Implementation of care planning in long term care. A Bruyère Rapid Review

REPORT AUTHORS

Elizabeth Ghogomu, Emily Kuurstra, Melissa Donskov, Bahareh Ghaedi, Kayla Richardson, Kerry Moloney, Michelle Grouchy, Zsofia Orosz, Vivian Welch
Individual resident-centered care plans have been developed to facilitate coordination of care provided by various health care providers for elderly people living with multiple, complex and chronic health conditions. The most commonly reported barriers and solutions to implementing optimal evidence-informed care planning for long term care residents were the following:

- Common barriers were: lack of staff knowledge and training, lack of communication, inconsistent and fragmented location of documentation at the provider level; lack of family involvement, and communication at the resident/family level; and issues with staffing and the length of the care plan at the work environment level.

- Key strategies to overcome common barriers were: providing education, training and support to staff; facilitating communication between staff; providing guidance to staff how to approach and facilitate discussions with residents and their families; using standardized forms and consistent terminology, and having a centralized or consistent location for documentation.

Based on our findings, we recommend that LTC homes should identify relevant barriers then contextualize and prioritize strategies and solutions that are feasible.
Executive summary

Elderly people living with multiple, complex and chronic health conditions need care and support from various health care providers. Individual resident-centered care plans have been developed to facilitate coordination of care for this population. A care plan or plan of care sets out the planned care, the goals the care is to achieve, and clear directions for staff and others who provide direct care to the resident. The plan of care must be based on an assessment of the resident and the resident’s needs and preferences and must cover all aspects of the resident’s care.

Long-term care homes are regularly inspected by inspectors for compliance with the Ontario Long Term Care Homes Act. One of the main areas of non-compliance is in the area of care planning/plan of care. The Bruyère Centre for Learning, Research and Innovation in Long Term Care in association with Ontario Long Term Care Association (OLTCA), and Ontario Association of Non-Profit Homes and Services for Seniors (OANHSS) is working on a plan of care initiative to identify the root causes of non-compliance related to plan of care and the success factors for compliance, and to devise and implement strategies to improve compliance with plan of care/care planning. This rapid review was done to support this initiative. Due to the limited literature on the evidence of effectiveness of strategies to improve implementation, we assessed the evidence of the challenges and solutions to implementing optimal evidence-informed care planning for long term care residents.

Given the limited availability of systematic reviews, we also searched for primary study designs and found 2364 articles. Thirty four met our inclusion criteria: 5 reviews and 29 primary research studies. Different qualitative research methods were used and various participants including staff, residents and their families were involved.

We used thematic analysis of the qualitative evidence about challenges and solutions. We categorized according to key themes at the provider level, resident/family level and work environment level.

Common barriers were:
- Lack of staff knowledge and training, lack of communication, inconsistent and fragmented location of documentation at the provider level;
- Lack of family involvement, and communication at the resident/family level;
- Issues with staffing and the length of the care plan at the work environment level.

Key strategies to overcome common barriers were:
- providing education, training and support to staff;
- facilitating communication between staff;
- providing guidance to staff how to approach and facilitate discussions with residents and their families;
- using standardized forms and consistent terminology, and having a centralized or consistent location for documentation.

Based on our findings, we recommend that LTC homes should identify relevant barriers then contextualize and prioritize strategies and solutions that are feasible.
Background

The issue
Due to Canada’s aging population there are more people living with multiple, complex and chronic health conditions [1]. It is important to provide continuity of care to this population through individual resident-centered care plans and greater collaboration between various health care providers within the patient’s circle of care [2]. A care plan or plan of care is defined as a written plan that sets out the planned care, the goals the care is to achieve, and clear directions for staff and others who provide direct care to the resident [2, 3]. The plan of care must be based on an assessment of the resident and the resident’s needs and preferences. The plan of care must cover all aspects of the resident’s care, including medical, nursing, personal support, nutritional, dietary, recreational, social, restorative, religious and spiritual care [2-4]. The residents and their family are encouraged to participate in the planning process and implementation as well to promote patient-centered care [2-4]. The plan of care could be on an electronic platform or paper-based [4]. The plan of care is a mandatory document in nursing care [5] and is a requirement in the Ontario Long-Term Care Homes Act and Regulation [3].

The type of care plan is defined by the care planning process, which is the process by which the care plan is developed and implemented [2, 6]. The plan of care comprises several components and may not be restricted to a single document [2, 3]. There are care plans for specific long-term conditions such as diabetes, asthma, cancer; palliative care plans involving advanced care plan and end of life care; discharge or transition care plans involving the transfer of a patient between different settings and health care providers during the course of their treatment e.g. discharge out of acute care setting to a long-term care facility or transfer from a long-term care facility to the emergency department or hospital [2, 3]. Some care plans are holistic covering every aspect of care e.g. care plans developed from the Resident Assessment Instrument (RAI) framework [4].

The Ministry of Health and Long-Term Care (MOHLTC) developed a standardized Care Coordination Tool for use by Health Links and 79% of them reported they were using this provincial coordinated care plan template in 2015 [7]. However, the use of the provincial template is not mandatory.

In Ontario, there are approximately 629 Long-Term Care Homes (LTC) that provide care to 76,000 residents [8]. The homes are regularly inspected by inspectors for compliance with the Ontario Long Term Care Homes Act (LTCHA) [3]. One of the main areas of non-compliance is in the area of care planning/plan of care. Some of the main themes that have been noted that are potentially affecting non-compliance related to plan of care/care planning are: inconsistent or incomplete documentation, information transfer, patient or family involvement, privacy concerns and process of implementing the plan (e.g. who is responsible for monitoring, updating and delivering parts of the plan) [2]. Strategies to overcome these barriers include promoting professional behavior change. The choice and success of these strategies will depend on certain conditions such as the setting, and identifying and prioritizing potential barriers and facilitators [9, 10]. For example, audit and feedback, educational outreach, local opinion leaders, printed educational materials and educational meetings have all been shown to improve health care [10].

Context
The Bruyère Centre for Learning, Research and Innovation in Long Term Care in association with Ontario Long Term Care Association (OLTCA), and Ontario Association of Non-Profit Homes and Services for Seniors (OANHSS) is working on a plan of care initiative to identify the root causes of non-compliance related to plan of care and the success factors for compliance, and to devise and implement strategies to improve compliance with plan of care/care planning.

This rapid review was done to provide evidence-based information to support this initiative in identifying best practices to inform recommendations on implementation of plan of care. We did a preliminary search and found one systematic review that assessed the effectiveness of plan of care on quality of care in the long-term care setting [11]. Due to the limited literature on the evidence of effectiveness of strategies to improve implementation, we assessed the evidence of the challenges and solutions to implementing optimal evidence-informed care planning for long term care residents.
Objectives

The objective of this review is to assess the evidence of the challenges and solutions to implementing optimal evidence-informed care planning for long term care residents.

Methods

We developed an a priori plan for the review including the eligibility criteria and methods, in collaboration with the clinical leads.

Eligibility criteria

The inclusion criteria were defined by the following PICO statement:

Population: Health care providers (RN, RPN, PSW), residents in the long term care setting and their families.

We excluded acute care setting.

Intervention: Interventions to improve or implement care planning/plan of care for LTC residents.

Interventions to improve care planning include organizational, delivery, financial, governance or implementation strategies (using EPOC classification criteria, http://epoc.cochrane.org/sites/epoc.cochrane.org/files/uploads/2015%20EPOC%20Taxonomy%20FINAL.pdf) e.g. implementation of Resident Assessment Instrument (RAI); in-service education of staff.

Although advanced care planning has a specialized focus we hypothesized that the challenges and solutions to implementing the advanced care plan would be similar for the care plan.

Comparison: No intervention or usual care or no comparison

Outcome: Reported findings on at least one of the following outcomes:

- Process outcomes including:
  - Compliance or adherence to care planning strategies
  - Improved workflow,
  - Staff satisfaction,
  - Resource use,
- Observed challenges
  - Challenges at resident/family-level (e.g., what is the impact of poor care planning, what is the level of detail that is needed in an optimal care plan, how should residents/family be engaged (how to engage cognitively impaired residents)?
  - Challenges at provider-level (e.g., lack of training/education, lack of motivation, lack of communication, too many different places to document)
  - Challenges related to the work environment (e.g., lack of time/staffing/resources)
- Solutions to optimal evidence informed care planning such as:
  - Solutions at resident/family-level (e.g., engagement in care planning process,
  - Solutions at provider-level (e.g., sufficient training/education, high motivation, adherence to care planning, use of tools, ability to consistently report)
  - Solutions related to the work environment (e.g., sufficient time/staffing, regular educational sessions, regular review of care plans, processes and tools)
Literature search
We ran a search in Medline on July 22, 2016 using the following mesh terms: Long-term care, Homes for the aged, Nursing homes, Plan of care, Service agreement, Care planning, Service user plan, Care plan, Service plan, Patient care planning. We identified 2364 articles. See Appendix 1 for the full search strategy.

Relevance assessment
We screened the search results in duplicate and disagreements were resolved by consensus. The screening was limited to studies published after 2010 (when the LTCHA came into force) and studies published in English or French.
We identified 34 articles that met all the inclusion criteria. See Appendix 2 for the list of included articles.

Evidence review
We included 29 primary research studies and 5 literature reviews. Different qualitative research methods were used in the included studies comprising interviews, questionnaires, surveys, focus groups, field observations, shadowing encounters, case studies, and document analysis (nursing care plans, charts, field notes, advanced care plans and advanced care directives) to identify the challenges and/or solutions of plan of care implementation. Different participants were involved: staff (physicians, nurses, personal support workers, social workers, therapists, and care home managers), residents and their families. Advanced care plans were the most assessed interventions in 20 (59%) of the included articles. Only four (12%) of the 34 articles assessed holistic care plans. Over half (56%) of the articles addressed both challenges and solutions while 32% addressed only challenges and 12% addressed only solutions. See Table 2.

Table 2: Study characteristics

<table>
<thead>
<tr>
<th>Qualitative research methods</th>
<th>Number of included studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature reviews</td>
<td>5</td>
</tr>
<tr>
<td>Case studies</td>
<td>7</td>
</tr>
<tr>
<td>Interviews</td>
<td>5</td>
</tr>
<tr>
<td>Surveys</td>
<td>4</td>
</tr>
<tr>
<td>Questionnaires</td>
<td>2</td>
</tr>
<tr>
<td>Focus groups</td>
<td>2</td>
</tr>
<tr>
<td>Document analyses</td>
<td>5</td>
</tr>
<tr>
<td>Mixed methods</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participants</th>
<th>Number of included studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents/Families</td>
<td>7</td>
</tr>
<tr>
<td>Staff</td>
<td>17</td>
</tr>
<tr>
<td>Residents/families/staff</td>
<td>5</td>
</tr>
</tbody>
</table>
Synthesis of findings

We summarized the qualitative evidence of challenges and solutions according to key themes and concepts. The key themes were categorized as provider-level, resident/family level and work environment level.

Provider level

We identified four subthemes at the provider level: knowledge, communication, documentation and personal characteristics. The most commonly reported barriers were lack of staff knowledge and training; lack of communication between staff and between staff and residents/families; inconsistent documentation often due to lack of time and variability of language used; fragmentation in location of documents. Barriers related to personal characteristics were seen especially with the introduction of new processes and with advanced care planning as a result of lack of motivation for change and differing cultural beliefs. The most suggested solutions were providing education, training and support to staff; facilitating communication between staff; providing guidance to staff how to approach and facilitate discussions with residents and their families. Solutions for issues with documentation include using standardized forms and consistent terminology, and having a centralized or consistent location. See table 3.

### Table 2: Study characteristics continued

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Number of included studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care plans</td>
<td>4</td>
</tr>
<tr>
<td>ACP/EOL</td>
<td>20</td>
</tr>
<tr>
<td>RAI</td>
<td>2</td>
</tr>
<tr>
<td>Transition care plan</td>
<td>1</td>
</tr>
<tr>
<td>Individualized care program</td>
<td>1</td>
</tr>
<tr>
<td>Fall management program care plan</td>
<td>2</td>
</tr>
<tr>
<td>Care protocol</td>
<td>1</td>
</tr>
<tr>
<td>Strategies to improve family involvement</td>
<td>1</td>
</tr>
<tr>
<td>Strategies to improve communication</td>
<td>1</td>
</tr>
<tr>
<td>Staff connectedness</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Number of included studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges</td>
<td>11</td>
</tr>
<tr>
<td>Solutions</td>
<td>4</td>
</tr>
<tr>
<td>Challenges and solutions</td>
<td>19</td>
</tr>
</tbody>
</table>

ACP: Advanced care plan; EOL: end of life; RAI: Resident assessment instrument
<table>
<thead>
<tr>
<th>Subthemes</th>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Lack of knowledge/training</td>
<td>Provide education, training, and support to staff members to address knowledge and service gaps</td>
</tr>
<tr>
<td>Communication</td>
<td>Lack of communication/discussion between staff</td>
<td>A more connected staff so that information moves freely and promote cognitive diversity</td>
</tr>
<tr>
<td></td>
<td>Lack of communication/discussion between staff and resident/family e.g. Nurses concerned about communication with family (hard to discuss, fear of misinforming/question accuracy)</td>
<td>Provide guidance to staff how to approach and facilitate discussions</td>
</tr>
<tr>
<td>Language barrier</td>
<td></td>
<td>Avoid medical and complex jargon; Check for understanding; Hire bilingual, bicultural staff; Use professional translators</td>
</tr>
<tr>
<td>Documentation</td>
<td>Inadequate nurses’ record keeping due to time constraint</td>
<td>Care plan should be concise</td>
</tr>
<tr>
<td></td>
<td>Variability of language used in care plans</td>
<td>Use consistent terminology in written care plan</td>
</tr>
<tr>
<td></td>
<td>Fragmented versions/location of documents</td>
<td>The use of standardized forms and documents supported by policies and located in a central or consistent location. For example brightly colored POLST forms, easily located ACP in front of patient charts, using an electronic system or software package</td>
</tr>
<tr>
<td>Personal characteristics</td>
<td>Different providers have different motivations or lack of motivation</td>
<td>The contextualization of impending practice change was regarded as important, whereby the need or rationale for change is communicated transparently to those who will be charged with implementing change. Ensuring that staff is afforded opportunities to provide input into protocol implementation processes, and is encouraged to do so</td>
</tr>
<tr>
<td></td>
<td>Staff having difficulty discussing end-of-life due to cultural beliefs</td>
<td>Provide guidance to staff how to approach and facilitate the discussion</td>
</tr>
</tbody>
</table>
Resident or family level

Four subthemes were identified at the resident or family level: family involvement, communication, personal characteristics and relationship with staff. The most commonly reported barriers were lack of family involvement, family struggles with decision making, communication barriers especially due to cultural/religious factors around end of life or transition into end of life care, cognitive impairment of the resident, and conflicts with the staff.

Possible solutions were to educate the family about person-centered care and involve the family in establishing the resident's preferences and a care plan as well as involve family in all subsequent follow ups; to educate the residents and their families about end-of-life care; and facilitate discussions and involvement in care meetings. See Table 4.

Table 4: Qualitative findings at the resident or family level by subthemes

<table>
<thead>
<tr>
<th>Subthemes</th>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family involvement</td>
<td>Lack of family involvement</td>
<td>Educate the family about person-centered care and involve family in the care plan process and in all subsequent follow-ups</td>
</tr>
<tr>
<td></td>
<td>Reluctance in making decisions (when resident cannot) due to lack of emotional preparedness/support or due to Family cultural factors such as communal decision making, or inability to reach a consensus</td>
<td>Building consensus and a shared understanding of the medical situation</td>
</tr>
<tr>
<td>Communication</td>
<td>Reluctance to discuss end of life or transition into end of life care due to cultural/religious factors</td>
<td>Educating residents and their families about end-of-life care</td>
</tr>
<tr>
<td></td>
<td>Language barrier</td>
<td>Avoid medical and complex jargon;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check for understanding;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hire bilingual, bicultural staff;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use professional translators</td>
</tr>
<tr>
<td>Personal characteristics</td>
<td>Cognitive impairment — patient's lack of decisional capacity and does not have a surrogate</td>
<td>Start discussions early and in gradual stages before the onset of serious health problems. Public awareness.</td>
</tr>
<tr>
<td>Relationship with staff</td>
<td>Family conflicts with staff</td>
<td>Involve family in establishing the resident's preferences and a care plan as well as involve family in all subsequent follow ups</td>
</tr>
</tbody>
</table>
Work environment level

The subthemes at the work environment level are: staffing, documentation, resources, and structure and culture of nursing home. Common barriers were high staff turnover and shortages, the length of the care plan – too long and lack of time to complete it adequately, poor resource setting and dispersion of responsibility.

Possible solutions identified are: implementation of a good system with a good structure and guidance in the nursing care process; development of a system that is concise and user friendly; adequate resourcing for care plan implementation; allocation of responsibility for program implementation and having efficient organizational systems with staff support and education resources. See Table 5.

Table 5: Qualitative findings at the work environment level by subthemes

<table>
<thead>
<tr>
<th>Subthemes</th>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing</td>
<td>High staff turnover and shortages</td>
<td>Implementation of a good system with a good structure and guidance in the nursing care process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Underscoring the benefits of practice change for both residents and staff – time efficiencies or workload reductions, for example.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Keeping staff on the same page</td>
</tr>
<tr>
<td>Documentation</td>
<td>Care plan is too long or nurses view it as a distraction from work</td>
<td>Develop a system that is concise and user friendly to nursing and care staff and at the same time gives all necessary information. Incorporate regular (e.g. a monthly) audit and review.</td>
</tr>
<tr>
<td>Resources</td>
<td>Poor resource setting e.g. lack of available software packages</td>
<td>Adequate resourcing for care plan implementation</td>
</tr>
<tr>
<td>Structure and culture of nursing home</td>
<td>Dispersion of responsibility</td>
<td>Allocation of responsibility for program implementation.</td>
</tr>
<tr>
<td></td>
<td>Lack of support to staff and staff that are stuck in their daily practice (will not change)</td>
<td>RN leadership combined with efficient organizational systems</td>
</tr>
<tr>
<td></td>
<td>Lack of coordination of care</td>
<td>Available training and education resources on emerging standards of practice that can promote change and clinical practice consistent with geriatric principles appropriately adapted to LTC settings. Achieving buy-in among implementers, and overcoming resistance to change</td>
</tr>
<tr>
<td></td>
<td>Lack of multidisciplinary team approach</td>
<td>Adequate RN leadership and efficient care planning models must be present for effective communication and to provide direction to integrate the resident care plan into daily nursing facility operations</td>
</tr>
<tr>
<td></td>
<td>Lack of recognition/ remuneration or respect of team members’ efforts</td>
<td>Develop an efficient system that recognizes the strengths that all members of the multidisciplinary team bring to the LTC setting. Facilitate communication and interaction and collaboration among team members.</td>
</tr>
<tr>
<td></td>
<td>Difference in goals of care between nursing homes and hospitals</td>
<td>Documented plans should be available and understood across settings.</td>
</tr>
<tr>
<td></td>
<td>Lack of family involvement</td>
<td>Provide a welcoming facility environment</td>
</tr>
</tbody>
</table>
Discussion

Applicability of evidence/implementation

Although care planning is mandatory and a key element in providing continuity of care in the long term care setting, there is growing concern about non-compliance in plan of care. Most of the research evidence is on identifying factors that influence the implementation of plan of care rather than the effectiveness of strategies to improve implementation. A preliminary search found one systematic review on effectiveness of the plan of care in the long-term care setting [11]. There is limited evidence of implementation strategies in the long term care setting.

A key step in assessing implementation is to identify potential challenges and solutions [9]. Almost 60% of the included articles were on the implementation of advanced care planning and the challenges and solutions for implementing advanced care plan were consistent with those for implementing the plan of care. The challenges were also consistent with those from the home inspection reports.

Our findings showed that different types of challenges may operate at different levels of the healthcare system. It is important to understand the type of challenges, whether they are modifiable or not, and identify potential solutions then prioritize challenges by importance and consider which solutions are feasible and the resources available to implement them. Different strategies may work for different people and different situations and a combination of strategies may be more effective than single strategies.

Strengths and limitations

Consistent themes and proposed challenges and solutions were found across included studies. We grouped the findings according to themes which might facilitate decision about implementation.

Due to limited literature on this topic, the search strategy required the use of many text words which might restrict the retrieval of potential articles. We included articles on the implementation of the advanced care plan and the care plan and the findings were consistent.
Practice recommendations

Based on our findings we recommend that LTC homes should identify relevant barriers then contextualize and prioritize strategies and solutions that are feasible.

- Long-term care homes should identify and prioritize the barriers in their context that need to be changed.
- Long term care homes should implement strategies to monitor impact of implementing these changes on processes of care as well as the resident, family and staff experience.
- Long-term care homes should choose which solutions work best for them.

Research recommendations

- Given the lack of evidence on implementation of interventions to improve communication about plans of care in long term care, there is a need for implementation research in this area.
- Implementation research should be designed to build on existing knowledge about implementation, by comparing new strategies and combinations of strategies to methods known to be effective.
- More quality research is needed to provide evidence on the effectiveness of the plan of care in long-term care setting.

References


Appendices

Appendix 1: Search methods
Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1946 to Present>
Search Strategy:

1 exp Long-Term Care/ (23172)
2 exp Homes for the Aged/ (12002)
3 exp Nursing Homes/ (34224)
4 1 or 2 or 3 (57494)
5 exp Patient Care Planning/ (56795)
6 meta analysis.mp.pt. (108459)
7 review.pt. (2137583)
8 search.tw. (210437)
9 6 or 7 or 8 (2320769)
10 4 and 5 and 9 (197)
11 Plan of care.mp. (1459)
12 Service agreement.mp. (25)
13 Care planning.mp. (39923)
14 Service user plan.mp. (1)
15 Care plan.mp. (3342)
16 Service plan.mp. (180)
17 5 or 11 or 12 or 13 or 14 or 15 or 16 (62757)
18 4 and 9 and 17 (237)
19 long stay hospital.mp. (130)
20 exp Skilled Nursing Facilities/ (3808)
21 residential care.mp. (2362)
22 Discharge Planning.mp. (2478)
23 Inter-Professional Collaboration.mp. (114)
Appendix 2: Included studies


Acknowledgements

We thank Manosila Yoganathan for helping with the searches.