

# Exploring Patient Care Navigation in the Medicare Program

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## About This Report

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“Patient Navigation” is a broad term applied to a wide array of programs and services that are sometimes available to patients who require assistance managing the complexity of health care and social services in the United States. The needs for navigation can be more acute for the growing U.S. population of elderly people, who can face complex illness and declining ability to manage and access their care. While some Medicare enrollees have access to navigation services (such as through some Medicare Advantage plans), many do not, and currently no such benefit is provided to beneficiaries with traditional fee-for-service. Given this need, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) in the U.S Department of Health and Human Services has contracted with the RAND Corporation to provide an overview of patient navigation programs in the United States through an environmental scan and key informant discussions.

The focus of this investigation was to describe how patient navigation programs vary, as well as to identify and characterize the available evidence for their impact on patient outcomes and costs. Supplemental interviews with several navigation programs also provide an on-the-ground perspective on how these programs are developed and implemented and the challenges and opportunities they face. Implications for a potential patient navigation program for Medicare are also discussed.

This research was funded by ASPE and carried out within the Access and Delivery Program in RAND Health Care. RAND Health Care, a division of the RAND Corporation, promotes healthier societies by improving health care systems in the United States and other countries. We do this by providing health care decisionmakers, practitioners, and consumers with actionable, rigorous, objective evidence to support their most complex decisions. For more information, see [www.rand.org/health-care](http://www.rand.org/health-care), or contact

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# Summary

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## Issue

Medicare beneficiaries and their caregivers may face a high degree of complexity managing their health care. Many Medicare beneficiaries have multiple comorbidities and complex health care needs, with some needing frequent care transitions between hospitals and post-acute care and communication with several medical specialists. The difficult choices patients and their families must make throughout this process are overlaid with the need to understand the health care system and the implications of their decisions on their care. In traditional fee-for-service (FFS) Medicare, there is no current benefit for a resource to help beneficiaries navigate the complexities of their care, which could include help with their care decisions, care transitions, or understanding services available. As the Medicare program moves away from traditional FFS and toward total cost of care models, as envisioned in the Center for Medicare and Medicaid Innovation (CMMI) strategy refresh, patient navigation may be a potential strategy to improve both the appropriateness of services and efficiency. Establishing a patient navigation benefit is one potential policy consideration that would provide support and information to beneficiaries and their families to help them deal with the complexities of health care services. However, *patient navigation* is a broad term encompassing many purposes and strategies to help guide patients through the health care system.

## Project Purpose and Approach

The purpose of this project was to develop a better understanding and overview of patient navigation services implemented within existing health care organizations to help explore what patient navigation could look like as a Medicare FFS benefit, a Medicare Advantage benefit, and under the total cost of care strategy. The project had two main tasks. We conducted an environmental scan of academic and gray literature evaluating or describing programs performing patient navigation services. We also held four semistructured discussions with patient navigation program staff to understand their program design and implementation, program outcomes, and program representatives' thoughts on the generalizability of patient navigation within the Medicare population.

## Results

We describe the variety of patient navigation services that we identified, the types of patients targeted, the settings and types of organizations that have navigation services, the types of staff

that perform these services, the funding support for navigation, geographic reach of navigation services, outcomes of these programs, implementation considerations, and policy considerations.

### *Services of Patient Navigation*

Within the environmental scan, we found that patient navigation services fell in both clinical and nonclinical categories. Patient navigation services (both clinical and nonclinical) were implemented to achieve such goals as improving access to health care and community supports and improving health care quality through patient education and care coordination.

### *Types of Patients Targeted*

There was variation in the types of patients targeted for navigation services. Many programs focused on patients with cancer or other conditions, such as chronic obstructive pulmonary disease, asthma, diabetes, and HIV. Other navigation programs targeted patients undergoing specific procedures, such as planned orthopedic surgeries. Additional patient navigation programs focused on medically complex or high-need patients identified as such through claims data or by using algorithms to predict future hospitalization or death. A smaller number of programs targeted certain demographic groups or focused on screening for sex-specific diseases. A few programs focused on lower-income patients.

### *Settings and Types of Organizations*

In terms of settings and types of organizations, most programs described in this report were run by health care providers and other care delivery organizations, including large integrated health systems, smaller hospitals and affiliated clinics, and physician practices that employ an outpatient navigator.

### *Staff Providing Navigation Services*

Many types of staff provided navigation services, and the services provided varied according to the type of staff employed by care delivery organizations. For example, nurses often provided more clinical services, while social workers or community health workers often helped patients receive social or community support. Credentialing and certification varied widely according to the program. Some programs required nursing or advanced practitioner licenses. Other programs did not require navigators to have clinical training or background, but many provided on-the-job training for staff.

### *Funding Support*

Funding support for patient navigation was not well documented within our environmental scan. Information from discussions suggested that navigation programs were often supported

through grant funding, philanthropy, or internal funding within health systems. Some programs were funded through Medicaid or commercial insurers and Medicare Advantage organizations.

### *Geographic Reach*

The geographic reach of navigation programs most often was limited to a smaller geographic area (e.g., city or county) with regional, multicounty, or national programs being less common but still established within the literature.

### *Outcomes*

Impact on clinical outcomes varied across different types of navigation programs. Within the literature, we found that programs focused on reducing readmissions had some success with reducing hospitalization, though the reduction varied greatly by program (i.e., between a 4-percent reduction and a 28-percent reduction in hospital admission when a reduction was noted). Similar outcomes were noted in navigation programs focused on reducing emergency department (ED) visits.

In terms of increasing screening rates of specific tests or procedures, navigation services targeting these procedures increased test completion rates with varying magnitude. Navigation services aimed to get patients to attend outpatient visits decreased no-show rates.

Narrowly focused navigation programs that had clear purpose and specific outcomes to target (e.g., increasing rate of specific procedures or reducing risk of rehospitalization) were most successful at improving patient outcomes, while broader, more general navigation programs aiming to improve care or experience overall were less successful, with some programs not improving these outcomes.

### *Implementation Considerations*

Buy-in from leadership during the development phase, as well as a program champion, contributed to program success. Adopting technology was also identified as an implementation consideration, as it helped achieve standardization in navigation roles, activities, streamlining processes, and collecting data to track outcomes.

While staffing was not well-defined within the literature, in the discussions, patient navigators were well-integrated within teams, but coordination across navigation programs within systems was identified as a potential issue—especially with respect to communication across different navigation teams.

Discussion participants indicated that funding and staff retention were two potential barriers to program sustainability. In the interviews, funding was regarded as a barrier in both start-up and ongoing sustainment phases of programs. In terms of staffing, respondents from one discussion noted that the lack of a clear career path may affect staff turnover, particularly in navigation roles with lower education requirements, while respondents from another discussion

indicated that the tight labor market, as well as a provider shortage, could exacerbate both funding and staff retention.

### *Policy considerations*

The project identified several policy considerations:

- Define the scope of patient navigation services and target navigation services.
- Nonclinical components are important to most navigation programs.
- In terms of funding sustainability, some discrete services can be billed under FFS, but these payments alone are not sufficient for program sustainment.
- Bundled payment approaches may be an option depending on the details and may be easier to establish for condition-specific navigation.
- Alternative Payment Models or Value-Based Payment approaches could be considered to help establish or sustain navigation programs.

## Discussion

To establish a Medicare patient navigation benefit, it is critical to consider how patient navigation services fit into existing care coordination roles and how patient navigation can complement these existing services. Additionally, many navigation services do not require clinical skills; many of the tasks performed are nonclinical in nature. It follows that a navigation benefit would likely not need clinically trained staff to provide navigation services, though navigation programs would likely need to train staff on the specific tasks required to help their patients.

Navigation benefits would also need to clearly define their scope and targeted patients and consider the appropriate intensity of navigation services and specific patient needs when targeting these patients.

Patient navigation should be financed in a sustainable way. This could be through a combination of renewable grants, bundled payment, alternative payment models—including global payment models—or paying for navigation services using FFS through existing codes; however, much of patient navigation is not covered through existing payment structures.

## Limitations

We note several limitations of our study. For the environmental scan, we chose to review literature over the past ten years (since 2013) to capture the current state of U.S.-based patient navigation programs. Previously published systematic reviews were also excluded. Our search strategy prioritized academic articles, so programs not described in academic articles were more likely missed.

Our selection of the four discussion participants was not random, and our efforts to achieve heterogeneity in program type considered only a few dimensions. Nonclinical navigators and

social workers were likely underrepresented in our discussions because we spoke primarily with representatives of nurse-led programs in clinical settings. Navigation programs in community settings were not represented. Future research could explore patient navigation in other settings from other perspectives.



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# Chapter 1. Introduction

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## Study Background and Purpose

*Patient navigation* is a broad term encompassing many purposes and strategies to help patients find their way in the health care system. In the earliest navigation programs, which focused on cancer care, the purpose and scope of patient navigation was to reduce access barriers among the poor (Freeman and Rodriguez, 2011). Today, the term *patient navigation* is applied to a wide array of goals across many different diseases and conditions, from improving health care access to navigation both within and outside the health system. A variety of definitions of *patient navigation* and *patient navigators* have been published in journals and on government and foundation websites (Centers for Disease Control and Prevention, 2022; National Cancer Institute, 2023; Rural Health Information Hub, 2023). These definitions often include the broad goals of improving access, reducing barriers to care, and assisting patients with managing the complexities of the health care system that impede improving health. These programs can also include specific clinical components such as *case management*, in which navigators help patients address their diagnoses and individual care plans.

Navigation programs have been established by some private health insurers and health care systems, but features and outcomes of these programs vary. For example, some Medicare Advantage plans offer health-related supplemental benefits that can include care plan development and case management (Centers for Medicare & Medicaid Services [CMS], 2018; “Using Embedded Case Managers to Reduce Readmissions and Streamline Care,” 2015); some private health insurers have embedded navigators within emergency departments (EDs) to help reduce ED readmissions (“Acute Care Transitions Program Cuts ED Visits,” 2013); and some health care systems have supported navigation for a variety of services, including increasing the use of screening or diagnostic tests (Idos et al., 2021) or helping patients manage diabetes or other chronic conditions (Horný et al., 2017).

In October 2021, the Center for Medicare and Medicaid Innovation (CMMI) announced a strategic refresh, which included as its first priority driving accountable care by having Medicare Part A and B beneficiaries in care relationships that include accountability for health care costs or quality (CMS, 2021). CMMI has included patient navigation as a component of several of its models that increase this accountability for beneficiaries. Health care organizations participating in the Oncology Care Model provided patient navigation to enrolled Medicare beneficiaries; this navigation has been cited as one of the potential ways the Model increased access to care, reduced readmissions, and helped address financial barriers to care (Abt Associates, 2023). The ongoing Enhancing Oncology Model continues to provide these services to participating beneficiaries (CMS, 2023b).

Additionally, in July 2023, CMS proposed changes to the Physician Fee Schedule that included potential changes to the way Medicare pays for navigation-related services, including services to address health-related social needs provided by care navigators or community health workers (CMS, 2023a). These services can include *Community Health Integration*, in which navigators address social needs that affect diagnosis or management of medical conditions, and *Principal Illness Navigation*, in which patients with specific high-need conditions are connected to both clinical and nonclinical resources.

However, in traditional fee-for-service (FFS) Medicare, there is no current requirement for a specific entity or identified resource to help beneficiaries navigate the complexities of care decisions, care transitions, or available services. Establishing a patient navigation benefit that would support patients and their caregivers as they access health care services and make choices about their care, as well as help them address barriers to care, is one potential policy consideration that would provide support and information to beneficiaries and their families to help them deal with the complexities of health care services.

Through this exploratory project consisting of an environmental scan and key informant discussions, we sought to gain a general understanding of the different types of possible patient navigation services to determine policy considerations for what a patient navigation program could look like for Medicare beneficiaries. Given the current lack of clarity on features that differentiate navigation programs from programs that perform similar or overlapping roles (e.g., case management, care coordination, social work), the Office of the Assistant Secretary for Planning and Evaluation (ASPE) was interested in applying an inclusive definition of navigation. Therefore, in our review, we included all research on any programs that sought to improve access to care, reduce barriers to care, and help patients maneuver through the health care system. This included programs that were described as patient navigation but also programs described as care management, case management, care coordination, community health, and nurse coordination. We conducted this project between February and September 2023.

In this report, we describe the following aspects of patient navigation:

- different types of patient navigation services described between 2013 and 2023 and how these compare and contrast
- the scope of such services (particularly the types of conditions and patients served)
- the licensure or certification requirements for individuals or entities providing patient navigation
- the continuum of fees and costs for different types of beneficiary support.

We also examine how patient navigation services may fit into existing care coordination roles (e.g., clinical care coordinators, community health care workers) and interface with primary care, team-based care, and specialty care. Patient navigation may provide support for different aspects of care and service needs, such as clinical care, social/community services, and/or financial information. Patient navigation may differ in intensity depending on the patient

characteristics, such as age, condition, whether the condition is new, and whether the condition is acute versus chronic.

## Chapter 2. Study Methods

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The results of this report emerged from an environmental scan of academic and gray literature evaluating or describing programs performing patient navigation services and four structured discussions with patient navigation program staff. The environmental scan describes programs across a wide spectrum of navigation models using systematic search and screening methods. Content from the structured discussions was used to supplement systematic review findings and provide practical insights where applicable.

To investigate navigation program variation, we took an inductive approach to data collection, opting to apply minimal restrictions on type of program and services provided. Therefore, to accommodate the wide variety of goals and designs of programs, we did not restrict our search to conform with a preexisting definition of patient navigation and instead used a broad definition of patient navigation that included programs seeking to improve access to care, help patients address barriers to care, and assist patients as they received care across the health system. We regularly conferred with ASPE and CMS about whether specific programs or groups of similar programs could be included in the definition. Throughout this report, we use the term *patient navigation programs* to refer to programs described in the literature as meeting inclusion criteria of our study (described in this chapter) but acknowledge that some included programs that were not referred to as *patient navigation* by their authors and some programs that were referred to as *patient navigation* were not included in this report.

### Environmental Scan

To develop our list of patient navigation programs, the RAND Corporation team performed an environmental scan of the academic and gray literature. Specifically, we searched the literature in March 2023 for articles describing or evaluating patient navigation programs between 2013 and 2023. We initially used a broad set of search terms to capture many different programs providing services to help patients navigate the U.S health care system, including *navigator*, *case manager*, *care coordinator*, *care manager*, and *community health worker*. We developed search parameters, a list of databases, and a set of search terms (described in Appendix A). The search and abstraction process are shown in Figure 2.1. Our search turned up 7,460 articles. We also conducted additional targeted web searches of large health systems and payers to identify patient navigation programs not described in published articles and reports. Though the first patient navigation program was started in 1990 (Freeman, 2012), we focused on programs described in the past ten years to capture the current state of patient navigation, especially given the changes to the U.S. health care system since the passage of the Affordable Care Act.

To be included, articles were required to

- describe an initiative in the U.S. health care system
- be written in English
- include some element that helped patients access part of the health system or address barriers to care.

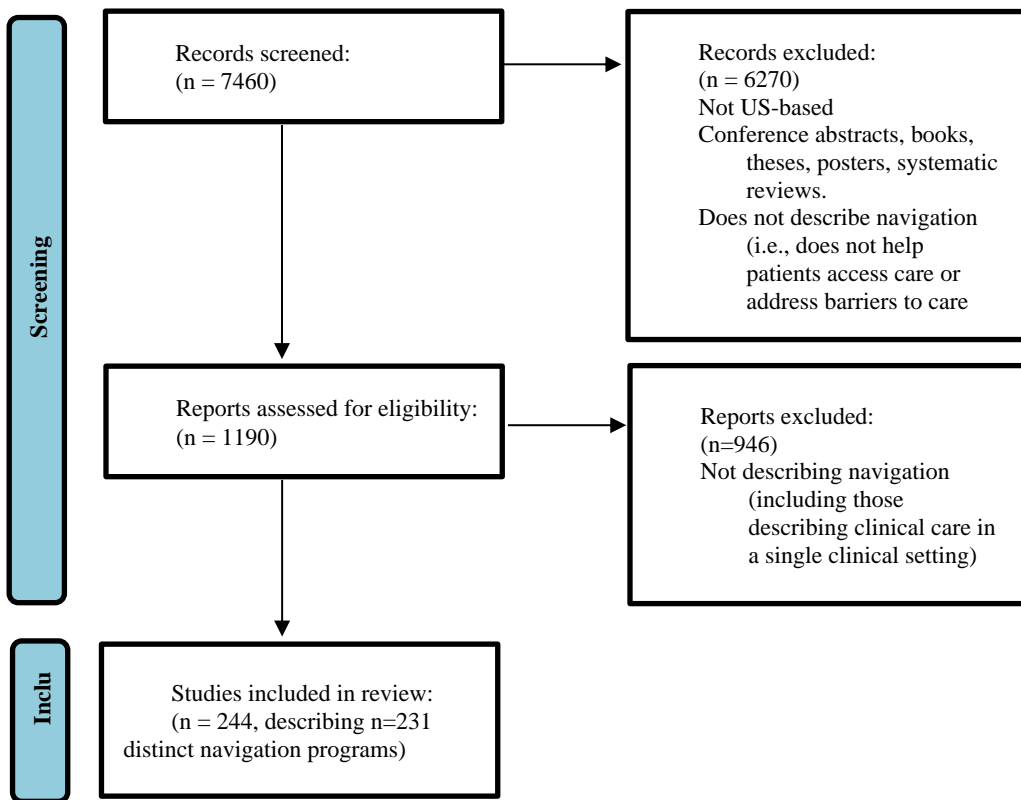
We excluded the following:

- conference abstracts, books, theses, and posters
- systematic reviews
- programs that exclusively provided navigation to help uninsured patients enroll in health insurance programs; though these programs were referred to as *navigation*, they were not focused on helping patients directly access care (Myerson and Li, 2022).

We then screened the articles, reports, and other documents identified through search in DistillerSR (DistillerSR, 2023). Four members of the research team screened the same subset of 50 articles (randomly chosen from all titles and abstracts) and met to refine the inclusion criteria and discuss any disagreements. Each reviewer then screened 25 percent of the 7,410 remaining articles, and the team met regularly to discuss any questions reviewers had about specific programs.

Based on the first round of screening, we selected 1,190 articles for further review. We obtained full-text versions of these articles and completed a three-stage abstraction process. Each article was reviewed and abstracted by a single reviewer, with regular meetings among reviewers to discuss any articles flagged by a reviewer for additional discussion. After initial abstractions, all abstractions were reviewed by a single researcher (ZP).

**Figure 2.1. Flow Diagram for Environmental Scan**



SOURCE: Reproduced from Page et al. (2021).

In the first stage, we reviewed each article to determine whether the program described could really be considered patient navigation (i.e., was the program trying to help patients access care or address barriers to care?). In this round, we used a stricter definition of *patient navigation services* that excluded articles describing clinical care within a single clinical setting without any referrals or coordination with other providers, such as patient education programs. For each article, we abstracted the following program information:

- focus of patient navigation services: clinical (either direct patient care or managing referrals to other providers), financial, community support services/health-related social needs
- entity that is responsible for providing the patient navigation services (e.g., individual provider or clinic, provider network, community health organization, integrated delivery system, payer)
- care setting for patient navigation service (e.g., inpatient, outpatient, primary care, emergency room, specialty care, post-acute care, hospice, behavioral health, community-based entity)



- types of staff providing navigation services (e.g., nurse, medical assistant, care manager, social worker, patient coordinator, community health worker, peer navigator)
- types of patients targeted for these services (e.g., general population, older adults, condition-specific, people with multiple chronic conditions, dual eligible, new Medicare enrollees, acute hospital discharge)
- source of funding or relevant payers (e.g., grant-funded, private insurer, Medicare Advantage, Medicaid)
- geographic referral area (national, regional, state, city, health system, urban versus rural).

If a program was provided by a health system, we made a qualitative assessment of whether the health system was well-integrated using descriptions of the health system in news media. We abstracted information on 231 navigation programs from 244 articles.

In the second stage, we identified any articles that contained information about the outcomes of the navigation program. This included any clinical outcomes, any impact on access to care or health care utilization, and any impacts on costs (including information on cost savings, any information on fees or per-member-per-month costs, any information on start-up costs and ongoing implementation costs, or anything on cost-effectiveness or return on investment. We also included any information on patient and family experience or satisfaction, and we identified any impact on patient, family, or clinician attitudes toward navigation (including both quantitative and qualitative outcomes). We did not include outcomes if there was neither a baseline nor comparison group, or outcomes that related to the use of the navigation services themselves (i.e., we did not abstract the number of patient calls made by navigators or number of referrals made).

In the final stage of abstraction, we looked for any potential policy considerations for policymakers looking to incentivize development of navigation programs. This included any discussion of best practices for implementation, facilitators or barriers to implementation, information on the use of electronic health records or other patient assessment data, and any special considerations for underserved populations.

## Key Informant Discussions

We supplemented the environmental scan with four key informant discussions, all of which occurred in June 2023, with representatives of health care service organizations<sup>1</sup> with experience developing, implementing, and administering patient navigation services. The number of interviews was set before interviews began as part of the project scope. Discussions included as many as three representatives from each system, and participants were selected at the discretion of navigation program leadership, who were provided project background and discussion topics.

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<sup>1</sup> While some navigation programs are operated through community organizations, we chose a narrower scope for the structured discussions to include only services delivered within a clinical context, given the small sample and sponsor interest in a more homogenous sample for this stage of the project.

All discussions included at least one experienced navigator (current or past) and at least one participant who was involved in program development and administration. Other roles included navigation program directors, program managers, and Principal Investigators on research grants supporting navigation programs. We did not limit eligibility for discussions based on the clinical population served (e.g., type of chronic condition) or types of services provided. We developed a convenience sample for these discussions and drew from two sources to identify a list of programs to prioritize for recruitment: navigation programs listed among the 20 largest health systems in terms of patient revenue and navigation programs provided by health systems identified in the environmental scan. Upon consultation with staff at ASPE, we sought to include at least one system that was well-integrated and that provided care to underserved populations, including those from rural areas.

### *Recruitment*

For each identified system, we assessed whether the system served a significant rural population by examining the number of system hospitals with rural status based on the county in which they are located according to the Federal Office of Rural Health Policy using a 2022 U.S. acute care hospital list compiled by the University of North Carolina's NC Rural Health Research Program (Cecil G. Sheps Center for Health Services Research: The University of North Carolina at Chapel Hill, 2023). For other underserved populations, we used the Agency for Healthcare Research and Quality's (AHRQ) 2018 Compendium of U.S. Health Systems (updated 2021) to note whether the health system is in the top quintile of systemwide uncompensated care burden (AHRQ, 2023). We were unable to locate a measure of system integration but identified systems that were described as having well-integrated health services in third-party literature<sup>2</sup> or that highlighted integrated delivery as a core feature of their system on their websites. Using this information, we developed a prioritization list within categories designed to achieve heterogeneity along priority dimensions and contacted systems in order of priority until four systems were selected. Table 2.1 lists and provides brief descriptions of the four programs included in discussions.

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<sup>2</sup> We sought markers of integration in the health system sense, e.g., care that is comprehensive and well-coordinated across a patient's medical and or social needs.

**Table 2.1. Health Systems and Departments Represented in Key Informant Discussions**

<b>Health System</b>	<b>Department/Institute</b>	<b>Description</b>	<b>Underserved Populations Represented</b>
Boston Medical Center (BMC)	Oncology/Hematology	Navigation program using nonclinical navigators covering cancer and sickle-cell patients in a safety-net hospital setting serving primarily an urban population in the Boston region	Low-income, minority populations
Hospital Corporation of America (Sarah Cannon)	Sarah Cannon Cancer Institute, Oncology	Nurse navigation program covering cancer patients across many sites nationwide in a for-profit setting	Health system includes rural hospitals
University of California Los Angeles (UCLA) Medical Center	Alzheimer's and Dementia Care Program, Geriatrics	Nurse practitioner (NP) or physician assistant program covering patients with dementia in an academic medical center setting	N/A
University of Pittsburgh Medical Center (UPMC)	Orthopedics (UPMC Passavant, UPMC East, and UPMC Mercy)	Nurse navigation program covering total hip and knee replacement patients in academic and Catholic nonprofit settings	Health system includes rural hospitals

### *Discussions*

We conducted one-hour discussions via video conference, following a semistructured discussion guide that we developed and customized for each discussion. Discussion guide topics and questions were developed aligned with areas of interest specified in the project announcement and through draft iterations with ASPE staff and are included as Appendix B. All discussions included questions on program design, implementation, and outcomes and included participants who could speak to these issues program-wide. Discussion participants were also asked to generalize from their experiences to provide views on how Medicare might develop a patient navigation benefit. All discussions were led by one member of the study team (JH) with another team member present to take notes. Discussions were recorded to ensure the accuracy of these notes, and discussion participants provided verbal consent to participation. The RAND Corporation Institutional Review Board reviewed all discussion materials and protocols and approved this study. Detailed notes for the four discussions were cleaned and checked against discussion recordings for accuracy and completeness and organized within the topic categories matching the results of the environmental scan.

### **Analysis and Synthesis**

We tabulated the data collected from the review of literature and identification of patient navigation programs. For each program included in the environmental scan, we categorized the

type of entity providing services (health system, community-based organization, etc.), the focus of the navigation services (clinical, financial, community support/social needs, or wellness), the number of patients served, the geographic area (city, health system, county, state, nationwide), the care setting (inpatient, outpatient primary care, outpatient specialty care, etc.), the type of staff providing services (nurse, medical assistant, community health worker, nonclinical navigator, etc.), the type of patients targeted for services (general population, condition-specific, discharged patients, etc.), whether the program was described as targeting rural populations, and any information about the entity paying for services (private payers, health systems, Medicare Advantage, etc.). We also presented information about outcomes of the navigation programs. We then used the rough counts of these different characteristics and outcomes to qualitatively assess trends in patient navigation programs and identify any observable patterns across different types of programs.

We then grouped outcomes from data from peer-reviewed literature and reports on the impact of navigation on patients and their families. We did not include evidence reporting solely on the use of patient navigation services (e.g., how many phone calls navigators made, how many referrals made to external organizations) because we wanted to compare outcomes of patients using navigation services to those not using navigation services. Where possible, we tried to identify whether *aspects* of patient navigation programs have an impact on outcomes (e.g., whether the outcomes of programs staffed by nurses differ from those staffed by social workers), but these effects were difficult to isolate given the wide range of outcomes and limited information about many of the navigation programs.

We combined results from the environmental scan with content from the discussions to develop an understanding of patient navigation and potential considerations for implementing a patient navigation benefit in Medicare. Relevant qualitative data from the discussion were systematically integrated into each section of the environmental scan results by organizing detailed notes by topic (program design, program development and implementation, program outcomes, and policy perspectives) and discussion question and sequentially going through associated notes for each discussion. Verbatim transcripts were consulted when detailed notes were unclear or when a direct quote was sought. Content from the discussions was described independently when environmental scan content was lacking.

## Chapter 3. Results

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We identified the features and underlying similarities and differences of programs providing patient navigation services to highlight the key elements of different programs. Full information on each navigation program is included in the environmental scan in the annex to this report.

In this section, we describe the goals and characteristics of patient navigation programs in this review, including the services provided, the staff qualifications and training, the care settings, and the payers. We provide a description of the variation among these navigation programs on several key characteristics.

Broadly, services described in the literature as *patient navigation* often fell into two categories: clinical services and nonclinical services. *Clinical services* included coordinating care across multiple settings, managing care plans and post-discharge instructions, and patient education on conditions and medications. *Nonclinical services* included helping patients schedule appointments, providing reminders about those appointments, making referrals to social services and community resources, and helping navigate health insurance barriers.

### Services to Improve Access

One common goal of patient navigation programs is to improve access to health care and community supports. This was achieved through a variety of approaches. Table 3.1 describes services we identified that improve access to care. The services noted in Table 3.1 were those mentioned most frequently in the articles in the environmental scan.

A prevalent feature of patient navigation programs is the use of care coordination that facilitates communication between different health care providers who may or may not be employed by the same health care system and ensures that patients have access to recommended care. This typically occurs when outpatient care was delivered by physicians of different specialties (e.g., linking patients seen in primary care with specialists) and includes follow-up with patients being seen in primary care who had been admitted to an inpatient setting or an ED. In UPMC orthopedic navigation, this took the form of coordinating education and care before and after inpatient surgery (hip and knee replacement surgeries). Navigation, in this case, improves access and timeliness through providing scheduling and communication assistance to patients in need of multiple appointments for testing, labs, the surgery itself, and follow-up care.

In some cases, navigation programs were based in the community and recruited prospective patients who were not currently engaged in care at churches, farmers markets, or other public spaces and worked to link them to care (Percac-Lima, Ashburner, et al., 2013). These included specialized programs providing free HIV testing and connecting those who tested positive for HIV to follow-up care (Parnell et al., 2019), programs that sought to engage recent immigrants or

racial and ethnic minorities in primary or specialty care (Sous et al., 2021), and programs that conducted outreach to recently released incarcerated people to connect them to primary or specialty care (Akiyama et al., 2019).

Some patient navigation programs were narrowly focused on helping patients complete screening tests or procedures. These programs were typically limited to specific cancer screening tests, including mammograms, cervical cancer screens, and colorectal cancer screening through fecal occult blood testing or screening colonoscopies, but they occasionally included additional tests for infectious diseases such as HIV or Hepatitis B or C (Hyde et al., 2023; Simon et al., 2015; Pelto et al., 2015). These programs varied in structure but usually involved outreach by the patient navigator via phone or email to patients to schedule these tests, reminders from the navigator in the days or weeks before appointments, and follow-up afterwards by the navigator to share results and coordinate any additional care indicated by the test. Typically, these programs also included follow-up by navigators to reschedule the tests if patients missed their appointments.

Many patient navigation programs also included efforts to connect patients to community resources or social services to address health-related social needs. The most commonly addressed social need was transportation; some navigation programs included a budget for taxi reimbursement or public transportation vouchers that navigators were able to provide for patients directly (Kelley et al., 2020; Gordils-Perez et al., 2017). The navigation program at BMC sought to improve access for oncology patients experiencing a barrier to care, especially transportation—described as the most common barrier. Staffers achieve this by setting up and paying for community ride services, taxis, and ride-share services that bring patients to and from their appointments. Transportation assistance in navigation programs may also be extended to those with physical disabilities or other limitations on their ability to drive. At UPMC, navigators assist with transportation needs for physically impaired patients who do not have someone to take them to and from appointments.

In other cases, navigators directed patients experiencing homelessness to housing supports within the community (Horný et al., 2017). Navigators in some programs also connected patients to other social services, including food banks, job training, or legal services (Young, 2022). These sorts of supports were a focus for BMC navigators, whose patients were referred to the program only if they had at least one identified barrier to care, such as food insecurity, lack of social support, language barriers, and cultural barriers.

While many navigation programs helped patients address financial or insurance-related barriers to care, only a few navigation programs were focused exclusively on addressing these barriers to accessing or maintaining care, including programs that helped patients address insurance-related barriers. For example, one program helps patients testing positive for Hepatitis C by calling health insurers to obtain prior authorization for Hepatitis C treatment (Vu et al., 2018). These calls allowed patients to remain engaged in care and complete their treatment course. Other programs involved navigators in these tasks as part of many services they

provided, including a mammogram navigation program that helped patients understand their medical bills (Thai et al., 2022), a condition-specific navigation program helping patients with sickle-cell disease fill out insurance-related forms (Overholser et al., 2014), and a hospital-based program assisting discharged patients as they attempt to fill their prescription medications (Young, 2020).

**Table 3.1. Services Identified in Environmental Scan to Improve Access to Health Care**

<b>Feature</b>	<b>Description</b>
Communication and care coordination	Typically conducted within outpatient services across care settings or care transitions from inpatient to outpatient settings to help facilitate communication between providers and provider types
Get patients to care	Recruiting prospective patients not currently engaged in care in community settings (e.g., places of worship, public spaces, community events)
Increase routine screening tests and procedures	Coordination to ensure that routine cancer screenings occur (e.g., mammograms, cervical cancer screenings, colorectal cancer screenings) or infectious disease screenings (e.g., HIV, Hepatitis B or C)
Connect patients to community resources for health-related social needs	These were often transportation services to and from medical appointments via taxi, ride share, or public transportation vouchers. Other types of support included housing support, food/food banks, job support, and legal services.
Addressing financial or insurance barriers	Prior authorization assistance for patients needing treatment, help understanding medical bills or completing insurance-related forms

## Services to Improve Health Care Quality Through Patient Education and Care Coordination

Many patient navigation programs included a component in which navigators educate patients about their condition or available treatment options. This was especially prominent in programs focused on cancer care, given the wide variety of types of cancer and the complexities of new, complex biologic chemotherapies (Halbert et al., 2014). These patient education activities were closely related to components of navigation programs that promoted shared decisionmaking, in which patients worked with navigators or clinicians to choose between available treatment plans according to the patient’s preferences and evaluation of possible trade-offs between treatment efficacy and side effects. At Sarah Cannon, for instance, part of navigation includes education from nurse navigators (registered nurses) on relevant cancer types, treatment options, and clinical trial availability.

Patient education was noted as an important function of navigation in the two non-oncology programs in the key informant discussion as well, and such education is tailored to the needs of the condition. For instance, at UPMC, patients receive education classes on their upcoming

surgeries and associated treatment and follow-up. At UCLA, education is focused on both the medical and behavioral management of Alzheimer's and dementia, with particular focus on caregivers given the mental and physical limitations of the patient population.

Another broad group of navigation services focused on care related to inpatient admissions and ED visits. In these programs, patients were connected to a navigator who then provided services during the stay or after the patient was sent home—or both (Bakshi et al., 2022). Many of these programs sought to limit readmissions within the first 30 days following discharge or prevent future ED visits. These programs typically involved regular telephone outreach but could also include home visits to assess the safety of the patient's home or accompanying the patient to follow-up outpatient care appointments. Some of these programs also included the navigator working with the patient toward the end of the inpatient stay to help with the discharge plan and provide education about possible adverse events or complications that might occur. This discharge planning often was focused on patients discharged to home but could also target patients discharged to a post-acute care setting, including a skilled nursing facility, rehabilitation facility, or nursing home (Kitzman et al., 2017). Post-acute transitions were a function of the Alzheimer's and Dementia Care program at UCLA, such as transitions to custodial or hospice care, though, after a period of follow-up, the patients are then disenrolled from the navigation program, as discussion participants said that patients at this point are no long in need of additional navigation support.

In other inpatient-focused navigation programs, navigators were involved throughout the patient's inpatient stay and helped facilitate transitions between units or floors, or from the ED to a floor. In these programs, navigators primarily provided care coordination between floors or units to ensure that medications and other care were delivered consistently as the patient moved between locations in the hospital (Shearer, Hilmes, and Boyd, 2019). In a handful of programs, these navigators were based in the ED, and their main responsibilities included identifying patients visiting the ED frequently, triaging these patients when they presented to the ED, and redirecting these patients to lower-acuity care settings when they visited with minor ailments (Jiang et al., 2022; T. Y. Kim, Mortensen, and Eldridge, 2015).

Table 3.2 describes the services identified to improve care quality through education and coordination that were mentioned most frequently in the environmental scan.



**Table 2.2. Services Identified in Environmental Scan to Improve Care Quality Through Patient Education and Care Coordination**

Feature	Description
Shared decisionmaking	Patients and navigators discuss treatment plans based on patient preferences and goals
Education on scheduled upcoming treatment	Navigators instruct patients on what to expect during upcoming surgeries, treatment, and follow-up care
Patient discharge navigation	Patient navigators are assigned during or shortly after an inpatient stay or ED visit to prevent hospital readmissions or future ED visits by conducting telephone and/or home visits to discuss patient concerns and assess patient safety
Inpatient transition navigation	Navigators help facilitate transitions between hospital units or floors to aid continuity of care and medication reconciliation
Medical appointment assistance	Navigation needs could include accompanying patients to medical appointments to address barriers to care or completing social needs assessments to connect patients to needed services

There also can be significant variation in services provided to patients within a program; since navigation is often tailored to a specific patient’s needs or barriers, the “dose” of the intervention varies from patient to patient. For example, many cancer navigation programs consisted of a standard set of one to three calls or interactions between a patient and a navigator (DeSalvo et al., 2018; Krok-Schoen et al., 2015). Then, after the patient had an established care plan, the patient could opt into further contact with the navigator. One of the most variable services offered by navigators was accompanying patients to some of their medical appointments. If the patient had another caregiver or family member willing to go to those appointments, the navigator was typically not needed (Kelley et al., 2020). Many programs that focused on addressing health-related social needs and other barriers to care had navigators complete social needs assessments and connected patients with only services they needed and requested.

## Types of Patients Targeted

Through our environmental scan, we identified navigation programs that target many different types of patients. Many programs still focus on navigation for cancer patients—not surprising given the historical origins of patient navigation as a service for patients with cancer and a previous requirement for a patient navigation program to receive accreditation from the American College of Surgeons (Commission on Cancer, 2016). These programs provide support to a patient throughout their cancer journeys. In some cases, this might consist solely of engaging with a patient after an abnormal screening test, educating the patient on the meaning of certain test results, and helping them schedule additional tests to get to a noncancer diagnostic resolution. However, if the additional tests indicate a patient does in fact have cancer, the navigator supports the patient throughout the course of their disease, which could include setting

up appointments with specialists, accompanying the patient to appointments, coordinating care between the different members of the care team, educating the patient on their disease or different treatment options, and developing or helping the patient adhere to a care plan. These navigation programs typically involve more-focused attention earlier in the disease, possibly even in the form of weekly check-in phone calls, and then decrease in intensity as the patient becomes more capable of navigating the cancer care system on their own, including among patients who live for long periods of time with metastatic disease. Typically, they end when the patient goes into remission or passes away, though we did note some programs focused on helping cancer survivors address barriers to care (Stout et al., 2019; Ramirez et al., 2020).

However, our discussions with BMC and Sarah Cannon demonstrated how cancer navigation programs can vary in whom they target to reflect different program goals. For instance, Sarah Cannon targets all patients with a diagnosis in covered tumor sites and tends to target patients at earlier stages of cancer, while BMC targets patients with at least one barrier to care. These differences reflect differences in the underlying needs of the patient base in these two programs—and the stronger focus on addressing access and health equity at BMC.

Some patient navigation programs target patients with specific acute or chronic conditions. Chronic condition navigation has been established for patients with diabetes, chronic obstructive pulmonary disease, and asthma. Many navigation programs focus on engaging patients with HIV to help them become adherent to antiretroviral care or patients at high risk for HIV infection to help them become adherent to preexposure prophylaxis to prevent HIV infection. Other programs will target patient populations undergoing specific procedures to address underlying health issues, such as the program at UPMC orthopedics, which targets patients getting total hip and knee replacement surgery, mirroring the system’s participation in the Comprehensive Care for Joint Replacement payment model.<sup>3</sup> We also identified several programs focused on patients with mental health care needs, including a program that targeted patients with serious mental illness who visited the ED and assisted with follow-up care (Enos, 2022) and another that provided community resources to family members of patients with serious mental illness (Myers et al., 2015).

Compared to cancer and other disease-specific navigation, which involves a defined period of time (abnormal screening test to diagnostic resolution, remission, or death), other types of programs target generally high-need or otherwise medically complex patients. These patients can be identified using a variety of methods, including through risk prediction algorithms that use clinical and administrative data to generate a score predicting the patient’s risk of hospitalization or death within the next year. Navigators target patients with the highest risk scores for additional outreach and services. Other programs identified patients with a high number of

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<sup>3</sup> As described by CMS on its innovation model page, “The CJR Model is a Medicare Part A and B payment model that holds participant hospitals financially accountable for the quality and cost of a CJR episode of care and incentivizes increased coordination of care among hospitals, physicians, and post-acute care providers.”

chronic conditions or patients referred by physicians because of their high medical complexity. At the UCLA program, whose purpose is to help patients and caregivers manage the complex medical and social needs of dementia, any patient with dementia at any stage is eligible to receive navigation, but the focus of the program is on high utilizers with complex needs. This supports an underlying goal of this program to reduce utilization, such as visits to the ED, through better management of patient needs.

A small number of navigation programs focus on a general population of older adults, including programs targeting Medicare beneficiaries. Other programs focused on patients with other specific types of health insurance, including patients enrolled in various state-based Medicaid programs or dual-eligibles enrolled in both Medicaid and Medicare.

Another small set of programs focuses on helping complex pediatric patients make the transition to adult care providers. These programs focus mainly on care coordination—ensuring that patients continue receiving care they need and updating their new providers on relevant aspects of their history.

Other navigation programs targeted patients belonging to specific demographic groups—most commonly racial and ethnic minorities, recent immigrants, or those who prefer a language other than English. Still others targeted a specific sex (e.g., cervical cancer screening navigation for women, prostate cancer screening navigation for men). A handful of programs focused on lower-income patients, typically providing financial or other social supports.

## Settings and Types of Organization

Most navigation programs described in the environmental scan were run by health care providers and other health care delivery organizations. This included large integrated health systems in which navigators worked in both inpatient and outpatient care settings, smaller hospitals and a set of their affiliated or owned clinics, and small physician practices employing navigators who worked solely with outpatients. Some programs were administered by community-based organizations, where navigators worked with patients across whatever care setting they visited (Horne et al., 2015; Enard et al., 2015). A handful of programs were run by payers, including health insurance companies and Medicaid contractors (“Health Plan Coordinates Medicaid Member Care,” 2014); some of these payer-run programs embedded their navigators within clinics or other care settings.

Relatedly, the care settings in which navigators provided services varied, and some navigation programs operated across multiple care settings. Outpatient settings, including both primary care and specialty care clinics, were most common. Many programs provided navigation in inpatient care settings or emergency rooms. A smaller number of programs operated in post-acute care, hospice, or other long-term care settings. Some programs focused on care transitions, including discharge from higher-acuity settings; navigators in these programs typically provided services across multiple settings.

Program settings varied by their disease focus, though models of navigation within disease settings also varied. At UPMC, orthopedic navigators follow patients across settings and stages of the needed procedure, including pre-surgery, inpatient observation and recovery, and postoperative care, including home health. Discussion participants noted that some programs employed separate inpatient and outpatient navigation teams. At BMC oncology, nonclinical navigators (e.g., community health worker navigators) operate in a purely outpatient context, with inpatient navigation managed through case managers who facilitate safe discharge.

## Staff Providing Services

We identified many different types of staff providing navigation services. The type of staff was usually closely related to the services provided. For example, navigation programs that employed nurses were able to offer more clinical services, and programs employing social workers or community health workers typically placed more emphasis on social or community supports (Valverde et al., 2018; Wells et al., 2018). We identified several navigation programs that employed peer navigators; some also relied on volunteer peer navigators. Some programs included navigators with ambiguous backgrounds—for example, “case managers” or “care managers”—making it impossible to determine their qualifications or background. In some cases, information about staff type or training was not provided. Some programs used “combined” staffing models and employed staff with multiple backgrounds (e.g., a single program might employ both a nurse navigator and a nonclinical navigator and have them perform similar tasks).

Staffing needs varied significantly among the programs we spoke with, even among those focused on similar disease populations. While Sarah Cannon’s and BMC’s navigation programs are both focused on oncology patients, navigator functions varied significantly along with the staff needed to perform them. Sarah Cannon’s program relies exclusively on registered nurses, mostly with knowledge and training specific to a tumor site to facilitate close integration and expert assistance on education and treatment decisions. BMC’s program relies on nonclinical navigators without strict educational or licensing requirements who support the program’s focus on the health-related social needs of its population. While not clinically trained, BMC nonclinical navigators were assigned to populations facing specific concerns and conditions (e.g., breast cancers, gastro-intestinal cancers, sickle cell disease). The program at UCLA had the highest level of credentialing; this program is staffed by NPs and advanced practitioners called *dementia care specialists*.

Programs employing nurse navigators required nursing degrees for staff, and those with specialized foci (e.g., oncology navigation) sometimes described their nurse navigators as experienced in the specific clinical area targeted. This was true of Sarah Cannon’s staff of registered nurses, many of whom had oncology certification or specialized breast certifications. UCLA’s model, which has NPs performing navigation services and co-managing care with

physicians, requires an even higher level of education and prior experience in skilled nursing care, primary care, and transitions of care in dementia. Training requirements for nonclinical navigators in programs that used them typically consisted of a few days or weeks of classroom training and several months of on-the-job training. The Academy of Oncology Nurse & Patient Navigators (AONN+) offers a certification program for oncology nurse navigators (Shockney, 2019); however, this certification may not be relevant for nonclinical navigators or navigators without a nursing background. We did not identify major concerns with the scope of practice for navigators.

Among programs that targeted underserved patients, peer navigators were more common. For example, one navigation program for transgender women of color with HIV relied on peer navigators to connect these women to the HIV care continuum, using their shared experiences to help patients feel more comfortable engaging with the health care system (Reback, Kisler, and Fletcher, 2021).

## Financial Support

There was limited information in included articles on the funding sources or financial backing for most navigation programs. Evidence from discussions indicated that funding support was heterogenous. Many programs were supported through grant funding, often from federal grantmaking agencies. The program at UCLA, for instance, received its early funding through a CMMI innovation award and research grants, with sustainment support partially through allowed billing practices, likely because the services were provided by nurses. The program at BMC is funded primarily through grants and philanthropy, such as through endowment funds. Additionally, health systems sometimes supported navigation programs by hiring staff. In the case of BMC, this was in the form of the health system directly providing for some navigator staff through its hospital budget. At UPMC, support for navigation was associated with the system's participation in a payment model tying system support to performance, providing motivation for system investments in navigation efforts to support quality and cost targets.

A handful of programs were funded through payers, including both public payers, such as Medicaid (Guo et al., 2019; Magasi et al., 2019; Leone et al., 2013), and private payers, such as insurance companies. We also identified several programs funded by Medicare Advantage plans, including a program in which Medicare Advantage paid for the services of social workers and community health workers (Moreno et al., 2021). We identified several national navigation programs run by private health insurers and one run by a nonprofit organization.

## Geographic Reach

Most navigation programs covered a small geographic area—for example, at a city-wide or county level. Geographic coverage was closely related to other characteristics of the programs, including the care settings and services provided. For example, programs based in a large,

integrated health system typically served patients across care settings state-wide or across states, whereas programs located in outpatient primary care or specialty practices more often focused on services provided in a city or smaller area. Regional or multi-county programs were less common, but we did identify several programs operating on this scale (Peacher et al., 2013; Vilchis et al., 2019). Systems represented in our discussions spanned a variety of geographic reach, with Sarah Cannon's program spanning the country across 15 division nationwide while programs such as BMC's were focused in a single urban area (but servicing a much larger region as the largest safety-net hospital in New England).

Programs connecting patients to community resources require navigators to be plugged into informal communication networks within an area; if patients are being referred to housing supports, the navigators need to know community-based organizations or government agencies that provide those services in an area. We identified several programs that focused on serving rural patients, but these programs were similar to urban or suburban programs in terms of activities and scope. For example, one navigation program for low-income adults in rural North Carolina helped patients manage referrals to specialists, ensured patients had access to transportation services, and made connections for patients to food banks and other community resources (Rhyne, Livsey, and Becker, 2015). Another program targeting rural patients discharged from the hospital after stroke provided patient education and worked with patients for up to six months to help address barriers to care (Kitzman et al., 2017). One program targeting rural Latino patients with cancer helped address barriers with transportation, communication, and housing (Peacher et al., 2013), while another focused on getting newly diagnosed breast cancer patients in rural areas connected with surgery, radiation oncology, and medical oncology (Petereit et al., 2016).

## Outcomes of Navigation Programs

Impacts on clinical outcomes and quality were mixed across different types of navigation programs. Here we summarize major findings from the environmental scan in Table 3.3 but also note that full information on program outcomes is found in the environmental scan in the annex. Navigation programs that focused on reducing readmissions or hospitalizations were typically able to improve these outcomes for navigated patients, though the magnitude of the improvement varied from a 4-percent-lower readmission rate to a 28-percent reduction in hospitalization (Kangovi et al., 2018; Nishizaki et al., 2019). Several studies found no significant differences in hospitalization among navigated patients compared to nonnavigated patients (Parikh et al., 2021; J. Y. Kim et al., 2017). Navigation programs focused on reducing ED visits found similar variation in and magnitudes of impact, with some finding reductions in ED utilization (Possin et al., 2019) and others finding increases in ED visits (Williams, Kelly, and Knapp, 2022). One large navigation program in a safety-net hospital found a more complicated relationship between navigation and utilization, demonstrating an improvement in rates of hospitalization among older

navigated patients but an increase in hospitalization among younger navigated patients (Balaban et al., 2017).

**Table 3.3. Outcomes of Navigation Programs**

<b>Outcome</b>	<b>Summary of Evidence</b>
Rate of screening test completion	Of the 21 studies that assessed impact of navigation on screening or follow-up testing, 20 found an increase in the rate of screening completion, and one found no statistically significant change in completion.
Time to follow-up or completion of follow-up visit	23 studies assessed the impact of navigation on whether a patient attended a follow-up appointment or the amount of time it took a patient to complete a follow-up appointment. Of these, 20 found an improvement in this (either an increase in rate of appointment completion or a decrease in time to appointment).
Costs of navigation program	Studies measured costs in many ways; we noted 19 studies that included some measure of costs (e.g., total costs, cost per patient, changes in uncompensated care). Thirteen studies noted a decrease in one of these cost measures, three found an increase in per-patient costs, and three noted no impact of navigation on costs.
Hospitalization or readmission	Of the 26 studies that reported the impact of navigation on hospitalization, readmission, or inpatient care utilization (including those studies that focused on a specific disease), 22 found an improvement, and four found no significant impact. We note that five of the studies finding improvements were short pieces in trade journals, so we cannot assess the quality of their methods.
Emergency department use	Twenty-two studies looked at the impact of navigation on ED visits. Eighteen found a decrease in the rate of these visits, three found no impact, and one found an increase. We note that five of the studies finding decreases were short pieces in trade journals, so we cannot assess the quality of their methods.
Health care quality	Studies used a variety of measures of health care quality beyond readmissions and ED visits, including quality of life and measures of physical or mental health. Seventeen studies found navigation improved these measures, while only five found navigation had no impact on care quality.

Navigation programs that were narrowly focused on increasing the rates of specific screening tests were able to increase completion rates for those services. Magnitude of the effects varied, but for navigation programs focused on increasing colorectal cancer screening, the screening rates increased by between 4 percent and 27 percent (Rice et al., 2017; Qian et al., 2020); navigation increased mammogram and other breast cancer screening rates by between 19 percent and 37 percent (Braun et al., 2015; Hunt et al., 2017); and a study of lung cancer screening navigation found a 15-percent increase (Percac-Lima et al., 2018).

Several studies measured the impact of navigation on the likelihood that a patient attended an outpatient visit; most of these found a decrease in no-show rates of between 5 percent and 20 percent (Percac-Lima, Benner, et al., 2013; Luckett et al., 2015), though, in one study, the decrease in no-show rate was not statistically significant (Flower et al., 2020).

Navigation's impact on costs was not consistently reported. Some studies provided information on the total costs associated with establishing and operating a navigation program. In one of these, a colorectal cancer navigation program screened 2,552 patients over three years for a total cost of less than \$300,000, averaging \$115 per patient screened (Qian et al., 2020). Other navigation programs had higher costs per patient; a program focused on addressing social needs among patients in Atlanta had a total cost of \$1.33 million and per patient costs of \$1,455 annually (MacLeod et al., 2021). Several programs that sought to reduce the use of unnecessary medical care reported reductions in costs of up to \$14,000 per navigated patient per year (Kelley et al., 2020; Vohra et al., 2020); a program targeting unnecessary hospital stays reported a single navigator averted more than \$1.3 million in hospital costs for trauma patients (Lee, 2023).

Staff type did not have a strong relationship with the impact of a navigation program. Some programs staffed by nurses (Basu et al., 2013), community health workers (Hunt et al., 2017), and other nonclinical navigators (Enard et al., 2015) all increased access to care among targeted patients. Programs staffed by case managers ("Acute Care Transitions Program Cuts ED Visits," 2013), community health workers (Vohra et al., 2020) and nonclinical navigators (Doblecki-Lewis et al., 2019) all showed decreases in costs among navigated patients.

## Implementation Considerations

Navigation programs were most successful when they had a clear purpose and specific targeted outcomes, such as those intended to increase the rate of specific procedures or narrowly targeted to reduce risk of rehospitalization. Programs that had more-general goals of improving patient care or experience were less successful at reducing overall health care costs or mortality, though we noted that many programs still were able to improve certain outcomes for patients (Thompson et al., 2018; Bakshi et al., 2022).

According to our discussions with large health care system employees, all programs stressed the importance of leadership in developing and establishing navigation programs. This included ensuring that facilities and division leaders had a clear understanding of the role of navigators and saw value in having a navigation program. UCLA, which has been disseminating its model to several other health systems, noted that identifying a good site champion who is skilled at identifying sources of funding and applying for grants was among the most important components of program development. In development of its own program, key discussions among staff at UCLA included clearly defining the model for navigation and how it related to care delivery. In discussing extending programs to other Hospital Corporation of America hospitals, Sarah Cannon identified the adoption of technology infrastructure as being instrumental in achieving standardization in navigation roles, activities, and data to track and demonstrate value in the program. Technology, such as artificial intelligence to help identify patients to refer for navigation, also assisted in creating a streamlined process that was not dependent upon physician referrals and did not increase administrative burden. UPMC pointed to



strong leadership involvement from upper UPMC leadership down to local hospital leadership and physicians (as a consequence of implementation of the CMS Comprehensive Care for Joint Replacement Model), with the importance of having a surgeon champion to support navigation at the site.

Though staff roles were sometimes poorly defined across programs identified in the environmental scan, among programs addressed in the discussions, most are well-integrated, and each described how navigators fit within teams of other staff with defined roles, such as social workers. However, suboptimal coordination *across* navigation programs within the system was a common issue mentioned in discussions. In particular, communication across different navigation teams came up as an area that needed improvement. One program listed a lack of integration of navigators across departments as a source of duplication of benefits and patient confusion over whom to talk to.

Discussion participants pointed to the need for improved coordination at the leadership level to address these issues. The program concerned about duplication noted that it lacked a system perspective that defined what navigation is, what must be done to support it, and how to create an integrated workforce of navigators with consistent training. One of the programs that appeared furthest along in achieving this was Sarah Cannon, where, in 2014, a corporate team established program-wide standardization, training, and evaluation across hospitals across the country. These and other advances were rooted in significant development of information technology infrastructure, such as a specially designed navigation electronic medical record (EMR) to facilitate the collection and tracking of navigation activities. Even in this highly developed program, however, discussion participants noted that siloed navigation programs across disease areas remained an issue that they were working to address (e.g., oncology may not know that a patient is also being navigated for bariatric surgery).

Discussion participants noted funding barriers to navigation program development and sustainment. For the BMC and UCLA programs, both of which have been involved in program dissemination efforts, financing was regarded as a significant barrier to system adoption. At BMC, discussion participants noted that *start-up costs* were hiring and training staff, and *sustainment costs* were associated with salaries. BMC's reliance on grants and philanthropy to support most salaries was noted as a significant challenge to sustaining navigation support. Given its co-management model that blends navigation with service delivery, UCLA discussion participants also noted additional costs associated with office staff and exam rooms. Other start-up costs, such as the development of dedicated IT infrastructure to support and integrate navigation as accomplished by Sarah Cannon, require significant investment, which may pose a challenge to smaller systems.

Staff retention was raised in two discussions as a barrier to sustainment. BMC noted that navigation staff turnover can be a problem given that navigator positions in the program do not have a clear career path to encourage long-term employment. Given that education requirements are low in the program, many staff leave to pursue further education (e.g., master's in social

work). On the other end, at UCLA, discussion participants noted that the tight labor market for more-experienced staff—in UCLA's case, advanced practice providers, including NPs and physician assistants, can pose staffing and cost difficulties and was particularly a problem during the COVID-19 pandemic. Due to the shortage of providers, UCLA acknowledged that using an NP model may not work for smaller health systems.

Technology played an important role in many successful navigation programs, and organizations looking to implement patient navigation should be mindful of the potential benefits and costs of different technologies for patient navigation. Navigation programs that relied on clinical data to identify patients for inclusion, including complex care navigation, often used existing data sources, such as EMRs, to inform algorithms to predict patients at risk. At Sarah Cannon, artificial intelligence software further facilitates eligibility determination and referral—for example, by reading pathology reports to determine cancer diagnoses. Navigation to increase the rates of screening tests typically used demographic data to identify patients eligible for screening and data on past visits to determine which of these patients were due for screening. For specific types of screening, including lung cancer screening, additional data on risk factors, such as smoking history, were needed to determine eligibility for screening (Percac-Lima et al., 2018). Other navigation programs collected their own patient assessments, including assessments of social need as part of an initial intake visit, to tailor the program toward the patient's needs (Beverly et al., 2018; Guo et al., 2019).

There was relatively little information about the use of technology by navigation programs in the environmental scan. Some navigation programs used electronic health records and other data systems for sharing data across clinic settings and tracking referrals, though this was more difficult when care was delivered across care settings and across different health systems (Haque et al., 2019). This is consistent with results of a nationwide survey of oncology navigators that found inconsistent data collection practices across navigation programs (Battaglia, Fleisher, et al., 2022). Community-based navigation also typically lacked access to these data unless accessed through a specialized portal.

## Policy Considerations

Our environmental scan and program discussions identified several policy considerations and potential barriers around supporting patient navigation services for patients. Generally, navigation program discussion participants viewed a hypothetical Medicare benefit for navigation as filling a critical need, though few had clear ideas or preferences on how such a program might function. In one discussion, a participant cautioned that patient navigation should not be too broadly defined and should have specific roles, adding that navigators should not be duplicating work that the health system should be doing (e.g., scheduling and interpretation). Discussants from multiple organizations believed patient navigation support in Medicare would be beneficial, with one discussant expressing that a benefit for navigation could be “life

changing” for many patients who do not qualify for existing navigation services. Another participant believed that navigation need not focus on those with high need, noting that “everyone needs a navigator,” not just those who are disadvantaged or have complex needs.

Some participants brought up Medicare payments as a means of sustained funding. Using bundled payments was raised in two discussions as a potential sustaining funding model. One participant at BMC expressed support for a policy of funding patient navigation through bundled payments for episodes of care. Similarly, UPMC proposed including navigation as a default component of certain diagnosis-related group payments (e.g., brittle diabetes, chronic liver disease) as a possible means for Medicare to identify patients with likely navigation needs and to provide support.

Programs that we spoke with generally did not view the FFS model as sufficient for sustaining navigation services. While discussion participants mentioned a handful of activities provided by navigators that could work conceptually as discrete billable services, including systematic screening activities (e.g., for social needs), linking to services that overcome those social needs, and education services, in several instances, discussion participants did not agree that navigation was or could be a billable service because many of the functions navigators perform are not adequately distinct. In one program, the discussion participant noted that programs administered by registered nurses or staff with lower credentials cannot independently bill Medicare. FFS was also seen as flawed in programs such as UCLA’s; interviewees from that program noted that, while navigators can directly bill for some of the services they provide, they cannot bill for proactive and preventative activities that occur outside of an encounter. Additionally, discussion participants said that there needed to be resources and support for community-based organizations given that health systems do not support all needs of patients and their families. UCLA discussion participants proposed that filling the gaps in FFS may come down to alternative payment models and per member per month benefits that allow providers to attend to the needed care support that may not be easily attributed to specific encounters.

Other models of navigation support might be achieved without direct reimbursement. In one discussion, participants suggested that Medicare could create and administer its own program that employs or contracts navigators, either locally or nationally, whom beneficiaries can use in instances where navigation services are not available (either for a specific condition or in a particular geography). Additionally, systems may choose to take up patient navigation on their own as a part of internal initiatives or models that condition payment on performance on certain quality measures if navigation services are shown to be effective in improving those measures.

## Chapter 4. Discussion

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Key to deliberations regarding a Medicare patient navigation benefit is how patient navigation services relate to and expand on existing care coordination roles (e.g., clinical care coordinators, community health care workers) and what additional value they could provide. For many of the navigation programs we identified in the literature, these terms were used somewhat interchangeably, though some practitioners and researchers have distinguished between *patient navigation* (addressing clinical and nonclinical barriers to care), *care coordination* (with more focus on clinical needs and coordinating between care providers), and *case management* (with more of an emphasis on managers providing care). Researchers in oncology navigation have noted that, for navigation services to achieve sustainable support, the eligible services and providers would need to be clearly defined (Battaglia, Zhang, et al., 2022). Most navigation programs that we identified included both clinical and nonclinical components, though the nonclinical components—for example, helping patients address financial or insurance barriers, such as the need to obtain prior authorization, or connecting patients with community resources—were typically what distinguished navigation programs from care coordination or other health-focused programs.

A navigation benefit in Medicare would likely not need clinically trained staff to bill for services provided, as many of the key navigation tasks do not require clinical skills—for example, helping patients schedule appointments or close the loop on external referrals. Many programs used nonclinical navigators trained on the job who nevertheless were able to improve access, costs, or quality of health care delivery without any specific certification (Ustjanauskas et al., 2016; Wells et al., 2018; Anderson et al., 2020). Programs that focus on improving reach and resolution of diagnostic screenings, for instance, are commonly staffed with nonclinical navigators. Programs with a social-service and community support focus, such as at BMC, are another example of common navigation models that do not require clinical staff. For navigation programs that require more clinical knowledge, such as those that are integrated into treatment and disease management, clinical training such as nursing certifications might be required. Social workers and counselors also develop important skill sets through their degree programs that are useful for many navigation programs. Also, navigation specifically for patients with mental health conditions may require specific mental health care training, and these programs may need to look for mental health nurses or other counselors. However, navigation programs employing all different types of staff have been successful in improving patient outcomes, so restricting eligible providers to clinical staff only may limit the success of otherwise beneficial programs employing nonclinical navigators.

A navigation benefit would also need to clearly define eligible patients. Intensity of patient navigation services varied depending on whether they targeted a newly diagnosed condition or

an acute illness, such as a new cancer diagnosis or admission to a hospital, versus a longstanding chronic condition, such as diabetes or cardiovascular disease. Some programs were not tied to a specific condition at all but rather were based on overall risk of death or hospitalization, frailty, or other needs of the patient. For patients with greater disease complexity or social needs (e.g., multiple conditions, social and behavioral needs) who may require more intense navigation services, some sort of risk adjustment of the benefit might be beneficial.

To move beyond grant-funded research demonstrations or pilots of small numbers of patients, navigation programs must be financed in a sustainable way. Programs that rely on ad-hoc grants are often viewed as less sustainable than those that have consistent and steady sources of funding (Garfield et al., 2022). Renewable grants from federal funders are an option to establish these programs, pay for the acquisition of any needed information technology upgrades, and compensate staff (both frontline staff delivering navigation services and supervisors overseeing navigation programs). For condition-specific navigation, including oncology navigation, bundled payments for navigation services could also be a promising approach (Hardin, Kilian, and Murphy, 2017; Gillespie and Privitera, 2018). However, for chronic condition navigation to be directly incentivized through payment policy, the terms of a bundled payment approach would need to be carefully defined, especially if navigation will take place over years, such as for patients with diabetes or other similar conditions. Other alternative payment models, including global payment models, could also create incentives for health systems to implement patient navigation programs to lower costs or improve outcomes, even if the payment models do not explicitly require these programs. However, more work to explore the extent to which these models incentivize navigation, improve care quality, and help mitigate risks around the costs of these programs is needed.

Another potential approach would be to pay for navigation services using an FFS approach for specific tasks performed by navigators. Medicare has begun to allow FFS to reimburse for some navigation activities through new initiatives, such as its transitional care management and chronic care management codes. While these codes allow for reimbursement for care coordination and care transition activities under some circumstances, many other important roles and functions are not covered. To fill more of this gap, billing codes could be established for other aspects of navigation currently not reimbursable under Medicare—for instance, the use of a screening tool or other assessments, time for care planning, or patient education. The COVID-19 pandemic has also highlighted willingness among many payers to reimburse for telehealth care delivered via telephone or video, increasing opportunities for service delivery and compensation. Despite these options, however, FFS was not viewed as an adequate model by discussants given the comprehensive nature of services provided as part of a navigation program. Additionally, FFS solutions would not apply to programs with navigators not under the direction of billing practitioners, such as those focused on social needs and community care.

A different approach identified in key informant discussion was to develop a central resource, such as a call center or other federally administered program that would connect

eligible patients to remote navigation services, that can advise patients and provide a source of support and advice for specific categories of diseases or needs. This was viewed as a potentially valuable resource among some key informants, though such a resource may lack familiarity or personal connection with local community resources. It was also acknowledged that a challenge for Medicare in administering such a program will be identifying those patients who are in most need of this benefit. Future work to provide patient navigation services can build off existing federal efforts to develop Community Care Hubs, in which health systems or nonprofits provide care coordination, referrals to social services, and other care to support high-need populations and older adults and address social needs (Robertson and Chernof, 2020). Twelve of these hubs are currently funded by the Administration for Community Living, but, in the future, these could be funded through alternative payment models. For example, the Value-Based Insurance Design Model is testing offering non-primarily health-related supplemental benefits to targeted enrollees based on chronic conditions and socioeconomic status (Chappel et al., 2022).

## Limitations

This report is limited to articles published between 2013 and 2023 because ASPE's goal was to capture the current state of patient navigation programs in the United States. Previously published systematic reviews were also excluded to maintain limited restrictions on the types of navigation programs represented in this report<sup>4</sup> and reduce duplication that occurs when reviews share sources. The search strategy also prioritized academic articles and reports; programs run by nonacademic organizations might have been more likely missed; for example, the Susan G. Komen Foundation operates a navigation program for Black people with breast cancer in major U.S. cities but has not published articles on this program outside of its blog ("Komen's Patient Navigation Program Supporting the Stand for H.E.R. Initiative," 2021). Though many patient navigation programs were identified through this search, there are likely many more programs operating throughout the country, especially those without published reports or those relying on short-term funding.

This report relied upon a small number of discussions to get an on-the-ground perspective on navigation programs to supplement information from the literature. The selection of these programs was not random, and our efforts to achieve heterogeneity in program type considered only a few dimensions. Importantly, navigation programs using nonclinical navigators and social workers were likely underrepresented in our discussions relative to their prevalence in practice. Likewise, our discussions consisted primarily of nurse-led programs, overrepresenting the perspective of one of many patient navigation staffing models. We chose to focus discussions on programs within clinical settings; therefore, perspectives from programs delivered in community

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<sup>4</sup> Systematic reviews can place narrow definitions on their subject matter, e.g., examining only nurse navigator programs, which limit applicability to a broader concept.

settings were not represented. Programs at federally qualified health centers were also not represented in discussions. Future work could explore patient navigation in other settings, including navigation focused on increasing the rates of specific screening tests, improving care transitions, or navigation to increase connection to social services. This could also include the perspectives from federally qualified health centers, payers, or national organizations providing navigation services.

## Chapter 5. Conclusion

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“Patient navigation” is applied broadly to describe programs that help patients access care, address barriers to care, and manage the complexity of using available health care and social services. Based on an environmental scan and discussions with key informants who provide navigation services in several different settings, we identified and described navigation programs across the country, ranging from those seeking to increase the use of a specific screening test to those helping patients with major social needs access the health care system. Some programs were run by large integrated health care systems, while others were run by individual clinics or community-based organizations. For each program, the scope of service provided, patient population served, and characteristics of the program (setting, staff type, payer), are often closely related. Narrowly targeted navigation programs, with clearly defined goals, time frames, and patient populations served (e.g., programs aiming to increase the use of a specific screening test among patients of a specific age or sex), tended to be more successful than more-general navigation programs at improving access to care, reducing health care costs, and improving care quality.

Navigation programs can be costly to establish and maintain; many of the programs we identified relied on grant or health system funding for support. While there is some evidence that certain navigation programs can sustain themselves financially, the evidence for a positive return on investment associated with patient navigation is complex and depends on the specific design of the program, including the population, setting, and disease or condition of focus.

All these factors must be considered in development of a patient navigation benefit for Medicare. If navigation services are to be reimbursed using an FFS model, the specific services to be reimbursed would need to be defined, as would the applicable providers of those services and patients eligible for them. This could include reimbursement for systematic screening as part of navigation, or for specific points of contact between navigators and patients. Alternative payment models promoted by CMMI may also indirectly incentivize health care systems to establish patient navigation programs, as long as these programs are able to improve patient outcomes and reduce costs. As Medicare works toward its goals of all beneficiaries receiving care under alternative payment models and evolution from a purely FFS payment and reimbursement model, explicit incorporation of patient navigation requirements into these models may further support their growth and advancement, as well as their availability to Medicare beneficiaries.



## Appendix A. Search Parameters

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**Publication Date Range:** 2013–2023

**Type of Literature:** Scholarly and gray literature

**Language:** English

**Databases:**

PubMed, CINAHL, Business Source Complete, Grey Literature Report from the New York Academy of Medicine (discontinued in 2017 but can search for 2013–2017 publications)

**Search Terms**

**Title or abstract fields:**

(navigator\* OR “case manager\*” OR “care coordinator\*” OR “care co-ordinator\*” OR “care manager\*” OR “community health worker\*” OR “nurse coordinator\*”)

AND

(coverage\* OR service\* OR treatment\* OR diagnos\* OR admission\* OR discharg\* OR transition\* OR hospital\* OR healthcare OR "health care" OR cost\*)

AND

patient\*

**OR**

(“patient navigation” OR “case managers” OR “case management”) in MeSH field (for PubMed and CINAHL)

\*Note, for Business Source Complete, we used a broader set of terms:

(navigat\* OR “case manager\*” OR “care coordinator\*” OR “care co-ordinator\*” OR “care manager\*” OR “community health worker\*” OR “nurse coordinator\*”)

AND

(coverage\* OR service\* OR treatment\* OR diagnos\* OR admission\* OR discharg\* OR transition\* OR hospital\* OR healthcare OR “health care” OR cost\*)

AND

patient\*

## Appendix B. Discussion Guide

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Semistructured discussions were conducted over 60 minutes according to the following discussion guide. Discussion guides were tailored to each participant according to information that was publicly available and known features of each program. Within each topic, discussions followed the natural flow of the conversation, so not all questions listed below were asked in each discussion. Likewise, some follow-up questions to answers given are not listed.

### **Design (5 minutes)**

Could you provide a brief overview of the patient navigation service(s) within your organization?

[If needed]

- What are the patient populations you target? Why did you choose this population?
- What are the key services provided through your navigation program? (e.g., clinical, financial, community support)
- In what care settings are you providing navigation services? (e.g., acute care, post-acute care, primary care, specialty care, behavioral care, inpatient, outpatient, etc.)
- Is your patient navigation service part of a benefit package or model test? If so, which one (e.g., MA plan, CMS MSSP, private pay, Medicaid program, state or local government service, or CMS Innovation Center model test)?
- What is the entity that is responsible for providing the patient navigation services (individual provider, provider network, community health organization, integrated delivery system, payer, etc.)?

### **Implementation (15 minutes)**

- Can you describe your process for developing and implementing patient navigation services?
  - What are the steps necessary to establish and implement a patient navigation program within a health system/health plan (vs. for an individual physician practice, etc.)?
    - What barriers did you encounter?
    - What facilitators made implementation easier?
  - How do you determine which patient populations to target?
    - What are the different service needs among these key populations?
    - How do you determine eligibility for navigation (including eligibility for different levels of intensity of navigation services)?

- What additional considerations do you have for underserved populations and those with special needs?
  - What is the variation in intensity of patient navigation services offered? How do patient navigation services vary with the onset of a patient’s condition, chronic condition, frailty or other needs of the patient? What roles make up the navigation team and who provides navigation services?
    - How does the type of patient navigation services provided vary based on the benefit provided to the patient population, type of staff / licensure requirements of staff?
  - How do the patient navigation services fit with other existing care coordination roles (e.g., clinical care coordinators, community health care workers, etc.)
    - Are the patient navigators embedded within the care team or external to the care team, and how often do they interface with the care team?
    - How does patient navigation interface with primary care, team-based care, and specialty care?
  - How are these teams organized? How do they integrate within other existing workforce and care teams?
  - What patient assessment data does the navigation team use?
  - How do you use technology in your navigation program? For example, do you use technology to identify patients for inclusion in the program? For care coordination or referral tracking? Are navigation services integrated within an EMR?
    - How does communication occur in cases where various providers may be using different EMRs?
  - What other options has your organization used and/or considered for facilitating patient navigation (such as co-location of pharmacy / behavioral health services)?
- What were the costs of establishing the patient navigation program?
    - What level(s) of training/credential/licensing was needed?
    - What is the total time spent training each provider? What percent of time are providers spending on navigation services?
    - Did you need to hire any new personnel? If so, for what roles?
    - How many patients can a typical patient navigator or navigation team manage? How does this vary depending on the types of navigation services and the intensity of navigation services?
    - Did you need to contract with an external organization or vendor? If so, for what roles or services?
    - How much time is spent per patient [per month] for navigation? Does this vary throughout the year? Or by type of patient?
    - What were the major start-up costs associated with the navigation program?
      - What is the estimated amount of time needed to achieve a return on this investment?
    - What are the major ongoing costs associated with the navigation program? What are the sources of funding to meet these costs? Is funding sustainable?

- What is the unit of payment for each patient receiving patient navigation services? Are there uniform or variable fees or cost (e.g., depending on the intensity of patient navigator services needed by different types of patients, per member per month, risk adjustment methods for variable approaches, etc.)?
- Is there patient cost-sharing?
- How does the health system coordinate with other navigators associated with their patients (e.g., navigators at insurance plans, navigators at other health systems, community health workers who are navigators, etc.)?

### **Outcomes (15 minutes)**

- How do you judge or evaluate the effectiveness of the program?
  - What outcomes and metrics do you review? (e.g., clinical outcomes, utilization [hospital admissions, emergency department visits], navigation service use, number of completed vs. missed appointments for referrals, patient experience, costs, care quality, etc.) Do you look at changes over time?
  - How might patient navigation services affect these outcomes?
- Have you done any calculations of return-on-investment for navigation services? How long does it take for different types of providers / organizations / payers to achieve a return on investment for these services (e.g., independent physician practice vs. integrated delivery system)? Is the return on investment higher for certain types of patients (e.g., patients with multiple chronic conditions, dual eligibles, etc.)
- How are patients responding to the navigation program?
  - What are their experiences with patient navigation?
  - What services do they find most useful or value the most?
  - How are patient and caregiver preferences reflected in patient navigation?
  - How do you keep patients/caregivers engaged? What is the uptake of your patient navigation program? Do beneficiaries opt out? Do patients “graduate” from navigation?

### **Generalizability (15 minutes)**

- How should CMS think about developing and implementing a patient navigation benefit under Medicare? For what populations do you think patient navigation works best?
  - How can patient navigation be distinguished from existing billing codes? (e.g., chronic care management, care plan oversight services)
  - What would be the best model for navigation services delivery? (e.g., provided by hospital workers, other health care workers, community health organizations, etc.) How would supervision of navigators take place?
  - What impact do you think establishing a benefit for patient navigation in Medicare fee-for-service would have on beneficiaries?

- What might be some implementation considerations?
  - What are potential barriers? How have programs addressed these barriers?
  - What are the potential facilitators, potential impact?
  - What implementation strategies or best practices do you think are most important to convey? How about lessons learned?
- How might these factors vary across:
  - All Medicare beneficiaries?
  - Beneficiaries with complex conditions?
  - Beneficiaries who use post-acute services?
  - Geography (urban vs. rural)?
  - Beneficiaries with behavioral health needs / HRSNs?
- Given the current state of patient navigation, what do you think are the next steps to develop these benefits in the next 3–5 years?

## Annex. Environmental Scan

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The evidence tables accompanying this report summarize the navigation programs identified through the environmental scan. This information is available upon request to the report authors.

## Abbreviations

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AHRQ	Agency for Healthcare Research and Quality
AONN+	Academy of Oncology Nurse & Patient Navigators
ASPE	Office of the Assistant Secretary for Planning and Evaluation
BMC	Boston Medical Center
CMMI	Center for Medicare and Medicaid Innovation
CMS	Centers for Medicare & Medicaid Services
ED	emergency department
EMR	electronic medical record
FFS	fee-for-service
NP	nurse practitioner
UCLA	University of California Los Angeles (Medical Center)
UPMC	University of Pittsburgh Medical Center

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