

EVIDENCE BRIEF

Do System Navigation Programs Linking Primary Care with Community-Based Health and Social Services Improve User and Healthcare System Outcomes Compared to Usual Care? A Systematic Review

KEY POINTS

- ✓ A team-based approach to system navigation may be effective at improving the use of primary health care and social services rather than costlier health services.
- ✓ Lay or health professional models may support improvements in patient experiences with quality of care.
- ✓ A lay person model of system navigation within primary care may be promising in terms of costs, but more research is required.

What is this research about?

Fragmented delivery of health and social services can impact access to high quality, efficient, person-centred care for adults with complex health and social needs. To this end, health system innovations (e.g., Ontario Health Teams) have been developed to reduce fragmentation by creating fiscal and clinical accountability for delivering a coordinated continuum of care across defined geographic populationsⁱ.

The EMBOLDEN study uses community co-design, partnering with health/social service providers and citizens to develop an evidence-informed, mobility-enhancing intervention for older adults that includes system navigation support and promotes physical activity, healthy eating, and social participation. System navigation includes programs aimed to link the patient's primary, specialist, and community-based

(health and social service) care and deliver integrated, patient-focused care. Previous scoping reviews have identified models and roles of navigatorsⁱⁱ, and factors shaping the implementation and maintenance of patient navigation programsⁱⁱⁱ.

This systematic review aimed to identify the effectiveness of system navigation programs linking primary care with community-based health and social services to improve user and healthcare system outcomes. The primary outcome examined was health and social service utilization. Secondary outcomes included: patient health/wellbeing, patient/caregiver experiences, and costs.

What did the researchers find?

Twenty-one intervention studies (published between 2009-2019) were included; studies had low to moderate risk of bias. The average age of study participants was 67 years. Most included studies were completed in the USA (n=9), UK (n=7), and Canada (n=2). The remaining studies came from China, Netherlands, and Sweden.

Four types of system navigation models were identified, including 1) lay person (non-professionals trained to perform specific activities related to system navigation) (n=10), 2) health professional, such as a social worker or nurse (n=4), 3) team-based (lay person(s) and health professional(s) together, or teams of health professionals) (n=6), and 4) self-navigation based on a personalized list of local resources with lay support available (n=1).

High quality evidence from 3 studies demonstrated a team-based navigation approach led to more appropriate health and social service utilization (e.g., primary care rather than use of costlier health services). Moderate quality evidence from 4 studies supports either lay or health professional models for improving patient experiences with their quality of care. There was inconclusive evidence across any of the models for improving patient-level outcomes e.g., quality of life, anxiety, depression, loneliness, self-efficacy, health-related behaviors, caregiver outcomes or cost outcomes.

What does this mean for patients?

EMBOLDEN's Strategic Guiding Council of community-dwelling older adults and health/social service providers were engaged to interpret the findings. Their perception was that team-based system navigation was preferable to individual navigation models. This perception is aligned with findings that patient experience consistently improved across lay-person and health professional models of system navigation.

What does this mean for primary health care?

This review found that a **multidisciplinary team of health care providers** (including lay people in some studies) performing system navigation activities showed favorable results in health/social service use.

For example, in one randomized controlled trial, volunteer-led home visits to assess health status and goals followed by action planning with the healthcare team (including links to community support) showed an increase in primary care visits and reduced rates of hospitalization among older adults^{iv}. In another study, social worker, and volunteer-led social prescribing to community services among adult patients experiencing social isolation with a history of frequent primary care visits resulted in a lower rate of annual general practitioner consultations; however, this study lacked randomization^v. These results may indicate a shift from reactive to more preventative care, with health and social needs being better managed at the most appropriate level of care.

System navigation models led by a **trained lay person within primary care** and **nurse-led navigation models** resulted in consistent improvements in patient experiences with quality of care.

This review suggests that a lay person model of system navigation within primary care may be promising in terms of cost-effectiveness, but more data is required. None of the other system navigation models evaluated cost-related outcomes. There is a gap in research evidence to examine the impacts of self-navigation models.

Further research is needed to determine which types of patients might benefit from greater levels of support (e.g., team-based system navigation) and which patients might do well with a lay-person situated within primary care for system navigation support. More research is required to determine the impact of different models of system navigation on patient level health outcomes and caregiver health.

This systematic review identified models of system navigation that support outcomes relevant to the Quadruple Aim framework, such as patient experience, health system utilization, and cost-effectiveness^{vi}. Given the orientation of health systems towards delivering integrated health and community care, these results highlight the **potential benefit of team-based system navigation as a strategy to improve use of primary health care services versus costlier healthcare** (e.g., emergency department visits, hospitalizations) **and enhance patient experiences with care**.

Further research on system navigation programs within publicly funded health systems is needed to fully understand how system navigation models may impact service use in Canadian settings.

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