# **HEALTH SYSTEMS AND POLICY ANALYSIS**

# **POLICY BRIEF 44**

What are patient navigators and how can they improve integration of care?

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# Keywords:

Patient care management

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What are patient navigators and how can they improve integration of care?

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# Acronyms

AIDS	acquired immunodeficiency syndrome
CAPRI	CAncérologie, Parcours, Région, lle de France
CDC	Centers for Disease Control and Prevention
COVID-19	SARS-Cov-2
CPD	Continuing professional development
FFS	fee-for-service
HIV	human immunodeficiency virus
HoMBReS	Hombres Manteniendo Bienestar y Relaciones Saludables
ICARE4EU	Innovating care for people with multiple chronic conditions in Europe
I-PaCS	Integrated Primary Care and Community Support
MiMi	Mit MigrantInnen für MigrantInnen
OECD	Organisation for Economic Co-operation and Development
OWL	Ostwestfalen-Lippe
РССР	Patient Care Connect Program
SALUS	Salzburger Gesundheitslotsinnen
SELFIE 2020	Sustainable intEgrated care modeLs for multi- morbidity: delivery, Flnancing and performance
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

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# Key messages

- The patient navigator role originated in the USA. It is designed to support patients in finding their way through health and social care systems, and to help them overcome barriers to accessing services.
- Although evidence on the effectiveness of patient navigator programmes is limited, available studies indicate that they can contribute to improving access and continuity of care, seemingly offering a promising approach to better integration of care.
- There are a number of patient navigator initiatives in Europe, albeit with varying levels of implementation. Both these and the USA experience offer opportunities for countries to learn from each other.
- Existing patient navigator programmes typically focus on:
  - cancer care, where they help patients to move through the entire care continuum, from prevention to survivorship
  - o transitional care, where they centre on helping (often older) patients to move between various settings (e.g. hospital and home) or sectors (e.g. health and social care)
  - o care for vulnerable and disadvantaged populations, such as migrants, ethnic minorities, homeless or uninsured persons, where they can facilitate early detection of diseases and access to care.
- Patient navigators are an example of a skill-mix innovation, whereby new tasks or ways of working are implemented. Navigators come from different backgrounds: they can be qualified health professionals, such as nurses or social workers, or trained lay persons, often recruited from the community that is being targeted.
- Key roles of the patient navigators depend on their skills and experience. Typical tasks might include identifying individual needs and barriers to care, educating patients and communities, and linking patients with different care providers. Professional navigators may carry out more advanced (including clinical) tasks.
- Policy-makers interested in introducing patient navigator programmes should consider macro-, meso- and microlevel factors, all of which will influence implementation.
- Key issues to address include: developing appropriate educational standards; securing support from key stakeholders; putting in place long-term funding to ensure the sustainability of patient navigator programmes.

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# **Executive summary**

## Why patient navigators?

The majority of countries in Europe are facing rising rates of chronic diseases, long-term conditions and multimorbidity, with patients' health care needs becoming increasingly diverse and complex. As a result, patients may require various types of service, including health, social care and community services from different providers. Patient navigators have been introduced in some countries, usually on a small scale, with the aims of: helping patients to 'navigate' through the complexity of care and to overcome any barriers; enabling their timely access to the health and social care services they need; and – through these – contributing to better integration of care.

# What do patient navigators do and who can perform this role?

Patient navigators may perform various tasks depending on the country, setting, the patients they serve, and their own professional level and background. Some typical tasks include: identifying individual needs and barriers to care; educating patients and entire communities; linking patients with different care providers; making appointments and setting reminders. Most patient navigators have face-to-face contact with the patient, but remote contact via phone or video can also be used, with telemonitoring becoming particularly relevant since the outbreak of the SARS-Cov-2 (COVID-19) pandemic.

Both health and care professionals (including, for example, nurses, social workers and physician assistants) and lay persons (including, for example, community workers and former cancer patients) can be recruited as patient navigators. There is wide diversity across countries and settings with regard to who performs this role. The evidence to date has been limited as to the exact tasks and activities performed by patient navigators from different backgrounds.

### Where are patient navigators used?

Patient navigator programmes first emerged in the USA in the 1990s. Since then, they have been introduced in other countries in Europe and beyond, with initiatives targeting different settings and patient groups, and achieving varying degrees of implementation. This policy brief identified three main areas where patient navigators have been used:

• **Cancer care:** Patient navigators were first used in cancer care in the USA with the aim of addressing access barriers to health care services. Existing programmes target patients with different types of cancer (e.g. breast, cervical, colorectal) across the entire care continuum, from prevention (to increase the uptake of screening), throughout treatment and on to survivorship. Both lay and qualified health care professionals (e.g. nurses) provide cancer navigation. While these programmes are

firmly rooted in the USA, pilot projects in Germany and France show that patient navigator programmes are becoming more popular in other countries too, with some that focus on remote care provision introduced during the COVID-19 pandemic.

- Transitional care: Patient navigators have increasingly been implemented for patients suffering from various single and multiple chronic conditions. These patients repeatedly have to transition between inpatient and ambulatory care, as well as between different providers, and often need support in coordinating their care. Patient navigators can facilitate effective transitions (e.g. older patients transitioning from hospital to home, young patients transitioning from paediatric to adult care) and can reduce hospital readmissions. Most patient navigator programmes in transitional care employ health care professionals, predominantly nurses, who have both the clinical expertise and system experience to enable them to perform advanced tasks when navigating high-needs patients through their care paths.
- Services targeted at vulnerable and socially disadvantaged patients: Most patient navigator programmes address patients with specific needs or with a certain level of vulnerability. This includes patients of low socioeconomic status, with limited health literacy, persons without insurance (in the USA), or from ethnic minority and migrant communities. Patient navigator programmes in cancer care often focus on addressing health inequalities but this is the focus of other programmes too, such as those targeting human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) patients. The aim of these programmes is to increase access to health services for hard-to-reach groups. Patient navigators may engage in outreach activities (e.g. by educating and involving communities) and in building bridges between communities and service providers (e.g. through language and cultural translations).

## How effective are patient navigator programmes?

Overall, patient navigator programmes are associated with positive outcomes in terms of increasing access to care, including reducing waiting times for diagnosis and treatment, and increasing uptake of screening. Patient navigators have also been found to contribute to improving care coordination and continuity of care, as shown by: improved referrals and adherence to follow-up appointments; higher completion of screening and diagnostics; and reduced readmission and emergency visit rates.

These results should be interpreted with caution though as evidence remains scarce, particularly outside the USA, and outcomes are highly context dependent.

# Which facilitators and barriers should be considered when implementing a patient navigator programme?

The specific context and settings of the intended programme, as well as its overall aims, should be taken into account when considering the implementation of a patient navigator programme. This means identifying the desired profile and scope of tasks of the patient navigators, including how they will interact and collaborate with other health professionals.

Implementation barriers can be encountered at the macro, meso and micro levels. Such barriers might, for instance, result from specific policies and regulatory mechanisms around the scope of practice and minimum level of educational background required – factors that are key to ensuring uniformity, quality and minimum professional standards in patient navigator programmes. Securing sustainable funding can also be a problem, despite some evidence on the cost-effectiveness of patient navigator programmes. Funding for patient navigator roles often comes from short-term government funding or private grants from charities and foundations, and obtaining longterm funding has often proved to be a major challenge to implementation.

Other important barriers to the implementation of patient navigators include: weak (or no) institutional arrangements and general infrastructure to support team collaboration; lack of buy-in from important stakeholders such as health professionals; and – at the micro level – deficiencies in communication and lack of effective working relationships across and within different settings, teams and providers. These should all be addressed to ensure the effective and sustainable implementation of such programmes.

# POLICY BRIEF

# Introduction

Strengthening coordination of care is crucial to delivering high-quality and person-centred care (Nolte, Knai & Saltman, 2014; Roland & Nolte, 2014; Nolte & Knai, 2015). With a growing number of people affected by chronic diseases, long-term conditions and multimorbidity, patients' health care needs have not only increased but also become more diverse and complex. Patients require not just various types of health services but also social care and community services (OECD, 2019). This in turn requires engagement and collaboration across a range of different providers and settings, as well as a fit-for-purpose workforce (Hopman, Schellevis & Rijken, 2015; Dussault & Buchan, 2018).

Faced with these challenges, health systems require effective solutions to meet the needs of their populations and to ensure delivery of quality care services. Implementation of integrated care models is one strategy to address major health systems challenges, such as the growing demand for health and social services (WHO, 2016).

This can be supported by the adoption of new roles and tasks undertaken by various health professionals or lay workers (Looman et al., 2021). Among these new roles and tasks, patient navigators have emerged as a promising innovation to help patients navigate the complexities of the health care system, thus facilitating the integration of care.

This policy brief aims to inform policy-makers about the roles performed by patient navigators in different countries and how they can contribute to improving the integration of care. In the following section, we start by outlining the key features of the patient navigator role, before presenting more detailed descriptions of selected patient navigator programmes from different countries. We then draw on work conducted in the context of a European Observatory on Health Systems and Policies' study on skill-mix (see Box 1) to summarize current evidence on the impact of patient navigators on patient and broader health systems outcomes. In the final section we highlight important levers and possible barriers to implementing patient navigators and discuss the implications for policy and practice.

#### Box 1: Methods

This policy brief draws mainly on two publications, both of which were based on an overview of reviews, following a prespecified protocol (Maier et al., 2018): (1) a forthcoming study by the European Observatory on Health Systems and Policies on *Skill-mix innovation, effectiveness and implementation* (Maier et al., 2022); and (2) an article on *The role of patient navigators in ambulatory care: Overview of reviews* (Budde et al., 2021). Second, a comprehensive search of grey literature, including websites, was performed to identify case studies on patient navigator programmes in different countries. This was supplemented by material from relevant research projects, such as SELFIE 2020 (Sustainable intEgrated care models for multi-morbidity: delivery, Flnancing and performance) and ICARE4EU (Innovating care for people with multiple chronic conditions in Europe).

# Patient navigators: roles, tasks and examples of patient navigator programmes

# **Roles and tasks**

# Why patient navigators?

Integrated care concepts have received considerable attention from policy-makers and have been promoted as a strategy to achieve accessible and quality care services (Valentijn et al., 2013) (see Box 2). Yet, it is often unclear how best to implement such approaches, including which strategies have been pursued and with what results in terms of enabling care integration (Goodwin, 2017; Berntsen et al., 2018). New types of skill-mix innovations present an important approach to help facilitate different levels of integrated care (Winkelmann et al, in press). Skill-mix innovations change the status quo by modifying skills, roles and competencies within and between health professionals (Sibbald, Shen & McBride, 2004). Introducing new tasks and roles (not to be confused with introducing a new profession) is one type of skill-mix intervention.

#### Box 2: How is integrated care defined in this policy brief?

There are various definitions and conceptual frameworks of integrated care (Armitage et al., 2009). This policy brief defines integrated care as an approach "to provide coordinated, pro-active, person-centred, multidisciplinary care by two or more communicating and collaborating care providers. Providers may work at the same organisation or different organisations, either within the health care sector or across the health care, social care, or community care sectors (including informal care)" (Struckmann et al., 2018).

Integration of care can take place at different levels. At the micro level, it is characterized by a person-focused care perspective, i.e. a focus on the individual needs of a person or of a defined population, which is meant to facilitate comprehensive, continuous and coordinated services. Rather than being disease-focused, a personcentred perspective considers the broader health context and encompasses a range of services, including social or community care. This may be particularly relevant for vulnerable and disadvantaged population groups whose needs span across different service areas. At the meso level, integration of care involves collaboration between professionals within and between organizations. At the macro level, it requires a holistic strategy involving health and social systems as a whole (Valentijn et al., 2013).

Patient navigators are one example of a skill-mix innovation whereby a new role or new tasks are implemented. We are not aware of any patient navigator programme whereby an entirely new profession has been introduced.

The primary focus of patient navigators is on the individual person's level, i.e. the micro level. They consider the individual needs of a patient in order to match them with the right services and providers. Their main purpose is to navigate patients through the complexity of health care systems, helping them to access health services and overcome any access barriers (see Box 3). Moving beyond that to the meso level, patient navigators may collaborate with other care and social service providers who are involved in patients' health. At the macro level, they can work with decision-makers to achieve system change, although this is rare (Doucet et al., 2019).

#### Box 3: Who are patient navigators?

This policy brief defines 'patient navigator' as an individual whose role is to enable "timely movement of the individual patient through an often complex and fragmented health care system. Patient navigators can also serve to connect systems of care for individual patients by applying the core function of navigation, which is the elimination of barriers to timely care across all segments of the health care continuum" (Freeman, 2012). However, the literature shows that there is significant ambiguity around the definition of patient navigators as a new role as well as patient navigation as a new function. The role of a patient navigator is not always well defined and is sometimes also referred to as care navigators, community health workers, patient or case managers, or other. Patient navigation typically describes a function which can be undertaken by a qualified health care professional as a new component of their role, among multiple existing tasks (Kelly, Doucet & Luke, 2019; Reid, Doucet & Luke, 2020).

#### Who can be a patient navigator?

Various types of qualified health professional, including, but not limited to, nurses, social workers, physicians and physician assistants, can act as patient navigators. This role can also be performed by trained lay persons, including community workers and patients (e.g. former cancer patients) (Robinson-White et al., 2010; Glick et al., 2012; Roland et al., 2017; Kline, Rocque & Rohan, 2019; Reid, Doucet & Luke, 2020). Lay persons are often recruited from the communities targeted by a specific patient navigator programme as they are more likely to be trusted by and understand the needs of the local community, and can empower its population (National Academies of Sciences, Engineering, and Medicine, 2018). In most cases, lay workers working as patient navigators do so in close collaboration with trained professionals and are part of a multiprofessional team (Roland et al., 2017).

### What do patient navigators do?

Tasks performed by patient navigators reflect the heterogeneity of patients' needs, the context in which care is given (e.g. transitional care) and their own background and qualifications (Wells et al., 2018; Reid, Doucet & Luke, 2020). For example, professional patient navigators such as nurses usually carry out more advanced tasks compared to lay health navigators, which is linked to their clinical expertise, skills and system experience. Their existing knowledge of the health system allows them to navigate complex care processes and coordinate with different providers. Lay navigators may approach patients on a more personal level and are often seen as equals, particularly when coming from the same community and sharing similar experiences (Reid, Doucet & Luke, 2020). Common tasks performed by patient navigators are listed in Box 4.

Patient navigators typically have face-to-face contact with the patient, but they can also set up appointments or reminders via telephone or video (McBrien et al., 2018). During the COVID-19 crisis, telemonitoring has become particularly important within patient navigator programmes, allowing patient navigators to continue serving their patients while avoiding the risk of infection (Nalley, 2020; Bigelow et al., 2021; Ferrua et al., 2021).

#### Box 4: Key tasks performed by patient navigators

- Identify individual needs for health and social care.
- Identify individual barriers to accessing health and social services.
- Link and coordinate between different levels of the health and social care systems.
- Facilitate communication with different providers of health and social care services.
- Facilitate referrals.
- Assist with appointment scheduling and follow-up.
- Set reminders (e.g. about upcoming appointments).
- Support self-management.
- Perform outreach activities.
- Inform and educate patients and community members.
- Educate and involve communities.
- Translate and offer interpretation services.
- Provide social and emotional support.
- Assist with goal setting.

• Link patients and clients to resources (social, financial, transport). *Source:* Authors, based on Desveaux et al. (2019) and McBrien et al. (2018).

# Examples of patient navigators across countries and settings

Patient navigators originally emerged during the 1990s in the USA, starting in **Harlem, New York**, to address barriers encountered by underserved patients in cancer care (Freeman & Rodriguez, 2011). They have since expanded across different settings and countries (Peart et al., 2018), with some programmes well-established and others still in their piloting phases or implemented at regional level only.

We have identified three main areas where patient navigators have been introduced across Organisation for Economic Co-operation and Development (OECD) countries: 1) cancer care; 2) transitional care; and 3) for vulnerable and disadvantaged patients. This section presents examples of patient navigator programmes from different countries, including Australia, Austria, Canada, France, Germany, the United Kingdom (UK) and the USA.

#### Patient navigators in cancer care

Ensuring high-quality services in cancer care presents several challenges, including access barriers for certain patient groups and difficulties in ensuring coordination of care across different providers and settings. These problems are reflected in health inequalities in cancer care that exist in many OECD countries (OECD, 2019).

The positive impact of patient navigators on reducing disparities in cancer care has been well established in the

USA. This was recognized in the Patient Navigation Outreach and Chronic Disease Prevention Act passed in 2005 (H.R.1812-109th Congress 2005–2006). A funding mechanism was introduced to support research on the effectiveness of patient navigation programmes. Several policies have been introduced since then to help implement patient navigator programmes in cancer care. Most notably, in 2012, the American College of Surgeons' Commission on Cancer required all health care facilities accredited by the Commission to have a patient navigation programme, and to put in place processes aimed at identifying and removing patients' barriers to care in order to address existing health disparities in cancer care (Mercurio, 2016; Dixit, Rugo & Burke, 2021).

Patient navigators in cancer care can provide their services across the entire continuum of cancer care, from prevention and early detection to treatment and survivorship (see Figure 1; National Academies of Sciences, Engineering, and Medicine, 2018).

For example, the **Patient Care Connect Program** (PCCP) implemented by the University of Alabama in the USA recruited lay patient navigators to support patients throughout their entire pathway, from cancer diagnosis through survivorship and end-of-life care. The programme encompasses 12 cancer centres in five southern states and targets older Medicare patients (>65 years). The centres are located in both urban and rural regions. Patient navigators are required to have a minimum of a bachelor's degree, but they are not licensed health care professionals. They undergo predefined training that has been developed and is

delivered by a multidisciplinary team. The PCCP team also includes a registered nurse site manager, who supervises the team of lay navigators and is responsible for any clinical issues. Medical directors of cancer centres acting as site champions engage with the care teams to ensure that physicians and staff members integrate lay navigators within their teams. The evaluation of the programme showed high rates of patient satisfaction, with 83% of patients satisfied or very satisfied and 89.5% willing to recommend the programme to others (Rocque et al., 2016).

Some patient navigation programmes are designed for cancer survivors and their families and address physical, emotional and practical concerns that patients encounter after treatment. The Livestrong Cancer Navigation Programme in Austin, Texas is such an example. Patient navigators start with a needs assessment and identify individual challenges of each cancer survivor and will then help patients to overcome these issues in a timely manner. Referrals to other organizations and facilitation of consulting with other providers are among the main tasks that patient navigators undertake (Livestrong, 2021). In 2015, the programme was evaluated to assess how well cancer survivors managed their health and practical concerns, and how the survivorship navigation contributed to self-efficacy. Results showed that self-efficacy of cancer survivors who participated in the programme increased, while their concerns and emotional distress decreased. Participating survivors also reported higher satisfaction (Hemingway et al., 2015; Treiman et al., 2015).



#### Figure 1: Patient navigators in cancer care: across the care continuum

Source: Authors, based on Freeman & Rodriguez

Various cancer patient navigator programmes have also been developed in European and other OECD countries. In Germany, there are around 38 different pilot programmes introducing patient navigators either as the main intervention or one component among several interventions. They target patients across various settings, including cancer care (BMC Managed Care, 2021). Most of these cancer navigator programmes are implemented as pilots at the level of federal states. One example is the **Onkolotse** (German abbreviation of 'oncology navigator') programme in the federal state of Saxony, where cancer navigators join the patient at the time of cancer diagnosis and collaborate closely with medical staff. Trained nurses, other health care professionals, counsellors, psychologists and social workers who specialize in oncology can all work as cancer navigators ('Onkolotsen'). Their training encompasses seven modules and more than 130 hours of tuition on cancer care relevant topics (e.g. service structures, processes and appropriate contact persons). They act as a permanent contact person to patients and their families throughout the cancer treatment and aftercare, guiding patients through the system of different providers in the inpatient and outpatient settings. Their tasks include patient education to facilitate selfmanagement (Porzig et al., 2018).

Although patient navigator programmes are becoming more popular in Germany, their widespread implementation is still limited. Evaluations from randomized studies looking at the effectiveness and economic impact are needed to increase acceptance but are currently missing (Porzig et al., 2018).

The current COVID-19 pandemic has exacerbated health system challenges, particularly in cancer care. Not only are cancer patients at higher risk of developing serious complications from COVID infections, they have also encountered delays in surgery and treatment. Many support programmes for cancer patients were paused, increasing barriers to effective cancer care (Hanna et al., 2020). Nurse navigators were one answer to address the impact of COVID-19 on cancer care (Nalley, 2020; Bigelow et al., 2021; Ferrua et al., 2021). One example is the **CAPRI** (abbreviation for CAncérologie, Parcours, Région, Ile de France – Oncology Pathway in the Ile de France Region) COVID programme in France, which uses oncology nurses as patient navigators to ensure that patients continue to receive adequate health and social services.

The CAPRI-COVID intervention was launched in March 2020 at the coordinating outpatient care unit of the Gustave Roussy Cancer Centre in Paris. This could be implemented rapidly because the centre already had a unit where nurses had been providing patient navigation services since 2016 and therefore had the necessary skills and experiences to monitor patients remotely. Nine nurses with a French nursing degree as well as a dedicated postgraduate diploma specializing in oncology act as patient navigators, guiding patients who are isolating at home due to a COVID-19 diagnosis through their cancer treatment. They use telemonitoring to provide remote assistance with organizing visits to different service providers and supervise transition between providers. They also educate patients on COVID-19 prevention measures and identify needs relating to home assistance. If patients' symptoms worsen during their

quarantine, the navigators consult an emergency physician (Ferrua et al., 2021).

The CAPRI-COVID programme has shown positive effects. It has enabled patients to remain at home while following their cancer care pathways and has contributed to a reduction in unnecessary visits to health care facilities as well as to the early identification of special needs and vulnerabilities (Ferrua et al., 2021).

## Patient navigators in transitional care

Moving between different ambulatory services and between out- and inpatient care may introduce different barriers to access and a high degree of care fragmentation (WHO, 2016). Transitions between multiple providers across different settings are challenging for many patients, particularly for older persons with multiple chronic conditions (Manderson et al., 2012; Balaban et al., 2015), but also for young patients with complex needs (Doucet et al., 2019; Samuel et al., 2019). Patient navigation has thus also become popular for such patients (McBrien et al., 2018). Using patient navigators to support care integration during transitional periods may be a strategy to overcome these challenges and can reduce hospital admissions or readmissions, facilitate discharge processes and improve access and quality of care (Manderson et al., 2012).

Most patient navigator programmes for older persons with chronic conditions focus on supporting them during transitions, e.g. between hospital and home, or between health, long-term and social care, with the aim of keeping individuals independent for as long as possible. They employ health care professionals such as nurses, often with advanced practice expertise, whose main tasks relate to the discharge process, including care planning and coordination, phone support and home visits, with the aim of enabling access to the services and providers needed during transitional periods (Manderson et al., 2012). In the UK, the Salford Together programme targets older patients with multiple chronic conditions, with the aim of providing more integrated care services and reducing hospital admissions. As part of the programme, a centre of contact was established to help patients access the support they need after hospital discharge and to provide a 30-days follow-up (SELFIE, 2016). Today, 'care navigators' facilitate social prescribing as one intervention among several other components within the programme. The aims of social prescribing are to keep patients in their community as long as possible and to link them with local services (for more details on social prescribing, see Winkelmann et al., in press). The care navigators act as gatekeepers and ensure that patients are referred to the right services (Salford Primary Care Together, 2018).

Nurse navigators can provide critical navigation services to patients in need of a high degree of comprehensive and coordinated care (Harvey et al., 2019). In Australia, the **Queensland** Government established the first nurse navigator programme in 2015 as part of its Nursing Guarantee policy. The programme committed to employing 400 nurse navigators across Queensland over a period of four years and the role became permanent in 2019 (Queensland Government, 2019a). The aim of the Queensland nurse navigator programme is to reduce hospital readmissions through navigating patients from the point of referral from the primary care provider, throughout hospital care and back home. The navigators are senior registered nurses who support patients with multiple chronic conditions and complex needs (Queensland Government, 2019b). They have clinical expertise and indepth knowledge of the health system, which allows them to identify what services high-needs patients require before facilitating access to the right health and social services. Nurse navigators function as central contact and coordination point for the patient and work with a multidisciplinary team. They provide patient education, support self-management, develop care plans and coordinate care, which includes scheduling appointments and liaising with different service providers and sectors to achieve patient-centred care.

Evaluation of the programme started in 2018 and is still ongoing (Harvey et al., 2019). A progress report identified first positive results of the evaluation, indicating cost savings through the reduction of hospital readmissions, as well as improved patient well-being and self-management (Harvey et al., 2019).

In Canada, patient navigator programmes frequently focus on patients with complex needs who need additional health, social and educational services (Reid, Doucet & Luke, 2020). For example, the Centre for Research in Integrated Care at the University of New Brunswick established the NaviCare/SoinsNavi programme in 2017 in the province of New Brunswick to facilitate transitions from paediatric to adult care for young patients (Doucet et al., 2019). Young patients are often unprepared for the transition to adult care and can face several challenges during the transition process, requiring a high degree of care coordination (Reiss & Gibson, 2002; Kaufman et al., 2007; Samuel et al., 2019). To support these patients, the NaviCare/SoinsNavi recruited two bilingual patient navigators (French and English), one lay worker and a nurse. These patient navigators first identify barriers and individual needs, then reach out to service providers and community services to meet these identified needs. They have regular contact and build partnerships with the different services and stakeholders they refer to. Patient navigators work on a one-to-one basis with the families. The patient is first assessed by the professional navigator and then the lay navigator takes over, depending on the client's needs. A Family Advisory Council is composed of seven parents who have experience with children with complex needs. They continuously advise patient navigators on the complex needs of children and adolescents. The NaviCare/SoinsNavi team is also actively reaching out to other patient navigator programmes in Canada to share lessons learned and best practices. After its first two and a half years, the programme had assisted more than 160 families (Doucet et al., 2019).

In Germany, several pilot projects funded by the innovation fund ('Innovationsfonds' – see section on funding) have introduced patient navigators in transitional care, mostly supporting patients transitioning from hospital to home (IGES, 2018). Projects such as **Stroke OWL** (OWL is an abbreviation for Ostwestfalen-Lippe, a region in Germany; see Box 7) or **Cardiolotse** (abbreviation for cardiology navigator in German) show how transitions can effectively be supported by patient navigators for a specific patient group with complex needs. The latter targets patients with chronic heart diseases, who transition from hospital to ambulatory care in Berlin. Only patients from one sickness fund and who are being treated in one of the specified clinics can access the programme. The programme employs 11 patient navigators who are medical assistants or nurses, and will be the patient's primary contact person for 12 months after hospital discharge. They have regular phone contact with the patient, ensure adherence to necessary follow-up care, and assist with appointment scheduling or finding rehabilitation services. Patient navigators undergo a two-month training to obtain their gualification. Training is delivered by cardiologists, nurses who are specialized in cardiology, and other specialists, with training modules including communication training, medical education, data management and coaching (Cardiolotse, 2021).

# Patient navigators for vulnerable and disadvantaged patients

Vulnerable and socially disadvantaged persons may face large barriers when accessing or navigating through health care services. Consequently, they may experience higher rates of disease, reduced access and fewer treatment options (Natale-Pareira et al., 2011). Most patient navigator programmes focusing on vulnerable and disadvantaged patients either target a specific vulnerable community, such as ethnic minorities and/or migrants by offering language-tailored services (Shommu et al., 2016), homeless persons (Sarango et al., 2017) or uninsured persons (Bush, Kaufman & Shackleford, 2017), or address a specific disease that disproportionally affects vulnerable and disadvantaged communities, such as those with HIV/AIDS (McBrien et al., 2018).

The early detection of cancer is an important intervention to prevent serious health impacts and improve survival rates (Huo et al., 2014; Redaniel et al., 2014). However, screening services are particularly underutilized among vulnerable patient groups as they encounter the largest barriers when accessing primary care services (Freeman, 2012). These barriers can relate to language, location, financial or structural factors (Waisel, 2013). Patient navigator programmes may address patients and communities with high needs and who are at risk for delayed cancer care or hardest to reach. Patient navigators targeting vulnerable groups may approach patients through outreach activities. set up structured phone calls, or meet face to face to identify individual barriers, for example to cancer screening services (De Mil et al., 2018). Through continuous follow-up, appointments and home visits, they help to prevent delays in follow-up after screening and enable early diagnosis and treatment initiation (Robinson-White et al., 2010; Glick et al., 2012; Bush, Kaufman & Shackleford, 2017).

Lay patient navigators who are recruited from the communities can function as a bridge between the patient and the health system (National Academies of Sciences, Engineering, and Medicine, 2018). In the German city of **Stuttgart**, an ongoing patient navigator programme aims to educate migrant communities, through seminars in the

community. The seminars cover topics such as healthy lifestyles, maternal health, long-term care, prevention of drug abuse; they also provide relevant information about the health care system in Germany. Twenty-five volunteers from migrant communities were recruited and trained as patient navigators. They speak the same language and have the same cultural background as the communities they serve. The patient navigators receive training consisting of two modules, the first of which provides all of them with a basic knowledge about the health care system as well as introducing them to the area of health promotion and prevention. In the second module, participants can choose one subject area on which to focus. The project started in 2018 and will be funded until the end of 2022 (vdek, 2019). Similar programmes have been initiated in Austria, including **MiMi** (Mit MigrantInnen für MigrantInnen – with migrants for migrants) in Vienna and SALUS (Salzburger Gesundheitslotsinnen – Salzburg's health navigators) in Salzburg. The latter was initiated in 2014 and funded until 2016. Migrant women were trained to become patient navigators focusing on health promotion and prevention. The participatory approach, which included experts from migrant communities as well as health professionals to develop the programme and training for the patient navigators, was critical to its implementation. In 2016, the programme was awarded the title of 'Best practice example' in the region of Salzburg (Fund for Healthy Austria, 2017).

Some programmes are aimed at increasing access to HIV/AIDS prevention services, treatment and care (Bradford, Coleman & Cunningham, 2007; McBrien et al., 2018; Mizuno et al., 2018; Shade et al., 2021). These usually target persons with a history of incarceration, AIDS diagnosis and substance use or mental health problems. Patient navigators in HIV/AIDS treatment and care accompany patients to appointments, coordinate these appointments, provide education and refer to health services. Most of these programmes are in the USA (McBrien et al., 2018; Mizuno et al., 2018).

The HoMBReS (Hombres Manteniendo Bienestar y Relaciones Saludables – Men Maintaining Wellbeing and Healthy Relationships) and HoMBReS Por un Cambio (Men for Change) intervention is a community-level programme that addresses HIV/AIDS disparities among Hispanic men in the USA. Lay health workers (called 'navegantes'), who belong to existing social networks such as recreational soccer teams, are recruited to promote safe use of condoms and to increase screenings for sexually transmitted diseases (Rhodes et al., 2016). Introducing lay advisors in this specific setting presents an important strategy to reach the population as they are members of the community themselves and are trusted within these social networks. Originally introduced in 2012, the programme expanded to address other population groups who may be at higher risk of exposure to HIV/AIDS, such as men who have sex with men or transgender persons. The programme was included in the Centers for Disease Control and Prevention (CDC)'s Compendium of Evidence-based Behavioural Interventions and Best Practices for HIV Prevention (Rhodes et al., 2016).

There is also literature on patient navigation that focuses on vulnerable patients with other chronic conditions, including diabetes, cardiovascular diseases or multiple chronic diseases. Most of these studies come from the USA and have assessed patient navigator programmes for patients with low socioeconomic status or without insurance, or ethnic minority patients who have one or multiple chronic conditions. However, the evidence on their effectiveness considering patient and health system outcomes is limited (McBrien et al., 2018).

# How effective are patient navigator programmes?

This section presents an overview of the evidence on the effectiveness of patient navigator programmes across countries. The synthesis is based on an overview of systematic reviews on patient navigators in ambulatory care (Budde et al., 2021); this was conducted as part of a larger European Observatory on Health System and Policies' study on skill-mix innovations (Maier et al., 2022).

The systematic reviews identified by an overview of reviews (Budde et al., 2021) covered individual studies mostly from the USA and Canada, followed by studies from European countries (e.g. Austria, Germany, UK) and individual studies from Asia (e.g. Republic of Korea) and South Africa. Systematic reviews covered patients with cancer or other chronic conditions and multimorbidity, and patients in transitional care. Nine out of the 11 systematic reviews included patient navigator programmes primarily targeted at vulnerable and socially disadvantaged patient groups. Systematic reviews analysing patient navigator interventions primarily focus on assessing health system outcomes, such as access to care services, coordination of care, continuity of care or effectiveness. Some studies also report on patients' clinical outcomes. Evidence on professional-related outcomes is largely missing (Budde et al., 2021) (other limitations are presented in Box 5).

#### Box 5: Limitations of the evidence on the effectiveness of patient navigator programmes

The evidence identified by the overview of reviews has several limitations. First, most of the available evidence on patient navigators came from the USA and focused on cancer care, and there was very limited evidence from European countries. Since outcomes at the system level are highly context dependent, generalizability of the outcomes to other countries and settings is limited. Second, the quality of the systematic reviews on patient navigators was generally low. There were only a few medium- to high-quality studies and meta analyses. Moreover, there was limited reporting on the training and qualification of patient navigators in the included studies, including lack of a detailed description of professional backgrounds or the length of training before undertaking patient navigation roles. Information about the scope of practice across different settings is also limited (Budde et al., 2021).

Table 1 summarizes the key findings from the overview of reviews. At the system level, eight reviews showed improved access to health services for patients in the cancer setting. Two reviews reported reduced waiting times, one reported earlier treatment initiation, one shorter time to diagnosis and six studies demonstrated increased cancer screening updates. Five systematic reviews reported positive effects of patient navigation on care coordination and continuity of care, including improved referrals, adherence to diagnostic followups and completion of screening and diagnostics. Effectiveness was demonstrated by reduced emergency department visits and readmission rates in two reviews for patients in transitional care. Three studies showed positive effects on patient-related outcomes, including mortality rates, clinical outcomes and quality of life (Budde et al., 2021).

DIMENSIONS	OUTCOME (SOURCE)	COUNTRIES
Access	<ul> <li>Reduced waiting times and improved appointment scheduling with specialists (Robinson-White et al., 2010; Bush, Kaufman &amp; Shackleford, 2017)</li> <li>Earlier treatment and treatment initiation (Bush, Kaufman &amp; Shackleford, 2017)</li> <li>Shorter time to diagnosis and appointments (Ranaghan et al., 2016)</li> <li>Increased screening uptake (Robinson-White et al., 2010; Glick et al., 2012; Genoff et al., 2016; Ali-Faisal et al., 2017; Roland et al., 2017; McBrien et al., 2018)</li> </ul>	<ul> <li>CA, USA</li> <li>USA</li> <li>CA, KR, USA</li> <li>BD, CA, USA</li> </ul>
Care coordination / continuity of care	<ul> <li>Improved adherence to diagnostic follow-ups (Bush, Kaufman &amp; Shackleford, 2017; McBrien et al., 2018)</li> <li>Improved referrals (Roland et al., 2017)</li> <li>Improved completion of screening and diagnostics (Glick et al., 2012; Roland et al., 2017)</li> <li>Improved referrals or disease management, and positive effects on communication with patients and caregivers (Manderson et al., 2012)</li> </ul>	<ul> <li>CA, USA, ZA</li> <li>AU, CA, USA</li> <li>CA, FR, USA</li> <li>AU, CA, USA</li> </ul>

#### Table 1: Evidence on patient navigator programmes

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DIMENSIONS	OUTCOME (SOURCE)	COUNTRIES
Effectiveness	<ul> <li>Lower readmission rates (Manderson et al., 2012; Le Berre at al., 2017)</li> <li>Fewer emergency department visits (Le Berre et al., 2017)</li> </ul>	<ul> <li>AT, AU, BE, CA, CH, CN, DE, DK, ES, FI, HK, IR, IT, JP, NL, NZ, SE, SL, UK, USA</li> </ul>
Health outcomes	<ul> <li>Reduced mortality rates (Le Berre et al., 2017; McBrien et al., 2018)</li> <li>Improved clinical outcomes (Manderson et al., 2012 McBrien et al., 2018; Desveaux et al., 2019)</li> <li>Improved quality of life (Manderson et al., 2012)</li> </ul>	<ul> <li>AT, AU, BE, CA, CH, CN, DE, DK, ES, FI, HK, IR, IT, JP, NL, NZ, SE, SL, UK, USA, ZA</li> <li>CA, USA, ZA</li> <li>AU, CA, USA</li> </ul>

Country abbreviations: AT=Austria, AU=Australia, BD=Bangladesh, BE=Belgium, CA=Canada, CH=Switzerland, CN=China, DE=Germany, DK=Denmark, ES=Spain, FI=Finland, FR=France, HK=Hong Kong, IR=Iran, IT=Italy, JP=Japan, KR=Republic of Korea, NL=The Netherlands, NZ=New Zealand, SE=Sweden, SL=Slovenia, UK=United Kingdom, USA=United States of America, ZA=South Africa

Source: Budde et al. (2021).

# What are the levers and barriers for the implementation of patient navigator programmes?

Implementation of innovative workforce changes within existing health care structures is complex (Valaitis et al., 2017; Nolte, 2018; Nolte & Groenewegen, 2021). This section presents six main themes that emerge from the literature in relation to barriers and facilitators of the implementation of patient navigator programmes. At the macro level, these themes are policy, laws and professional regulation; education and training; and funding. At the meso level, they are organizational frameworks; and support and leadership. At the micro level, there is communication and working relationships (Figure 2).

# Figure 2: Factors to be considered for the implementation of patient navigator programmes



Source: Source: Authors, based on Bourgeault et al. (2008); Maier et al. (2022); Scarpetti et al. (in press).

## **Macro-level factors**

#### Policy, laws and professional regulation

Policies on skill-mix and changes to regulatory mechanisms can act as either barriers or facilitators to the uptake of skill-mix innovations (Delamaire & Lafortune, 2010; Maier, Aiken & Busse, 2017). Clear definitions of the scope of practice of patient navigators can be a facilitator to successful implementation, but a barrier if not in place (Valaitis et al., 2017). In the USA, patient navigation has been included in health policies, accreditation standards and guidelines from professional organizations. In addition, the American College of Surgeons' Commission on Cancer included patient navigation as a required standard for cancer programme accreditation in 2012 and in 2014, and the 2014 standards set by the National Accreditation Programme for Breast Centers require patient navigator processes to be in place. Both standards state that patient navigation may be provided by qualified professionals or trained lay persons. This is supported by joint position statements issued by professional organizations such as the Oncology Nursing Society, Association of Oncology Social Work and National Association of Social Workers (Ustjanauskas et al., 2015).

### Education and training

The alignment of education and training is critical to ensure uniformity and a minimum educational and professional standard for patient navigators (Ustjanauskas et al., 2015; Kokorelias et al., 2021). Patient navigators perform different tasks, depending on whether they are lay persons or health care professionals. Within the group of health care professionals, educational backgrounds also vary considerably. Hence, it is important to agree on minimum standards of competencies, skills and knowledge across the professions, as well as between health professionals and lay workers (Ustjanauskas et al., 2015). Linking lay navigators to supervisors or gualified health care professionals has been described as a crucial factor in supporting them to perform their tasks (Hendren et al., 2012; Ustjanauskas et al., 2015; Guo et al., 2019; Kokorelias et al., 2021). In the USA, efforts have begun to develop standardized training programmes that provide training to different patient navigator programmes, such as those led by the **Harold P. Freeman** Patient Navigation Institute and the Patient Navigator Training Collaborative in Colorado (Ustjanauskas et al., 2015; see Box 6). Continuing professional development (CPD) ensures that patient navigators maintain and develop their competencies in line with the needs of the patients and communities they serve (Valaitis et al., 2017).

#### Box 6: Patient navigator training programmes in the USA

The Patient Navigator Training Collaborative in Colorado offers standardized patient navigator training to new and experienced patient navigators from different professional backgrounds and provides free information material online. The course length varies, depending on the patient navigator's existing experience. All participants receive a certificate of completion. While some of the courses are provided online, training can also be offered on site to meet an organization's specific needs. Skills learned during the course include professional conduct, health promotion, motivational interviewing, communication techniques, strategies to improve self-care and learn to overcome challenges, among others (Patient Navigator Training Collaborative, 2021).

Another example is the training programme developed by the Harold P. Freeman (HPF) Patient Navigation Institute, located in New York City. Persons from various backgrounds can attend the programme, including lay workers and qualified health care professionals (HPF Institute, 2021). The programme comprises intensive two-day training, encompassing 10 theory-based modules, a practical module (interaction with patients), and case studies. Although the training curriculum is standardized and focuses on cancer care as the primary setting, it can be tailored to meet the needs of other programmes with different target populations. Lack of tailoring to the participants' professional background and existing expertise may be an important drawback of this programme. Upon completion, all participants receive a certificate. To our knowledge, there has not as yet been any evaluation of this or similar training programmes.

### Funding

Implementing a patient navigator programme has cost implications. Funding is required to cover salaries, education and training, transport and office supplies, among others. Total costs will depend on the number of patients covered by the programme, the educational background of the navigator and the scope of the role (e.g. full-time, parttime). Lay patient navigators usually receive lower salaries than professional health care staff, although lay staff may also require supervision from health professionals. Moreover, lay workers' roles are naturally limited primarily to nonclinical tasks, whereas nurses and other health professionals can naturally provide more holistic and integrated services, including for high-needs patients. There are also considerations over the optimal payment model (e.g. on a fee-for-services basis, salary or other) and its appropriate level. This requires an assessment not only of the costs of the role, but also the effort, gualifications, knowledge and skills needed to take on patient navigator roles or tasks.

Funding for patient navigator programmes frequently comes from short-term government funding or private grants from charities and foundations (Osundina, Garfield & Downer, 2019). In Germany, for example, the **innovation fund** has provided yearly funding of EUR 200 million until 2024 for various innovative projects leading to more integrated care or improved quality, including patient navigator programmes, which have the potential to be integrated into the statutory health care (see Box 7). Cardiolotse, another project funded by the innovation fund (see section on transitional care) received approximately EUR 4.6 million in funding for its three-year pilot phase. First results from an ongoing evaluation showed positive effects on hospital readmission rates (Cardiolotse, 2021). Programmes can receive funding for a period of three to four years (Innovationsausschuss, 2021). The key challenge for

programmes is thus to secure long-term funding beyond this initial period and ensure the integration into regular health care. This initiative has provided funding for several pilot patient navigator programmes.

#### Box 7: Funding of a patient navigator programme in Germany

**STROKE OWL** is a patient navigator programme that is led by the German stroke foundation (Deutsche Schlaganfall-Hilfe) and aims to provide more integrated care services for stroke patients (Galle, 2021). The programme received a total of EUR 7.1 million between 2017 and 2021, and is currently undergoing its final evaluation. STROKE OWL is committed to finding a financial framework that will allow all patients to benefit from the patient navigator programme in the future. Some sickness funds considered stroke patient navigators to have the potential to reduce the overall burden on the health care system and to optimize patients' care pathways; six of them have agreed to finance STROKE OWL for a transition period after 2021. To that end they entered into selective contracts with stroke clinics, thus allowing their patients continued access to the programme beyond the initial funding period (Galle, 2021).

Examples of long-term funding from national budgets or direct reimbursement through insurance plans are less common. This acts as a disincentive for providers to implement patient navigators and undermines the sustainability of such programmes over time. Some initiatives have been observed in the USA where patient navigators are reimbursed through insurance plans, using different types and combinations of payment mechanism, with each having specific benefits and limitations in terms of incentivizing implementation (see Box 8).

# Box 8: Payment mechanisms for patient navigator programmes in the USA

In the USA, patient navigators are often reimbursed through a feefor-service (FFS) model (such as is used, for example, for diabetes educators in diabetes self-management training through Medicare and Medicaid). FFS helps to provide long-term funding for navigators at a predefined level, thereby incentivizing uptake. However, it may require legal/regulatory changes to be put in place, and may restrict the types of navigator that can be reimbursed, limiting the use of lay navigators. Moreover, FFS has received long-standing criticism over promoting inefficient and unnecessary care.

Other mechanisms have also been used, such as capitation where service providers receive a capitated payment to deliver services to a patient for a defined period of time. The Molina Healthcare of New Mexico, for example, negotiated a new billing code for its Integrated Primary Care and Community Support (I-PaCS) initiative to cover the costs of patient navigators, who were reimbursed under a capitated payment structure (Osundina, Garfield & Downer, 2019). Recent initiatives have also seen increased use of more bundled payments. The CMS Medicare Oncology Care Model, for example, has adopted bundled payments, with per-beneficiary, per-month payments provided to cover the costs of the navigation service over a six-month period. The South Carolina Nurse–Family Partnership and Oregon Coordinated Care Organizations meanwhile use a pay-for-performance model to provide funding, dependent on the level of success and with an agreed capped maximum payment. It should be noted that bundled payments and pay for performance do not explicitly pay or reimburse for patient navigators, but instead act to incentivize the use of navigators if a provider determines that the role may help to achieve specific aims, such as improving care quality and coordination or health outcomes, while reducing costs. Context-specific evidence on the impact of navigators on different outcomes (including economic evaluations of cost implications) is therefore important to guide decisions on implementation (Osundina, Garfield & Downer, 2019).

## **Meso-level factors**

#### Organizational frameworks

Patient navigators operate in collaboration with other health care and social service providers. Therefore, institutional arrangements and resources that favour multiprofessional work and a general infrastructure that supports team collaboration and workflows can be levers for successful implementation (Kokorelias et al., 2021). A shared health IT system between patient navigators and other care providers is beneficial to allow access to informational material and data (Haque et al., 2019). Training for patient navigators will be required to ensure they are able to operate IT systems (Hague et al., 2019). Physical resources, such as room availability, can also act as a barrier or facilitator, and need to be considered in the overall organizational structure (Kokorelias et al., 2021). Partnership within and between organizations is another important factor that will determine the successful operation of a patient navigator programme. Strong relationships with community services and organizations facilitate the integration of health and social services for the population targeted by the patient navigator programme. The lack of such partnerships can be a major challenge, particularly when serving patients with complex needs (Valaitis et al., 2017).

#### Support and leadership

An important facilitating factor in increasing the uptake of patient navigator programmes is the role of leadership. Clinical leadership, considered as "the process of influencing point-of-care innovation and improvement in both organizational processes and individual care practices to achieve quality and safety of care outcomes" (Joseph & Huber, 2015), is also relevant for patient navigators. Supportive and visionary leaders can help promote and implement a needed change (Kokorelias et al., 2021). Programme leaders can be individual physicians, organizational leads or hospital administrators, but some programmes have an implementation committee that supervises the implementation process (Kokorelias et al., 2021). Certain stakeholders, such as physicians, clinical leaders, not-for-profit organizations, researchers and patients, can act as champions and encourage buy-in. They can support the implementation and help gain acceptance of patient navigators within their environment, for example

by providing information within their specific organization, facility or community. Stakeholders acting as champions usually have several years' experience of working with patient navigators (Kokorelias et al., 2021). Some professional groups can have a strong influence on lobbying for patient navigator initiatives (Valaitis et al., 2017; Kokorelias et al., 2021). Scepticism and poor understanding of the patient navigator role by various health care professionals, most notably physicians, can impact the uptake of such programmes (Valaitis et al., 2017).

# **Micro-level factors**

## Communication and working relationships

At the micro level, team dynamics and communication are pivotal to the successful integration of patient navigators within the existing care pathway (Valaitis et al., 2017). For example, a rigid hierarchy and lack of communication can create bottlenecks to introducing new tasks and roles. Resistance from clinicians can be especially difficult and the reluctance to share care responsibilities with patient navigators may create a challenging environment for the navigators as they try to establish trust in their role (Friedman et al, 2016). Therefore, a good relationship between patient navigators and other health professionals is crucial (Pescheny, Pappas & Randhawa, 2018). Clear, effective and regular communication (e.g. in the form of regular meetings) among those involved in patient navigator programmes, as well as a shared understanding of professional boundaries and an appropriate supervisory structure will all help to integrate new roles into existing team dynamics. The engagement of clinical leads in regular meetings can increase the importance and value of the programme among the team (Valaitis et al., 2017).

A more detailed overview of the levels and factors that can influence the uptake of skill-mix changes in general is provided by Winkelmann et al. (in press).

# Conclusions

Patient navigators may play an important role in overcoming the many challenges that patients face when moving across the health care system. Patient navigator programmes originated in the USA, mostly focusing on cancer care, but have gained popularity in Europe and other countries, both in cancer care and other settings. Several pilot programmes from different European countries have demonstrated that patient navigators can support better coordinated care for patients with various chronic conditions, particularly during transitional periods. Patient navigators have also been used to improve access to health and social services for vulnerable and disadvantaged groups. Examples from Germany and Austria demonstrate that patient navigator programmes can not only help to overcome barriers to care, but may also be used to increase prevention and health promotion in hardto-reach communities.

Existing programmes vary in terms of: context and setting; overall aims; and practical implementation, including choosing the right person for the job (e.g. lay or gualified health professional), with the necessary experience and training to meet both the programme's purpose and the needs of the population, as well as to perform the various required activities and tasks. They are thus not easily transferable across countries. While short-term funding may help in initiating a programme and can support its evaluation, longer-term funding models are needed to ensure the sustainable integration of patient navigator programmes into health systems. Other important factors to consider include institutional arrangements that allow patient navigators to be integrated into existing teams and collaborative structures. Identifying individual champions in the clinical setting, or within patient communities, may increase acceptance and buy-in from stakeholders and contribute to the success of a programme. Finally, several pilot patient navigator programmes are currently undergoing evaluations or are yet to be evaluated. The results of these evaluations will be important to inform policy-making about their effectiveness and to further guide the implementation of such programmes.

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