Core Competency Model for the Family Planning Public Health Nurse

by

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Abstract

CORE COMPETENCY MODEL FOR THE FAMILY PLANNING PUBLIC HEALTH NURSE

by

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It is important to define competency for both individual and organizational performance. Without defining the competencies that are necessary for a given job, it is not possible to hire, train or evaluate workers with the requisite skills. Although competency models have been developed for the general public health workforce and adapted by various public health specialties, like public health nursing, competencies for the family planning (Title X) public health nurse have not been specified. For this study a competency model was developed through expert consensus using a three stage Delphi Method. Expert consensus was sought using an expert panel of 40 family planning senior administrators, community/public health nursing faculty and seasoned family planning public health nurses. The initial survey was developed from the 2011 Title X Family Planning program priorities as well as commonly offered family planning clinical services. The 32 item survey was distributed electronically via SurveyMonkey®. The study results suggest that the Delphi Method was a successful technique through which to drive consensus amongst a panel of family planning experts. Panelist attrition was low, and participation robust resulting in the final 28 item model. Competencies with at least 75% consensus were included in the model and those competencies were primarily related to education/counseling and administration of medications and contraceptives. Implications of this study relate to education/training, certification and workplace performance.

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CHAPTER 1. INTRODUCTION

Statement of Problem

It is important to define competency for both individual and organizational performance. Without defining the competencies that are necessary for a given job, it is not possible to hire, train or evaluate workers with the requisite skills. Although competency models have been developed for the general public health workforce and adapted by various public health specialties, such as public health nursing, competencies for the family planning (Title X) public health nurse have not been specified.

Public health, broadly defined, is what we, as a society, collectively do, to assure the conditions in which people can be healthy. The "US public health system" is the organized and sustained efforts of the public sector to assure the public's health (IOM, 1988). Nurses make up the largest clinical component of the U.S. governmental public health workforce and it is the competence of this vital professional group on which the success of the public health service depends (ASTHO, 2008; IOM, 2003). However, three important factors challenge the success of our public health workforce. One, there exists a critical shortage of public health nurses (PHN); two, PHNs are increasingly providing care in specialty settings for which they were not trained, and three, rigorous studies examining public health workforce issues are limited by the difficulty in actually defining the public health workforce. (Gebbie and Hwang, 2000; Gebbie, Raziano, & Elliott, 2009; IOM, 2003; May, Phillips, Ferketich, & Verran, 2003; Quad Council, 2007).

Public Health Nurse

There is a critical shortage of public health nurses (ASTHO, 2008; Quad Council, 2007). As described in a 2007 brief published by The Quad Council of the Public Health Nursing Organizations, an alliance of the four national nursing organizations that address PHN issues: the

Association of Community of Health Nurse Educators (ACHNE), the American Nurses Association's Congress on Nursing Practice and Economics (ANA), the American Public Health Association-PHN Section (APHA), and the Association of State and Territorial Directors of Nursing (ASTDN), the magnitude of the current shortage is far worse than experienced in previous years. According to a 2008 publication by the Association of State and Territorial Officials (ASTHO), of all the key public health occupation classifications, nursing continues to see the most dramatic shortages (ASTHO, 2008).

The ASTHO report cited above defines public health nursing as the practice of promoting and protecting the health of populations using knowledge from nursing, social, and public health sciences (2012). However, there is actually no nationally accepted definition for the public health nurse and this lack of definition is one of the challenges in collecting comprehensive public health data and producing health systems research (Gebbie, Raziano & Elliott, 2009). When this term is used, public health nurse, many imagine late 19th century nurses climbing between tenements on the lower east side of Manhattan. Others imagine nurses giving flu shots at a community center. The title "public health nurse" (PHN) describes a registered nurse with educational preparation in both public health and nursing (ASTHO, 2008). There exists no national certification or nationally accepted minimal educational requirements for use of the professional title "public health nurse." Nurses working for publicly funded agencies or who have earned Master's degrees in public health are generally considered to be "public health nurses" as described in the public health professional and academic literature (HRSA, 2005). The term "public health nurse" is also used to define a public health occupational classification for those nurses working in governmentally funded public health

agencies (ASTHO, 2008). For this research the Public Health Nurse (PHN) will be defined as a registered nurse working in a governmentally funded public health agency.

PHNs play very different roles in their respective public health departments, and states hold very different minimum educational qualifications for PHNs. In New York, for example, PHNs must have a baccalaureate degree in nursing (New York Codes, Rules and Regulations, Title 10, §11.41). In California, PHNs must hold public health nursing certification (California Business & Professions Code §2818(c)), based in part on baccalaureate-level coursework in public health nursing (California Code of Regulations, Title 16, §1491). Georgia, New Mexico, Montana and Texas have no minimum educational requirement for PHNs (ASTHO, 2008).

The scope of practice and administrative oversight of the PHN varies a great deal from state to state. In Georgia, since 1989, PHNs who receive additional state-sponsored training can qualify as "expanded role" PHNs and practice under nurse protocols (HRSA, 2005). Nurse protocols allow PHNs to provide significantly more direct patient care with significantly more autonomy than in other states and are overseen, not by the Board of Nursing, but rather by the Department of Public Health (Georgia Department of Public Health, 2011). The Georgia nurse protocol states, "If working in specific settings, RN may perform 'specified medical acts' including, 'ordering dangerous drugs, medical treatments, or diagnostic studies and the dispensing of dangerous drugs in accordance with dispensing procedure and under the authority of a physician's order' (410-11-.03 Use of Nurse Protocols Authorized by O.C.G.A. § 43-34-26.1).

"Expanded" roles for RNs are seen in several states, most are rural and considered "medically underserved". There is no national database listing which states, under which authority, allow for RNs to function in the expanded role. No published studies discussing any

aspect of RN's functioning in the "expanded role" have been found in any academic database. This author is familiar with four southeastern states in addition to Georgia which allow RNs to practice in this "expanded scope": North Carolina, South Carolina, Tennessee and Kentucky (see Appendix A for the state-specific PHN scope of practice legislation). Each state varies in how expansive the RN scope of practice is, what duties are allowed, and under which state authority the RN practice is overseen.

Family Planning

There are fewer PHNs in the US than in previous decades and they are increasingly providing more specialized care than their general education and training typically prepared them to provide; family planning is one of those specialty areas (Gebbie & Hwang, 2000; May, et al., 2003; Quad Council, 2007). Title X Family Planning programs constitute an important component of our public health system (Sonenstein, Punja, & Scarcella, 2004). The Title X of the Public Health Service Act is dedicated solely to providing access to comprehensive family planning services and related preventative health services for individuals, especially underserved communities and adolescents. In 2010 alone, over 5 million women and men accessed Title X funded family planning services through a network of 4,500 community-based clinics that include state and local health departments, tribal organizations, hospitals, university health centers, independent clinics, community health centers, faith-based organizations and other public and private, non-profit organizations. More than half of all Title X funds go to state and local health departments (Fowler, Lloyd, Gabe, Wang & Krieger, 2011).

Title X funded agencies offer a broad range of reproductive health services including contraceptive counseling, provision of contraceptive methods, preventive health services, including patient education and counseling; cervical and breast cancer screening; sexually transmitted disease (STD) and HIV prevention education, testing, and referral; and pregnancy

diagnosis and counseling. By law, Title X funds may not be used in programs where abortions are performed. For many clients, Title X clinics provide their only continuing source of health care and health education. In Fiscal Year 2010, the program received approximately $317.5 million in funding (Fowler et al., 2011).

The public health nurse and family planning.

Identifying exact numbers of PHNs in family planning settings is difficult due to the manner in which Title X data are collected. The Family Planning Annual Report (FPAR) is the only source of annual, uniform reporting by all Title X service grantees. The FPAR provides consistent, national-level data on program users; service providers; utilization of family planning and related preventive health services; and sources of Title X and other program revenue. The Title X Family Planning program, as defined in the FPAR, describes two groups of family planning providers. The first group, "Clinical Service Providers "(CSP), includes physicians, and midlevel providers (nurse practitioners, physician assistants and certified nurse midwives). The FPAR describes the second group of Family Planning Providers as, "other" clinical service providers. The FPAR includes no defining information for this group other than "e.g., registered nurses." Despite the FPAR offering little definitional criteria for this group, these "other" clinical service providers provide a significant amount of clinical care in Title X programs. For example, according to the 2010 FPAR, "other" clinical service providers in Health and Human Service (HHS) Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee), provided services for up to 54% of the reported patient encounters (Fowler, 2011). See Table 1 for distribution of Title X clinical services by CSP, and Table 2 for a description of U.S. Health and Human Service Regions.

Table 1

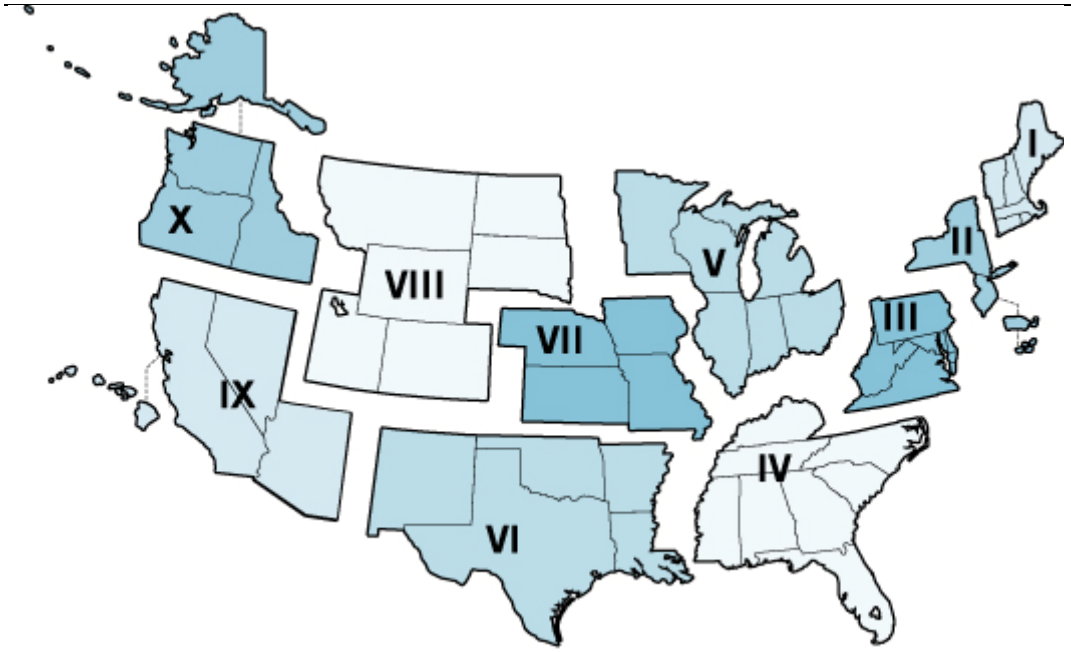
Distribution of Title X Clinical Service Providers (Full Time Equivalent)

	Regions										
	All regions (%)	I (%)	II (%)	III (%)	IV (%)	V (%)	VI (%)	VII (%)	VIII (%)	IX (%)	X (%)
Physician	15	22	25	24	5	11	13	14	5	19	8
PA/NP/CNM	66	78	74	48	42	84	87	83	58	77	92
Other CSP	19	0	1	28	53	5	0	2	37	4	0
Total	100	100	100	100	100	100	100	100	100	100	100

Note. Adapted from Family Planning Annual Report: 2010 National Summary by C.I. Fowler, S.W. Lloyd, J. Gable, J. Wang, K. & Krieger. Copyright 2011 by Research Triangle Park, NC: RTI International.

Table 2

U.S. Department of Health and Human Services Regions



•Region I (Boston, MA)—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

•Region II (New York, NY)—New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands

•Region III (Philadelphia, PA)—Delaware, Washington, DC, Maryland, Pennsylvania, Virginia, and West Virginia

•Region IV (Atlanta, GA)—Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee

•Region V (Chicago, IL)—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin

•Region VI (Dallas, TX)—Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

•Region VII (Kansas City, MO)—Iowa, Kansas, Missouri, and Nebraska

•Region VIII (Denver, CO)—Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming

•Region IX (San Francisco, CA)—Arizona, California, Hawaii, Nevada, American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Republic of the Marshall Islands, and Republic of Palau

•Region X (Seattle, WA)—Alaska, Idaho, Oregon, and Washington

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Note. Adapted from Family Planning Annual Report: 2010 National Summary by C.I. Fowler, S.W. Lloyd, J. Gable, J. Wang, K. & Krieger. Copyright 2011 by Research Triangle Park, NC: RTI International.

PHN Competencies

A competent public health nurse (PHN) workforce is vital to the success of our national public health system (Gebbie and Hwang, 2000). In recent years the practice of competency driven workforce development has become increasingly prevalent in the field of public health (Miner, Childers, Alpern, Cioffi, and Hunt, 2005). The 2002 Institute of Medicine (IOM) report, *Who Will Keep the Public Healthy*, calls for the development of additional competencies to set the standard for both graduate education in public health and continuing education for the public health workforce (IOM, 2002; Miner et al., 2005).

Competencies, as defined in the business and educational literature, and used in the social science literature, are used to develop, deliver and evaluate instruction; identify job responsibilities; and address individual and organizational capacity (Miner et al., 2005). Lucia & Lepsinger (1995) define competency as "a cluster of related knowledge, skills and attitudes that effect a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well accepted standards, and that can be improved via training and development" (pg.5). Thus competencies are measurable human capacities that are required for effective performance, and a competency model is an organizing framework comprising the competencies required for effective performance in a specific job function (Marrelli, Tondora & Hoge, 2005).

In 2001, The Council on Linkages (COL), a coalition of representatives from 19 national organizations committed to academic/practice collaboration to assure a well trained workforce, developed a framework of core competencies for front-line professionals, advanced practitioners and front-line leaders (see Appendix B for a complete list of Council member organizations). The COL emerged in response to the 1988 IOM report entitled, *the Future of Public Health*

which identified the growing need for a well educated and trained public health workforce (Gebbie, Merrill, & Tilson, 2002). The COL competencies represent "a set of skills, knowledge, and attitudes necessary for the broad practice of public health" (COL, 2001, P.1) that transcends specific disciplinary boundaries to define core components for public health practice. The resulting 68 competencies are organized within eight domains (Oppenwal, Lamanna, & Glenn, 2006).

Public health nursing leaders adapted the COL competencies for public health nursing practice; the COL's general public health competencies were considered within the context of public health nursing. In 2004, The Quad Council published their own adaptation of the COL competencies, The Quad Council Competencies for Public Health Nurses (Quad Council, 2004). The Quad Council competencies were not a modification of COL core competencies but rather an adaptation of the COL competencies within the context of PHN work with individuals/families and populations/systems using two (rather than three) job categories and by identifying the level of skill for each category. The document is intended to guide curricula in academic settings, identify continuing education needs, and be used in practice settings for orientation and promotion purposes (Oppenwal et al., 2006).

The 2003 Quad Council competencies for PHNs are an important first step in preparing the future PHN workforce. However, these competencies address very broad public health competencies. As discussed previously, PHNs are increasingly providing specialized care in specialized care settings, like family planning. Due to the variation in education, training, and job function from state to state, it is difficult, from a national perspective, to address the education and training needs of PHNs who provide family planning services. To ensure the health and well

being of some of our country's most vulnerable individuals, there exists a need to identify those core job functions performed by the PHN who work in family planning settings.

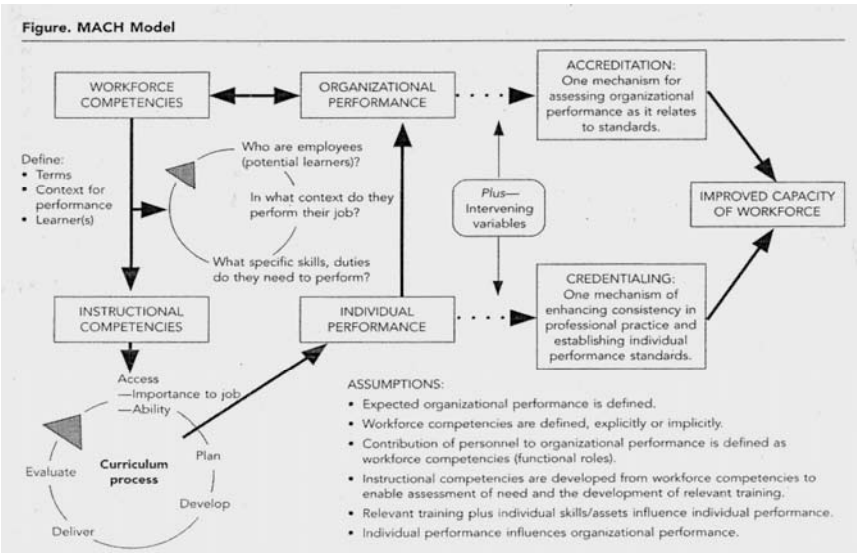
"Core", in this study context, refers to the specific job functions of the FP-PHN which are considered, by experts, to be fundamental to the role of the FP-PHN. The "core" competencies should not reflect state to state variations in practice, for example, those duties which may be performed in the "expanded role", but rather reflect the fundamental functions of the FP-PHN. It is the hope of the author that these "core" competencies will serve as an initial framework to be later developed by specific state and regional family programs to reflect their specific program needs. Once the core job functions, or competencies, are identified, then training programs, quality assurance measures and licensing/accreditation criteria can be developed. These competencies are the cornerstone of safe and effective family planning services.

Conceptual Framework

The MACH Model (Miner, Childers, Alpern, Cioffi, Hunt, 2005) offers a conceptual framework through which to identify priorities and implement comprehensive approaches to competency-driven public health workforce development. The Model, named using the first initials of the five authors' last names, represents a systematic process for identifying and meeting training needs as it puts into context the organizational and instructional theories that underpin workforce preparation and practice. The model was developed at Emory University, Rollins School of Public Health, in response to the 2003 CDC imperative to develop a competent and sustainable workforce (Miner, et al., 2005). The model serves as a logic map that explains the associations among the objectives and challenges within the CDC imperative. The primary outcome for the Model is organizational performance, achieved through a system that targets the needs of individual workers (Miner et al., 2005).

As shown in Figure 1, the MACH model offers a systematic approach in which competency development is the first step toward improved public health workforce capacity. This comprehensive model aids the reader in understanding how identifying competency is vital to ensuring both individual and organizational performance. Those identified competencies inform the training curricula, quality assurance measures, professional credentialing criteria as well as organizational accreditation criteria. Competency is the first step toward a safe and competent workforce.

Figure 1. The MACH Model



Note. Adapted from "The MACH model: From Competencies to Instruction and Performance of the Public Health Workforce," by K.R. Miner, W.K. Childers, M. Alpern, J. Cioffi, & N. Hunt, 2005. Public Health Reports, 120, p. 11. Copyright Association of Schools of Public Health. Printed with permission.

Purpose of the Study

In response to the need for a competent public health workforce, this study developed a core competency model for the PHN providing family planning services. This model was

developed through expert consensus using the Delphi Method. Panel members were identified leaders in public health nursing practice, administration and academia. As operationalized through the MACH Model, identification of these competencies will help inform training curriculum, individual and organizational performance, accreditation/credentialing and ultimately the improved capacity of the public health workforce.

CHAPTER 2. REVIEW OF LITERATURE

Introduction

A review of the competency related literature was performed. A search was performed using the Medline, CINAHL, PsycINFO and SocINDEX and limited to English language articles published from 2001-2011. Search terms, "competency" "development", "identification", "modeling", "clinical", and "public health" were used in numerous combinations resulting in modest results. Articles most relevant to the topic of public health competency will be reviewed here.

The public health competency-related literature reviewed here can be organized into three categories of articles: the process and methods related to identification of specific competencies (8), the process of integrating public health competencies into academic and practice settings (3), and the adoption of previously developed competencies as a foundation for competency assessment tools (6).

The literature concerned with public health competencies discussed below generally describe the identification or implementation of competencies for the general public health workforce; few relate to public health nursing. Of those public health nursing-related studies, only two explored specific populations: neonatal and pediatric. No studies examine competency assessment, development or implementation for public health nurses working in family planning settings.

Competency Identification

One commonality in the literature describing the development of public health competencies is the use of expert opinion and group consensus. Gebbie, Merrill, Hwang, Gupta, Btoush and Wagner (2002) describe their process of identifying public health worker

competencies for emergency preparedness. Researchers crafted an initial draft of competencies through consulting relevant literature and expert opinion. The draft was validated and expanded by a panel of public health experts using a modified Delphi technique. Representatives from public health agencies provided further validation and clarification of the proposed competencies.

Subbarao and colleagues (2008) developed a competency set and educational framework from which educators could devise learning objectives and curricula tailored to fit the needs of all health professionals in a disaster (Subbarao, Lyznicki, Hsu, Gebbie, Markenson, Barzansky, Armstrong, Cassimatis, Coule, Dallas, King, Rubinson, Sattin, Sweinton, Lillibridge, Burkle, Schwartz, and James, 2008). Similar to the seminal work by Gebbie cited above, Subbarao and team began their work with a literature review. A systematic review to identify competencies and other educational training guidance for professionals in disaster health was performed. The initial competency set was reviewed by stakeholder organizations. An 18-member expert working group achieved consensus on the most vital competencies using a three stage modified Delphi.

Calhoun and colleagues also used a three round modified Delphi to achieve expert opinion on a core competency model for the Masters of Public Health Degree (Calhoun, Ramiah, Weist, and Shortell, 2008). The US Centers for Disease Control and Prevention funded the Association of Schools of Public Health's 2006 "Core Competency Model Development Project" to improve public health education through development of a competency-based, outcomes oriented MPH program. A two-phase project was carried out over a two-year period through which expert and workgroup panels identified both discipline-specific and later crosscutting competencies which were to form the foundation for a competency-based MPH program.

Public health nurse leaders used a modified Delphi technique to identify primary care competencies for public health nurses and professors in Brazil (Witt & Almeida, 2008). Two groups of participants were selected for expertise; primary care nurses and public health nurses and faculty. Unlike previously discussed studies, Witt and Almeida used an open-ended initial Delphi round, opposed to a literature search, to inform the initial list of primary care competencies. General and specific primary care public health competencies were identified which were further classified into 10 domains. Researchers concluded that these competencies reflected current Brazilian health policy at the time of publication and hoped competencies would provide a reference for professional practice and education.

The continuing education needs of the public health workforce were addressed in a 2001 study (Allegrante, Moon, Auld, & Gebbie). Researchers used a national consensus panel to examine key issues, training needs and action steps for further workforce development and quality assurance in all public health disciplines. The expert panel was comprised of health educators, nurses, physicians and sanitarians and they identified 8 broad areas of competency which were most needed among public health educators including, advocacy, business management, communication, community health planning and development, computing and technology, cultural competency, evaluation and strategic planning.

Two studies identified healthcare leadership related competencies. Calhoun and colleagues (Calhoun, Vincent, Baker, Butler, Sinioris, & Chen, 2004) describe their use of a modified Delphi technique to develop a benchmark model of core competencies for the functional area of leadership in health management. Similar to previous works cited above, this research team performed a literature search to populate the initial draft of a competency list. Two expert panels, one of health management leaders and the other group comprised of a broader

panel of health managers, were surveyed to elicit opinion ratings, review and comment on the initial draft of competencies. Consensus was achieved identifying a final set of six competency domains.

Calhoun and colleagues (Calhoun, Dollett, Sinioris, Wainio, Butler, Griffin, & Warden, 2008) further developed their initial model discussed above to include not only initial competencies as defined in their 2004 study, but to also include career stage and interprofessional competencies. Similar to their initial study, these researchers used an initial literature search, modified Delphi and expert panel.

Competency Integration

Three articles describe the process of integrating previously developed competency models. Calhoun, Rowney, Eng and Hoffman (2005) describe the challenges and barriers to the integration of previously developed competency models into specific educational and professional development practices. Calhoun and colleagues (2005) describe the process undertaken by the Michigan Center for Public Health Preparedness to integrate competency-based learning and assessment in all its educational and training initiatives. Of note is the description of competency mapping: a process by which curriculum planners ensure integration of previously identified competencies; in this case integration of the Core Public Health Competencies for Emergency Preparedness and Response (Columbia University School of Nursing Center for Health Policy, 2001).

The purpose of the study published by Oppenwal and colleagues (2006) was to survey members of three national public health nurse organizations to assess familiarity and use of the COL "Core Competencies for Public Health Professionals" in practice and academic settings (Council on Linkages Between Academia and Public Health Practice, 2001). Researchers used a

17-item web-based questionnaire including open and closed ended questions. Items were designed to assess factors associated with the adoption and implementation as well as barriers to integration of the "Core Competencies for Public Health Professionals." Results of the study confirmed modest dissemination of competencies in practice and education but further diffusion among PHN was still needed.

Nursing faculty within the College of Nursing, Rush University Medical Center, described their process of integrating the Quad Council's "Public Health Nursing Competencies" (2004) throughout the graduate Public/Community Health Nursing (P/CHN) curriculum (Swider, Levin, Ailey, Breakwell, Cowell, McNaughton, & O'Rourke, 2006). Faculty evaluated all P/CHN specialty courses and documented how the Quad Counsel competencies were addressed. Competency gaps in the curriculum were examined and addressed. Authors concluded that the evaluation process to ensure that graduates of the advanced practice nursing program in P/CHN meet specialty competencies was of overall benefit to the program by strengthening the relevance of the updated curriculum to clinical practice.

Competency as Framework

Several articles describe the use of public health competencies to provide frameworks for both training curriculum and assessment tool development. The Quad Council Public Health Nurse Competencies provided the basis upon which two PHN training programs were developed in the state of Georgia. The first program was developed as an aid to further enhance population-focused practice. After initial piloting to 15 nurses, the online course was ultimately taken by 300 PHNs. Nurses completing the course reported greater experience with and understanding of population health competencies.

The Quad Council Public Health Nurse Competencies were used again in the state of Georgia, this time to develop a childcare health consultant workforce. Childcare health consultants are health professionals who insure the health and safety of children through providing access to information about programs and resources for families. The Quad Council competencies provided the framework for the development of a discipline-specific training program. Interestingly, according to researchers, the program not only helped prepare a new discipline-specific public health workforce in the state of Georgia, but helped increase awareness and acceptance of the Quad Council Competencies.

Cross and colleagues (Cross, Block, Josten, Reckinger, Keller, Strohschein, Rippke & Savik, 2006) describe their experience developing and performing initial testing of their tool, the Public Health Nursing Competency instrument, to measure population-based public health nursing competencies. The researchers chose to design an instrument to document competence before and after a continuing education series. The developers also intended that the instrument be useful in evaluating the competence of public health nurses, the public health nursing workforce as a whole, as well as nursing students. Of note, Cross and colleagues criticize the Quad Council's Public health Nurse Competencies as being insufficiently specific and sensitive to measure public health nursing practice. This is the reason, therefore, that researchers chose to base their instrument, referred to above, on the Minnesota Public Health Inventory Model (Keller, Strohschein, Lia-Hoagberg, & Schaffer, 1998) instead of the Quad Council Competencies. According to the study authors, the Minnesota Public Health Inventory Model was specific enough to measure changes in competence over time (Cross et al., 2006).

A core competency model for use by perinatal and neonatal nurses was based upon the cross cutting competency set developed for emergency preparedness and disaster response

education and training (Center for Health Policy, Columbia University School of Nursing, 2001, Jorgenson, Mendoza & Henderson, 2010) This competency set also allows for the identification and incorporation of measurable objectives that address learning needs of nurses as well as the unique needs of pregnant women, new mothers and infants during public health emergencies and disaster events.

Two studies developed tools to measure self-perceived competence, one for public health nurses in Taiwan and the other for public health workers in Colorado. Nurse researchers in Taiwan developed "The Public Health Nurse's Professional Competency Scale" based upon competencies previously developed by a Taiwanese professional nursing organization (Lin, Hsu, Li, Mathers & Huang, 2010). Initial psychometric testing suggested the scale to be a reliable tool for assessing the competence of public health nurses in Taiwan.

Researchers at the University of Wyoming developed a survey instrument, the Public Health Profile and Training Needs Assessment, to determine the level of self-perceived proficiency of the public health workforce based upon the COL "Core Competencies for Public Health Workforce" (Bartee, Winnail, Olsen, Diaz, & Blevens, 2003). The premise behind this statewide survey-based needs assessment was to determine and assess competencies and then develop appropriate and effective training opportunities for public health employees.

Gaps remain in the competency literature regarding competency development for public health nurses working in family planning settings. Although several studies used expert opinion like the Delphi method to achieve consensus techniques, no studies were found which described competency model development in the public health specialty of family planning. It reasonably follows that since no published studied were found describing competency development for

family planning public health nurses, no studies were found either describing integration or adoption of family planning competencies.

CHAPTER 3. METHODOLOGY

Introduction

A great deal of variation exists in the education, training, roles and responsibilities of PHNs working in family planning settings. Core Public Health Nurse Competencies have recently been developed but as argued previously, due to the increasingly specialized fields in which PHNs are providing care, like family planning, more specific competencies still need to be identified. Consensus by recognized experts is needed in order to develop core PHN family planning (PHN-FP) competencies. Typically, as in the development of the Council on Linkages Core Competencies, meetings are called and committees formed to discuss and agree upon the most important competencies. However, these are expensive and time consuming events. Questionnaire surveys sent by email and collated through services like SurveyMonkey®, offer a more economical method for collecting opinion but do little to bring leaders together in agreement. To achieve agreement and therefore create "buy-in" by leaders who will ultimately use and promote those competencies there needs first to be national consensus on what the competencies should be. As described in the MACH Model, results of this study offer the potential to improve the capacity of the public health workforce through instruction, performance evaluation, credentialing, and accreditation.

Delphi Method

The Delphi method is a consensus method that was first used by the RAND Corporation in the mid 20th Century and has been increasingly used by varied disciplines, especially by the social sciences (McKenna, 1994; Keeney, Hassan & McKenna, 2001). This method uses a series of questionnaires or rounds among content experts to gather and provide information toward the goal of determining the level of agreement over a given issues (Vernon, 2008). Consensus

methods are especially useful research approaches where there is limited or contradictory evidence in a given area (Vernon, 2008). Rounds continue until consensus is achieved. One of its appealing characteristics is that this method, opposed to face to face meetings, does not allow one personality to intentionally or un-intentionally dominate, or influence, the consensus process (this adding to the trustworthiness of the study findings). Another appealing characteristic is that the Delphi allows for inclusion of varied opinions over large geographic areas (economically) by using electronic (or historically postal) communication (Keeney, et al., 2001; Jairath & Weinstein, 1994; Landetta, 2005).

There are three types of Delphis: conventional, real-time and policy (DeVillier et al., 2005; Keeney et al, 2001). The conventional Delphi is the classical forum for prioritizing information. In it a questionnaire is sent out to a group of experts, with a second questionnaire based on the results of the first. Subsequent questionnaires refine the information gauging the support of the participants. The real-time or modified Delphi is a shorter version of the conventional Delphi where the process takes place during the course of a meeting. The policy Delphi is a forum of ideas where the decision-maker is interested in having an informed group present options and supporting evidence rather than having a group reach a decision (DeVillier et al., 2005)

Use of the Delphi method has increased since the mid 1980s (Landetta, 2005). And by 2008, 2500 Delphi-related publications were available in the health- related literature (Vernon, 2009). Its rapid spread has been credited to its ability to provide solutions to problems inherent in the traditional group opinion based interactions which include selective feedback of the relevant information, more extensive consideration due to the repetition, participant review of group responses, flexible methodology and simple execution (Landetta, 2006).

Background

The Delphi method was first used at the RAND Corporation as part of a military defense project, which for security reasons, was published 12 years later (Landeta, 2005). The term Delphi refers to the prophetic process undertaken at the Oracle of Delphi in Ancient Greece, where the resident priestess Pythaeia made predictions in the form of cryptic messages which were then subject to interpretation (Vernon, 2009). Researchers at RAND initially were interested in investigating scientific use of expert opinion, and early studies found group opinion to be superior to that of an individual (Landeta, 2005). After being declassified by the United States military, the Delphi technique spread rapidly, particularly in technological forecasting and used to evaluate complex social problems (Landetta, 2005).

The Delphi method was originally conceived as a group technique used to obtain "the most reliable consensus of opinion among a group of experts by means of a series of intensive questionnaires with controlled opinion feedback" (Keeney, et al., 2001, p.196). Later application eliminated the restriction for the obligatory search for consensus so it may now be defined as an iterative process (Landetta, 2005; Linstone & Turnoff, 1975). Current literature defines the Delphi method as a "technique used to achieve consensus using a forecasting process to determine, predict and explore group attitudes, needs and priorities" (Keeney, et al., 2001, p.196).

Linstone & Turoff, in their 1975 seminal work on this method, describe research objectives which are appropriate for the technique. These objectives are:

- To explore or expose underlying assumptions or information leading to differing judgments

- To seek out information that may generate a consensus on the part of the respondent group
- To correlate informed judgments on a topic spanning a wide range of disciplines
- To educate the respondent group as to the diverse and interrelated aspects of the topic

Characteristics

There exist many variations on the Delphi method, an issue which will be discussed in greater detail below. However, this approach is characterized by a number of factors which will be discussed in this section.

Expert panel.

The Delphi method uses panel of experts. These experts have been defined as "a group of informed individuals" (McKenna, 1994), "specialists in their field" (Goodman, 1987) or "someone who has knowledge about a specific subject" (Davidson, 1997; Lemmer, 1998; Green, Jones, Hughes & Williams, 1999). Other researchers expand their definition of "expert" to be someone who not only possesses relevant knowledge and experience but whose opinion is also respected by colleagues (DeVilliers, DeVilliers & Kent, 2005).

The researchers' task is to define and justify the criteria for expertise of participants in their study (Keeney, Hassan & McKenna, 2006; Vernon, 2009). A homogenous group of specialists is required where a Delphi is used for forecasting, or to consider a specialized or highly technical area (Goodman, 1987; Vernon, 2009). Conversely, where the Delphi is being used to consider a broader policy issue, a heterogeneous group of experts with a broader understanding of the area in question would be preferred (Vernon, 2009).

A great deal of variation in how many, or few, panelist to include in Delphi studies exist. Decisions regarding what the adequate number of panelists should be should be made to ensure a

reasonable representation of expert opinion (Cornick, 2006). The focus for panel size within a qualitative context is not to satisfy quantitative concerns like margins of error or statistical power but to yield a sample which reflects the concerns of the study, in context, for example geographic and professional designation, in equal distribution (Fowler, 2009; Lincoln & Guba, 1985). Published Delphi studies have used as few as four to as many as 100 respondents (Vernon, 2009); however, despite these variations, recommendations about panel size have been made. A panel typically consists of 15 to 30 participants from the same discipline or from five to 10 per category from different professional groupings (Linstone & Turoff, 1975; Moore 1987, DeVilliers, et al., 2005). Panels with greater than 30 members have not been shown to improve results (Fink, 1984).

Controlled feedback with statistical group response.

Another characteristic of the Delphi method is the use of controlled feedback and statistical group response. In the Delphi method, expert panelists are given a survey questionnaire to which they are encouraged to suggest edits to survey items. As responses are received they are collated, statistically summated and shared with respondents. A second questionnaire is developed using the results and feedback from the first survey round (De Villiers et al., 2005;Vernon, 2008). Rounds continue until consensus is achieved (Keeney, et al., 2001).

Conventional Delphi studies have used as many as four rounds and as few as two rounds (Keeney, et al. 2001). One of the basic principles of the method is that rounds should continue until consensus is achieved (Keeney et al., 2006). The challenge with using as many as four rounds is the time required by both researcher and panelists (Keeney, et al., 2001; 2006; Landetta, 2005). Samsion (1998) recommends an adequate response rate for each round of 70%. Another challenge with using multiple rounds is that participant dropout rates increase and a

70% response rate becomes increasing difficult to achieve (Keeney, et al., 2001). When researchers using the Delphi report on response rates, which is not always the case, rates range from 60%-98% (De Villiers, et al., 2005, Gibson, 1998; Gebbie et al., 2002). Typically Delphi studies use between two and three rounds; the largest adjustment in participants agreement levels typically happening between rounds one and two (De Villiers, 2005). Eighty percent of studies indexed in the CINAHL database using the Delphi method, used three rounds (Cornick, 2006; De Villiers et al.; 2005; Gibson, 1998; Misenger, Watkins, & Ossege, 1994; Polivka, Stanley, Gordon, Taulbee, Kieffer, & McCorkle, 2008; Subbarao et al., 2008; Witt & Puntel de Almeida, 2008)

Study time frame is also influenced by the method of the first round, that is, how qualitative or quantitative it is. Traditionally, round one is used as an idea generating strategy to uncover the issues pertaining to the topic under study (Keeney, et al., 2001). However, this more qualitative approach can yield unwieldy amounts of data which can therefore prolong the research process as the researcher analyzes data for themes. This "all inclusive" approach not only prolongs the researchers' time frame but increases the panelists' participation time which is associated with increased dropout rates (Keeney, et al., 2001). To address the issue of how to structure the initial round, when adequate literature exists on a specific topic, researchers recommend developing a more structured initial questionnaire from an in depth literature search (Keeney et al., 2006, DeVilliers, et al., 2005). Another challenge with using both qualitative and quantitative data is that little guidance exists in the literature on how to manage mixed method data in the Delphi (Green, et al., 1999; Keeney, et al., 2001).

Anonymity (Quasi-Anonymity).

Anonymity allows for respondents to present and react to ideas presented, unbiased by the identities of the other participants (Keeney, et al., 2001). Specifically, it frees respondents from perceived pressure from more influential panel members (Couper,1985; Keeney, et al., 2001). Anonymity also allows for truthful and honest responses which increase the validity of the data (Goodman, 1987; Keeney, et al., 2001). However, according to Polit and Hunger (1995), true anonymity is ensured when no one (including the researcher) can link a response to a respondent. Due to the iterative process inherent in the Delphi method, true anonymity cannot be guaranteed, since the researcher can link responses to respondents. McKenna (1994) termed this quasi-anonymity (Keeney, et al., 2006).

That fact that true anonymity cannot be guaranteed with the Delphi method, for some researchers is strength of the method. Goodman suggests that true anonymity may lead to lack of accountability for the views expressed, thus encouraging ill considered judgments (1987). Keeney et al. (2006) write that actually having the panelists know each other can help increase response rates.

Linstone and Turoff (1976) describe the Delphi as a 'participatory democracy'. Ideally, all participants have the freedom and equal opportunity to express their opinions and these responses are given equal weight. For Vernon (2009), this approach allows for views to be expressed without influences arising from perceived rank and status of others. As such, this approach counteracts the potential inequalities inherent in more traditional interactive environments where more outgoing personalities can dominate the process. Consensus is achieved, through the process by which panelists see de-identified responses from other panelists and are encouraged to reconsider their own responses in light of the majority. For Delphi purists,

the process by which panelists reconsider their own responses and change their minds when they see someone else has identified a more relevant issue they perhaps had not considered, is the intended process by which true consensus is achieved.

Consensus.

Consensus forming is the essence of the Delphi technique (De Villiers, et al., 2005). According to the Oxford English Dictionary, Consensus (n.) is defined as an agreement in opinion; a collective unanimous opinion of a number of persons (Oxford English Dictionary, 2012). In the social science literature, consensus can be defined as a gathering around median responses with minimal divergence (DeVilliers, et al., 2005). How to establish consensus, by what definition and by what statistical method continues to be an issue of debate within the Delphi technique.

There are no recognized guidelines on the appropriate level of consensus (Keeney et al., 2006). Many Delphi studies fail to offer a definition for consensus (Powell, 2003). Keeney et al. (2006) write that the level of consensus depends upon the importance of the research topic. Loughlin and Moore (1979) suggest that consensus should be equated with 51% agreement of panelists. Alternatively, Green et al. (1999) recommend consensus at 80% agreement. Keeney et al., (2006) recommend consensus be set at 75% . A review of more recent Delphi studies suggests it is common practice to set consensus between 70%-75% (Cornick, 2006; De Villiers, et al., 2005; Gebbie et al, 2002).

Trustworthiness.

Many Delphi researchers argue that credibility standards for this method should be those used by qualitative methods rather than those used by quantitative researchers (Cornick, 2006).

Lincoln and Guba's criteria for establishing trustworthiness are currently considered the gold standard for qualitative research (Polit & Beck, 2004).

The four aspects of trustworthiness are credibility, transferability, dependability and confirmability. As described by Polit & Beck (2004): Credibility refers to the degree to which data can be believed. Transferability refers to essentially the generalizability of the data: the extent to which the findings can be transferred to other settings or groups. Dependability refers to the stability of data over time and over conditions; this is similar conceptually to the stability and equivalence aspects of reliability assessments in quantitative studies. Confirmability refers to the objectivity or neutrality of the data: the potential for congruence between two or more independent people about the data's accuracy, relevance or meaning.

Design

For this research study, a three round Delphi study was used to identify the Core Competency Model for the Family Planning Public Health Nurse (FP-PHN). After piloting a draft survey of family planning competencies based on current OPA/OFP 2011 program priorities, for clarity, with four family planning/ public health experts, the survey was distributed to a criterion based sample (n=41) of family planning and public health nurse leaders representing all ten HHS regions (panelists) . The panelists were asked to include, include with edits or drop items listed in the family planning competencies. For the first two survey rounds, results were analyzed and feedback presented to panelists both for changes in levels of agreement for item inclusion in the final model, new competency items suggested by panelists, as well as major themes seen in panelist's edits and comments. Round three formed the final competency model. Survey items with less than 75% consensus (agreement) were dropped from the final core competency model. Consensus was set at 75% because it was hypothesized by the

investigator that there would be strong agreement on most of the competency items and that the credibility of the study would be thus strengthened by using a higher consensus level. The study spanned a period of four months from September 2011 through January 2012. Panelists were given two weeks to complete each survey, although an extra week was needed for all three rounds to collect late responses.

Consensus amongst experts (panelists) was defined in this study as 75% agreement to include the survey item (or competency) into the final model. For Rounds I and II, "consensus" was used primarily for reporting purposes. Panelists received feedback on levels of agreement for each item, and given the opportunity to make suggestions for editing survey items. During the third survey round those items which received less than 75% consensus were dropped from the model.

Participant recruitment

Initial inclusion criteria for study participants, or panelists, were for: 1) "administrator" - those individuals who held an administrative title of Director or above in a county or state family planning program, 2) - "academic" held a faculty appointment at the level of Assistant Professor or higher at a school or college of nursing with at least two publications in peer-reviewed journals on topics of public health and or family planning, and 3) "clinician" - had clinical expertise as a family planning public health nurse as evidenced by providing direct patient care in a county or state family planning program for at least five years.

Participant recruitment was undertaken using several approaches. The study investigator's Title X professional networks. Emails were initially sent to Title X Regional Program Consultants (RPD), Title X Regional Training Center Program Directors (RTC), State Family Planning Directors as well as State Nurse Consultants (State employees entrusted to

evaluate and ensure the quality and safety of state provided services). These initial contacts were given a brief description of the study purpose as well as study investigator's phone and email contacts, and asked to share this information with their fellow Title X nurse administrators and clinician colleagues. Those FP-PHNs interested in participating in the study were given the contact information (phone and email) of the study investigator. Study participants who were nurse academics were first identified through a literature search using the CINAHL database for publications in family planning related topics. Nurse academics that fit these inclusion criteria were contacted by email, given a description of study purpose and design and invited to participate in the study.

Recruitment efforts continued in all HHS regions simultaneously until an adequate professional representation was achieved. In some regions, where recruitment efforts were especially challenging, a decision was made in favor of keeping the study moving forward (to avert participant attrition) versus holding up the process in an attempt to capture the proposed participant representation.

The survey was initially pilot tested on a four public health nursing and family planning experts to ensure clarity. Two of these experts were senior administrators in family planning agencies, and two were Professors in Nursing with established research portfolios. The comments of the pilot group were limited to suggestions regarding collecting demographic information. In response to comments, breadth of demographic information was limited to questions directly relevant to study purpose. Comments from the pilot survey directly informed the development of Survey I.

Survey development

Survey items were informed by the Office of Population Affairs/Office of Family Planning (OPA/OFP) 2011 Program Priorities. The 2011 OPA/OFP Program Priorities listed six broadly defined program goals. These program goals emphasized the provision of comprehensive and quality family planning services with priority given for individuals from low income families. Since these goals were so broadly defined, specific program services from local family planning services were used to further inform the survey development. See Appendix C for the list of 2011 Title X Program Priorities.

Using an internet-based web search, a review of commonly offered Title X Family Planning program services was made. After reviewing programs in urban, rural, and suburban settings from each of the 10 Standard Federal Regions, an initial list of specific family planning services was created. This list was compared to the OPA/OFP 2011 Program Priorities to ensure all program goals were represented. The services were then re-written to reflect action oriented competencies as well as categorized into three broadly defined competency areas: assessment/evaluation (14 items), provision/administration of medicines and contraception (4 items), education/counseling (15 questions).

Survey distribution

In the first survey round (Round I), panelists were asked, using a summated scale, distributed electronically using the online program SurveyMonkey®, to decide whether each listed family planning clinical competency (survey item) should either be (a) included "as is" in the core competency model, (b) included with edits (allowing panelists to include suggested edits) or (c) dropped from the list. Responses from the open-text field "include with edits" were reviewed, then items re-written in an attempt to reflect the suggestions and concerns of panelists.

The goal of re-writing the item was to try to achieve the broadest consensus possible on item inclusion, or deletion, from the final competency model. The Round I survey also provided an open-text field for panelists to suggest competencies which initially did not appear on the survey.

The decision to use these three specific scale terms (i.e. as, include with edits or drop) was deliberate; wording of scale items provided clarity for respondents in that terms were directly relevant to the study context. Whereas more traditional summated agreement scale items such as "strongly agree, somewhat agree, somewhat disagree, strongly disagree" are often used in quantitative surveys, for purposes of competency development such language is vague and unconstructive. The goal of competency development is to identify those most vital and necessary competencies, not to measure the strength of agreement that a competency should or should not be included in a scale.

The scale items used in this study also provided a more constructive approach for competency development than more commonly used agreement scales. By offering respondents the opportunity to flag items and suggest edits this scale provided valuable feedback to the researcher. This survey also provided panelists an active voice in the process and thus ongoing commitment to the research process. Furthermore, it moved panelists closer to consensus.

The Round II survey gave panelists the opportunity to re-consider their responses from Round I. The panelists were given Round I results and were again asked to indicate whether survey items should be: (a) included as is (b) included with edits (c) dropped. Since the initial competency list was relatively short (32 competencies), the Round II survey included the same items as Round I with the additional competency recommendations taken from the open-text field option (n=35). The process for data collection and analysis for Round II was the same process as performed in Round I.

The Round III survey included data analysis performed on Round II results. Survey items which received at least 75% support for inclusion comprised the final core PHN-FP competency model (n=28).

Data analysis

Analysis of the survey data was performed in two stages for each round. Once the raw data were collected from all survey respondents, individual responses were used to calculate average group responses by each professional designation and region. The second stage of the analysis involved averaging the group responses to determine the overall level of consensus for each proposed competency. This approach addressed the challenge of maintaining a uniform sample distribution due to risks of both oversampling as well as panelist attrition, by ensuring that each professional designation and region had equal weight.

CHAPTER 4. FINDINGS

This study was an effective method for achieving consensus amongst a panel of family planning experts. It also demonstrated the strength and breath of consensus held by panelists throughout the study on a majority of family planning competencies for the family planning public health nurse.

Initially, 45 participants (panelists) agreed via email communication to participate in the study. However, two weeks later when the initial survey was emailed to those original 45 participants, only 41 participants completed the Round I survey. One panelist dropped out of the study after completing Round I. The panel was comprised primarily of female nurses (n=40) a small majority prepared at the Masters' level (n=18) whose primary function was administrative (n=21). The greatest number of panelists came from region IV (n=14). The panelist demographics in this study were reflective of the current PHN workforce (Quad Council, 2007) (see Tables 3-5 for full panel characteristics).

There was an increase in level of consensus over the course of the study, 31 items showed an improvement in consensus. In addition, 20 items which had initial consensus of less than 90% showed an average increase of 19 percentage points. Participant attrition was much lower than expected. As mentioned, attrition rates are typically high with the multiple rounds used in Delphi techniques. However, in this study, and despite anticipating attrition rates near 70%, only one participant dropped out of the study (Keeney, et al., 2001).

Of the original 32 items from Survey I, 27 showed improvement in consensus, four items did not change and one item decreased by 1% through the three rounds of the study. Three items were added in Round II and all showed improvement from Round II to Round III. The greatest improvements in levels of consensus occurred between Round I and II, an anticipated finding in

the Delphi method. Since there was a trend revealing a "flattening out" of agreement levels after round II, this supports both the trustworthiness of the method and choice to end the study after three rounds. Please see Appendix D for a full description of survey item edits and corresponding changes in consensus.

Table 3

Participant Distribution by Region and Professional Designation

Region	**Professional Designation**			
	Administrator	Clinician	Academic	Total
I (CT,ME,MA,NH,RI,VT)	3	1	1	5
II (NJ,NY,PR,VI)	-	1	-	1
III (DE,DC,MD,PA,VA,WV)	1(3)*	-	-	1(4)
IV(AL,FL,GA,KY,MS,NC,SC,TN)	8 [a]	5	1	14
V (IL,IN,MI,MN,OH,WI)	2	3	-	5
VI (AK,LA,NM,OK,TX)	2(3)*	-	-	2 (3)
VII (IA,KS,MO,NE)	2	-	1	3
VIII (CO,MT,ND,SD,UT,WY)	1	1	-	2
IX (AZ,CA,HI,NV,AS,GU,MP,FM)	1	4	1	6
X (AK,ID,OR,WA)	1(2)*	1	-	2 (4)
Total	**21** (25)*	**16**	**4**	**41** (45)

Note. *Initial recruitment figures: 45 agreed to participate in study but 4 did not complete initial survey.
[a] One dropped out after first survey round

Table 4

Participant Distribution by Degree and Professional Designation

	Professional Designation			
Degree	Administrator	Clinician	Academic	**Total**
Doctorate	3	1	3	7
Masters	9	4	1	14
Bachelors	4	6	-	10
Associates	3	4	-	7
Other	2	1	-	3
Total	**21**	**16**	**4**	**41**

Table 5

Participant Distribution by Age and Professional Designation

	Professional Designation			
Age	Administrator	Clinician	Academic	**Total**
21-35	-	2	-	2
36-45	4	6	-	10
46-55	11	5	2	18
Over 56	6	3	2	11
Total	**21**	**16**	**4**	**41**

Round I

Forty-one participants responded to the Round I survey (see Appendix E for Survey I.) Agreement of at least 75% was achieved for most of the competencies (24 out of 32). Twenty-eight panelists suggested 143 edits. Of those 28 panelists, 54% were administrators, 32% were clinicians and 14% were academics. Complete agreement was achieved on 10 competencies. Those items with the strongest agreement occurred among the competencies relating to education/counseling and the administration of medicines and contraceptives. The greatest disagreement or least amount of consensus was seen for eight competencies primarily relating to Assessment/Evaluation skills (see Tables 6 and 7 for items with strongest and weakest agreement.)

Table 6

Competencies with 100% Agreement after Round I

Competency
Perform/interpret urine pregnancy tests
Provide/administer birth control pills or etonogestrel/ethinyl estradiol vaginal ring
Provide/administer medroxyprogesterone acetate (intramuscular and subcutaneous)
Provide/administer antibiotics
Provide contraceptive counseling
Provide HIV/STD risk and prevention counseling
Provide pregnancy options counseling
Provide preconception counseling
Provide abstinence and pregnancy postponement counseling
Provide HPV natural history, transmission and vaccination counseling

Table 7

Competencies with Weakest Agreement after Round I

Competency	**Agreement Level (%)**
Perform/interpret microscopy for vaginitis/vaginosis/trichomoniasis	35
Perform breast exam	38
Perform pelvic exam	39
Collect cervical cytology specimen (pap smear)	42
Perform male exam	42
Perform postpartum evaluation	45
Provide genetic/infertility counseling and referral	46
Perform/interpret Rh Factor tests (performed in clinic laboratory)	48

Round I Edits

Generally, the items with the greatest number and most specific edits were in the assessment/evaluation section which correlated highly with competency items that had the weakest rates of agreement. Alternatively, the items with the strongest consensus (education/counseling) were the items with the fewest edits.

For the assessment/evaluation competencies, the majority of Round I edits were made in response to suggestions to include language recognizing authority of state oversight on scope of practice. In the first round, language was changed in eight out of 14 questions. The phrase, "…within parameters delineated by agency or permitted by state practice acts" was used to qualify assessment/evaluation competencies.

For competency items relating to providing/administering medications and contraceptives, the Round I edit most frequently made was to include language acknowledging the pre-existence of physician standing orders. Edits were made to all four questions in this

section. In this case the phrase most commonly added was "…when state practice acts support the implementation of standing orders."

Only five items out of 17 were education/counseling-related competencies were edited. Unlike in the previous two sections, these edits primarily involved adding minor caveats like "screening" or "referral." However, it is in this section that the addition of one seemingly minor qualifier, i.e, "basic," significantly improved consensus. The initial competency item was worded: "Provide genetic/infertility counseling and referral"; however, consensus improved significantly after editing the competency to, "Provide basic genetic/infertility counseling and referral". Suggested edits also led to the addition of three new competency items.

- Provide emergency contraception counseling
- Provide substance abuse counseling and referral
- Provide culturally and linguistically appropriate services

Round II

Forty participants responded to the Round II survey and the comments provided in Round I led to improvements in a number of measures of consensus (see Appendix F for Survey II.) Twenty-one panelists suggested 117 edits. Of those 21 panelists the majority of edits were made by administrators. One item (providing basic genetic/infertility counseling) gained consensus (greater than 75% agreement) achieved from the previous round due to the addition of the qualifier, "basic" in the competency description.

Round II Edits

Round II edits, as in Round I, were most numerous for the assessment/evaluation competency items. Edits in this section were primarily focused on language stressing importance

of training and provision of clinical supervision "…with appropriate training/demonstration of competency/clinical supervision."

Round II edits for the four provision/administration of medication and contraceptive items included changing the language for three items. These changes were minor: primarily clarifying that medications were being administered but not prescribed by the FP-PHN, as well as recognizing the importance of written agency protocols (in addition to standing orders) when antibiotics were to be administered. Edits made for the education/counseling items, as with assessment/evaluation items, were focused on training and clinical supervision. Again the phrase, "…with appropriate training/demonstration of competency/clinical supervision" was most often suggested.

Round III

As in previous rounds, panelist comments in Round III led to improved measures of consensus (see Table 8 for change in consensus over course of the study.) Round III, as compared to Round II, also saw improved levels of consensus (see Appendix G for Survey III.) For the 35 item survey, on average there was an 8% increase in consensus on Round III items compared to Round II items. Round III had 14 items with complete agreement; one additional item compared to Round II. Compared to Round II, 34 items in this round had improved levels of consensus of an average 8%, although one item had on average, a decreased level of consensus of 3%.

Compared to Round I, Round III items had, on average, a 12% improvement on levels of consensus. Throughout the course of the study, consensus improved on 31 items, decreased on one item and three items saw no change. Twenty-eight items had consensus greater than 80%; 14 items had complete consensus. On average, there was a 4% increase from Round I items. 18

items increased in consensus on average 12%, 12 items decreased in consensus on average 6 % and two items did not change. Complete agreement /consensus was achieved for three additional competencies compared with Round I results (13 competencies in Round II versus 10 competencies in round one). Twenty-six items had a consensus of greater than 80% ("include as is"). As seen with Round I, the items with the greatest consensus were seen for the competencies relating to education/counseling, administration of contraceptives and medicines.

Trustworthiness

Trustworthiness of the study findings was assured through the study methodology and design. In this study credibility, or the extent to which data can be believed, was secured by the number and expertise of the panelists. The panelists represented three distinct professional groups within public health nursing with demonstrated expertise in family planning as well as representation of all HHS regions.

Transferability, or the ability of study findings to be applied to other settings, was demonstrated in this study. Since the purpose of the study was to identify a competency model applicable to family planning settings nationally, it could be concluded that these findings were in fact, generalizable to family planning settings, nationally.

The dependability of the findings, whether findings could be repeated in other studies were dependent upon the consistency of the Title X program priorities: as clinical services change over time, the need for repeated studies using this same design will be necessary. Also, as the panel of participants change, so will the interests and opinions of the group thus the results of future studies.

Confirmability, the ability to ensure data has come from an identifiable source, was demonstrated by the iterative study design. Results from each round were summated and shared

with study participants and their feedback on findings was encouraged. A constant dialogue of data between researcher and participant was maintained throughout the study.

Table 8

Change in Consensus over Course of Study

Competency	Survey I (%)	Δ I to II	Survey II (%)	Δ II to III	Survey III (%)	Total Change in Consensus * (%)
Perform/interpret microscopy etc.	35	15	50	8	59	23
Perform clinical breast exam etc.	38	22	59	2	62	24
Perform pelvic exam etc.	39	11	49	8	57	18
Collect cervical cytology etc.	42	12	54	9	62	20
Perform male genital exam etc.	42	15	58	2	59	17
Perform limited postpartum evaluation etc.	45	4	49	21	70	25
Provide information on basic genetic/infertility etc.	46	36	81	11	93	47
Perform/interpret Rh Factor tests etc.	48	6	53	19	72	24
Provide/administer (not prescribe) antibiotics etc.	74	21	95	5	100	26
Perform health history etc.	75	21	96	4	100	25
Provide basic substance abuse etc.	NA	NA	76	11	87	11
Perform/interpret hematocrit etc.	80	8	88	11	98	19
Provide self breast/testicular exam etc.	80	-2	78	19	96	16
Provide/administer (not prescribe) birth control pills etc.	81	9	90	10	100	19
Provide tobacco cessation counseling etc.	84	5	89	11	99	16
Screen for child abuse etc.	84	6	90	5	95	11
Provide intimate partner violence (IPV) etc.	87	3	90	5	95	8
Provide basic prenatal care etc.	87	11	98	-3	95	8
Provide/administer medroxyprogesterone etc.	88	2	91	9	100	12
Collect blood specimens etc.	89	0	88	1	89	0
Provide basic preconception counseling etc.	90	0	90	10	100	10
Provide culturally and linguistically appropriate services.	NA	NA	90	3	93	3
Provide Reproductive Life Planning (RLP) etc.	91	-4	88	8	95	4
Give intramuscular and subcutaneous injections etc.	91	9	100	0	100	9
Provide Natural Family Planning (NFP) counseling etc.	93	-3	90	3	93	0
Provide abstinence and pregnancy postponement etc.	94	-4	90	10	100	6
Collect urine specimens.	95	-7	88	6	94	-1
Provide emergency contraception counseling etc.	NA	NA	95	5	100	5
Provide contraceptive counseling etc.	98	-5	93	7	100	2
Provide pregnancy options counseling etc.	98	-10	88	12	100	2
Collect and interpret vital signs etc.	98	-3	95	5	100	2
Perform/interpret urine pregnancy tests.	99	-6	93	8	100	1
Perform/interpret rapid HIV tests.	99	-7	92	6	98	0
Provide HPV natural history, etc.	99	-16	84	16	100	1
Provide HIV/STD risk and prevention etc.	100	-5	95	5	100	0
Mean (%) Δ in item consensus	NA	**3**	NA	**8**	NA	**12**

Note. Questions #11, 22, and 28 were added in survey II. The total change in consensus over the course of the study is calculated as the difference in survey III versus survey II for these three questions. For all other questions the total change in consensus is calculated as the difference between survey III and survey I.

Despite the improved measures of consensus in Round III, seven items were dropped from the final competency model. These were the same items which received the weakest consensus in both Rounds I and II (assessment/evaluation items). See Table 7 for competency items dropped from the model.

Table 9

Competency Items Dropped from Model

Perform clinical breast exam when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision
Perform pelvic exam when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision
Perform male exam when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision
Perform limited postpartum evaluation including psychosocial and physical assessment when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision
Collect cervical cytology specimens (pap smear) when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision
Perform/interpret microscopy for vaginitis/vaginosis/trichomoniasis when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision
Perform/interpret RH factor tests (performed in clinic laboratory with appropriate training/demonstration of competency/clinical supervision

Dropped Items

An analysis performed on items with strong consensus suggested that there was little difference either by professional designation or by region. For those items that failed to achieve consensus, however, there were sharp regional differences in the level of agreement with proposed competencies; with some strong agreement, disagreement and some with mixed responses. The professional designation did not show such sharp differences (see Table 10 for regional consensus levels and Table 11 for Professional Designation consensus levels.) Region III, for example had 100% agreement for all the seven poorly performing competencies where as Region X, by comparison, had on average, a 31% agreement on those same seven competencies.

The dropped items, relative to the items which received > 75% participant agreement, experienced the greatest increases in levels of agreement over the course of the study. It could be argued that the items with very strong agreement (i.e > 90%) could not experience any more than a 10% improvement in agreement, for example, and therefore it would be obvious that the items with the weakest agreement levels would experience the greatest levels of improvement. However, it could also be argued that these items which reflect a potentially contentious issue for PHNs (expanded scope practice), experienced such impressive levels of improvement because the concerns of the panelists (i.e. need for adequate training and supervision) were addressed in the language of the competency description and therefore panelist would be more willing to consider these expanded scope competencies as core to the practice of the FP-PHN.

Table 10

Regional Consensus Levels of Dropped Items

Competency	**Region (%)**									
	I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**	**X**
Perform pelvic exam …	56	0	100	79	33	50	50	100	100	8
Collect cervical cytology specimens …	56	100	100	79	33	50	50	100	100	8
Perform/interpret microscopy…	56	100	100	79	33	50	50	100	50	17
Perform limited postpartum…	89	0	100	89	50	50	50	100	100	42
Perform/interpret Rh…	89	100	100	74	100	50	75	50	50	50
Perform clinical breast exam…	56	0	100	84	33	50	50	100	100	33
Perform male genital exam…	56	0	100	77	33	50	50	100	50	58

Table 11

Professional Designation Consensus levels of Dropped Items

Competency	**Prof. Designation**		
	Admin (%)	**Clinician (%)**	**Academic (%)**
Perform pelvic exam …	53	53	75
Collect cervical cytology specimens …	53	67	75
Perform/interpret microscopy…	53	57	75
Perform limited postpartum…	56	72	100
Perform/interpret Rh…	57	76	100
Perform clinical breast exam…	54	50	100
Perform male genital exam…	54	43	100

Core Competency Model

Of the 35 competencies evaluated over the course of the study, 28 competencies achieved the targeted consensus level (>75% agreement) and are being included in the recommended Core Competency Model for the Family Planning Public Health Nurse (see Table 12).

Table 12

Core Competency Model for the Family Planning Public Health Nurse

Assessment/Evaluation
1. Perform health history (including sexual history) within parameters delineated by agency or permitted by state practice acts
2. Collect and interpret vital signs (Blood Pressure/Weight/respiration/temperature)
3. Collect blood specimen (venipuncture, finger stick)
4. Collect urine specimens
5. Perform/interpret urine pregnancy tests
6. Perform/interpret rapid HIV tests
7. Perform/interpret hematocrit/hemoglobin tests as permitted by state/federal laboratory standards with appropriate training/demonstration of competency/clinical supervision
Provide/Administer Medications and Contraceptives
8. Provide/administer (not prescribe) birth control pills, contraceptive patch, etonogestrel/ethinyl estradiol vaginal ring or emergency contraception when state scope of practice acts support implementation of standing orders
9. Provide/administer (not prescribe) medroxyprogesterone acetate (intramuscular and subcutaneous) when state scope of practice acts support implementation of standing orders
10. Provide/administer (not prescribe) antibiotics (both PO and IM) for treatment of sexually transmitted infections when state scope of practice acts support implementation of MD standing orders and written agency protocols
11. Give intramuscular and subcutaneous injections when state scope of practice acts support implementation of standing orders
Education/Counseling
12. Provide contraceptive counseling including information about permanent methods (sterilization) and long acting methods (IUDs and Implants) with appropriate training/demonstration of competency/clinical supervision

13. Provide emergency contraception counseling with appropriate training/demonstration of competency/clinical supervision
14. Provide Natural Family Planning (NFP) counseling with appropriate training/demonstration of competency/clinical supervision
15. Provide HIV/STD risk and prevention counseling with appropriate training/demonstration of competency/clinical supervision
16. Provide pregnancy options counseling with appropriate training/demonstration of competency/clinical supervision
17. Provide basic prenatal care counseling and referral with appropriate training/demonstration of competency/clinical supervision
18. Provide intimate partner violence (IPV) screening; provide counseling and referral when indicated with appropriate training/demonstration of competency/clinical supervision
19. Screen for child abuse or neglect; provide indicated reporting, counseling or referral consistent with specific state regulations with appropriate training/demonstration of competency/clinical supervision
20. Provide basic preconception counseling and referral with appropriate training/demonstration of competency/clinical supervision
21. Provide information on basic genetic/infertility concerns and referral for additional care
22. Provide abstinence and pregnancy postponement counseling with appropriate training/demonstration of competency/clinical supervision
23. Provide self breast/testicular exam counseling when indicated with appropriate training/demonstration of competency/clinical supervision
24. Provide tobacco cessation counseling and referral with appropriate training/demonstration of competency/clinical supervision
25. Provide Reproductive Life Planning (RLP) counseling with appropriate training/demonstration of competency/clinical supervision
26. Provide HPV natural history, transmission and vaccination counseling with appropriate training/demonstration of competency/clinical supervision
27. Provide basic substance abuse counseling and referral
28. Provide culturally and linguistically appropriate services

CHAPTER 5. DISCUSSION

As evidenced by results described above, the Delphi method was an effective technique to develop consensus amongst a panel of public health and family planning experts. The panel of experts in this study consistently agreed that the majority of competencies, primarily those relating to counseling/education, and administration of medication/contraception, should be considered core to the job function of the family planning public health nurse. These competencies consistently received strong consensus throughout the study as well as a moderate number of suggested edits.

The competency items which were ultimately dropped from the model are worth discussing at greater length for several reasons. The dropped items not only received the greatest number of edits by participants but were also the items which received the greatest increases in levels of consensus. It is not surprising that these competencies (assessment/evaluation), which traditionally have been considered beyond the scope of practice of Registered Nurses (yet are part of the practice of FP-PHNs in those states which use PHNs in the "expanded role") received consistently weak consensus by the expert panel. However, it was impressive to see how much attention these competencies received as well as how dramatic the increases in level of consensus were for these items.

The dropped items received the most significant regional differences, in term of levels of agreement. It is expected that regions, like IV, which have expanded scope practice, would have high levels of agreement for the seven items. It is not expected, however, that regions which do not have expanded scope laws, like III, for example, would also have high levels of agreement to include these seven items, yet that is what was seen in this study. Furthermore, in Round I, region III "voted" to drop all seven items from the model and yet by the final round of the

study, “voted” to include all seven items. Due to the small number of panelists (n=40), and the nature of the study design, it is difficult and to draw any conclusions from these regional findings. That being said, it does support the notion that through dialogue, consensus is possible.

The importance of panelist dialogue (participant feedback) can be seen through the impact participant edits had on increasing levels of agreement. When panelists concerns regarding the significance of state practice acts and providing adequate training and supervision for the FP-PHN, were reflected in the competency item, levels of agreement increased. This occurrence highlights not the state to state variation in RN scope of practice but rather the ability and willingness of nurse leaders to accept regional variations in practice. As long as FP-PHN are adequately prepared and supervised for their jobs, panelists seemed much more willing to consider including the seven items into the model.

Sweeping conclusions regarding perceptions of regional differences or professional designation regarding FP-PHN practice cannot be drawn both due to the small sample size and nature of study used. What can be concluded from this study, is that through participant dialogue levels of agreement improved. Even for the most contentious competencies, the items dropped from the model, support for these items increased throughout the course of the study. One major conclusion can be drawn from the activity around these seven dropped items: panelists regarded the preparation and supervision of the FP-PHN, regardless of practice setting as significant.

The attention the dropped competency items earned and the ultimate increased levels of consensus suggest an encouraging sign. The attention received and the subsequent improvement in levels of consensus of these items suggest that through dialogue amongst

panelists, the scope of practice "issue" became less divisive. When the panelists concerns were reflected (in the language of the competency), consensus improved. This finding suggests that perhaps FP-PHN leaders can tolerate the differences in regional practice with continued dialogue, and that an even more robust competency model (even including expanded scope competencies) is possible.

Limitations

Despite the original study plan to have an equal representation, or distribution, amongst the three professional designations (administrator, clinician, academic) as well as amongst the 10 federal regions, the panel was not proportionately distributed. The risk of disproportionate panelist distribution was anticipated and addressed in the original study design. As described in Chapter 3, participant responses were first used to calculate average group responses by region and professional designation. These group responses were then averaged to determine the overall level of consensus for each proposed competency.

Unanticipated challenges were experienced during the recruitment process. Recruiting nurse academics with established research portfolios in family planning related topics was challenging. The primary reason for this challenge was the limited number of nurse academics actively engaged in family planning related research. Of those nurse academics contacted, few responded to the study invitation. The author speculates that busy academics were uninterested in participating in doctoral level research, especially when the researcher was unknown to the nurse academics.

Another unanticipated challenge was recruiting panelists for region IX. In this region, two of the largest states' health departments (CA and AZ) do not administer Title X Family Planning Programs. Rather, non-governmental agencies like Planned Parenthood administer the

funds. This meant that recruitment efforts for PHNs working in Title X programs was limited to those two states in which the State both administered and provided Title X funded services: HI and NV.

It was also difficult to recruit direct care PHNs (i.e. clinicians). Two possible reasons for this phenomenon are considered here. Initially, as described above, recruitment efforts began with senior state program directors, RPDs and RTCs. This "top down" approach typically ended with mid-level nurse administrators (not clinicians) who themselves offered to participate. When the mid-level nurse administrators did forward the recruitment information to direct care PHNs, the complete explanation of the study purpose may not have been provided, or fully, understood by potential participants resulting in reduced participation.

Recruiting direct care PHNs was more successful in regions that employed PHNs for direct patient care, as in region IV. In Region IV, a region in which PHNs are used extensively (and in several states used in the "expanded role") recruiting was significantly more successful than in regions in which few PHNs provide direct patient care (i.e. Regions I and II). Another likely reason for the success in recruiting in Region IV was the fact that this investigator has more professional relationships in this region relative to other regions, thus allowing for better access to recruiting channels.

Implications

This Core Competency Model for the FP-PHN is offered as a framework to help address some of the challenges our current public health system faces in ensuring the provision of safe and effective family planning services. Through the modified Delphi method utilized in this study, state-to-state RN differences in scope of practice are highlighted as is the importance of

ensuring the adequate education and training of the FP-PHN. Three implications for this study are discussed below.

This Core Competency Model for the FP-PHN should be used as a framework to help guide curricular development in schools of nursing at both the Baccalaureate and Masters level as they strive to create public health programs which are both broad enough to address general components of public health nursing yet at the same time flexible enough to prepare PHNs to adapt to different performance expectations from state to state and varying roles.

Schools of nursing, individual states, as well as federally funded Title X Regional Training Centers, are all challenged to develop training curricula to prepare the "generalist" PHN, as well as the new graduate PHN, to safely perform within the specific needs of the family planning program. This Core Competency Model for the FP-PHN should be able to again provide a framework for these family planning specific training programs. Furthermore, as certification is increasingly seen as a strategy to ensure a competent workforce, this Competency Model should form the foundation of national family planning certification.

And finally, as described in the MACH model, this Core Competency Model for the FP-PHN, should be used to form the framework for a quality assurance program used by family planning programs to assess the job performance of their own family planning RNs.

This study is one addition to the larger work of public health workforce research. More research is needed to understand implications of the variation in FP-PHN scope of practice (more specifically, the "expanded scope" PHN) on policy, education and practice.

Conclusion

Competency development is an important component of ensuring a safe and effective public health workforce. Public health nurses provide a significant proportion of care within our

nation's public health system and increasingly find themselves working in specialized settings, like family planning. The purpose of this study was to develop, through expert consensus, a core competency model for public health nurses working in family planning settings. Study results suggest that the Delphi Method was a successful technique through which to achieve consensus amongst a panel of family planning experts. Study findings also highlighted the regional differences in RN scope of practice as well as importance of training and supervising PHNs working in family planning settings.

Appendix A

HSS Region IV States with Expanded Scope Practice Regulations for RNs

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Georgia

In specific non-hospital settings, an RN may perform "specified medical acts" including "ordering dangerous drugs, medical treatments, or diagnostic studies and the dispensing of dangerous drugs in accordance with dispensing procedure and under the authority of a physician's order" (Georgia State Board of Nursing, 2007).

North Carolina

An RN "[m]ay perform a complete history and physical or components thereof including bimanual, breast and prostate exams." (North Carolina Board of Nursing, 2009).

Kentucky

A Board of Nursing advisory opinion stating, in part, that an RN "initiates [bimanual exams, pap smears and breast exams] according to guidelines, identifies abnormalities and reports/refers to others for treatment and diagnosis" was "removed from current publication and archived as the practice has been incorporated into the common practice of nursing." (Kentucky Board of Nursing, 2010).

South Carolina

RNs may "dispens[e] drugs for the treatment of tuberculosis and sexually transmitted diseases, HIV/AIDS, maternal and child care, children with special health care needs, family planning, immunizations, and any other public health program" (South Carolina Code of Laws, Sec. 40-33-30(E))**.**

It is within the scope of practice of an RN “with specialized education and training to include annual skill competency verification” to “obtain a pap smear as ordered by the authorized health care provider or standing order when that RN is obtaining the specimen for cervical cancer screening. (South Carolina Board of Nursing, 2003).

Tennessee

An RN employed by a family planning clinic "has the authority to issue…Oral contraceptives…and Drugs relating to sexually transmitted diseases" if a "physician has examined the patient for the condition for which such drugs are issued." (Tennessee Code §63-7-124).

Appendix B

Council on Linkages between Academia and Public Health Practice Member Organizations

- American Public Health Association (APHA)
- American College of Preventive Medicine (ACPM)
- Association for Prevention Teaching and Research (APTR)
- Association of Accredited Public Health Programs (AAPHP)
- Association of Public Health Laboratories (APHL)
- Association of Schools of Public Health (ASPH)
- Association of State and Territorial Health Officials (ASTHO)
- Association of University Programs in Health Administration (AUPHA)
- Centers for Disease Control and Prevention (CDC)
- Community-Campus Partnerships for Health (CCPH)
- Health Resources and Services Administration (HRSA)
- National Association of County and City Health Officials (NACCHO)
- National Association of Local Boards of Health (NALBOH)
- National Environmental Health Association (NEHA)
- National Library of Medicine (NLM)
- National Network of Public Health Institutes (NNPHI)
- National Public Health Leadership Development Network (NLN)
- Quad Council of Public Health Nursing Organizations (Quad Council)
- Society for Public Health Education (SOPHE)

Appendix C

Title X Family Planning Program 2011 Priorities

1. Assuring the delivery of quality family planning and related preventive health services, where evidence exists that those services should lead to improvement in the overall health of individuals, with priority for services to individuals from low-income families;
2. Expanding access to a broad range of acceptable and effective family planning methods and related preventive health services that include natural family planning methods, infertility services, and services for adolescents, including adolescent abstinence counseling. The broad range of services does not include abortion as a method of family planning;
3. Providing preventive health care services in accordance with nationally recognized standards of care. This includes, but is not limited to, breast and cervical cancer screening and prevention services; sexually transmitted disease (STD) and HIV prevention education, testing, and referral; and, other related preventive health services;
4. Emphasizing the importance of counseling family planning clients on establishing a reproductive life plan, and providing preconception counseling as a part of family planning services, as appropriate;
5. Addressing the comprehensive family planning and other health needs of individuals, families, and communities through outreach to hard-to-reach and/or vulnerable populations, and partnering with other community-based health and social service providers that provide needed services.

6. Identifying specific strategies for addressing the provisions of health care reform ("The Patient Protection and Affordable Care Act"), and for adapting delivery of family planning and reproductive health services to a changing health care environment, and assisting clients with navigating the changing health care system.

Note. Adapted from U.S. Department of Health and Human Services, Office of Populations Affairs (2012).

Appendix D

Item Edits and Corresponding Changes in Consensus

Assessment/Evaluation

Round	Item	Consensus
Round 1	Perform comprehensive health history	75%
Round 2	Perform health history within parameters delineated by agency or permitted by state practice acts	96%
Round 3	Perform health history (including sexual history) within parameters delineated by agency or permitted by state practice acts	100%

Round	Item	Consensus
Round 1	Perform breast exam	38%
Round 2	Perform clinical breast exam when indicated and when permitted by state scope of practice acts	59%
Round 3	Perform clinical breast exam when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision	62%

Round	Item	Consensus
Round 1	Perform pelvic exam	39%
Round 2	Perform pelvic exam when indicated and when permitted by state scope of practice acts	49%
Round 3	Perform pelvic exam when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision	57%

Round	Item	Consensus
Round 1	Perform male exam	42%
Round 2	Perform male genital exam when indicated and when permitted by state scope of practice acts	58%
Round 3	Perform male genital exam when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision	59%

Round	Item	Consensus
Round 1	Perform postpartum evaluation	45%
Round 2	Perform complete postpartum evaluation including psychosocial and physical assessment when permitted by state scope of practice acts	49%
Round 3	Perform limited postpartum evaluation including psychosocial and physical assessment when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision	70%

Round	Item	Consensus
Round 1	Collect and interpret vital signs (Blood Pressure/Weight/respiration/temperature)	98%
Round 2	No change	95%
Round 3	No change	100%

Round	Item	Consensus
Round 1	Collect blood specimen (venipuncture, finger stick)	89%
Round 2	No change	88%
Round 3	No change	89%

Round	Item	Consensus
Round 1	Collect clean catch urine specimen	95%
Round 2	Collect urine specimens	88%
Round 3	No change	94%

Round	Item	Consensus
Round 1	Collect cervical cytology specimen (pap smear)	42%
Round 2	Collect cervical cytology specimens (pap smear) when indicated and when permitted by state scope of practice acts	54%
Round 3	Collect cervical cytology specimens (pap smear) when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision	62%

Round	Item	Consensus
Round 1	Perform/interpret urine pregnancy tests	99%
Round 2	No change	93%
Round 3	No change	100%

Round	Item	Consensus
Round 1	Perform/interpret rapid HIV tests	99%
Round 2	No change	92%
Round 3	No change	98%

Round	Item	Consensus
Round 1	Perform/interpret microscopy for vaginitis/vaginosis/trichomoniasis	35%
Round 2	Perform/interpret microscopy for vaginitis/vaginosis/trichomoniasis when permitted by state scope of practice acts and laboratory standards	50%
Round 3	Perform/interpret microscopy for vaginitis/vaginosis/trichomoniasis when permitted by state scope of practice acts and laboratory standards with appropriate training/demonstration of competency/clinical supervision	59%

Round	Item	Consensus
Round 1	Perform/interpret hematocrit/hemoglobin tests(performed in clinic laboratory)	80%
Round 2	Perform/interpret hematocrit/hemoglobin tests as permitted by state/federal laboratory standards	88%
Round 3	Perform/interpret hematocrit/hemoglobin tests as permitted by state/federal laboratory standards with appropriate training/demonstration of competency/clinical supervision	98%

Round	Item	Consensus
Round 1	Perform/interpret Rh Factor tests (performed in clinic laboratory)	48%
Round 2	No change	53%
Round 3	Perform/interpret Rh Factor tests (performed in clinic laboratory) with appropriate training/demonstration of competency/clinical supervision	72%

Provide/Administer Medications and Contraceptives

Round	Item	Consensus
Round 1	Provide/administer birth control pills or etonogestrel/ethinyl estradiol vaginal ring	81%
Round 2	Provide/administer birth control pills, contraceptive patch, etonogestrel/ethinyl estradiol vaginal ring or emergency contraception when state scope of practice acts support implementation of standing orders	90%
Round 3	Provide/administer (not prescribe) birth control pills, contraceptive patch, etonogestrel/ethinyl estradiol vaginal ring or emergency contraception when state scope of practice acts support implementation of standing orders	100%

Round	Item	Consensus
Round 1	Provide/administer medroxyprogesterone acetate (intramuscular and subcutaneous)	88%
Round 2	Provide/administer medroxyprogesterone acetate (intramuscular and subcutaneous) when state scope of practice acts support implementation of standing orders	91%
Round 3	Provide/administer (not prescribe) medroxyprogesterone acetate (intramuscular and subcutaneous) when state scope of practice acts support implementation of standing orders	100%

Round	Item	Consensus
Round 1	Provide/administer antibiotics	74%
Round 2	Provide/administer antibiotics (both PO and IM) for treatment of sexually transmitted infections when state scope of practice acts support implementation of standing orders	95%
Round 3	Provide/administer (not prescribe) antibiotics (both PO and IM) for treatment of sexually transmitted infections when state scope of practice acts support implementation of MD standing orders and written agency protocols	100%

Round	Item	Consensus
Round 1	Give intramuscular and subcutaneous injections	91%
Round 2	Give intramuscular and subcutaneous injections when state scope of practice acts support implementation of standing orders	100%
Round 3	No change	100%

Education/Counseling

Round	Item	Consensus
Round 1	Provide contraceptive counseling	98%
Round 2	Provide contraceptive counseling including permanent methods (sterilization) and long acting methods (IUDs and Implants)	93%
Round 3	Provide contraceptive counseling including information about permanent methods (sterilization) and long acting methods (IUDs and Implants) with appropriate training/demonstration of competency/clinical supervision	100%

Round	Item	Consensus
Round 1	Blank (question added after Round 1)	
Round 2	Provide emergency contraception counseling	95%
Round 3	Provide emergency contraception counseling with appropriate training/demonstration of competency/clinical supervision	100%

Round	Item	Consensus
Round 1	Provide Natural Family Planning (NFP) counseling	93%
Round 2	No change	90%
Round 3	Provide Natural Family Planning (NFP) counseling with appropriate training/demonstration of competency/clinical supervision	93%

Round	Item	Consensus
Round 1	Provide HIV/STD risk and prevention counseling	100%
Round 2	No change	95%
Round 3	Provide HIV/STD risk and prevention counseling with appropriate training/demonstration of competency/clinical supervision	100%

Round	Item	Consensus
Round 1	Provide pregnancy options counseling	98%
Round 2	No change	88%
Round 3	Provide pregnancy options counseling with appropriate training/demonstration of competency/clinical supervision	100%

Round	Item	Consensus
Round 1	Provide prenatal care counseling	87%
Round 2	Provide prenatal care counseling and referral	98%
Round 3	Provide basic prenatal care counseling and referral with appropriate training/demonstration of competency/clinical supervision	98%

Round	Item	Consensus
Round 1	Provide Intimate Partner Violence (IPV) risk and referral counseling	87%
Round 2	Provide intimate partner violence (IPV) screening; provide counseling and referral when indicated	90%
Round 3	Provide intimate partner violence (IPV) screening; provide counseling and referral when indicated with appropriate training/demonstration of competency/clinical supervision	95%

Round	Item	Consensus
Round 1	Provide child abuse risk and referral counseling	84%
Round 2	Screen for child abuse or neglect; provide indicated reporting, counseling or referral consistent with specific state regulations	90%
Round 3	Screen for child abuse or neglect; provide indicated reporting, counseling or referral consistent with specific state regulations with appropriate training/demonstration of competency/clinical supervision	95%

Round	Item	Consensus
Round 1	Provide preconception counseling	90%
Round 2	Provide preconception counseling and referral	90%
Round 3	Provide basic preconception counseling and referral with appropriate training/demonstration of competency/clinical supervision	100%

Round	Item	Consensus
Round 1	Provide genetic/infertility counseling and referral	46%
Round 2	Provide basic genetic/infertility counseling and referral	81%
Round 3	Provide information on basic genetic/infertility concerns and referral for additional care	93%

Round	Item	Consensus
Round 1	Provide abstinence and pregnancy postponement counseling	94%
Round 2	No change	90%
Round 3	Provide abstinence and pregnancy postponement counseling with appropriate training/demonstration of competency/clinical supervision	100%

Round	Item	Consensus
Round 1	Provide self breast/testicular exam counseling	80%
Round 2	No change	78%
Round 3	Provide self breast/testicular exam counseling when indicated with appropriate training/demonstration of competency/clinical supervision	96%

Round	Item	Consensus
Round 1	Provide tobacco cessation counseling and referral	84%
Round 2	No change	89%
Round 3	Provide tobacco cessation counseling and referral with appropriate training/demonstration of competency/clinical supervision	99%

Round	Item	Consensus
Round 1	Provide Reproductive Life Planning (RLP) counseling	91%
Round 2	No change	88%
Round 3	Provide Reproductive Life Planning (RLP) counseling with appropriate training/demonstration of competency/clinical supervision	95%

Round	Item	Consensus
Round 1	Provide HPV natural history, transmission and vaccination counseling	99%
Round 2	No change	84%
Round 3	Provide HPV natural history, transmission and vaccination counseling with appropriate training/demonstration of competency/clinical supervision	100%

Round	Item	Consensus
Round 1	Blank (question added after Round 1)	
Round 2	Provide substance abuse counseling and referral	76%
Round 3	Provide basic substance abuse counseling and referral	87%

Round	Item	Consensus
Round 1	Blank (question added after Round 1)	
Round 2	Provide culturally and linguistically appropriate services	90%
Round 3	No change	93%

Round One Survey: Introduction

Thank you for taking time to complete this survey. The following page will describe the purpose and process for this study. It should take you no longer than 1 hour to complete this survey.

Please note this survey is concerned with the competencies of the Registered Nurse (RN) working in a public health-family planning setting. This study is not examining competencies for Advance Practice Nurses (NP, CNM, CNS).

After reading the consent information, which also contains the directions, if you wish to continue with the survey, please continue on to the next page.

Consent & Directions

CONSENT FORM

My name is Caroline Hewitt and I am student in the Doctor of Nursing Science (DNS) Program at The Graduate Center of the City University of New York (CUNY), and Principal Investigator of this project, entitled “Core Competency Model for the Family Planning Public Health Nurse.” This is a research study using expert consensus to define the core competencies needed for the provision of safe and effective family planning services by public health nurses. Identification of these competencies will help inform training curriculum, individual and organizational performance, accreditation/credentialing and ultimately the improved capacity of the public health workforce.

Your participation in this study will include completing a survey listing commonly performed duties/services (approximately 40 items) in family planning clinics. You will be asked to indicate whether you feel the listed competencies should be considered core to the job performance of the family planning public health nurse (FP-PHN). You will be asked to indicate whether the competency should be a) included in the competency model as written, b)included with edits (include suggested edits), or c) dropped from the model. You will also have the opportunity to add any competencies not included on the survey.

After the initial survey responses have been collected and compiled you will have the opportunity to review the responses, of approximately sixty of your national public health/family planning colleagues (in aggregate). Responses will be anonymous. You will be asked to again complete the survey and be given the opportunity to change or amend your responses. This same process will be repeated for round three.

Completion for each survey round should take no more than one hour. All information gathered will be kept strictly confidential, and will be stored in a locked file cabinet, to which only I, and my advisor, Carol Roye, EdD, RN, PNP, will have access. At any time you can refuse to answer any questions or end this survey.

The risks from participating in this study are no more than encountered in everyday life. The benefits of your participation is that this competency model will help improve the capacity of the public health workforce through informing education, quality assurance measures as well as licensing and credentialing processes. There will be approximately 60 participants taking part in this study.

I may publish results of the study, but names of people, or any identifying characteristics, will not be used in any of the publications. If you would like a copy of the study, please provide me with your address and I will send you a copy in the future.

If you have any questions about this research, you can contact me at (914) 610-0099 or chewitt@gc.cuny.edu, or my advisor Carol Roye, EdD at (212) 481-8237 or croye@hunter.cuny.edu. If you have questions about your rights as a participant in this study, you can contact Kay Powell, IRB Administrator, The Graduate Center/City University of New York, (212) 817-7525, kpowell@gc.cuny.edu.

Thank you for your participation in the study. You may print a copy of this form for your records.

By continuing on to the next page, you consent to participate in this study.

The following 14 questions refer to assessment/evaluation competencies

The following survey items describe common duties/services within family planning clinics. Please indicate by clicking on the appropriate circle, whether you feel the following competencies should be considered core to the job performance of the family planning public health nurse (FP-PHN).

Please indicate if the following competencies should be:

A) Included in the competency model as is
B) Included in the competency model with edits (include edits)
C) Dropped from the competency model

1. Perform comprehensive health history

◯ Include as is

◯ Include with edits

◯ Drop

Suggested edits

2. Perform breast exam

◯ Include as is

◯ Include with edits

◯ Drop

Suggested edits

3. Perform pelvic exam

◯ Include as is

◯ Include with edits

◯ Drop

Suggested edits

4. Perform male exam

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

5. Perform postpartum evaluation

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

6. Collect and interpret vital signs (Blood Pressure/Weight/respiration/temperature)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

7. Collect blood specimen (venipuncture, finger stick)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

8. Collect clean catch urine specimen

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

9. Collect cervical cytology specimen (pap smear)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

10. Perform/interpret urine pregnancy tests

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

11. Perform/interpret rapid HIV tests

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

12. Perform/interpret microscopy for vaginitis/vaginosis/trichomoniasis

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

13. Perform/interpret hematocrit/hemoglobin tests(performed in clinic laboratory)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

14. Perform/interpret Rh Factor tests (performed in clinic laboratory)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

The following 4 questions assume existence of MD standing orders

15. Provide/administer birth control pills or etonogestrel/ethinyl estradiol vaginal ring

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

16. Provide/administer medroxyprogesterone acetate (intramuscular and subcutaneous)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

17. Provide/administer antibiotics

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

18. Give intramuscular and subcutaneous injections

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

The following 15 questions refer to education/counseling competencies

19. Provide contraceptive counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

20. Provide Natural Family Planning (NFP) counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

21. Provide HIV/STD risk and prevention counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

22. Provide pregnancy options counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

23. Provide prenatal care counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

24. Provide Intimate Partner Violence (IPV) risk and referral counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

25. Provide child abuse risk and referral counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

26. Provide preconception counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

27. Provide genetic/infertility counseling and referral

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

28. Provide abstinence and pregnancy postponement counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

29. Provide self breast/testicular exam counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

30. Provide tobacco cessation counseling and referral

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

31. Provide Reproductive Life Planning (RLP) counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

32. Provide HPV natural history, transmission and vaccination counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

33. Other competencies not included above

Demographic Information

34. Please indicate your highest eduational degree

- ◯ Associates
- ◯ Bachelors
- ◯ Masters
- ◯ Doctorate
- ◯ Other

Other (please specify)

35. Please indicate your certification/license

- ◯ Registered Nurse (Only)
- ◯ Advanced Practice Nurse (NP,CNM,CNS)
- ◯ Other

Other (please specify)

36. Please indicate your professional title

- ◯ Clinician (Staff RN)
- ◯ Administrator
- ◯ Academic (Assistant, Associate or Full Professor)

37. Please indicate in which Standard Federal Region you work

- ◯ I (CT,ME,MA,NH,RI,VT)
- ◯ II (NJ,NY,PR,VI)
- ◯ III (DE,DC,MD,PA,VA,WV)
- ◯ IV (AL,FL,GA,KY,MS,NC,SC,TN)
- ◯ V (IL,IN,MI,MN,OH,WI)
- ◯ VI (AK,LA,NM,OK,TX)
- ◯ VII (IA,KS,MO,NE)
- ◯ VIII (CO,MT,ND,SD,UT,WY)
- ◯ IX (AZ,CA,HI,NV,AS,GU,MP,FM)
- ◯ X (AK,ID,OR,WA)

38. Please indicate your sex

- ◯ Female
- ◯ Male

39. Please indicate your age

- ◯ 21-35
- ◯ 36-45
- ◯ 46-55
- ◯ Over 56

Thank you!

Thank you so much for completing this Round One Survey. Once you click on the "Done" button, you will have successfully completed this survey.

Within two weeks you will receive the anonymous results (in aggregate), by email, from this survey. Results will include your responses as well as the responses of your fellow family planning leaders (family planning clinicians (RNs), administrators and academics).

After having an opportunity to review the responses, you will be given another opportunity to complete the survey for Round Two. You may choose to change your answers in light of your fellow colleague's responses (from Round One), or answer the same as you did in Round One.

Thank you again for your time and expertise.

Round Two Survey: Introduction

Thank you for taking time to complete this round two survey.

The purpose of this research is to develop consensus about which competencies (knowledge, skills, attitudes) should be core to the job performance of the Family Planning Public Health Nurses (FP-PHN).

While it is well known that great variation exists in RN scope of practice from state to state, the goal of this survey is not to document the current job function of the FP-PHN but rather to capture expert opinion (your opinion) regarding what the job function of the FP-PHN should be.

By conducting a three stage survey, while refining and clarify the criteria at each survey round, this project seeks to achieve the greatest level of agreement for each competency, either to include the specific competency in the model or drop it from the model.

You are now ready to complete the round two survey. Round two should take no longer than round one to complete. The FINAL round, accompanied by results from the round two survey, will be emailed out to you after the New Year.

Your continuing participation in this research is vital to the success of this study. Thank you again for your time and expertise.

Consent & Directions

CONSENT FORM

My name is Caroline Hewitt and I am student in the Doctor of Nursing Science (DNS) Program at The Graduate Center of the City University of New York (CUNY), and Principal Investigator of this project, entitled "Core Competency Model for the Family Planning Public Health Nurse." This is a research study using expert consensus to define the core competencies needed for the provision of safe and effective family planning services by public health nurses. Identification of these competencies will help inform training curriculum, individual and organizational performance, accreditation/credentialing and ultimately the improved capacity of the public health workforce.

Your participation in this study will include completing a survey listing commonly performed duties/services (approximately 40 items) in family planning clinics. You will be asked to indicate whether you feel the listed competencies should be considered core to the job performance of the family planning public health nurse (FP-PHN). You will be asked to indicate whether the competency should be a) included in the competency model as written, b)included with edits (include suggested edits), or c) dropped from the model. You will also have the opportunity to add any competencies not included on the survey.

After the initial survey responses have been collected and compiled you will have the opportunity to review the responses, of approximately sixty of your national public health/family planning colleagues (in aggregate). Responses will be anonymous. You will be asked to again complete the survey and be given the opportunity to change or amend your responses. This same process will be repeated for round three.

Completion for each survey round should take no more than one hour. All information gathered will be kept strictly confidential, and will be stored in a locked file cabinet, to which only I, and my advisor, Carol Roye, EdD, RN, PNP, will have access. At any time you can refuse to answer any questions or end this survey.

The risks from participating in this study are no more than encountered in everyday life. The benefits of your participation is that this competency model will help improve the capacity of the public health workforce through informing education, quality assurance measures as well as licensing and credentialing processes. There will be approximately 60 participants taking part in this study.

I may publish results of the study, but names of people, or any identifying characteristics, will not be used in any of the publications. If you would like a copy of the study, please provide me with your address and I will send you a copy in the future.

If you have any questions about this research, you can contact me at (914) 610-0099 or chewitt@gc.cuny.edu, or my advisor Carol Roye, EdD at (212) 481-8237 or croye@hunter.cuny.edu. If you have questions about your rights as a participant in this study, you can contact Kay Powell, IRB Administrator, The Graduate Center/City University of New York, (212) 817-7525, kpowell@gc.cuny.edu.

Thank you for your participation in the study. You may print a copy of this form for your records.

By continuing on to the next page, you consent to participate in this study.

The following 14 questions refer to assessment/evaluation competencies

The following survey items describe common duties/services within family planning clinics. Please indicate by clicking on the appropriate circle, whether you feel the following competencies should be considered core to the job performance of the family planning public health nurse (FP-PHN).

Please indicate if the following competencies should be:

A) Included in the competency model as is
B) Included in the competency model with edits (include edits)
C) Dropped from the competency model

1. Perform health history within parameters delineated by agency or permitted by state practice acts

◯ Include as is

◯ Include with edits

◯ Drop

Suggested edits

2. Perform clinical breast exam when indicated and when permitted by state scope of practice acts

◯ Include as is

◯ Include with edits

◯ Drop

Suggested edits

3. Perform pelvic exam when indicated and when permitted by state scope of practice acts

◯ Include as is

◯ Include with edits

◯ Drop

Suggested edits

4. Perform male genital exam when indicated and when permitted by state scope of practice acts

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

5. Perform complete postpartum evaluation including psychosocial and physical assessment when permitted by state scope of practice acts

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

6. Collect and interpret vital signs (Blood Pressure/Weight/respiration/temperature)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

7. Collect blood specimen (venipuncture, finger stick)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

8. Collect urine specimens

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

9. Collect cervical cytology specimens (pap smear) when indicated and when permitted by state scope of practice acts

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

10. Perform/interpret urine pregnancy tests

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

11. Perform/interpret rapid HIV tests

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

12. Perform/interpret microscopy for vaginitis/vaginosis/trichomoniasis when permitted by state scope of practice acts and laboratory standards

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

13. Perform/interpret hematocrit/hemoglobin tests as permitted by state/federal laboratory standards

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

14. Perform/interpret Rh Factor tests (performed in clinic laboratory)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

The following 4 questions refer to the administration of medications

15. Provide/administer birth control pills, contraceptive patch, etonogestrel/ethinyl estradiol vaginal ring or emergency contraception when state scope of practice acts support implementation of standing orders

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

16. Provide/administer medroxyprogesterone acetate (intramuscular and subcutaneous) when state scope of practice acts support implementation of standing orders

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

17. Provide/administer antibiotics (both PO and IM) for treatment of sexually transmitted infections when state scope of practice acts support implementation of standing orders

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

18. Give intramuscular and subcutaneous injections when state scope of practice acts support implementation of standing orders

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

The following 15 questions refer to education/counseling competencies

19. Provide contraceptive counseling including permanent methods (sterilization) and long acting methods (IUDs and Implants)

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

20. Provide emergency contraception counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

21. Provide Natural Family Planning (NFP) counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

22. Provide abstinence and pregnancy postponement counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

23. Provide HIV/STD risk and prevention counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

24. Screen for child abuse or neglect; provide indicated reporting, counseling or referral consistent with specific state regulations

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

25. Provide preconception counseling and referral

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

26. Provide pregnancy options counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

27. Provide prenatal care counseling and referral

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

28. Provide basic genetic/infertility counseling and referral

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

29. Provide intimate partner violence (IPV) screening; provide counseling and referral when indicated

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

30. Provide self breast/testicular exam counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

31. Provide tobacco cessation counseling and referral

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

32. Provide Reproductive Life Planning (RLP) counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

33. Provide HPV natural history, transmission and vaccination counseling

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

Suggested edits

34. Provide substance abuse counseling and referral

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

35. Provide culturally and linguistically appropriate services

- ◯ Include as is
- ◯ Include with edits
- ◯ Drop

36. Other competencies not included above

Demographic Information

37. Please indicate your highest eduational degree

- ◯ Associates
- ◯ Bachelors
- ◯ Masters
- ◯ Doctorate
- ◯ Other

Other (please specify)

38. Please indicate your certification/license

- ◯ Registered Nurse (Only)
- ◯ Advanced Practice Nurse (NP,CNM,CNS)
- ◯ Other

Other (please specify)

39. Please indicate your professional title

- ◯ Clinician (Staff RN)
- ◯ Administrator
- ◯ Academic (Assistant, Associate or Full Professor)

40. Please indicate in which Standard Federal Region you work

- ◯ I (CT,ME,MA,NH,RI,VT)
- ◯ II (NJ,NY,PR,VI)
- ◯ III (DE,DC,MD,PA,VA,WV)
- ◯ IV (AL,FL,GA,KY,MS,NC,SC,TN)
- ◯ V (IL,IN,MI,MN,OH,WI)
- ◯ VI (AK,LA,NM,OK,TX)
- ◯ VII (IA,KS,MO,NE)
- ◯ VIII (CO,MT,ND,SD,UT,WY)
- ◯ IX (AZ,CA,HI,NV,AS,GU,MP,FM)
- ◯ X (AK,ID,OR,WA)

41. Please indicate your sex

- ◯ Female
- ◯ Male

42. Please indicate your age

- ◯ 21-35
- ◯ 36-45
- ◯ 46-55
- ◯ Over 56

Thank you!

Thank you so much for completing this round two survey. Once you click on the "Done" button, you will have successfully completed this survey.

Within two weeks you will receive the anonymous results (in aggregate), by email, from this survey. Results will include your responses as well as the responses of your fellow family planning leaders (family planning clinicians (RNs), administrators and academics).

After having an opportunity to review the responses from the round two survey, you will be given the opportunity to complete the final survey. It will be from this final survey that the core competency model will be derived.

Thank you again for your time and expertise.

Final Survey: Introduction

Thank you for taking time to complete this FINAL survey. This round will inform the Core Competency Model for the Family Planning Public Health Nurse.

Please make sure to review the results of the round two survey which were emailed to you yesterday. Once you have done so, reflect back on the responses of the other participants and ask yourself whether the knowledge of your colleagues' responses changes your answers as you complete the FINAL survey.

You are now ready to complete the FINAL survey.

Your continuing participation in this research is vital to the success of this study. Thank you again for your time and expertise.

Consent & Directions

CONSENT FORM

My name is Caroline Hewitt and I am student in the Doctor of Nursing Science (DNS) Program at The Graduate Center of the City University of New York (CUNY), and Principal Investigator of this project, entitled “Core Competency Model for the Family Planning Public Health Nurse.” This is a research study using expert consensus to define the core competencies needed for the provision of safe and effective family planning services by public health nurses. Identification of these competencies will help inform training curriculum, individual and organizational performance, accreditation/credentialing and ultimately the improved capacity of the public health workforce.

Your participation in this study will include completing a survey listing commonly performed duties/services (approximately 40 items) in family planning clinics. You will be asked to indicate whether you feel the listed competencies should be considered core to the job performance of the family planning public health nurse (FP-PHN). You will be asked to indicate whether the competency should be a) included in the competency model as written, b)included with edits (include suggested edits), or c) dropped from the model. You will also have the opportunity to add any competencies not included on the survey.

After the initial survey responses have been collected and compiled you will have the opportunity to review the responses, of approximately sixty of your national public health/family planning colleagues (in aggregate). Responses will be anonymous. You will be asked to again complete the survey and be given the opportunity to change or amend your responses. This same process will be repeated for round three.

Completion for each survey round should take no more than one hour. All information gathered will be kept strictly confidential, and will be stored in a locked file cabinet, to which only I, and my advisor, Carol Roye, EdD, RN, PNP, will have access. At any time you can refuse to answer any questions or end this survey.

The risks from participating in this study are no more than encountered in everyday life. The benefits of your participation is that this competency model will help improve the capacity of the public health workforce through informing education, quality assurance measures as well as licensing and credentialing processes. There will be approximately 60 participants taking part in this study.

I may publish results of the study, but names of people, or any identifying characteristics, will not be used in any of the publications. If you would like a copy of the study, please provide me with your address and I will send you a copy in the future.

If you have any questions about this research, you can contact me at (914) 610-0099 or chewitt@gc.cuny.edu, or my advisor Carol Roye, EdD at (212) 481-8237 or croye@hunter.cuny.edu. If you have questions about your rights as a participant in this study, you can contact Kay Powell, IRB Administrator, The Graduate Center/City University of New York, (212) 817-7525, kpowell@gc.cuny.edu.

Thank you for your participation in the study. You may print a copy of this form for your records.

By continuing on to the next page, you consent to participate in this study.

The following 14 questions refer to assessment/evaluation competencies

The following survey items describe common duties/services within family planning clinics. Please indicate by clicking on the appropriate circle, whether you feel the following competencies should be considered core to the job performance of the family planning public health nurse (FP-PHN).

Please indicate if the following competencies should be:

A) Included in the competency model
B) Dropped from the competency model

1. Perform health history (including sexual history) within parameters delineated by agency or permitted by state practice acts.

◯ Include

◯ Drop

2. Perform clinical breast exam when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

3. Perform pelvic exam when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

4. Perform male genital exam when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

5. Perform limited postpartum evaluation including psychosocial and physical assessment when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

6. Collect and interpret vital signs (Blood Pressure/Weight/respiration/temperature).

◯ Include

◯ Drop

7. Collect blood specimen (venipuncture, finger stick).

◯ Include

◯ Drop

8. Collect urine specimens.

◯ Include

◯ Drop

9. Collect cervical cytology specimens (pap smear) when indicated and when permitted by state scope of practice acts with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

10. Perform/interpret urine pregnancy tests.

◯ Include

◯ Drop

11. Perform/interpret rapid HIV tests.

◯ Include

◯ Drop

12. Perform/interpret microscopy for vaginitis/vaginosis/trichomoniasis when permitted by state scope of practice acts and laboratory standards with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

13. Perform/interpret hematocrit/hemoglobin tests as permitted by state/federal laboratory standards with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

14. Perform/interpret Rh Factor tests (performed in clinic laboratory) with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

The following 4 questions refer to the administration of medications

15. Provide/administer (not prescribe) birth control pills, contraceptive patch, etonogestrel/ethinyl estradiol vaginal ring or emergency contraception when state scope of practice acts support implementation of standing orders.

- ◯ Include
- ◯ Drop

16. Provide/administer (not prescribe) medroxyprogesterone acetate (intramuscular and subcutaneous) when state scope of practice acts support implementation of standing orders.

- ◯ Include
- ◯ Drop

17. Provide/administer (not prescribe) antibiotics (both PO and IM) for treatment of sexually transmitted infections when state scope of practice acts support implementation of MD standing orders and written agency protocols.

- ◯ Include
- ◯ Drop

18. Give intramuscular and subcutaneous injections when state scope of practice acts support implementation of standing orders.

- ◯ Include
- ◯ Drop

The following 15 questions refer to education/counseling competencies

19. Provide contraceptive counseling including information about permanent methods (sterilization) and long acting methods (IUDs and Implants) with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

20. Provide emergency contraception counseling with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

21. Provide Natural Family Planning (NFP) counseling with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

22. Provide abstinence and pregnancy postponement counseling with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

23. Provide HIV/STD risk and prevention counseling with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

24. Screen for child abuse or neglect; provide indicated reporting, counseling or referral consistent with specific state regulations with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

25. Provide basic preconception counseling and referral with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

26. Provide pregnancy options counseling with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

27. Provide basic prenatal care counseling and referral with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

28. Provide information on basic genetic/infertility concerns and referral for additional care.

◯ Include

◯ Drop

29. Provide intimate partner violence (IPV) screening; provide counseling and referral when indicated with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

30. Provide self breast/testicular exam counseling, when indicated, with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

31. Provide tobacco cessation counseling and referral with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

32. Provide Reproductive Life Planning (RLP) counseling with appropriate training/demonstration of competency/clinical supervision.

◯ Include

◯ Drop

33. Provide HPV natural history, transmission and vaccination counseling with appropriate training/demonstration of competency/clinical supervision.

- ◯ Include
- ◯ Drop

34. Provide basic substance abuse counseling and referral.

- ◯ Include
- ◯ Drop

35. Provide culturally and linguistically appropriate services.

- ◯ Include
- ◯ Drop

Thank you!

Thank you for completing this final survey. Once you click on the "Done" button, you will have successfully completed this survey.

Thank you again for your time and expertise.

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