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Patient Navigation Across the Spectrum of Women's Health Care in the U.S

Kathryn M. McKENNEY, MD, MPH, Noelle G. MARTINEZ, BA, and Lynn M. YEE, MD, MPH
Department of Obstetrics and Gynecology, Northwestern University Feinberg School of Medicine, Chicago, IL

Abstract

Patient navigation is a patient-centered intervention that uses trained personnel to identify patient-level barriers, including financial, cultural, logistical, and educational obstacles to health care, then mitigate these barriers to facilitate complete and timely access to health services. For example, in order to assist a Medicaid patient seeking postpartum care, a patient navigator could help her schedule an appointment before her insurance benefits change, coordinate transportation and childcare, give her informational pamphlets on contraception options, and accompany her to the appointment to ensure her questions are answered. Existing studies examining the efficacy of patient navigation interventions show particularly striking benefits in the realm of cancer care, including gynecologic oncology; patient navigation has been demonstrated to increase access to screening, shorten time to diagnostic resolution, and improve cancer outcomes, particularly in health disparity populations, such as women of color, rural populations, and poor women. Due to the successes in cancer care at reducing disparities in health care access and health outcomes, patient navigation has the potential to improve care and reduce disparities in obstetric and benign gynecologic care. We review the concept of patient navigation, offer potential roles for patient navigation in obstetrics and gynecology, and discuss areas for further investigation.

Keywords

delivery of health care; health disparities; patient navigation; navigators; women's health

INTRODUCTION

Patient navigation is a patient-centered intervention that uses trained personnel to facilitate complete and timely access to health services. Originally implemented in Harlem, New York, in the 1990s, patient navigation was shown to improve breast cancer screening and

CORRESPONDING AUTHOR: Lynn M. Yee, MD, MPH, Northwestern University Feinberg School of Medicine, Department of Obstetrics and Gynecology, 250 E. Superior Street, #5-2191, Chicago, IL 60611, Lynn.yee@northwestern.edu.

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treatment rates, as well as reduce stage at diagnosis for low-income women.¹ Financial support from private foundations and governmental sources² alike allowed for broader implementation of this “promising intervention” for underserved patients, and over the past two decades, patient navigation has been applied by individual health facilities, health care systems, and communities to improve and reduce disparities in patient access and outcomes.^{2–5} Despite the successes in the realm of cancer care, however, there is substantially less study of the application of navigation to the broader arena of women’s health care.

The evolving health care landscape necessitates a deeper look at navigation in women’s health for two major reasons. First, the complexity of health systems continues to increase. Complex health care systems and an evolving payer landscape create barriers for even well-informed patients to find and utilize health care resources. Second, disparities in women’s health persist. It has been well-established that low-income and minority women are at greater risk of adverse health outcomes than higher-resourced, non-Hispanic white patients. Because navigation has reduced these gaps in other contexts,^{3,5,6} we propose that patient navigation be considered and further evaluated as one method to improve health care access, delivery, and outcomes in obstetrics and gynecology by helping women negotiate complex or pivotal aspects of their care. Thus, we will provide an overview of patient navigation, highlight existing navigator services, and propose roles for patient navigators in obstetrics and gynecology.

GOALS OF PATIENT NAVIGATION

The core principles of patient navigation involve identifying patient-level barriers to access, improving timeliness of care, providing health education, and offering social support.^{2,7,8} In order to achieve these aims, navigators may help to arrange transportation, complete documentation for missed work, and minimize out of pocket expenses by helping patients understand and utilize insurance coverage.^{2,9} They also help patients obtain information about their health conditions, and they may provide social support to patients, assist the patient-provider relationship, and connect patients with professional psychological support.⁹

While patient navigation often focuses on episode-specific logistical coordination, it has the potential to promote the self-efficacy and health literacy skills necessary for patients to become autonomous, self-sufficient healthcare consumers after the navigator-patient partnership has ended. Individual navigation services, such as assistance with paperwork and appointment reminders, lay the groundwork by helping patients establish relationships with healthcare providers. Subsequent help with referrals, prescription access, and care coordination with multiple providers ensures that patients have the systems awareness to receive comprehensive long-term care. Emotional and educational support, as well as facilitation of joint decision-making between the patient and her providers, can promote patient self-efficacy by modeling self-advocacy. Ultimately, the hope is that patient navigation establishes the logistical and health literacy groundwork necessary for self-sustained engagement with healthcare (Figure 1).

DEVELOPMENT OF PATIENT NAVIGATORS

Depending on the specific needs and resources of the target community, individuals who serve as patient navigators range from lay people, including promotoras and community health workers, to professional health care or social services personnel, including case managers, social workers, and nurses.⁷ Lay health navigators may include members of the community being served, which may improve approachability and community trust in the health care system, and may offer more individualized or relevant social support than support offered by health care professionals.^{7,10,11}

Because navigators come from diverse backgrounds, there is variability in their level of formal training or professional experience within health care systems. Common elements of navigator training programs include care-related topics such as communication skills, cultural competence, barriers and adherence to care, psychosocial needs, care coordination, health education, computer skills, patient privacy, and professional boundaries.^{11,12} Navigators also receive training specific to the health issues addressed by their role and to the resources unique to their locality.¹³

In practice, navigators may coordinate with social workers, case managers, and patient advocates, or even perform roles typically executed by these individuals.^{7,14,15} Given this overlap, it is important to understand the distinction between patient navigators and other health care team members. Patient navigation focuses on connecting the patient with a discrete set of health services, and it measures success based on predetermined, measurable outcomes.^{7,8} This focus on a single health condition (e.g. pregnancy) or goal (e.g. completion of postpartum glucose tolerance test for women with gestational diabetes) contrasts with case management, which seeks to connect a patient with individualized resources depending on evolving, multi-specialty needs.¹⁶ Furthermore, while patient advocates also help to resolve discrete individual issues about health care delivery, such as medical bills or discrimination, the long-term navigation focus is to address condition-specific needs with a particular clinical outcome in mind.^{7,8,17}

GROWTH OF PATIENT NAVIGATION

After early successes of patient navigation in oncology, in 2005, the Health Resources and Services Administration amended the Public Health Service Act to implement navigator services for patients with cancer or other chronic diseases, with an emphasis on serving health disparity populations.² By providing \$12.6 million (2008–12) in grants to local organizations focused on health disparity populations, this law supported navigators to perform the following services: preventive care coordination or referrals, involvement of community organizations, improving awareness of clinical trials, helping patients overcome health system barriers, coordinating insurance access, and providing outreach to at-risk populations with health disparities.² Patient navigation was found to be a promising intervention for prevention and treatment of chronic medical conditions among underserved patients.²

Patient navigation programs have proliferated in the United States over the past decade. In the realm of oncology, navigation has increased screening rates among minority groups for breast, cervical, and colorectal cancers.^{3,7,9,18} It has been associated with improved time to diagnostic follow up for breast, cervical, colorectal, and prostate cancer screening abnormalities^{7,9,19} as well as lower incidence of late stage at diagnosis.^{7,9} Navigation reduces no-show rates to both initial^{3,20} and follow up appointments for cervical and colorectal cancer screening.^{3,7,21} It may also improve patient satisfaction and uptake of ancillary services such as palliative care among underserved populations.^{4,9,22} Similarly, navigation services for HIV-positive individuals, as a component of intensive wraparound services, have recently been effective in improving viremic control and retention in HIV care.^{23,24}

A recent success in obstetrics is the Ohio Perinatal Quality Collaborative's Progesterone Project, which used progesterone navigators in its program of extensive system-level interventions to reduce preterm birth.²⁵ A HRSA-funded navigator program for women with gestational diabetes increased the attendance rate to postpartum follow-up.² At our institution, low-income women who received postpartum navigation services were more likely than non-navigated peers to attend postpartum appointments, uptake Tier 1 and 2 contraceptive methods, receive influenza and human papillomavirus vaccinations, and undergo screening for postpartum depression.²⁶

Due to these successes, patient navigation is being used increasingly in the chronic disease care setting and is required by some cancer care accreditation standards.¹² The use of promotoras, or lay patient navigators, has even been recommended by the U.S. Department of Health and Human Services in the most recent Action Plan to Reduce Racial and Ethnic Health Disparities.²⁷ Thus, although uncommon in obstetrics and gynecology, navigation appears to be a viable means to improve care and reduce disparities in obstetric and benign gynecologic care.

NAVIGATION AS AN APPROACH TO REDUCING WOMEN'S HEALTH DISPARITIES

Racial and ethnic minority populations within the United States experience worse obstetric and gynecologic outcomes relative to their non-Hispanic white counterparts, and many of these inequities are related to differences in access to and quality of services.²⁸ Moreover, disparities also exist by socioeconomic status, education level, health literacy level, immigrant status, employment status, and gender identity. Each of these racial, ethnic, psychosocial, behavioral, and economic factors that contribute to health status offer areas in which navigation-based interventions may be of help.

Regarding racial and ethnic disparities, the most prominent and well-studied aspect of health inequity, minority women, in particular non-Hispanic black women, are more likely to experience maternal death, infant death, and severe maternal morbidity.²⁸⁻³⁰ Although non-Hispanic black women are known to have higher preterm birth rates, they receive interventions associated with reduction of preterm birth less often.³¹⁻³³ Non-Hispanic black women are less likely to access the most effective contraceptive methods compared to non-

Hispanic white women.^{28,34,35} They are also less likely to access infertility services such as in vitro fertilization (IVF), and those who do undergo IVF have lower live birth rates than non-Hispanic white women undergoing IVF.²⁸ Within gynecology, non-Hispanic black women are less likely to complete HPV vaccination, access hormone replacement therapy, and receive non-surgical alternatives to hysterectomy.^{28,36,37} Although gynecologic oncology care is not the focus of this article, similar disparities have been demonstrated in that subspecialty as well.²⁸

Health disparities reflect simultaneous societal, community, and individual forces. Patient navigation addresses each of these elements by combining a patient-centered mindset, system-level expertise and tools, and awareness of existing community resources. In practice, navigators make health care more approachable by eliciting opinions from patients who might be intimidated by or reticent with health care providers, as well as more accessible, by addressing financial, transportation, and health literacy barriers.⁷ Navigators can also tailor services to certain populations, such as immigrant communities, in which cultural or language differences can pose additional barriers to care.³⁸ Providing patient-centered input to providers and promoting patient self-efficacy serve to enhance patient engagement, empowerment, and retention in care.³⁹ Ultimately, in addition to offering short-term assistance and health education, patient navigation seeks to sustainably eliminate health disparities by fostering the trust and skills patients need to stay engaged with care in the long-term (Figure 1).

SPECIFIC ROLES FOR NAVIGATORS IN WOMEN'S HEALTH

A multitude of possible roles exist for navigators in obstetrics and gynecology across all subspecialties (Figure 2). From a systems perspective, community health workers may excel in encouraging women to establish care and perform routine screening, whereas specialized patient navigators may focus on optimizing more subspecialty-specific processes of care and outcomes. Furthermore, as the national emphasis on integrated, patient-centered care grows, navigators may play a central role in pregnancy medical homes, an obstetric variation on patient-centered medical homes.⁴⁰

In obstetrics, common patient concerns with maternity care include long wait times, rushed staff, inadequate individualization of care, incomplete information provision, and lack of continuity.³⁸ Navigators may help schedule prenatal visits, facilitate continuity where available and desired, offer prenatal-specific health education, provide breastfeeding support, and connect patients to pediatric care, new mother's resources, and community support. Navigators can also enhance receipt of postpartum care, including postpartum contraception, vaccinations, and health screening.²⁶

For women with complicated pregnancies, navigation may be of even greater benefit. Navigators may provide connections to subspecialist maternal, fetal, or pediatric providers or identify a patient-centered medical home to manage medical comorbidities. They can assist with the logistical challenges that accompany maternal medical complications during pregnancy. Consider the example of a patient with newly diagnosed type 2 diabetes mellitus. She will require numerous services during her antenatal course including new medications

and medical supplies, nutrition consultation, specialized ultrasonography, laboratory visits, consultation with other specialists, and third trimester fetal surveillance. Each step requires scheduling, transportation, and perhaps childcare; these demands are typically amplified with increasing gestational age. This patient requires intensive health education. The complexity of care and the new diagnosis are likely to present emotional challenges; this patient may benefit from psychosocial support as well. Finally, after pregnancy, she will require primary care to promote her long-term health. Patient navigation can ease the burden of these numerous elements of complex care by taking some of the onus off the already overwhelmed patient.

Although the utility of navigators is evident in gynecologic oncology care, such a service can also benefit benign gynecology patients. For example, navigators can bridge emergency department gynecologic care for issues such as abnormal uterine bleeding or pregnancy of unknown location to appropriate and timely outpatient follow-up. In the outpatient setting, navigators may help with completing diagnostic tests, accomplishing recommended follow-up or treatment plans, and undergoing required pre-operative evaluations. For example, consider a perimenopausal woman with medical comorbidities and abnormal uterine bleeding in the setting of a myomatous uterus who desires management of her bulk symptoms. In the context of her medical comorbidities, her choice of medical, interventional radiologic, or surgical management will require in-depth understanding of the risks and benefits as well as insurance coverage of each option. Imaging, metabolic testing, cardiopulmonary evaluation, and pre- and post-procedure teaching and close follow-up are also required.

Navigators may also serve a critical role in family planning. Navigators may assist patients in learning how to accurately use a new contraceptive method or ensure that family planning tasks, such as a hysterosalpingogram after hysteroscopic sterilization, are completed in the appropriate timeline. Abortion care remains an area deeply in need of navigation services, given the multitude of social, financial, legal, and access barriers to safe abortion. For example, a teenager desiring pregnancy termination may face parental notification or consent laws, mandatory waiting periods, and financial or geographic barriers to receiving a desired pregnancy termination. Patient navigation may be an essential tool to reduce burdens on patients, shorten time to services, and improve the likelihood that women will receive desired care. Importantly, navigation programs focused on facilitating abortion care will need to be thoughtfully planned to work within the local politico-legal climate; such navigation services may require more complex training and program planning than other women's health navigation programs.

Lastly, in addition to helping build the patient-provider therapeutic alliance, navigators can also aid the health care team. There are many provider and patient tasks which require understanding of health care systems but do not require clinical expertise. A pivotal role of the patient navigator may be to reduce the quantity of tasks providers must perform. For example, navigators may explain pre-operative instructions, locate patients who fail to show for care, review health education information, or help obtain records from other providers. This assistance could allow clinicians to spend more time with each patient or accommodate an increased volume of patients. A qualitative study of providers' views on a cancer care

navigation program found it increased patient volume and facilitated use of existing community resources while reducing the burden on physicians, nurses, and case managers.⁴¹

MEASURING OUTCOMES OF PATIENT NAVIGATION

As patient navigation services have not been applied frequently within obstetric and benign gynecologic women's health care, it will be important for new programs to develop replicable outcome measures to assess the impact of navigators. Kelly et al. have proposed a design for a systematic review to assess the effectiveness of patient navigator interventions for people with chronic disease.⁴² Their protocol includes patient-level outcomes such as mortality, quality-of-life utility measures, rates of complications from suboptimal disease management, patient satisfaction, and adherence to guidelines for testing and treatment.⁴² Guadagnolo et al. have proposed a set of policy-relevant cancer care-specific metrics as well.⁴³ We have adapted these models to address navigation in women's health care (Table 1). Some published guidance already exists regarding cost-effectiveness analysis and use of patient-centered outcomes in this setting, including a scale developed and validated specifically to evaluate patient satisfaction with navigator services.⁴⁴⁻⁴⁶

CONCLUSIONS

There are numerous health inequities in obstetrics and gynecology in access to health services, the process of care, and health outcomes. By providing patient-centered support to address barriers to care, patient navigation may be a mechanism that is ideally suited to helping ameliorate these disparities.

To strengthen the evidence base for patient navigation interventions, further evaluation should assess outcomes in obstetrics and gynecology, as well as factors that affect program success. Future studies should investigate the benefits of patient navigation to patient experiences and health outcomes in the many realms of women's health care, including obstetrics and benign gynecology. For example, the implementation of navigation in areas such as maternal-fetal medicine (e.g. for patients with diabetes during pregnancy) may be assessed through randomized trials of outcomes with navigation versus routine care prior to large scale implementation. Such in-depth investigations can demonstrate the potential impact of navigation and will help tailor navigator programs for the specific needs of obstetrics and gynecology. As health systems transition from fee-for-service payment models toward pay-for-performance and other value-based payment systems, the cost of navigation programs may be mitigated by their improvement in patient outcomes. Additional work can aim to determine navigation cost-effectiveness and develop potential reimbursement strategies, particularly since most existing navigator programs are funded by philanthropy or grants. Next, although various groups have developed their own training curricula and certifications (e.g., the Patient Navigation Research Program), no nationally established training standards exist.¹² More work can be done to determine the necessary credentials and training needed to provide effective navigation services.²⁷ Training-related navigation research should also seek to understand navigation approaches that best serve the needs of different target populations, including to what extent concordant race, ethnicity, and language improve the effectiveness of patient navigation.⁴⁷

Given the many reasons why patient navigation may be an effective and acceptable mechanism to improve care and reduce disparities in women's health, next steps include developing the evidence and experience base to expand this strategy.

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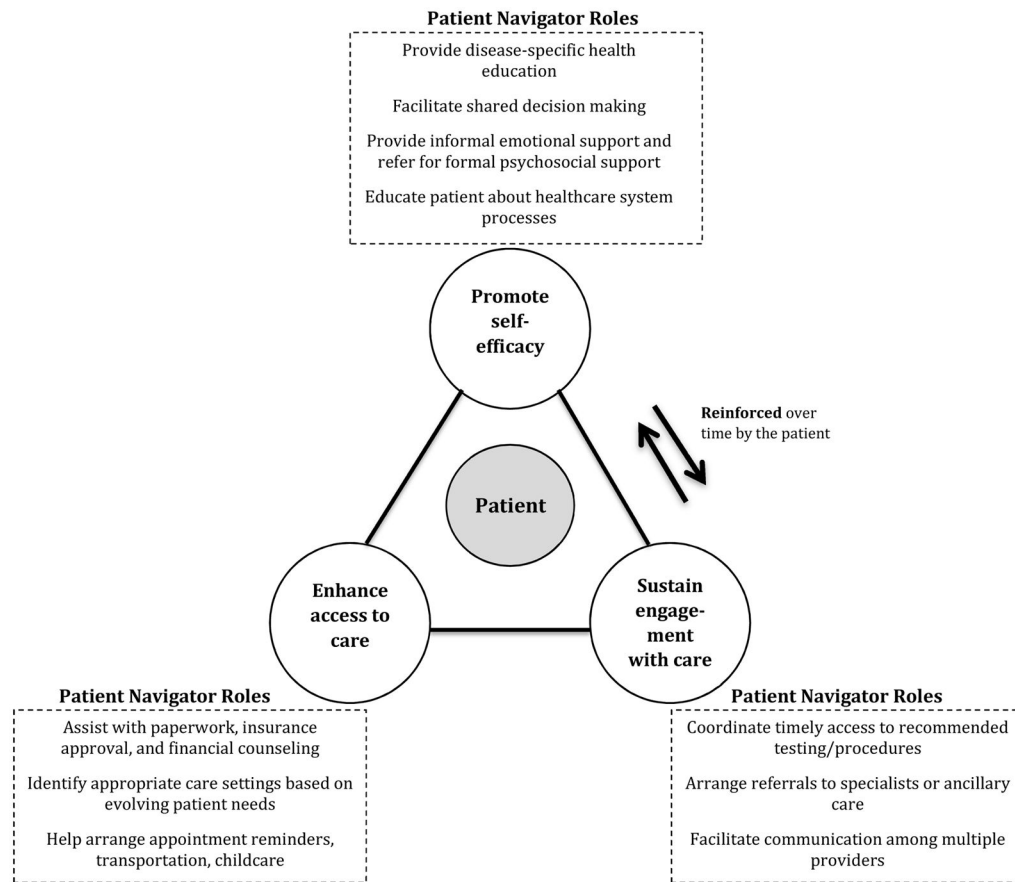


Figure 1.
Patient Navigator Model

	Enhance access to care	Promote patient self-efficacy	Sustain engagement with healthcare
Obstetrics	<ul style="list-style-type: none"> - Schedule antenatal diagnostics (lab visits, ultrasounds) - Assist with barriers to prescription access - Help patients manage multiple appointments - Encourage provider continuity where desired 	<ul style="list-style-type: none"> - Connect patients to community perinatal resources for support, housing, food, transportation - Offer psychosocial support during this period of enhanced health needs and learning 	<ul style="list-style-type: none"> - Assist with arranging referrals and specialist consultations - Help patients identify primary care providers, as well as pediatricians - Bridge obstetric to primary care
Gynecology	<ul style="list-style-type: none"> - Coordinate access to cervical and breast cancer screening and facilitate diagnostic resolution of abnormal results - Assist with completing pre-operative tasks prior to gynecologic surgery such as cardiac testing, lab work, or anesthesia consultation 	<ul style="list-style-type: none"> - Educate patient regarding pertinent screening guidelines - Connect patient with educational resources about LEEP, conization, and cryotherapy - Offer psychosocial support at each stage of cancer screening 	<ul style="list-style-type: none"> - Transition from emergency department to outpatient clinical care - Help patients follow up HCG or ultrasounds for pregnancies of unknown or ectopic location - Facilitate referral to and retention in ancillary services such as pelvic floor physical therapy
Family Planning	<ul style="list-style-type: none"> - Coordinate access to contraception (e.g. prior authorization for long acting reversible contraception or sterilization; prescription coverage for hormonal contraception) - Help overcome legal, financial, and logistical barriers to abortion access 	<ul style="list-style-type: none"> - Provide basic contraceptive education - Elicit patient preferences regarding reproductive life planning in discussions with providers - Facilitate access to comprehensive, unbiased information and psychosocial support for women seeking abortion 	<ul style="list-style-type: none"> - Ensure post-abortion follow-up - Ensure post-sterilization follow-up (hysterosalpingogram after hysteroscopic sterilization; confirmation of pathology after tubal ligation; semen analysis after vasectomy)
Reproductive Endocrinology	<ul style="list-style-type: none"> - Coordinate diagnostic testing - Coordinate the highly timed and specific processes undertaken with fertility treatment - Assist with complex financial and insurance needs 	<ul style="list-style-type: none"> - Provide a bridge to infertility-related mental health care 	<ul style="list-style-type: none"> - Bridge to obstetric care when pregnancy is achieved

Figure 2.
How can navigators assist women’s health patients?

Table 1

Suggested outcome measures to assess the effect of navigation in women's health

	Patient-level	Intermediate/Disease-specific	Process/System
Obstetrics	<ul style="list-style-type: none"> • Patient satisfaction related to prenatal care and childbirth experience • Patient anxiety (e.g. Spielberger State-Trait Anxiety Inventory) and quality of life (e.g. World Health Organization Quality of Life assessment) 	<ul style="list-style-type: none"> • Time to diagnosis of pregnancy-specific comorbidities (e.g. gestational diabetes) • Time to initiation of recommended screening or therapy (e.g. initiation of cervical length measurements and progesterone therapy for women at risk of preterm birth) • Disease-specific metrics (e.g. preterm birth rate) • Clinical trial participation 	<ul style="list-style-type: none"> • No-show rate at prenatal care visits • Rate of appropriate completion of prenatal care milestones (e.g. glucose challenge at 24-28 weeks, Tdap vaccine at 27-36 weeks) • Rate of attendance at postpartum obstetrical visit • Care established with primary care provider (PCP), PCP contact information documented in chart • Rate of appropriate receipt of subspecialist care after referral • Obstetrical triage or emergency department visits
Gynecology	<ul style="list-style-type: none"> • Patient satisfaction with gynecologic care • Patient anxiety and quality of life 	<ul style="list-style-type: none"> • Completion of recommended gynecologic surgery or therapy • Time to first IVF cycle after initiating fertility treatment • Achievement of equitable rates of diagnostic resolution or disease outcome (e.g. negative follow-up test after treatment for sexually transmitted infection) • Appropriate use of minimally invasive surgical or non-surgical therapeutic approaches • Disease-specific metrics (e.g. live birth rate after fertility treatment or gestational age at time of abortion) • Clinical trial participation 	<ul style="list-style-type: none"> • Rate of timely follow up appointment after emergency department visit • Rate of timely follow up of abnormal Pap or mammogram result • Rate of appropriate pregnancy of unknown location follow-up • Unscheduled office or emergency visits