

Improving Cancer Screening for Underserved Women Through an FNP Student-Led Clinic

Cindy Weston, DNP, FNP-BC, Robin Page, PhD, CNM,

Kara Jones-Schubart, DNP, FNP-BC, and Marvellous Akinlotan, MPH

ABSTRACT

The purpose of this project was to increase access to cancer screening for underserved women while providing collaborative clinical experiences for family nurse practitioner (FNP) students. A FNP program, the School of Public Health, and a free clinic collaborated to provide well-woman visits that included breast and cervical cancer screening to low-income women. From 2015–2016, 83 women received well-woman exams, including 75 cervical cancer screenings and 47 referrals for mammography. Qualitative surveys revealed 95% satisfaction and 100% reported they would refer friends and family. Innovative collaboration improves access to cancer screening for low-income women while providing training for FNP students.

Keywords: Access to care, cancer screening, FNP education, underserved, women's health

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Limited access to preventative screening contributes to minority and low-income women dying from breast and cervical cancer. Recent data show an overall increase in breast cancer rates among non-Hispanic black and Hispanic women.¹ Non-Hispanic black women also have persistently higher breast cancer mortality rates compared with non-Hispanic white women.¹ Uninsured women without access to a primary care provider have lower screening rates through Papanicolaou (Pap) testing for cervical cancer.² National trends demonstrate increased mortality for breast and cervical cancer for uninsured women, while increased access to screening contributes to reduced breast and cervical cancer death rates.^{3,4}

With more students seeking advanced practice nursing preparation, clinical sites and nurse practitioner preceptors are in high demand, particularly in women's health. A 2013 inter-professional survey of deans and/or directors revealed most professional programs struggle to secure clinical sites in primary care practice.⁵ Across disciplines, the limited availability of pediatric and obstetric/gynecologic sites for students is most problematic.⁵ The opportunity to collaborate for well-woman services

fills the gap for women's health clinical sites while meeting the needs for uninsured and under-insured populations.

Family Nurse Practitioner (FNP) students must achieve competency in performing well-woman health care visits but encounter limitations for clinical immersion in this area. The annual well-woman examination serves as the primary opportunity to provide counseling in health promotion and conduct preventative screening for breast and cervical cancer. Women of low socioeconomic status have limited access to preventative healthcare. The purpose of this innovative program was to coordinate grant-funded breast and cervical cancer screening through the Cancer Prevention and Research Institute of Texas with the FNP program at Texas A&M University and Health For All, a nonprofit free health care clinic in central Texas. Through the FNP student-led well-woman clinics, students have the opportunity to exhibit behaviors to attain the nurse practitioner core competencies as outlined by the National Organization of Nurse Practitioner Faculties,⁶ as well as address the triple aim of improved population health, improved individual patient experience, and lower health care costs.⁷

METHODS

Health For All is a donor-supported, free health care clinic founded in 1987 that serves as a medical home for underinsured residents. Eighty percent of the patients served have an annual income under \$18,000 and the majority are female, single parents. The clinic provides over 5,000 patient visits annually. While largely a comprehensive clinic, female clients are referred out for breast and cervical cancer screening services, often creating additional barriers to preventative care.

INTERVENTION

The institutional review board approved the activity and written consent for treatment was obtained for those who received services at the well-woman clinic. Collaboration between the free clinic and the college of nursing began in 2015 to address the mutual needs for women's health services at Health for All and clinical immersion for FNP students. Coordination meetings between FNP faculty and the medical director focused on needs assessment, faculty credentialing, care navigation, and protocols. A checklist for nursing students was created, along with orientation documents to the clinic and electronic health record. The American College of Obstetricians and Gynecologists guidelines for well-woman visits were adopted and reviewed with faculty preceptors and FNP students.

Multi-level students were incorporated to meet the educational needs of the patients; pre-licensure Bachelor of Science in Nursing (BSN) students completed course objectives for women's health through presenting educational programs to patients on topics such as contraception, interpersonal violence, healthy lifestyle, breast awareness, HPV vaccination, and polycystic ovarian syndrome. Additional BSN students teamed with FNP students to work synergistically to conduct the well-woman visit.

One clinic date per month was established to include 3 faculty/FNP student/BSN student teams. The student teams met at the clinic in the morning for set-up and pre-briefing. Students had 1-hour appointments to conduct the well-woman visit and to complete documentation. The BSN student initiated services from the waiting room and assessed vital signs, body-mass index, and performed a urine

dip test. Following this triage, the BSN student gave a report to the FNP student and they proceeded together to complete the patient visit. After the examination, the student team discussed the plan of care with faculty oversight. The BSN student discharged the patient and reinforced teaching with appropriate referrals while the FNP student documented the visit.

PATIENT POPULATION AND SAMPLE

Women ages 18 and over were recruited from the free clinic panel, the local housing authority, and the homeless shelter through flyers and direct solicitation. Participants were not rewarded for participation but were offered a small gift bag of personal care items donated to the free clinic. Staff of the free clinic and BSN students led recruitment efforts and marketing. Utilizing the American College of Obstetricians and Gynecologists recommendations, any woman in need of breast and/or cervical cancer screening was included in the program and screened by a community health worker. The community health worker's role was to register the woman for the grant-funded services, collect screening data, and on occasion serve as a Spanish-language translator. Women who received primary health care at the free clinic previously had to leave their medical home to connect to services for well-woman exams, which included breast and cervical cancer screenings. This innovative program brought well-woman services to the free clinic, which allowed a monthly FNP student-led clinic. Under faculty supervision, the FNP students received clinical immersion in performing well-woman visits through sponsorship by Cancer Prevention and Research Institute of Texas grant funding.

DATA COLLECTION/ANALYSIS

FNP students completed a pre/post Likert scale on self-reported confidence in performing a clinical breast exam and counseling a woman reluctant to have a mammogram or Pap test. In addition to collecting student data on the experience, the patient experience was explored. Clinic volunteers collected qualitative data through structured telephone interviews within 2 weeks after the visit to understand the patient experience in a FNP student-led well-woman clinic. Open-ended questions prompted feedback on satisfaction with the healthcare visit, caring behaviors of

the provider, timeliness of the visit, and if the patient would refer family and friends to the clinic. Notes of verbatim responses were analyzed for percentages of positive responses. In addition to qualitative data, quantitative data was collected on subject demographics as well as frequencies of clinical breast exams, referral for mammography, and cervical cancer screening. Data were entered into a spreadsheet and frequencies calculated.

RESULTS

From Fall 2015–2016, 83 women received well-woman exams. Demographics revealed the mean age was 48 years, with an age range of 23–66, and 28% reported Hispanic ethnicity. The majority of women were single (57%) with a mean annual income of \$10,459. Seventy-three percent reported not having a consistent primary care provider. The clinic provided 75 cervical cancer screenings, which included 3 abnormal cytology results referred for colposcopy, 47 referred for mammography, and 14 referred for screening colonoscopy. In addition to cancer screening and prevention, we addressed health promotion through education on sexual health, smoking cessation, healthy diet and exercise, osteoporosis screening and prevention, along with immunization updates. Depression and mood screening was included through the Patient Health Questionnaire (PHQ-9) assessment, along with education on healthy coping and stress reduction. Positive PHQ-9 screens received referral to a telehealth counseling clinic and pharmacologic treatment as indicated.

Twenty patients completed qualitative telephone surveys with 95% reporting satisfaction with the clinic experience and 100% reporting they would refer the service to their friends and family.

- *“The nurse practitioner and nurses are nice and did a great job.”*
- *“It was a great experience.”*
- *“I like the women’s health services very much.”*
- *“I wouldn’t have had access to a Pap without this.”*

For 2015–2016, 17 FNP students (including 2 males), 46 BSN students, and 6 faculty participated in the clinics. Clinical hours in women’s health ranged from 8–32 hours per FNP student and 4–24 hours per BSN student. On average, each FNP student completed 4 to 8 wellness visits per day. Self-reported

confidence of FNP students improved in performing a clinical breast exam and counseling a woman reluctant to have a mammogram or Pap test following the experience ($P < .05$). Not only did this clinical experience build confidence in the FNP students’ skill set in women’s health care, but it also contributed to achievement of core competencies.

DISCUSSION

Innovative collaborative women’s health clinics can improve access to cervical and breast cancer screenings for low-income women. Access to care for low-income women in Texas became more difficult in 2010 when the state opted out of Medicaid expansion. In 2011, the Texas legislature passed the “Affiliate Ban Rule,” which prohibited organizations that perform abortions from participating in the Women’s Health Program, which was the state-funded 1115 Medicaid waiver demonstration.⁸ As a result, in 2012, the Centers for Medicare and Medicaid Services refused to renew funding citing the “freedom of choice” policy, which permits Medicaid beneficiaries the ability to choose from any Medicaid provider within the state.⁸ This led to the closure of half of the women’s healthcare clinics providing care to low-income women throughout Texas over the next 2 years.⁸

The national rate for diagnosis of cervical cancer is 7.5 per 100,000 women, while the age-adjusted rate for women in Texas is 8.3 per 100,000, attributable to the high Hispanic population.^{9,10} Although the incidence of breast cancer for women in Texas is below the national average, the outcomes for low-income women remain poor.^{11,12} Expanding opportunities through FNP student-led clinics for low-income women improves access to breast and cervical cancer screening.

FNP students have limited access to clinical immersion in women’s health. This is more challenging for male students who may face reluctance from patients undergoing a pelvic examination.¹³ Despite these challenges, patients reported favorably on their experiences with the male FNP students. Through our student-led clinics, male and female students had the opportunity to gain experience in women’s health. Some students had little exposure to vulnerable, underserved populations prior to this experience

and they were able to develop cultural competence as well as clinical skills.

In addition to gaining clinical skills, the FNP students had the opportunity to experience role assimilation as an advanced practice registered nurse. The FNP students served as mentors and role models for the BSN students who were collaborators on their team. The FNP student-led initiative facilitated team-based collegial care with the development of delegation skills as a leader in the healthcare team.

LIMITATIONS

Most of the low-income women who received services depended on public transportation, which contributed to a high “no show” rate. Demographic data collection fulfilled grant-funding requirements, but in hindsight, additional survey questions on barriers to screening would have enhanced our understanding of the population and contributing factors to engagement in personal health. Qualitative data of the patient experience was only collected after the first 2 clinic days and, although data saturation appeared evident, information on the patient experience would have been valuable after each clinic day.

CONCLUSION

With a focus on value-based care, FNP student-led clinics combine high-quality, cost-effective health-care delivery while educating the next generation of healthcare providers. The triad of the triple aim through FNP student-led well-woman clinics was met by improving access to cancer screening contributing to improved patient outcomes at low-cost with qualitative data supporting an excellent patient experience. **JNP**

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Cindy Weston, DNP, FNP-BC, Robin Page, PhD, CNM, and Kara Jones-Schubart, DNP, FNP-BC, are assistant professors at Texas A & M University, College of Nursing, Bryan, TX. Marvellous Akinlotan, MPH, Akinlotan is a doctoral student at Texas A & M University, School of Public Health, College Station, TX. Dr. Weston can be reached at cweston@tamhsc.edu. In compliance with national ethical guidelines, the authors report no relationships with business or industry that would pose a conflict of interest.

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