



Quality of advance care planning policy and practice in residential aged care facilities in Australia

William Silvester,¹ Rachael S Fullam,¹ Ruth A Parslow,² Virginia J Lewis,² Rebekah Sjanta,¹ Lynne Jackson,¹ Vanessa White,² Jane Gilchrist¹

► Additional tables are published online only. To view these files please visit the journal online (<http://dx.doi.org/10.1136/bmjspcare-2012-000262>).

¹Respecting Patient Choices, Austin Health, Heidelberg, Victoria, Australia

²Australian Institute for Primary Care and Ageing, La Trobe University, Melbourne, Victoria, Australia

Correspondence to

Dr Rachael S Fullam, Respecting Patient Choices, Austin Hospital, PO Box 5555, Heidelberg, VIC 3084, Australia; rachael.fullam@austin.org.au

Accepted 7 August 2012
Published Online First
14 November 2012



To cite: Silvester W, Fullam RS, Parslow RA, *et al.* *BMJ Supportive & Palliative Care* 2013;**3**:349–357.

ABSTRACT

Objectives To assess existing advance care planning (ACP) practices in residential aged care facilities (RACFs) in Victoria, Australia before a systematic intervention; to assess RACF staff experience, understanding of and attitudes towards ACP.

Design Surveys of participating organisations concerning ACP-related policies and procedures, review of existing ACP-related documentation, and pre-intervention survey of RACF staff covering their role, experiences and attitudes towards ACP-related procedures.

Setting 19 selected RACFs in Victoria.

Participants 12 aged care organisations (representing 19 RACFs) who provided existing ACP-related documentation for review, 12 RACFs who completed an organisational survey and 45 staff (from 19 RACFs) who completed a pre-intervention survey of knowledge, attitudes and behaviour.

Results Findings suggested that some ACP-related practices were already occurring in RACFs; however, these activities were inconsistent and variable in quality. Six of the 12 responding RACFs had written policies and procedures for ACP; however, none of the ACP-related documents submitted covered all information required to meet ACP best practice. Surveyed staff had limited experience of ACP, and discrepancies between self reported comfort, and levels of knowledge and confidence to undertake ACP-related activities, indicated a need for training and ongoing organisational support.

Conclusions Surveyed organisations' policies and procedures related to ACP were limited and the quality of existing documentation was poor. RACF staff had relatively limited experience in developing advance care plans with facility residents, although attitudes were positive. A systematic approach to the implementation of ACP in residential aged care settings is required

to ensure best practice is implemented and sustained.

It is widely acknowledged that the application of advance care planning (ACP) is an important component of personalised end-of-life care, and that recognition and accommodation of preferences expressed in ACP documents allow individuals to have control over the level of health care they receive at the end of life.^{1–5} Studies conducted in different healthcare settings suggest that ACP can improve patient and family satisfaction with care,^{6–7} reduce nursing home to hospital transfers,^{8–10} limit the application of burdensome treatments at the end of life in line with patient preferences,^{7–11–12} and reduce indicators of stress, anxiety and depression in surviving relatives.^{6–7}

Effective ACP requires that a number of key processes are undertaken and revised as necessary through ongoing practitioner–patient negotiations. These processes include: (i) consideration of options and expression of values; (ii) communication and documentation of preferences; (iii) identification, where possible, of a surrogate decision maker able to make decisions for treatment when these preferences and decisions cannot be made by the patient; and (iv) ensuring that such documentation is made available to practitioners across different healthcare settings, for example when the patient moves from an aged care facility to hospital.^{3–13–15}

Initiation of discussions leading to the completion of advance directives (ADs) is dependent on the individual policies and priorities of health managers and practitioners.^{16–17} However, the impact of legislation supporting ADs is questionable

even when it is enacted nationally. After the Patient Self-Determination Act was implemented in the USA in 1991,¹⁸ higher proportions of some patient populations completed ADs, in at least some healthcare settings.^{19–22} Despite this improvement in uptake, studies have indicated that there is considerable variability in the concordance between previously expressed treatment preferences and actual treatment provision.^{11 23–26} Organisational policies, procedures and systems are required to reinforce and support good practice.

In Australia, legislation underwriting ADs exists in most but not all states and territories. The legislation varies in terminology, intent and associated physician liability.^{27 28} A number of studies have examined aspects of ACP in Australia, including guidelines for implementing ACP in Australian healthcare settings,^{1 4 29 30} the roles of different health practitioners in supporting ACP,^{31–34} and the outcomes of a randomised controlled trial in which elderly patients were allocated to receive usual care or facilitated ACP.⁶ In the specific context of Australian residential aged care facilities (RACFs), development of advance care plans may or may not be part of the institution's policy, and in those settings where the importance of the ACP process is recognised, the quality of processes and instruments developed has been found to be variable and often questionable.^{4 28 30 33 34} More recently, the need for the provision of quality ACP within Australian residential aged care settings has been highlighted during major healthcare reviews³⁵ and in federal strategies.³⁶ Given these developments, ACP provision within RACFs may have become more extensive and of better quality, although there are no recent studies specifically examining this issue.

The federally funded Respecting Patient Choices (RPC) programme completed the previously noted randomised controlled trial in Melbourne, Australia⁶ and is now completing a major related project 'Making Health Choices' (MHC) which aims to develop, trial and evaluate a sustainable model for implementing ACP in RACFs in Australia. Participating RACFs had not previously received formal ACP training from the RPC programme. The pre-implementation evaluation involved detailed examination of ACP policy and practice within facilities, and staff knowledge, attitudes and behaviours in relation to ACP. This paper presents the key findings of the pre-implementation evaluation; post-implementation changes to these findings will be reported in a future paper. We hypothesised that although pre-implementation ACP awareness and practice within the project facilities may be higher than previously reported, in line with previous research in this area,^{4 28 30 33 34} the quality of ACP practices would be highly variable.

METHODS

All surveys were developed from instruments utilised in a previous ACP implementation study involving 19 RACFs and 187 staff.³⁷ The present evaluation was also informed by best practice principles for ACP in the aged care setting (see box 1 for an overview), formulated by a working group consisting of industry experts in aged and palliative care, academics and RPC staff.

At the beginning of the MHC project, two geographical regions of the state of Victoria, the first in the state's capital and the second in a rural area, were targeted due to a lack of previous RPC ACP implementation in these regions. Information regarding the project was distributed to 51 aged care organisations (representing 93 RACFs) operating within these regions. Organisations that attended a subsequent information session were invited to submit an expression of interest for inclusion in the MHC project. Expressions of interest required a commitment to the

Box 1 An overview of best practice advance care planning (ACP) in residential aged care facilities

- ▶ Facilities have written policies and procedures about ACP that are readily accessible and establish ACP as a routine component of care.
- ▶ Regular ACP education is provided to aged care service staff, residents and relatives, and general practitioners (GPs).
- ▶ Residents and families are given information regarding ACP before or at admission.
- ▶ ACP is offered to residents within 28 days of admission.
- ▶ ACP is completed by an appropriately skilled health professional during an in-depth discussion with the older person and/or their family.
- ▶ The focus of the ACP conversation is on reasonable outcomes and 'living well'. The conversation raises the issues of life-prolonging treatment generally but does not focus on any specific treatment.
- ▶ GPs are involved in ACP discussions.
- ▶ Completed advance care plans are regularly reviewed.
- ▶ ACP documents clearly specify (at a minimum): (a) a nominated substitute decision maker (and contact details) where applicable; (b) current state of health; (c) values and beliefs (things that matter most in life); (d) future unacceptable health conditions; (e) level of preferred future medical treatment indicated; (f) specific wanted/unwanted treatments, where applicable; (g) goals for end-of-life care; and (h) appropriate signatures (clear, complete, dated, witnessed), and include evidence of GP review.
- ▶ Facilities have effective information transfer systems in place to enable communication of resident ACP information across health transition points.

project deliverables from the organisation's executive, an assessment of organisational preparedness and agreement to contribute to ongoing data collection via on-line surveys. Organisations were asked to nominate no more than four RACFs for inclusion in the project. Thirteen aged care organisations (eight metropolitan and five regional, representing 20 RACFs) submitted an expression of interest and all were included in the project. Due to a change of management, one organisation (representing one RACF) subsequently withdrew from the project prior to the start of the education phase. The final project sample comprised 11 metropolitan RACFs (operated by seven aged care organisations) and eight rural RACFs (operated by five organisations). Participating organisations were asked to nominate staff members to attend MHC education programmes. Organisations were specifically requested to nominate both management and senior clinical staff to participate. This strategy was employed in order to support sustainable implementation of ACP during the MHC project.

Data collection

Evaluation of the MHC project was approved by La Trobe University Human Research Ethics Committee. Organisation and facility level consent for inclusion in the project was obtained during the expression of interest process. Individual consent for inclusion in the pre-implementation evaluation was implicit with the completion of survey instruments.

Facility level data

General information about each participating RACF was collected from the Australian Department of Health and Ageing Aged Care Summary Data and Service list.¹ Information was sought on ownership (eg, government, not for profit, private), number of beds and care level. Managers of participating RACFs were asked to complete online resident profile surveys. Information collected included primary reasons for admission of residents, age range of residents and number of resident deaths during the previous financial year. Each RACF manager was also asked to participate in an online pre-implementation survey regarding the organisation's written policies and procedures around ACP, whether ACP practice within each area was routinely audited, and the extent to which ACP discussions covered key domains including discussion of residents' medical treatment options, wishes around hospital transfer, and residents' goals and values. They were also asked to provide copies of any existing ACP-related documentation used to record resident treatment preferences and end-of-life wishes prior to the MHC project. This pre-existing

documentation was reviewed by the MHC project team. The surveys remained open for a period of 1 month before commencement of the education phase of the MHC project.

Staff level data

Staff nominated by their aged care organisations to participate in the MHC project were asked to respond to an online pre-implementation survey which included questions about their sociodemographic attributes, current professional position or classification, years of experience and time fraction worked, their understanding and knowledge of ACP, the application of ACP in RACF settings generally and their workplace specifically, and their experience of facilitating ACP with residents. All respondents were advised that no personally identifying information would be kept with survey responses. The survey remained open for a period of 1 month prior to the start of the education phase of the MHC project.

Data analysis

The data analysis was largely descriptive. Small sample sizes precluded statistical comparison of data according to facility level variables. Limited comparisons based on individual level variables were made for the staff survey data using Mann–Whitney U tests.

RESULTS

Facility data for the 19 participating RACFs are given in table 1. Resident profile data were obtained from 10 of these RACFs. Several RACF managers did not complete this survey due to workload pressures. All responder and non-responder RACFs provided high

Table 1 Profiles of participating residential aged care facilities

	Provided resident profile information (n=10)	Did not provide resident profile information (n=9)	Total (n=19)
Organisation type			
State government	5	4	9
Not for profit	4	3	7
Private, for profit	1	2	3
Located in			
Metropolitan area	4	7	11
Inner regional area	6	2	8
Number of beds			
1–50	3	4	7
51–100	4	5	9
Over 100	3	0	3
Care level			
Low care with aging-in-place	6	1	7
Low and high care	3	2	5
High care	1	6	7

¹<http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-rescare-servlist-download.htm>

care (care for residents who may have complex health-care needs and/or who may require increased support for activities of daily living and/or behavioural management). This was either as the majority of care provided (high-care only facilities), in a separate unit alongside a low-care unit (low and high care) or as part of an aging-in-place facility (high care provided in situ as residents' needs increase). However, there were more high-care only facilities in the non-responder sample. In addition, there were no RACFs with over 100 beds in the non-responder sample.

Resident profile data are provided in table 2. Over 70% of residents admitted during the period studied were 80 or more years old. The primary reason for admission was given as frailty in 60% of cases, with dementia indicated in 30% of cases. It should be noted that collecting data on the primary reason for admission will not measure actual rates of dementia in participant RACFs as residents often have multiple comorbid conditions on admission. However, the admission profile may also reflect the greater number of facilities providing low care in the responder sample.

The survey of current ACP policies and procedures was completed by the managers of 12 of the 19 RACFs. The responder sample had a lower proportion of facilities funded to provide high care only, and a higher proportion of facilities with 100 or more beds (see online supplementary table S1 for a description of the characteristics of responding and non-responding facilities). The 12 RACFs reported written policies and auditing in the following domains: ACP—six with policies, four conducting audits; end-of-life

Table 2 Participating facility resident profile information for 1 July 2009 to 30 June 2010 (n=10)

	Total	Median	Minimum	Maximum
Number of beds	766	67.5	44	127
Average length of stay (months)	–	31.0	2	76.8
Total permanent resident deaths/year	198	14.0	0	46.0
Permanent resident admissions/year	252	21.5	11	50
Admissions/year				
Frail	154	13	0	41
Dementia	59	4	0	21
Palliative	15	0.5	0	5
Social	27	1	0	11
ABI	2	0	0	2
50–59 years old	5	0.5	0	1
60–69 years old	11	1	0	3
70–79 years old	51	4.5	2	9
80–89 years old	126	11	3	24
90+ years old	62	4	0	21

Disparities between the reported total admissions per year and the reported totals for admission by primary reason and by age are due to responder inaccuracy when completing the resident profile survey. ABI, acquired brain injury.

care—eight with policies, eight conducting audits; palliative care—12 with policies, nine conducting audits; resuscitation—six with policies, four conducting audits; consent to treatment—eight with policies, five conducting audits; and substitute decision makers—six with policies, zero conducting audits. Table 3 provides information about how and when ACP information was given to residents, when ACP documents would be completed, and what kinds of information were discussed. Only four of 12 respondents to the organisational survey expressed the view that ACP information was used effectively in their facility.

Reviews of existing ACP-related documentation indicated that participating aged care organisations used a variety of documents to record residents' treatment preferences and end-of-life wishes. Overall, none of the 12 pre-intervention documents submitted for review (representing documents used in all

Table 3 Current ACP practices reported by respondents to the organisational survey

ACP practice item	Number of facilities (n=12)
Provision of ACP information to residents	
No ACP information given	1
On admission	2
After admission	5
On admission and after admission	2
Before admission, on admission and after admission	2
Extent of ACP completion	
All permanent residents*	7
Some permanent residents with no particular rationale	5
Some permanent residents who meet specific criteria	0
Time to advance care plan completion	
Within the 1st month of admission	6
Within the 2nd month of admission	4
On resident/family request only	2
Information collected/discussed	
Appointment of an SDM (MEPOA)/guardianship†	9
Residents' palliative care wishes	10
Residents' pain management guidelines	2
Residents' wishes around hospital transfer in the event of illness	11
Residents' medical treatment options	5
Residents' end-of-life wishes	10
Residents' funeral wishes	10
The things that matter most to the resident about living and their end of life	1

*Permanent resident, excludes residents who are briefly admitted for respite care.

†Guardianship: appointment of a person to make decisions for an adult with a disability when they are unable to do so.

ACP, advance care planning; MEPOA, medical enduring power of attorney; SDM, substitute decision maker.

participating RACFs) adequately covered all information domains seen as essential and required for effective, best practice ACP.^{30 38} Document sets were most likely to include sections related to information about personal/cultural/religious wishes in relation to end-of-life care (questions such as 'Are there any special fulfilling requests or wishes that the resident or family wishes to achieve prior to death'), residents' preferences as regards hospital transfer and a signature section. A future paper will report in more detail on the limitations of existing ACP documentation and consequent recommendations for best practice.

Sixty-five of the 71 RACF staff participants commenced the pre-implementation staff survey. Eight who failed to complete the survey and 11 respondents who completed the survey after they had undertaken online e-learning components of the MHC project training were excluded. Another individual's survey was excluded because her organisation withdrew from the programme. Sociodemographic and employment information provided by the 45 staff who completed the survey is given in table 4. The majority of staff were over 50 years old, had tertiary qualifications, worked full time, had practiced in aged care for 15 years or more, and were registered nurses or managers. Table 5 details the responses provided by participants concerning their previous experience with ACP-related discussions. Overall, the majority of participants had had little or no experience in holding such discussions. Those who had had such discussions or knew of these processes being conducted in their RACF reported that they or other staff members were most likely to initiate such conversations (table 5). The majority of respondents indicated that they were 'comfortable' or 'very comfortable' having discussions around ACP wishes in the event of a deterioration of health and/or end-of-life care. Fewer reported that they felt 'skilled' or 'very skilled' to have such discussions. Levels of confidence reported to undertake the different tasks and activities associated with ACP varied, with the majority of respondents reporting they felt 'not at all confident' or 'a little confident' in relation to most specified activities, including knowing the role of the substitute decision maker, knowing the relevant laws, teaching other healthcare providers about ACP, or mediating when there is a disagreement between the resident and family regarding end-of-life care (see online supplementary table S2 for detailed item responses).

Participant knowledge of ACP was assessed by marking seven statements as true or false. Forty-four per cent of respondents answered four of the questions correctly, with a further 27% answering five questions correctly. However, one statement 'People may appoint anyone they wish as a substitute decision maker' was incorrectly classified as true by over 70% of respondents. Two further statements (both false): 'People must have both a written advance care plan

Table 4 Characteristics of the 45 participants who completed the pre-implementation staff survey

Attribute	Number (%)
Age range (years)	
20–29	1 (2.2)
30–39	7 (15.6)
40–49	13 (28.9)
50–59	21 (46.7)
60 or over	3 (6.7)
Highest educational qualification	
Certificate/diploma	18 (40.0)
Undergraduate degree	6 (13.3)
Graduate diploma/honours	14 (31.1)
Master's degree	7 (15.6)
Time fraction currently worked	
Full-time	25 (55.6)
Part-time (0.5–0.9 equivalent full-time)	17 (37.8)
Part-time (0.1–0.5 equivalent full-time)	3 (6.7)
Current position/classification	
Registered nurse division 1	10 (22.2)
Registered nurse division 2, or senior enrolled nurse	7 (15.5)
Care coordinator/supervisor	6 (13.3)
Service manager	11 (24.4)
Executive officer	3 (6.7)
Director of care/nursing	2 (4.4)
Quality manager	4 (8.9)
Other	2 (4.4)
Years practised in current workplace	
0–4	24 (53.3)
5–9	9 (20.0)
10–14	5 (11.1)
15–19	3 (6.7)
20 or over	4 (8.9)
Years practised in aged care	
0–4	6 (13.3)
5–9	6 (13.3)
10–14	6 (13.3)
15–19	12 (26.7)
20 or over	15 (33.3)

and a substitute decision maker before end-of-life decisions are honoured' and 'If a resident lacks decision-making capacity and does not have a substitute decision maker, healthcare providers must seek legal permission to stop life-sustaining treatment', were incorrectly assessed as true by almost half of participants (see online supplementary table S3). There were no significant differences in total ACP general knowledge score when the sample was split and compared by age, years of aged care experience, or educational qualification level (see online supplementary table S4).

Respondents to the staff survey indicated the extent to which they agreed or disagreed with a number of attitudinal statements concerning ACP and end-of-life

Table 5 Staff survey respondents' experience, comfort and skill in dealing with ACP discussions

	Number (%) who had discussions with			
	Most/all residents	Some residents	Very few/no residents	Have had no discussions
Respondents reporting that, in the past 6 months, they had discussions with residents about				
ACP	3 (6.6)	8 (17.8)	18 (40.0)	16 (35.8)
Residents' wishes in the event of deterioration of health	4 (8.9)	6 (13.3)	35 (46.7)	14 (31.1)
End-of-life care	1 (2.2)	8 (17.8)	36 (44.4)	16 (35.6)
			Number (%)	
Discussions about ACP, deterioration of health/end-of-life care usually initiated by				
			n=45	
Self or other staff			30 (66.7)	
Family or friends of resident			5 (11.1)	
Resident			0 (0.0)	
Other or no discussions occurred			10 (22.2)	
Level of comfort dealing with discussions around ACP, deterioration of health/end-of-life care				
			n=41	
Comfortable or very comfortable			27 (65.9)	
Neither comfortable nor uncomfortable			8 (19.5)	
Uncomfortable or very uncomfortable			6 (14.6)	
Self-perceived skill in dealing with discussions around ACP, deterioration of health/end-of-life care				
			n=42	
Skilled or very skilled			21 (50.0)	
Neither skilled nor unskilled			16 (38.1)	
Unskilled or very unskilled			5 (11.9)	

ACP, advance care planning.

care (see online supplementary table S5). Responses to these statements suggested that participants valued and supported ACP, recognised the importance of documenting the wishes and preferences of residents, and considered that priority should be given to such documented preferences over relatives' wishes and standard medical protocols.

The 45 staff respondents were also asked about organisational policies and procedures within the RACF. Only 16 (35.6%) reported that their service had policies and procedures concerning ACP; 14 of these 16 respondents had read those documents. Twenty-three respondents (51.1%) reported that their service had no such procedures in place, while the six remaining participants (13.3%) did not know whether or not such policies and procedures existed in their service. Responses to questions concerning actual and documented procedures for recording ACP discussions are given in table 6. Approximately half of the respondents (53%) said that ACP was implemented 'poorly' or 'very poorly' within their RACF.

When respondents were asked about their recognition of and compliance with advance care plans in the past, 71% indicated they would trust ('quite a bit'/'very much') the information recorded about a resident's advance care and/or end-of-life wishes, and 74% said they would use the information recorded in a resident's ACP to guide the treatment and care that they provided ('quite a bit'/'very much'). Sixteen of the 45 respondents said they had cared for a resident

with an ACP in the past 6 months. Five respondents said that in the past 6 months they had provided treatment to a resident who had previously indicated that

Table 6 Current procedures and practices around advanced care planning (ACP) in residential aged care facilities as reported by staff survey respondents

Actions taken when a resident/family member raises ACP issues	% Usually taking this action*
Tell	
Senior nursing staff	54.5
Resident's GP	65.6
Another family member	24.1
Formally document discussions	78.6
Don't know what to do	3.8
Documentation of ACP discussions in facility	% Endorsing this option*
Not documented	12.0
Recorded in	
Clinical notes by nursing staff	97.1
Clinical notes by GP	84.8
Clinical notes by allied health staff	50.0
Resident care plan	79.3
'Not for resuscitation' form	97.2
End-of-life care/palliative care plan	94.1
A specific ACP form	41.4
Admission documentation	65.5

*Percentages calculated from those responding to question. GP, general practitioner.

they did not want that treatment and six said they had observed others providing treatment to a resident who had previously indicated that they did not want that treatment.

DISCUSSION

This paper summarises findings from a pre-implementation evaluation of 19 RACFs and selected staff participating in the MHC project. Current policies, procedures and practices around ACP were explored in 12 RACFs who completed the relevant survey. It also provides a brief overview of the results of a review of the contents and quality of existing ACP-related documentation in use at all participating facilities. It covers in detail the level of awareness, knowledge and practice related to ACP reported by 45 staff members working in a range of nursing and administrative positions within participating RACFs.

Overall, the findings from these surveys and documentation review suggest that some ACP-related practices were already occurring within facilities prior to the start of the MHC project, but that such activities were variable and lacked key components fundamental for best practice (see box 1). While these facilities were targeted because they had not previously received formal RPC training, some organisations had developed local practices relevant to ACP, a finding also reported previously.³⁷ Although conclusions to be drawn from the available survey data are limited by small sample sizes, there is evidence of deficits in ACP practice in facilities prior to the implementation of the MHC project. For example, only half of the facilities reported having an ACP-specific policy at pre-implementation and none of the existing documentation submitted by participating RACFs adequately covered all domains required for best practice. These findings are also in line with other Australian studies.^{4 28 30 33 34 39}

Only a quarter of staff participants reported having discussed ACP with at least some RACF residents within the last 6 months. Fewer participants had specifically addressed issues such as residents' wishes in the event of deterioration in health or their end-of-life care. Given this limited experience, the validity of participants' self-reported comfort and skill in holding such discussions might be queried, and the apparent discrepancy between higher self-rated levels of comfort, but limited ACP knowledge and lower ratings of skill and confidence, understood. Staff attitudes were supportive of ACP, even where knowledge was sometimes weak. These results indicate a readiness to receive and implement ACP training in RACF staff. The majority of staff reported that few ACP discussions were initiated by the residents or their family, further reinforcing the need for staff to have the skills and confidence to initiate ACP discussions. The latter finding may reflect the residents' unwillingness to consider the issue (possibly underpinned by cognitive

impairment),⁴⁰ but may also reflect limited provision of information to residents regarding the opportunity to engage in ACP. The ineffectiveness of an ad hoc approach to ACP is reflected in the disparity between the apparent existence of ACP and end-of-life care policies and the self-reported low incidence of ACP discussions and documentation, and the 'poor' or 'very poor' implementation of ACP in these facilities.

The results of this study highlight the need to have a systematic approach to the implementation of ACP in RACFs for sustainable ongoing good practice. Interventions need to address existing shortcomings in organisational and staff capacity to ensure effective provision of ACP. In particular, ACP implementation has to address a major practical dilemma experienced by healthcare professionals in aligning philosophical views concerning the role and importance of ACP with making clinical treatment decisions that conflict with the preferences expressed in advance care plans. In the current pre-implementation data, while close to 80% of respondents reported that they would formally document ACP issues (only 41% indicated that a specific ACP form was used to achieve this), almost 30% expressed limited trust in the validity of such recorded information, while around one in four would not consistently use this information to guide treatment choices. Similarly, while a large majority of respondents considered a healthcare provider should not overrule an ACP when they disagreed with it, some two thirds of respondents felt it was not a nurse's responsibility to flag this conflict with the medical practitioner when it occurred. A systematic approach to ACP training and sustainable organisational implementation is required to ensure that the quality of ACP in RACFs and other settings is improved.

We recognise that the research has a number of limitations. The number of RACFs who responded to the pre-implementation survey of policies and practice was small, and represented 63% of facilities participating in the trial. This response rate and the response rate for provision of resident profile information is most likely a reflection of the extensive data collection required and is not thought to indicate a lack of enthusiasm by participating facilities. In line with this, all participating aged care organisations provided current RACF ACP documentation for quality review. The number of training participants who responded to the pre-implementation survey is relatively small although drawn from a number of different RACF settings. Although the study only involved RACFs in one Australian state, it represented a broad mixture of RACFs, metropolitan and rural, public and private, and may be a reasonable representation of ACP practice in Australian RACFs.

CONCLUSION

Overall, the findings from these surveys and documentation review suggest that some ACP-related

practices were already occurring within facilities that had not previously been exposed to RPC initiatives specific to this topic. Nonetheless, there is evidence that existing ACP practices in facilities had pronounced deficits and that surveyed RACF staff had limited experience in discussing and documenting ACP with residents, and reported poor implementation of ACP in their facilities. Initiatives providing guidelines and education concerning ACP best practice are required to ensure that such documents are prepared for all residents who wish to engage in ACP, are comprehensive and are routinely used to inform health choices at end of life.

Acknowledgements We would like to thank all participating aged care organisations and associated residential aged care facilities and staff.

Contributors WS: project lead; RSF & RAP: data analysis; VJL: study design. All authors contributed to the first draft and revisions.

Funding The Australian Government Department of Health and Ageing, National Palliative Care Program funded this study.

Competing interests None.

Ethics approval La Trobe University Human Research Ethics Committee approved evaluation of the MHC project.

Provenance and peer review Not commissioned; externally peer reviewed.

Open Access This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 3.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/3.0/>

REFERENCES

- Jeong SY, Higgins I, McMillan M. The essentials of Advance Care Planning for end-of-life care for older people. *J Clin Nurs* 2010;19:389–97.
- Alfonso H. The importance of living wills and advance directives. *J Geront Nurs* 2009;35:42–5.
- Cantor MD, Pearlman RA. Advance care planning in long-term facilities. *J Am Dir Assoc* 2004;5(2 Suppl):S72–80.
- Nair B, Kerridge I, Dobson A, *et al.* Advance care planning in residential care. *Aus NZ J Med* 2000;30:339–43.
- Blackford J, Strickland E, Morris B. Advance care planning in residential aged care facilities. *Contemp Nurse* 2007;27:141–51.
- Detering KM, Hancock AD, Reade MC, *et al.* The impact of advance care planning on end of life care in elderly patients: randomised controlled trial. *BMJ* 2010;340:1345.
- Wright AA, Zhang B, Ray A, *et al.* Associations between End-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. *J Am Med Dir Assoc* 2008;300:1665–73.
- Caplan GA, Meller A, Squires B, *et al.* Advance care planning and hospital in the nursing home. *Age Ageing* 2006;35:581–5.
- Teno JM, Gozalo P, Mitchell SL, *et al.* Terminal hospitalizations of nursing home residents: does facility increasing the rate of do not resuscitate orders reduce them? *J Pain Symptom Manage* 2011;41:1040–7.
- Badger F, Clifford C, Hewison A, *et al.* An evaluation of the implementation of a programme to improve end-of-life care in nursing homes. *Palliat Med* 2009;23:502–11.
- Hickman SE, Nelson CA, Moss AH, *et al.* The consistency between treatments provided to nursing facility residents and orders on the physician orders for life-sustaining treatment form. *J Am Geriatr Soc* 2011;59:2091–9.
- Monturo CA, Strumpf NE. Advance directives at end-of-life: nursing home resident preferences for artificial nutrition. *J Am Med Dir Assoc* 2007;8:224–8.
- Weinick RM, Wilcox SR, Park ER, *et al.* Use of advance directives for nursing home residents in the emergency department. *Am J Hosp Palliat Care* 2008;25:179–83.
- Miles SH, Koepf R, Weber EP. Advance end-of-life treatment planning. A research review. *Arch Intern Med* 1996;156:1062–8.
- Pauls MA, Singer PA, Dubinsky I. Communicating advance directives from long-term care facilities to emergency departments. *J Emerg Med* 2001;21:83–9.
- Hinders D. Advance directives: limitations to completion. *Am J Hosp Palliat Care* 2011;29:286–9.
- Brown M. The law and practice associated with advance directives in Canada and Australia: similarities, differences and debates. *J Law Med* 2003;11:59–76.
- Baker ME. Economic, political and ethnic influences on end-of-life decision-making: A decade in review. *J Health Soc Policy* 2002;14:27–39.
- Bradley EH, Wetle T, Horwitz SM. The patient self-determination act and advance directive completion in nursing homes. *Arch Fam Med* 1998;7:417–23.
- Orlander JD. Use of advance directives by health care workers and their families. *South Med J* 1999;92:481–4.
- Daaleman TP, Williams CS, Preisser JS, *et al.* Advance care planning in nursing homes and assisted living communities. *J Am Med Dir Assoc* 2009;10:243–51.
- Resnick HE, Schuur JD, Heineman J, *et al.* Advance directives in nursing home residents aged > or =65 years: United States 2004. *Am J Hosp Palliat Care* 2008;25:476–82.
- Yuen JK, Reid MC, Fetters MD, *et al.* Hospital Do-Not-Resuscitate orders: Why they have failed and how to fix them. *J Gen Intern Med* 2011;26:791–7.
- Biola H, Sloane PD, Williams CS, *et al.* Preferences versus practice: life-sustaining treatments in last months of life in long-term care. *J Am Med Dir Assoc* 2010;11:42–51.
- Toller CA, Budge MM. Compliance with and understanding of advance directives among trainee doctors in the United Kingdom. *J Palliat Care* 2006;22:141–6.
- Bond CJ, Lowton K. Geriatricians' views of advance decisions and their use in clinical care in England: qualitative study. *Age Ageing* 2011;40:450–6.
- Taylor D, Cameron PA. Advance care planning in Australia: overdue for improvement. *Intern Med J* 2002;32:475–80.
- Brown M, Grbich C, Maddocks I, *et al.* Documenting end of life decisions in residential aged care facilities in South Australia. *ANZ J Pub Health* 2005;29:85–90.
- Mitchell G, Nicholson C, McDonald K, *et al.* Enhancing palliative care in rural Australia: the residential aged care setting. *Aus J Primary Health* 2011;17:95–101.
- Lyon C. Advance care planning for residents in aged care facilities: what is best practice and how can evidence-based

- guidelines be implemented? *Int J Evid Based Healthcare*, 2007;5:450–7.
- 31 Chang E, Hancock K, Harrison K, *et al.* Palliative care for end-stage dementia: A discussion of the implications for education of health care professionals. *Nurse Educ Today* 2005;25:326–32.
 - 32 Jeong SY, Higgins I, McMillan M. Advance care planning (ACP): The nurse as “broker” in residential aged care facilities. *Contemp Nurse* 2007;26:184–95.
 - 33 Shanley C, Whitmore E, Khoo A, *et al.* Understanding how advance care planning is approached in the residential aged care setting: A continuum model of practice as an explanatory device. *Australas J Ageing* 2009;28:211–5.
 - 34 Fernandes G. Implementation of best practice in advance care planning in an ‘ageing in place’ aged care facility. *Int J Evid Based Healthc* 2008;6:270–6.
 - 35 Commonwealth of Australia. A National Health and Hospitals Network for Australia’s Future: Delivering better health and better hospitals. 2010; Appendix C, 411–3. [http://www.health.gov.au/internet/yourhealth/publishing.nsf/Content/report-redbook/\\$File/HRT_report3.pdf](http://www.health.gov.au/internet/yourhealth/publishing.nsf/Content/report-redbook/$File/HRT_report3.pdf) (accessed 20 Feb 2012).
 - 36 Commonwealth of Australia. Supporting Australians to Live Well at the End of Life: National Palliative Care Strategy. 2010. [http://www.health.gov.au/internet/main/publishing.nsf/Content/533C02453771A951CA256F190013683B/\\$File/NationalPalliativeCareStrategy.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/533C02453771A951CA256F190013683B/$File/NationalPalliativeCareStrategy.pdf) (accessed 20 Feb 2012).
 - 37 Silvester W, Blackford J, Strickland E, *et al.* Final Evaluation of the Community Implementation of the Respecting Patient Choices Program. <http://www.health.gov.au/in...0Silvester%20et%20al%20Submission%20B.pdf> (accessed 5 Jan 2012).
 - 38 Commonwealth of Australia. *A National Framework for Advance Directives*. The Clinical, Technical and Ethical Principal Committee of the Australian Health Minister’s Advisory Council, 2011. http://www.ahmac.gov.au/cms_documents/AdvanceCareDirectives2011.pdf (accessed 10 Jun 2012).
 - 39 Bezzina A. prevalence of advance care directives in aged care facilities in the Northern Illawarra. *Emerg Med Aust* 2009;21:379–85.
 - 40 Schickedanz AD, Schillinger D, Landefeld S, *et al.* A clinical framework for improving the Advance Care Planning process: Start with patients’ self-identified barriers. *J Am Ger Soc* 2009;57:31–9.

Supplementary Table 1 Characteristics of responders / non responders to the organisational survey of ACP policies and practices

	Number of facilities	
	Respondents (n=12)	Non respondents (n=7)
Organisation type		
State Government operated	6	3
Not for profit	5	2
Private, for profit	1	2
Located in		
Metropolitan area	6	5
Inner regional area	6	2
Number of beds		
1-50	5	2
51-100	3	5
Over 100	4	0
Care level		
Low care with aging in place	5	2
Low and high care	4	1
High care	3	4

Supplementary Table 2 Staff survey respondents' self-reported confidence in undertaking specified roles/activities within ACP

Tasks/roles/Activities	Number of respondents (%)		
	Not at all confident /a little confident	Quite confident / very confident	Not applicable
Knowing the role of surrogate decision makers	31 (68.9)	10 (22.2)	4 (8.9)
Initiating advance care plan discussions with residents*	19 (42.2)	22 (48.9)	4 (8.9)
Answering residents' questions about advance care plans	21 (46.7)	20 (44.4)	4 (8.9)
Answering family members' questions about advance care plans	21 (46.7)	21 (46.7)	3 (6.7)
Complying with the provisions of residents advance care plans	10 (22.2)	32 (71.1)	3 (6.7)
Implementing institutional policy and procedures for advance care plans	18 (40.0)	21 (46.7)	6 (13.3)
Mediating when there is a disagreement between residents and family members regarding end of life decisions	31 (68.9)	11 (24.4)	3 (6.7)
Teaching other health care providers about advance care plans	30 (66.7)	13 (28.9)	2 (4.4)
Knowing state laws regarding advance care plans	38 (84.4)	5 (11.1)	2 (4.4)

Supplementary Table 3 Staff survey respondents' ACP general knowledge around ACP

ACP General Knowledge statement	Correct (%)	Incorrect (%)	Don't know (%)
1 People must have both a written advance care plan and a substitute decision maker for health care before end-of-life decisions are honoured. (ANS = False)	21 (46.7)	19 (42.2)	5 (11.1)
2 An advance care plan enables individuals to describe in writing the type of health care they do or do not wish to receive when they are no longer able to speak for themselves. (ANS = True)	43 (95.6)	0	2 (4.4)
3 A substitute decision maker for health care gives a person the authority to make health care decisions for the individual when he/she is no longer able to make those decisions. (ANS = True)	40 (88.9)	2 (4.4)	3 (6.7)
4 People may appoint anyone they wish as their substitute decision maker (ANS = False)	6 (13.3)	33 (73.3)	6 (13.3)
5 Appointment of a substitute decision maker for health care must always be signed and witnessed. (ANS = True)	36 (80.0)	3 (6.7)	6 (13.3)
6 If a resident lacks decision-making capacity and does not have a substitute decision maker, health care providers must seek legal permission to stop life-sustaining treatment. (ANS = False)	10 (22.2)	20 (44.4)	15 (33.3)
7 An advance care plan becomes effective when people are not able to make and/or communicate their medical treatment decisions. (ANS = True)	32 (71.1)	9 (20.0)	4 (9.9)

Supplementary table 4. ACP general knowledge score by age, years of aged care experience and educational level.

Demographic/employment variable	Median ACP general knowledge score	Mann-Whitney U	Statistical significance
Age	<40 years	138.50	Not significant
	≥40 years		
Experience in aged care	< 10 years	179.0	Not significant
	≥10 years		
Educational qualifications	Undergraduate degree or lower	241.0	Not significant
	Postgraduate diploma or higher		

Supplementary Table 5 Participants' attitudes towards aspects of developing and implementing ACPs and End-of-life plans

Statement	Percentage whose response to statement was: (n=45)		
	Disagree or strongly disagree	Agree or Strongly agree	Don't know
1 Residents with decision-making capacity who are not terminally ill should have right to refuse life support even if that decision may lead to death	2.2	97.7	0.0
2 Most of the time residents don't know enough about health care to prepare Advance Care Plans	40.0	60.0	0.0
3 Staff should go against relatives' wishes if they conflict with the resident's end of life decisions	37.7	44.5	17.8
4 It is appropriate to give medication to relieve pain even if it may hasten a resident's death	4.4	91.1	4.4
5 Staff should be actively involved in helping residents complete advance care plans	4.4	91.1	4.4
6 It is not the nurse's responsibility to confer with the doctor about medical treatment if a resident's rights have not been considered	66.7	20.0	13.3
7 Staff should persuade residents to accept treatment when this is best for them regardless of the Advance Care Plans	86.6	8.9	3.3
8 Staff should help inform residents about their condition and treatment alternatives when preparing an Advance Care Plan	0.0	93.3	6.7
9 It is impossible to make good end-of-life plans if a resident and their family have difficulty communicating	55.5	40.0	4.4
10 With Advance Care Plans residents are able, even in conditions of incapacity, to retain their authority and autonomy regarding their health care	2.2	93.4	4.4
11 Health care providers usually know the wishes of their residents regarding end-of-life care without having formal documentation	77.8	22.2	0.0
12 The information in an Advance Care Plan is usually sufficient to guide treatment	17.8	68.9	13.3
13 Some resident are excluded from making decisions about their care because they are inappropriately judged to lack capacity to make decisions	17.7	73.3	8.9
14 When providers disagree with a resident's Advance Care Plan, providers use their own judgment whether to follow the Advance Care Plan.	77.8	8.9	13.3
15 Most of the time family members know the resident's preference regarding end-of-life care	51.1	48.9	0.0
16 Helping residents complete an Advance Care Plan is emotionally draining	48.9	42.2	8.9