Establishing effective patient navigation programs in oncology

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Abstract

Purpose Recent advances in cancer treatment have resulted in greatly improved survival, and yet many patients in the USA have not benefited due to poor access to healthcare and difficulty accessing timely care across the cancer care continuum. Recognizing these issues and the need to facilitate discussions on how to improve navigation services for patients with cancer, the National Cancer Policy Forum of the National Academies of Sciences, Engineering, and Medicine (NASEM) held a workshop entitled, "Establishing Effective Patient Navigation Programs in Oncology. The purpose of this manuscript is to disseminate the conclusions of this workshop while providing a clinically relevant review of patient navigation in oncology.
Design Narrative literature review and summary of workshop discussions
Results Patient navigation has been shown to be effective at improving outcomes throughout the spectrum of cancer care. Work remains to develop consensus on scope of practice and evaluation criteria and to align payment incentives and policy.
Conclusion Patient navigation plays an essential role in overcoming patient- and system-level barriers to improve access to cancer care and outcomes for those most in need.

Keywords Cancer care barriers · Oncology · Patient navigation

Introduction

Recent advances in cancer treatment have resulted in greatly improved survival, and yet many patients in the USA have not benefited due to poor access to healthcare and difficulty accessing timely care across the cancer care continuum [1]. Recognizing these issues and the need to facilitate discussions on how to improve navigation services for patients with cancer, the National Cancer Policy Forum of the National Academies of Sciences, Engineering, and Medicine (NASEM) held a workshop entitled, "Establishing Effective Patient Navigation Programs in Oncology." The workshop, held in November 2018 at NASEM, brought together patients, navigators, clinicians, administrators, and other stakeholders, in a collaborative discussion regarding the history and future of patient navigation.

Some patient challenges are financial, but cultural differences and emotional distress can also create obstacles to timely, quality cancer care. Even in the best of circumstances, cancer care in the USA is often complex and fragmented. This can be a challenge for any patient and can result in delays or missed opportunities in care. The core role of a patient navigator in oncology is to mitigate barriers in access to healthcare, improve access to timely care, and provide patients with guidance and support throughout the cancer care continuum [2]. Patient navigation is fundamentally a patient-centered strategy that ensures that there is a liaison between the patient and the healthcare system. Patient navigators can play a key role in care coordination by streamlining care for patients across diverse clinical settings. Furthermore, the treatment complexities and emotional

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burden associated with cancer care make it a particularly high-yield opportunity for patient navigation programs [3–5]. The purpose of this review article is to provide a general overview of patient navigation in oncology, stemming from discussions at the workshop.

Origin and growth of patient navigation in oncology

Over the past several decades, advances in cancer screening and treatment have led to an overall reduction in cancer mortality [6, 7]. However, this progress has been hindered by continuing cancer care disparities, particularly among underrepresented racial and ethnic minorities and low-income populations [8, 9]. Patient navigation began as a community-based attempt to narrow racial and socioeconomic disparities in breast cancer mortality [3]. Dr. Harold Freeman, who started the first program in the early 1990s, envisioned its potential for reducing the delay between diagnosis and treatment while improving cancer survival rates among Harlem's disadvantaged patient population [2]. Combined with free breast cancer screenings, this patient navigation program led to significant increases in breast cancer survival rates by decreasing the average breast cancer stage at presentation [2, 10].

This initial success created a framework and paved the way for institutional and policy support for patient navigation as an essential component of quality cancer care. The passing of the Patient Navigator and Chronic Disease Prevention Act in 2005 enabled federal funding for a number of patient navigation demonstration sites. Financial support for patient navigation in oncology has also originated in large part from private foundations such as the American Cancer Society, the Avon Safety Net Foundation and Susan G. Komen [2, 4, 11, 12]. The Affordable Care Act (ACA), enacted in 2010, expanded the role of patient navigators by requiring Health Insurance Marketplaces, created pursuant to the ACA, to establish navigator programs in order to educate consumers, facilitate insurance enrollment, and foster patient autonomy [13, 14].

One of the most significant milestones in patient navigation is a requirement for institutions accredited by the American College of Surgeons' Commission on Cancer to now document a navigation process and conduct regular community health needs assessments to ensure that their navigation process aligns with patient needs [15]. For help conducting a community needs assessment, a toolkit is available at no cost called *Implementing the Commission on Cancer Standard 3.1 Patient Navigation Process* [16].

Defining the role of patient navigation in oncology

Patient navigation is distinguished from other clinical supports by its focus on overcoming obstacles that frequently inhibit optimal care and improving the patient's interaction and integration into the cancer care process [4]. Navigation programs increase access to care for patients at all stages of cancer care. Navigators also serve as important liaisons and advocates within and beyond the health care system [4, 13]. For example, navigators are often best positioned to link patients to community and clinical supports to optimize patient access to screening [17, 18], diagnosis, treatment, and supportive care and to improve patient and family quality of life. The role of the navigator includes improving communication between providers and settings during transitions in care. Navigators also can reduce missed appointments and the number of patients lost to follow-up [19].

The challenges to accessing and completing cancer care are as diverse as patients themselves, requiring diversity in the profession that defies typical role standardization. Patient and family challenges may be logistical, economic, cultural, and/or provider-centered in nature. Specific challenges may include lack of safe, consistent transportation to treatment; health insurance coverage gaps; high levels of distress; lack of social support; co-morbidity and symptom management; and fragmented care across providers and institutions. Some patients may need additional assistance with insurance paperwork, such as pre-authorizations. Others may benefit from co-pay assistance and other charitable programs. Additionally, all patients deserve accurate and timely information about cancer risk, prognosis, treatment options, and treatment side effects [4]. Most patients will need the help, at some point, of a designated person to make sure they can efficiently use time with their oncologist, access comprehensive care during treatment, coordinate primary and specialty care, and optimize their wellness.

As the scope of patient navigation has increased to meet the growing needs of cancer patients and caregivers, so has the diversity of roles and training within the field. There is a need for various types of navigators who can address the practical and psychosocial needs and coordinate care for people diagnosed with cancer and at risk for the disease. Today, patient navigator programs may include peer navigators, navigators with professional training but no clinical license, social workers, nurses, advocates, medical assistants, or any combination of these depending on the type of need, the volume of cancer patients seen by the institution,

and available resources [13, 17]. Selection of a patient navigator, including their training and background, should be tailored to patient and institutional needs.

In a study conducted by Willis et al. [19], the roles and responsibilities of four primary navigator types—community health workers, patient navigators, nurse navigators, and social workers—were delineated (see Table 1). Navigators can play an instrumental role in reducing barriers to healthcare for patients [3, 4, 13]. But the kinds of activities navigators perform to address those barriers vary based on institutional needs and the navigator's scope of practice. A fundamental overview of major cancer therapeutic modalities, financing mechanisms, and cancer patient supportive care needs is a key component of navigator training.

Evidence for patient navigation outcomes in oncology

The existing evidence base for patient navigation programs supports navigation's impact across several measures. The majority of patient navigation programs have focused on cancer, particularly breast cancer [4]. Studies have shown the efficacy of patient navigation in improving screening rates, increasing adherence to recommended treatment, and improving the timeliness of care after a screening abnormality [4, 21, 22, 25–27]. Similar results have been found for patients with abnormal prostate and colon cancer screening tests [23]. Patient navigation has also been associated with higher rates of patient satisfaction and healthcare empowerment, and reductions in racial disparities [24, 28–30]. While these cancers have garnered attention and are discussed in more detail below, cancer care is complex, and navigation programs may be most beneficial for patients with the greatest needs, regardless of their specific cancer type [5].

Breast Cancer

Patient navigation can improve rates of screening mammography and receipt of recommended treatment, particularly among vulnerable minority and low income populations [31–34]. Patient navigation is associated with improved timeliness of diagnosis and management of breast abnormalities [29, 35–38], though some studies have yielded mixed results [39]. In a randomized control trial, navigated patients had fourfold higher odds of follow-up through diagnostic resolution after an abnormal mammogram compared to non-navigated patients [40]. In another study, the implementation of an outreach initiative that combined community health advocates and patient navigators was associated with a

twofold increase in the proportion of stage 0 breast cancers, and a decline in stage IV breast cancer from 16.8 to 9.4% [41]. Patient navigation has also been associated with higher odds of receiving recommended adjuvant therapy (e.g., antiestrogen therapy in patients with hormone receptor-positive breast cancer) [42]. In the American Indian population, utilization of patient navigation services was associated with reduced treatment interruptions and higher rates of clinical trial enrollment [43]. Culturally tailored navigator programs have also shown efficacy at improving breast cancer screening and reducing disparities in screening among vulnerable refugee women [44].

Colon Cancer

Patient navigation is associated with higher rates of colorectal cancer screening; one study reported a threefold increase in screening among navigated patients relative to non-navigated patients [45, 46]. The effect of patient navigation on improving screening rates appears to be particularly beneficial for non-English speaking and minority patient populations [47–50]. One randomized control trial found higher rates of screening colonoscopy (15% above the national average) in African American patients randomized to receive navigation either by peer patient navigators or professional navigators [51]. In a recent randomized control trial, navigated patients had 1.5 times greater odds of completing a colonoscopy compared to non-navigated patients [18]. Patient navigation is also associated with improved timeliness of diagnostic resolution after an abnormal colonoscopy [37]. One study showed that patient navigation decreased racial/ethnic disparities in colorectal cancer screening [52]. Colorectal cancer screening patient navigation has also shown strong cost-effectiveness [53].

Lung Cancer

Lung cancer screening by low dose CT scanning has only recently been recommended by the US Preventive Services Task Force (2013) for people with specific risk factors [54]; however, one randomized clinical trial has already found a nearly twofold increase (31% in navigated patients versus 17.3% in the control group) in lung cancer screening rates [55].

Benefits of patient navigation have extended beyond improvements in screening, to all aspects of cancer care including engagement in treatment with improved adherence and treatment completion as well as better follow-up and survivorship care. Research evidence on the value of patient navigation in the post-screening period may be mixed, in part, due to the variability of health care system contextual factors

Table 1 Patient navigation framework: navigator function across domains [20]

Domain	Community (community health worker)	Community/healthcare institution (patient navigator)	Healthcare institution (nurse navigator/social work navigator)
Professional roles and responsibilities: The knowledge base and skills needed to perform job-related duties and tasks, including understanding scope of practice, supporting evaluation efforts and identifying and exercising self-care strategies. The following general skills are required: Organizational skills Office skills Interpersonal skills Time management Problem solving Multitasking Critical thinking	General knowledge base on health issues such as cancer, diabetes, obesity, heart disease, stroke, HIV/AIDS, and other chronic diseases. Active documentation in client record. Conduct evaluation focused on community needs assessment and health behaviors.	Knowledge of cancer screening, diagnosis, treatment, and survivorship and related physical, psychological, and social issues. Active documentation of encounter with patient, barriers to care, and resources or referrals to resolve barriers, which may be noted in the client record and/or the medical record. Conduct evaluation focused on barriers to care, health disparities, and quality indicators.	Knowledge and maintenance of knowledge (e.g., license, certification, continuing education) of cancer clinical impacts on patient, caregivers, and families and ability to intervene (e.g., symptom management, assessment of functional status and psychosocial health) Active documentation in medical record. Conduct evaluation focused on clinical outcomes and quality indicators.
Community resources: Ongoing identification, coordination, and referral to resources such as individuals, organizations, and services in the community.	Provide referral to evidence-based health promotion programs. Provide assistance accessing health insurance.	Provide assistance with scheduling appointments and facilitate request and follow-up with specialist or supportive care based on clinical referral. Provide assistance accessing health insurance, co-pay programs, patient assistance programs and financial assistance.	Focus on clinically oriented resources, such as referrals for second opinions, treatment or testing, that may not be offered at the patient's institution as well as supportive or specialty referrals within or external to the institution (specific to nurse navigators). Provide assistance in identifying community resources that can provide psychosocial support throughout treatment (specific to social work navigators).
Patient empowerment: Identifying problems and resources to help patients solve problems and be part of decision-making process. An important facilitator of patient empowerment is development of good patient rapport.	Motivate individual and community to make positive changes in health behaviors. Activate and empower individuals and communities to self-advocate and make healthy decisions.	Assist patient with identifying administrative, structural, social, and practical issues to participate in decision-making and solutions. Empower patients by ensuring they know all their options; identify their preferences and priorities, and assist them to access healthcare services and self-manage their health. Educate patients on their rights and preferences and ensure they are able to participate in the decision-making process throughout their care and into survivorship or end-of-life care.	Assist patients in decision-making regarding diagnostic testing and treatment options (specific to nurse navigators). Provide patients with strategies to cope with disease, treatment, and stress (specific to social work navigators).
Communication: Ensuring appropriate communication with patient, healthcare and service providers, and community.	Facilitate communication with community about access and utilization of the healthcare system.	Assist patient and provider with communicating expectations, needs, and perspectives.	Provide translation and communication of clinical information. Provide counseling through one-on-one communication and serve as conduit between patient and providers to address emotional and psychosocial needs of patients (specific to social work navigators).
Barriers to care/health disparities: Identifying and addressing barriers to care and reducing health	Address barriers to accessing the healthcare system.	Address structural, cultural, social, emotional, and administrative barriers to care.	Address clinical and service delivery barriers to care.

Table 1 (continued)

Domain	Community (community health worker)	Community/healthcare institution (patient navigator)	Healthcare institution (nurse navigator/social work navigator)
disparities as defined by age, disability, education, ethnicity, gender, sexual identification, geographic location, income, or race in populations that often bear a greater burden of disease than the general population.	Focus on reduction of general health disparities.	Focus on reduction of cancer health disparities in medically underserved patients and timely access to care across the continuum.	Provision of services to at-risk populations, which may be defined by individual need, high-acuity, or high-volume at institutional level.
Education, prevention, and health promotion: Promoting healthy behaviors and lifestyle, including integrative and wellness approaches.	Provide general health promotion at the individual and community level, including physical activity, healthy eating habits, stress reduction, sunscreen use, tobacco cessation, and reduction of other risky behaviors to reduce risk of cancer and chronic disease.	Educate patients on practical concerns and next steps in treatment with regard to what to expect. Identify the educational needs of patients to advocate on their behalf with the care team. Inform patients of the importance and benefit of clinical trials and connect them with additional resources.	Assess educational needs of patient. Identify the educational needs of patients to advocate on their behalf with the care team. Inform patients of the importance and benefit of clinical trials and connect them with additional resources. Provide clinical education about diagnosis, treatment, side effects, and post-treatment care (specific to nurse navigators). Educate patients and caregivers on their biopsychosocial concerns regarding their diagnosis and treatment (specific to social work navigators).
Ethics and professional conduct: Understanding scope of practice and professional boundaries, assuring confidentiality, and following legal requirements. Maintaining and adhering to the professional standards. Bringing accountability, responsibility, and trust to the individuals the profession services.	Abide by state defined scope of practice.	Understand difference in scope of practice between licensed professionals and nonlicensed professionals.	Abide by the ethical principles in the profession's scope of practice and code of conduct according to licensure.
Cultural competency: Healthcare services that recognize, respect, and respond to cultural and social differences within the context of beliefs, practices, behaviors, and needs of diverse community and/or population served [21].	Act as community/cultural liaison and mediator between community and healthcare system using culturally appropriate education materials.	Provide navigation services in a culturally competent manner, e.g., National Culturally and Linguistically Appropriate Services (CLAS) Standards in Health and Health Care. Educate providers to increase their understanding of community's history, culture, and needs, as well as the cultural appropriateness of their approaches and educational materials.	Provide clinical care and education materials in culturally competent manner.
Outreach: Providing healthcare education to individuals and communities that address health disparities [22, 23]	Work with the community to identify education needs and opportunities.	Educate on cancer-related topics to reduce fears and barriers related to cancer screening. Effectively link patients referred from the community to resources that can improve care coordination and timeliness to treatment.	Consult and counsel patients on their unique risks.
Care coordination: A method of organizing patient care activities to facilitate the appropriate delivery of healthcare services [24]	Provide case management, service coordination, and system navigation.	Identify the pathway in the continuum and document the next steps to ensure the patient's optimal outcomes. Identify unmet needs and facilitate cancer care resources to eliminate	Assess and facilitate coordination of psychosocial and medical/clinical care along the care continuum.

Table 1 (continued)

Domain	Community (community health worker)	Community/healthcare institution (patient navigator)	Healthcare institution (nurse navigator/social work navigator)
		barriers along the cancer continuum.	
Psychosocial support services/assessment: Providing and/or connecting patients to resources for psychosocial support services.	Identify resources in the community for emotional and social support.	Administer distress screening and provide assistance with administrative, practical, or social issues identified.	Screen and assess for psychosocial distress. Provide psychosocial support services such as counseling. (Specific to social work navigators)
Advocacy: Advocating on behalf of patient within the community and healthcare system.	Speak up for individual and community needs.	Educate providers on individual preference of care and needs.	Assure patients' needs and preferences are integrated into treatment and care delivery.

including baseline patient outcomes, target population needs, access to and use of resources, efficiency, institutional leadership, and attention to quality improvement. Future avenues of research include identifying which patient populations and medical conditions would particularly benefit from patient navigation services, quantifying the impact of patient navigation programs on patient-centered quality metrics, and analyzing the cost-efficiency of patient navigation programs across a variety of healthcare systems and payers.

Achieving financial sustainability of patient navigation in oncology

A challenge that remains for patient navigation as a field is its integration into healthcare reimbursement structures. The question of whether patient navigation is a cost-efficient intervention is thus particularly salient. Most recently, a matched comparison study at the University of Alabama found that Medicare costs declined by $781.29 per quarter per navigated

Table 2 Financing opportunities and challenges for patient navigation

Model	Key characteristic	Benefits	Challenges
Fee for service [64]	Navigation services billed individually	Easier to establish than value-based methods; Medicare may lead other insurers to follow suit	High administrative burden. May inadvertently increase disparities by requiring more administrative paperwork and reinforcing historical models that value volume over value
Value-based purchasing (e.g., Oncology Medical Home) [65]	Navigation embedded as a quality metric for payment	Part of predefined care delivery expectations for payment; capitated payments provided up front	May be difficult to establish for small, outpatient practices; hard to monitor if quality metric standards are being compromised to cut costs; measures shift over time
Bundled payment [66]	Navigation embedded as a quality metric for payment	Part of predefined episode for payment	Hard to monitor if quality metric standards are being compromised to cut costs; measures shift over time.
Shared savings (e.g., accountable care organizations) [67]	Navigation is an optional strategy for shared savings	Not mandatory; Incentivizes efficiency for both providers and payers; may lower premiums long term	Relies on institution to prioritize service as a driver of cost-savings; could result in cherry picking patients
National coverage determination [68]	Stakeholder-driven request for coverage of reasonable and necessary services for diagnosis or treatment of a particular disease	National, stable coverage for service by Medicare	Strength of evidence must support service as reasonable and necessary for the diagnosis or treatment of cancer
Medicare Advantage flexibility [69]	Allows Medicare Advantage plans to provide supplemental health benefits to different patients with reduced cost-sharing	Incentivizes institutions to provide navigation by covering services	Navigation may not be selected as a supplemental service by any given Medicare Advantage plan; patients without Medicare Advantage not covered

Table 3	No cost resources for patient navigator workforce capacity building

Title	Description	Access
Implementing the Commission on Cancer Standard 3.1 Patient Navigation Process: a road map for comprehensive cancer control professionals and cancer program administrators	Assists cancer program administrators with conducting a cancer-specific community needs assessment and matching navigation processes to identified patient needs.	http://bit.ly/CoCPNRoadMap
Oncology patient navigation core competencies: the fundamentals	List of consensus-based core competencies for cancer patient navigators framed through the common taxonomy of health professional competency domains.	http://bit.ly/PNCompReport
Oncology nurse navigators (ONN) competencies	List of consensus-based core competencies for oncology nurse navigators developed by the Oncology Nursing Society.	https://www.ons.org/sites/default/files/2017ONNcompetencies.pdf
ONN toolkit	Toolkit that includes the ONN competencies, job responsibilities, and requirements and resources for navigating financial challenges.	https://www.ons.org/practice-resources/toolkits/onn-toolkit
Oncology patient navigation training: the fundamentals	Self-paced, competency-driven training for all navigator types with a focus on those without a clinical license.	http://bit.ly/GWCCOnlineAcademy
Guide for patient navigators: a supplement to the oncology patient navigator training—the fundamentals	Companion guide to oncology patient navigator training: the fundamentals	http://bit.ly/PNTrainingGuide
Patient Navigation Barriers and Outcomes Tool (PN-BOT™)	Case management and evaluation tracking tool to demonstrate value of patient navigation activities	http://bit.ly/AboutPNBOT
Executive training on navigation and survivorship	Training that addresses how to conduct a needs assessment, focus a navigation program, implement, and evaluate the program.	http://bit.ly/GWCCOnlineAcademy
Executive training on navigation and survivorship: finding your patient focus—guide for program development	Companion guide for executive training on navigation and survivorship.	http://bit.ly/ExecTrainGuide
Advancing the field of cancer patient navigation: a toolkit for comprehensive cancer control professionals	Toolkit to assist with system change and program planning to sustain the navigation profession.	http://bit.ly/PNPSEGuide

patient, leading to an estimated $19 million in Medicare savings per year [56]. A recent systematic review also demonstrated strong consensus on the cost-effectiveness of navigation for colorectal cancer screening [53]. Targeting patient navigation programs to smaller, higher-need populations may increase program cost-effectiveness while limiting per patient navigation costs [5, 53]. Additionally, the duration of a research study has a direct relationship on captured costs—a shorter study may not identify longer-term benefits that accrue over time. More work remains to elucidate characteristics that make a patient navigation program more cost-effective.

Patient navigation not only impacts patient outcomes but it also has the potential for increasing healthcare system value. Communications outlining the benefits of patient navigation programs may help persuade public and private payers to implement appropriate reimbursement schemes. The effectiveness of patient navigation programs partly depends on their adaptability and responsiveness to local needs. However, these characteristics also present challenges to defining payment algorithms. Clarification of who (professional role, training credentials) is performing what for whom and in what

setting will become increasingly important. Further development of patient navigation standards may additionally facilitate public and payer understanding of the navigation role.

The evolution of healthcare financing in the USA towards capitation and bundled payments has the potential to incentivize care navigation by allowing health care organizations to benefit from their savings [57]. One model for financing navigation is billing for individual services. However, social work provides important historical knowledge. Currently, social workers can bill Medicare for psychotherapy services, but not for case management [58]. Billing for psychotherapy separate from other services adds administrative burden and may not be considered cost-effective for some cancer centers. Additionally, this model of financing could inadvertently increase health disparities by restricting services to those with certain health plans. Many cancer centers opt to provide social work services free of charge to ensure that the uninsured and patients with fewer health insurance benefits are not restricted from critical services.

Building navigation expectations into metrics for quality care as a condition of payment is another approach that

policymakers may want to consider. The Oncology Care Model (OCM) embeds patient navigation within its required services, which are supported by a $160 per beneficiary per month payment [59]. Other services include access to a clinician with real time access to the patient's medical records, documentation of a care plan that includes the 13 elements of the Institute of Medicine's oncology care plan [60], ongoing quality improvement activities, and the use of a certified electronic health record [61]. Because performance-based payments are based on a total cost of care, this model is one value-based purchasing approach that rewards systems for providing more efficient care rather than parceling out services via a fee-for-service model [62]. Bundled payments may provide another model for financing navigation in smaller practices, since these are based on episodes of care [63]. Additional cost-effectiveness analyses that incorporate cost-utility, cost quality adjusted life years (QALYs) for diverse patients in diverse settings with varied access to resources could provide additional data on how to assess the cost of providing navigation services and to inform possible financing approaches. Table 2 shows an overview of potential financing models.

Developing training standards and competencies for patient navigation in oncology

Recognizing the growing need to formulate training and evaluation standards for patient navigators, the George Washington University Cancer Center formulated a set of national, consensus-based professional competencies for patient navigators in oncology [70]. At the institutional level, the National Cancer Institute Patient Navigation Research Program proposed four primary outcomes in order to assess patient navigation programs: time to diagnostic resolution, time to initiation of cancer treatment, patient satisfaction, and cost-effectiveness [17]. The American College of Surgeon's Commission on Cancer has additionally required a community health needs assessment and patient navigation in its cancer program standards [15]. Similarly, the Oncology Nursing Society has developed Oncology Nurse Navigators (ONN) competencies and an ONN Toolkit for use in training and position development [71]. Table 3 lists no-cost resources for navigator workforce capacity building. A comprehensive list of training and tools available to support the navigation profession has also recently been published [72].

Conclusion

While biomedical advances have drastically improved treatment and survival possibilities for cancer patients,

the societal benefits of these advances have not been fully realized due to healthcare system fragmentation and the diversity and complexity of patient needs, particularly among stigmatized populations with less access to resources and care [73].

Patient navigation plays an essential role in overcoming patient- and system-level barriers to improve cancer outcomes for those most in need. Patient navigation in oncology has rapidly developed into a central pillar of patient-centered care across the nation. The requirement of the Commission on Cancer that all cancer programs must have a navigation program to achieve accreditation supports this concept as a key component of cancer care [15].

Despite the successes of patient navigation, work remains to develop consensus on scope of practice, evaluation criteria, and to use the evidence of effectiveness to inform alignment of payment incentives and policy. Looking to the future, Box 1 summarizes potential strategies identified at the NASEM workshop that aim to advance the field of patient navigation. Overall, evidence-based, expert consensus is building for integrating patient navigation into existing healthcare financing structures, which has been shown to improve cancer outcomes [74, 75].

Box 1 [69]

Evidence-based potential strategies to improve the future of patient navigation programs in oncology

Suggested by participants of the National Cancer Policy Forum Workshop

Providing effective navigation services throughout the oncology care continuum

• Establish navigation strategies for all stages of care (e.g., prevention and screening, diagnosis, treatment, survivorship care, and end-of-life care).

• Enhance collaboration among the members of multidisciplinary care teams, from navigators to physicians.

• Screen patients to identify those with the greatest need of navigation services.

• Foster self-care management by patients receiving navigation services.

• Empower patients and maximize uptake of navigation services by enhancing convenience.

• Identify and address evidence gaps for patient navigation (e.g., impact on palliative care, cancers other than breast).

Improving education for patient navigation

• Standardize training and certification for all navigators, regardless of professional role.

• Define the roles, responsibilities, and boundaries of the navigator within the care team.

• Clarify different roles of navigators with different professional backgrounds.

• Clarify expectations and best practices for interactions with patients and among team members.

• Inform navigators about resources in the community so they can refer patients.

• Recruit navigators with important traits and capabilities for the role, including ability to organize, multitask, and reprioritize workflow.

Coordinating and managing patient navigation teams

• Assign a navigation coordinator who is responsible for overseeing all phases of navigation activity within a given health care system.

• Establish operational procedures and supports, with clear policies.

• Create stream-lined care maps for common problems.

• Deploy telehealth tools, such as online patient portals, to enable patient communication with care providers, including virtual visits.

• Consider adding patient-reported outcomes for communication between patients and navigators for symptom monitoring.

• Enhance dialogue, information sharing, and transparency across the health care team.

Assessing needs and resources for successful patient navigation

• Delineate the population(s) a program would serve, conduct a community health needs assessment, and identify gaps or bottlenecks in the services provided.

• Tailor programs, including navigator training, to fit the culture of the communities that will use them.

• Incorporate community perspectives on pain management, palliative care, and end-of-life care.

• Ask patients, clinicians, and other stakeholders what would be most helpful when developing a new navigation program.

• Consider the complexities of clinical care and healthcare systems as well as the impact of a program on care providers.

• Create a national clearinghouse to disseminate navigation resources.

• Determine the skills required in different phases of navigation.

Assessing patient navigation programs

• Establish a system at the onset of a navigation program for tracking metrics.

• Specify how metrics will be used to improve the program.

• Incorporate process measures (e.g., timeliness of care, use of distress screening or pain assessments at every visit, with appropriate follow-up).

• Incorporate patient-centered metrics (e.g., treatment adherence, patient-reported outcomes, patient satisfaction), in addition to traditional patient outcomes like mortality.

• Incorporate analyses of cost and return on investment (e.g., missed appointments, unplanned hospital admissions, outmigration to another healthcare system).

• Communicate with navigators, patient advisory councils, and clinicians about what is working within the navigation program and what needs to be improved.

• Develop standards for structuring navigation programs to maximize outcomes.

Addressing policy challenges and opportunities for making navigation affordable

• Sustain patient navigation using different models and payment structures (e.g., bundled and value-based payments).

• Leverage resources for navigation by arranging group visits for patients.

• Target navigation resources to patients with the greatest needs to reduce disparities.

• Engage public health departments to make patient navigation a statewide priority.

Compliance with ethical standards

Conflict of interest statement The authors declare that they have no conflict of interest.

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