theory as one possible mechanism to reframe competencies, while Walker (1995) and Racine and Vandenberg speak to a praxis-oriented approach. The second area of critique hinges on the notion that competencies focus on skills and techniques, giving little heed to the nursing theories once considered essential to the profession (Foth & Holmes, 2017); theories that, in fact, paved the way for making nursing the recognized profession that it is today (Tobbell, 2018). A thoughtful, but critical examination would bring to light the difficulties associated with competencies.

7 | LIMITATIONS

Study limitations include the possibility that in our search of the pertinent literature, we missed relevant articles, especially with respect to psychometric testing of PHN competencies. Second, we depended on the published literature to identify the use of PHN competencies in practice settings; it could well be that public health nurses are using competencies in practice yet have not published their efforts. This points to an area for further exploration. Third, having made the decision to use Anderson et al.’s (2001) revised taxonomy, we necessarily omitted other potential taxonomy frameworks. These other taxonomies might have altered our results, including identifying fewer no match or unclassified competencies. Along these lines, as we relied on what was presented in the nursing competency documents themselves regarding development, taxonomies may have been used, but were not reported as such. A further limitation is our decision to analyze the draft version of the ANA competencies, assuming there will be few differences between the verbs appearing in the draft and the document’s final version. Finally, although each author independently coded all the competencies and compared discrepancies, some competencies may have been coded incorrectly as the process involves interpretation.

8 | CONCLUSION

The results reported here point toward the enormous effort that has been devoted to developing PHN competencies, without equivalent time and effort given to evaluating and integrating them into practice and education or even acknowledging their limitations. Based on reviewers’ comments on earlier drafts of this paper, we believe our claims about the various “problems” associated with the PHN compe-

tency project will generate vigorous dissent, particularly from those who are strong advocates of having PHN education and practice competencies. However, disagreement and the resulting discourse are to be welcomed. We suggest ensuing discussions take up such questions as: what does the discourse around competencies do for PHN? Or, as one of the manuscript’s reviewers asked us, given the lack of definitive evidence about competencies, why do PHN-affiliated organizations continue to heavily invest in competencies?

For us, questions about PHN competencies are inextricably linked to questions of PHN identity and worth. A recent editorial in this journal (Little, 2021), lamented the general public’s apparent inability to recognize the “critical importance of our [PHN] work” (p. 337); this frustration is nothing new. Consternation over PHN’s worth and identity goes back over a century (Durkee, 1920), with others since that time also concerned about the invisibility of PHN activities (Keleher, 2003; Kelly, 2015; Schaffer et al., 2015). We offer that no amount of “educat[ing] the public about our specialty” is likely to alter the invisibility of PHN (Little, p. 337). Only through demonstrating that public health nurses make a difference in population health outcomes will some semblance of recognition be achieved.

Multiple and competing competencies further erode PHN’s visibility, even among public health nurses (Drevdahl & Canales, 2020). Becoming visible requires commitment to a path that is followed over and over, rather than creating many divergent options. PHN needs to commit to one path, one set of competencies, and then demonstrate how their knowledge, skills, and abilities influence population health outcomes. In an APHA-PHN section listserv discussion about Little’s editorial, one participant raised the question, “What is a public health nurse for?” (S. Padgett, personal communication, July 13, 2021). Figuring out the answer to that question rather than enumerating what public health nurses *do* seems key to the future of PHN. Most of us aspire to engage in work that has merit and meaning; whether the continuing pursuit of PHN competencies constitutes worthwhile “labor” is a decision that PHN organizations and their membership will need to make.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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