Australian Government
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Use of aged care services before death

DATA LINKAGE SERIES NO. 19

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Authoritative information and statistics to promote better health and wellbeing

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Abbreviations

ACAP	Aged Care Assessment Program
ACAT	Aged Care Assessment Team (for ACAP)
AIHW	Australian Institute of Health and Welfare
CACP	Community Aged Care Package
EACH	Extended Aged Care at Home
EACHD	Extended Aged Care at Home Dementia
HACC	Home and Community Care
LOC	length of care
PIAC	Pathways in Aged Care
PRAC	permanent residential aged care; that is, permanent RAC (used in tables and figures only)
RAC	residential aged care (subsidised by the Australian government)
RRC	residential respite care; that is, respite RAC (used in tables and figures only; used rather than RRAC to allow easy differentiation between permanent and respite RAC)
TCP	Transition Care Program
VHC	Veterans' Home Care

Symbols

–	nil or rounded to zero
. .	not applicable
→	followed by
cum.	cumulative
n	number

Summary

In 2010–11, 116,481 people died in Australia aged at least 65. This report examines these people's use of aged care services in the 8 years before they died. Three-quarters of this group used an aged care service during the 12 months before they died. While some used aged care services only in the year before death, others had accessed services over several years.

The analysis uses the Australian Institute of Health and Welfare's Pathways in Aged Care extended database. This database covers the Aged Care Assessment Program (ACAP) and use of seven aged care service programs from 1 July 2002 to 30 June 2011, as well as deaths. The service programs included are residential aged care (RAC, both permanent and respite), three aged care package programs, the Transition Care Program, Home and Community Care (HACC) and Veterans' Home Care (VHC). ACAP data are not included in the current analysis as person-level assessment data were only available nationally from 2006–07.

People who died in 2010–11 aged at least 65

- The average age at death of these people was 83.4; 48% were male.
- On average, the women were older than the men when they died (85.2 versus 81.5).
- Overall, 80% had used aged care in the 8 years before death. People who died aged 85 and older were much more likely to have used care before death than those who died at younger ages (91% versus 57% of people aged 65–74 at death).
- Three-fifths were current clients of aged care programs when they died.

Timing of program use

- Almost half (47%) began using aged care more than 4 years before death.
- In all age groups, there was increased take-up of care in the last 6 months of life. This trend was much more marked for people who died aged 65 to 74.
- The older a person was when they died, the more likely they were to have been accessing a care program at the time of death.
- Around 10% stopped using aged care in the last quarter before death.

Patterns of program use

- People used a diversity of care pathways, with use of aged care programs varying considerably, both in terms of when care was accessed and the care programs used.
- Around 80% of people who used a program began by using HACC or VHC. Permanent RAC was the first service used for about half of the remainder.
- Just over one-third of program users accessed only HACC or VHC, while 1 in 10 used only permanent RAC in the 8 years before they died.
- Almost half (46%) of program clients used combinations of community care and permanent and/or respite RAC.
- Permanent RAC was the last aged care service used by 54% of program users, and 43% of those who died in total.
- People who used aged care commonly had several episodes of care. On average, VHC and permanent RAC provided their clients with the longest care (length of care of 3.1 and 2.7 years, respectively, combining all episodes of use).

1 Introduction

Previous analysis has shown that three-quarters of people who died in 2010–11 aged 65 and over had used an aged care service at some time in the year before (AIHW 2014). Among the very old (aged 85 and over), this was true for nearly 9 out of 10 people. While some used aged care services only in the year before death, others accessed services over a number of years. This previous analysis examined use of aged care services between 2002–03 and 2010–11, looking broadly at the annual use of aged care services by people aged 65 and over, as well as program use in the 12 months and 5 years before death. This current report examines more extensively program use before death, presenting data on people's use of aged care in the 8 years before they die. It looks at what programs were used first and last, the number of episodes of service use, combinations of programs accessed, and length of care. The analysis centres on the 116,481 people who died in 2010–11 at age 65 or more.

Data source and scope

This study uses the Pathways in Aged Care (PIAC) extended database, developed by the Australian Institute of Health and Welfare (AIHW). The database—which allows for person-based analyses—covers aged care assessments carried out under the Aged Care Assessment Program (ACAP) and all use of 7 aged care service programs from 1 July 2002 to 30 June 2011 (see Box 1), as well as all deaths in the period (irrespective of age or program use). A detailed description of the development of the database is given in *Patterns in use of aged care: 2002–03 to 2010–11* (AIHW 2014).

The scope of the PIAC database means that it includes all people who either used one of the selected programs between 1 July 2002 and 30 June 2011 or who died in that period. As noted above, this report focuses on the 116,481 people who died in 2010–11 aged at least 65. These people are in one of four service use groups:

- those who used services only before 1 July 2002
- those who used services both before and after 1 July 2002
- those who used services only after 1 July 2002
- those who never used a service.

Using currently available data, it is not possible to distinguish between the first and last of these groups. Hence, analysis of use of care programs is limited to the period for which consistent data are available; that is, to the 8 years before death. Available data indicate that, of the people who did not use services in these 8 years, very few would have used them previously.

Programs covered in the analyses for this report include residential aged care subsidised by the Australian Government (RAC, including both permanent and respite care), the three aged care package programs (Community Aged Care Packages [CACP], the Extended Aged Care at Home [EACH] and Extended Aged Care at Home Dementia [EACHD]) programs, the Transition Care Program (TCP), Home and Community Care (HACC), and Veterans' Home Care (VHC) (see Box 1). Person-level Aged Care Assessment Program (ACAP) assessment data were available nationally only from 2006–07. Hence, ACAP data are not included in this report.

Box 1: Aged care programs included in the PIAC database

The PIAC database includes data from ACAP and seven aged care service programs. The purpose of these eight programs is described briefly below.

- **Aged Care Assessment Program** (operating from 1985). Under ACAP, multidisciplinary Aged Care Assessment Teams (ACATs) determine people's care needs and make a recommendation concerning the preferred long-term living arrangement for the client. Relevant approvals are required from an ACAT in order to access subsidised RAC, CACP, EACH, EACHD and TCP, but are not needed to access HACC or VHC.
- **Residential aged care** (funded by the Australian Government from 1963). The Australian Government subsidises residential aged care facilities to provide permanent residential care and residential respite care for older people. An ACAT approval is required to access funded places for both permanent and respite RAC. For the period covered in this report, an ACAT approval was also required for permanent residents moving between facilities in order to change from low care to high care.
- **Community Aged Care Packages** (operating 1992–2013). CACPs provide support services for older people with complex needs living at home who would otherwise be eligible for admission to 'low-level' residential care. They provide a range of home-based services, excluding home nursing assistance and allied health services, with care being coordinated by the package provider. Access requires an ACAT approval.
- **Extended Aged Care at Home** (operating 2002–2013). EACH provides packaged care at home that is equivalent to 'high-level' residential care. Access requires an ACAT approval.
- **Extended Aged Care at Home Dementia** (operating 2006–2013). EACHD provides a community care option specifically aimed at high-care clients with dementia and behavioural and psychological symptoms. Access requires an ACAT approval.
- **Transition Care Program** (operating from 2005). TCP provides short-term care to older people leaving hospital who are assessed as otherwise being eligible for at least low-level RAC. It aims to improve recipients' independence and functioning, and delay entry into RAC. Access requires an ACAT approval. TCP care can be provided at home or in 'live-in' facilities, including RAC and hospital.
- **Home and Community Care** (operating from 1985). HACC provides a large range of services (including allied health and home nursing services) to support people at home and to prevent premature or inappropriate admission to residential care (see AIHW 2011, Appendix B, for a list of services provided).
- **Veterans' Home Care** (operating from 2001). VHC provides a relatively small range of services to help veterans, war widows and widowers with low-level care needs to remain living in their own homes longer (see AIHW 2011, Appendix B, for a list of services provided). Eligible veterans who need higher amounts of personal care than provided under VHC may be referred to the Community Nursing Program (Gold or White Repatriation Health Card holders only).

Source: AIHW 2014, Box 1.1.

In this report, the term 'community care' includes the following five programs: CACP, EACH, EACHD, HACC and VHC. 'Packaged care' is a subset of 'community care' and includes the CACP, EACH and EACHD programs. Also, the terms 'residential aged care',

'RAC' and 'residential care' all refer to care provided in government-funded places in a residential aged care facility.

Age and sex profile

Overall, the average age at death of people who died during 2010–11 aged 65 and over was 83.4, and 48% were male (Table A1). Consistent with the greater longevity of women, the women tended to be older than the men when they died, with a mean age at death of 85.2 compared with 81.5 for men.

Nearly two-thirds (64%) of people who died without using any aged care services in the 8 years before death were men (Table A1). Those who died without using aged care services tended to be younger than those who did, with a mean age of 78.0 compared with 84.8 for those who used aged care services. Women who died without using any aged care were, on average, just over 2 years older than the men when they died (mean of 79.3 years versus 77.2 years).

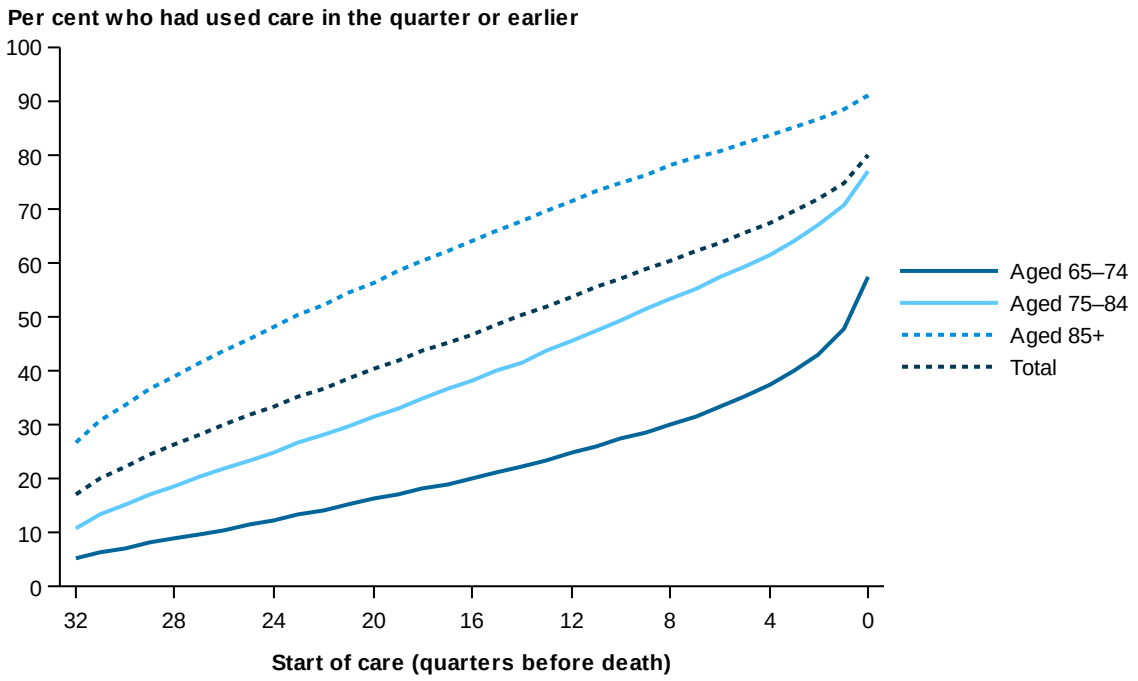
2 First use of aged care

Overall, 80% of people who died during 2010–11 at age 65 or more had used at least one aged care service in the 8 years before their death (Table A1). Many people had accessed care services a number of years before their death: 50% had used an aged care service at least 3½ years before, and one-third had used care services more than 6 years before dying (Figure 1; Table A2). Moreover, the data indicate that around one-sixth of the cohort had used aged care at least 8 years before their death, with this proportion increasing with age at death.

Timing of first care

One (1) in 6 people who used aged care in the 8 years before they died began that care within 1 year of their death, and half began no more than 5 years before dying (Table A3). On the other hand, over one-fifth had started using aged care services at least 8 years before they died.

People who died at older ages were more likely to have used aged care before they died than those who died at younger ages (Figure 1). More specifically, just over 90% of people aged 85 and over when they died had accessed aged care in the 8 years before their death, compared with 57% of those aged 65 to 74 (Table A2). In all age groups, there was increased take-up of care in the last quarter or 2 of life (quarters being relative to death and all 91.3 days long [365.25/4]). However, among those who died aged between 65 and 74, this higher growth in program use began earlier. Just 30% of this younger age group accessed aged care more than 2 years before their death; by the time of death, the proportion who had used aged care services had nearly doubled, to 57%. On the other hand, for people who died aged at least 85, there was generally a steady growth in use of aged care, with the proportion having accessed care increasing by 1–2 percentage points for all but the last quarter for the 7 years preceding death. These differences most likely reflect the differing care needs of people who have a sudden debilitating health event at a relatively young age (such as stroke) compared with those whose capacity to live independently gradually declines (for example, due to increasing osteoarthritis).



Note: Quarters are relative to death and are all 91.3 days long (365.25/4). Quarter 1 ends with the death of the person. People who used care programs only more than 8 years before their death could not be identified and so are included in the 20% classified as never having accessed care.

Source: Table A2.

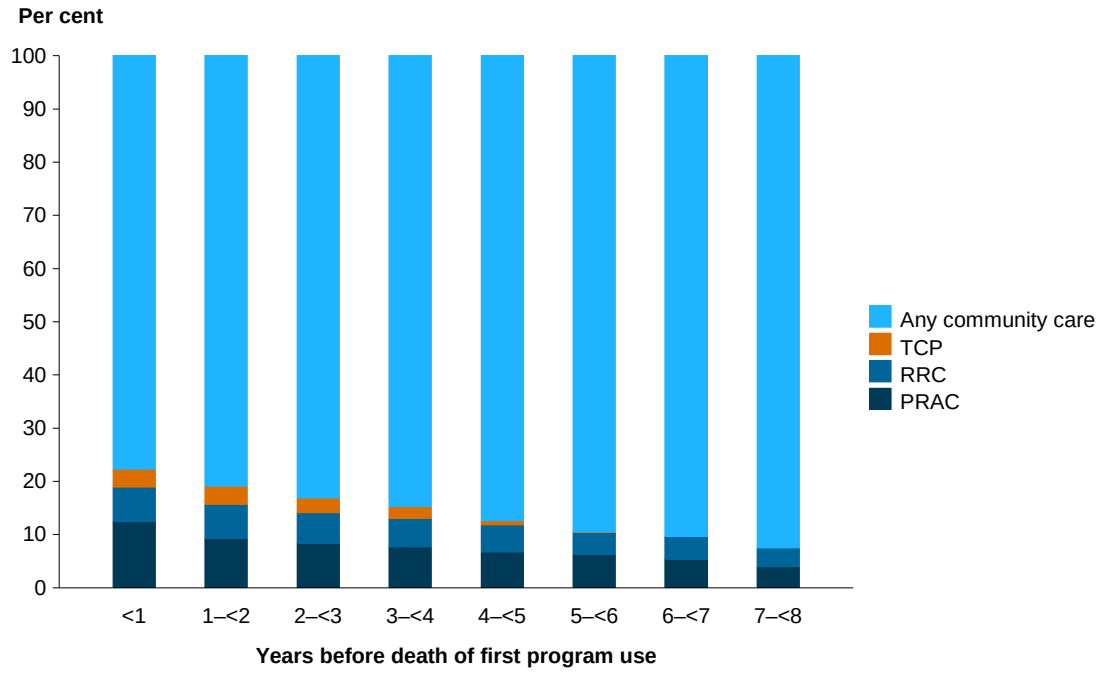
Figure 1: Earliest program use in the 8 years before death, people who died in 2010–11 aged 65+

First program used

Community care as the starting point

The majority of people first used community care (67% of all deaths, equating to 84% of those who used a program) (Table A1; Table A3). Permanent RAC (referred to in tables and figures as PRAC) was the first service used by 1 in 10 of those who accessed aged care, while HACC was the first program used by nearly three-quarters of them (Table A3). Few people started their care use as a client of the small EACH and EACHD programs (0.2% of the cohort), or as a client of the relatively new TCP (1%).

People were much more likely to first access community care than residential care, irrespective of how long before death they first accessed care (Table A3). This percentage tended to increase the longer a person had been accessing care: 78% of people who started using a care program within 1 year of their death began by using community care, compared with 93% who began in the eighth year before death (Figure 2). A previous ACAP-based cohort analysis showed that people who first accessed care within 12 months of their death were more likely than others to be approved for permanent RAC, and were also more likely to take up this care (see AIHW 2014: section 3).



Notes

1. 'Community care' includes CACP, EACH, EACHD, HACC and VHC.

2. RRC = residential respite care.

Source: Table A3.

Figure 2: Program first used by years before death of first use, people who died in 2010–11 aged 65+

Age and sex differences

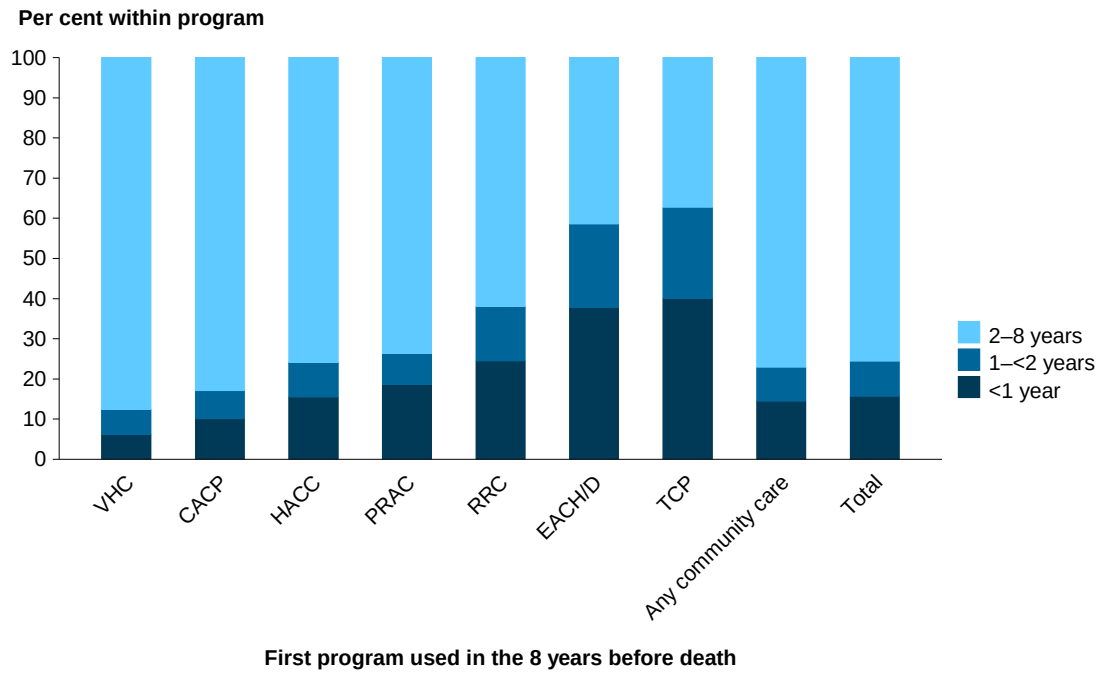
Around two-thirds of people whose first identified program use was permanent RAC or a CACP were women, as were over half of those starting with residential respite care (referred to as RRC in tables and figures) or HACC (Table A1). In contrast, men were in the majority among people who started their care use with either the EACH, EACHD, TCP or VHC program, with those who started using care by accessing VHC or EACH the least likely to be female (around 42% female). The VHC group also tended to be older than other people in the cohort, with an average age at death of 88.5. Those accessing either residential care or a CACP before other care were also relatively old at death (average age was over 86) (Table A1). (Note that these differences in the sex and age profile by first program use may be affected by the fact that we have been able to look at program use only in the 8 years before death; some people may have used a different care program before then.)

Differences in timing

People whose first program use in the 8 years before death was either permanent RAC or CACP were more likely than others to have accessed care 8 or more years before death; around 40% of these two groups were in this category, compared with 34% whose first program use was VHC and 18% whose first program use was HACC (Table A3). However, it should be remembered that the first episode of care observed in the 8 years before death may have started before the study period, and that some people in the associated 'At least 8 years'

category may have had even earlier care episodes. Hence, a proportion of people who were identified as starting with permanent RAC or CACP in the study period could have had earlier episodes of care; for example, in community care or residential respite care.

People who began with care under the community care programs of CACP, HACC and VHC were more likely to use aged care over longer periods than those starting with residential care. Specifically, 15% or fewer of people who began their care using one of these community care programs started that care within 1 year of death, compared with almost one-fifth (19%) of those whose first program use in the 8 years before death was permanent RAC. For people who began with residential respite care, nearly one-quarter used this care within 1 year of death, and 38% began within 2 years (Figure 3). Among the small number of people who started care using the EACH or EACHD programs or TCP, relatively large proportions (over 50%) had begun that care less than 2 years before their death (Table A3).



Note: EACH and EACHD have been combined (EACH/D column) due to small numbers.

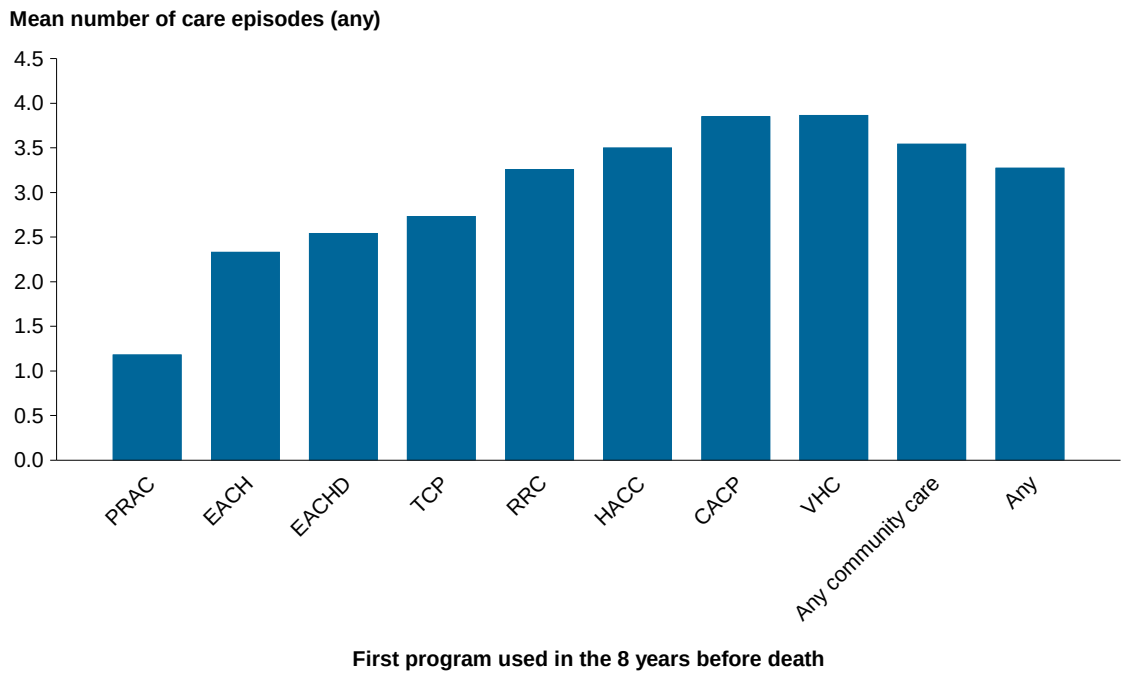
Source: Table A3.

Figure 3: Time before death of first program use by program first used in the 8 years before death, people who died in 2010–11 aged 65+

Episodes of care

Just under half of the cohort (49%) had 4 or more distinct care episodes in the 8 years before they died, with the average number of care episodes being 3.3 among those who accessed at least 1 care program (Table A4). The number of episodes of care varied with the program first accessed (Figure 4). As would be expected, people who first used community care were more likely to have multiple care episodes than those who first used permanent RAC in the 8-year period. In 91% of cases, people who first used permanent RAC had only 1 care episode. People whose first program use in the study period was residential respite care or the community care programs of CACP, HACC and VHC all averaged more than 3 care episodes in the 8 years before death.

Irrespective of the number of care episodes a person had, program use was likely to begin with accessing HACC (Table A4). Even among those who had just 1 period of care, 56% used HACC services while just over one-third (36%) used permanent RAC. For people with multiple care periods, over three-quarters began with use of a HACC service.



Note: 'Any' includes all people who used at least 1 care program.

Source: Table A4.

Figure 4: Mean number of care episodes by program first used in the 8 years before death, people who died in 2010–11 aged 65+

3 Last use of aged care

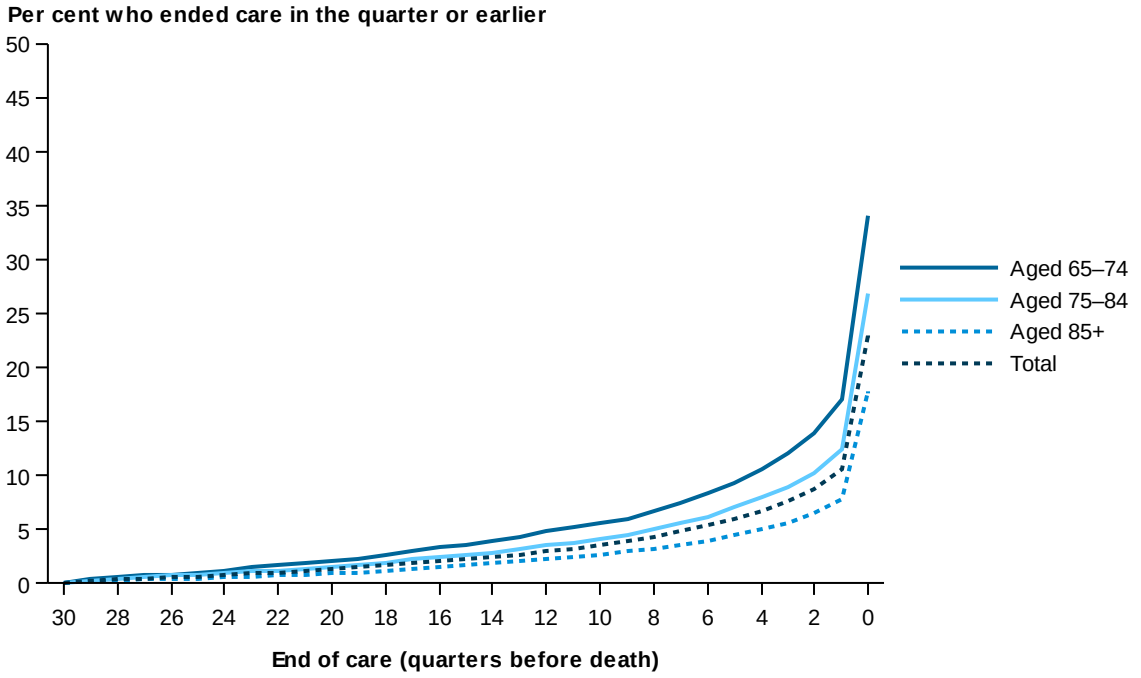
Overall, 62% of people were a client of a care program when they died. A further 18% were split fairly evenly between those who had left aged care within 10 weeks of death and those who had not been in a care program for at least 10 weeks (Table A5). The remaining 20% had not used an aged care program in the 8 years before death.

The above figures mean that over three-quarters (77%) of program users were a current client of an aged care program at the time of their death (Table A6)—although a proportion of these may have been in hospital at the time. In an overwhelming majority of cases (93%), people who had accessed services in the 8 years before their death were using care programs within 1 year of death (Figure 5; Table A6). Just 3% of program users had a gap of 3 or more years between when they last used a care program and their death.

Timing differences by age

Fewer older program clients than younger clients stopped using aged care before they died, so that they were more likely than younger people to have been reported as accessing a care program at the time of their death. Two-thirds of people who died aged 65 to 74 and who had used care services were program clients when they died, compared with 82% of those who had died aged 85 and over.

For all age groups, a relatively large proportion of program clients stopped using care programs in the 3 months before death (Figure 5), with this percentage being highest in the youngest age group: 17% compared with 10% among those who died aged at least 85 (Table A6). This equates to 10% of the cohort as a whole. Hospitalisation and use of specialist palliative care before death is the likely explanation for this phenomenon, with almost half of older people dying in hospital. (In 2008–09, 53,500 of 113,400 deaths of older people were in hospital [AIHW 2013: Table1.2; AIHW 2014: Table A2.16].)



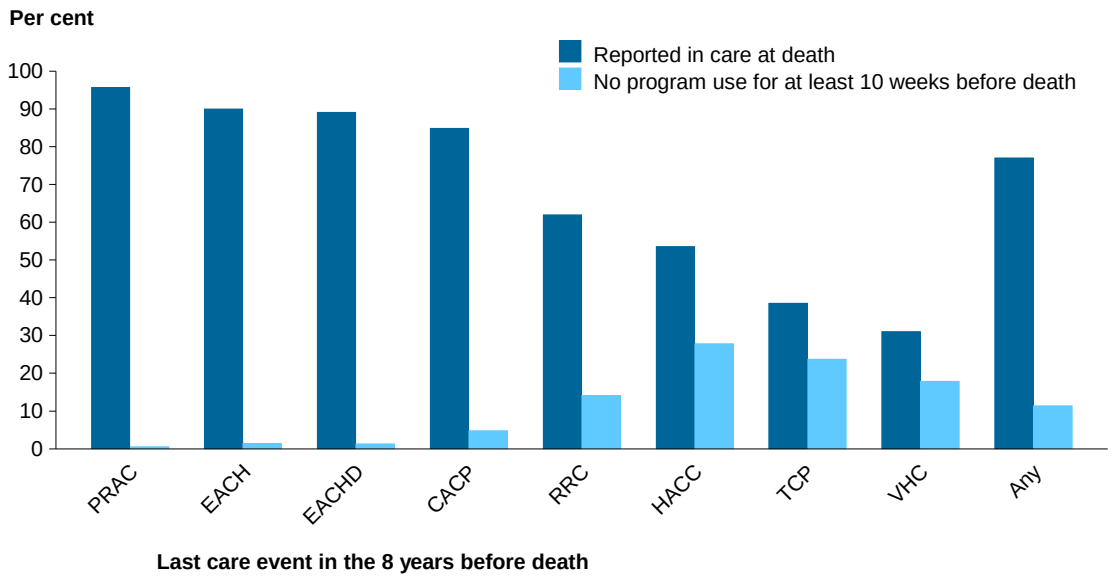
Note: Quarters are relative to death and are all 91.3 days long (365.25/4), except for quarter 1 which ends on the day before death. Quarter = 0 if the person was still an aged care client at the time of death. People who used care programs only more than 8 years before their death could not be identified are so are included in the 20% classified as never having accessed care (not included in this figure).

Source: Table A6.

Figure 5: Cessation of program use, people who died in 2010–11 aged 65+ who had used an aged care program in the 8 years before death

Program differences

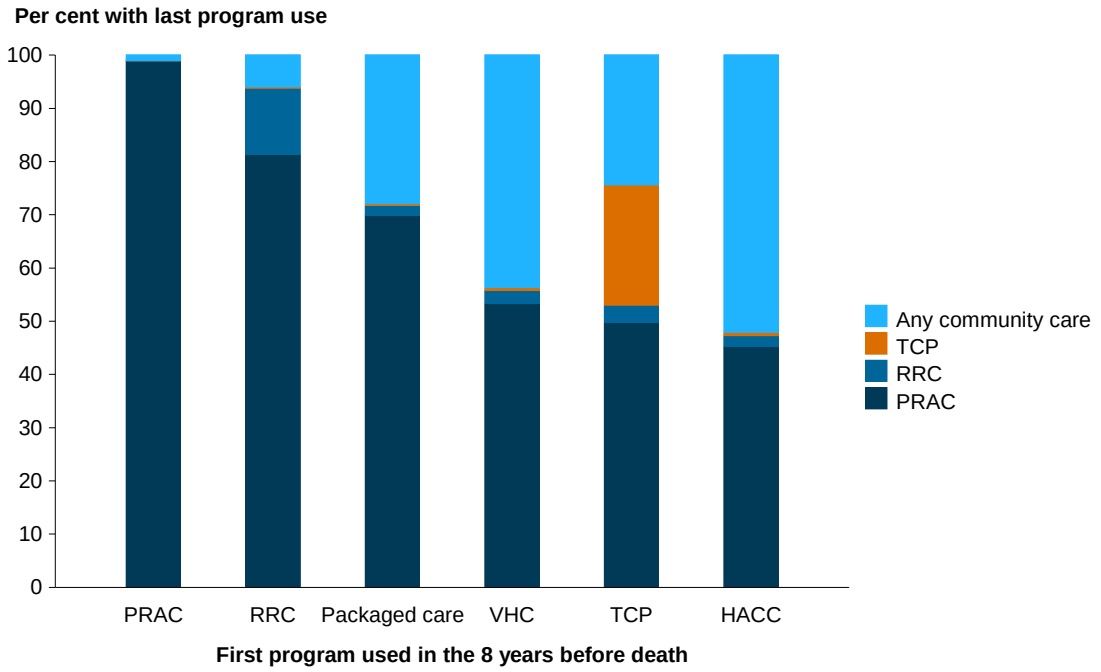
People whose last care event was permanent RAC were much more likely than others to be in care at the time of their death: 96% compared with 54% of people who last used HACC (Figure 6; Table A5). As a result, of those who were aged care clients at the time of their death, two-thirds were permanent RAC residents; a further quarter were HACC clients (Table A5). In general, as the time between the end of program use and death increased, the more likely it was that the person used HACC last and the less likely it was that they used permanent RAC last. Among people who finished their care 10 weeks or more before their death, just 2% had used permanent RAC last while 87% ended their use of aged care services with a period as a HACC client.



Source: Table A5.

Figure 6: Cessation of program use, by program last used in the 8 years before death, people who died in 2010–11 aged 65+

A little under half (47%) of the people who used a community care program first had permanent RAC as the last program accessed (Table A7). However, this relatively low proportion was driven by the relatively large number of people who were initially HACC users (Figure 7). The relatively small number of people who began with packaged care were more likely to be in permanent RAC at or near the time of their death than those who began with HACC; for example, 71% of those who began care as a CACP recipient finished in permanent RAC compared with 45% of those who started as HACC clients.



Source: Table A7.

Figure 7: Last program use by program first used in the 8 years before death, people who died in 2010–11 aged 65+

4 Combinations of care

People may use several service programs over a period for a number of reasons, including a change in care availability, a change in personal circumstances or a change in attitude to particular care programs (AIHW 2014: section 3). The current data show that such changes in program use are common, with many people using a variety of care programs before they die. Except for people whose last program use was VHC, over half of program users had begun by using HACC, irrespective of the program of last use. For those ending with VHC, just 25% had begun by accessing HACC services while 74% had begun as VHC clients (Table A7). Among those whose last care was in permanent RAC, 62% started their care as HACC clients and 19% were identified as having permanent RAC as the first program used in the 8 years before death (although some of these people are likely to have used community care services before the study period).

The analysis below examines the use of combinations of care programs in the 8 years before death. To facilitate the discussion, and because of the small numbers of people who started their care using EACH or EACHD, care packages (CACP, EACH and EACHD) have been grouped into a single category called 'Packages'. HACC and VHC are also grouped because VHC provides similar services (if a somewhat smaller range) to those available through HACC.

The analysis begins by looking at use of combinations of community and residential care. In this presentation, TCP is not included as either residential or community care, both because of its very focused purpose—to assist people leaving hospital—and because it can be provided either at home or in a home-like setting within facilities, including RAC facilities and hospitals. However, to provide a complete picture, use of community and residential care by TCP users is also discussed. The order of program use is then considered, providing insight into care pathways.

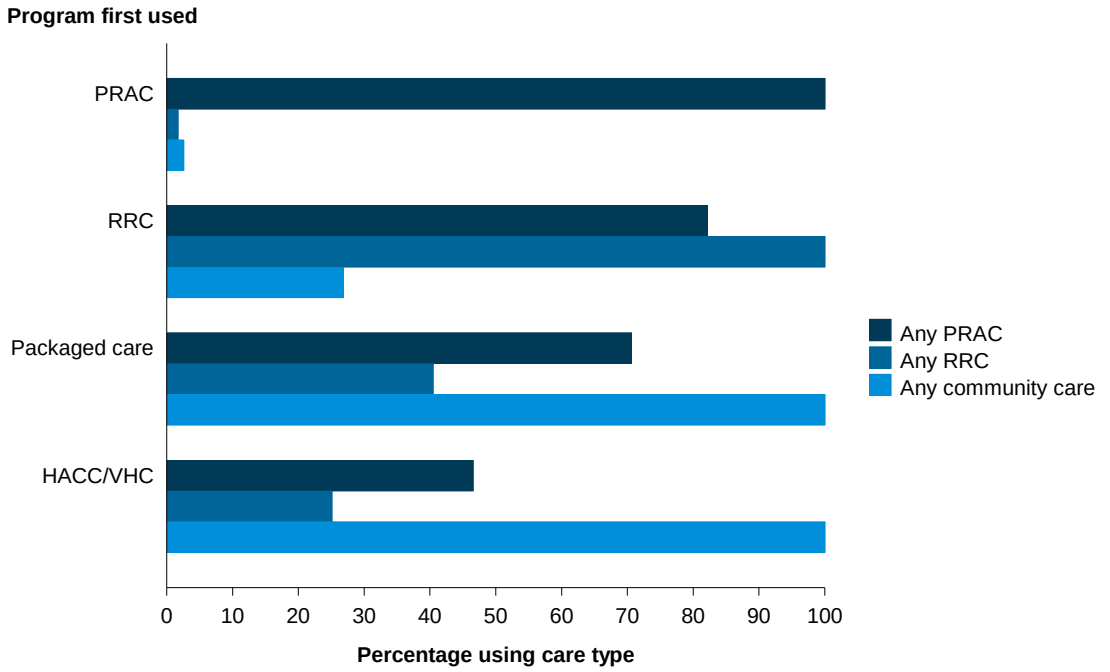
As seen above, just under 80% of the study cohort of 116,481 people used residential care and/or community care. Moreover, 8% accessed only permanent RAC and 32% used community care programs only (Table A8). Hence, many people (37%) used a combination of both residential care (mostly permanent) and community care before they died.

Use of community and residential care

The vast majority (97%) of people who went into permanent RAC without using another care program first used only that type of care (Figure 8; Table A9). Among people who began with an episode in residential respite care, just over one-quarter (27%) also used community care programs, and four-fifths (82%) went on to become permanent RAC residents.

Both residential respite care and permanent RAC were more likely to be used by people whose first program use was packaged care rather than HACC or VHC. (Figure 8; Table A9). In fact, people whose first program use was an aged care package more often than not went on to use permanent RAC (Table A9): 71% of these people became permanent RAC residents before they died, with 35% also spending some time in respite RAC. Just 13% of people who started with packaged care used only that type of care before they died; a slightly smaller proportion (10%) also accessed HACC or VHC.

Nearly half (48%) of the people who started with HACC or VHC services only ever used community-based services (Table A9). Almost as many (47%) went into permanent RAC before their death, with about two-fifths of these people also using residential respite care. Overall, one-quarter of people who started with HACC or VHC services used respite RAC.



Source: Table A9.

Figure 8: Use of community and residential care by program first used in the 8 years before death, people who died in 2010–11 aged 65+

Use of transition care with other care

Five per cent (5%) of the cohort accessed TCP before they died (Table A8). Those who used packaged care were more likely than others to also use transition care (around 10%). On the other hand, TCP was used by just 1% of people who did not use another aged care service. People who had used both respite and permanent RAC but no community care also had a relatively low usage rate of TCP (2.7%).

Nearly all people who accessed TCP (96%) accessed other care, with 58% using permanent RAC and 88% using community care. Among people who had TCP as the first program they accessed, nearly 80% also used at least one other program (Table A9). More specifically, almost half (46%) were also community care clients and 16% used residential respite care. One-half entered permanent RAC before they died, and 7% of people who started their care using TCP used all of community care, respite RAC and permanent RAC.

Care pathways

People access services to suit their particular circumstances. Hence, patterns of service use are diverse in terms of the programs accessed, and the frequency with which—and order in which—they are used.

Box 2: Program use dates for deriving care pathways and length of care

Episode start and end dates

For this report, transfers between service providers for the same type of care have been combined into a single episode of care (see AIHW 2014: Appendix B6 for a description). For the pathways and length of care analyses presented here, the start date of an episode is therefore the date of entry into a care type, while the end date is the date of exit from a care type, following continuous access to that care.

People can be clients of more than one program at a time; for example, a person can be accessing some HACC services while being an aged care package recipient. Hence, the order in which people access care programs—that is, the order of episode start dates—can be different from the order in which they exit care programs—that is, the order of episode end dates. This would be the case for a person receiving HACC services for a period and then entering residential respite care for a short time without exiting the HACC program (see Table A10 for other examples).

Length of care

The length of an episode of care is derived as the difference between the care episode start and end dates. The total time a person spends as a client of a particular care program—or length of care (LOC)—is estimated by summing the episode lengths for each episode a client has in that program.

For community care programs, this measure provides the length of time during which the client was 'on the books', but does not include intensity of care. For example, a person getting weekly nursing assistance may have the same episode length as someone receiving monthly gardening assistance. In addition, for HACC, many service start and end dates are based on the start and end dates of the quarter of provision (see AIHW 2014: Appendix B6). Consequently, LOC for HACC is, on average, likely to be overestimated.

Because people can be clients of more than one program at the same time, only within-program LOC statistics are presented (see Section 5).

Common pathways by order of access

The pathways people follow to access the services that they need can be complex. If we consider the order in which programs are accessed along with the last program ever used (see Box 2)—ignoring repeat use of a program without accessing another program in between—in the 8 years before death there were 1,520 different care pathways for the 116,500 people who died in 2010–11 (Table A10). The longest pathway contained 20 changes in care type, counting first program use as a change. However, 94% of people had either no care or 1 to 4 changes, while just 52 people had 12 or more changes of program use.

A relatively small number of pathways was used by a large majority, with just 28 pathways (including the 'no care' pathway) each being used by more than 300 people, and accounting for 91% (or 106,100) of the people who died.

Just 10 pathways were each used by more than 1% of people, with slightly over two-thirds (68%) using the top 4 pathways, including the 'no care' pathway (Table A10). The most common pathway, used by 28% of people, involved use of HACC and/or VHC services only; the second most common pathway was the 'no care' pathway (20%). The other 2 most common pathways were the pathway that began with use of HACC or VHC and ended with permanent RAC (13%), and the pathway that involved use of permanent RAC only (8%).

Overall, two-thirds of the 28 most common pathways began with access to HACC or VHC, and 15 ended with use of permanent RAC. Use of HACC or VHC together with residential respite care was also common. The most common pathway involving use of transition care was ranked eleventh and consisted of use of HACC or VHC followed by TCP and then permanent RAC (care pathway used by 1,091 people, or 0.9% of the cohort).

Many pathways were used by a very small number of people: just 9% (10,400) of people had 1,492 different pathways between them, averaging 7 people per pathway (Table A10).

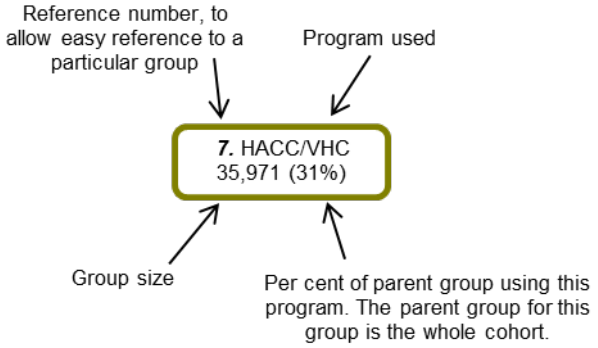
Last programs used in care pathways

The variety of care pathways is further illustrated in Figure 9 (see Box 3 for interpretation). This figure shows the last three care programs used before death, based on episode end dates (see Box 2); it also shows the wide range both in the numbers of people using different pathways and in the order of program use. For example, while just 30 people had permanent RAC and packaged care as their second last and last care before death (reference group number 66 in Figure 9), over 1,500 people used an aged care package and then HACC before entering permanent RAC as their final care program (reference group number 80 in Figure 9).

Box 3: Key for interpreting Figure 9

Figure 9 shows the last three care programs used before death, with order of use derived from episode end dates. Different coloured shapes are used to represent the different programs used, or 'no care', as the case may be. For example, permanent RAC is represented by a pink pentagon, while aged care packages (CACP, EACH and EACHD) are represented by a blue rectangle. When a number of programs in the pathway were used by only a small number of people, they were grouped into an 'other' category (represented by a black outlined circle).

There is a range of information in each shape. This is explained in the example below.



Note that reference numbers are sequential within branches.

Figure 9 reveals some interesting patterns. For example, in general, HACC (or VHC) was the most recently used program for 60–70% of people entering another program, irrespective of whether that program was packaged care, residential respite care or TCP. A notable exception was the large group of people who ended their care pathway using permanent RAC: 43% of these people came from using HACC or VHC services while 25% had respite RAC as their second last care program; 19% had no previous program use in the 8 years before death.

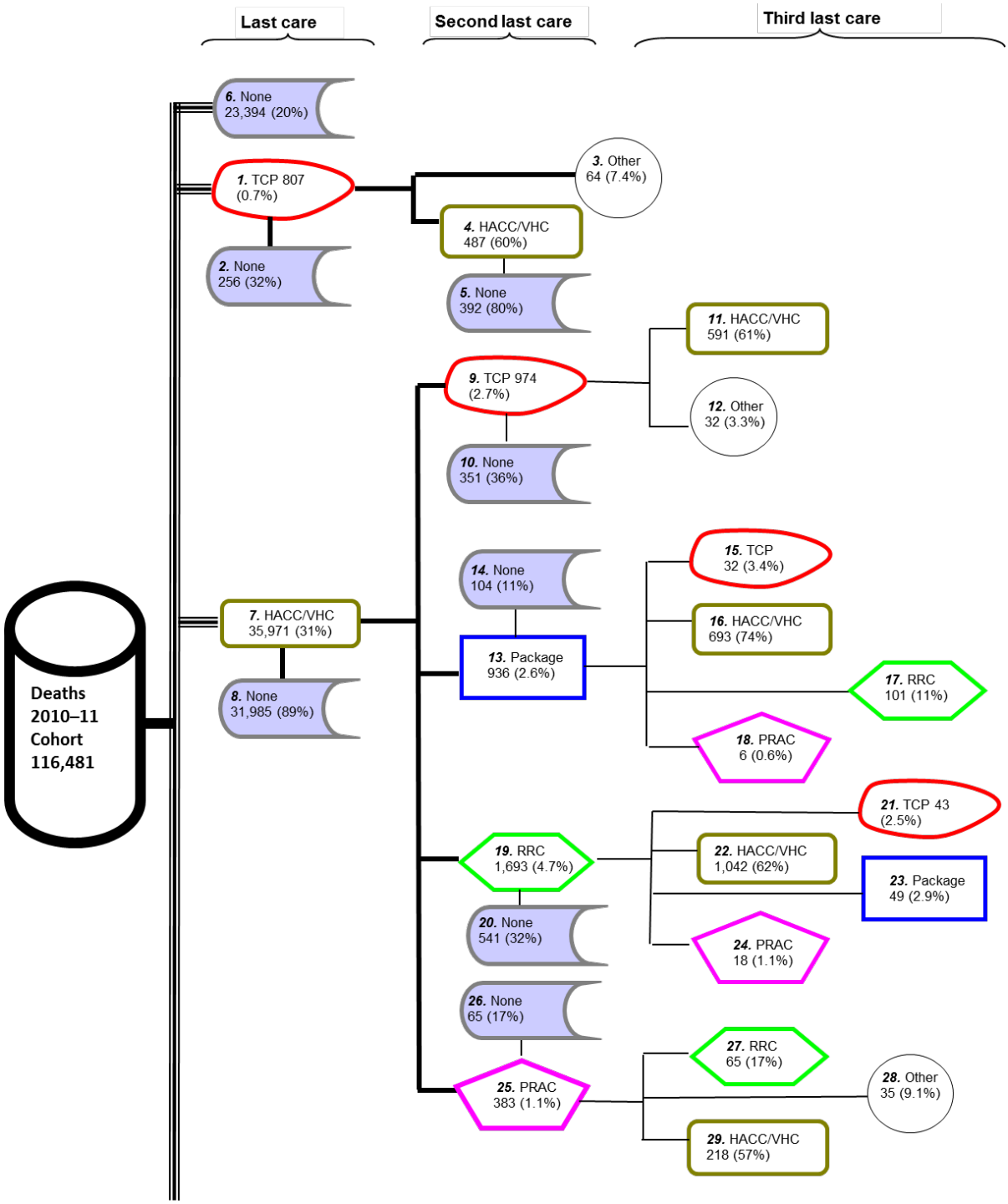


Figure 9: Last three care programs used in the 8 years before death, people who died in 2010–11 aged 65+

(continued)

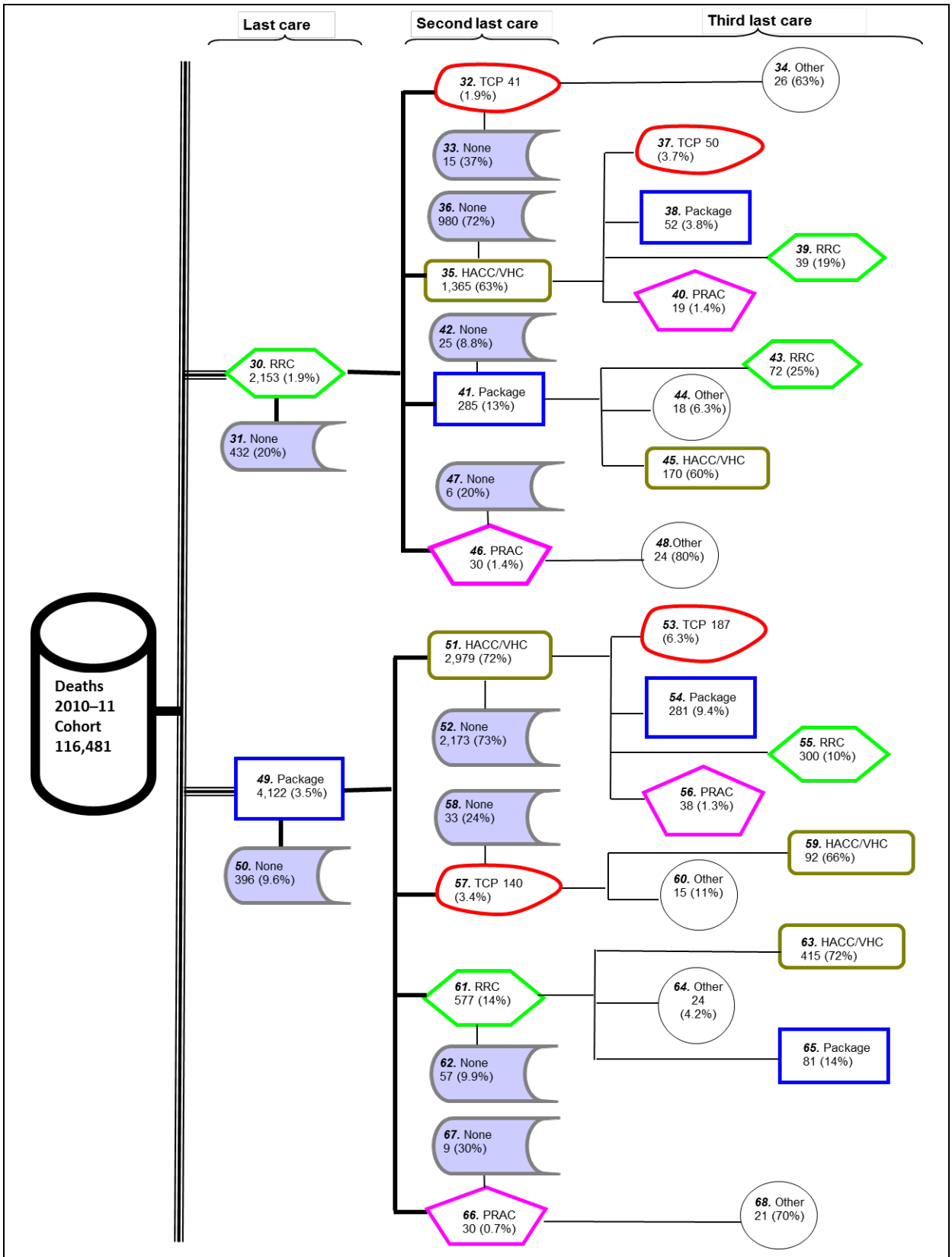
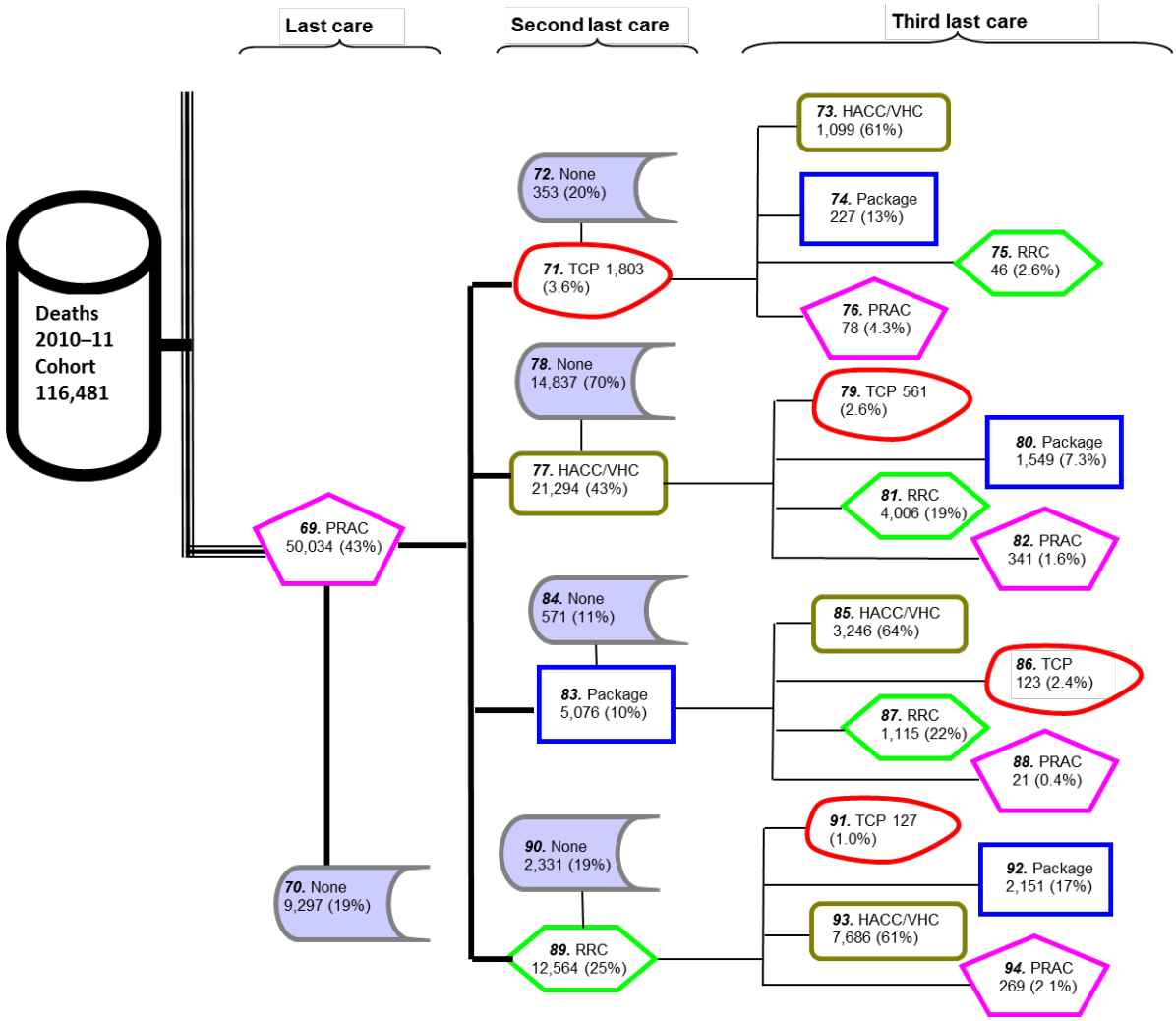


Figure 9 (continued): Last three care programs used in the 8 years before death, people who died in 2010–11 aged 65+

(continued)



Notes

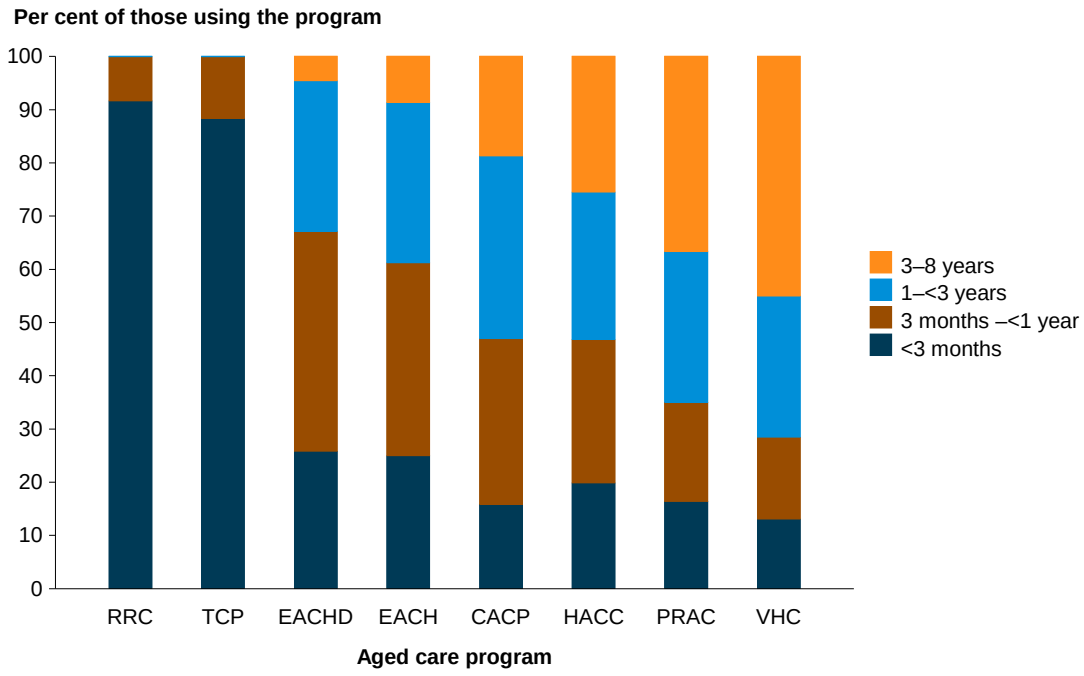
1. See Box 3 for information on interpreting the figure.
2. Order is based on care episode end dates, and so numbers are not directly comparable with those in Table A10. Within-program transfers and repeat use of a program without accessing another program in between are ignored.
3. 'Package' includes CACP, EACH and EACHD.

Figure 9 (continued): Last three care programs used in the 8 years before death, people who died in 2010–11 aged 65+

5 Length of care

As seen in Chapter 4, many people use multiple care programs before they die. Overall, HACC and permanent RAC were the most commonly used programs, with these services being used, respectively, by 65% and 44% of people before they died (Table A11). One-fifth of people who died in 2010–11 had used residential respite care, and 12% had been a CACP recipient.

The time people spent as clients of particular care programs—or LOC (see Box 2)—varied considerably with the program (Figure 10; Table A11). The vast majority of clients of the short-term programs of respite RAC (92%) and TCP (88%) spent less than a total of 3 months in these programs throughout the last 8 years of their life, with a mean LOC of 43 and 55 days, respectively. In contrast, under one-quarter of clients of other programs spent less than 3 months in the program.



Note: TCP began operating in 2005. EACHD began operating in 2006.

Source: Table A11.

Figure 10: Length of care in the 8 years before death, by program, people who died in 2010–11 aged 65+

While the majority of people spent fewer than 2 years in total as a client of a particular program, some people had quite long periods of care, in particular as a client of permanent RAC, HACC and VHC. One-quarter of HACC clients received their services for a total of 3 years or more, as did 36% of permanent RAC residents and 45% of VHC clients. These figures are reflected in the mean LOC spent in a program. Mean LOC in VHC was just over 3 years, with RAC residents averaging 2.7 years in permanent care, and HACC clients on average getting just over a total of 2 years of service provision over the last 8 years of their life.

Appendix: Tables

Table A1: Age and sex profile, by first program used during 1 July 2002 to 30 June 2011, people who died in 2010–11 aged 65+

	First program used[(a)]											
Sex	**PRAC**	**RRC**	**TCP**	**CACP**	**EACH**	**EACHD**	**HACC**	**VHC**	**Any community care**	**Any care**	**No care**	**Total**
						Per cent						
Male	34.7	43.5	52.0	32.4	57.1	54.0	44.6	58.9	45.4	44.3	63.8	48.2
Female	65.3	56.5	48.0	67.6	42.9	46.0	55.4	41.1	54.6	55.7	36.2	51.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total (row %)	**8.3**	**3.3**	**1.1**	**2.5**	**0.1**	**0.1**	**58.5**	**6.1**	**67.3**	**79.9**	**20.1**	**100.0**
Total (n)	**9,665**	**3,862**	**1,224**	**2,910**	**112**	**100**	**68,127**	**7,087**	**78,336**	**93,087**	**23,390**	**116,477**
						Mean age at death (years)						
Male	84.0	84.2	82.9	85.7	81.6	82.0	82.1	88.4	82.9	83.1	77.2	81.5
Female	89.0	87.8	84.9	87.9	84.0	81.5	85.3	88.6	85.7	86.2	79.3	85.2
Total	**87.3**	**86.3**	**83.9**	**87.2**	**82.6**	**81.8**	**83.9**	**88.5**	**84.4**	**84.8**	**78.0**	**83.4**

(a) This is the first program used in the 8 years before a person's death, and includes program use ongoing on the day 8 years before the client's death.

Notes

1. Age is at death.
2. Sex was missing for 4 cases.
3. Community care includes CACP, EACH, EACHD, HACC and VHC.

Table A2: Earliest program use in the 8 years before death, by age at death, people who died in 2010–11 aged 65+

	Aged 65–74		Aged 75–84		Aged 85+		Total	
Start of care (quarter of admission date)	**Per cent**	**Cum. per cent**	**Per cent**	**Cum. per cent**	**Per cent**	**Cum. per cent**	**Per cent**	**Cum. per cent**
No care	42.7	42.7	23.0	23.0	8.9	8.9	20.1	20.1
1	9.4	52.1	6.4	29.4	2.6	11.5	5.2	25.3
2	4.8	56.9	3.7	33.1	1.7	13.2	2.9	28.2
3	3.2	60.0	2.9	35.9	1.5	14.7	2.3	30.5
4	2.6	62.6	2.4	38.3	1.5	16.3	2.0	32.6
5	2.1	64.7	2.3	40.6	1.5	17.7	1.9	34.4
6	2.0	66.7	2.1	42.7	1.4	19.1	1.7	36.2
7	1.8	68.5	2.1	44.8	1.4	20.5	1.7	37.9
8	1.5	70.0	2.0	46.8	1.4	22.0	1.7	39.5
9	1.3	71.3	1.9	48.7	1.6	23.6	1.7	41.2
10	1.4	72.7	2.0	50.6	1.6	25.2	1.7	42.9
11	1.3	74.0	1.9	52.6	1.7	26.8	1.7	44.6
12	1.3	75.3	1.9	54.5	1.7	28.5	1.7	46.3
13	1.2	76.5	1.9	56.4	1.9	30.4	1.8	48.0
14	1.3	77.8	1.9	58.3	1.8	32.2	1.8	49.8
15	1.1	78.9	1.8	60.1	1.9	34.1	1.7	51.5
16	1.1	80.0	1.8	61.8	1.8	35.9	1.7	53.1
17	1.0	80.9	1.6	63.5	1.9	37.8	1.6	54.7
18	0.9	81.9	1.7	65.2	1.9	39.7	1.6	56.4
19	1.0	82.8	1.8	67.0	1.9	41.6	1.7	58.1
20	1.0	83.8	1.6	68.6	2.0	43.6	1.7	59.8
21	1.0	84.9	1.7	70.2	2.0	45.6	1.7	61.5
22	0.9	85.8	1.6	71.9	2.1	47.7	1.7	63.2
23	1.0	86.7	1.5	73.4	2.0	49.7	1.6	64.8
24	1.0	87.7	1.6	75.0	2.0	51.7	1.7	66.5
25	0.9	88.6	1.5	76.5	2.2	53.9	1.7	68.2
26	0.8	89.4	1.6	78.1	2.2	56.1	1.7	70.0
27	0.8	90.3	1.5	79.6	2.4	58.5	1.8	71.7
28	0.8	91.1	1.7	81.3	2.4	60.9	1.9	73.6
29	0.8	91.9	1.8	83.1	2.5	63.4	2.0	75.6
30	0.9	92.7	1.8	84.9	2.7	66.1	2.0	77.6
31	0.9	93.7	1.9	86.8	3.1	69.2	2.3	79.9
32	1.2	94.9	2.4	89.2	4.1	73.3	3.0	82.8
≥33[(a)]	5.1	100.0	10.8	100.0	26.7	100.0	17.2	100.0
Total	**100.0**	**21,673**	**100.0**	**40,447**	**100.0**	**54,361**	**100.0**	**116,481**

(a) Care use began at least 8 years before death. Note that data on HACC use before 1 July 2002 are not included in the PIAC linked database; therefore, HACC care identified as starting on 1 July 2002 may have begun earlier.

Notes

1. Quarters are relative to death and are all 91.3 days long (365.25/4). Quarter 1 is that which ends with the death of the person.
2. People who used care programs only more than 8 years before their death could not be identified and so are included in the 20% classified as never having accessed care.
3. Age is at death.

Table A3: Years before death the person started receiving care, by first program used during 1 July 2002 to 30 June 2011, people who died in 2010–11 aged 65+ and who had program use

	First program used[a]									
Year before death	PRAC	RRC	TCP[b]	CACP	EACH[b]	EACHD[b]	HACC	VHC	Any community care	Total
					Column per cent					
< 1 year	18.6	24.4	40.0	10.0	43.8	31.0	15.4	6.1	14.4	15.6
1 –< 2	7.7	13.5	22.7	7.0	20.5	21.0	8.6	6.2	8.4	8.7
2 –< 3	6.8	11.6	17.6	8.8	14.3	13.0	8.5	6.7	8.3	8.4
3 –< 4	6.3	11.0	14.5	8.7	5.4	22.0	8.7	8.1	8.7	8.6
4 –< 5	5.3	10.3	5.0	7.1	7.1	13.0	8.7	8.6	8.6	8.3
5 –< 6	5.0	8.5	0.3	5.7	3.6	. .	9.0	9.7	8.9	8.4
6 –< 7	4.5	9.4	. .	5.9	1.8	. .	9.7	10.2	9.6	8.9
7 –< 8	4.3	9.9	. .	6.9	2.7	. .	13.2	10.7	12.7	11.5
At least 8 years[c]	41.5	1.4	. .	39.9	0.9	. .	18.2	33.7	20.3	21.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
					Row per cent					
< 1 year	12.4	6.5	3.4	2.0	0.3	0.2	72.2	3.0	77.8	100.0
1 –< 2	9.1	6.4	3.4	2.5	0.3	0.3	72.5	5.4	81.0	100.0
2 –< 3	8.3	5.7	2.7	3.3	0.2	0.2	73.5	6.1	83.2	100.0
3 –< 4	7.6	5.3	2.2	3.1	0.1	0.3	74.2	7.1	84.8	100.0
4 –< 5	6.6	5.1	0.8	2.7	0.1	0.2	76.6	7.9	87.4	100.0
5 –< 6	6.2	4.2	0.1	2.1	0.1	. .	78.6	8.8	89.6	100.0
6 –< 7	5.2	4.4	. .	2.1	0.0	. .	79.6	8.7	90.4	100.0
7 –< 8	3.9	3.6	. .	1.9	0.0	. .	83.7	7.0	92.6	100.0
At least 8 years[c]	20.1	0.3	. .	5.8	0.0	. .	61.9	12.0	79.7	100.0
Total	**10.4**	**4.1**	**1.3**	**3.1**	**0.1**	**0.1**	**73.2**	**7.6**	**84.2**	**100.0**
Total (n)	**9,665**	**3,862**	**1,224**	**2,910**	**112**	**100**	**68,127**	**7,087**	**78,336**	**93,087**

(a) This is the first program used in the 8 years before a person's death, and includes program use ongoing on the day 8 years before the client's death.

(b) EACH began in 2002 with a small number of packages, TCP in 2005 and EACHD in 2006.

(c) The first period of care observed in the 8 years before death may have started before the study period. Also, some people may have had other care episodes that ended more than 8 years before death; these are not included in this study and so are not reflected in the statistics for the category 'At least 8 years'.

Notes

1. Age is at death.

2. Community care includes CACP, EACH, EACHD, HACC and VHC.

Table A4: Number of episodes of care, by first program used during 1 July 2002 to 30 June 2011, people who died in 2010–11 aged 65+

	First program used[a]										
Number of episodes	**PRAC**	**RRC**	**TCP**	**CACP**	**EACH**	**EACHD**	**HACC**	**VHC**	**Any community care**	**No care**	**Total**
						Column per cent					
1	90.5	8.9	18.4	9.9	42.9	19.0	20.2	15.0	19.4	. .	21.1
2	6.2	47.3	37.4	22.1	25.0	37.0	21.6	19.2	21.4	. .	16.9
3	1.7	15.8	20.8	24.1	17.9	25.0	18.4	19.3	18.7	. .	13.5
4	0.6	10.0	10.9	16.3	5.4	13.0	13.9	14.9	14.0	. .	9.9
5	0.4	5.9	6.5	9.8	2.7	3.0	9.3	11.2	9.4	. .	6.6
6	0.2	3.7	2.8	7.1	2.7	2.0	6.1	7.2	6.2	. .	4.4
7	0.1	2.6	1.8	3.2	0.9	1.0	3.9	4.7	3.9	. .	2.8
8	0.1	1.7	0.9	2.9	1.8	—	2.4	3.1	2.5	. .	1.8
9	0.1	0.8	0.2	1.6	—	—	1.6	2.0	1.6	. .	1.1
10	0.1	1.0	0.3	1.0	—	—	0.9	1.1	0.9	. .	0.7
11–14	0.1	1.6	—	1.3	—	—	1.4	1.6	1.4	. .	1.0
15+	0.0	0.7	—	0.8	0.9	—	0.3	0.6	0.4	. .	0.3
None	. .	. .	. .	. .	. .	. .	. .	. .	. .	100.0	20.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
						Row per cent					
1	35.7	1.4	0.9	1.2	0.2	0.1	56.2	4.3	62.0	. .	100.0
2	3.1	9.3	2.3	3.3	0.1	0.2	74.8	6.9	85.3	. .	100.0
3	1.1	3.9	1.6	4.5	0.1	0.2	79.9	8.7	93.4	. .	100.0
4	0.5	3.3	1.1	4.1	0.1	0.1	81.6	9.2	95.1	. .	100.0
5	0.5	2.9	1.0	3.7	0.0	0.0	81.5	10.2	95.5	. .	100.0
6	0.4	2.8	0.7	4.1	0.1	0.0	81.9	10.0	96.1	. .	100.0
7	0.4	3.1	0.7	2.9	0.0	0.0	82.5	10.4	95.8	. .	100.0
8	0.2	3.3	0.5	4.1	0.1	—	80.9	10.8	96.0	. .	100.0
9	0.4	2.3	0.2	3.5	—	—	82.8	10.9	97.1	. .	100.0
10	0.6	4.8	0.5	3.6	—	—	80.7	9.8	94.0	. .	100.0
11–14	0.4	5.4	—	3.4	—	—	80.9	9.9	94.1	. .	100.0
15+	1.3	8.7	—	7.4	0.3	—	69.8	12.5	90.0	. .	100.0
None	. .	. .	. .	. .	. .	. .	. .	. .	. .	100.0	100.0
Total	**8.3**	**3.3**	**1.1**	**2.5**	**0.1**	**0.1**	**58.5**	**6.1**	**67.3**	**20.1**	**100.0**
Total (n)	**9,665**	**3,862**	**1,224**	**2,910**	**112**	**100**	**68,127**	**7,087**	**78,336**	**23,394**	**116,481**
						Mean number of episodes[b]					
Mean	**1.18**	**3.26**	**2.73**	**3.85**	**2.33**	**2.54**	**3.50**	**3.86**	**3.54**	. .	**3.27**

(a) This is the first program used in the 8 years before a person's death, and includes program use ongoing on the day 8 years before death.

(b) Additional care episodes may be for any care program. The mean for the 'Total' includes only people who used at least one care program.

Notes

1. Age is at death.
2. Community care includes CACP, EACH, EACHD, HACC and VHC.

Table A5: Last program used in the 8 years before death, by weeks before death that the care ended, people who died in 2010–11 aged 65+ and who had program use

Weeks before death care ended	Last care event in the 8 years before death									Total	Per cent of all deaths
	PRAC	RRC	TCP	CACP	EACH	EACHD	HACC	VHC	Any community care		
						Column per cent					
Reported in care at death	95.7	61.9	38.5	84.8	90.0	89.1	53.5	31.0	55.2	77.0	61.5
< 1 week	3.1	9.4	12.5	5.9	5.2	6.1	4.8	11.4	5.3	4.3	3.4
1 –< 2 weeks	0.4	4.2	8.6	1.7	1.6	1.2	3.4	13.2	3.9	2.1	1.6
2 –< 3 weeks	0.2	2.5	5.0	0.7	0.4	0.9	2.4	8.8	2.7	1.3	1.1
3 –< 4 weeks	0.1	2.0	1.5	0.7	0.3	0.9	1.9	4.8	1.9	0.9	0.8
4 –< 5 weeks	0.1	1.3	2.0	0.4	0.2	0.3	1.5	3.9	1.6	0.8	0.6
5 –< 6 weeks	0.0	1.1	3.1	0.3	0.2	—	1.3	3.1	1.3	0.6	0.5
6 –< 7 weeks	0.0	1.3	2.5	0.3	0.3	0.3	1.1	2.0	1.1	0.5	0.4
7 –< 8 weeks	0.0	1.0	1.0	0.2	0.1	—	1.0	1.6	0.9	0.4	0.4
8 –< 10 weeks	0.0	1.3	1.7	0.4	0.3	—	1.4	2.5	1.4	0.7	0.5
At least 10 weeks	0.5	14.1	23.7	4.7	1.4	1.2	27.7	17.8	24.5	11.4	9.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**79.9**
						Row per cent					
Reported in care at death	66.8	1.9	0.4	3.3	1.3	0.4	24.7	1.2	30.9	100.0	. .
< 1 week	38.4	5.1	2.5	4.1	1.4	0.5	39.7	8.3	53.9	100.0	. .
1 –< 2 weeks	9.3	4.7	3.6	2.4	0.9	0.2	59.1	19.8	82.4	100.0	. .
2 –< 3 weeks	6.6	4.3	3.2	1.4	0.3	0.2	63.6	20.3	85.9	100.0	. .
3 –< 4 weeks	5.1	4.9	1.4	2.0	0.3	0.3	70.3	15.6	88.6	100.0	. .
4 –< 5 weeks	6.6	3.9	2.2	1.4	0.3	0.1	70.1	15.4	87.3	100.0	. .
5 –< 6 weeks	2.0	3.8	4.2	1.3	0.3	—	73.7	14.7	90.0	100.0	. .
6 –< 7 weeks	1.8	5.4	4.0	1.6	0.6	0.2	74.8	11.6	88.8	100.0	. .
7 –< 8 weeks	2.2	5.1	2.0	1.5	0.2	—	77.5	11.5	90.7	100.0	. .
8 –< 10 weeks	1.5	4.8	2.3	2.0	0.5	—	77.0	12.0	91.4	100.0	. .
At least 10 weeks	2.3	2.9	1.8	1.2	0.1	0.0	86.8	4.9	93.0	100.0	. .
Total	**53.7**	**2.3**	**0.9**	**3.0**	**1.1**	**0.4**	**35.5**	**3.1**	**43.1**	**100.0**	**. .**
Per cent of all deaths	**43.0**	**1.8**	**0.7**	**2.4**	**0.9**	**0.3**	**28.4**	**2.5**	**34.4**	**79.9**	**. .**
Total (n)	**50,034**	**2,153**	**807**	**2,757**	**1,035**	**330**	**33,090**	**2,881**	**40,093**	**93,087**	**. .**

Notes

1. Age is at death.
2. Community care includes CACP, EACH, EACHD, HACC and VHC.

Table A6: Cessation of program use, by age at death, people who died in 2010–11 aged 65+ and who had used an aged care program in the 8 years before death

	Aged 65–74		Aged 75–84		Aged 85+		Total	
End of care (quarters before death)	**Per cent**	**Cum. per cent**	**Per cent**	**Cum. per cent**	**Per cent**	**Cum. per cent**	**Per cent**	**Cum. per cent**
Client at time of death	65.8	65.8	73.2	73.2	82.2	82.2	77.0	77.0
1	17.1	82.9	14.5	87.6	10.1	92.3	12.5	89.5
2	3.2	86.1	2.2	89.8	1.3	93.6	1.8	91.3
3	1.9	87.9	1.3	91.1	0.8	94.3	1.1	92.4
4	1.5	89.5	0.9	92.0	0.7	95.0	0.9	93.3
5	1.2	90.7	1.0	93.0	0.5	95.6	0.8	94.1
6	1.0	91.7	0.8	93.8	0.4	96.0	0.6	94.7
7	0.8	92.5	0.7	94.5	0.4	96.4	0.6	95.2
8	0.8	93.3	0.6	95.1	0.4	96.8	0.5	95.7
9	0.7	94.0	0.4	95.5	0.3	97.1	0.4	96.1
10	0.4	94.4	0.4	95.9	0.3	97.3	0.3	96.5
11	0.4	94.8	0.4	96.3	0.3	97.6	0.3	96.8
12	0.4	95.2	0.3	96.5	0.2	97.8	0.2	97.0
13	0.5	95.8	0.3	96.8	0.2	98.0	0.3	97.3
14	0.4	96.1	0.3	97.1	0.2	98.2	0.3	97.6
15	0.3	96.4	0.2	97.4	0.2	98.4	0.2	97.8
16	0.3	96.7	0.2	97.6	0.2	98.6	0.2	98.0
17	0.4	97.1	0.3	97.8	0.1	98.7	0.2	98.2
18	0.3	97.4	0.2	98.0	0.1	98.9	0.2	98.4
19	0.3	97.7	0.2	98.2	0.1	99.0	0.2	98.6
20	0.2	97.9	0.2	98.4	0.1	99.1	0.2	98.7
21	0.2	98.1	0.2	98.6	0.1	99.2	0.1	98.9
22	0.2	98.3	0.2	98.8	0.1	99.3	0.1	99.0
23	0.3	98.6	0.2	98.9	0.1	99.4	0.1	99.1
24	0.2	98.8	0.1	99.1	0.1	99.5	0.1	99.2
25	0.2	99.0	0.1	99.2	0.1	99.5	0.1	99.4
26	0.2	99.2	0.1	99.3	0.1	99.6	0.1	99.5
27	0.1	99.3	0.1	99.4	0.1	99.7	0.1	99.6
28	0.1	99.4	0.2	99.6	0.1	99.8	0.1	99.7
29	0.2	99.6	0.1	99.7	0.1	99.8	0.1	99.7
≥30	0.4	100.0	0.3	100.0	0.2	100.0	0.3	100.0
Total	**100.0**	**12,425**	**100.0**	**31,145**	**100.0**	**49,517**	**100.0**	**93,087**

Notes

1. Quarters are relative to death and are all 91.3 days long (365.25/4), except for quarter 1 which ends on the day before the death.
2. People who accessed care programs only more than 8 years before their death could not be identified and so are included in the 20% classified as never having accessed care (and so are excluded from this table).
3. Age is at death.

Table A7: Last program used by first program used in the 8 years before death, people who died in 2010–11 aged 65+ and who had program use

First program used in the 8 years before death[a]	Last care event in the 8 years before death									
	PRAC	RRC	TCP	CACP	EACH	EACHD	HACC	VHC	Any community care	Total
					Column per cent					
PRAC[b]	19.1	0.5	0.5	0.2	0.8	1.2	0.2	0.1	0.2	10.4
RRC	6.3	22.4	1.0	1.1	1.9	3.0	0.5	0.5	0.6	4.1
TCP	1.2	1.9	34.3	2.2	2.2	0.6	0.6	0.5	0.7	1.3
CACP	4.1	2.4	1.0	18.5	8.4	9.1	0.5	0.1	2.0	3.1
EACH	0.1	0.2	—	—	5.6	0.6	0.0	—	0.2	0.1
EACHD	0.1	0.1	0.1	—	—	7.3	0.0	—	0.1	0.1
HACC	61.5	64.3	58.6	72.7	76.5	74.2	95.9	24.6	88.5	73.2
VHC	7.5	8.3	4.5	5.3	4.5	3.9	2.3	74.2	7.7	7.6
Any community care	*73.4*	*75.2*	*64.2*	*96.5*	*95.1*	*95.2*	*98.7*	*99.0*	*98.4*	*84.2*
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
					Row per cent					
PRAC[b]	98.8	0.1	0.0	0.1	0.1	0.0	0.8	0.0	1.0	100.0
RRC	81.2	12.5	0.2	0.8	0.5	0.3	4.2	0.3	6.1	100.0
TCP	49.7	3.3	22.6	5.1	1.9	0.2	16.3	1.1	24.4	100.0
CACP	71.0	1.8	0.3	17.5	3.0	1.0	5.3	0.1	26.9	100.0
EACH	38.4	4.5	—	—	51.8	1.8	3.6	—	57.1	100.0
EACHD	70.0	2.0	1.0	—	—	24.0	3.0	—	27.0	100.0
HACC	45.2	2.0	0.7	2.9	1.2	0.4	46.6	1.0	52.1	100.0
VHC	53.2	2.5	0.5	2.1	0.7	0.2	10.7	30.2	43.8	100.0
Any community care	*46.9*	*2.1*	*0.7*	*3.4*	*1.3*	*0.4*	*41.7*	*3.6*	*50.4*	*100.0*
Total	**53.7**	**2.3**	**0.9**	**3.0**	**1.1**	**0.4**	**35.5**	**3.1**	**43.1**	**100.0**
Total (n)	**50,034**	**2,153**	**807**	**2,757**	**1,035**	**330**	**33,090**	**2,881**	**40,093**	**93,087**

(a) This is the first program used in the 8 years before a person's death, and includes program use ongoing on the day 8 years before the client's death.

(b) A total of 42% (4,014) of people whose first program use in the 8 years before death was permanent RAC were in that type of care on the day 8 years before their death (Table A3). That is, they had been admitted into permanent RAC before that date and discharged after that date. The data in this table suggest that many of these people had used other aged care services (predominantly HACC) before they entered permanent RAC.

Notes

1. Age is at death.

2. Community care includes CACP, EACH, EACHD, HACC and VHC.

Table A8: Combinations of community and residential care used in the 8 years before death, by any use of TCP, people who died in 2010–11 aged 65+

	Used TCP (column %)			Used TCP (row %)			
Program use (not TCP) in 8 years before death[(a)]	**No**	**Yes**	**Total**	**No**	**Yes**	**Total**	**Total (N)**
PRAC only	8.4	6.4	8.3	96.1	3.9	100.0	9,677
RRC only	0.4	0.3	0.4	95.6	4.4	100.0	452
RRC and PRAC only	2.2	1.2	2.2	97.3	2.7	100.0	2,515
Community care only subtotal	*32.1*	*30.8*	*32.0*	*95.1*	*4.9*	*100.0*	*37,282*
Packages only	0.4	0.7	0.4	90.2	9.8	100.0	439
HACC and/or VHC only	28.9	23.1	28.6	95.9	4.1	100.0	33,349
Only packages and HACC/VHC	2.8	7.0	3.0	88.2	11.8	100.0	3,494
PRAC and community care	17.6	34.3	18.5	90.6	9.4	100.0	21,522
RRC and community care	3.7	6.2	3.8	91.7	8.3	100.0	4,432
PRAC and RRC and community care	14.5	16.4	14.6	94.3	5.7	100.0	16,951
Any PRAC subtotal	*42.7*	*58.3*	*43.5*	*93.2*	*6.8*	*100.0*	*50,665*
Any RRC subtotal	*20.7*	*24.1*	*20.9*	*94.2*	*5.8*	*100.0*	*24,350*
Any community care subtotal	*67.8*	*87.7*	*68.8*	*93.5*	*6.5*	*100.0*	*80,187*
Any service use subtotal	*78.8*	*95.7*	*79.7*	*93.9*	*6.1*	*100.0*	*92,831*
No service use	21.2	4.3	20.3	98.9	1.1	100.0	23,650
Total	**100.0**	**100.0**	**100.0**	**94.9**	**5.1**	**100.0**	**. .**
Total (n)	**110,582**	**5,899**	**116,481**	**110,582**	**5,899**	**116,481**	**116,481**

(a) Includes use of RAC (permanent and respite), CACP, EACH, EACHD, HACC and VHC. TCP use is not considered.

Notes

1. Age is at death.
2. Community care includes CACP, EACH, EACHD, HACC and VHC. Packages include CACP, EACH and EACHD.

Table A9: Combinations of community and residential care used in the 8 years before death, by first program used during 1 July 2002 to 30 June 2011, people who died in 2010–11 aged 65+ and who had program use

Program use (not TCP) in 8 years before death[b]	First program used in 8 years before death[a]					
	PRAC	RRC	TCP	Packaged care	HACC/VHC	Total
			Column per cent			
PRAC only	96.6	. .	27.8	. .	. .	10.4
RRC only	. .	11.3	1.2	. .	. .	0.5
RRC and PRAC only	0.8	61.9	3.8	. .	. .	2.7
Community care only subtotal	. .	. .	*23.3*	*23.4*	*48.2*	*40.1*
Packages only	. .	. .	2.5	13.1	. .	0.5
HACC and/or VHC only	. .	. .	16.3	. .	44.1	35.8
Only packages and HACC/VHC	. .	. .	4.4	10.4	4.1	3.8
PRAC and community care	1.7	. .	12.2	36.1	26.7	23.1
RRC and community care	. .	6.5	4.2	5.9	5.2	4.8
PRAC and RRC and community care	0.9	20.3	6.7	34.5	19.8	18.2
Any PRAC subtotal	*100.0*	*82.2*	*50.4*	*70.6*	*46.5*	*54.4*
Any RRC subtotal	*1.7*	*100.0*	*15.8*	*40.5*	*25.1*	*26.2*
Any community care subtotal	*2.6*	*26.8*	*46.3*	*100.0*	*100.0*	*86.1*
Any service use subtotal	*100.0*	*100.0*	*79.1*	*100.0*	*100.0*	*99.7*
Only TCP	. .	. .	20.9	. .	. .	0.3
Total	**55.2**	**52.1**	**50.7**	**51.7**	**90.4**	**100.0**
			Row per cent			
PRAC only	96.5	. .	3.5	. .	. .	100.0
RRC only	. .	96.7	3.3	. .	. .	100.0
RRC and PRAC only	3.2	95.0	1.8	. .	. .	100.0
Community care only subtotal	. .	. .	*0.8*	*2.0*	*97.3*	*100.0*
Packages only	. .	. .	7.1	92.9	. .	100.0
HACC and/or VHC only	. .	. .	0.6	. .	99.4	100.0
Only packages and HACC/VHC	. .	. .	1.5	9.3	89.2	100.0
PRAC and community care	0.8	. .	0.7	5.2	93.3	100.0
RRC and community care	. .	5.7	1.2	4.2	89.0	100.0
PRAC and RRC and community care	0.5	4.6	0.5	6.4	88.0	100.0
Any PRAC subtotal	*19.1*	*6.3*	*1.2*	*4.4*	*69.1*	*100.0*
Any RRC subtotal	*0.7*	*15.9*	*0.8*	*5.2*	*77.5*	*100.0*
Any community care subtotal	*0.3*	*1.3*	*0.7*	*3.9*	*93.8*	*100.0*
Any service use subtotal	*10.4*	*4.2*	*1.0*	*3.4*	*81.0*	*100.0*
Only TCP	. .	. .	100.0	. .	. .	100.0
Total	**10.4**	**4.1**	**1.3**	**3.4**	**80.8**	**100.0**
Total (n)	**9,665**	**3,862**	**1,224**	**3,122**	**75,214**	**93,087**

(a) This is the first program used in the 8 years before a person's death, and includes program use ongoing on the day 8 years before the client's death.

(b) Includes use of RAC (permanent and respite), CACP, EACH, EACHD, HACC and VHC. TCP use is not considered.

Notes

1. Age is at death.

2. Packages include CACP, EACH and EACHD.

Table A10: Common care pathways in the 8 years before death, people who died in 2010–11 aged 65+

	Care pathway				
Rank order	Order of access[(a)]	Last program used[(b)]	Number	Per cent	Cumulative per cent
1	H	H	31,985	27.5	27.5
2	None	. .	23,394	20.1	47.5
3	H→P	P	14,841	12.7	60.3
4	P	P	9,297	8.0	68.3
5	H→R→P	P	8,415	7.2	75.5
6	R→P	P	2,331	2.0	77.5
7	H→C→P	P	1,886	1.6	79.1
8	H→C	C	1,670	1.4	80.5
9	H→C→R→P	P	1,492	1.3	81.8
10	H→R	R	1,111	1.0	82.8
11	H→T→P	P	1,091	0.9	83.7
12	H→C→H→P	P	986	0.8	84.6
13	H→R	H	848	0.7	85.3
14	H→R→H→R→P	P	639	0.5	85.8
15	H→R→H→P	P	572	0.5	86.3
16	C→P	P	571	0.5	86.8
17	H→C→H→R→P	P	566	0.5	87.3
18	H→C→H	H	482	0.4	87.7
19	C→R→P	P	477	0.4	88.1
20	R	R	432	0.4	88.5
21	H→T	T	404	0.3	88.8
22	C→H→P	P	400	0.3	89.2
23	C	C	396	0.3	89.5
24	H→C→H	C	393	0.3	89.9
25	H→R→H	H	382	0.3	90.2
26	H→T	H	356	0.3	90.5
27	H→T→H	H	343	0.3	90.8
28	T→P	P	339	0.3	91.1
. .	Other (1,492 pathways)		10,382	8.9	100.0
. .	**All (1,520 pathways)**		**116,481**	**100.0**	**. .**

(a) Order of program use is based on care episode start dates. Within-program transfers and adjacent periods of use of the same program (that is, without intervening use of another program) are not identified.

(b) The last program used is that with the latest end date. Care pathways with the same order of program access can have different 'last used' programs (see Box 2). This is the case for rank order groups 10 and 13, 18 and 24, 21 and 26.

Notes

1. P = permanent RAC, R = respite RAC, C = packaged care (CACP, EACH and EACHD), H = HACC and/or VHC, T = TCP.
2. Table shows pathways used by at least 300 people.

Table A11: Length of care by program, program use in the 8 years before death, people who died in 2010–11 aged 65+ (per cent)

	Aged care program							
Length of care	**PRAC**	**RRC**	**TCP**	**CACP**	**EACH**	**EACHD**	**HACC**	**VHC**
	Per cent of people using the program							
Up to 3 months	16.3	91.6	88.3	15.8	24.9	25.8	19.8	13.0
3 –< 6 months	8.0	7.2	10.9	12.8	17.1	17.6	11.5	6.1
6 months –< 1 year	10.7	1.1	0.8	18.3	19.2	23.7	15.5	9.2
1 –< 2 years	16.0	0.1	0.0	22.5	20.1	20.9	17.0	14.4
2 –< 3 years	12.4	—	—	11.9	10.0	7.4	10.7	12.1
3 –< 5 years	16.7	—	—	12.2	7.2	4.6	14.0	20.2
5 –< 8 years	13.2	—	—	5.9	1.5	—	10.9	23.8
8 years	6.8	—	. .	0.7	—	. .	0.6	1.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Mean LOC[(a)] (years)	**2.71**	**0.12**	**0.15**	**1.71**	**1.13**	**0.92**	**2.01**	**3.06**
People using the program (n)	**50,665**	**24,350**	**5,899**	**13,638**	**2,363**	**1,196**	**75,261**	**10,692**
Per cent of deaths	**43.5**	**20.9**	**5.1**	**11.7**	**2.0**	**1.0**	**64.6**	**9.2**
	Per cent within the cohort[(b)]							
Up to 3 months	7.1	19.2	4.5	1.9	0.5	0.3	12.8	1.2
3 –< 6 months	3.5	1.5	0.6	1.5	0.3	0.2	7.4	0.6
6 months –< 1 year	4.6	0.2	0.0	2.1	0.4	0.2	10.0	0.8
1 –< 2 years	6.9	0.0	0.0	2.6	0.4	0.2	11.0	1.3
2 –< 3 years	5.4	—	—	1.4	0.2	0.1	6.9	1.1
3 –< 5 years	7.3	—	—	1.4	0.1	0.0	9.1	1.9
5 –< 8 years	5.8	—	—	0.7	0.0	—	7.1	2.2
8 years	3.0	—	. .	0.1	—	. .	0.4	0.1
None	56.5	79.1	94.9	88.3	98.0	99.0	35.4	90.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Length of care (LOC) is truncated at 8 years, and so the mean may underestimate the average time people are clients of a particular care program throughout their life. The exceptions to this are EACHD and TCP which both began after 2002. Also, the effect will be very small for EACH as this program began in 2002. See Box 2 for derivation of LOC.

(b) The cohort of people who died in 2010–11 aged 65 and over (that is, 116,481 people).

Note: Age is at death.

References

AIHW 2011. Pathways in Aged Care: program use after assessment. Data linkage series no. 10. Cat. no. CSI 10. Canberra: AIHW.

AIHW 2013. Movement between hospital and residential aged care 2008–09. Data linkage series no. 16. Cat. no. CSI 16. Canberra: AIHW.

AIHW 2014. Patterns in use of aged care 2002–03 to 2010–11. Data linkage series no.18. Cat. no. CSI 21. Canberra: AIHW.

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Related publications

A range of AIHW publications related to aged care is available for free download at <http://www.aihw.gov.au/aged-care-publications/>.

- *Patterns in use of aged care: 2002–03 to 2011 (*<http://www.aihw.gov.au/publication-detail/?id=60129548008>) is the most recent publication relating to care pathways. It describes aged care program use between 2002–03 and 2010–11, as well as the take-up of approved care following an ACAT assessment.
- Earlier work on care pathways can be found in the following publications: *Pathways in aged care: program use after assessment (*< http://www.aihw.gov.au/publication-detail/?id=6442475608>), *Pathways in aged care: do people follow recommendations?*, (http://www.aihw.gov.au/publication-detail/?id=10737419871) and *Dementia and the take-up of residential respite care* (<http://www.aihw.gov.au/publication-detail/?id=6442468346>).
- The latest analysis of movement between hospital and residential aged care is contained in the publication *Movement between hospital and residential aged care 2008–09* (<http://www.aihw.gov.au/publication-detail/?id=60129544627>).
- Statistics on the use of residential aged care and home care packages are published annually on the web, the most recent publication being *Residential aged care and aged care packages in the community 2012–13* (<http://www.aihw.gov.au/aged-care/residential-and-community-2012-13/#toc>).

This report examines people's use of aged care services in the 8 years before death, using the cohort of 116,481 people who died in 2010–11 aged at least 65. Overall, 80% of these people had used aged care in the 8 years before death, and three-fifths were aged care clients when they died. Just under half of the cohort began using aged care more than 4 years before their death.