

Content and implementation of advance care plans

A retrospective cohort study

Laura Panozzo, Bernadette Ward,
Pam Harvey, Jason Fletcher

Background and objectives

The development of advance care plans (Plans) in general practice can be time consuming. End-of-life care should reflect an individual's documented preferences. The aim of this study was to examine the content and implementation of Plans in hospital during end-of-life care.

Methods

A retrospective cohort study of the hospital medical records of decedents aged ≥ 75 years was performed to assess Plan content and implementation.

Results

Of the 536 decedents, 52 had a Plan. There were 17 cases where life-prolonging treatment was given and contradicted preferences listed in the Plan. This included instances of intubation, surgery and curative medication.

Discussion

General practice staff investment in advance care planning should be reflected in the utilisation of Plans and, where medically indicated, respect for patients' preferences.

An advance care plan (Plan) is a written declaration outlining preferences for medical care, referenced by health practitioners when an individual loses decision-making capacity.¹ These documents are often created in the general practice setting and require considerable time to create. General practitioners (GPs) have a long-standing relationship with their patients and are well placed to lead conversations about their end-of-life wishes.² It is therefore important to ensure that these Plans are referenced during end-of-life care and that any treatment received or withheld reflects an individual's expressed preferences. The aim of this study was to examine the content and implementation of Plans in hospital during end-of-life care.

Methods

A retrospective cohort study was conducted of decedents aged ≥ 75 years who died between 1 January 2016 and 31 December 2017 in a hospital in Victoria, Australia. The data extraction tool used in the three days prior to death was based on published literature and assessed Plan content and implementation.³⁻⁵ Data were analysed in Statistical Package for Social Sciences (SPSS).⁶ Ethical approval was granted by Monash University (reference: 12314) and the study hospital (reference: LNR/17/BHCG/63) Human Research Ethics Committees.

Results

Of the 536 decedent hospital records, 9.7% ($n = 52$) included a Plan. Of these, four Plans were constructed in general practice. The majority were made in the aged-care facility from which the decedent was admitted ($n = 22$) or the study hospital ($n = 20$). Remaining documents were constructed in either another hospital or a lawyer's office, or were self-made ($n = 6$). Plans were created a median of 1.2 years (interquartile range [IQR] = 0.3–2.1) prior to death.

All decedents were noted to have significantly impaired ($n = 22$) or no ($n = 30$) decision-making capacity in the three days prior to death. Table 1 compares the number of Plans that preferred against invasive life-prolonging treatment (LPT) with whether LPT was given during the last three days of life. There were 17 cases in which a decedent was given an LPT that was explicitly preferred against in their Plan; these LPTs included intubation and surgery ($n = 4$).

Plans were explicitly mentioned in the progress notes of 28 (53.8%) records. Of the sighted documents, there were four cases when LPTs were provided against Plan preference. The majority of Plans included the patient's preference for or against receiving LPT ($n = 50$); 23 for and 27 against LPT (ie cardiopulmonary resuscitation [CPR], tube feeding, surgery). It was most common for a Plan to explicitly outline a preference for (four

completely, 11 with some limitation) or against ($n = 33$) CPR. The frequency of other preferences varied greatly. Most Plans did not express where (eg home or hospital) a decedent preferred to die ($n = 46$). Many decedents wrote a statement of values ($n = 34$) or outlined specific preferences for their end-of-life care ($n = 41$).

Discussion

This is the first Australian study we are aware of to examine the content and implementation of decedents' Plans. One-third of decedents were given LPT that contradicted their end-of-life preferences. Plan implementation is multifactorial, influenced by document clarity and content, patient decision-making capacity and Plan availability in-hospital. These documents should be easily accessible, legible and compliant with the legislation of their respective jurisdiction. This ensures that any documented preferences can be more readily implemented when an individual loses decision-making capacity. This is important for two reasons: 1) where Plans include preferences against invasive treatments, such interventions would be against patient wishes, and 2) in jurisdictions, such as Victoria, Plans are legal documents and doctors must make a reasonable effort to locate and implement them.¹

The hospital record progress notes provided evidence that more than half of the Plans were actually sighted by a hospital health practitioner or social worker when an individual lost decision-making capacity. Additional Plans may have been sighted, but this was not documented. This highlights that not only is the proportion of patients with a Plan low, but their (lack of) implementation may lead to clinical practices that conflict with patients' preferences.

While discharge summaries provide information about decedents' treatment, they may not provide enough detail to determine whether patients' preferences were followed. In the event that patients' end-of-life preferences are not followed, discharge summaries may be little comfort to busy GPs who have invested considerable time discussing and developing Plans with their patients.

Primary health networks encourage GPs and practice nurses to promote the uptake of advance care planning.⁷ While general practice staff are well placed to lead these conversations, there is no dedicated Medicare Benefits Schedule item for this activity, and it is not known whether these Plans are available to, or used by, hospital staff during end-of-life care.

The findings of this small study may be generalisable to decedent (≥ 75 years) records in other acute hospitals. Further research is needed to examine the implementation of Plans among a larger

population and the variables that could, where indicated, be modified to ensure patients' preferences are followed. Other factors influencing Plan development and communication between health services were not in the scope of this study. The national prevalence of statutory Plans is 14%, so it is unsurprising that we identified so few Plans.⁸

Conclusion

Advance care planning is an important aspect of clinical care for older people, and general practice staff spend considerable time supporting patients to make Plans. This investment should be reflected in the utilisation of Plans and, where indicated, respect for patients' preferences. Further research would help define the challenges in implementation.

Authors

Laura Panozzo BMedSc(Hons)/MD student, Research Support Officer, Monash Rural Health, Bendigo, Vic. lepan1@student.monash.edu

Bernadette Ward PhD, Senior Research Fellow, Monash Rural Health, Bendigo, Vic

Pam Harvey BAppSc(Physio), MD, PhD, Lecturer, Monash Rural Health, Bendigo, Vic

Jason Fletcher MBBS, FCICM, PGDipEcho, Director of Intensive Care Unit, Bendigo Health, Vic

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Table 1. Advance care plan preference against life-prolonging treatment and treatment given in the last three days of life ($n = 52$)

	Advance care plan preference against (n)	Treatment given in last three days of life (n)
CPR	33	0
Intubation	24	2
Tube feeding	24	0
Surgery	19	2
Blood products	14	0
Medication*	20	11
Fluid*	11	2

*Denotes provision under curative (non-palliative) intent. Palliative therapies were not included in this comparison.

CPR, cardiopulmonary resuscitation

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correspondence ajgp@racgp.org.au