# Palliative Care Models in Long-Term Care: A Scoping Review

Sharon Kaasalainen, Tamara Sussman, Lynn McCleary, Genevieve Thompson, Paulette V. Hunter, Abigail Wickson-Griffiths, Rose Cook, Vanina Dal Bello-Haas, Lorraine Venturato, Alexandra Papaioannou, John You and Deborah Parker

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1: Specialist palliative care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carlson et al., USA, 2011</td>
<td>Palliative care consult service (The Palliative Care Center of the Bluegrass)</td>
<td>Consultations for hospice eligibility by external MDs and NPs • Consultations on pain and symptom management, ACP, family communication and transition to hospice</td>
<td>Lowered and avoided hospitalization rates • Enhanced access to palliative care for all NH residents • Increased availability of palliative care technologies on-site • Heightened awareness of resident pain and symptom management, psychosocial and spiritual needs • Higher rates of ACP and pain treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morris and Castillo, USA, 2017</td>
<td>Caring About Residents’ Experiences and Symptoms (CARES) Program</td>
<td>Staff education on core palliative care principles • Expert consultation services for nursing home residents • CARES team consists of EMS/physicians and home champion, partners (hospice agencies, hospital board, palliative teams, attending physicians), champions (nursing home staff)</td>
<td>Improved staff capacity building • 98% of residents with pain symptoms had a change in their medication regimen to address their uncontrolled symptoms • Changes in care plans to address symptom needs occurred in 68% of residents • 96% of residents who died in hospice services during implementation</td>
</tr>
</tbody>
</table>
### Table 1. (cont’d) Summary of literature: Literature summarized by palliative model and other key components

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casaret et al., USA, 2005</td>
<td>Improving the Use of Hospice Services in Nursing Homes</td>
<td>Structured interviews to identify residents appropriate for hospice care</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The intervention group residents’ interview results were sent to their physicians to authorize an external hospice visit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The usual care group residents were given a description of hospice services instead of visits referred by a physician</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intervention residents were more likely to enrol in hospice within 30 days (21/107 [20%] vs 1/98 [1%])</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Intervention residents had fewer acute-care admissions (mean: 0.28 vs 0.49) and spent fewer days in an acute-care setting (mean: 1.2 vs 3.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Families of intervention residents rated the residents’ care higher (mean on a scale of 1–5: 4.1 vs 2.5)</td>
</tr>
<tr>
<td>Levy et al., USA, 2008</td>
<td>Making Advance Planning a Priority (MAPP) Program</td>
<td>Residents at high risk of death are identified (score &gt;7 on the mortality prediction score from MDS data)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Attending physicians informed of the residents’ mortality risk</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Obtain palliative care or hospice consultation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improve ACP documentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Residents less likely to die in hospital (48.2% preintervention vs 8.9% postintervention, p &lt; 0.0001)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Residents who passed away after implementation of MAPP program had an advanced care directive (p = 0.03)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Residents were more likely to get a palliative referral (7.4% preintervention vs 31.1% postintervention, p = 0.02)</td>
</tr>
</tbody>
</table>

### Model 2: In-house end-of-life care

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basson et al., France, 2002</td>
<td>Role of a palliative care mobile unit in a nursing home</td>
<td>Palliative care mobile unit in a nursing home</td>
<td>Treated physical pain, psychological suffering and end-of-life symptoms to avoid unnecessary hospitalizations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Supported families and medical teams in their day-to-day work</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 82% of the families, 73% of the caring teams and 75% of the treating physicians were fully satisfied with the mobile unit</td>
</tr>
<tr>
<td>Carlson et al., USA, 2011</td>
<td>Nursing home-based palliative care (Morningside House)</td>
<td>Nursing home employs internal palliative care NP or team (NP, SW, chaplain, MD)</td>
<td>Improved staff retention</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Daily contact promotes understanding of resident/family values, personal goals and care preferences</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• More deaths occurring at “home”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Reduced hospitalizations by 45%, emergency department visits by 50% and average length of stay in the hospital by one day</td>
</tr>
<tr>
<td>Author(s), country, year</td>
<td>Program</td>
<td>Methods</td>
<td>Outcomes</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------</td>
<td>---------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| Giuffrida, USA, 2015    | Palliative care program | • Palliative care order sheet to build a new plan of care  
 • Identification of direct palliative care admissions on admit sheet  
 • Care plan meetings occur within 48 hours of admission  
 • Daily visits by pastoral care staff  
 • Private room when possible  
 • Flexibility in meeting family's “special requests”  
 • Accommodations for family members to stay overnight  
 • Post-death condolence care  
 • Sharing of resident wake/shiva and funeral arrangements  
 • Biannual memorial service  
 • Changes to the referral processes  
 • Partnered with community hospice programs  
 • Provided education for clinical staff | • The number of residents on palliative care increased from 5 to 25%  
 • Rehospitalization rates decreased from 17.4 to 15.2%  
 • Residents with healthcare proxies increased from 65 to 69%  
 • Residents with DNR orders increased from 64 to 73%  
 • Residents with feeding tubes declined from 24 to 14 |
| Kaasalainen et al., Canada, 2014 | Palliative Performance Scale (PPS) | • Tool for measuring the decline of a palliative resident  
 • Five functional dimensions: ambulation, activity level and evidence of disease, self-care, oral intake and level of consciousness | • Staff felt positively about using these tools and said it increased awareness of palliative care and helped identify residents who were nearing the end of life |
### Table 1. (cont’d) Summary of literature: Literature summarized by palliative model and other key components

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Kovach et al., USA, 1996 | Hospice household intervention | • Hospice-oriented care for residents with end-stage dementia  
• Development of strategies for new “hospice households”  
• Staff education provided | • Decreased resident discomfort and behaviour problems  
• Statistically significant difference in discomfort levels between treatment and control groups ($t = 3.88, p < 0.001$)  
• The behaviour problem differences were not large enough to be statistically significant ($t = 1.44, p = 0.155$)  
• Staff reported improved job satisfaction, increased sense of empathy and caring and recognized improvement in residents  
• Family members noted that there were periods when the resident was more alert |
| Simard and Volicer, USA, 2010 | Namaste Care | • Meaningful activities for residents with advanced dementia or who cannot engage in traditional activities  
• Seven-days-a-week care program provided by in-house staff or volunteers | • Decreased delirium ($p = 0.79$) and need for antianxiety medications ($p = 0.35$)  
• Improved quality of family visits  
• Increased awareness of impeding deaths for residents with advanced dementia, which may result in increased use of hospice care |

**Model 3: In-house capacity building within a palliative approach**

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Ersek and Wilson, USA, 2003 | Palliative Care Educational Resource Team (PERT) Program | • Curriculum designed to enhance EOL abilities of nursing assistants and nurses working in LTC  
• Four-day-long, monthly classes covering various EOL care topics | • Significant increases in EOL knowledge, self-evaluation of EOL skills and supervisors’ evaluations of participants’ EOL care |
| Gatchell et al., USA, 2011 | The Improving Professional Education and Sustaining Support (IMPRESS) Project | • Monthly in-services for front-line staff about core palliative care concepts  
• Core concepts included knowing the patient, cleanliness/touch/dignity, pain and symptom management, discussion of goals of care, emotional support, cultural and religious support and ability to handle grief  
• Feedback forms assessed how frequently staff applied core concepts | • Usage of core concepts improved after the educational intervention (mean improvement 0.14 on a four-point scale, $p = 0.03$) especially in staff who attended more in-services |
### Table 1. (cont’d) Summary of literature: Literature summarized by palliative model and other key components

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Hanson et al., USA, 2005 | Nursing home (QI) intervention | • Recruitment and training of palliative care leadership teams with technical assistance meetings  
• Hospice providers gave educational sessions to nursing home staff  
• Teams received feedback on performance data | • Increased hospice enrolment from 4% of residents at baseline to 6.8% post intervention and increased pain assessments from 18 to 60%  
• Among resident in pain, orders for nonpharmacologic pain treatments increased from 15 to 35%  
• Residents having in-depth discussions about end-of-life care increased from 4 to 17% |
| Kortes-Miller et al., Canada, 2007 | The palliative care in long-term care education program | • Detailed assessment of staffs’ educational needs and preferred educational formats  
• 15 hours of education for staff provided by in-house trained staff facilitator  
• Six sessions belong to the curriculum: Dying in Canada, Dying, Working with families, Grief and Bereavement, Planning for Death, Helping Relationships and Self-Care | • Education by LTC providers empowered the in-house staff and developed them as local resources  
• Staff preferred interdisciplinary small-group learning; hearing stories from other participants and working with one another enhanced their learning  
• Staff confidence and participation in delivering palliative care increased  
• Effective education should focus on learners’ identified knowledge gaps  
• Participants of the education program continued to see the facilitator as their palliative care resource person after completion of the program |
| Livingston et al., UK, 2013 | Improving the End-of-Life for People with Dementia Living in a Care Home: An Intervention Study | • 10-session manualized, interactive staff training program devised by senior managers in the home  
• Compared advance care wishes documentation and implementation, place of death for residents who died and themes from staff and family carers’ after-death interviews pre- and postintervention | • Increases in documented advance care wishes arising from residents’ and relatives’ discussions with staff about end of life, including resuscitation orders (73% vs 14%) and dying in care homes as opposed to hospitals (76% vs 47%)  
• Bereaved relatives’ overall satisfaction increased from 7.5 preintervention to 9.1 postintervention  
• Relatives reported increased consultation and satisfaction about decisions  
• Staff members were more confident about end-of-life planning and implementing advanced wishes |
Table 1. (cont’d) Summary of literature: Literature summarized by palliative model and other key components

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Ouslander et al., USA, 2014 | INTERACT program | • Quality improvement program that focuses on improving the identification, evaluation and management of acute changes in condition of NH residents  
• Consists of over 30 tools regarding quality improvement, communication, decision support and ACP  
• requires support of the interprofessional leadership team, including directors of nursing, administrators and medical directors, as well as buy-in from primary care clinicians | • 24% reduction in all-cause hospitalizations of nursing home residents over a six-month period of implementing the program (equivalent to $100,000 of Medicare savings annually)  
• Early identification and evaluation of changes in condition  
• Management of common changes in condition without hospital transfer  
• Improved ACP and use of palliative or hospice care when appropriate  
• Improved staff communication and documentation |
| Parker et al., Australia, 2012 | The Palliative Approach Toolkit: An Evidence-Based Model of Palliative Care | • Framework, educational and clinical tool for all LTC staff  
• Based on three key processes: ACP, PCCCs, EOL care pathway  
• Consists of the following:  
  • Three modules (integrating a PA, key processes, clinical care), supported by a range of evidence-based practice resources (e.g., Guide to Pharmacological Management, RAC EoLCP)  
  • Brochures and forms  
  • Educational resources and DVDs | • Improvements in next of kin being involved in EOL discussions, palliative care conferences and the use of an EOL care pathway  
• Improvements in regular assessment and documentation of pain, the use of an appropriate pain assessment tool and management of nonpharmacological treatments  
• Improvements in assessment for dyspnea and documentation of treatment  
• Increases LTC home capacity |
| Phillips et al., Australia, 2006 | Multidisciplinary Team Approach to Care Planning in Residential Aged Care Facilities | • Multidisciplinary team comprising core disciplines (usually three or more people) that meets on a regular basis to develop an individual care plan for each resident and their families in accordance with their identified needs  
• Staff engage in reflective debriefing during meetings to help with care plan development | • Ensures residents and their families have access to a palliative approach  
• Ensures residents’ GP, aged care staff and other HCPs have an opportunity to be formally involved in the development of residents’ care plan  
• Provides multidisciplinary team members with an opportunity for enhanced education opportunities |
<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| **Model 4: In-house capacity building with external support from palliative specialists**

Badger et al., UK, 2009 | An Evaluation of the Implementation of a Programme to Improve End-Of-Life Care In Nursing Homes | • Evaluation of GSFCH
• Five homes in Phase 2 of the program were invited to participate in the evaluation | • Some staff found completion of the program challenging
• Statistically significant increases in the proportion of residents who died in the care homes and those who had an advanced care plan (80.9% vs 88.5%)
• Crisis admissions to hospital were significantly reduced (37.8% vs 26.3%)

Caplan et al., UK, 2006 | Let Me Decide Advanced Care Directive (ACD) | • A leader within the facility is trained to implement the Let Me Decide ACD
• Educational meetings held with residents, families, general practitioners and community service providers | • Emergency calls from nursing homes decreased (intervention vs control; −1% vs +21%, p = 0.0019)
• 35.4% decrease in hospital admissions over three years in intervention hospitals
• Increase in residents receiving treatment in the home rather than in the hospital

Carlson et al., USA, 2011 | Nursing home-based palliative care (Evercare Hospice and Palliative Care) | • Nursing home contracts with a Medicare Managed care program for nurse practitioners with palliative care expertise | • Improved staff retention
• Better resident/family satisfaction
• More deaths occurring at “home”
• Fewer hospitalizations
• Reduced hospitalizations by 45%, emergency department visits by 50% and average length of stay in the hospital by one day

Giuffrida USA; 2015 | Palliative care transitions program | • Goal is to improve communication among palliative care patients, families and the interdisciplinary team regarding each patient’s wishes and values, especially with regard to hospitalization
• Transitions coach and clinical social worker focus on the hospitalized patients’ needs when transitioning to nursing home
• Transition coach works with the resident and family members | • Rehospitalization rate decreased from 15.2 to 13.9%
• Rehospitalization rate for the 33 palliative care patients admitted through the transitions coach was 7.2%, well below the national benchmark of 23%
• In-house residents on the palliative care program increased from 18 to 27%
<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Hall et al., UK, 2011    | Gold Standards Framework for Care Homes (GSFCH) | • Quality improvement program that consists of enabling tools, tasks and resources used in care homes for older people, with training and central support from the GSF team and local support from a GSFCH facilitator  
• Focuses on organizing and improving the quality of care for care home residents in the last year of life  
• Key elements include multidisciplinary resident review meetings, completion of a prognostic register and associated advance care planning and discussion of resuscitation status | • Interviews with LTC staff, family members and residents reveal the following:  
• Improved symptom control and team communication  
• Increased staff confidence  
• Fostering residents’ choice  
• Boosted reputation of the home |
| Heals, UK, 2008          | Palliative care link nurse program | • Link nurses enables communication through fostering links between the homes and the hospice and provide ongoing education and training for staff | • Recognized importance of contact and liaison within the hospice  
• With increased knowledge and skills, the link nurses felt more confident in talking with general practitioners, relatives and residents  
• Changes in care planning and documentation recognized |
| Hickman et al., USA, 2014| The OPTIMISTIC Project | • Aims to reduce avoidable hospitalizations of long-stay residents  
• Three principal intervention cores medical, transitional and palliative care  
• OPTIMISTIC clinical staff (RNs and NPs) support in-house LTC staff  
• OPTIMISTIC staff are involved in care of residents but not as primary care providers  
• OPTIMISTIC staff provide the End-of-Life Nursing Education Consortium (ELNEC)-geriatric curriculum (a train-the-trainer educational program designed to improve palliative care in LTC) | • Of 910 hospital transfers evaluated, 28% were judged to be avoidable, 57% were unavoidable and 15% had no response coded  
• Staff capacity building through education program |
<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Jensen et al., Canada, 2014 | Insights into the Implementation and Operation of a Novel Paramedic Long-Term Care Program | • Explored perceptions on an extended-care paramedic (ECP) program that was implemented to provide emergency assessment and care on-site to LTC homes  
• 21 participants took part in four focus groups: paramedics and dispatchers, ECPs, ECP oversight physicians and decision makers | • Key themes identified were (1) program implementation, (2) ECP process of care, (3) communications and (4) end-of-life care  
• Program has positive implications for the relationship between EMS and LTC, requires additional paramedic training and can positively affect LTC patient experiences during acute medical events |
| Lee et al., China, 2013 | Improving the Quality of End-of-Life Care in Long-Term Care Institutions | • A knowledge transfer program was carried out to improve knowledge in EOL care for staff  
• Program consisted of seminars and on-site sharing sessions  
• Reflective debriefing with staff, residents and families before and after the initiative along with interviews | • Improved relationship between hospital supports and LTC  
• Improved staff knowledge gaps (mortality relating to chronic diseases, pain and use of analgesics, feeding tubes, dysphagia, sputum management and attitudes toward end-of-life care issues)  
• Flexibility in ambulance service handling of residents  
• Speech therapists/dietitians to promote oral rather than tube feeding  
• Increase in residents adopting ACPs  
• Adoption of training material by other geriatric teams and LTC homes |
| Strumpf et al., USA, 2004 | Implementing Palliative Care in the Nursing Home | • Palliative Care Delivery Process via staff training (introduction to palliative care, advance care planning, pain and symptom management, psychosocial support)  
• Training provided by external nurse consultant  
• Interdisciplinary palliative care teams developed | • More residents with advance care plans (p < 0.01), more residents with pain managed by narcotics (p < 0.01), higher rates of symptoms in the last weeks of life (p < 0.05) and higher rates of physician visits and x-rays in the last weeks of life (p < 0.01) |
| Wickson-Griffiths et al., Canada, 2015 | Comfort care rounds (CCR) | • Understanding staff members’ perspectives on the implementation of CCRs (meetings held for the interprofessional team and palliative care consultants to discuss resident case-based palliative and EOL care issues) | • CCRs beneficial to palliative and end-of-life care knowledge, practice and confidence  
• Effective advertising, interest and assigning staff to attend CCRs facilitated participation  
• Key barriers to attendance included difficulty in balancing heavy workloads and scheduling logistics |
### Table 1. (cont’d) Summary of literature: Literature summarized by palliative model and other key components

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Ampe et al., Belgium, 2016 | Advance Care Planning for Nursing Home Residents with Dementia: Policy vs Practice | Evaluation of ACP policies for residents with dementia in LTC to gain insight in the involvement of residents with dementia and their families in ACP and how policies are put into practice  
• Nurse-led conversations with staff and residents to explore views on ACP policies | Staff only managed to involve residents/families in ACP on a baseline skill level  
• Evaluations of ACP policies were promising, but actual practice needs improvement  
• Future assessment of both policy and practice is recommended  
• Further research should focus on communication interventions  
• No statistically significant correlations between policy and practice |
| Brazil et al., Canada, 2012 | Knowledge and Perceived Competence Among Nurses Caring for the Dying in Long-Term Care Homes | Survey conducted to evaluate LTC nursing staff knowledge on palliative care | The average correct score ranged from 52.50 to 63.41%  
• PC knowledge gap reveals a need for PC training for staff working in LTC homes |
| Carlson, USA, 2007 | Death in the Nursing Home: Resident, Family and Staff Perspectives | Evaluated studies from resident, family and staff perspectives to identify issues and contributing factors so nurses can modify their practice to improve EOL care | Support for improvement in EOL care is underway  
• Nursing can benefit by maintaining its leadership role in improving the quality of care in LTC  
• Nurses can improve EOL care by reviewing literature and including palliation practices as appropriate in their care  
• Assessing patient preferences directly would empower nurses to strengthen EOL care |
### Table 1. (cont’d) Summary of literature: Literature summarized by palliative model and other key components

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Gill et al., Canada, 2011 | Nursing Guidelines for End-of-Life Care in Long-Term Care Settings       | • Nursing guidelines for EOL care based on the PPS implemented in two LTC homes  
• Information booklet and resources provided to staff  
• One-hour facilitated educational sessions were provided  
• Staff and family members completed surveys to evaluate the guidelines | • 87% of staff reported that the EOL care was “much improved” following the implementation of the nursing guidelines  
• Training about using the PPS in LTC helped staff deliver care in a timely manner  
• Survey respondents reported increased awareness of EOL issues, more timely responses to EOL needs, practice improvements and improved communication  
• All family respondents were satisfied with the nursing care provided to their loved ones (33.3% “satisfied,” 66.7% “very satisfied”)  
• Key stakeholders reported that they were satisfied with the nursing guidelines for EOL care |
| Hickman et al., USA, 2016 | Systematic Advance Care Planning in the Nursing Home: Preliminary Outcomes from the OPTIMISTIC Project | • Explores relationship between ACP and the hospitalization of nursing facility residents  
• Describes successes and challenges to systematic ACP | • 44% of the patients had engaged in ACP either with the RN or someone else  
• The most common reason for no ACP conversation was that the RN had approached the resident yet (61%)  
• ACP discussions with RNs resulted in a change in orders 74% of the time |
<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Hieu et al., USA, 2010   | Evaluating the Impact of Health Care Providers’ Knowledge, Attitudes and Behavior on Medical Orders for Life Sustaining Treatment (MOLST) Implementation in Long Term Care Facilities | • MOLST facilitates EOL medical decision making in New York State, Connecticut, Massachusetts, Rhode Island, Ohio and Maryland using a MOLST form  
• Anonymous survey of physicians, nurses and social workers in LTC facilities with high and low rates of MOLST implementation | • There is a clear correlation between level of knowledge and attitudes regarding the importance of advance directive execution and MOLST and actual utilization of advance directives  
• Groups that highly implement MOLST = high MOLST  
• Groups that have low implementation of MOLST = low MOLST  
• 86% high MOLST vs 38% low MOLST agreed that all LTC residents should have an MOLST form  
• 44% high MOLST vs 5% low MOLST agreed that residents with MOLST forms had better pain management. High-performing facilities have a stronger belief that physicians need to take an active part in completing MOLST documents to effectively implement advance directives  
• 52% high MOLST vs 35% low MOLST selected physicians as most likely team members to be involved in EOL discussions |
| Hockley and Froggatt, UK, 2006 | Developing high-quality end-of-life care in nursing homes: An action research study | • Evaluating the use of action research to develop high-quality end-of-life care in nursing homes  
• Study 1: Implementation of collaborative learning groups following a death and use of the Liverpool Care Pathway for the Dying  
• Study 2: Creating new documentation, education and training, reflective debriefing, remembrance books, new policies and procedures, discussion groups | • Highlights the importance of collaboration and recognizing bias, issues of power and being sensitive to differing viewpoints, while at the same time being inclusive to those stakeholders committed to taking part |
| Hockley, UK, 2013        | A Strategic Development Using “High” Facilitation to Implement and Sustain The Gold Standards Framework for Care Homes | • To implement the GSFCH using “high facilitation” to support sustainability  
• Community outreach nurses visit each home during implementation  
• Role model/empower ACP discussions  
• Implement EOL care plan | • ACP conversations increased from 51 to 75% and DNACPR orders increased from 52 to 80% over the course of the project (2009–2012)  
• Team of outreach nurses is now fully funded by the home |
<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Hudson et al., Australia, 2012 | Guidelines for the Psychosocial and Bereavement Support of Family Caregivers of Palliative Care Patients | • To develop clinical practice guidelines for the psychosocial and bereavement support of family caregivers  
• Focus groups and structured interviews with key stakeholders  
• Expert opinion to further develop the guidelines | • Guidelines developed for multidisciplinary healthcare professionals and clinical services commonly involved in caring for adult patients receiving palliative care in a variety of care sites throughout Australia  
• Research is recommended to explore the uptake, implementation and effectiveness of the guidelines |
| Kaasalainen et al., Canada, 2012 | The Evaluation of an Interdisciplinary Pain Protocol in Long Term Care | • Implementation of a pain protocol using a pain team, pain education and skills training and other quality improvement activities  
• Evaluated effectiveness of (1) dissemination strategies to improve clinical practice behaviours and (2) implementation of the pain protocol to reduce pain | • More positive changes in intervention group for the use of a standardized pain assessment tool and completed admission/initial pain assessment  
• Staff should be reminded to think about pain as a priority  
• On-site champions (advanced practice nurses and a pain team) were key to successfully implementing pain protocol |
Table 1. (cont’d) Summary of literature: Literature summarized by palliative model and other key components

<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Kaasalainen et al., Canada, 2016. | The Effectiveness of a Nurse Practitioner-led Pain Management Team in Long Term Care: A Mixed Methods Study | • Explored effectiveness of NP-led pain team on resident pain, functional status and quality of life  
• NP was external to LTC home  
• Provided outreach at least monthly to LTC home for consultation and coaching | • Found significant pre- and postimplementation improvements in pain and functional status of residents  
• Staff felt the NPs helped build capacity within the home |
| Kelley and McKee, Canada, 2013 | Capacity Development in Participatory Action Research (PAR) | • Explores the use of a capacity-building framework that aims to develop palliative care programs within LTC | • Potential international resource for capacity building in LTC |
| Kinley et al., UK, 2014 | The Provision of Care for Residents Dying in UK Nursing Care Homes | • Looked at care for residents dying in UK nursing care homes  
• Examined the records of residents who died in these homes between 2008 and 2011 | • Links need to be expanded with GP, palliative care nurses and physiotherapy  
• Dependency of resident increase with 56% residents dying within a year of admission, these links need to be expanded  
• Provision of healthcare that meets the needs of future nursing care home residents needs to be proactive |
| Morris et al., UK, 2013 | End-of-Life Care Medication “As Stock” for Residents Dying in Nursing Homes: A Project in 3 Nursing Care Homes | • Explores the frequency of symptoms in the dying phase and the availability of EoLC medication  
• Establishes the cost savings of having EoLC medication “as stock” rather than “named patient basis”  
• Explores the perceived benefits of EoLC medication “as stock” | • The total cost for residents' medication on a “named patient basis” was higher than the actual cost  
• Nurse manager reported that having access to stock medications resulted in her nurses feeling comfortable requesting prescriptions for dying residents without fear of wastage  
• Ensuring access to medication for the dying is a priority |
| Phillips et al., Australia, 2009 | An Insight into the Delivery of a Palliative Approach in residential aged Care | • Study aimed to investigate GPs’ perceptions and understanding of a palliative approach | • GP uncertainty about a palliative approach, a need to reorient providers, the challenges of managing third parties and making it work and moving forward  
• GPs need to have more awareness and be more engaged in EOL planning |
<p>| Registered Nurses Association of Ontario, Canada, 2011 | End-of-Life Care During the Last Days and Hours. Best practice guideline | • Provides evidence-based recommendations for RNs and RPNs on best nursing practices for EOL care | • May build capacity in LTC when used by staff to guide EOL practices |</p>
<table>
<thead>
<tr>
<th>Author(s), country, year</th>
<th>Program</th>
<th>Methods</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| Roberts and Gaspard, Canada, 2013 | A Palliative Approach to Care of Residents with Dementia | • Four-hour workshop to promote critical reflection and challenge staff to consider palliative care earlier on | • Increased scores in palliative care knowledge and confidence  
• Average of 10% increase in correct answers, and self-rating confidence measures increased from 7.2 to 8.3 |
| Temkin-Greener et al., USA, 2009 | Measuring End-of-Life Care Processes in Nursing Homes | • Goal to develop measures of EOL care processes in nursing homes and use of validated instrument  
• Survey was sent to directors of nursing care in 608 LTC homes  
• Data on structural characteristics were obtained | • Four EOL process domains – assessment, delivery, communication and coordination of care among providers and communication with residents and families  
• Facilities with more EOL quality assurance and greater emphasis on staff education had better scores on EOL care processes of assessment, communication and coordination among providers and care delivery  
• Facilities with higher RN/certified nurse aide ratios and religious affiliation had higher process scores |
| Vandenberg et al., USA, 2006 | Use of the Quality Improvement Process in Assessing End-of-Life Care in the Nursing Home | • Representatives of the deceased were surveyed using a tool that assessed symptom management, emotional states, hospice use and satisfaction with the care provided by the home and the hospice  
• Results of this survey were used to improve EOL care | • Specific areas that were improved as per the survey results were overall quality of care, spiritual care, distribution of workload and patients’ preparedness for death  
• Prevalence of symptoms was reduced by 22% (pain), 25% (dyspnea) and 30% (uncomfortable symptoms of dying)  
• Greater involvement of clergy in spiritual care |