Patient Navigation Programs for People with Dementia: Clinical Utility, Cost-Effectiveness, and Guidelines
Research Questions

1. What is the clinical utility of patient navigation programs for people with dementia?
2. What is the cost-effectiveness of patient navigation programs for people with dementia?
3. What are the evidence-based guidelines regarding the use of patient navigation services for people with any medical condition?

Key Findings

Three systematic reviews (two with a meta-analysis), four randomized controlled trials, and one non-randomized study were identified regarding the clinical utility of patient navigation programs for people with dementia. One economic evaluation was identified regarding the cost-effectiveness of patient navigation programs for people with dementia. Four evidence-based guidelines were identified regarding the use of patient navigation services for people with any medical condition.

Methods

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including Medline and CINAHL, the Cochrane Library, the University of York Centre for Reviews and Dissemination (CRD) databases, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine’s MeSH (Medical Subject Headings), and keywords. The main search concepts were patient navigation and dementia. For questions #1 and #2, no filters were applied to limit the retrieval by study type. For question #3, a filter was applied to limit the retrieval to guidelines only. The search was also limited to English language documents published between January 1, 2010 and November 16, 2020. Internet links are provided where available.

Selection Criteria and Summary Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed. The Overall Summary of Findings was based on information available in the abstracts of selected publications. Open access full-text versions of evidence-based guidelines were reviewed when abstracts were not available, and relevant recommendations were summarized.
Table 1: Selection Criteria

| Population          | Q1-Q2: People with dementia (all types)  
|                    | Q3: People with any medical condition  
| Intervention        | Patient navigation programs or services (i.e., care coordination programs)  
| Comparator          | Q1-Q2: Usual care; no coordination of care with patient navigation programs  
|                    | Q3: Not applicable  
| Outcomes            | Q1: Clinical utility (e.g., quality of life, time to diagnosis and treatment, disease severity, cognitive impairment [e.g., MMSE scores], mortality)  
|                    | Q2: Cost-effectiveness (e.g., cost per quality-adjusted life-year gained)  
|                    | Q3: Recommendations regarding best practices (e.g., appropriate patient populations, implementation considerations, appropriate clinical settings)  
| Study Designs       | Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies, economic evaluations, evidence-based guidelines  

Results

Three systematic reviews\(^1\)-\(^3\) (two with a meta-analysis\(^2\)-\(^3\)), four randomized controlled trials,\(^4\)-\(^7\) and one non-randomized study\(^8\) were identified regarding the clinical utility of patient navigation programs for people with dementia. One economic evaluation\(^9\) was identified regarding the cost-effectiveness of patient navigation programs for people with dementia. Four evidence-based guidelines\(^10\)-\(^13\) were identified regarding the use of patient navigation services for people with any medical condition. No health technology assessments were identified regarding the clinical utility of patient navigation programs for people with dementia.

Additional references of potential interest that did not meet the inclusion criteria are provided in the appendix.

Overall Summary of Findings

Three systematic reviews\(^1\)-\(^3\) (two with a meta-analysis\(^2\)-\(^3\)), four randomized controlled trials,\(^4\)-\(^7\) and one non-randomized study\(^8\) were identified regarding the clinical utility of patient navigation programs for people with dementia. The three identified systematic reviews\(^1\)-\(^3\) all reported positive clinical effects for patient navigation services or programs for patients with dementia. The authors of the systematic reviews found that the care coordination programs were associated with improved quality of life for people living with dementia,\(^1\) a reduced rate of admissions to the healthcare system,\(^1\)-\(^2\)-\(^3\) and a positive impact on patient behaviour.\(^3\) The four identified randomized controlled trials\(^4\)-\(^7\) reported positive clinical outcomes regarding the impact of telephone-based collaborative dementia care,\(^4\)-\(^6\) palliative care planning coordinators,\(^5\) and dementia care management computer programs.\(^7\) The authors found that telephone-based collaborative dementia care programs improved the quality of life of patients with dementia,\(^4\) reduced visits to the emergency department,\(^4\) and reduced the severity and frequency of dementia symptoms.\(^6\) The authors of the study investigating palliative care coordinators reported increased quality of end-of-life care, as well as improvements in pharmacological and non-pharmacological palliative management.\(^5\) The authors investigating dementia care management computer programs reported decreased behavioral and psychological symptoms of dementia and an increased chance of receiving medication amongst those in the program compared to care as usual.\(^7\)
Additionally, no effect on the overall quality of life or potentially inappropriate medication use was found. The authors of the non-randomized study reported that a telephone-delivered collaborative dementia care intervention was found to reduce the frequency of dementia related behaviours compared to clinical evaluation only. Most of the interventions in the identified literature were implemented in community settings, one was implemented in nursing homes, and one was implemented in primary care. Based off the titles and abstracts alone, the setting was unclear for three interventions.

The identified economic evaluation reported increased quality-adjusted life years and decreased cost when collaborative dementia care management was used instead of usual care. The authors concluded that collaborative dementia care management was likely to be a cost-effective strategy for treating dementia.

Four evidence-based guidelines were identified regarding the use of patient navigation services for people with any medical condition. The authors who conducted a systematic review generated recommendations for patients with mental illnesses, including: the use of case management for people with severe illnesses who are high users of inpatient care, providing case management after discharge from inpatient treatment, and the use of digital technology to enhance care coordination. The guidelines from Cancer Australia recommend using trained nurses or lay people as patient navigators in order to assist lung cancer patient’s navigation through their treatment pathway, including scheduling appointments and understanding their care pathway. The guidelines from the National Institute for Health and Care Excellence recommend the use of a single named health or social care professional responsible for coordinating care for dementia patients. The authors of the fourth evidence-based guideline recommend that organizations implement processes that ensure the communication and coordination of relevant information and care planning throughout the course of treatment for patients with delirium, dementia, and depression. The authors highlight that case management is a supported strategy for individuals with dementia.

References Summarized

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses


**Randomized Controlled Trials**


**Non-Randomized Studies**


**Economic Evaluations**


**Guidelines and Recommendations**


   See: Recommendation 15.4, p.91
Appendix — Further Information

Previous CADTH Reports


Systematic Review & Meta-Analyses

Alternative Population


Randomized Controlled Trials

Alternative Population


Alternative Intervention


Alternative Outcomes


Non-Randomized Studies

No Comparator

Alternative Outcomes


Economic Evaluations

Alternative Comparator


Guidelines & Recommendations

Unclear Intervention


Unclear Recommendation


Review Articles


Additional References
