

Supplementary Table 1: Characteristics of included studies

For references, please see main article.

Country	Research focus	Design & methods	Population focus and setting	Key findings	Comments/implications
[21]USA	Care of patients in last week of life	Systematic review (nos of papers not stated)	All research on med-line 1990-2004	Evidence of increased clinical intervention in the last weeks of life	Medline only data base searched
[22]USA/Canada	Clinical practice in EoL care for ALS	Retrospective chart/case review (n=1014)	Patients who died with ALS in all care settings	10% did not have a peaceful death despite having advance directives in place. Respiratory symptoms, anxiety and pain were untreated.	Pain is not well recognised in ALS patients at the EoL
[23]USA	Application of the Palliative Performance scale	Retrospective chart/case review (n=261)	Patients seen by hospital PC service	Dyspnoea significant physical marker. EoL more likely to be recognised in cancer patients	PPS useful in describing mortality across a population but less so in predicting death in individuals
[24]UK	Quality of dying of head and neck cancer patients	Retrospective chart/case review (n=32)	Patients registered with Head and Neck cancer service	Insufficient recognition of psychosocial and spiritual issues at EoL	Over half of patients needed emergency admission and absence of relatives at time of death indicates difficulties in diagnosing dying
[25]Netherlands	Problems and needs of glioma pts at EoL	Retrospective chart/case review (n=58)	Adult glioma pts at EoL at home and in hospital	specific symptoms at the EoL; decreased consciousness, dysphagia, neurological deficit and seizures	This group may need specific guidelines for EoL care
[26]Switzerland	Symptoms at EoL for stroke patients	Retrospective chart/case review (n=42)	Stroke pts (stroke unit) referred to PCT at the hospital	Symptoms (dyspnoea & pain) in stroke patients underestimated	EoL not recognised – communication issues
[27]Italy	EoL issues in brain tumour patients	Retrospective chart/case review (n=324)	Brain tumour patients enrolled on home care programme	Data on Clinical symptoms, palliative treatments and EoL treatment	Decreased level of consciousness important and this group may need specific EoL guidelines.
[28]UK	Psychological, social and spiritual needs at EoL	Qualitative longitudinal interview study	Advanced lung (24) and heart failure (n=24) patients at home	As physical symptoms increase there is a parallel decline in social wellbeing.	Patients at EoL are likely to demonstrate significant psychosocial characteristics
[29]USA	How staff recognise EoL	Qualitative interviews	Nursing home employees (n=42)	Physical, behavioural and social indicators are evident in the frail older person at EoL	Comfort care may be viewed as palliative care in nursing homes
[30]USA	To explore PC needs of	Structured interviews	Staff and family	Emotional symptoms, cleanliness and pain	Improved communication

	nursing home residents		members of deceased nursing home residents (n=176)	relief significant at EoL.	/ACP required
[31]Netherlands	Retrospective assessment of symptoms at EoL	Quantitative (structured questionnaire)	Physicians actively practicing medicine from range of areas (n=85)	Physical symptoms treated more than psychosocial symptoms	Attention to psychosocial well-being and to the need to be with loved ones is essential at EoL
[32]UK	End-of-life care for community dwelling older people with dementia (including those resident in care homes)	Integrative literature review	Studies on palliative care for older people with dementia, 1985 - 2006 (67 papers included)	Health professionals are not skilled at recognizing the end stage in patients with dementia.	Research on end-of-life care for people with dementia has yet to develop interventions that address the particular challenges that dying with dementia poses.
[33] Belgium Denmark Italy Netherlands Sweden Switzerland	Medical end of life decisions in expected deaths	Quantitative questionnaire to physicians of expected deaths	Reporting doctors	Medical EoL decisions precede dying. Third of deaths were unexpected.	End of life decision making was defined as those which may or may not hasten death
[34] Germany	Medical & nursing practice at EoL	Retrospective chart/case review	Acute Hospital staff (n=226)	Care decisions and interventions remained cure focussed	More cancer patients were considered to be dying than those with CV disease.
[35]Spain	To evaluate death circumstances in heart failure and dementia in two acute hospitals and caregiver's opinions.	Retrospective case review	Record of deceased 102 patients aged over 64 with conclusive diagnosis, Telephone interviews with main caregiver (n=102)	Caregivers were satisfied with end of life care and two thirds of the patients with dementia had all non-palliative treatment withdrawn before death.	No system in place to avoid admission through A&E in the last stages of life
[36]USA	Medicine residents approach to EoL care	Qualitative interviews	Medicine residents	A 'cult of curability' was influential	Junior physicians rely on worsening clinical condition as main reason for not being 'surprised' if patient dies
[37]USA	Adequacy of EoL care in hospital	Retrospective chart/case review, focus groups & interviews	Charts (n=61) Focus groups with Drs and nurses 3x10) Individual interviews with surviving	Nurses and physicians felt able to diagnose dying but this was not always communicated and 50% of relatives did not expect the death of their relative until very late stages.	Decision making was focused towards active treatment rather than EoL.

			family member (N=31)		
[38]Italy	Describe how Italian patients die in hospital	Retrospective chart/case review and interviews	Data collection within 72 hours of death (n=270), interviews with senior nurses in charge at time of death and Drs to ascertain cause of death	Despite imminence of death patients were exposed to invasive treatments and lacked adequate symptom management including pain relief	Decision making was focused towards active treatment rather than EoL care.
[39]USA	To evaluate a physician led Comfort care programme	Retrospective chart/case review following implementation of the CCP	Medical records of veterans in a 'Veterans Medical centre' (n=203)	Increased documentation helped staff to better identify patients who were dying.	EoL care can be introduced to units focussed on cure
[40]UK	To compare the experiences in the community in the last 3 months of life of older adults dying from cancer and non-cancer deaths.	Retrospective cross-sectional survey	Bereaved relatives (n=1,266) completed VOICES questionnaire.	Cancer patients received more health and social services in the last 3 months than non-cancer patients. Those dying from cancer were more aware that the patient was going to die soon and received support from a bereavement service. Older non cancer patients experienced disadvantage.	Those dying from non-cancer related deaths were less likely to be identified as dying, more likely to be moved in the last weeks of life and less likely to receive palliative care.
[41]UK	To identify factors that enable or hinder clinicians identifying when a patient is dying, enabling implementation of the Liverpool Care Pathway (LCP)	Phenomenological study	Semi-structured interviews (5 nurses and 5 doctors) involved in care of 6 patients who had been on LCP and 4 who had not been on LCP.	Anxiety about getting the timing of diagnosing dying correct (potential barrier). Clinicians avoided difficult conversations with families which may lead to misunderstandings about the LCP.	Doctors tended to use more evidence (history and tests) and nurses used more intuition to diagnose dying, Specific communication skills training may help clinicians in this role.
[42]UK	Implementing an integrated care pathway for the last days of life as a way of developing quality end-of-life care in nursing	Action research	Summative evaluation of a 5-year action research project on 8 nursing homes.	Six main barriers were identified: a lack of knowledge of PC drugs, symptom control at EoL, lack of preparation for approaching death; not knowing when someone is dying or understanding the	Quality end-of-life care in any nursing home depends on adequate staff, a culture of learning, motivation and management support.

	homes.			dying process; lack of MDT working in nursing homes; lack of confidence in communicating about dying	
[43]UK	To implement an ICP in an inpatient hospice setting in order to set standards for care at end of life.	Case review of all patients placed on ICP in one care centre between Feb 1997 & Feb 1998.	Review of case records (N = 168) for one year (1997-8) for all patients on LCP.	The introduction of ICP documentation is a 'cultural change' in an organisation and takes time to be accepted by staff. Symptom control achieved in 85% of cases of patients on the ICP.	The ICP entry criteria are appropriate for cancer populations but not tested in non-malignant cases.