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Bridging the postpartum gap: Best practices for training of obstetric patient navigators

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Abstract

The postpartum period represents a critical window of opportunity to improve maternal short- and long-term health, including optimizing postpartum recovery, providing effective contraception, caring for mood disorders, managing weight, supporting lactation, initiating preventive care, and promoting cardiometabolic health. However, inadequate postpartum care, especially for individuals facing social and structural barriers, is common in the United States and contributes to suboptimal health outcomes with lasting consequences.

Patient navigation is a patient-centered intervention that uses trained personnel to identify financial, cultural, logistical, and educational obstacles to effective health care, and to mitigate these barriers in order to facilitate comprehensive and timely access to needed health services. Given emerging evidence suggesting patient navigation may be a promising method to improve health among postpartum individuals, our team developed a postpartum patient navigator training guide to be used in the Navigating New Motherhood 2 (NNM2) and other obstetric navigation programs. NNM2 is a randomized trial exploring whether patient navigation by a trained, lay postpartum navigator for low-income individuals can improve health and patient-reported outcomes during and after the postpartum period. Hiring and training patient navigators without health professional degrees are integral components of initiating a navigation program. Yet, patient navigator training is highly variable, and no guidelines regarding key elements in such a training program exist for obstetrics specifically.

Thus, this paper aims to describe the core principles, content, and rationale for each element in a comprehensive postpartum patient navigator training program. Training should be centered around six core elements: 1) principles of patient navigation, 2) knowledge of pregnancy and postpartum

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care, 3) health education and health promotion principles, 4) cultural sensitivity and health equity, 5) care coordination and community resources, and 6) electronic medical record systems. These core elements can serve as a basis for the development of adaptable curricula for a variety of institutions and contexts. We also offer recommendations for the implementation of a navigator training program. A curriculum such as this, with built-in flexibility to meet community and institutional needs, may promote the effective and sustainable use of patient navigation in the postpartum context.

CONDENSATION

We describe core principles and training practices to equip postpartum patient navigators with the skillset to guide patients through the postpartum period.

Keywords

health disparities; health education; patient navigation; patient navigator; postpartum; navigator training

I. INTRODUCTION

The postpartum period represents a critical opportunity to improve short- and long-term health. The first months after birth are a time of remarkable change and vulnerability in an individual's physical health, psychological well-being, and social roles. The postpartum period is unique because pregnancy serves as a window to future health,¹⁻⁵ and can be a period of enhanced access to health care.^{4,5} Individuals interact with the healthcare system more frequently during the prenatal period, and the availability of publicly funded care for low-income pregnant individuals facilitates enhanced access to care. Patients are additionally motivated to improve health behaviors during pregnancy,⁶⁻⁹ and thus this period has the potential to spark lifelong changes.^{10,11} Optimizing pregnancy-specific health status, providing postpartum care for chronic comorbidities, and promoting changes in health behaviors in the postpartum period may positively influence lifelong health.

Yet, engagement in postpartum care in the United States (US) is suboptimal, and improving health after pregnancy requires novel and comprehensive approaches to postpartum care and health care transitions. Our team previously demonstrated that the introduction of a postpartum patient navigator to an obstetric practice was associated with improvements in health metrics compared to a historical cohort who did not have access to navigation.¹² Following those findings, we are determining whether patient navigation improves short- and long-term health via the Navigating New Motherhood 2 (NNM2) trial, in which publicly insured low-income pregnant and postpartum individuals are randomized to receive either navigation or usual care during the first year after birth (NCT03922334¹³). For participants randomized to receive navigation, a postpartum patient navigator provides intensive, individualized, one-on-one navigation services.

However, there is no current template for the core principles or training elements for postpartum patient navigators. Thus, we developed and implemented a comprehensive

curriculum to train patient navigators for the trial, but also for postpartum navigation in general. To develop this training program, we referenced multiple sources, including existing literature about postpartum care and navigation in other contexts, our experience as health services and obstetrics experts, the experience of clinical team members with the prior navigation program,¹⁴ and the input of the navigators themselves. Although the NNM2 trial is ongoing and results are not yet available, the concept of patient navigation is of increasing interest in obstetrics, and we believe our experience with developing a postpartum navigator training program may be useful to clinicians, researchers, and quality improvement experts looking to design similar programs in their own context.

The objectives of this manuscript are to describe the rationale for postpartum patient navigation; review the training goals, methods, and principles of a navigation program; delineate a blueprint for the translation of principles to practice; and provide recommendations for programmatic development.

II. RATIONALE FOR POSTPARTUM PATIENT NAVIGATION

Although the postpartum period represents a critical opportunity for engagement with medical care, uptake of postpartum care in the US is often poor. As many as 40% of individuals do not attend a postpartum healthcare visit.^{15,16} Socioeconomic inequities in postpartum care are abundant¹⁶⁻²¹ and ample evidence identifies that there are multiple barriers to care, including potentially lesser prioritization of maternal care compared to pediatric care.²²⁻²⁶ Even when care is received, care quality may be suboptimal.^{27,28} Furthermore, the transition to primary care commonly does not occur.^{4,16,23} Thus, the postpartum period represents a critical window for retention in high quality health care and a clear gap in the current health system; this gap is even wider for those with inadequate insurance coverage, cultural or linguistic barriers to health care, limited health literacy, who live in rural areas or inaccessible urban areas, or who have other challenges to accessing health during this transitional period.

Patient navigation is a patient-centered intervention utilizing trained non-medical personnel to identify financial, cultural, logistical, educational, and other obstacles to health care, and then to mitigate these barriers by facilitating comprehensive and timely access to health services.²⁹ The core principles of navigation involve identifying patient- and system-level barriers to access, improving timeliness of care, providing health education, and offering social support.³⁰⁻³² In the postpartum period, the broad goals of a postpartum patient navigation program are to improve health by 1) increasing the receipt of postpartum care in the indicated time periods by reducing barriers to accessing and engaging with health care, 2) improving the quality of postpartum patient care by equipping patients with tools for self-advocacy and providing health education, and 3) ensuring comprehensive transitions from obstetric care to primary care. Postpartum-specific goals that may serve as guideposts for patient navigation programs include attendance at a comprehensive postpartum appointment, receipt of postpartum-specific anticipatory guidance, receipt of desired contraception, initiation and maintenance of breastfeeding when desired, receipt of indicated screening (such as for perinatal depression), and receipt of preventive care and indicated screening (such as blood pressure, weight, and metabolic tests).³³

To achieve these aims, navigators perform many duties, including arranging transportation, completing documentation, helping patients understand and utilize insurance coverage, helping patients obtain health information, providing psychosocial support, assisting patient-provider communication, encouraging patient activation, and linking patients to community resources (Figure 1).^{30,34} As a longstanding component of oncology care and a growing element in chronic disease management, patient navigation has consistently been shown to improve patient outcomes and reduce disparities in both healthcare access and health outcomes.^{30,31,34–45}

Although navigation aims to address specific episodes of patients' needs, it has the potential to promote the self-efficacy, system awareness, and health literacy skills necessary for patients to become fully activated participants in health care long after the navigation partnership concludes.²⁹ Based on the compelling evidence for patient navigation as a barrier-reducing strategy in other health domains, we proposed that navigation could be a viable method to address gaps in postpartum care for vulnerable populations in the US.¹³

III. TRAINING OVERVIEW

III.1 Training Goals

Navigators come from diverse backgrounds with variable degrees of formal training and professional experience.²⁹ There are established benefits of training individuals who are not health care professionals to be patient navigators, and evidence from oncology suggests that, with proper training, a lay navigator can develop the skills to support complex care needs.⁴⁶ However, no current guidelines for obstetric or postpartum navigation training exist. In other fields, common topics of navigation curricula include communication skills, cultural competence, barriers to care, specific health education topics, and resources unique to the locality.^{47–49} Because of the novel application of patient navigation to postpartum care, we adapted these topics and skills in order to develop a postpartum navigator training program.

First, based on our experience and review of the existing literature, we identified key characteristics of a postpartum navigator, including strong communication skills, a relationship-building capacity, problem-solving skills, knowledge about prenatal and postpartum care, and a capacity to understand the health care system. Second, we delineated six core elements for navigator professional development: 1) principles of patient navigation, 2) knowledge of prenatal and postpartum care, 3) health education and health promotion principles, 4) cultural sensitivity and health equity, 5) care coordination and community resources, and 6) electronic medical record (EMR) systems (Table 1). These principles are the framework for the navigator training program.

III.2 Training Methods

We designed a comprehensive, semi-structured training plan to develop foundational knowledge and skills for the patient navigator role. The curriculum was designed to encompass the six core principles using a multimodal educational approach combining experiential and self-directed training. To design this curriculum, we outlined the care processes and potential issues an individual may experience throughout pregnancy, delivery,

the early postpartum period, and the transitional period during the first postpartum year, especially as related to accessing healthcare. We accomplished this process via evaluating our experiences with prior navigation programs, as clinicians and other care team members, and by discussions with postpartum individuals. Although there is significant variability in patients' needs, this process mapping effort focused the training so a navigator could understand the spectrum of health care and the psychosocial complexity during this life stage.

After identifying these touchpoints, we leveraged the expertise of multiple clinical care team members to create a multi-pronged educational approach. The training period consisted of eight weeks of learning and preparatory work, including a four-week period of observational and experiential learning (Table 2). We included formal didactic methods, such as structured courses, self-directed readings, webinars, and lectures (Table 3). This flexible curriculum was intended to promote development of the core principles in an interactive manner that allowed for skills-building and led to an intimate familiarity with local resources. This length of time was selected in order to quickly acclimate the navigators to their roles via this intensive training period, which was then followed by ongoing learning while in the navigator role.

III.3 Observational and Experiential Learning

Observational learning is an integral component of navigator training. We designed the observational and experiential learning schedule to orient the navigators to the obstetric and postpartum inpatient and outpatient care teams as well as community and institutional resources. We aimed to expose the navigators to all care team members with whom a patient could potentially interact during the late antenatal and postpartum period. Each care team member (Table 2) offered a detailed understanding of their role and how it may intersect with a navigator while providing patient care. Navigators subsequently observed staff members performing their regular duties for a time period determined by the level of interaction required and proximity of their role to the navigator. In addition to becoming familiar with various resources, this process allowed the navigators to develop independent relationships with healthcare providers. By introducing the navigator role and explaining the program, this learning period aimed to reduce health system fragmentation for individuals.

The experiential learning phase first included orientation to the inpatient units. Navigators oriented to the locations, roles, and processes of Obstetrical Triage and the Emergency Department, the first units a patient encounters upon admission. They shadowed on the Labor and Delivery unit, and, with patient consent, witnessed birth in order to gain perspective on the labor process and steps involved in a hospital birth. They underwent observational training on the postpartum inpatient units with physicians, nurse managers, and bedside nurses to understand postpartum care processes and inpatient operations. Additionally, the navigators shadowed and had orientations with lactation counselors, inpatient women's health social workers, and neonatal intensive care unit social workers to understand their roles and routines.

The outpatient observational learning process included orientation to both antenatal and postpartum care (Table 2). The navigators met and observed all team members with whom

patients may interact, including medical assistants, registered nurses, social workers, breastfeeding peer counselors, physicians at multiple career stages, patient services representatives, and clinic administrative staff. The goals of this observational process were to identify how best to assist and prepare patients for outpatient care and to understand how navigation supports the roles of these team members. In addition to the care teams available to all patients, navigators observed a diabetes-focused Advanced Practice Nurse, Registered Dietitian, and social workers specific to our institution's programs (mental health, perinatal loss, and fetal health). The navigators underwent one-on-one training with a maternal-fetal medicine expert in obesity and weight loss. Additionally, the navigators observed a nurse navigator in breast oncology to gain further familiarity with navigation itself. The navigators also engaged in observational learning with primary care providers to develop the skills to promote the transition to primary care. By observing primary care visits and orienting with the clinic's care coordinator, the navigators developed an understanding of the transition process and primary care resources.

Finally, the navigators underwent health systems observational learning. This included a tour of the patient-facing and non-patient-facing aspects of the hospital campus and meeting with the clinic resource coordinator to understand issues such as scheduling, clinic templates, and administrative resources. The training also included meeting insurance administrators for the health care system, observing the provision of care via this system's health education specialists, meeting with counselors in the hospital domestic violence crisis program, and learning about the work of the patient relations and medical records offices. Extensive training with the EMR system included learning about documentation, messaging, clinical reports, and scheduling.

IV. TRAINING FOR THE CORE ELEMENTS OF NAVIGATOR DEVELOPMENT

IV.1 Principles of Patient Navigation

Our training developed the navigators' understanding of the scope and practice of navigation work (Table 3). To accomplish training on the fundamentals of navigation, we utilized the *Patient Navigator Training Collaborative (PNTC)*,⁵⁰ an established patient navigator training program. The navigators completed the PNTC *Fundamentals of Navigation* course, an 8-week online training covering several topics: the history of patient navigation, the role of patient navigators, communication, health literacy, health disparities, barrier and needs assessment, problem-solving strategies, motivational interviewing, and professional boundaries. Through this course, navigators developed a foundational understanding of their role and responsibilities, including how to distinguish themselves from other members of the healthcare team. Additionally, the PNTC program offers several skills-building courses that serve as continuing education for navigators, such as the 4-week *Care Coordination* course.

Training on the principles of patient navigation, professionalism, and communication continued via self-directed didactic materials (Table 3), including the *Patient Navigation: Overcoming Barriers to Care* textbook, materials from the National Navigation Roundtable, and published works by our own group.^{12,29,46}

Developing professional communication skills is a key requirement of training patient navigators, including maintaining professional boundaries while promoting patient engagement. At our site, navigators employ multiple modes of communication, including email and text-messaging along with in-person visits, to interact with patients. The use of mobile health technology allows patients to easily access navigators but also requires the establishment of a professional navigator-patient relationship to ensure appropriate behavior and effective communication between both parties. Thus, training included discussion of appropriate use of work-issued mobile phones and hours for communication, the use of an on-call system for patients who deliver on weekends, and the development of an emergency protocol for managing urgent needs (such as severe hypertension or suicidality). Via didactic training, role-playing, observation of the navigators with patients, and guidance from navigators in other fields, the training on core principles of navigation aimed to promote professional, balanced communication between patients and team members.

IV.2 Knowledge of Prenatal and Postpartum Care

Although navigators have non-medical professional backgrounds, their role requires basic knowledge of prenatal and postpartum care in order to support patients. Training in these topics largely occurred via the observational and experiential learning processes to orient the navigators to the evolution of healthcare needs throughout the prenatal and postpartum periods. For example, individuals in the late third trimester may need additional logistical support for tasks such as registering at the hospital for delivery, ordering a breast pump, or preparing for hospital visitor policies. In contrast, postpartum care may evolve to include a greater need for community resources or postpartum mental health support.

Although the hospital staff may support some of these tasks, the role of the navigator includes promoting self-advocacy skills needed for patients to realize specific needs and utilize available resources effectively, as well as working with team members to address individual-level barriers. This fundamental perspective differentiates patient navigators from other care team members, who may not approach their roles with the explicit goal of promoting patient activation for long-term success. Patient navigators must be trained to promote activation in the patient's own healthcare engagement alongside developing skills to succeed in the healthcare system on their own when navigation ends. Dedicated training regarding barrier-reducing support tasks with the evolution of changing needs of pregnancy and postpartum care is essential to achieve the goals of individualized navigation.

IV.3 Health Education and Health Promotion Principles

The third core principle of navigator development includes understanding the goals of health education and health promotion as related to pregnancy and postpartum health. The navigators were expected to develop a basic working knowledge of anticipated health needs of postpartum patients. However, as the navigators are not clinicians, their training also emphasized that they were not expected to provide clinical care or answer clinical questions beyond routine health education, but included resources for redirecting such needs to appropriate clinical personnel.

To organize this learning, didactic training was concentrated on five focal topics the navigators would cover with patients: breastfeeding, contraception and pregnancy spacing, weight loss and metabolic health, mental health transitions and risks, and primary care recommendations and goals (Table 4). The navigators learned about these health education topics by shadowing the health care team, attending lectures and webinars, and reading materials from professional societies (Table 3). Table 3 reflects the health education learning tools used specifically for this program, although we acknowledge that materials from other sources or professional societies may provide similar content with additional perspectives.

Health promotion concepts were addressed via training in motivational interviewing, which offered strategies for discussing difficult topics or health issues requiring patients to have a more active role. Because navigators aim to improve patient health outcomes by supporting self-efficacy, high-quality motivational interviewing is a valuable tool. In addition to didactic material, we addressed this skill via one-on-one demonstration and simulation opportunities using standardized clinical scenarios. Care team members provided in-person training on health promotion by demonstrating motivational interviewing in practice and sharing the health resources they provide to patients. The curriculum's combined focus on topical knowledge and health promotion techniques equipped navigators to provide patients with accurate information.

IV.4 Cultural Sensitivity and Health Equity

Patient navigation is often designed to support diverse, low-income, and/or under-resourced populations. Thus, we included training in the concepts of health equity, health disparities, and social determinants of health. Many barriers to optimal postpartum care exist, including knowledge and lack of awareness of need, insurance coverage, childcare, adequate access to food and other necessary resources, early return to work, linguistic barriers, poor provider continuity, transportation, and many others. Training on the patient- and healthcare system-based social determinants and equity issues was accomplished via in-person discussions with the team, self-directed readings on social determinants, and lectures and webinars highlighting aspects of care for different sociodemographic groups and advocacy skills (Table 3). Training emphasized a culturally sensitive, holistic approach to patient care, with emphasis on openness and appreciation for the diverse perspectives of the patient population. While navigators are not expected to be intimately familiar with the cultural background of all patients, they must demonstrate compassion and understanding in order to engage effectively and equitably with patients and advocate appropriately on their behalf. Navigators, who were bilingual English- and Spanish-speakers, were also trained in the professional provision of bilingual navigation services.

Additionally, navigator training must expose navigators to the challenges within the healthcare system that disadvantage certain groups, including issues of racism and implicit bias. The curriculum aimed to offer insight on the issues patients may face, including discrimination and stigma due to racial or ethnic identity or other issues such as mental health, obesity, or socioeconomic status, when accessing care. Our didactic library further addressed intersectional topics, such as health literacy, healthcare for individuals with housing instability, and health for sexual and gender minority individuals. The navigator

training includes didactic and experiential learning with querying patients about their social determinants of health and then specifically providing resources tailored to each individuals' needs; for example, navigators learn how to sensitively determine if a barrier such as insurance coverage is prohibiting her from accessing her desired contraceptive method followed by working with the patient to resolve the gaps in coverage or identify other resources to fulfill this need.

IV.5 Care Coordination and Community Resources

Integration of navigators into care teams is essential to the successful implementation of navigation programs. Thus, training included introducing the clinical team to the program objectives and the navigators' role. Navigators regularly coordinate with other care team members to support patients. As such, relationships between navigators and care team members facilitate effective healthcare access for patients. Training in team-based care was accomplished via meetings with the clinical team (Table 2) and the formal courses described above (Table 3), which emphasized team-based care coordination with a patient-centered approach.^{51,52} Navigators learned communication techniques to help with team collaboration, reduce fragmentation in care, and promote accountability to a shared care plan.

In addition to coordinating patient care within the hospital system, navigators are expected to facilitate patient access to community resources, including community-based care coordination or community navigation programs. Such support includes developing a catalog of institutional, community health, and social services available to patients that cater to various backgrounds and communities. Thus, training included acquiring familiarity with such resources, via guidance from social workers and self-directed resource searching, in order to coordinate care and connect patients to services. Training additionally included learning of the scope of practice of community resources and developing the communication skills to enhance partnerships with community resources and to optimize the hand-offs from the healthcare system to the community.

Training in community resources extended beyond the initial 8-week period, given the depth and breadth of resources available in this large metropolitan area. Once navigators developed connections with their patients and identified individual needs, they were provided additional training in specific areas. Two such areas for inclusion in navigator curricula include public insurance and housing resources. The complexity of the public insurance system requires intimate familiarity with insurance options, as navigators commonly spend extensive time supporting insurance issues in the transition period after birth. Similarly, housing stability plays an important role in healthcare access and utilization. Training on housing programs and coordination of efforts with social workers is a critical component of community resource training, and navigator training that includes familiarity with such community resources can be a major benefit to patients.

IV.6 Electronic Medical Record Systems

Lastly, navigators must have access to and facility with the institution's EMR system to coordinate care and communicate with patients' care teams. The EMR system allows the

team to document and communicate patient care and treatment plans. Access to and documenting within the EMR allows navigators to actively engage with the care team, schedule appointments, and integrate their work into patient care.

Several phases of work prepared the navigators to utilize the EMR system. First, information technology, security, and legal agreements established navigators' terms of usage, access and functional privileges with regard to scheduling, messaging, and documentation. Second, a two-day training course offered an overview of our hospital's EMR system and a detailed experiential learning process regarding EMR-specific skills. This course included learning how to schedule appointments and developing skills to use the EMR independently. Third, navigators worked with clinical team members to better understand their roles in clinical documentation. Clinic administrative staff provided a step-by-step instructional guide and demonstrations in real-time settings. Finally, our team built EMR system templates for the navigator role, which required advanced understanding of EMR-specific processes and confidentiality safeguards for EMR patient information. Upon completion of this EMR training, the navigators were able to independently conduct all functions necessary for their role.

V. RECOMMENDATIONS AND CONCLUSIONS

The training of a postpartum patient navigator requires the development of a myriad of skills and a broad knowledge base to optimally support the postpartum health of diverse populations. To accomplish these goals, we identified key recommendations:

- Ensure training is flexible and adaptable to local needs while also centering the curriculum on the core professional development elements.
- When orienting institutional and community members who will interact with the navigators, fully introduce the navigator role and the purpose of the program to reduce confusion and promote collaboration among all team members.
- Seek input from clinical and administrative stakeholders about critical topics to include throughout training.
- Standardize and clarify expectations for the outcomes of navigator training to ensure adequate incorporation of content and skills.
- Explain and reinforce the program goals and navigator scope with the clinical care team to align expectations and promote integration.
- Incorporate clinical team feedback in identifying priority areas for ongoing navigator education.
- Identify the ongoing needs of navigators after initiation of their role. Periodically query the navigators regarding knowledge gaps as their roles evolve.
- Develop a plan for "Continuing Navigator Education." Ongoing professional development may take place at a standard time (e.g., every six months) via formal lectures, webinars, or readings.

However, despite these key recommendations for the optimization of a patient navigator training program, the development and sustainability of patient navigator programs are not without challenges. Educating clinical stakeholders to understand the navigator role and engaging them to partner with navigators require a dedicated and cohesive leadership team and ongoing systems for feedback and programmatic modifications.^{46,53} Since patient navigation is not yet a standard, reimbursable service in obstetrics, funding for patient navigators often comes from research or philanthropy.⁵³ Future work must consider not only the efficacy of patient navigation to improve health but also its cost-effectiveness in order to support the need for insurers to pay for navigation programs. In addition, challenges with delineating the scope of practice may exist; navigation programs need clear goals and context-specific scope of practice definitions in order to function most effectively.⁴⁶ Finally, optimizing implementation of navigation programs requires not just commitment to the training of a navigator, but also ongoing program evaluation in order to ensure scalability and sustainability within a given healthcare setting.

We propose that patient navigation may be an effective approach to improve postpartum health and reduce inequities. This adaptable blueprint for training an obstetric and/or postpartum navigator may be readily tailored to fit the needs of institutions, while centering on core competencies for the role. This multimodal training method is a practical way for navigators to learn and engage with a variety of courses, individuals, and materials.

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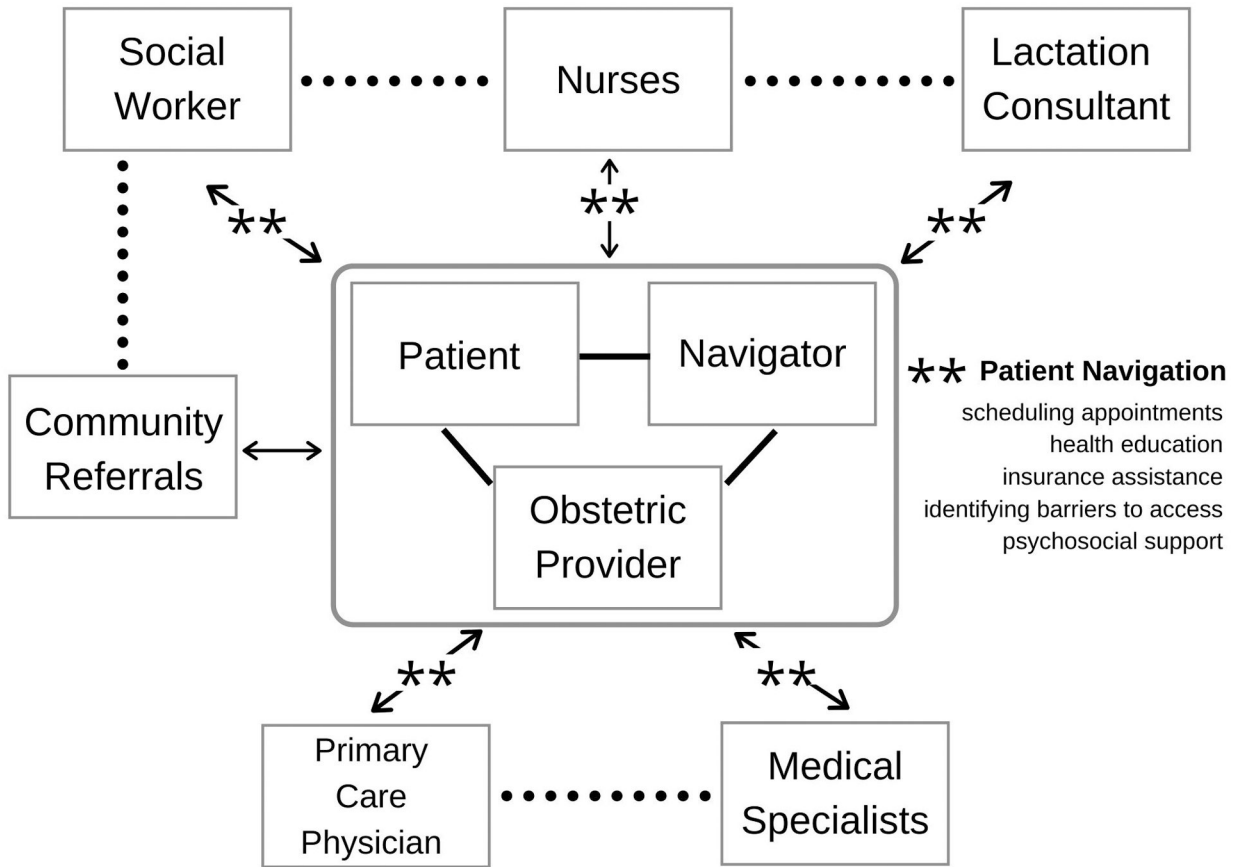


Figure 1:
Patient navigation: Bridging gaps across systems of care
** indicates bidirectional navigation

Table 1:

Core elements for obstetric navigator professional development

Core Elements for Obstetric and Postpartum Navigator Professional Development
Principles of Patient Navigation
Knowledge of Prenatal and Postpartum Care
Health Education and Health Promotion Principles
Cultural Sensitivity and Health Equity
Care Coordination and Community Resources
Electronic Medical Record Systems

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Table 2.

Navigator experiential training overview

Content	Learning Strategy	Key Learning Points	Duration
Inpatient setting			
Obstetrical triage	Observing triage physician director	<ul style="list-style-type: none"> Learned patient evaluation process in triage Witnessed team-based care provided by obstetric team Identified the importance of communication between triage and outpatient practice 	2 hours
Emergency department	Orienting with resident in obstetrics and gynecology	<ul style="list-style-type: none"> Learned the organization of the emergency department and how patients are managed by level of care required Compared the differences in emergency department versus obstetrical triage capabilities 	1 hour
Labor and delivery	Orienting to labor and delivery	<ul style="list-style-type: none"> Witnessed the high number of medical staff and high degree of activity in the delivery room Understood the stressors of delivery and benefits of family/social support Observed the multidisciplinary nature of intrapartum care 	4 hours
Postpartum care	Observing nurses on postpartum mother-baby units	<ul style="list-style-type: none"> Became familiar with the support, care, and education the patient receives during inpatient hospitalization Observed care and ancillary services provided to neonates 	4 hours
Lactation support	Shadowing lactation consultants	<ul style="list-style-type: none"> Witnessed inpatient lactation consultant educating patients on breastfeeding techniques and offer useful tips Learned about breastfeeding resources 	4 hours
Inpatient social work	Shadowing inpatient women's health Licensed Clinical Social Worker	<ul style="list-style-type: none"> Understood when a patient requires a social worker consult and the support social workers provide Determined how navigators and social workers can collaborate to assist patients 	4 hours
Neonatal care	Shadowing NICU social workers	<ul style="list-style-type: none"> Learned about care processes and unique needs of neonates in the NICU, as well as resources available to families 	3 hours
Obstetric outpatient setting			
Outpatient clinic operations	Meeting with the Practice Manager	<ul style="list-style-type: none"> Received an overview of clinic operations, learned clinic expectations Familiarized clinic staff with the navigator roles 	1 hour
Patient registration and scheduling	Meeting with Patient Service Representative	<ul style="list-style-type: none"> Familiarized with clinic schedule, physician workflow, and overview of the EMR Learned about resources for clinic scheduling problem-solving 	3 hours
Patient intake for physician appointment	Shadowing Medical Assistant (MA) and introduction with lead MA	<ul style="list-style-type: none"> Learned clinic flow as illustrated in EMR system Witnessed collaboration between MA and physicians Witnessed MAs administer depression screening 	4 hours
Physician role in antenatal care	Shadowing obstetrician-gynecologist physicians	<ul style="list-style-type: none"> Observed antenatal care provision and how physician care integrates with other team members in the practice 	8 hours

Content	Learning Strategy	Key Learning Points	Duration
		<ul style="list-style-type: none"> Learned about the role of residents, fellows, and faculty in this tertiary care center teaching practice 	
Subspecialist role in obstetric care	Shadowing MFM physicians and MFM New Patient Liaison	<ul style="list-style-type: none"> Understood which patients may need MFM care and how care processes can differ for high-risk patients Learned about the referral and intake system for patients sent to this practice for MFM care Learned about referrals and collaboration across institutions for fetal health coordination 	6 hours
Nurse role in antenatal and postpartum care	Shadowing nurses during provision of antenatal and postpartum care	<ul style="list-style-type: none"> Learned about the role of nurses in performing antenatal and postpartum health education Witnessed nursing provision of care and education Observed nurses triaging patient calls with questions for physicians 	4 hours
Lactation support	Clinic interaction with Lactation Peer Counselor	<ul style="list-style-type: none"> Learned steps to order breast pumps Became familiar with outpatient breastfeeding resources and the role of a lactation peer counselor 	2 hours
Nutrition for pregnancy and postpartum	Shadowing Registered Dietitian	<ul style="list-style-type: none"> Observed dietitian evaluate patients' nutritional needs and develop dietary plan in collaboration with care team Understood navigators' role in promoting healthy living for patients 	3 hours
Care needs of pregnant patients with diabetes	Shadowing diabetes Advanced Practice Nurse	<ul style="list-style-type: none"> Observed diabetes perinatal APN provide health education and diabetes care during pregnancy and postpartum Learned importance of patient comprehension of diabetes management plan 	4 hours
Outpatient social work	Shadowing outpatient women's health and fetal health Licensed Clinical Social Workers	<ul style="list-style-type: none"> Witnessed social worker assess patient needs and provide services in collaboration with clinic staff Learned of inpatient and outpatient resources Learned about the specialized referrals, resources, and patient experiences for patients who receive care at the affiliated children's hospital 	1 day
Perinatal mental health care	Meeting with perinatal mental health Licensed Clinical Social Worker	<ul style="list-style-type: none"> Learned the referral process for the site's mental health program, services provided, and content of sessions with patients Reviewed self-care resources, postpartum mood warning signs, and normal postpartum mood changes Understood resources available for urgent and non-urgent mental health needs 	2 hours
Gestational weight gain and postpartum weight loss	Training with an MFM expert in obesity and weight	<ul style="list-style-type: none"> Learned the gestational weight gain guidelines, principles of weight-related motivational interviewing, and resources available for weight loss support 	1 hour
Perinatal loss	Meeting with perinatal loss Licensed Clinical Social Worker	<ul style="list-style-type: none"> Learned about the experience of perinatal loss and anticipated stages of grief and recovery Reviewed resources available to patients and families who experience perinatal loss 	1 hour

Content	Learning Strategy	Key Learning Points	Duration
Overview of patient navigator role and daily activities	Shadowing breast oncology nurse navigator	<ul style="list-style-type: none"> Learned the everyday activities of patient navigation in oncology Witnessed navigator's difficulties in tracking work performed with each patient and learned about the role of navigation in providing continuity throughout care Realized each patient would have unique needs and require different methods 	3 hours
Primary care outpatient setting			
Primary care	Shadowing primary care physicians in a women's health-focused primary care practice	<ul style="list-style-type: none"> Witnessed medical students, residents, and faculty physicians obtain patient history and provide primary care Observed medical team promote primary care follow-up and treatment Learned about the unique primary care needs after pregnancy complications and the preventive health needs of postpartum patients 	4 hours
Primary care patient care coordinator	Meeting with practice coordinator for a primary care practice	<ul style="list-style-type: none"> Learned about the intake and referral process for new women's health primary care patients 	1 hour
Health systems resources and electronic medical record			
Hospital resources	Tour of physical facility	<ul style="list-style-type: none"> Toured physical space in inpatient and outpatient hospital units Learned about security procedures for patient and staff safety 	3 hours
Health education	Orienting at the Health Learning Center	<ul style="list-style-type: none"> Received an overview of the institution's Health Learning Center educational content, referral process, and scheduling process Met with the Certified Health Education Specialist to understand their skills and roles 	1 hour
Hospital Crisis Intervention Program	Meeting with Domestic Violence Program Counselor	<ul style="list-style-type: none"> Learned referral process for and overview of Connections for Abused Women and their Children (CAWC), this hospital's program for domestic violence Learned about specific CAWC services for families in unsafe relationships and how navigators can coordinate with CAWAC 	1 hour
Patient Innovation Center	Meeting with Executive Director	<ul style="list-style-type: none"> Learned about Patient Innovations Center insurance coordination program Understood the assistance the insurance coordinators can provide to patients facing barriers to accessing care 	2 hours
Change Health (Medicaid representative)	Meeting with Manager and Field Services Representative	<ul style="list-style-type: none"> Learned about Medicaid and Change Health's role in enrolling a mother and/or new baby in publicly-supported insurance Learned process of outreach, documentation, and application processing Understood the potential impact of changes in state regulations regarding Medicaid availability and enrollment 	2 hours
Patient Relations and Medical Records	Meeting with representatives from the patient relations and medical records offices	<ul style="list-style-type: none"> Learned about Patient Relations services to assist patients in resolving grievances, billing, and service recovery Learned about the medical record request process 	1 hour

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Content	Learning Strategy	Key Learning Points	Duration
		<ul style="list-style-type: none"> Learned about the free interpretation services offered to patients 	
Documentation, tracking, and messaging in the EMR	Meeting with outpatient Resource Coordinator	<ul style="list-style-type: none"> Learned about the functionality, tracking, work flow, and communication within the EMR Practiced clinical messaging and obstetrics-specific clinical functionality 	3 hours
Scheduling and clinical uses of the EMR	EMR training course	<ul style="list-style-type: none"> Learned to use the EMR system, including patient tracking, data entry, appointment making, and insurance verification 	2 days

NICU, neonatal intensive care unit

MFM, maternal fetal medicine

EMR, electronic medical record

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Table 3.

Didactic Training for Patient Navigators

Content	Source	Key Learning Points
Formal Training Courses		
Fundamentals of Patient Navigation (8 week course) ⁵²	Patient Navigator Training Collaborative (PNTC) course	<ul style="list-style-type: none"> Learned about the history of patient navigation and the navigator role and responsibilities Learned effective communication techniques, problem-solving strategies health promotion principles, and introductory motivational interviewing skills Provided tools to assess patient needs and barriers to care Learned relationship building strategies to help establish rapport with patients and maintain professional boundaries and importance of providing materials appropriately matching patients' health literacy level Learned the importance of self-care to avoid navigator burn out
Care Coordination Course (4 week course) ⁵¹	PNTC course	<ul style="list-style-type: none"> Emphasized team-based care coordination and understanding roles/responsibilities of care team members Promoted patient engagement, safety, helping reduce barriers for patients, reducing health care costs and enhancing productivity. Learned skills to effectively collaborate with care team and reduce fragmentation in care via a patient-centered approach with outlined team responsibilities and a shared plan of care
Introduction to Chronic Disease ⁵⁴	PNTC course	<ul style="list-style-type: none"> Learned the basics of common chronic diseases (characteristics, symptoms, treatments, risk factors)
Introduction to Healthcare System ⁵⁵	PNTC course	<ul style="list-style-type: none"> Introduced to private, public and non-profit hospital systems Received an overview of the health insurance plans and programs Learned about the Patient Bill of Rights, HIPPA and protected health information
Preventive Healthcare 101 ⁵⁶	PNTC course	<ul style="list-style-type: none"> Understood methods to encourage formation of healthy habits and prevention of harmful habits among patients
Motivational Interviewing ⁵⁷	PNTC course	<ul style="list-style-type: none"> Introduced to motivational interviewing, identifying the stages of change and interaction techniques
Readings		
Patient Navigation: Overcoming Barriers to Care ⁴⁶	Textbook	<ul style="list-style-type: none"> Introduced to principles of navigation Learned about prior studies of patient navigation and navigation implementation in the healthcare system
National Navigation Roundtable (NNRT) materials ⁵⁸	NNRT	<ul style="list-style-type: none"> Understood about promising evidence-based practices in patient navigation Learned about health policies and organizational systems to promote patient navigation
Motivational Interviewing ⁵⁹	ACOG	<ul style="list-style-type: none"> Applied motivational interviewing as a tool to improve health behaviors and outcomes
Benefits to Women of Medicaid Expansion Through the Affordable Care Act ⁶⁰	ACOG	<ul style="list-style-type: none"> Learned about the adverse health outcomes for the uninsured population and provided a rationale for Medicaid expansion and improving reimbursement rates

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Content	Source	Key Learning Points
Breastfeeding in Underserved Women ⁶¹	ACOG	<ul style="list-style-type: none"> Learned about low rates of breastfeeding in underserved population Learned about the role of healthcare providers and government agencies to advocate for patients and promote breastfeeding through education and outreach
Optimizing Support for Breastfeeding (ACOG Breastfeeding Toolkit) ⁶²	ACOG	<ul style="list-style-type: none"> Described the evidence and the specific benefits of breastfeeding for moms and babies Understood the recommendations for providers such as providing breastfeeding education and support and starting conversations about breastfeeding early in prenatal care Provided tips and suggestions for educating patients and helpful information for breastfeeding support
Healthcare for Homeless Women ⁶³	ACOG	<ul style="list-style-type: none"> Understood specific health issues the homeless population faces and the barriers to accessing health care Understood recommendation to help identify patients experiencing homelessness and ways to manage their care
Challenges for Overweight and Obese Women ⁶⁴	ACOG	<ul style="list-style-type: none"> Learned about specific health issues overweight and obese women face and how those risks contribute to developing health conditions (diabetes, hypertension, etc.) Learned about the role of motivational interviewing and education as tools to promote lifestyle changes and improve health
Access to Contraception ⁶⁵	ACOG	<ul style="list-style-type: none"> Learned about barriers women face to accessing birth control (lack of education, cost, health inequities, etc.) Learned about legislation impeding on access to contraception for minors
Immediate Postpartum Long-Acting Reversible Contraception ⁶⁶	ACOG	<ul style="list-style-type: none"> Understood background information on long-acting reversible contraception (LARC) Learned about the advantages of LARC and the clinical considerations, risks, and common concerns Learned about the effect on breastfeeding and the concerns associated with LARC
Bedsider Birth Control Support Network ⁶⁷	Website	<ul style="list-style-type: none"> Accessed web-based information about different birth control methods including cost, usage, side effects, and problems
Health Literacy to Promote Quality of Care ⁶⁸	ACOG	<ul style="list-style-type: none"> Understood importance of health literacy in providing care to improve patient outcomes
Racial and Ethnic Disparities in Obstetrics and Gynecology ⁶⁹	ACOG	<ul style="list-style-type: none"> Learned about the role of healthcare providers in alleviating racial and ethnic health disparities Learned about the importance of a culturally sensitive approach to care in alleviating disparities
Health Care for Unauthorized Immigrants ⁷⁰	ACOG	<ul style="list-style-type: none"> Learned about the challenges immigrant women face to accessing healthcare, specifically prenatal care and preventative care, and the need for immigrant advocacy
Importance of Social Determinants of Health and Cultural Awareness in the Delivery of Reproductive Health Care ⁷¹	ACOG	<ul style="list-style-type: none"> Obtained awareness on the importance of social determinants of health to better understand patients Learned about recognizing cultural matters in clinical settings and the importance of showing humility and cultural respect

Content	Source	Key Learning Points
		<ul style="list-style-type: none"> Learned about tools healthcare providers can use to implement in their practice to address social determinants of health
Health Disparities in Rural Women ⁷² and Providing Safe, High-Quality Maternity Care in Rural US Hospitals ⁷³	ACOG and Institute for Healthcare Improvement	<ul style="list-style-type: none"> Understood the unique barriers experienced by individuals in rural areas and how to advocate for patients with rural health disparities
Implicit Bias in Healthcare Professionals: A Systematic Review ⁷⁴	Article	<ul style="list-style-type: none"> Recognized the evidence analyzed from peer reviewed articles indicating healthcare professionals show the same levels of implicit bias as the wider population Learned about how implicit bias can influence the care provided to patients by healthcare professionals
Optimizing Postpartum Care ¹⁵	ACOG	<ul style="list-style-type: none"> Understood the importance of engaging patients in postpartum care through a patient-centered approach Learned about the importance of advising mothers with chronic health conditions to continue management
Screening for Perinatal Depression ⁷⁵	ACOG	<ul style="list-style-type: none"> Learned about perinatal depression, the screening process, and appropriate treatments Learned about the importance of connecting patients with mental health services
Expression of Emotion Through Nonverbal Behavior in Medical Visits ⁷⁶	Article	<ul style="list-style-type: none"> Demonstrated how nonverbal behavior and emotions can influence the care process for patients and physicians Learned about methods used to assess nonverbal behavior and nonverbal sensitivity
Project Implicit ⁷⁷	Project Implicit	<ul style="list-style-type: none"> Learned about implicit bias via implicit association tests, web-based readings on implicit bias, and resources on implicit bias
Webinars		
Managing difficult encounters ⁷⁸	PNTC Webinar	<ul style="list-style-type: none"> Developed insight into managing “challenging” patients by reframing encounters from patient perspectives, diffusing tension and discussing with the care team
LGBTQ Cultural Responsiveness ⁷⁹	PNTC Webinar	<ul style="list-style-type: none"> Learned about the importance of gender-affirming pronouns and creating a supportive environment for LGBTQ individuals
Seminar on Poverty and Self-Sufficiency ⁸⁰	PNTC Webinar	<ul style="list-style-type: none"> Explored data on family incomes and perspective on the relationship between geographic location and self-sufficiency
Culturally and Linguistically Appropriate Services Standards for Navigators ⁸¹	PNTC Webinar	<ul style="list-style-type: none"> Learned about the importance of appropriate cultural and linguistic services to prevent written and oral miscommunications
Basic Crisis Management Skills for Patient Navigators ⁸²	PNTC Webinar	<ul style="list-style-type: none"> Learned to manage and respond to patients in crisis through “emotional first aid”
Healthier Pregnancy Interventions to Promote Breastfeeding ⁸³	ACOG	<ul style="list-style-type: none"> Learned about the importance of promoting breastfeeding and evidence-based support in hospital settings to help women reach their breastfeeding goals Learned about the importance of educating patients on resources to promote breastfeeding, for example, insurance covered breast pumps and support groups

Content	Source	Key Learning Points
Maintaining Breastfeeding beyond the First Week ⁸⁴	ACOG	<ul style="list-style-type: none"> Understood the importance of identifying and creating a plan to address barriers to breastfeeding (postpartum depression, physical breast issues, etc.) Learned about informing patients about the benefits of breastfeeding beyond three months
Implicit Bias Video Series ⁸⁵	UCLA Know Implicit Bias Series	<ul style="list-style-type: none"> Learned about biases, heuristics, stereotypes, and explicit versus implicit bias Learned about the role of implicit biases in health and health care
Grand Rounds and other in-person lectures		
Bipolar Disorder in the Perinatal Patient	Lecture	<ul style="list-style-type: none"> Learned about the high risk of postpartum psychosis among women with bipolar disorder Introduced to dangers of postpartum psychosis and treatment options
Housing as a Structural Determinant of Perinatal Health	Lecture	<ul style="list-style-type: none"> Learned about the effects of homelessness on perinatal health Learned about different styles of housing programs
Perinatal Depression Screening and Treatment	Lecture	<ul style="list-style-type: none"> Learned about the recommendations for depression screening throughout pregnancy and postpartum Learned about the importance of collaborative care through mental health services, obstetrical care, and social services Learned about diagnostic tools and treatment options for perinatal depression
Gestational Diabetes Mellitus	Lecture	<ul style="list-style-type: none"> Learned about management and long-term health risks associated with gestational diabetes mellitus, as well as associated disparities

ACOG, American College of Obstetricians and Gynecologists

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Table 4:

Example education resources by focal area

Focal area	Example Educational Resources
Infant feeding	<ul style="list-style-type: none"> • Experiential learning with breastfeeding peer counselor and lactation consultant • “Breastfeeding in Underserved Women”⁶¹
Contraception and pregnancy spacing	<ul style="list-style-type: none"> • Didactic content from Bedsider Birth Control Support Network • “Access to contraception”⁶⁵ • “Immediate Postpartum Long-Acting Reversible Contraception”⁶⁶
Weight loss and promotion of metabolic health	<ul style="list-style-type: none"> • Individual training with a maternal-fetal medicine expert in weight • “Challenges for Overweight and Obese women”⁶⁴
Mental health transitions and risks	<ul style="list-style-type: none"> • Experiential learning with perinatal mental health social worker • Bipolar Disorder in the Perinatal Patient Grand Rounds • Perinatal Depression Screening and Treatment Grand Rounds • “Screening for Perinatal Depression”⁷⁵
Primary care	<ul style="list-style-type: none"> • “Interpregnancy Care”⁸⁶ • Experiential learning with primary care physicians
Health disparities and health services	<ul style="list-style-type: none"> • “Health Literacy to Promote Quality of Care”⁶⁸ • “Health Care for Homeless Women” • “Racial and Ethnic Disparities in Obstetrics and Gynecology”⁸⁷ • “Importance of Social Determinants of Health and Cultural Awareness in the Delivery of Reproductive Health Care”⁸⁸ • “Health Disparities in Rural Women”⁷² and “Providing Safe, High-Quality Maternity Care in Rural US Hospitals”⁷³

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