



**Australian Government
Aged Care Financing Authority**

The Hon Mark Butler MP
Minister for Mental Health and Ageing
Minister for Social Inclusion
Minister Assisting the Prime Minister
on Mental Health Reform
Minister for Housing and Homelessness
Parliament House
CANBERRA ACT 2600

Dear Minister

MODELLING ON THE FINANCING IMPACTS OF THE LLLB REFORMS

To assist in the development of its first report on financing and funding issues in the aged care sector, the Aged Care Financing Authority (ACFA) commissioned modelling from KPMG on the potential impacts of some of the key elements of the *Living Longer Living Better* (LLLB) reforms. The analysis looks at the impact of a range of the reforms on both the profitability and balance sheets of residential aged care providers at an aggregate level.

The attached report sets out KPMG's modelling analysis and findings.

The KPMG analysis examines:

- the possible choice an individual may make to pay either a daily accommodation payment (DAP) or refundable accommodation deposit (RAD) based on the impact of the choice on the individual's wealth;
- the subsequent impact of that choice on providers;
- the impact on providers of the removal of legislated retention amounts;
- the impact of the removal of the current cap on accommodation prices in high care; and
- the impact of extending the ability to pay lump sums (RADs) to high care.

The models incorporated the impacts of the means testing arrangements proposed in the LLLB legislation currently before Parliament.

The analysis assumes that a resident's choice between a RAD or DAP is based solely on financial considerations, whereby a person entering residential aged care would make a decision that would maximise their net financial wealth, subject to their own budget constraints.

The report recognises that, as currently, there are non-financial considerations that will continue to influence a person's decisions and behaviours after the reforms commence. These include estate planning considerations as well as the desire to simplify arrangements and personal affairs. However, the models make no attempt to quantify the impact of these.

Approach

The approach taken by KPMG illustrated in Figure 2 (page 29) has three areas of focus:

1. To model the decision an individual might make between paying a DAP or a RAD based *solely on financial criteria* with the benefit of full information and choice as defined by the LLLB reforms including:
 - transparent pricing and equivalent payment modes – accessed through publicly available published reference materials; and
 - total choice as to method of payment which may be made separately to choice of facility (ie within 28 days of entering).
2. To model the impact of such residents' decisions on Low Care and Extra Services places on each of Revenue and Balance Sheet (funding) including the impact of removal of prescribed retentions.
3. To model the impact of such residents' decisions on High Care places on each of Revenue and Balance Sheet (funding) recognising that LLLB reforms impact differently to Low Care by:
 - changing the pricing of Accommodation Payments – effectively removing the cap; and
 - introducing the same pricing and funding options (as for Low Care) – thereby allowing for the introduction of RADs.

Methodology

The methodology involved the creation of three separate models, as represented in Figure 2:

1. Input Model:

This modelled an individual's likely decision making process which incorporates a range of personal financial inputs that might motivate and fully inform an individual's decision in the context of their location, asset and income circumstances.

2. Low Care and Extra Services Model:

Application of the decision outputs from the Input Model to the 19,519 individuals who entered Low Care and Extra Services in 2011-12 to assess the impact of their possible decision as to DAP/RAD on each of Revenue and Balance Sheet.

3. High Care Services Model:

Application of the decision outputs from the Input Model to the 20,166 individuals who entered High Care Services in 2011-12 to assess the impact of their possible decision as to DAP/RAD on each of Revenue and Balance Sheet.

Models 2 and 3 scaled the impact for the first year of the reforms, 2014-15. However, such impacts will continue in subsequent years until the current cohort of residents has left aged care.

Findings for the 2014-15 Financial Year

For High Care Services (other than Extra Services) the model estimates that in the first year of the reforms there will be an increase of \$3.4 billion in new RADs from new residents.

There is also estimated to be a \$93.5 million increase in provider income, reflecting the removal of the capping arrangements in High Care.

For Low Care and Extra Services the model estimates that in the first year of the reforms there will be a decrease in the number of new RADs of \$402.8 million from new residents. There is also an estimated decrease in income of \$68.4 million in the first year reflecting the removal of retention amounts¹, but not accounting for a potential offsetting increase in revenue that may arise if residents choose to make combination payments under the new arrangements, including draw downs from lump sum payments.

The model found that based solely on maximising wealth, the majority of new entrants in Low Care and Extra Services would choose to pay a DAP except that in the majority of cases the income earned from renting out the home would not be sufficient to pay the estimated DAP.

A summary of the impact of these changes in the first year of the LLLB reforms at the aggregate industry level is set out below.

	Balance Sheet impact \$m	Profit and Loss impact \$m
High Care	3,400	93.5
Low and Extra Service	-402.8	-68.4

The value of new RADs for new High Care (other than Extra Services) residents entering aged care will be slightly offset by the small reduction in new RADs for Low Care and Extra Service residents entering care who elect to pay by a DAP.

The KPMG analysis is based on a number of key assumptions and, as noted in the report, there are some limitations to the findings (see page 44 of the full report). As noted by KPMG, the estimated shift from RADs to DAPs in Low Care may be over estimated for low value bonds as it is based on the assumption that all new entrants own a home and are single². In addition the estimated reduction in income associated with the removal of retentions represents the upper limit as it does not take into account the draw down facility which will be available under the new arrangements.

Conclusion

ACFA supports the overall findings of the analysis that the reforms can be expected to have a significant positive impact on the overall level of refundable accommodation deposits (bonds) and revenue for the industry.

However, ACFA acknowledges that the LLLB reforms may impact residential aged care providers differently given the variability in provider characteristics. The precise impact on all providers will depend on their individual capital structures, their profitability, their

¹ This represents a first year reduction of income from retention amounts from a total annual income of \$200 million.

² Due to data limitations, the model has assumed that all residents are single and that they have a house which can be rented out. Under the model residents who have paid a low value RAD would elect to pay a DAP. It is unlikely that a single person paying a low value RAD has a house. It is more likely that this person has other assets which would provide a better return paid as a RAD than held as an asset. A member of a couple entering care would not be able to rent out their house. This type of resident would also be unlikely to pay a DAP and is more likely to pay a RAD from the other assets held by the couple other than the house.

business models and their capacity to adapt to changes within the sector. It would also appear that certain Low Care providers may feel a greater negative impact from the reforms.

Subject to the passage of the legislation, ACFA will monitor the impacts of the reforms as they are implemented and regularly report to you. This will include consideration of how the reforms impact on different providers with different funding and operational structures.

Yours sincerely

Lynda O'Grady
Chair

22 May 2013



cutting through complexity

Scenario analysis of selected LLLB financial arrangements

Interim report

Prepared for:

Aged Care Financing Authority

May 2013

Disclaimer

Inherent Limitations

This report has been prepared as outlined in the Introduction of this report. This report which has been prepared at the request of the Department of Health and Ageing on behalf of the Aged Care Financing Authority (ACFA), provides a summary of KPMG's findings during the course of the work undertaken for the Department of Health and Ageing on behalf of ACFA under the terms of KPMG's contracts dated 20 December 2012, 26 March 2013, and 15 May 2013. The contents of this interim report do not represent our conclusive findings, which will only be contained in our final detailed report.

The services provided in connection with this engagement comprise an advisory engagement which is not subject to Australian Auditing Standards or Australian Standards on Review or Assurance Engagements, and consequently no opinions or conclusions intended to convey assurance have been expressed.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, the Department of Health and Ageing personnel consulted as part of the process.

KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

Third Party Reliance

This report is prepared solely for the purpose set out in the Introduction to this report and is not to be used for any other purpose without KPMG's prior written consent. Other than our responsibility to the Department of Health and Ageing and ACFA, neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party's sole responsibility.

Contents

1	Introduction	15
1.1	Context of this report	15
1.2	Purpose of this report	16
2	Overview of the residential care sector	18
2.1	Composition	18
2.2	Funding flows	19
2.3	Funding structure	21
3	LLLB funding reforms	23
3.1	Residential care funding reforms	23
3.2	Other LLLB reforms	26
4	Model methodology	27
4.1	Financial arrangements included in the scenario analysis	27
4.2	Additional data analysis	28
4.3	Financial arrangements excluded from the scenario analysis	28
4.4	Model structure	28
4.5	Decision framework for residents	30
4.6	Datasets	32
4.7	Model assumptions	33
4.8	Model parameters	34
5	Baseline data	36
5.1	Resident payments	36
5.2	Accommodation payments from a provider perspective	40
6	Model results	42
6.1	Low care and extra services high care residents	42
6.2	High care	46
7	Sensitivity analysis	51
7.1	Overview	51
7.2	Results - funding arrangements	52

7.3 Results - pricing arrangements	54
References	56

Glossary

Acronym	Definition
ACFA	Aged Care Financing Authority
ACFI	Aged Care Funding Instrument
CAP	Conditional adjusted payment
DAP	Daily Accommodation Payment
DoHA	Department of Health and Ageing
EBITDA	Earnings before interest, tax, depreciation and amortisation
GPFR	General purpose financial report
HACC	Home and Community Care
LLLB	Living Longer Living Better
MPIR	Maximum permissible interest rate
NFP	Not for profit
RAC	Residential aged care
RAD	Refundable Accommodation Deposit

Executive Summary

The Australian population is ageing at a rapid pace. In 2011, the first of the baby boomers turned 65 years of age, with the ageing baby boomer bubble expected to increase the prevalence of long term aged related health care conditions.

Over the next 40 years the ageing population is expected to see the number of people aged 65-84 years to more than double and the number of people aged 85 years and over quadruple to 1.8 million people (The Treasury 2010).

The need for aged care will increase with the ageing population. Increasingly, more people are expected to use Community Care (Home Care) and shift to residential care if and when required. This suggests any increase in the demand for aged care from the ageing population will first be felt in community care.

By 2031 the first of the baby boomers will turn 85 years of age, at which point the demand for high care services is projected to increase significantly due to an increase in the prevalence of age related conditions, such as dementia.

This shift in the composition of the Australian population will require a future aged care sector that is dynamic, flexible and sustainable. It will not only require additional investment to meet the expected increase in demand, but may need to accommodate alternative needs and preferences of residents, their family and friends to a level previously unseen.

The Living Longer Living Better reforms

On 20 April 2012 the federal government released the Living Longer Living Better (LLLB) aged care reform package. This was in response to the Productivity Commission's Caring for Older Australians report, the recognised need by consumers, industry and government to reform the aged care sector, and opportunities to enhance the framework to deliver aged care solutions to a growing market.

The LLLB reforms aim to address recognised challenges in the aged care system. This includes changing selected financial arrangements in order to meet increased needs and changing preferences of an ageing population, and to mitigate financial pressures on providers and the federal government.

The Australian Government is working with the aged care sector to develop and implement a 10 year plan to address the aged care reforms. The first five years of the program will be dedicated to implementing immediate changes to the aged care system. There will be a major review after five years to assess how the system has changed and adapted, and the ability to make further changes.¹ This staged approach will give time for aged care providers to adjust to the reforms and any new market structure that may be created.

The purpose of this report

KPMG was commissioned by ACFA to develop an annual report on the impact of aged care financing arrangements on access to quality care, sustainability, industry viability and the aged care workforce. The annual report is expected to be delivered to ACFA in mid June 2013.

¹ More detail on the *Living Longer Living Better* reforms can be found at <http://www.livinglongerlivingbetter.gov.au/>

Given the Senate Committee's interest in the modelling from the annual report,² KPMG were commissioned by ACFA to develop an interim report on the potential impact from selected Living Longer Living Better (LLLB) financial arrangements on residential aged care providers.

The purpose of this interim report is to help ACFA develop a response to the Minister of Health and Ageing on the potential impacts of selected LLLB financial arrangements on the residential care sector.

The residential care sector

In 2011-12 recurrent expenditure on aged care was approximately \$12.9 billion, with the federal government providing around three quarters of total funding for aged care expenditure (excluding HACC expenditure). This accounted for approximately \$9.8 billion.

The largest amount of federal government aged care expenditure was associated with residential care. In 2011-12 government expended \$8.7 billion on residential aged care compared to \$1.1 billion on community care packages. An additional \$1.4 billion was spent on the HACC program, including the Commonwealth HACC program and the federal government's contribution to funding in Victoria and Western Australia.

In total, residential care providers receive approximately \$12.0 billion in operating revenue per year from government, residents and other funding sources. Providers also receive funds for capital expenditure from residents (bonds), financial institutions (loans), federal government (zero interest loans and capital grants), and investors (equity investments).

In 2010-11 there were close to 1,100 residential aged care providers. Religious, charitable and community-based providers owned 51.8 per cent of operational residential care places. For-profit providers owned 37.5 per cent while the remainder were owned by state and local governments.

There was also large variability in financial characteristics across residential aged care providers. On average for-profit providers had greater earnings before interest, tax depreciation and amortisation (EBITDA) per resident per annum than not-for-profit and government owned providers. However, they were more reliant on debt, with approximately 14.5 per cent of total finance made up of equity, compared to 43.6 per cent for not-for-profit providers.

Given the variability in financial characteristics, LLLB reforms may impact residential aged care providers differently. The impact on each provider will depend on its capital structure and profitability, their business model and the capacity of the provider to adapt to changes within the sector arising from the reforms.

Financial arrangements included in the scenario analysis

The purpose of developing a model was to test alternative scenarios associated with selected LLLB financial arrangements expected to impact partially supported and non-supported residents in residential care.³ This included impacts on both the profitability of the residential

² A Senate Committee is currently considering several bills related to the LLLB reforms, including the Aged Care (Living Longer Living Better) Bill 2013; Australian Aged Care Quality Agency Bill 2013; Australian Aged Care Quality Agency (Transitional Provisions) Bill 2013; Aged Care (Bond Security) Amendment Bill 2013; and Aged Care (Bond Security) Levy Amendment Bill 2013.

³ Non-supported residents have a combination of assessable income and assets at a level where the federal government deems they can afford to pay all of their accommodation costs. Partially supported residents have a combination of assessable income and assets at a level where the federal government deems they can afford to pay part of their accommodation costs. In discussing the impact of selected LLLB financial on residents, this report refers to the impact on partially supported and non-supported residents in residential care.

care sector through impacts on income and the cost of debt, and on balance sheets through the impact on the total value of lump sum payments.

Financial arrangements that are expected to impact low and extra services care residents and that have been evaluated through scenario analysis include:

- requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility; and
- removing the ability of providers to retain prescribed amounts from lump sum accommodation payments.

Financial arrangements that are expected to impact high care residents and that have been evaluated through scenario analysis include:

- requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility; and
- creating consistent accommodation pricing by removing daily accommodation charges and allowing providers to ask residents entering high care to pay either a refundable accommodation deposit (RAD), daily accommodation payment (DAP) or combination of both.⁴

Change to means testing arrangements for care fees

Under the new arrangements, the federal government will assess whether the care subsidy for a resident entering residential care on or after 1 July 2014 should be reduced based on their assessable income and means-testable assets, rather than only on their assessable income, which is the current arrangement.

Assessable income will include federal government payments such as the age pension, and ordinary income as determined by the age pension income test. Assessable assets will include the resident's share of property or any valuable item they or their partner own (in full or in part), including a RAD. Means-testable assets will include all assessable assets, but the value of their share of their principal residence will be capped at \$144,500 (indexed over time).

As a RAD will be treated differently to the principal residence in the means-testable assets test, there is an implicit incentive for the resident to select a DAP in order to avoid additional care fees. Given this will impact the choice between a RAD and a DAP, the change to means testing arrangements for care has been explicitly incorporated into the model to ensure the scenario analysis results are representative of this change.

Additional data analysis

In addition, data analysis was undertaken on changes in the LLLB reforms that require providers to receive permission from the Aged Care Pricing Commissioner to price high care accommodation above the Level 2 threshold. This includes:

- estimating the value of new lump sum bonds and periodic payments in 2011-12 that exceed the Level 2 pricing threshold; and
- estimating the value of new RADs and DAPs from high care residents in 2014-15 that are expected to exceed the Level 2 pricing threshold.

As guidelines on receiving permission to charge an accommodation payment greater than the Level 2 threshold were not finalised at the time of this report, the potential change to the value

⁴ Under the LLLB reforms bonds are referred to as RADs and periodic payments are referred to as DAPs. This report uses the LLLB terms when referring to the reforms, and uses bonds and periodic payments when referring to historical data.

of accommodation payments associated with the new pricing arrangements was not estimated.

Financial arrangements excluded from the scenario analysis

Other financial arrangements under the LLLB reforms may impact residential care providers but have not been tested within the model due to limited data. These financial arrangements include:

- the impact of increased accommodation supplements for supported residents in facilities that have been significantly refurbished or newly built on or after 20 April 2012;
- allowing draw downs on RADs;
- changes to the extra services clawback and arrangements; and
- enabling residents to opt in and out of additional amenities offered by the provider and pay any relevant fees for those services.

There is potential for these financial arrangements to be tested in the future once they have been introduced into the sector.

Modelling methodology

The model assess a resident's decision to choose either a RAD, DAP or a combination of both based on maximising expected wealth.⁵

The model was built to estimate impacts on low and extra services care and high care. Although some financial arrangements will impact both types of residents, others will only impact one type of resident, such as removing prescribed retention amounts for low and extra services, and introducing consistent accommodation pricing for new high care residents.

The results relate to an estimated change in the first year of the new financial arrangements (2014-15). There will be impacts in subsequent years as new people enter residential care and replace current residents. However, owing to data limitations these effects have not been modelled.

Model results - Low and extra services

Results – Funding arrangements

Two changes to funding arrangements were tested within the scenario analysis for low and extra services care. These were:

- increased pricing transparency from requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility; and
- removing the ability of providers to retain prescribed amounts from accommodation payments.

Results from the scenario analysis suggest that:

⁵ As discussed in Section 0, factors other than maximising expected wealth will also impact the decision to choose between alternative accommodation payment types, such as an emotional attachment to the family home or alternative priorities within estate planning. Due to limited information they have not been included in the model.

- increased pricing transparency may reduce the value of new RADs from low and extra services residents by \$402.8 million in 2014-15, with these RADs shifting to DAPs;
- removal of prescribed retention amounts may reduce income associated with new RADs from low and extra services residents of up to \$68.4 million in 2014-15, assuming that providers currently retain the maximum permissible amount from all bonds.

The number of RADs estimated to switch payment type under a scenario with increased transparency around accommodation pricing is approximately 33.1 per cent, based on the resident maximising their wealth with full information, and the discretion to choose their accommodation payment type.

The relatively large number of RADs switching to DAPs compared to the total value of the shift highlights an important driver within the model. Most residents would prefer to pay a DAP based on their estimated wealth. However, in the majority of cases the estimated income earned from renting out the home was not enough to cover the estimated DAP.

The majority of RADs that switch to DAPs were at the lower end of the spectrum, valued at \$200,000 or less, with the average RAD switching across valued at \$113,107.

These results must be viewed in the context of the model structure and assumptions. The estimated shift from RADs to DAPs may be over estimated for low value bonds due to limited data on the characteristics of these residents.

Consideration must also be given to the result associated with removing prescribed retention amounts. Due to limited data on the willingness of residents to allow draw downs on RADs, the model did not estimate the potential offsetting increase in income to providers associated with these draw downs.

Results - Pricing arrangements

Potential impacts from requiring providers to receive permission from the Aged Care Pricing Commissioner to price accommodation above the Level 2 threshold were not tested within the scenario analysis.

Instead data analysis was undertaken to determine the value of new bonds in 2011-12 that would exceed the Level 2 threshold in order to gain an appreciation of the value of new bonds from low and extra services residents that may exceed the upper Level 2 threshold in 2014-15.

Under an assumed MPIR of 7.64 per cent, the equivalent Level 2 RAD threshold is \$406,037. Applying this threshold to the distribution of new low and extra services bonds (lump sum and periodic payments) in 2011-12 suggests:

- approximately 2,435 new bonds (13.3 per cent) would exceed the threshold, consisting of:
 - 2,010 lump sum bonds;
 - 112 periodic payments; and
 - 313 combination lump sum bonds / periodic payments.
- the value of new low and extra services bonds in 2011-12 exceeding the threshold is estimated to be \$303.6 million; and
- the value of income and avoided cost of debt associated with new low and extra services bonds in 2011-12 exceeding the Level 2 pricing threshold is estimated to be \$26.8 million.

Model results – High care

Results – Funding arrangements

Two changes to funding arrangements were tested within the scenario analysis. These include:

- increased pricing transparency from requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility; and
- creating consistent accommodation pricing by removing daily accommodation charges and allowing providers to ask residents entering high care to pay either a RAD, DAP or combination of both.

Results from changes to funding arrangements for new high care residents suggest:

- the value of new RADs from high care residents is estimated to increase by \$3.4 billion in 2014-15; and
- increased income and avoided cost of debt from new RADs and DAPs from high care residents is \$93.5 million in 2014-15.

The estimated increase in RADs from high care residents is more than enough to offset the estimated decrease in RADs associated with a switch from RADs to DAPs for low and extra services residents.

The results also suggest high care providers may be able to increase their income and reduce their cost of debt. This is because allowing providers to offer new high care residents a RAD, DAP or a combination of both removes the pricing cap currently associated with accommodation charges.

As more people leave residential care there will be greater opportunity to offer new high care residents a RAD, DAP or combination of both. This is expected to increase the ability of providers to increase their lump sum values, annual income and avoided cost of debt beyond 2014-15 as the current cohort of residents are replaced.

These results must be viewed in the context of the model structure and assumptions. In particular, it was assumed that high care residents choose to pay a RAD or DAP based on their expected wealth associated with each accommodation type. The propensity to base their decision on wealth may be less than low care residents given the reduced expected length of care.

Results - Pricing arrangements

Potential impacts from requiring providers to receive permission from the Aged Care Pricing Commissioner to price accommodation above the Level 2 threshold were not tested within the scenario analysis.

Furthermore, as residents paid an accommodation charge in 2011-12 (i.e., there were no accommodation bonds paid by new high care residents) data analysis could not be undertaken on the value of bonds exceeding the Level 2 threshold.

Instead, the analysis focused on the estimated distribution of new high care RADs and DAPs in 2014-15 that would exceed the Level 2 threshold.

Under an assumed MPIR of 7.64 per cent, the equivalent Level 2 RAD threshold is \$406,037. Applying this threshold to the distribution of estimated new RADs and DAPs for high care residents suggests:

- approximately 861 new RADs and 58 new DAPs would exceed the Level 2 threshold, which equates to approximately 5.0 per cent of estimated new RADs and DAPs for high care residents in 2014-15;
- the value of new RADs for high care exceeding the Level 2 threshold is estimated to be \$38.4 million in 2014-15; and
- the income and avoided cost of debt associated with new RADs and DAPs for high care exceeding the Level 2 pricing threshold is estimated to be \$3.0 million in 2014-15.

These results must be viewed in the context of the model structure and assumptions. The distribution of new high care RADs and DAPs was estimated based on the assumption that high care providers would charge an accommodation payment equal to the average low and extra services bond for providers in the same LGA.

This assumption means that the variability of estimated high care RADs and DAPs in 2014-15 was less than corresponding low and extra services bond values in 2011-12. Consequently the estimated number and value of new RADs and DAPs exceeding the Level 2 threshold may be underestimated.

Sensitivity analysis

The results of the sensitivity analysis suggest the model results are sensitive to assumptions used within the model. This includes average housing prices, estimated annual growth in housing prices (i.e., capital gains), and rental incomes. In addition, the estimated value of accommodation payments exceeding the upper Level 2 threshold was sensitive to changes in the MPIR.

1 Introduction

The federal government established the Aged Care Financing Authority (ACFA) in August 2012 to provide independent advice to the Minister for Mental Health and Ageing (the Minister) on pricing policy as part of the annual review of pricing policy. ACFA is headed by an independent chair and is charged with providing an annual report to the Minister on financing and funding issues in the sector.⁶

KPMG was commissioned by ACFA to develop an annual report on the impact of aged care financing arrangements on access to quality care, sustainability, industry viability and the aged care workforce. This includes:

- an analysis of the current state of the aged care sector, in terms of revenue movements, cost movements and productivity movements;
- setting a benchmark and developing a framework for measuring and monitoring the impact of Living Longer Living Better (LLLLB) reforms and other industry developments; and
- providing advice on accommodation payments, additional amenity fees for additional services in the context of the pricing policy, and other matters the Minister refers to the ACFA.

In developing the annual report, KPMG were requested to undertake scenario analysis on the potential impact from selected Living Longer Living Better (LLLLB) financial arrangement reforms on residential aged care providers. This interim report presents results from the scenario analysis.

1.1 Context of this report

In framing its advice, ACFA is to consider all relevant factors and take into account the federal government's broad objectives for aged care financing arrangements, which are set out in ACFA's operating framework.⁷ These objectives are to:

- support access, quality care, flexibility and choice for residents including those with special needs and living in rural and remote areas;
- recognise that accommodation is essentially a personal responsibility, so that residents with sufficient means should pay a reasonable price corresponding to the value of the accommodation services they receive, with appropriate safeguards for people who are marginalised, disadvantaged or have modest means;
- enable efficient aged care providers to:
 - provide quality care for their residents, while being appropriately rewarded for the operational risks inherent in operating an aged care business; and
 - make a return on investment that is sufficient to ensure that investment will continue to be made in the aged care industry at the rate needed to meet the demand for services;

⁶ ACFA's membership and operating framework can be found at <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-aged-care-acfa-revised-framework>, accessed 11 April 2013.

⁷ ACFA's role does not extend to recommending subsidy rates or care and accommodation prices.

- ensure that the cost of aged care remains sustainable for the Australian taxpayer;
- support a stable and skilled workforce that can meet the growing demand for aged care services;
- minimise the regulatory burden placed upon aged care providers;
- maximise competition while ensuring appropriate consumer protection; and
- ensure that the availability, affordability and quality of aged care services meet the broader community's expectations.

Under the ACFA's operating framework, advice will be provided to the Minister each year on the impact of financial arrangements on the aged care sector. This is to inform the Minister's annual review of pricing policy across the sector.

In particular, ACFA will provide advice on:

- the impact of aged care financing arrangements on access to quality care, sustainability, industry viability, and the aged care workforce, including an analysis of revenue, cost and productivity movements in the aged care sector;
- the level, and impact on access to care, sustainability, industry viability, and the aged care workforce, of any accommodation payments that are levied by approved providers for entry to residential aged care; and
- the level, and impact on access to care, sustainability, industry viability, and the aged care workforce, of any additional amenity fees for additional services that are levied by Approved Providers for aged care services.

This interim report has been developed within the context of the federal government's objectives and the objectives of ACFA in providing advice to the federal government. It will form part of the annual report on the impact of aged care financing arrangements on access to quality care, sustainability, industry viability and the aged care workforce. This annual report is expected to be delivered to ACFA in mid June 2013.

1.2 Purpose of this report

The purpose of this interim report is to help inform ACFA develop a response to the Minister for Health and Ageing and the Senate Committee currently considering the Aged Care bills currently before Parliament.⁸

Given that proposed LLLB financing reforms do not come into effect until July 2014, this report presents the current financial arrangements in residential care, and presents results from a scenario analysis of potential impacts from a change to selected financing arrangements.

The scenario analysis has not sought to evaluate all changes to financial arrangements under the LLLB reforms. Instead it has focused on selected LLLB financial arrangements, including:

- requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility;
- removing the ability of providers to retain prescribed amounts from lump sum accommodation payments;
- requiring providers to receive permission from the Aged Care Pricing Commissioner to price accommodation above the Level 2 threshold (currently set at \$85 per day); and

⁸ These include Aged Care (Living Longer Living Better) Bill 2013; Australian Aged Care Quality Agency Bill 2013; Australian Aged Care Quality Agency (Transitional Provisions) Bill 2013; Aged Care (Bond Security) Amendment Bill 2013; and Aged Care (Bond Security) Levy Amendment Bill 2013.

- removing daily accommodation charges and allowing providers to request residents entering high care to pay either a refundable accommodation deposit (RAD), daily accommodation payment (DAP) or combination of both.

This report presents scenario analysis results based on the data and information available at the time of its preparation. Because this report is an interim report, there is potential for scenario analysis results to change if additional data or information becomes available before the completion of the annual report.

2 Overview of the residential care sector

This chapter provides an overview of the residential care sector with the intention to provide context in assessing the potential impacts from the scenario analysis. It explores the composition of the residential care sector and current funding arrangements and flows between funders and providers.

2.1 Composition

Residential aged care comprises low care and high care.⁹ Some facilities are approved to offer extra services, which includes accommodation, services and food where standards are higher. Residential aged care is provided either on a permanent basis or a respite basis (temporary short term care).

The number of residential aged care places is determined by a population based formula set by the federal government. It is currently set at 44 places each for low and high care per 1,000 people aged 70 years and over.

In 2011-12 there were 184,570 operational residential care places in Australia. These serviced 171,065 residents on 30 June 2012, including 132,760 residents receiving permanent residential high care. Approximately 30 per cent of high care residents enter residential care as a low care resident and are subsequently moved to a high care place. There were also 34,249 residents receiving permanent residential low care, while the remainder received respite care (DoHA 2012).

Not-for-profit providers delivered the majority of operational residential aged care places, with 107,410 places in 2011-12. For-profit providers provided a much greater proportion of residential care with 66,335 places (38 per cent of the total) compared to their share in delivering community care packages. State and local government providers provided the least amount of operational residential care places with 10,825 places (see Table 1).

Table 1: Number of places by ownership status, 2011-12

Package type	Religious	Charitable	Community based	For profit	State govt.	Local govt.	Total
Allocated residential care places	54,544	36,316	26,898	81,442	9,308	1,991	210,499
Operational residential care places	50,259	32,384	24,767	66,335	8,934	1,891	184,570

Source: DoHA (2012).

⁹ Residential aged care is governed by the *Aged Care Act 1997* and the Aged Care Principles.

2.2 Funding flows

There is a large amount of funds provided by government, individuals and other funders to supply aged care each year. In 2011-12 recurrent expenditure on aged care was approximately \$12.9 billion, with the federal government providing around three quarters of total funding for aged care expenditure (excluding HACC expenditure). This accounted to approximately \$9.8 billion.

The largest amount of federal government expenditure is on residential care. In 2011-12 government expended \$8.7 billion on residential aged care compared to \$1.1 billion on community care packages. An additional \$1.4 billion was spent on the HACC program, including the Commonwealth HACC program and the federal government's contribution to funding in Victoria and Western Australia.

However, residential aged care funding is complex, with providers receiving funds from multiple sources, including government, residents, financial institutions, equity investors, and other sources such as charities and donations from the community (see Figure 1).

2.2.1 Accommodation

The federal government pays an accommodation supplement set at the same level for all regions for those with limited means. Most providers currently receive the bulk of their funding from residents through income and retention amounts derived from lump sum bonds, although some receive funding from periodic payments.

Only an accommodation charge can be levied in high care, except where the place is an extra service high care place, in which case a lump sum bond, periodic payment or both can be levied. The federal government also provides capital grants and zero real interest loans to some providers.

For the most part, providers use bonds to fund capital expenditure, which forms part of the provider's debt structure. This can also be supplemented by loans from financial institutions. Bonds accounted for 47 per cent of total financing in 2010-11, while debt accounted for 16 per cent (DoHA 2012a).

2.2.2 Living expenses

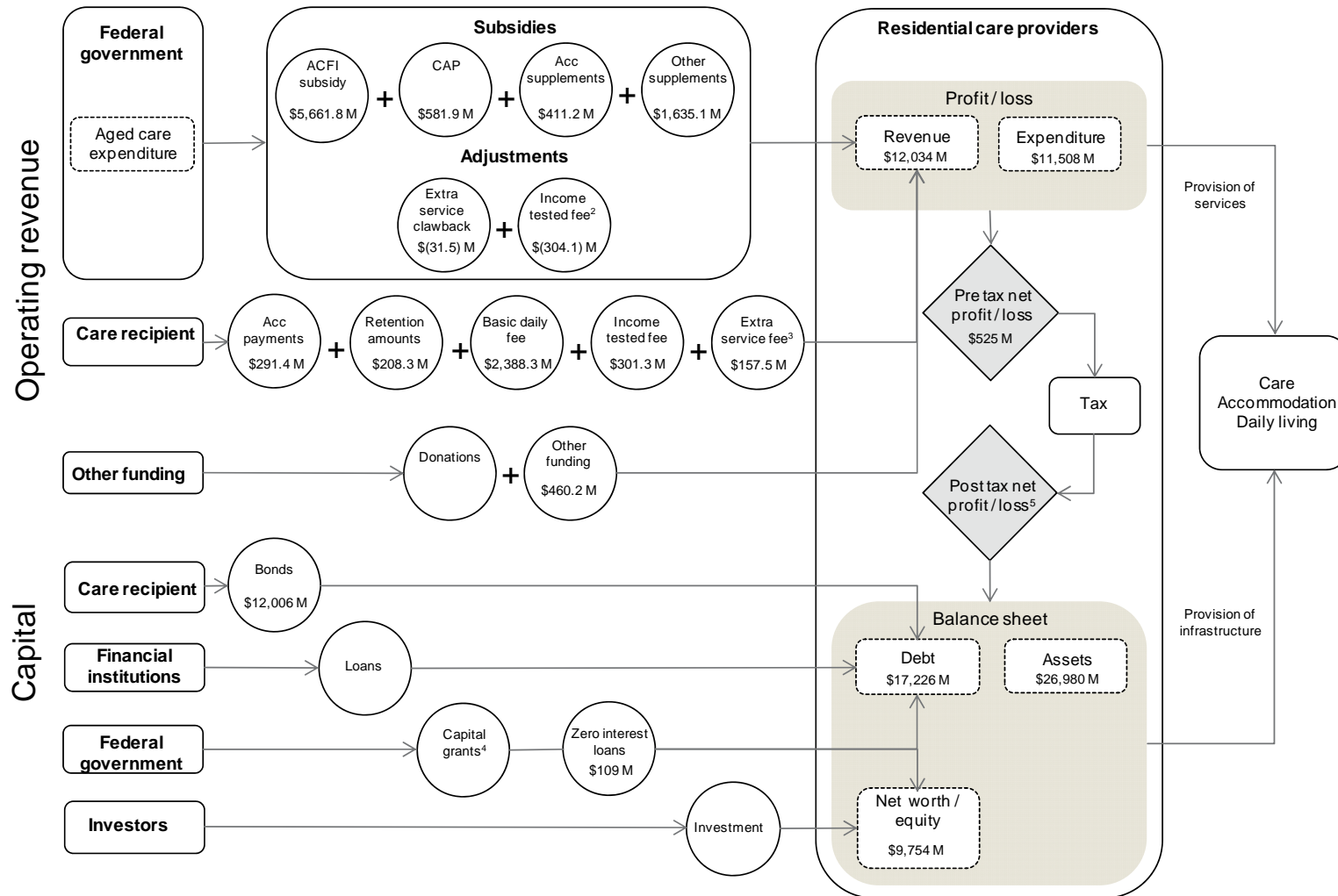
Funding is also provided for living expenses. This is paid by residents through the basic daily fee and covers expenses related to hotel type services, such as food, utilities and laundry. The basic daily fee is capped at 85 per cent of the annual single basic aged pension for all residents regardless of their income or wealth.

2.2.3 Care

Funding is also provided for delivering care from the federal government through the Aged Care Funding Instrument (ACFI) and residents through income tested care fees. Funding levels are the same across levels for people with the same care needs, except that a viability supplement is paid for smaller rural and remote services and services targeting disadvantaged groups such as older homeless people. The federal government may also provide additional supplements to providers for oxygen and enteral feeding supplements.

In 2011-12, care subsidies and supplements accounted for 95 per cent of the total \$8.7 billion in residential aged care funding. Accommodation supplements and other supplements relating to grand parenting accounted for the remaining five per cent of total federal government residential aged care funding (DOHA 2012).

Figure 1: Funding flow to residential aged care providers under the current aged care arrangements, 2010-11



Note: **1.** Financial data was supplied by the Department of Health and Ageing based on General Purpose Financial Report data. **2.** Income tested fees in subsidies represents the entire industry whereas in the care recipient section it represents only those providers who have provided GPFs. **3.** The extra service fee is an estimated amount which includes the claw back amount adjustment. **4.** Up to \$58.5 million in capital grants was made available nationally to Approved Providers in the 2011 Aged Care Approvals Round. Once capital grants are executed they cease to be a liability and are transferred into an asset held by equity investors. **5.** Data was not available for post tax profit / loss. Other amounts may also be distributed from post tax profits before entering the balance sheet, such as amounts to directors, trustees, and dividends.

2.2.4 Other types of funding

Providers may also receive funds from investors in the form of equity. The debt to equity ratio for all residential aged care providers was approximately 1.77 in 2010-11, although this varied significantly across providers, both within and across ownership types. For example, for-profit providers have around 14.5 per cent of equity compared to total finance on average, whereas not-for-profit providers have around 43.6 per cent.¹⁰

2.3 Funding structure

LLLB reforms may impact residential aged care providers differently given the variability in provider characteristics. The impact will depend on the capital structure of a provider and their profitability, their business model and the capacity for the provider to adapt to changes within the sector from the reforms.

In 2010-11 there were close to 1,100 residential aged care providers. Religious, charitable and community-based providers owned 51.8 per cent of operational residential care places. For-profit providers owned 37.5 per cent while the remainder were owned by state and local governments (see Table 2).

Table 2: Provider structure by ownership type, 2010-11¹

	Not for profit	For profit	Government owned	All providers
No. of providers	565	409	116	1,090
No. of facilities	1,664	811	297	2,772
No. of facilities per provider	2.9	2.0	2.6	2.5
EBITDA²	\$7,656	\$10,480	-\$1,379	\$8,036
Average bond per resident	\$173,056	\$214,647	\$129,987	\$185,689
Accommodation bonds as % of total finance	44.6%	57.2%	19.3%	47.1%
Debt as % of total finance³	12.9%	24.2%	5.4%	16.2%
Equity as % of total finance	43.6%	14.5%	77.7%	36.1%

Note: **1.** Total financing is the sum of total liabilities and equity. Bonds, debt and equity as a proportion of total finance do not equal 100 per cent because there are other contingencies besides bonds and non-current liabilities that constitute total liabilities (e.g. provisions, trade debts, and other miscellaneous payables). These are not relevant for these ratios and are therefore not included. Furthermore, balance sheet information is subject to each provider's measurement rule and may not necessarily reflect their true position as there is inconsistent treatment of bonds in current/non-current liabilities. **2.** Earnings before Interest, Taxation, Depreciation and Amortisation (EBITDA) per resident per annum. **3.** Debt comprises non-current liabilities only and excludes bonds.

Source: General Purpose Financial Report data sourced from the Department of Health and Ageing.

¹⁰ Unpublished data supplied by the Department of Health and Ageing.

On average for-profit providers have a higher EBITDA per resident per annum than not-for-profit and government owned providers. For profit providers are more reliant on debt, having:

- the largest average bond per resident at \$214,647;
- the greatest proportion of total financing made up of bonds at 57.2 per cent; and
- the greatest proportion of other debt (non-current liabilities) to total financing at 24.2 per cent.

3 LLLB funding reforms

This chapter provides an outline of changes to financial arrangements under the LLLB reforms. It discusses the expected changes in accommodation payments under the reforms, changes to extra services funding arrangements, and other changes to funding arrangements such as changes to means testing arrangements and additional supplements provided by the federal government. This chapter also lists other non-financial LLLB reforms that have the potential to impact the aged care sector.

3.1 Residential care funding reforms

3.1.1 Accommodation payments

There are several accommodation payment arrangements that will change under the LLLB reforms. These include:

- increased pricing transparency and consumer discretion over payment type;
- removing prescribed retention amounts;
- establishing an Aged Care Pricing Commissioner and introducing accommodation pricing thresholds;
- creating consistent accommodation pricing;
- increasing the accommodation supplement; and
- allowing draw downs on lump sum accommodation payments.

All of these financial arrangements (except the increase in the accommodation supplement) are expected to impact partially supported and non-supported residents only.¹¹ Each financial arrangement change is further discussed below.

Increased pricing transparency and consumer discretion over payment type

New rules governing the disclosure of accommodation prices will be introduced under the LLLB reforms, requiring providers to publish all accommodation prices and greater information explaining alternative accommodation payment options.

Aged care providers will not be able to distinguish between residents on the basis of how they elect to pay for their accommodation. All residents will have the choice of paying for their accommodation through a fully refundable accommodation deposit (RAD), a rental style daily accommodation payment (DAP), or a combination of both.

¹¹ Non-supported residents have a combination of assessable income and assets at a level where the federal government deems they can afford to pay all of their accommodation costs. Partially supported residents have a combination of assessable income and assets at a level where the federal government deems they can afford to pay part of their accommodation costs. In discussing the impact of selected LLLB financial on residents, this report refers to the impact on partially supported and non-supported residents in residential care.

Residents will have a 28 day period after entering the residential care facility to decide how to pay for their accommodation.

Removing prescribed retention amounts

The LLLB reforms will remove the ability of providers to retain prescribed amounts from lump sum accommodation payments.

Establishing an Aged Care Pricing Commissioner and introducing accommodation pricing thresholds

Accommodation payments will be regulated by the Aged Care Pricing Commissioner at three levels (see Table 3). The greatest change for providers will be the need to receive permission from the Aged Care Pricing Commissioner (ACPC) to charge bonds greater than the Level 2 threshold of \$85 per day (or the lump sum equivalent based on the Maximum Permissible Interest Rate).

Table 3: Accommodation payment levels

Level	
Level 1	From \$0 to the amount of the maximum government accommodation supplement, equivalent to \$52.84 per day from 1 July 2014, or an equivalent RAD of \$238,845. ¹
Level 2	From the maximum government accommodation supplement to \$85 per day or an equivalent lump sum of \$406,037.
Level 3	Amounts greater than \$85 per day (or the lump sum equivalent) will need to be pre-approved by the Aged Care Pricing Commissioner.

Note: **1.** Prices are expressed in 2012 dollars and will be indexed annually.

Source: DoHA (2012b).

Consistent accommodation pricing

The distinction between low and high level residential care will be removed, allowing providers to offer those entering high care a choice of a RAD, DAP or a combination of both. This means that all new residents after 1 July 2014 will be subject to the same accommodation payment arrangements. Existing arrangements for respite care will continue to apply. All approvals of residents for residential care will become non-lapsing (unless they are expressly time limited).

Increasing the accommodation supplement

The federal government will increase the accommodation supplement for residents with low means from approximately \$32 per day to \$52.84 per day for residents living in newly built residential facilities or residential facilities significantly refurbished on or after 20 April 2012.

Allowing draw downs on lump sum accommodation payments

Under section 52J-7 of the Aged Care (Living Longer Living Better) Bill 2013, an approved provider will be able to deduct a daily payment from a RAD paid by a person if:¹²

- the person has requested the deduction in writing; and

¹² The Aged Care (Living Longer Living Better) Bill 2013 can be found at <http://www.comlaw.gov.au/Details/C2013B00043/Download>, accessed 5 April 2013.

- the daily payment is payable by the person.

Furthermore, an approved provider may deduct the following from a RAD:

- the amounts specified in the Fees and Payments Principles that may be deducted when the person leaves the service;
- any amounts that the person has agreed in writing may be deducted; and
- such other amounts (if any) as specified in the Fees and Payments Principles.

These amendments are an alternative to regulated retentions, and may be particularly beneficial in regions where RADs are relatively low (e.g., rural and remote areas where home values are relatively low) if residents cannot afford the published RAD.

3.1.2 Changes to extra services funding arrangements

The federal government will clarify the circumstances under which providers will be allowed to offer optional additional services, where providers can offer optional additional services for a fee. Residents will be able to opt in or out of these additional services at any time. This clarification may encourage more residents and providers to consider such options, although providers may be limited in the scope of optional services offered due to the opt in opt out nature of the arrangements.

The federal government will also continue to allow approved providers to apply for Extra Service Status whereby a provider will be given authority by the Department of Health and Ageing to enter into a contract with a resident for extra services for a fee. Extra Service is currently restricted to a whole service or dedicated wing. Under the LLLB reforms, this approval may be given for individual rooms irrespective of where they are located.

Finally, there will also be changes to the extra services claw back. Under current Extra Service arrangements, the Government reduces the amount of the care subsidy by 25 per cent of the government approved Extra Service fee. Under the LLLB reforms, the federal government will no longer make this reduction after 1 July 2014.

3.1.3 Means testing arrangements

Change will be made to the way co-contributions to care are calculated for a resident entering residential care on or after 1 July 2014. This will include a new combined income and assets test for residential care.

Under the new arrangements, the federal government will assess whether the care subsidy for a resident should be reduced based on their assessable income and means-testable assets, rather than only on their assessable income, which is the current arrangement.

Assessable income will include federal government payments such as the age pension, and ordinary income as determined by the age pension income test. Assessable assets will include the resident's share of property or any valuable item they or their partner own (in full or in part), including a RAD. Means-testable assets will include all assessable assets, but the value of their share of their principal residence will be capped at \$144,500 (indexed over time).

The level of the daily care fee for a resident will be calculated by subtracting the maximum rate of the accommodation supplement from 1/364th of the sum of:

- An income tested amount equal to 50 per cent of the resident's income in excess of the maximum assessable income level for a full pensioner (currently \$22,701); plus
- An asset test amount equal to:
 - \$0 if the amount of the resident's means-testable assets is less than Minimum Permissible Asset level (currently \$40,500);

- 17.5 per cent of the amount of the resident’s means-testable assets in excess of the Minimum Permissible Asset level but less than \$144,500 (indexed);
- \$18,200 plus 1 per cent of the amount of the resident’s means-testable assets in excess of \$144,500 but less than \$353,500;
- \$20,290 plus 2 per cent of the amount of the resident’s means-testable assets over \$353,500.

Calculating a resident’s care fee on their means-testable assets and capping the principal residence value at \$144,500 (while including the entire value of RADs), will mean residents can lower their care fees by choosing a DAP if the provider has asked for a RAD greater than \$144,500.¹³

Caps on means tested care fees

There will also be new annual and lifetime caps on means tested care fees. This includes a \$25,000 (indexed) cap on the total amount of care fees a resident can pay in a year, and a lifetime cap of \$60,000 (indexed). Once a resident reaches the cap their care fees will be set to zero.

3.1.4 Other changes to financial arrangements

There will also be an increase in other types of supplements. For example, from 1 July 2013, an additional behaviour supplement and a new veteran’s supplement will be paid to providers who care for eligible residents. There will also be increased viability supplements to providers in remote locations or who provide services to Indigenous Australians and older people who are homeless.

3.2 Other LLLB reforms

While financial arrangement changes under the LLLB reforms are expected to impact the residential care sector, they must be considered within the wider LLLB reform package.

There are many other LLLB reforms unrelated to financial arrangements that are expected to impact all parts of the aged care sector, including community and residential care providers, the workforce and residents.

The federal government is working with the aged care sector to develop and implement a 10 year plan to address the aged care reforms. The first five years of the program will be dedicated to implementing immediate changes to the aged care system. There will be a major review after five years to assess how the system has changed and adapted, and the ability to make further changes.¹⁴ This staged approach will provide time for aged care providers to adjust to the reforms and any new market structure that may be created.

¹³ Changes to the means testing arrangements have been explicitly incorporated into the model to ensure the associated financial incentive to select a DAP (i.e., to avoid additional care fees) impacts the choice between a RAD and a DAP and is therefore included in the scenario analysis results.

¹⁴ More detail on the *Living Longer Living Better* reforms can be found at <http://www.livinglongerlivingbetter.gov.au/>

4 Model methodology

This chapter provides an overview of the model methodology. It includes a discussion on the LLLB financial arrangements that were tested within the scenario analysis, and those financial arrangements excluded due to a lack of data and information on expected behavioural change. This chapter also provides an outline of the model structure, the decision framework assumed for residents, and those datasets, model parameters and assumptions used within the model.

4.1 Financial arrangements included in the scenario analysis

The purpose of developing a model was to test alternative scenarios associated with selected LLLB financial arrangements for the residential aged care sector. This included impacts on both the profitability of the residential care sector through impacts on income and the cost of debt, and on balance sheets through the impact on the total value of lump sum payments.

4.1.1 Low and extra services care

Financial arrangements that are expected to impact low and extra services care and that have been evaluated through scenario analysis include:

- requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility; and
- removing the ability of providers to retain prescribed amounts from lump sum accommodation payments.

4.1.2 High care

Financial arrangements that are expected to impact high care and that have been evaluated through scenario analysis include:

- requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility; and
- creating consistent accommodation pricing by removing daily accommodation charges and allowing providers to ask residents entering high care to pay either a RAD, DAP or combination of both.

4.1.3 Change to means testing arrangements for care

As a RAD will be treated differently to the principal residence in the means-testable assets test, there is an implicit incentive to select a DAP to avoid additional care fees (see Section 3.1.3). Given this will impact the choice between a RAD and a DAP, the change to means testing arrangements for care has been explicitly incorporated into the model to ensure the scenario analysis results are representative of this change.

4.2 Additional data analysis

In addition, data analysis was undertaken on changes in the LLLB reforms that require providers to receive permission from the Aged Care Pricing Commissioner to price high care accommodation above the Level 2 threshold. This includes:

- estimating the value of new lump sum bonds and periodic payments in 2011-12 that exceed the Level 2 pricing threshold; and
- estimating the value of estimated new RADs and DAPs from high care residents that are expected to exceed the Level 2 pricing threshold.

The potential change to the value of accommodation payments associated with the new pricing arrangements was not estimated. This is because guidelines on receiving permission to charge an accommodation payment greater than the Level 2 threshold were not finalised at the time of this report.

4.3 Financial arrangements excluded from the scenario analysis

Other financial arrangements under the LLLB reforms may impact residential care providers. However, these have not been tested within the model due to limited data and information on the likely behavioural response of providers and residents. Most importantly these include:

- the impact of increased accommodation supplements for facilities that have been significantly refurbished or newly built on or after 20 April 2012;
- allowing draw downs on RADs;
- changes to the extra services clawback and arrangements; and
- enabling residents to opt in and out of additional amenities offered by the provider and pay any relevant fees for those services.

There is potential for these factors to be tested in future modelling once they have been introduced into the sector and behavioural change is observed.

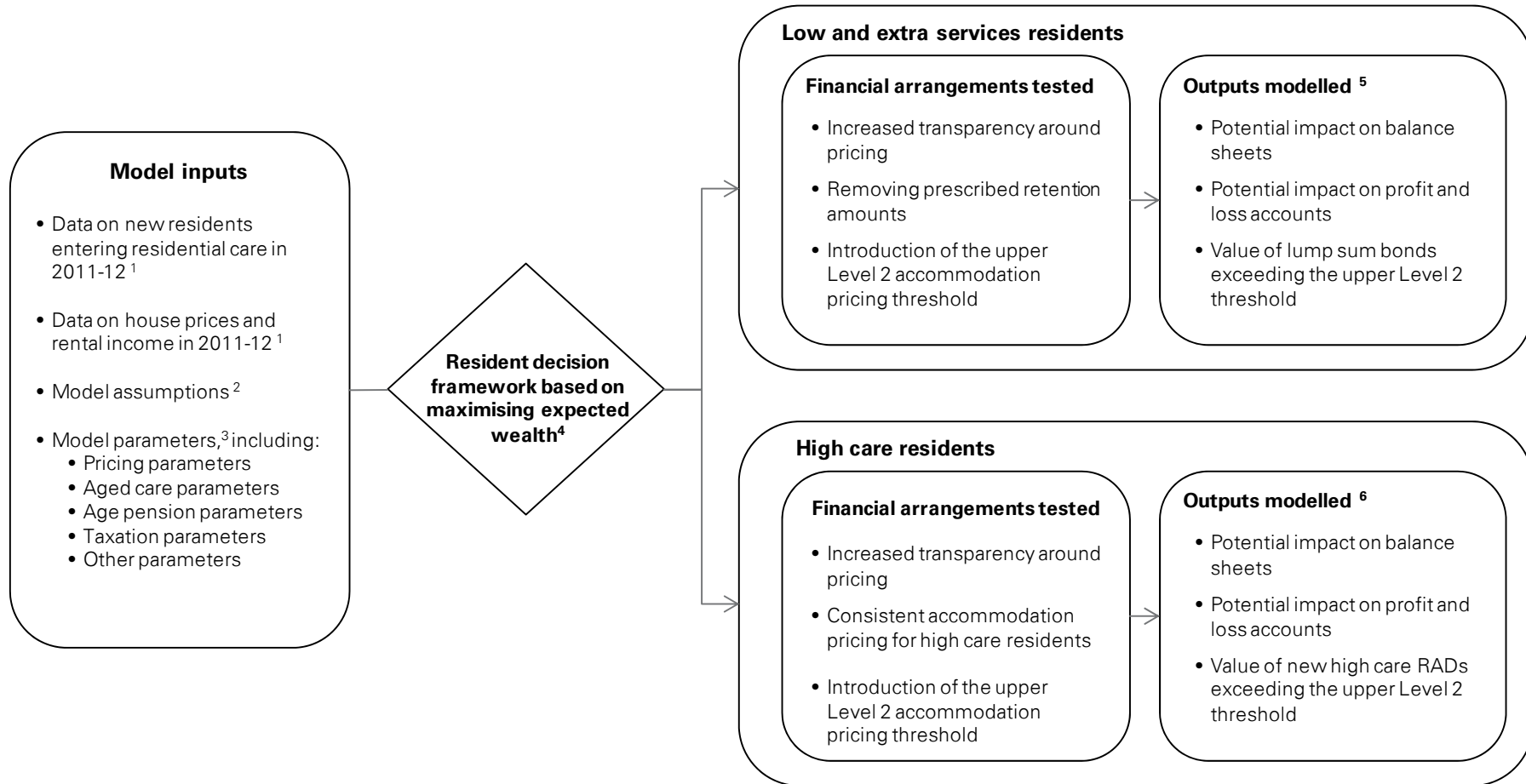
4.4 Model structure

The model structure was developed using several data inputs and parameters relating to 2011-12, and assumptions due to data limitations. The overall model structure pivots around the decision of a resident to choose either a RAD, DAP or combination of both based on maximising expected wealth (see Figure 2).¹⁵

The model was split into low and extra services residents and high care residents. Although some financial arrangements will impact both types of residents, others will only impact one type of resident, such as removing prescribed retention amounts for low and extra services, and introducing consistent accommodation pricing for new high care residents.

¹⁵ As discussed in Section 4.5, factors other than maximising expected wealth will also impact the decision to choose between alternative accommodation payment types, such as an emotional attachment to the family home or alternative priorities within estate planning. Due to limited information they have not been included in the model.

Figure 2: Schematic of the model developed for the scenario analysis



Note: **1.** See Section 4.6. **2.** See Section 4.7. **3.** See Section 4.8. **4.** See Section 4.5. **5.** See Section 5.2. **6.** See Section 6.2.

Outputs included the potential impact on residential care balance sheets and profit and loss accounts at the industry level. There was no assessment of potential impacts on individual facilities or providers.

4.5 Decision framework for residents

The framework of a resident choosing between paying a RAD or DAP was assumed to be based on purely financial expectations, whereby a person entering residential aged care would choose to maximise their net financial wealth, subject to their budget constraints.

The potential impact of other factors impacting the decision over accommodation payments (e.g., emotional factors and estate planning) were not considered due to limited data. It is recognised that these factors will play an important role in deciding between a RAD, DAP or a combination of both. The model results should be considered in the context of the potential impact of these other factors on choice of accommodation payment types.

Table 4 presents the framework used to estimate the expected wealth associated with a RAD or DAP for each resident entering residential care in 2011-12. The framework was used to:

- estimate the potential shift from RADs to DAPs for low and extra services residents from increased pricing transparency;¹⁶ and
- estimate the potential increase in RADs and DAPs from removing daily accommodation charges and allowing providers to request residents entering high care to pay either a RAD, DAP or a combination of both.

The choice of accommodation payment type was also assessed with respect to budget constraints that are expected to impact choice. In particular:

- for a resident to pay a RAD its value must be less than or equal to the average median house price in the respective local government area (LGA) of the facility less the minimum asset threshold; and
- for a resident to pay a DAP, its value must be less than or equal to the average median net rental income in the respective LGA of the facility.¹⁷

Budget constraints were introduced to capture the limited income most residents have from their pension once other expenses are taken into consideration, such as daily living expenses. It may be the case that residents would choose a DAP based on their expectation that their wealth would be greater, but they are constrained to a RAD because their income is not sufficient to cover the DAP. These cases were considered in the model.

¹⁶This includes requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility.

¹⁷ Net rental income was calculated by subtracting estimated rental expense from gross rental income using data supplied by RP Data (2011).

Table 4: Framework to estimate impact on wealth from choosing a RAD or DAP

Framework to estimate net wealth from choosing a RAD	Framework to estimate net wealth from choosing a DAP
Income	Income and capital gains
Return on surplus assets from the sale of the primary residence, estimated at the average median property value for the respective LGA where the resident is assumed to reside minus the RAD.	Net rental property income, estimated at the average median net rental income for the respective LGA where the resident is assumed to reside.
plus eligible Age Pension payments based on the pension income and assets tests specified by the Australian Government Department of Human Services.	plus estimated capital gains on the home, using the 10 year historical average annual capital gain for the respective LGA where the resident is assumed to reside.
	plus eligible Age Pension payments based on the pension income and assets tests specified by the Australian Government Department of Human Services.
Expense	Expense
Care fees under the means tested assessable income and assessable assets test outlined in the LLLB reforms. ²	Estimated DAP calculated using the MPIR and the actual bond paid by the resident or the average bond within the facility. ¹
plus income tax liability, net of any applicable Senior Australian Tax Offset, and inclusive of the Medicare Levy.	plus care fees under the means tested assessable income and assessable assets test outlined in the LLLB reforms. ²
	plus income tax liability, net of any applicable Senior Australian Tax Offset, and inclusive of the Medicare Levy.

Note: **1.** Actual bonds were used in calculating the equivalent DAP for low and extra services residents and the potential shift from RADs to DAPs, while the average bond charged by the facility was used to estimate the RAD and DAP that would be provided from removing daily accommodation charges and allowing providers to request residents entering high care to pay either a RAD, DAP or a combination of both. **2.** This includes means-testable asset test, which will include all assessable assets (including a RAD), but the value of a resident’s share of their principal residence will be capped at \$144,500 (indexed over time).

Source: KPMG.

4.6 Datasets

Data to populate the model for the scenario analysis were sourced from publically available information, proprietary data and unpublished data supplied by the Department. Two primary datasets relating to 2011-12 were used, comprising:

- data on new residents entering residential care; and
- data on housing prices and rental income in each LGA.

More information on these datasets is presented below.

4.6.1 Data on new residents entering residential care

The Department provided data on new partially supported and non-supported residents entering residential care in 2011-12. This included:

- Information on each facility that received a new partially supported and non-supported resident in 2011-12, including:
 - the postcode of the physical address of the facility;
 - the total value of lump sum bonds received; and
 - the total value of periodic payments received.
- de-identified data on new partially supported and non-supported high care residents entering each facility in 2011-12, and their agreed accommodation charge; and
- de-identified data on new lump sum bonds, periodic payments, and combination lump sum bonds / periodic payments received for each facility in 2011-12, including:
 - the agreed amount of the bond;
 - the payment method (i.e., lump sum bond, periodic payment, or a combination of both);
 - the lump sum amount (if any);
 - the interest rate used to calculate the periodic payment;
 - the equivalent monthly periodic payment at the agreed interest rate;
 - whether extra services were provided to the patient; and
 - whether the patient was admitted to low or high care.¹⁸

4.6.2 Data on house prices and rental income

Housing data published by RP Data Pty Ltd in their Investor Report for June 2011 were used to estimate the financial returns to a person entering residential aged care if they chose to pay a DAP. This was based on the assumption that a person would choose to keep their home and rent the premises to receive a rental income that can be used to contribute to their DAP.

Data sourced from the RP Data Investor Report that was used in the model includes:

- median house prices;
- average annual change to median house prices;

¹⁸ The care recipient level data for accommodation bonds contained residents who had paid a bond but were in high care (no extra services). These people were admitted to low or extra services care, were charged an accommodation bond, and were subsequently moved into high care (no extra services).

- weekly median advertised rents; and
- miscellaneous expenses associated with renting.¹⁹

As data provided by RP Data Pty Ltd were stratified by LGA and data provided by the Department were stratified by postcode, a concordance table sourced from the Australian Bureau of Statistics (ABS 2012) was used to match the postcode for a given provider to one or more LGAs.

Some postcodes stratified to more than one LGA. In these cases the postcode was mapped to the LGA comprising the highest proportion of that postcode. Similarly, some LGAs did not have property data. In these cases the LGA comprising the second highest proportion of the postcode was used to obtain property data.

4.7 Model assumptions

A number of assumptions were necessary to develop the model due to limitations in the availability of data and information (see Table 5).

Table 5: Assumptions used in the model

General assumptions

Persons entering residential aged care are classified as 'single' for the purposes of the Australian Government Age Pension income and assets tests.

Persons entering residential aged care choose a RAD or DAP based on a purely financial decision to maximise net financial wealth.

Persons entering residential aged care own one asset, being their principal residence, which is located in the LGA of the residential aged care provider.

Persons choosing to pay a RAD are able to immediately liquidate their principal residence for the average median house price for the applicable LGA.

The amount of any surplus assets, if any, for persons choosing to pay RAD is invested in securities which earn the cash rate set by the RBA.

Persons choosing to pay a DAP are able to immediately rent their former residence for the average median rent for the applicable LGA. Rental expenses (e.g., maintenance) are assumed to be one per cent of the value of the residence per annum.

Taxation calculations account for income tax, the Senior Australian Tax Offset, and the Medicare Levy. Unused portions of the Senior Australian Tax Offset are assumed not to be transferred. Persons are exempt from the Medicare Levy Surcharge.

Assumptions specific to high care residents

Persons in residential high care who pay less than the maximum accommodation charge are assumed to have insufficient assets to be able to pay a RAD or DAPs, and are therefore not considered in the modelling.

Source: KPMG.

¹⁹ These were estimated by RP Data Pty Ltd as one per cent of the median house price per year.

4.8 Model parameters

Several parameters were required to develop the model. These include parameters around the LLLB reforms, parameters set by the Department, aged pension parameters, taxation parameters, and other types of parameters (see Table 6).

Table 6: Parameters used in the model

Input	Unit	Value	Source
Accommodation pricing parameters			
Maximum permissible interest rate	<i>per cent</i>	7.64	KPMG calculation
Level 2 DAP threshold	\$	85.00	DoHA (2012b)
Level 2 RAD equivalent threshold	\$	406,037	DoHA (2012b)
Aged care parameters			
Maximum high care accommodation charge per day (1 July 2011)	\$	30.55	DoHA (2012c)
Maximum monthly retention amount for bonds over \$38,160 for 2011-12	\$	318.00	DoHA (2012c)
Minimum asset threshold for residents to retain	\$	39,000	DoHA (2012c)
Age pension parameters			
Payment rate per fortnight for singles	\$	772.6	DoHS (2013)
Lower threshold for income test (singles)	<i>\$/fortnight</i>	152.00	DoHS (2013)
Upper threshold for income test (singles)	<i>\$/fortnight</i>	1,697.20	DoHS (2013)
Reduction per \$1 of income in excess of lower threshold	<i>\$/fortnight</i>	0.50	DoHS (2013)
Lower threshold for assets test (single homeowners)	\$	192,500	DoHS (2013)
Upper threshold for assets test (single homeowners)	\$	707,500	DoHS (2013)
Reduction per \$1,000 of assets in excess of lower threshold	<i>\$/fortnight</i>	1.50	DoHS (2013)
Deeming rate for first \$45,400 effective from 20 March 2013	<i>per cent</i>	2.50	DoHS (2013a)
Threshold for higher deeming rate	\$	45,400	DoHS (2013a)
Deeming rate for the value of assets in excess of \$45,400 effective from 20 March 2013	<i>per cent</i>	4.00	DoHS (2013a)
Aged care means tested fee parameters			
Minimum asset threshold	\$	40,500	DoHA (2012e)
Intermediate asset threshold	\$	144,500	DoHA (2012e)
Upper asset threshold	\$	353,500	DoHA (2012e)
Cap on value of principal residence	\$	144,500	DoHA (2012e)
Fee component for assets between minimum and intermediate thresholds	%	17.5	DoHA (2012e)

Input	Unit	Value	Source
Fee component for assets between intermediate and upper thresholds	%	1.0	DoHA (2012e)
Fee component for assets over upper threshold	%	2.0	DoHA (2012e)
Income threshold	\$	22,701	DoHA (2012e)
Fee component for income over threshold	%	50.0	DoHA (2012e)
Taxation parameters			
Lower threshold for Medicare Levy in 2011-12	\$	30,685	ATO (2013)
Medicare Levy	<i>per cent</i>	1.50	ATO (2013)
Senior Australians Tax Offset income threshold	\$	48,525	ATO (2013a)
Maximum Senior Australian Tax Offset	\$	2,230	ATO (2013b)
Income tax rates for 2011-12	Upper limit of taxable income band	Maximum amount	Rate applied to the band
	6,000	-	-
	37,000	-	15%
	80,000	4,650	30%
	180,000	17,550	37%
> 180,000	54,550	45%	ATO (2013c)
Other parameters			
Return on cash or cash equivalent securities	<i>per cent</i>	3.00	RBA (2013)

5 Baseline data

This chapter provides a summary of the baseline data from which the model results were derived. It describes the data provided by the Department on accommodation payments for new low and extra services residents, and accommodation charges from new high care residents.²⁰ This chapter also provides an outline of the baseline data from a provider perspective, including from the perspective of the profit and loss account and the balance sheet.

5.1 Resident payments

The Department provided 18,385 care recipient level data records for residents entering low and extra services high care in 2011-12, of which 16,336 paid a lump sum, 652 paid periodic payments, and 1,397 paid a combination of a lump sum and periodic payments.

However, 141 data records provided by the Department were excluded from the baseline data analysis and the scenario modelling, as these were considered in error due to identified inconsistencies within each record.

5.1.1 Low and extra services

Details of all accommodation payments made by new residents in low and extra services places for 2011-12 were provided by the Department. These included lump sum bonds, periodic payments and a combination of both.

Lump sum bonds

Summary statistics for lump sum bonds are provided in Table 7 while the distribution of lump sum bonds is presented in Chart 1.

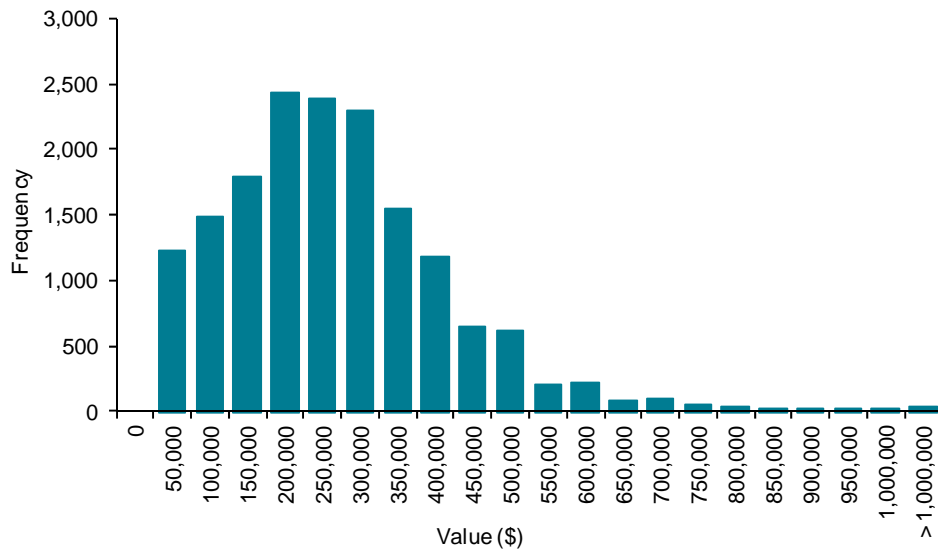
Table 7: Statistics of new low and extra services lump sum bonds, 2011-12

	Value
Number of bonds	16,332
Mean value	\$253,061
Median value	\$250,000
Most common bond value	\$250,000
Minimum bond amount	\$161
Maximum bond amount	\$2,000,000
Total value of bonds	\$4,132,990,280

Source: KPMG calculations based on data supplied by the Department of Health and Ageing.

²⁰ This references the datasets described in Section 4.6.1.

Chart 1: Distribution of new low and extra services lump sum bond values, 2011-12



Source: KPMG calculations based on data supplied by the Department of Health and Ageing.

In 2011-12:

- there were 16,332 lump sum bonds provided by new residents in low and extra services places;
- the average lump sum bond amount for these residents was \$253,061;
- lump sum bond values ranged from \$161 to \$2.0 million; and
- the total value of lump sum bonds for these new residents was \$4.1 billion.

The distribution of lump sum bonds is positively skewed, with the majority clustered around the mean. A small proportion of bonds have much larger values than the mean.

Periodic payments

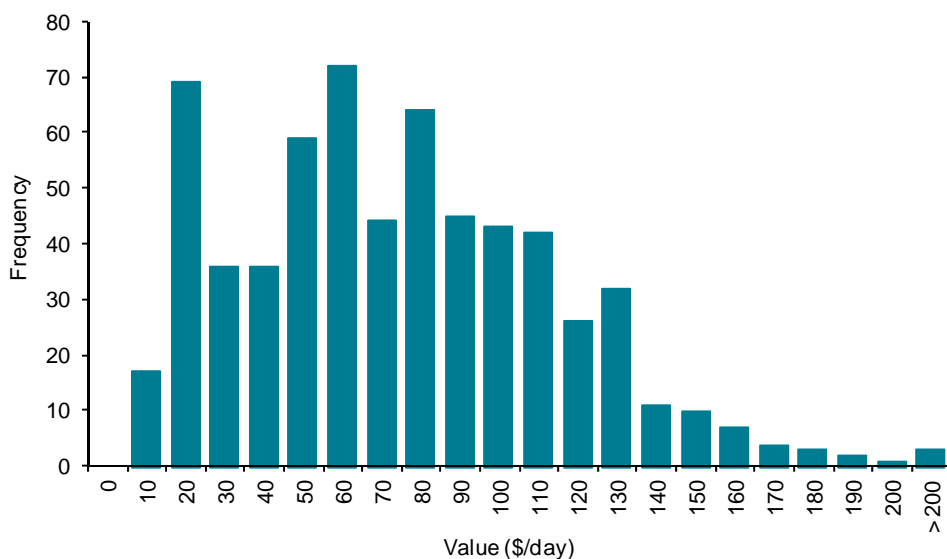
Summary statistics for periodic payments are provided in Table 8 and the distribution of their equivalent lump sum bond amounts is presented in Chart 2.

Table 8: Statistics of new low and extra services periodic payments, 2011-12

	Value
Number of new residents paying periodically	627
Mean value (per day)	\$69
Median value (per day)	\$67
Minimum value (per day)	\$2
Maximum value (per day)	\$276
Total annual income from periodic payments	\$15,744,640

Source: KPMG calculations based on data supplied by the Department of Health and Ageing.

Chart 2: Distribution of new periodic payments, 2011-12



Source: KPMG calculations based on data supplied by the Department of Health and Ageing.

In 2011-12:

- there were 627 new residents in low and extra services places that chose to pay by periodic payment;
- the average periodic payment was \$69 per day;
- the minimum periodic payment was \$2 per day;
- the maximum periodic payment was \$276 per day; and
- the total annual income from these periodic payments was \$15.7 million.

Combination lump sum bond / periodic payment

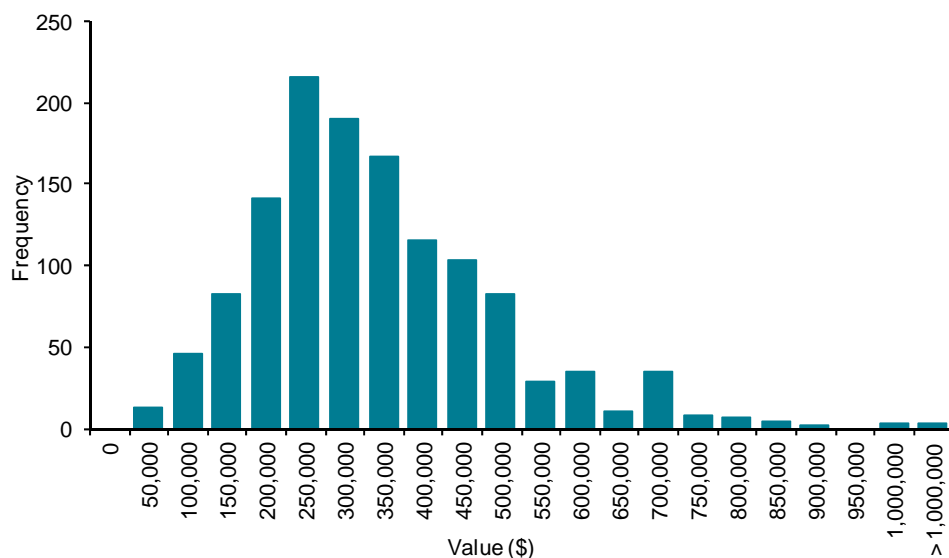
Summary statistics for combination lump sum bonds / periodic payments are provided in Table 9 and their distribution is presented in Chart 3.

Table 9: Summary statistics for new low and extra services combination lump sum bond / periodic payments, 2011-12

	Value
Number of bonds	1,285
Mean value	\$327,844
Median value	\$300,000
Most common bond value	\$250,000
Minimum bond amount	\$17,919
Maximum bond amount	\$1,200,000
Total value of bonds	\$421,279,992

Source: KPMG calculations based on data supplied by the Department of Health and Ageing.

Chart 3: Distribution of new low and extra services combination lump sum bond / periodic payment values, 2011-12



Source: KPMG calculations based on data supplied by the Department of Health and Ageing.

In 2011-12:

- there were 1,285 new residents in low and extra services places that chose to pay a combination lump sum bond / periodic payment;
- the average combination lump sum bond / periodic payment amount for these residents was \$327,844;
- combination lump sum bond / periodic payment values ranged from \$17,919 to \$1.2 million; and
- the total value of combination lump sum bonds / periodic payments for these new residents was \$421.3 million.

Similar to the distribution of lump sum and periodic payment bond amounts, the distribution of combination lump sum bonds / periodic payments is positively skewed, with the majority clustered around the mean.

5.1.2 High care

Data on the amount new high care residents paid through the accommodation charge in 2011-12 were also provided by the Department (see Table 10).

There were 20,166 new residents in high care that were asked to pay an accommodation charge. Approximately 20.2 per cent of these residents paid an accommodation charge less than the maximum daily accommodation charge in force on 1 July 2011. The other 79.8 per cent were charged the maximum accommodation charge set at the time of their entry.

There were 51 data entries where the agreed daily accommodation charge exceeded the maximum charge. These data entries were considered to be incorrectly entered.

Table 10: New high care residents paying an accommodation charge, 2011-12

Agreed daily accommodation charge	New residents	Notes
Less than \$30.55	4,076	
\$30.55	3,952	Maximum charge as at 1 July 2011. Equivalent to a \$145,552 bond.
Greater than \$30.55 but less than \$32.38	160	
\$32.38	7,480	Maximum charge as at 20 September, 2011. Equivalent to a \$154,271 bond.
Greater than \$32.38 but less than \$32.58	27	
\$32.58	4,420	Maximum charge introduced as at 1 January 2012. Equivalent to a \$155,224 bond.
Greater than \$32.58	51	As these exceed the maximum charge for 2011-12 they were considered errors.
Total	20,166	

Source: KPMG calculations based on data supplied by the Department of Health and Ageing.

5.2 Accommodation payments from a provider perspective

Data provided by the Department on accommodation payments from new partially supported and non-supported residents entering low and extra services, and new partially supported and non-supported residents entering high care in 2011-12 (see Section 4.6.1) were used to derive the impact on the balance sheet and profitability for the residential care sector (see Table 11).

Table 11: Balance sheet and profit and loss profile associated with new low and high care residents in 2011-12

	Low and extra services		High care	
	Balance sheet	Profit and loss	Balance sheet	Profit and loss
	\$m	\$m	\$m	\$m
Lump sum bonds ¹	4,133.0	315.8	-	-
Periodic payments	-	13.4	-	-
Combination lump sum bonds / periodic payments	254.5	32.4	-	-
Daily accommodation charges	-	-	-	211.1
Income from retentions ²	-	68.4	-	-
Total	4,387.5	429.9	-	211.1

Note: **1.** Impact on profit and loss from lump sum bonds is estimated based on an assumed MPIR of 7.64 per cent. **2.** Income from retentions is estimated based on the assumption that providers retain the maximum amount from all accommodation bonds.

Source: KPMG calculations based on data supplied by the Department of Health and Ageing.

In summary, the residential care sector received in 2011-12:

- approximately \$4.39 billion in new low and extra services lump sum bonds, comprising of lump sum bonds only and lump sum bonds as part of a combined bond;
- \$429.9 million in new income / avoided cost of debt associated with low and extra services bonds, derived from:
 - investment income from lump sum bonds;
 - avoided cost of debt;
 - income from periodic payments; and
 - income from retention amounts.
- \$211.1 million in new income from accommodation charges for high care residents.

6 Model results

The chapter provides results from the scenario analysis, split between low and extra services residents and high care residents. It includes the estimated impacts from a change to funding arrangements, and the value of accommodation payments that would exceed the Level 2 threshold on accommodation pricing.

The scenario analysis has only tested selected LLLB financial arrangements. Consequently, results should be considered and interpreted in the context of the assumptions and limitations underpinning the modelling and the potential impact from other LLLB reforms.

As the model uses new accommodation payments for 2011-12 the results of the scenario analysis should be interpreted accordingly. The results relate to a change in the first year of the financial arrangements (financial year 2014-15). Subsequent changes are expected in following years as new people enter residential care and replace current residents.

6.1 Low care and extra services high care residents

This section presents the modelling results for low and extra services associated with selected LLLB financial arrangement reforms. For presentation purposes the selected financial arrangements have been categorised into funding arrangements and pricing arrangements.

Funding arrangements

Two changes to funding arrangements were tested within the scenario analysis. These include:

- requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility; and
- removing the ability of providers to retain prescribed amounts from accommodation payments.

Pricing arrangements

There was only one pricing arrangement investigated through data analysis. This includes the requirement for providers to receive permission from the Aged Care Pricing Commissioner to price accommodation above the Level 2 threshold.

As guidelines on receiving permission to charge an accommodation payment greater than the Level 2 threshold were not finalised at the time of this report, the potential change to the value of accommodation payments associated with the new pricing arrangements was not estimated.

Instead the data analysis focused on estimating the value of new bonds from low and extra services residents in 2011-12 that exceed the Level 2 threshold.

6.1.1 Funding arrangements

Results from the scenario analysis suggest that (see Table 12):

- increased transparency around accommodation prices may reduce the value of new RADs by \$402.8 million in 2014-15, with these RADs shifting to DAPs; and
- removal of prescribed retention amounts may reduce income associated with new RADs by \$68.4 million in 2014-15, assuming that providers currently retain the maximum permissible amount from all bonds.²¹

Table 12: Estimated impact of funding arrangements for low and extra services residents, 2014-15

	Value of bonds on the balance sheet	Annual income/avoided cost of debt
	\$m	\$m
Previous		
RADs	4,133.0	315.8
DAPs	-	13.4
Combination RADs / DAPs	254.5	32.4
Income from retentions	N/A	68.4
<i>Total</i>	<i>4,387.5</i>	<i>429.9</i>
Estimated under the scenario		
RADs	3,933.6	300.5
DAPs	-	55.0
Combination RADs / DAPs	51.1	6.3
Income from retentions	N/A	0.0
<i>Total</i>	<i>3,984.7</i>	<i>361.8</i>
Net impact		
RADs	-199.4	-15.2
DAPs	-	41.6
Combination RADs / DAPs	-203.4	-26.1
Income from retentions	N/A	-68.4
Total¹	-402.8	-68.2

Note: The estimated change in annual income and avoided cost of debt is not equal. This is because current estimated income and avoided cost of debt was based on actual MPIRs, whereas estimated income and avoided cost of debt once the funding arrangement is introduced was based on an assumed MPIR of 7.64 per cent.

Source: KPMG calculations.

The number of RADs estimated to switch payment type under a scenario with increased transparency around accommodation pricing is approximately 33.1 per cent in 2014-15 (see Table 13).

The relatively large number of RADs switching to DAPs compared to the total value of the shift highlights an important driver within the model. Although most residents would prefer to pay a DAP based on their estimated wealth, in the majority of cases the estimated income earned from renting out the home was not enough to cover the estimated DAP.

²¹ This result relates to potential changes for 2014-15 only. The total income from retention amounts is much greater, equating to \$208.3 million in 2010-11.

Consequently, the majority of RADs estimated to switch to DAPs were at the lower end of the spectrum, valued at \$200,000 or less, with the average RAD switching across valued at \$113,107 (see Chart 4).

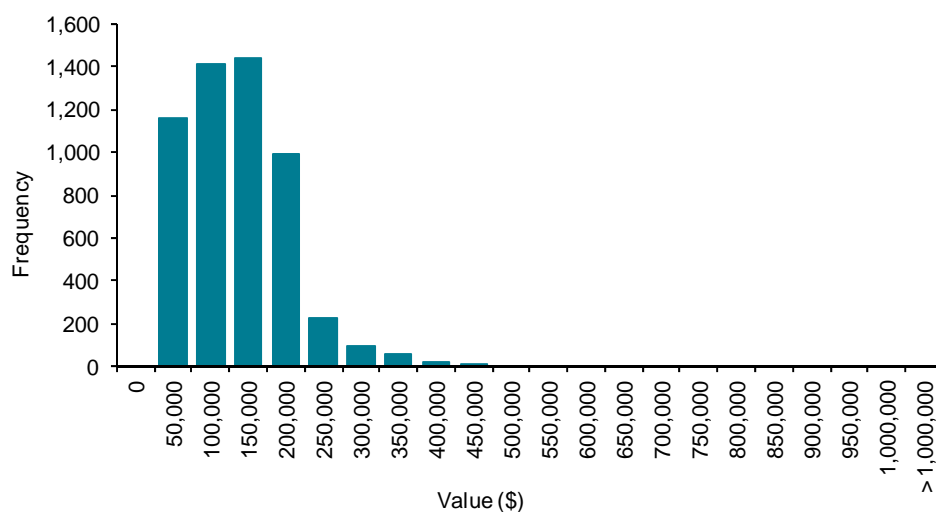
Table 13: Estimated number of residents switching payment type, 2014-15¹

	Number of new residents switching	Total number of new residents in 2011-12	Proportion of new residents switching
	<i>no.</i>		<i>%</i>
RADs to DAPs	5,402	16,332	33.1
DAPs to RADs	374	627	59.6
Combination RADs / DAPs to RADs	801	1,285	62.3
Combination RADs / DAPs to DAPs	282	1,285	21.9
Total²	6,859	18,244	37.6

Note: **1.** Residents refers to partially supported and non-supported residents. **2.** The total number of new residents does not sum to the column due to combination lump sum bonds / periodic payments being used twice as the denominator to determine the proportion of residents switching accommodation payment types.

Source: KPMG calculations.

Chart 4: Distribution of RADs estimated to switch over to DAPs, 2014-15



Source: KPMG calculations.

Limitations with the analysis

These results must be viewed in the context of the model assumptions and structure. In particular, data provided by the Department shows that the median surplus assets for residents paying a bond of \$150,000 or less in 2011-12 was \$41,225, which was just higher than the minimum asset threshold of \$40,500 for residents to be eligible to pay a bond.

The modelling results for low value bonds are not consistent with this experience, but could not be adjusted due to limited data.

- Some people paying low value bonds would not have owned a home and may not have had other substantial assets.

- Approximately 31.3 per cent of people paying bonds less than \$100,000 were partnered. Residences are not counted as assessable assets if they are occupied by spouses or protected people, and assessable assets are halved for each member of a couple.

Consequently, the estimated shift from RADs to DAPs may be over estimated for low value bonds.

Consideration must also be given to the result associated with removing prescribed retention amounts. Due to limited data on the willingness of residents to allow draw downs on RADs, the model did not estimate the potential offsetting increase in income associated with these draw downs. Consequently, the estimated reduction in income associated with retentions may be an upper bound.

6.1.2 Pricing arrangements

The guidelines around requirements to receive permission from the Aged Care Pricing Commissioner to charge accommodation prices greater than the Level 2 threshold have not been released. Consequently, it was not possible to estimate the impact of the Level 2 threshold on the value of RADs as there is no way of knowing how many RADs above the threshold would not receive permission. However, commentary is provided on the value of bonds that would exceed the Level 2 pricing threshold if it were applied to new low and extra services bonds received in 2011-12.

Under an assumed MPIR of 7.64 per cent, the equivalent RAD amount is \$406,037. Applying this threshold to the distribution of new low and extra services bonds (lump sum and periodic payments) in 2011-12 suggests (see Table 14):

- approximately 2,435 new low and extra services bonds (13.3 per cent) exceed the Level 2 threshold, consisting of:
 - 2,010 lump sum bonds;

Table 14: Value of new bonds in 2011-12 exceeding the Level 2 pricing threshold

	Value of bonds on the balance sheet	Annual income/cost of avoided debt
	\$m	\$m
New low and extra services bonds in 2011-12		
Lump sum bonds	4,133.0	315.8
Periodic payments	-	13.4
Combination lump sum bonds / periodic payments	254.5	32.4
Income from retentions	N/A	68.4
<i>Total</i>	<i>4,387.5</i>	<i>429.9</i>
Value exceeding the Level 2 pricing threshold		
Lump sum bonds	274.4	21.0
Periodic payments	0.0	1.8
Combination lump sum bonds / periodic payments	29.2	4.1
Income from retentions	N/A	0.0
Total	303.6	26.8

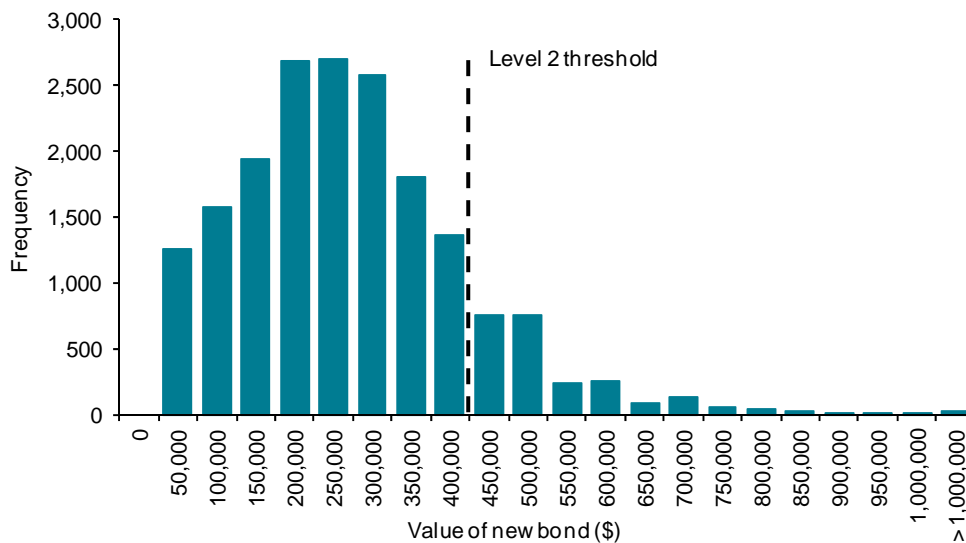
Note: Income and avoided cost of debt from RADs is estimated based on an assumed MPIR of 7.64 per cent.

Source: KPMG.

- 112 periodic payments; and
- 313 combination lump sum bonds / periodic payments.
- the value of new low and extra services bonds exceeding the Level 2 threshold is estimated to be \$303.6 million; and
- the income and avoided cost of debt associated with new low and extra services bonds exceeding the Level 2 threshold is estimated to be \$26.8 million.

Chart 5 shows the distribution of bonds exceeding the Level 2 threshold when applied to new low and extra services bonds received in 2011-12. Given the relationship between the MPIR and the Level 2 threshold, successive increases in the MPIR (i.e., decreases in the Level 2 threshold) will mean an increasing proportion of bonds will exceed the Level 2 threshold if there is no mechanism to review the threshold level.

Chart 5: Distribution of new bonds in 2011-12 that exceed the Level 2 threshold



Note: The Level 2 threshold of \$406,037 assumes an MPIR of 7.64 per cent.

Source: KPMG calculations.

6.2 High care

This section presents the modelling results for high care associated with selected LLLB financial arrangement reforms. For presentation purposes the selected financial arrangements have been categorised into funding arrangements and pricing arrangements.

Funding arrangements

Two changes to funding arrangements were tested within the scenario analysis. These include:

- requiring providers to publish accommodation payment prices and the ability of residents to choose their accommodation payment type 28 days after they have entered a facility; and
- creating consistent accommodation pricing by removing daily accommodation charges and allowing providers to ask residents entering high care to pay either a RAD, DAP or combination of both.

Pricing arrangements

There was only one pricing arrangement investigated through data analysis. This includes the requirement for providers to receive permission from the Aged Care Pricing Commissioner to price accommodation above the Level 2 threshold.

As guidelines on receiving permission to charge an accommodation payment greater than the Level 2 threshold were not finalised at the time of this report, the potential change to the value of accommodation payments associated with the new pricing arrangements was not estimated.

Instead the data analysis focused on estimating the value of new RADs and DAPs in 2014-15 that will exceed the Level 2 threshold.

6.2.1 Funding arrangements

Results from changes to funding arrangements for new high care residents show (see Table 15):

- the value of new RADs from high care residents is estimated to increase by \$3.4 billion in 2014-15; and
- increased income and avoided cost of debt from new RADs and DAPs from high care residents is \$93.5 million in 2014-15.

The estimated increase in RADs from high care residents is more than enough to offset the estimated decrease in RADs associated with a switch from RADs to DAPs for low and extra services residents. This is a potential benefit to providers delivering high care as it allows greater access to lump sum payments.

Table 15: Estimated impact associated with funding arrangements for high care residents, 2014-15

	Value of bonds on the balance sheet	Annual income/avoided cost of debt
	\$m	\$m
Previous		
Daily accommodation payments	N/A	188.0
RADs	-	-
DAPs	-	-
<i>Total</i>	-	188.0
Estimated under the scenario		
Daily accommodation payments	N/A	-
RADs	3,359.6	256.7
DAPs	-	24.8
<i>Total</i>	3,359.6	281.4
Net impact		
Daily accommodation payments	N/A	-188.0
RADs	3,359.6	256.7
DAPs	0.0	24.8
Total	3,359.6	93.5

Note: Income and avoided cost of debt from RADs is estimated based on an assumed MPIR of 7.64 per cent.

Source: KPMG calculations.

The results also suggest high care providers will be able to increase their income and reduce their cost of debt. Allowing providers to offer new high care residents a RAD, DAP or a combination of both removes the pricing cap currently associated with accommodation charges. This is shown in Table 16, which presents actual high care accommodation charges for 2011-12 to the equivalent daily payment associated with estimated new RADs and DAPs in 2014-15.

Table 16: Actual high care accommodation charges for 2011-12 and equivalent daily payments associated with estimated new RADs and DAPs in 2014-15

	Distribution of accommodation charges in 2011-12	Distribution of equivalent daily payments for estimated RADs and DAPs 2014-15
Less than or equal to \$30.55	8,028	708
Greater than \$30.55 but less than or equal to \$32.38	7,640	470
Greater than \$32.38 but less than or equal to \$32.58	4,447	0
Greater than \$32.58 but less than or equal to \$52.84	43	8,947
Greater than \$52.84 but less than or equal to \$85.00	8	4,945
Greater than \$85.00	0	933
Total	20,166	16,003

Note: The total for the distribution of equivalent daily payments for estimated RADs and DAPs in 2014-15 does not equal the total for the distribution of accommodation charge. This is because there were 4,076 people paying a daily accommodation charge of less than \$30.55 per day in 2011-12 that were excluded from the scenario modelling due to the assumption these people were partially supported residents. Furthermore, 87 high care residents were accommodated by providers in LGAs for which no low and extra services high care data were available.

Source: KPMG calculations.

As more people leave residential care there will be greater opportunity to offer new high care residents a RAD, DAP or combination of both. This is expected to increase the ability of providers to increase their lump sum values, annual income and avoided cost of debt beyond 2014-15 as the current cohort of residents are replaced.

Limitations with the analysis

It was assumed that high care residents choose to pay a RAD or DAP based on their expected wealth associated with each accommodation type. The propensity to base their decision on wealth may be less than low care residents given the reduced expected length of care, which may reduce the estimated increase in new RADs associated with high care residents.

6.2.2 Pricing arrangements

The Level 2 threshold was applied to the estimated distribution of new RADs and DAPs from high care residents in 2014-15 to estimate the value of new RADs and DAPs exceeding the threshold.

Under an assumed MPIR of 7.64 per cent, the equivalent Level 2 RAD threshold is \$406,037. Applying this threshold to the estimated distribution of new RADs and DAPs for high care residents in 2014-15 suggests (see Table 17):

- approximately 861 new RADs and 58 new DAPs would exceed the Level 2 threshold, which equates to approximately 5.0 per cent of estimated new RADs and DAPs for high care residents in 2014-15;
- the value of new RADs from high care residents exceeding the Level 2 threshold is estimated to be \$38.4 million in 2014-15; and
- the income and avoided cost of debt associated with new RADs and DAPs from high care residents exceeding the Level 2 pricing threshold is estimated to be \$3.0 million in 2014-15.

Table 17: Value of estimated new RADs and DAPs exceeding the Level 2 pricing threshold, 2014-15

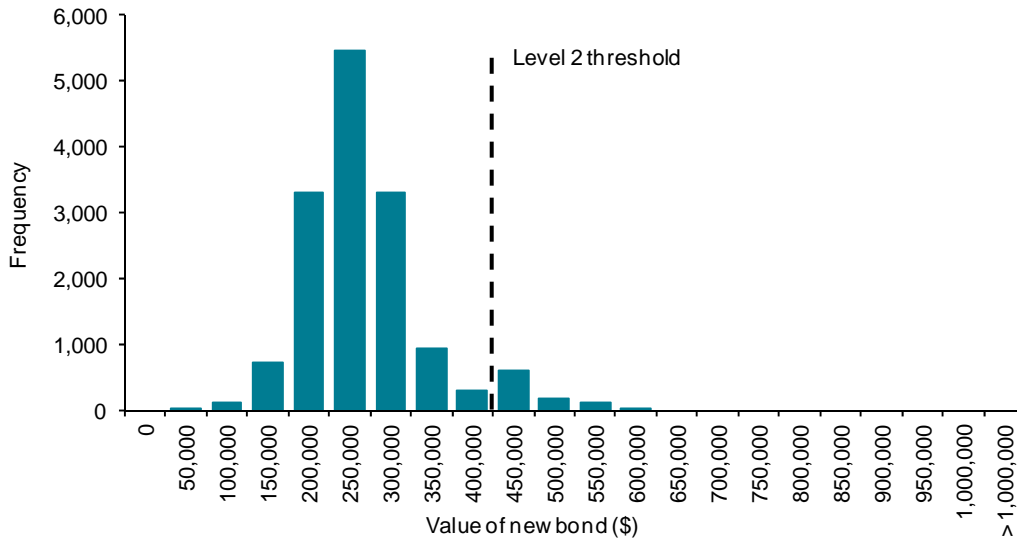
	Value of RADs on the balance sheet	Annual income/avoided cost of debt
	\$m	\$m
Estimated new high care RADs in 2014-15		
RADs	3,359.6	256.7
DAPs	-	24.8
<i>Total</i>	<i>3,359.6</i>	<i>281.4</i>
Value of new RADs and DAPs exceeding the threshold		
RADs	38.4	2.9
DAPs	0.0	0.1
Total	38.4	3.0

Note: Income and avoided cost of debt from RADs is estimated based on an assumed MPIR of 7.64 per cent.

Source: KPMG calculations.

Chart 6 shows the estimated distribution of new RADs from high care residents exceeding the Level 2 threshold. The results suggest the proportion of estimated new RADs and DAPs exceeding the Level 2 threshold is less compared to new bonds for low and extra services residents in 2011-12 (see Section 6.1.2).

Chart 6: Estimated new high care RADs exceeding the Level 2 threshold, 2014-15

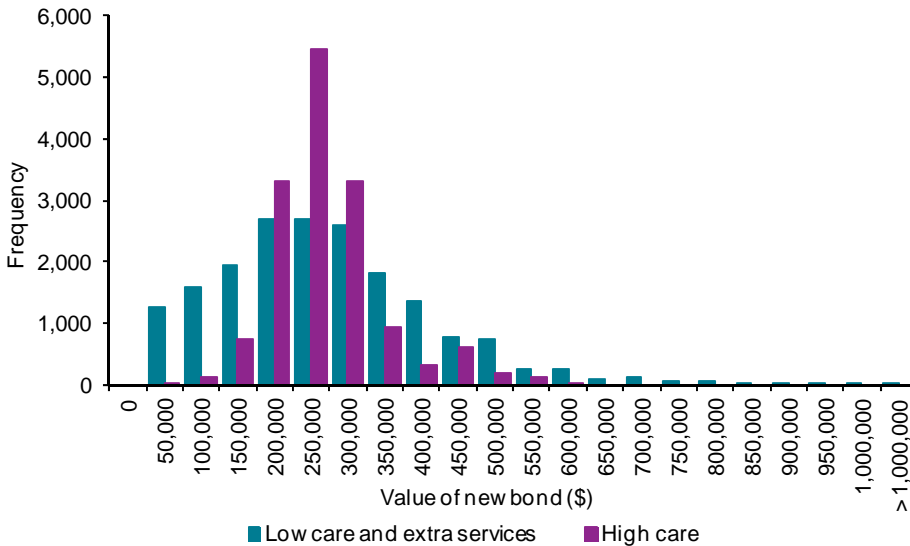


Note: The Level 2 threshold of \$406,037 has been based on an assumed MPIR of 7.64 per cent.
 Source: KPMG calculations.

Limitations with the analysis

These results must be viewed in the context of the model structure and assumptions. The distribution of new high care RADs and DAPs was estimated based on the assumption that high care providers would charge an accommodation payment equal to the average low and extra services bond for providers in the same LGA (see Chart 7).

Chart 7: Distribution of estimated RADs from high care residents in 2014-15 compared to distribution of low care and extra services lump sum bonds in 2011-12



Source: KPMG calculations.

Consequently, the variability of estimated high care RADs and DAPs in 2014-15 was less than corresponding low and extra services bond values in 2011-12, and is much tighter around the mean. This suggests the estimated value of new RADs and DAPs exceeding the Level 2 threshold may be underestimated.

7 Sensitivity analysis

This section discusses the results of a sensitivity analysis used to demonstrate the impact of changes in key assumptions on the scenario estimates. The scenario estimates in Chapter 6 should be considered in the context of the sensitivity analysis results.

7.1 Overview

A sensitivity analysis was undertaken to determine the impact from changing assumptions on the model results. The sensitivity analysis assumed minimum and maximum values for key model inputs, including:

- average housing prices;
- estimated annual growth in housing prices (i.e., capital gains);
- rental incomes; and
- the MPIR.

To test funding arrangements, the sensitivity analysis concentrated on factors that impact housing, as this is the primary driver in expected wealth associated with choosing a DAP. To test pricing arrangements, only the MPIR was varied as this will have a direct impact on the Level 2 pricing threshold.

The impacts of these changes were tested independently of changes in other factors. The specification of the sensitivity analysis for funding arrangements and pricing arrangements are presented in Table 18 and Table 19 respectively.

Table 18: Sensitivity analysis specification for funding arrangements

Input	Unit	Minimum value	Central estimate	Maximum value
Housing prices	<i>per cent of central estimate</i>	80	100	120
Growth in housing prices	<i>per cent of central estimate</i>	0	100	120
Net rental income	<i>per cent of central estimate</i>	80	100	120

Source: KPMG.

Table 19: Sensitivity analysis specification for pricing arrangements

Input	Unit	Minimum value	Central estimate	Maximum value
MPIR	<i>per cent</i>	6.0	7.64	12.0

Source: KPMG.

7.2 Results - funding arrangements

The results of the sensitivity analysis suggest the model results for funding arrangements are sensitive to assumptions used within the model.

7.2.1 Change in average housing prices

Changes in average housing prices will impact the estimated wealth of residents when choosing between a RAD and DAP, and change the capacity of residents to pay a RAD and DAP. Sensitivity analysis results are presented in Table 20.

Table 20: Sensitivity of funding arrangements to changes in average median housing prices

	Low and extra services	High care
	<i>Shift from RADs to DAPs</i>	<i>Increased RADs</i>
	<i>\$m</i>	<i>\$m</i>
Central estimate	402.8	3,359.6
Minimum (20 per cent lower than expected)	576.0	3,182.9
Maximum (20 per cent higher than expected)	275.7	3,457.7

Note: Funding changes include increased transparency around accommodation payment pricing and allowing providers to offer high care residents a RAD, DAP, or combination of both.

Source: KPMG calculations.

Low and extra services care

- Housing prices 20 per cent less than estimated in the model would result in \$576.0 million worth of RADs shifting to DAPs in 2014-15. This represents \$173.2 million additional RADs shifting to DAPs. This result is driven by a combination of competing impacts, whereby reduced housing prices increases net rental income (providing greater capacity to pay a DAP),²² but also reduced expected wealth from choosing a DAP due to reduced expected capital gains.
- Housing prices 20 per cent greater than estimated in the model would result in \$275.7 million worth of RADs shifting to DAPs in 2014-15. This represents \$127.1 million fewer RADs shifting to DAPs. Once again, this result is driven by a combination of competing impacts, whereby increased housing prices leads to reduced net rental income (providing less capacity to pay a DAP), but also increased expected wealth from choosing a DAP due to increased expected capital gains.

High care

- Housing prices 20 per cent less than estimated in the model would result in \$3.2 billion worth of additional RADs from high care residents in 2014-15. This represents \$176.7 million fewer high care RADs, and an associated increase in DAPs. This is a combination of competing impacts, whereby reduced housing prices leads to increased net rental income

²² Within data supplied by RP Data Pty Ltd, the annual expense associated with renting a home is calculated as one per cent of the value of the home.

(providing greater capacity to pay a DAP), but also reduced expected wealth from choosing a DAP due to reduced expected capital gains.

- Housing prices 20 per cent greater than estimated in the model would result in \$3.5 billion worth of additional RADs from high care residents in 2014-15. This represents an additional \$98.1 million RADs, and an associated decrease in DAPs. This result is driven by a combination of competing impacts, whereby increased housing prices leads to reduced net rental income (providing less capacity to pay a DAP), but also increased expected wealth from choosing a DAP due to increased expected capital gains.

7.2.2 Change in expected housing price growth

Changes in expected housing price would change the relative wealth of residents when choosing between a RAD and a DAP. This is because capital gains associated with housing are one component of expected wealth. Sensitivity analysis results are presented in Table 21.

Table 21: Sensitivity of funding arrangements to changes in assumed growth in housing prices

	Low and extra services <i>Shift from RADs to DAPs</i>	High care <i>Increased RADs</i>
	<i>\$m</i>	<i>\$m</i>
Central estimate	402.8	3,359.6
Minimum (zero growth)	291.2	3,477.4
Maximum (20 per cent higher growth than expected)	402.8	3,359.6

Note: Funding changes include increased transparency around accommodation payment pricing and allowing providers to offer high care residents a RAD, DAP, or combination of both.

Source: KPMG calculations.

Low and extra services care

- Zero expected housing price growth is estimated to result in \$291 million in new low care and extra services residents switching from RADs to DAPs in 2014-15. This is \$229.4 million fewer RADs shifting to DAPs compared to the central estimate.
- Assuming 20 per cent higher growth in housing prices compared to the central estimate is not estimated to impact the estimated switch from RADs to DAPs. This is because residents remain constrained in accessing DAPs due to their inability to pay DAPs using their rental income.

High care

- Zero expected housing price growth is estimated to result in \$3,477.4 million in new high care RADs in 2014-15. This is \$117.8 million in additional RADs compared to the central estimate.
- Assuming 20 per cent higher growth in housing prices compared to the central estimate is not estimated to impact the estimated increase in new high care RADs in 2014-15. This is because residents remain constrained in accessing DAPs due to their inability to pay DAPs using their rental income.

7.2.3 Changes to estimated net rental income

Changes in expected rental incomes changes the relative wealth of residents when choosing between a RAD and a DAP, and changes the ability of the resident to pay a DAP with rental income. Sensitivity analysis results are presented in (see Table 22).

Table 22: Sensitivity of funding arrangements to changes in assumed net rental income

	Low and extra services <i>Shift from RADs to DAPs</i>	High care <i>Increased RADs</i>
	<i>\$m</i>	<i>\$m</i>
Central estimate	402.8	3,359.6
Minimum (20 per cent lower than expected)	101.3	3,618.1
Maximum (20 per cent higher than expected)	853.1	2,622.6

Note: Funding changes include increased transparency around accommodation payment pricing and allowing providers to offer high care residents a RAD, DAP, or combination of both.

Source: KPMG calculations.

Low and extra services care

- Net rental incomes 20 per cent less than used in the central estimate is expected to result in only \$101.3 million worth of RADs shifting to DAPs in 2014-15. This is \$301.5 million fewer compared to the central estimate and results from a reduced capacity to pay a DAP with rental incomes.
- Net rental incomes 20 per cent more than used in the central estimate is expected to result in \$853.1 million worth of RADs shifting to DAPs in 2014-15. This is \$450.3 million more compared to the central estimate and results from an increased capacity to pay a DAP with rental incomes.

High care

- Net rental incomes 20 per cent less than used in the central estimate is expected to result in \$3,618.1 million in new high care RADs in 2014-15. This is \$258.5 million in additional RADs compared to the central estimate (with an associated reduction in DAPs) and results from a reduced capacity to pay a DAP with reduced rental incomes.
- Net rental incomes 20 per cent more than used in the central estimate is expected to result in \$2,622.6 million of new high care RADs in 2014-15. This is \$737.0 million fewer RADs compared to the central estimate (with an associated increase in DAPs) and results from an increased capacity to pay a DAP with increased rental incomes.

7.3 Results - pricing arrangements

A sensitivity analysis was undertaken to determine the impact of a change in the MPIR on the value of accommodation payments exceeding the Level 2 accommodation pricing threshold.

The results of the sensitivity analysis suggest changes to the MPIR will create changes to the amount of new bonds for low and extra services high care in 2011-12 and estimated new high care RADs and DAPs in 2014-15 exceeding the Level 2 threshold (see Table 23):

- An MPIR of six per cent produces an equivalent Level 2 RAD threshold of \$517,000 and would result in:

- approximately \$127.5 million in new bonds for low and extra services high care in 2011-12 exceeding the Level 2 threshold, with an associated income and avoided cost of debt equal to \$9.7 million; and
- approximately \$4.9 million in estimated new RADs and DAPs from high care residents in 2014-15 exceeding the Level 2 threshold, with an associated income and avoided cost of debt equal to \$0.3 million.
- An MPIR of 12 per cent produces a Level 2 RAD threshold of \$258,000 and would result in:
 - approximately \$999.6 million in new bonds for low and extra services high care in 2011-12 exceeding the Level 2 threshold, with an associated income and avoided cost of debt equal to \$124.7 million; and
 - approximately \$324.2 million in estimated new RADs and DAPs from high care residents in 2014-15 exceeding the Level 2 threshold, with an associated income and avoided cost of debt equal to \$38.9 million.

Table 23: Sensitivity of pricing arrangements to changes in the MPIR

	Low and extra services		High care	
	<i>Value of accommodation payments exceeding the Level 2 threshold</i>	<i>Associated income / avoided cost of debt</i>	<i>Value of accommodation payments exceeding the Level 2 threshold</i>	<i>Associated income / avoided cost of debt</i>
	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>
Central estimate	303.6	26.8	38.4	3.0
Minimum (MPIR of 6 per cent)	127.5	9.7	4.9	0.3
Maximum (MPIR of 12 per cent)	999.6	124.7	324.2	38.9

Note: Pricing changes include the introduction of a requirement to receive permission from the Aged Care Pricing Commissioner to charge accommodation prices greater than the Level 2 threshold.

Source: KPMG calculations.

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