Pioneering Economics

Moving the frontier

External Assessment Workforce Cost Study

Review of assessment costs under ACFI and a potential External assessment workforce under a fixed/variable casemix funding model

Prepared for the

Australian Government Department of Health

4 July 2018

Notice

Pioneering Economics was engaged on the instructions of the Australian Government Department of Health to 'Task 1 - Exploration and advice on current costs' associated with the Aged Care Funding Instrument assessment and 'Task 2 - Exploration and advice on potential costs and options for the establishment and maintenance of an external assessment workforce' ("Project"), in accordance with the proposal dated 18 May 2018 and as updated in discussions 7 June 2018.

This document has been prepared in good faith on the basis of information available at the date of release without any independent verification. Pioneering Economics does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this Report nor its usefulness in achieving any purpose. Readers are responsible for assessing the relevance and accuracy of the content of this Report. Pioneering Economics will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on information in this Report.

The Report should be read in its entirety, the applicable scope of the work and any limitations. A reference to the Report includes any part of the Report. No further work has been undertaken by Pioneering Economics since the date of the Report to update it.

Pioneering Economics has prepared the Report for the benefit of the Australian Government Department of Health and has considered only the interests of the Australian Government Department of Health. Pioneering Economics has not been engaged to act, and has not acted, as advisor to any other party. Accordingly, Pioneering Economics makes no representations as to the appropriateness, accuracy or completeness of the Report for any other party's purposes.

The material contained in the Report, including the Pioneering Economics logo, is copyright and copyright in the Report itself vests in the Australian Government Department of Health. The Report, including the Pioneering Economics logo, cannot be altered without prior written permission from Pioneering Economics.

1. Background

Pioneering Economics has been asked to complete two pieces of work for the Department relating to the current Aged Care Funding Instrument (ACFI) and the underway Resource Utilisation and Classification Study (RUCS).

The first was to examine the current costs being born by providers in undertaking to do all the appraisals of residents, collecting the information and submitting appraisals. This has been always understood as part of the condition of receiving ACFI since its introduction but little is known to date just how much this actually costs providers.

The second piece of work is to examine how the Department could provide independent assessments for clients under a fixed/variable casemix funding model. Even though this funding model is only a proposition at present, there are already trials underway to see how it might work in practice. This study would aim to take what is currently known about the RUCS classification tool and assessment thereof and seek to inform the Department how much the implementation of a workforce to assess it might cost.

Pioneering Economics has been asked to first establish the current set of costs under ACFI (task1) and consult with stakeholders, including the University of Wollongong currently undertaking the trials of RUCS, to assess a cost for a likely model for an external assessment workforce (task 2).

In this document we break down the important elements of cost to providers and potential cost to a future government. These are to be informed by consultation with ACFI review program officers, ACFI consultants, current providers to ascertain ACFI costs, ACAT teams, Departmental policy advisors and peak bodies of residential aged care providers.

This consultation will help make clear the existing patchwork of overseeing bodies, industry consultants, software developers, government funded agencies, State and Australian Government delivery of services.

The consultation is necessary to see the bigger picture in light of the Tune Review recommendations to attempt to unify elements of the assessment workforce.

1.1. Why do we have ACFI?

The purpose of this project is to examine the costs associated with ACFI, so why do we use it? The ACFI is the main mechanism the government uses to give revenue to providers for the provision of aged care services to Australians in residential care. The purpose of the instrument is to bring fairness and equity into the funding. The reason is some clients require more care than others due to their particular circumstance.

In general we refer to clients needing more assistance as being more ‘frail’, although this term does not capture the complexity of the circumstances that contribute to this need for care. The ‘frailer’ a client, the more funding they receive. This funding is meant to be commensurate with the amount of care providers need to deliver to meet their clients’ needs.

The idea delivers greater funding to providers that may have a profile of clients that require more assistance than others.

1.2. How does the ACFI actually work?

This project examines what resources providers specifically dedicate to comply with the ACFI. Why do providers need to dedicate resources at all? Well, ACFI aims to provide more funding for clients with higher frailty. The ACFI 'pack' contains all the evidence required to justify funding at the appropriate ACFI level.

Providers must demonstrate with evidence they have delivered care in accordance with the stipulations in the ACFI Answer Pack[1] under the ACFI guidelines[2]. This involves collecting a range of different information including diagnosis and treatment history. Some of the components like complex health care funding domain require a nurse or doctor certification and all components require evidence of delivery of care.

Other areas of funding have direct links to specific care. This includes items like physio treatments and TENS machines. These items are controversial as there may be alternate treatment options which are preferable but receive no funding under the ACFI.

The provider must collect all the information for each client over an initial evaluation period of 28 days then submit an ACFI appraisal for a funding allocation. This process requires detailed knowledge of clients' needs, the ACFI guidelines, appropriate treatments, detailed care delivery notes and most importantly clinical experience.

1.3. Why do providers dedicate ACFI-only resources?

The correct application of the ACFI guidelines is important for the provider. The ACFI delivers revenue based upon the amount dictated by the ACFI level.

If the level has been submitted incorrectly, providers could be delivering care and not receiving appropriate funding for it. Likewise, if care is being delivered but the evidence is not being collected, collated and submitted correctly, providers face the prospect of having to pay back a portion of revenue they have received through the compliance review processes.

This makes the correct application of ACFI guidelines both crucial for revenue as well as a risk for the providers.

[1] https://agedcare.health.gov.au/sites/g/files/net1426/f/documents/02_2018/final_acfi_answer_appraisal_pack.pdf

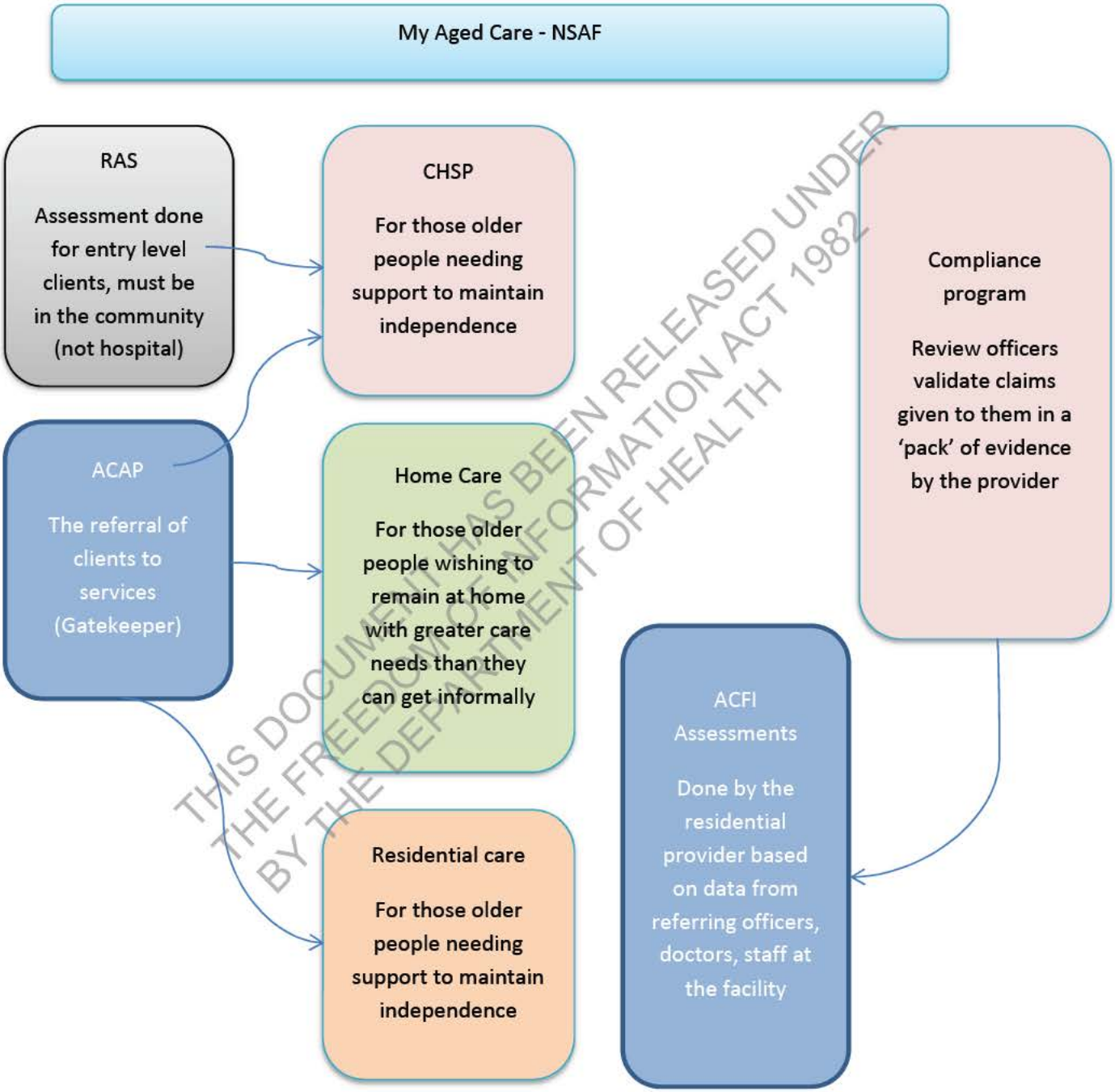
[2] https://agedcare.health.gov.au/sites/g/files/net1426/f/documents/02_2018/final_acfi_user_guide_2017.pdf

https://agedcare.health.gov.au/sites/g/files/net1426/f/documents/02_2018/final_acfi_answer_appraisal_pack.pdf

2. System investigation

2.1. Existing structure

There is currently a patchwork of existing external assessment purchased by the government. This includes 2 layers of governance and 1 layer of review



2.2. Consultation with compliance officers

As part of this project Pioneering Economics first undertook consultation with ACFI reviewers.

Feedback from the review officers:

1) Some providers employ their own doctors which raises probity questions about the evidence;
2) Some review officers produce a significant share of downgrades of reviewed 'packs'. The average being 37% of reviews result in downgrades;
3) Packs are very similar for multiple residents indicating they are produced using automated tools;
4) The review of packs is time consuming due to the complexity and volume of the information gathered. Each facility takes 2-3 days for 2-3 reviewers and only 10% or so of packs can be reviewed; and
5) There is often a large time commitment from providers in co-operating with reviews, some facilities provide many staff to support the review others only 1 or 2.

2.3. Existing costs of assessment

The main areas of cost for ACFI stretch back to ACAT. This is because a large component of an ACFI assessment is predicated upon the client record stored in My Aged Care. The My Aged Care portal appears to be a successful adaptation relied upon throughout the industry as a central repository of information.

The ACAT portion of the ACFI process is delivered via State government and paid for by the Commonwealth.

An ACFI assessment is often done on the basis of information contained in the My Aged Care system. Sophisticated providers will utilise specialised tools such as iCareHealth(Telstra) or LeeCare which allow the linking of different pieces of supporting evidence to questions in the ACFI. This encourages answers to questions first, then evidence to justify the answer later. This software is part-technology and part-intellectual property.

Providers are faced with multiple costs:

1) Staff implementation time to collect ACFI records, usually an ACFI co-ordinator.
2) Software costs for systems.
3) ACFI consultants.
4) Compliance review assistance.

The government pays for ACATs and the Compliance review program.

2.4. Where does ACATs fit into assessment?

ACATs original function was to act as a gatekeeper for a limited number of places to ensure those in most need found a priority place. Since the Hogan review and the ratio of places to the population aged 70+, the number of places delivered through the approval process (ACAR) has provided sufficient places in the system. It is now common place for ACAT recommendations to remain unused for extended periods while people self-select to remain in their homes longer. The home care program is also assisting in this process.

The combination of all these factors means the existing ACAP program is no longer providing the original gatekeeper role but has a substantial cost to the Australian Government.

If we were able to combine two steps in the figure and have an assessment of a client's needs assessment done at the point of admission in-situ then it would avoid the need for the providers to undertake the complex assessment task the current ACFI system asks them to do.

There would need to be a close examination about the role for the existing services, RAS, ACAT, Need assessment (ACFI or casemix). The prospect of receiving both an approval and assessment simultaneously would also assist families. The time delay would be reduced and providers potentially matched better. There would still be some demarcation between clients with higher and lower needs, as well as those seeking to remain at home and those needing residential care.

We will need to make an assessment of the likely workforce to be established with either the existing ACFI funding tool or casemix funding tool. The next step is to explore the most efficient way to deliver an external assessment workforce.

3. Methodology

There already exists an external assessment workforce involved in residential aged care. This is comprised of two parts, Aged Care Assessment Teams (ACAT) and the Compliance program (review officers). In addition there is a third external assessment workforce outside of residential care, the Regional Assessment Service (RAS). RAS assess clients with lower level care needs. The interaction of the RAS external workforce and any future external workforce will need to be considered.

The primary role of this project, the external workforce assessment, is to estimate the cost of the existing ACFI assessments to providers and the alternative of undertaking funding appraisals independently of providers. This diverges into two major parts. The first, estimating the cost of the existing ACFI assessments to both providers and government. The second, estimating the cost of external assessment using tool currently being developed for the RUCS.

3.1. Cost of ACFI

As ACFI is the basic subsidy it is connected to many other facets of the residential aged care program. This examination will be limited to the steps required to assess an older person seeking assistance to the prescribed level of basic subsidy.

The only additional step beyond the ACFI payment itself which is included in this examination is the compliance program. As the ACFI assessments are legislated to be conducted by the providers, the government created the compliance program to ensure funds aren't misused.

Even though ACATs assessments are delivered through the ACAP and not directly part of ACFI, they are in fact necessary for a resident to be admitted and to receive an ACFI payment. Another reason to include them in this examination is that the ACATs are already an example of an external assessment workforce.

The total cost of ACFI will include:

- Time taken by providers to undertake ACFI appraisals, including all record keeping and reporting. This includes dedicated ACFI internal staff such as an ACFI co-ordinator;
- Cost of software to collate all the necessary information for the appraisals;
- Cost of any external workforce used to assist with ACFI appraisals (consultants); and
- Cost of the ACFI compliance program.

In order to gather all the necessary information to calculate these costs, providers themselves need to be forthcoming in the costs they incur.

As this is not part of any compulsory government reporting, any survey of providers will be voluntary. We must therefore also acknowledge the possibility of a bias within the providers that choose to respond to this survey.

3.2. How to structure an external workforce?

While we are collecting information on ACFI costs, there is some information contained within the cost estimates which inform the expected costs of a future external assessment workforce.

Any future external assessment workforce will be required to visit all clients across Australia in residential facilities. It is also likely that some or all of the assessments may need to be conducted in-situ at the person's house or in hospital. This would be particularly important for getting an assessment of clients before entering care.

The RAS and ACATs conduct assessments across most places in Australia. The RAS operates as a contracted workforce to the Australian Government while ACATs are employed by the State Governments and funded by the Australian Government.

The compliance program is a third structure to examine. This workforce is employed directly by the Australian Government and operates out of state based offices.

The workforce structures of all three programs offer the full spectrum of options available to the Australian government when considering an external assessment workforce for fixed/variable casemix funding.

1) Fund the state governments to undertake the assessments (as with ACATs);
2) Direct contract a workforce with specified performance metrics (as for RAS);
3) Direct employ staff to undertake assessments (as with compliance); and
4) Some combination of the 3 above.

We don't have a prescribed model or method for delivering the external assessment workforce. We can use existing government programs as a proxy for potential costs of administration, office support, direct oversight, contractual oversight, site visits, IT infrastructure and monitoring.

This is valuable information as it is real-world information based on years of practice rather than a 'pilot' or some other temporary program.

3.3. Costs of assessments under a fixed/variable casemix model

The first step is to know the likely implementation of the assessment tool. At the moment the tool is in early trial stages although many assessments have already been undertaken. To date, all these assessments have been undertaken in residential aged care facilities.

As part of the RUCS, the University of Wollongong through the AHSRI, are undertaking direct external assessments of clients using an assessment tool. This information can be used as an estimate of the time it would take to undertake future assessments.

There are a few factors which we must take care to examine:

1) Current assessments are done in 'bulk' by going through an entire facility;
2) Current assessors are qualified registered nurses;
3) Only travel to the single site would be included in time estimates; and
4) AHSRI is looking at the possibility of extending the assessment to in-situ to test the feasibility of the tool outside a residential care facility.

3.4. Delays between approval and entry to care

A common theme in seeking residential care is a lengthy delay between when receiving an ACAT approval and entry into residential care. Part of this exercise is to look at the typical timeline of a client seeking care.

The analysis examines the distribution of time taken to enter residential care will tell us the role that ACATs play as a gatekeeper but also the average time between a future initial assessment and likely entry to care.

The longer the time span between assessment and entry, the less of a role the ACATs are playing as the gatekeeper to residential care. This is in part because of the number of alternative care options available today, such as home care and the Community Home Support Program.

An average lengthy delay indicates the current ACATs are really acting more as a facilitator of different aged care programs appropriate to client need rather than a 'gatekeeper'.

Except where a long delay or an event such as a fall or hospitalisation occurs, the assessment given at the time of approval could act as the funding instrument for the residential facility. If the residential facility believes there has been significant change in the client's needs, a re-assessment could be requested

3.5. Minimise assessors, maximise client trust

Aged Care is growing in size and at the same time now has more options for clients, with Commonwealth Home Support, Home Care with Consumer Directed Care and Residential Aged Care. If each of these programs was to have a separate assessment workforce, it adds complexity to the system.

The need for residential aged care can often be brought on by a sudden change in circumstances such as a recent medical event like a fall or acute condition. This can leave clients in a vulnerable and emotional state. Assessments should be conducted with great care and sensitivity.

In order to minimise the impact and stress of assessments, clients should see the same assessor where possible. This means when talking to the client, meeting family or talking to doctors, the same person is familiar with the client's entire situation. This will enable the assessor to develop a rapport with the client and also be in the best place to consider all

options available.

It is therefore recommended that future funding assessments should be an integral part of the overall ACAP. This would ensure that the person delivering the funding assessment has considered all options available to the client to best suit their needs and is familiar with the client's entire situation.

3.6. Replace ACAT with ACAP/RUCS workforce

At the present time the government already employs an external assessment workforce, ACATs delivered as part of the Aged Care Assessment Program (ACAP). There is a functional separation as the Australian Government funds the ACATs through the ACAP but has no direct oversight of them as this is administered through the state governments.

This workforce meets with clients face-to-face where and when necessary. Many of the assessments take place in a client's home at the request of a doctor or relative after having been directed through the My Aged Care portal.

The current structure of ACATs is already a significant cost to government. Current assessments are done on a one-on-one basis and in-situ Why would you then create a secondary workforce that would need to visit the same clients and ask very similar questions which would potentially confuse them and provide conflicting information. It is better to have a single person as indicated in the previous section, visit clients repeatedly (if necessary) to discuss further details or options.

The ACAP has an important role as both the gatekeeper to aged care but also as the service which assists clients find the most suitable pathway to care. A potential option for the Government is to ***replace the current ACATs with a new external workforce*** that is tasked with providing external assessment under fixed/variable casemix funding as well as providing the best client pathways to aged care given a client's circumstances.

Such a move would shift direct oversight of the replacement program to the Australian Government. This would enable the Australian Government to align the interests of the program and contract and staff supports with other aged care programs such as the Commonwealth Home Support Program and Home Care Packages. For example, assessment regions for all programs could be aligned or contracts for an external workforce could be rolled together even if the programs themselves maintained a separate assessment workforce.

Any move to combine the current external assessment workforce, ACATs, with a future funding assessment must consider the important client pathways and the client's situation. Assessors should always consider wellness and re-ablement in the client's best interest while they remain in a familiar setting. It is best to conduct the assessments in-situ where possible to gather a complete picture of the supports and options available.

The structure of this new ACAP workforce is yet to be determined but the costs can still be estimated now. These estimates are based upon what we know of other aged care assessment programs in existence. They will be realistic broad cost estimates as similar programs face

similar challenges, namely face-to-face client assessments, contract performance guidelines, travel to remote sites, IT infrastructure, team oversight, state based priority and team management.

3.7. Enter residential care with assessed funding

Were the ACAP program to be redesigned to incorporate RUCS, not only would the provider no longer have to perform assessments but the client could have funding attached to them when they enter care.

This could facilitate transition to care and facilities could undertake necessary care planning to suit the client's needs rather than putting together an ACFI assessment around parameters that enable funding.

There are two potential issues in this scenario, first, assessments could be out of date or otherwise disputed by the provider, and second, providers may decide not to admit clients based upon a known funding envelope.

On the first problem, providers would need to be able to seek a re-assessment for there to be seen to be fairness in the system. The manner in which they are allowed to seek re-assessment will need to be determined. In an external assessment world, the additional costs associated with re-assessment fall with government. Providers have an incentive to request re-assessments more frequently if they believe it advantageous. It is beyond the scope of this work but there are many options open to solve this including:

- A hurdle rate to overcome before an increase is allowed;
- Appraisals can move funding lower as well as higher;
- Limited number of re-appraisal in a given time period;
- A fixed number of 'decision reviews' which are only used when funding is not moved higher; and
- Attach a compliance review to each re-appraisal.

The second problem is a vexing one. Vulnerable clients may potentially find it hard to find a residential place that will accept them. The government would need to look closely at this issue and ensure any new system does not make it harder than it already is to find a residential place. If it is true that providers are 'cherry picking' clients, any incentive to do so should be addressed. A well-designed funding model which matches the underlying cost of care with the funding received should minimise this problem. This is a goal of the fixed/variable casemix funding model.

3.8. Cost a model for external workforce

A main component of this work is to look at the costs of a future external assessment workforce. The task will need to combine the known costs of the current assessment programs with the time and motion information of assessments completed for the RUCS.

We could use these time and motion based estimates along with the qualifications of the staff undertaking them to assess the direct staffing cost of undertaking the assessment. The University of Wollongong is currently trialling their assessment tool and do not have finalised times for the lengths of the assessment. However, the University advised that the majority (75%) of assessments took less than one hour. They also advised that the tool needed to be performed by a person with one of the following qualifications; registered nurse, physiotherapist or occupational therapist.

The information gathered from the other aged care assessment programs can be used to assess the other costs associated with the direct face-to-face assessment time. The ultimate cost of an external assessment workforce will depend on the structure. How we structure the workforce behind the face-to-face assessments is yet to be determined. Let us consider the options.

The manner they are combined and setting the assessments are conducted will be important. Two options are considered for the ***net cost*** of an external assessment workforce:

1) Replace ACATs with a combined ACAP/funding assessment workforce; and
2) Maintain existing ACATs through state governments and employ an additional workforce to undertake funding assessments in some combination of contracted and direct employ.

There is a separate investigation into recommendation number 27 of the Tune Review, tasked with exploring options to integrate the ACAT and RAS workforce. This work is directly relevant to that project but remains separate from this work. This report will only focus on the underlying costs of setting up a workforce. It will not have any of the details, consider impediments or otherwise establish conditions for setting up such a workforce.

Due to the macro level nature of this costing exercise the model will focus on broad parameters to guide costs as estimated from the existing programs. This has strength in being based upon existing programs that have a range of implementation costs already built into them.

This work could be used to inform the funding reform implementation task as well as an input to the team investigating the Tune review recommendation.

4. Existing Costs of ACFI

Pioneering Economics aimed to shed light on costs which have previously been unknown to government. That is, the costs providers incur appraising ACFI. We examined the following when looking at the requirements of ACFI appraisals and claiming:

- Direct costs, e.g staff time taken to complete ACFI appraisals and re-appraisals as well as on-going records;
- Indirect costs. e.g. IT systems, ACFI consultants, head office oversight; and
- Provider compliance processes for ACFI Review Program audit arrangements.

4.1. Direct data collection

Without any existing data, Pioneering Economics conducted direct qualitative and quantitative research on the cost providers incur in undertaking ACFI appraisals and reappraisals. This also included the costs of audits and compliance and associated record keeping based on a survey with residential aged care providers.

After reading through all the documentation involved in the ACFI User Guide[3] as well as discussions with review officers undertaking the validation of documents it was concluded that providers have three main channels for costs:

1) Software to keep and submit ACFI records and appraisals
2) External consultants to assist staff training in understanding ACFI
3) Internal ACFI co-ordinators and direct care staff record keeping

Questions about costs for these three channels were put to providers through engagement letters sent to peak bodies. Providers were then contacted directly and then we explained what the project was trying to collect. The three channels of cost were put to providers and all agreed these were the main source of cost, along with periodic audits.

4.2. Survey respondents

We spoke to 9 providers, representing 63 sites, from the independent association (ACSA), the Leading Aged Care Services Association (LASA) and the Aged Care Guild.

Respondents varied in size of operation, state, geographic location (metro/regional), from the smallest with 20 beds to the largest with 4500 beds. The private for-profit providers were under represented although there were a variety of approaches which covered almost all options for completing the ACFI paper work. These included:

- RN to manually check and complete all claims and logs
- RN to supervise ENs as ACFI co-ordinators across multiple sites with the assistance

[3] https://agedcare.health.gov.au/funding/aged-care-subsidies-and-supplements/residential-care-subsidy/basic-subsidy-amount-aged-care-funding-instrument/aged-care-funding-instrument-acfi-user-guide

of software

- Multiple RNs to go to each site and check all work done by dedicated ACFI co-ordinators
- Full time ACFI co-ordinator backed up by part-time RN
- Full-time ACFI co-ordinator backed up by part time Manager and external consultant
- Part-time ACFI co-ordinator backed up by software package and backup consultancy provided by the software package

Some providers indicated the alternative methods they tried before arriving at their current method. Most indicating having tried initially with just the site manager and staff but found it insufficient. Providers ***blatantly stated ACFI was too difficult***. They also indicated moves towards higher qualified staff and most had incrementally or entirely changed ENs for RNs. All providers indicated experience with ACFI was essential.

4.3. Survey results

The survey produced lots of interesting results. There are too few respondents to present detailed category estimates. The total cost for each provider is calculated by adding up the components. The total for each provider is compared by converting the reported amount to a cost per bed day. The total costs are estimated to the nearest cent per bed day.

4.3.1. Software packages

Software packages varied, some spent under $5,000 and some spent over $200,000. The method of charging also varies. Some are charged monthly, some have an all-inclusive annual package and some had a per bed day package and smaller monthly fee. All providers say they have been approached by more than one of the companies selling packages. Some had taken them up, others continued to use independent means.

The ones that perform the tasks independently cite the loss of 'in-house expertise' when they utilise software to perform part of the ACFI appraisal process. Instead, they have made the conscious decision to use the funds to invest in their own staff to ensure the entire process is done correctly. This is not an option if they retain an external software company to provide the service.

4.3.2. *External Consultants*

The use of consultants also varied, from once in the last 5 years for some providers to a regular once a month check-up for others.

The cost similarly varies. Some software packages such Mirus or LeeCare offer external consultancies in addition to the basic service for an additional fee. This was quoted as being 'done in groups' that match residents stored in the software package. The cost of a 'group' was between $5,000 and $10,000. It wasn't clear how many residents were in a 'group'. Like the price of the software packages themselves, the price appears to have been individually

negotiated directly between the provider and the ACFI software maker.

Despite all providers having said they had used consultants at some point in time, most indicated it was not recently. Only a few identified it as a regular part of the way they appraise ACFIs and maintain records.

4.3.3. *Proportion of options used*

Table 1 shows what proportion of providers used each of the components in the survey. As you can see the results are varied. In addition to these 'primary' or oversight methods, all facilities used some form of ACFI co-ordinator, a dedicated staff member[4] used to collect information to submit ACFI claims.

A provider that is primarily administered by an enrolled nurse (EN) is one where the majority of the work is undertaken by an EN. This would imply the ACFI co-ordinator is an EN but it doesn't preclude some oversight of an RN or facility manager (usually an RN as well). A facility primarily administered by an RN has either the RN as the ACFI co-ordinator or a full time RN to oversee all the ACFI assessments with support from other care staff.

The split or RN/EN was the best able to be achieved given the responses to the survey. There was almost as many different methods for completing ACFI appraisals as there were responses. ACFI software packages are used along-side input from nurses.

Table 1 – Methods used by proportion of respondents

	External Consultant	ACFI Co-ordinator	Primary Administered by RN	Primary Administered by EN	Primary Administered by External	ACFI specific Software package
Metropolitan (58 sites)	33%	100%	50%	33%	17%	40%
Rural/Remote (5 sites)	100%	100%	80%	0%	20%	100%

4.3.4. *Per bed day costs*

As the providers varied in size, type (for-profit, not-for-profit), location and multi-site operations the only method of comparing them is using a cost per-bed-day method. That is, we calculate the total costs for each site as reported and divide through by the number of bed days.

The steps for estimating the total cost of the system are as follows, we use the sum of all the components used:

Total cost for provider = Software + External consultants + Internal Consultants + Staff

[4] All providers were asked to confirm that these staff members did not provide any care, only ACFI reporting before declaring their answers.

For each provider we then create a per-bed day cost by:

Per bed day = Total cost for provider / (Total number of beds * occupancy)

Across all the different models of collecting ACFI information, the range of costs was not that large. We present the lowest and highest broken down into those using in-house RNs and those using ENs and external consultants as the primary method of overseeing ACFI.

Table 2 – Survey of Cost of ACFI collection & administration

Cost per bed day	Cost range – lowest	Cost range - highest
Metropolitan/Regional providers		
Total for provider (RNs mainly)	$3.37	$3.52
Total for provider (ENs + Consultants)[5]	$2.67	$5.76
Metropolitan average	$3.47	
Rural/Remote		
Total for Rural/Remote[6] providers	$6.38	$9.44
Sub-components		
Software packages per bed day	$0.08	$1.48
External consultants[7]	$0.45	

We can calculate the cost for the entire program using the weighted average per-bed-day figure for metropolitan and regional providers and a simple average for the rural/remote providers.

Using Modified Monash Model (MMM 1-7) definitions for region remoteness 1-7, we define all those living in the MMM5-7 as being allocated to the rural/remote providers. Based on ABS Census information there is approximately 13,000 residents on Census night in a residential aged care provider in MMM regions 5 to 7. It is an approximation but the survey's small sample size doesn't allow for a more precise definition.

Then we allow for an occupancy rate of 90%. From the total number of places of 200,689, this gives us approximately 180,620 residents in care at any point in time. The metropolitan per-bed-day figure is multiplied by 169,360 and 11,260 for rural/remote providers.

Given the survey has a small sample size, we also supply a range for the estimate using one standard deviation above and one standard deviation below the mean. The rural/remote regions do not have a large enough sample to do this, so instead we using the minimum collected in the survey for the low range estimate and the maximum collected for the high range estimate.

Table 3 shows the total cost of the entire residential aged care program based on the average cost of metropolitan/regional places per bed day and the number of metropolitan/regional places, combined with the cost per rural/remote place and the approximate number of

[5] ENs and Consultants are combined due to small sample size and because those that use consultants use them in conjunction with ENs.
[6] Rural remote is not broken down further due to small sample.
[7] Average is only for those providers identified using external consultants

rural/remote places.

Table 3 – Total Cost of ACFI collection & administration for providers

Cost per bed day	Cost range – lowest	Cost range - highest
Implied cost for 200,689 places[8]	$247 million	
Range for costs for 200,689 places[9]	$175 million	$319 million

4.4. Survey conclusions

Through this process we have identified a significant cost which is currently being born by the industry of approximately $247 million per year. The sample size is small and self-selected so we need to be cautious when utilising this figure. Never the less, the cost is significant and the survey brings to light previously unknown costs. Examining the costs for RNs showed a surprisingly limited range between highest and lowest per bed day.

This cost is in addition to the current other assessment programs funded by government such as the ACAP.

- The method of collecting ACFI information varied markedly by provider but all used some form of ACFI specific co-ordinator role
- There was wide use of consultants in the industry, all providers admitted to using them at some time in the past, though precise costs were hard to obtain due to the erratic pricing and use of their services.
- Software packages also varied markedly in price and use from a few thousand dollars per annum to over $200,000. All providers had considered using a package or had been approached to use one. Some had opted to continue with manual collated ACFI appraisals.
- Providers stressed the challenges of the role of ACFI co-ordinator and many had moved towards higher qualified RNs to perform the role. They found better results in their opinion
- Costs did not vary as widely as the method of use. In fact the cost per bed day range for those using registered nurses was very tight indeed.

I thank the providers for their readiness to speak with Pioneering Economics and their candour in divulging sensitive information.

4.5. Compliance program cost

The current compliance program is delivered entirely within the Australian Government Department of Health. The officers are all directly employed by the Australian Government.

[8] The costs for rural/remote providers are far higher, in the order of 100% higher. The overall cost of the program has been made using ABS data for MMM1-4 for metropolitan/regional beds and MMM5-7 for rural/remote beds.

[9] Range is defined using 1 standard deviation above and below for metropolitan/regional costs

Currently there are a total of 46 review offices spread across 6 state offices. The total budget for this program was approximately $5 million in 2016-17. The program is very small in comparison to the funding being reviewed.

As was indicated in the Section 2, Pioneering Economics performed a comprehensive set of interviews with multiple review officers to ascertain their role in the review program but also how they select facilities to review, undertake validation, work in teams, organise their teams, build capability, undergo training, speak with facilities, go out on-site, visit regional/rural locations and importantly, what providers do in return.

Part of this process was to learn about the overall system but also to ascertain what the cost to providers of the review program is. When we spoke to providers themselves, few had undergone recent reviews. This is understandable since there are lots of providers and few review officers. A reasonable way of assessing the cost to the providers of the review program is to get the review officers input on what staff resources are used by providers to meet with them.

Review officers indicated a range of different methods for providers meeting with them. Some were happy to submit their 'packs' in advance and had minimal need for staff on-site to assist review officers. Others review officers claim providers sent multiple staff from the main office (potentially in another state) to assist with the review process.

It was deemed usual to have 1 to 3 nurses or carers from the providers assisting review officers gather necessary paperwork, talk to residents and locate follow-up paperwork in answers to requests form reviewers. The providers would spend approximately a similar amount of time preparing paperwork and responding to requests that review officers had during their reviews.

Step 1 – Estimate cost to providers

Unfortunately without a time and motion study or reliable quantitative inputs relating to the ACFI review program costs imposed on providers the next best alternative is to approximate the cost to providers as a ratio of the cost to government.

Step 2 – Estimate provider cost based on Government experience

Based on feedback from the consultation process with review officers, we can establish a pattern of engagement by providers with the review program.

As indicated in Section 1, there is a range of engagement by providers during the review process. The review program sends 2-3 review officers as qualified registered nurses or equivalent, for 2-3 days. A conservative estimate for the number of staff used by the provider is a matching number of 2. The review officers do not spend their entire time on-site performing reviews. Indeed they spend a lot of time assembling information and constructing the review reports.

Similarly, the providers commit more resources than the face-to-face staff during the time of the site visit. They need to assemble the 'packs', client records, doctor's notes and external provider reports. They also need to produce any additional information requested by review officers and respond to the reports they receive from the outcome of the review.

Step 3 – Using government costs as a proxy

An approximation of the costs to the providers is to mirror those of the government of operating the review program. That is, the providers would be expected to spend the same as the government's $5 million[10] or more on staff time and resources in preparation before and time assisting the review officers during the review process.

The logic is that providers need to prepare and examine much the same information over the same timeframe as the review officers given the random selection of the review process.

The cost of the review program to the entire sector is approximated as $5 million of government funds ***matched by $5 million of provider funds***, indirectly through wages to staff that would otherwise be directed to care.

4.6. Total assessment costs under ACFI

The next step is to assess the total annual cost across the three sectors of assessment for residential aged care. The costs associated with assessment are:

1. ACAP costs are not publically available;
2. ACFI are approximately $247 mil – paid by providers; and
3. Review program $5 mil paid by providers and $5mil paid by government.

The total is approximately cost of ACAP + $5 mil paid by government and **$252 mil** paid by providers. This implies there is already a significant expense to both providers and government in the current system.

[10] A cost estimate has been supplied by the Department compliance program National Office.

5. External funding assessment

5.1. Delivery methods

In this section we shall consider two methods for providing external assessment. The first is having assessments done only in residential care facilities for people that have already entered care under the existing ACAT system. The second is having a funding assessment performed as part of the Aged Care Assessment Program (ACAP), the current external workforce that assesses people for a pathway to care and re-ablement, currently ACATs.

5.2. In-care assessment model

Under the first delivery method, assessments would all take place within residential aged care facilities. Clients would have already been admitted and awaiting either an initial assessment or a re-appraisal. This setting would require assessors to go from a central office to each residential care facility.

There is an existing government run program of qualified registered nurses that goes from the main state office to every residential care facility in Australia. This is the review compliance program. Currently, they do not review every facility in each year but they have been tasked with an overall industry audit which requires them to reach facility. They are given different targets and some are for reviewing rural and remote providers.

This model is costed around a similar program of qualified workers that would be based out of a state office that would also have multiple satellite hubs for staff to reach all parts of the state regularly. It has been produced in consultation with the existing managers in the review program state offices. They provided feedback on the how they manage staff going to off-site locations, maintaining goals, maintaining consistency and staff wellbeing.

There are some marked differences. Currently, state offices set their own goals and targets to visit facilities. They choose the facilities in conjunction with a management plan developed with data mining software that selects targets. This allows an efficient division of labour to reach sites in an orderly manner planned some time in advance.

The on-going phase of a national roll-out of fixed/variable casemix funding assessors would require them to respond to requests for initial appraisals or re-appraisals within a timeframe, 7 days to a month[11], to ensure timely assessments are undertaken. This would add an additional co-ordination layer which has been factored into the modelling.

Given most larger home of 100 beds or more, would need 2-3 new assessments each month and an additional 2-3 re-appraisals, both voluntary and time based, that would require most facilities to be visited monthly. In such a case, it should be planned that every residential care

[11] Consultations with ACFI consultants, providers, review officers suggested between 2 and 7 days as the minimum time to visit a client in residential care with a change in circumstance. Providers would be content with 7 days but indicated they would need to have appraisals and payments dated from the application date not date of appraisal.

facility in the country would need to be visited approximately monthly.

Where facilities are in remote locations, it makes less sense to send assessors regularly. Alternatively rural and remote facilities may be block funded or alternative assessment arrangements made such as engaging contracted local workers or using temporary payments while awaiting assessment. Such options are already in place within programs such as NATSIflex, which is block funded.

5.3. In-situ Assessments

An interesting question is whether assessments can be done in-situ as part of the normal client pathways offered to people in the ACAP process. The University is still undertaking the study but for the purposes of this model we have been asked to consider the case where the tool can be used outside the residential care facility. This is quite possible as the tool is based on patient characteristics rather than care provided.

It is beyond the scope of this exercise to make any assertions or definitive statements about the ultimate use of the assessment tool either way. What we can say, is there will always be a need to assess people for a client pathway including re-ablement. That assessment is best done in the home where clients can be encouraged to seek all supports to make the best choice for them.

We also consider as in Section 3.5, there is a need for clients to deal with as few assessors as possible. This section proposes developing a model that makes possible the delivery of funding assessment in the home. If the assessor is unable to place a definitive 'class' on the individual for funding under the assessment tool, the same assessor should re-visit the client in the residential facility once they are able to be assessed.

To reach all of Australia, now no longer just limited to the residential facilities but also to extend to clients homes, we will need a different structure for the workforce. Whatever system prevails, it will need to cope with the prospect of performing a single assessment in a regional or potentially remote area.

To do this, we propose a similar breakdown of the workforce as ACATs with state offices, supported by regional centres.

5.4. Existing example using ACATs, South Australia

Pioneering Economics has investigated the location of existing ACATs and found there to be a sensible distribution of ACATs around the country. Here we focused on a single state that is geographically large with a dispersed population, South Australia.

The current example of South Australia is just that, one potential example. It is still useful for illustrative purposes. Using public information we have ascertained that there are 8 ACAT base of operation in South Australia.

Table 4 – Location of ACATs

Name of ACAT office	Distance (km) from State office – Adelaide
Central Adelaide ACAT - in central Adelaide	0
Northern Adelaide ACAT – In northern metro	10
Southern Adelaide ACAT - in southern metro	10
Barossa Hills Fleurieu ACAT - Mount Barker in the 'Adelaide Hills'	33
Eyre, Flinders & Far North ACAT - (Port Augusta in the road to Alice Springs)	306
Yorke & Northern ACAT - (Wallaroo, At the coast, ferry to Port Lincoln/Whyalla, close to Moonta, Port Pirie)	157
South East ACAT – Mount Gambier near the Victoria border	435
Riverland Mallee Coorong ACAT – Renmark near NSW border on the Murray River	251

Using the ABS region definition SA4, South Australia is broken up by into 7 large regions, numbered 401-407. These roughly correspond with the regions chosen by the ACATs. Using the 2016 Census, Table 5 shows the bulk of the population aged over 70 lives in the Adelaide metropolitan region and surrounds, serviced by Central Adelaide ACAT and Southern Adelaide ACAT.

Table 5 – Population by region and ACATs

	70+ population	Total population	Serviced by
Adelaide - Central and Hills (401)	37,335	217,654	Central Adelaide ACAT & Barossa Hills Fleurieu ACAT
Adelaide - North (402)	54,431	423,086	Central Adelaide ACAT
Adelaide - South (403)	55,267	355,341	Southern Adelaide ACAT
Adelaide - West (404)	36,993	227,745	Central Adelaide ACAT & Southern Adelaide ACAT
Barossa - Yorke - Mid North (405)	21,712	110,515	Yorke & Northern ACAT
South Australia - Outback (406)	11,867	82,820	Eyre, Flinders & Far North ACAT
South Australia - South East (407)	37,126	184,742	South East ACAT & Riverland Mallee Coorong ACAT

The 'South East (407)' ABS region is serviced by 2 ACAT offices because it is a large area, 65,000 square kilometres. The region stretches along the NSW and VIC border back to the

Adelaide Hills and Barossa. The entire region has only 37,126 people over 70.

The 'Outback (406)' region is as you can imagine, monstrous, at 877,816 square kilometres. It is serviced mostly by 'Eyre, Flinders & Far North ACAT'. There are additional 'satellite offices' in Whyalla and Port Lincoln.

Given the 'Yorke and Northern ACAT' is located near the ferry at Wallaroo, team members from this ACAT may be able to meet with satellite offices lower Eyre towns such as Port Lincoln and Whyalla.

So between them these 8 offices are responsible for all of South Australia. The A.P.Y. lands may have additional resources which are 'mixed use' health services. Four of these offices are located in or close to Adelaide metropolitan areas. Four are located in regional areas between 150km and 450 km from Adelaide.

These four regional offices are utilised to service a population aged over 70 of 70,000. This is the balance struck between having too few clients to assess or too far to travel from a state office. A comparable model for direct funding assessment officers could be utilised.

5.4.1. Number of assessors needed

If we now turn to how many assessors might be needed. We can start with some basic assumptions about the assessments and augment those to the current ACAT program.

Current in-residential assessments performed by registered nurses in the RUCS are taking approximately 1 hour. When considering the case for funding assessment in-situ, we must assume that it can be done at home at all, as part of a normal client pathway assessment or as a stand-alone assessment.

If we ***assume an ACAP in-home client pathway assessment*** to take an average of ***1 day per client*** it should give sufficient time for this new RUCS tool to be incorporated as one of the options given to clients if residential care is a likely pathway chosen by the client. It may be unnecessary if the assessor deems that clients are better suited to re-ablement, CHSP or Home Care Package

In constructing the model for the number of assessors we are making the following assumptions:

- 1 assessment per day for new assessments.
- Re-assessments are more efficient as they are only for the purposes of funding and multiple re-assessments are conducted at the same location (the facility), so 3-4 re-assessments per day.
- Re-assessment ratio is 50% of those in residential aged care.
- Registered Nurse salary is based on the 2017 NSW Hospital award for an RN5 with further 18% allowed for super and workers compensation insurance
- It is assumed that the tool can be used in situ assessments for this model. This

assumption is going to be tested by AHSRI.

- Travel costs are included
- Office space will need to be rented in a way that roughly follows the ACAT distribution. These are currently co-located with other health services.
- We are assuming remote and very remote (MMM6-7) facilities are block funded or some other assessment/payment mechanism so re-assessments are not required. Individuals in rural and remote may still need an assessment but only if they are planning on going into resi care in a non-block funded area.

Across the nation as a whole, if ACAT assessments are being done at the rate of 1 for every 16 people over the age of 70, we can use that as a general planning guide for the number of Full-Time Equivalent (FTE) assessors. There are 3.1 million Australians over the age of 70 in the last Census in 2016.

If we allow for 4 years of growth to 2020, when a likely rollout of assessments would begin, would take that number to approximately 3.4 million people aged 70 and over. That would equate to 212,500 assessments per annum. Using around 215 working days in a single year, 212,500 assessments at 1 per day would require approximately 1,000 assessors. This simple calculation is explored further in a more detailed way in the cost model in section 6. Re-assessments would be in addition to this although they are faster as they can be conducted at the same location reducing travel time and cost. They are also included in the overall cost discussed in Section 6.

5.5. Incompatibility with reviews

Another potential option is to roll-out a 'provider assessed' tool based funding model with a review audit program. This could be rolled out in two ways. The first is similar to the current status quo - that is to validate assessments - but replace the ACFI with a new tool. The second is for review officers to conduct their own assessments and compare them with those found by the provider

Pioneering Economics believes a validation model is not possible. In discussions with the review officers, it has been made clear that the review officers are there to validate information collected as part of ACFI. They do not assess care recipients for the appropriateness of care. This validation process takes a long time to go through each resident's information 'pack' containing all the evidence collected by the provider during the course of their care.

The RUCS tool has been specifically designed to place residents into cost 'classes' built around functional abilities and limitations that drive cost to providers. This negates the need for a lengthy assessment process and more importantly it negates the need to collect excessive evidence of care delivery showing tasks complete for each resident. The single feature of the ACFI system that the new tool has been designed to remove is the precise thing with the review officers would need to validate. Therefore, it is formed the view that the ***tool***

being used in the RUCS is incongruous with validation method of compliance reviews.

The second option would be to re-assess clients and compare those assessments to the provider's assessments. This option is appealing as the government would not need to assess all clients. Our understanding of the current design of the RUCS tool is to place clients into classes based on their current condition. This makes ***assessments a point in time estimate***. If assessments were undertaken at a different time by assessors, we would be unable to determine whether the client changed between assessments or whether the original assessment was incorrect. This method of review also fails due to model design.

5.6. Gatekeeper role

The current ACATs have a role to assess individuals for the pathway to care One of the original purposes of this process was to see whether an individual was suitable for residential aged care. This was partly done to ensure only those individuals who truly needed residential care were put forward – a 'gatekeeper role'.

Using some analysis performed by the Department[12], the median time between clients receiving an approval for residential care and when they are admitted has grown from 114 days in 2012/13 to 279 days in 2016/17. This could be for one of two reasons. First, clients are unable to find a bed for an extended period of time. Second, clients are choosing to remain at home for longer with alternative supports.

If the median client was unable to find a place in a residential facility for 279 days, this would imply the system has no spare beds and large queues of people waiting for them to come up. It would be troubling. In this scenario we would expect occupancy to be running near to capacity across the system. Instead the Department indicates occupancy levels are running closer to 90%. In addition, there are providers which have received approval to build places under the ACAR process that sit unutilised for a long time – 5 or more years.

This evidence suggests the growth in the median days for a resident taking up a residential aged care place is due to client preference in the main. The growth of alternative options, namely Home Care and Consumer Directed Care under CHSP imply that residential aged care entry is being delayed by choice. This is a desirable outcome and one that shows a system functioning well. It also suggests there is less need for the 'gatekeeper' function that the ACATs originally played. Given consumer's preference for alternative-to-residential-care options, there should be little concern that having funding assessments performed in-situ would lead to a large increase of clients entering care.

[12] Department supplied internal analysis of median time between ACAT approval and admission to care.

6. Costs of assessment program

We must stress that these costs are being derived using broad figures, while the RUCS is underway. We are making assumptions about the mode, time and delivery of assessments. The results here will present a reasonable approximation of costs allowing for the limitations of the assumptions.

6.1. Re-assessment

This section presents different mechanisms for delivering external assessment of residential aged care using a fixed/variable casemix classification tool. In all of the cases presented there is also the need to reassess residents that have already received an initial assessment. The providers may request a re-assessment that recognises a change in the resident's functional limitations as there could have been a long time between the initial assessment and entry to care.

Here are the assumptions which underpin the re-assessments in all the models.

- Re-assessments take the same length of time as the initial assessment (currently 1 hour);
- Re-assessments occur within a residential aged care facility (otherwise it is still considered a repeat initial assessment);
- Re-assessments are likely to be conducted after 7 days to allow the resident to return to previous functionality if possible (potential to back-date to application date);
- Multiple re-assessments are likely to be conducted consecutively within the same facility and may be arranged to coincide with other re-assessments or initial assessments at the same location;
- Travel time is reduced per re-assessment because they are more likely to be done consecutively and also because they are more likely to be located centrally.

6.2. In-residential care only model

Pioneering Economics investigated a range of options to deliver external assessment. Examined in this case, the assessments are all to be conducted within the residential care facility after having already been admitted to care. The resident may have received an ACAT assessment as is the case now or potentially entered some other way.

For the purposes of this model we do not have a precise breakdown of all the residential aged care facilities by their location. Instead we have assumed they are located approximately in proportion with the population aged over 70. This is likely to be a conservative assumption as it implies rural and remote areas are as well serviced as metropolitan areas.

Using the total number of beds in 2016/17 in each state and apportioning them based on the population aged over 70 in each ABS SA4 region gives us our residential care beds by geographic area.

We then apply the following assumptions:

- The tool used in the RUCS is used by the assessor;
- An ACAT or equivalent has likely already screened the individual or collected some information on them to access a home care package prior to entry to residential care;
- Travel time is reduced compared to the in-situ assessments as each trip can have multiple assessments and there are fewer locations to visit;
- Population is based on the number of new residents entering residential care per annum;
- Assessments are conducted by a registered nurse with 5 or more years of clinical experience or equivalent;
- There is an assumed 50% of all residential clients re-assessed each year.
- Assessments take 1 hour including reporting time; and
- Average travel time is estimated for each ABS SA4 region in Australia

The model calculates the number of full time equivalent assessors will be required to undertake the number of assessments in each SA4 regions based on:

- The amount of time each assessment;
- The travel time to each location; and
- The likely number of re-assessment required in the same region.

The cost of these assessments is then calculated as the sum of the salary paid to the assessors (including on-costs), the direct travel costs (cars), direct office costs[13] and office administration staff for each SA4 region.

Based on the total number of FTE assessors in each state, an additional allowance is made for a number of managers at a ratio of 12 FTE staff for each manager. They are not specifically allocated to each region as this level of detail is beyond this project.

Costs are then apportioned between assessments and re-assessments based on the time taken to complete the total of each at the state level. This creates an estimate of the average cost of each assessment and re-assessment at the state level.

The results shown in Table 6 indicate a wide cost range for each assessment, from $152 in Victoria to $733 in the Northern Territory. The overall average is $175 per assessment. The differences are driven by the scale of operations within each region as well as the geography which in turn increases the travel time.

These results are consistent with the ongoing maintenance of the program under these settings. There will be additional costs when establishing the program in the 'roll-out' phase.

[13] An estimate of the cost of office space for each SA4 is provided using a land value coding system and estimates of commercial property values and rental yields. Running costs for utilities, security and cleaning are also added.

Table 6 –In-residential care assessments

State	Number of assessments and reassessments	Number of FTE Assessors	Cost for in-residential care assessments	Cost per assessment
NSW	55,252	56	$9,171,649	$166
VIC	42,480	42	$6,471,120	$152
QLD	30,113	32	$5,410,149	$180
SA	14,159	16	$2,902,934	$205
WA	13,668	14	$2,871,677	$210
TAS	4,088	4	$821,358	$201
NT	487	1	$356,906	$733
ACT	2,069	2	$407,832	$197
Australia	162,316	167	$28,413,624	$175

6.3. Eligibility and funding assessment in-situ model

Pioneering Economics has built a model which costs providing casemix classification assessments direct to clients in their homes, designed around the current location of ACATs.

The population of people over the age of 70 mapped by ABS region SA4 is used to map appropriate locations and size for future assessment hubs along with existing locations of ACAT centres.

Table 7 - Cost of in situ ACAP/RUCS external assessment

State	Number of in-home assessments	Number of in-care re-appraisals	Number of FTE Assessors	Cost of staff (including on-costs)	Travel cost (car)	Office/ Admin cost	Total cost
NSW	66,459	34,484	343	$38,022,413	$3,276,250	$6,312,190	$47,610,853
VIC	50,692	26,639	259	$28,722,843	$2,366,250	$5,202,360	$36,291,453
QLD	37,777	18,308	201	$22,282,044	$2,058,750	$3,602,295	$27,943,089
SA	16,610	8,969	92	$10,224,577	$1,085,000	$1,904,265	$13,213,842
WA	18,303	7,948	96	$10,628,081	$970,000	$2,001,840	$13,599,921
TAS	5,165	2,474	27	$3,077,648	$236,250	$479,400	$3,793,298
NT	741	256	6	$723,255	$122,500	$221,070	$1,066,825
ACT	2,560	1,269	13	$1,547,386	$113,750	$350,670	$2,011,806
Australia	**198,308**	**100,345**	**1037**	**$115,228,246**	**$10,228,750**	**$20,074,090**	**$145,531,086**

The overall cost of the program if it were to be rolled out to all homes across Australia would be approximately $145 million dollars. This is a substantial cost but it needs to be compared with the existing cost of ACAT arrangements and the current costs providers face administering ACFI, approximately $250 million dollars.

6.3.1. Parameters in the model

The model has been designed from a macro level. The locations have been selected to marry up with existing ACAT locations, in part because they make sense geographically. Almost all the parameters in the model are easily altered with the exception of the locations of the ACAP hubs. That requires a re-mapping of the population model and re-estimate of the travel times and costs.

A full set of parameters for the model are listed in Appendix A.

6.4. Classification only in-situ

In this case, we explore the possibility that funding classification assessment is added as another layer to the existing ACAP and existing ACAT assessments take place as they currently do.

Assessment time (2 hours) is assumed to be longer than in-residential care assessments (1 hour) because of the time it takes for assessors to familiarise themselves with the client to make them feel comfortable.

Otherwise all other office and travel, re-assessment assumptions remain the same.

The number of in-situ assessments will be greatly lower as the ACATs will only refer those residents wanting to enter aged care for a further funding classification assessment.

Table 8 - Cost of in-situ/residential care RUCS only assessment

State	Number of in-home assessments	Number of in-care re-appraisals	Number of FTE Assessors	Cost of staff (including on-costs)	Travel cost (car)	Office/ Admin cost	Total cost
NSW	20,768	34,484	87	$9,720,198	$851,250	$2,047,690	$12,619,138
VIC	15,841	26,639	61	$6,861,426	$558,750	$1,464,120	$8,884,296
QLD	11,805	18,308	50	$5,633,792	$532,500	$1,364,805	$7,531,097
SA	5,191	8,969	25	$2,875,896	$318,750	$772,500	$3,967,146
WA	5,720	7,948	25	$2,875,896	$268,750	$928,770	$4,073,416
TAS	1,614	2,474	7	$824,131	$61,250	$260,325	$1,145,706
NT	232	256	2	$319,752	$42,500	$164,370	$526,622
ACT	800	1,269	3	$420,628	$26,250	$118,635	$565,513
Australia	61,971	100,345	260	$29,531,718	$2,660,000	$7,121,215	$39,312,933

6.5. Transition

Apart from the maintenance phase, there is also the cost of establishing the program. We will call this the roll-out phase. In practice there are any number of ways the program could be rolled out. Presented here is a single method for rolling out the program in a single year. There are some cost savings doing it this way and there are some other additional costs. For example:

- You need to train more staff to reach all residents in a single year
- You need to establish offices in regions
- Training will be intensive to begin before you can expect large progress
- Savings from having consistent assessments
- Fewer re-assessments needed due to reduce lag between the first ones in the roll-out
- There are no re-assessments included in these calculations of the roll-out. They would form part of the on-going program.

This leads to the following change in parameters.

- Running costs increase to 120% of the year's rent to allow for the set-up of offices, purchase of IT equipment.
- The number of training days per FTE increases from 12 per year to 32 working days, or an additional month of training. This includes the time of the trainee and the trainer who is likely to also be an assessor.
- The number of managers per FTE assessor increases to 1/6 from 1/12 to allow for the build-up of the workforce. This would also be caused by fewer assessors at the start.

Table 9 –Roll-out phase In-residential care assessments

State	Number of in-resi assessments	Cost per assessment	Cost for assessments including set-up	Number of FTE Assessors
NSW	68,967	$196	$13,496,198	77
VIC	53,277	$190	$10,129,093	59
QLD	36,616	$211	$7,710,365	43
SA	17,937	$246	$4,420,067	23
WA	15,896	$239	$3,791,510	18
TAS	4,947	$229	$1,132,708	6
NT	511	$761	$388,775	1
ACT	2,538	$260	$659,394	3
Australia	200,689	$208	$41,728,109	230

The results in Table 9 show an elevated cost per assessment and number of assessors compared with the maintenance phase. The overall cost is $41.7 million compared with $28.3 million during the maintenance phase. That means the effective 'roll-out cost' would be $13.4 million in addition to the regular maintenance phase.

6.5.1. Sensitivity on assessment time for roll-out

If during the roll-out we do not expect assessors to operate as efficiently as those during the trial we can test the impact of an assessment taking 1.5 hours rather than 1.

With all other parameters held equal (ceteris paribus) we can see the result in Table 10 show the total cost increases to $53.9 million. That is a 29% increase on the cost. We can see that results are unsurprisingly quite sensitive to the time per assessment.

Table 10 –Roll-out phase slower assessments sensitivity

State	Number of in-resi assessments	Cost per assessment	Cost for assessments including set-up	Number of FTE Assessors
NSW	68,967	$258	$17,787,730	102
VIC	53,277	$252	$13,436,053	78
QLD	36,616	$273	$9,992,222	56
SA	17,937	$295	$5,300,112	29
WA	15,896	$293	$4,656,957	24
TAS	4,947	$318	$1,571,085	8
NT	511	$847	$432,750	2
ACT	2,538	$302	$766,215	4
Australia	200,689	$269	$53,943,122	303

6.6. Specific IT costs

In the course of discussions with the various sections it is clear that IT costs are significant. The majority of them occur at the national office rather than as a result of additional assessors.

The assessors will most likely travel on-site with tablets or laptops with a portal to interface with My Aged Care. There is already an existing interface and application developed for the government for the ACAT assessors. There may need to be some adaptation of this to suit the funding classification tool.

Currently the University of Wollongong is supplying their own IT infrastructure and it would not be indicative of the overall roll-out cost to government.

The only specific allowance for IT costs per assessor is within the set-up cost of the roll-out phase. The general office allowance for the set-up of offices is approximately to $1.8 million. This funding envelope can accommodate the specific purchase of around 200-300 tablets or laptops, which costs between $290,000 and $435,000.

Further research will need to be conducted into the implementation cost of any additional bespoke IT software requirements.

6.7. Workforce requirements

One of the considerations for Government developing an external assessment workforce is the availability of workers. For each of the options considered in the previous sections we have calculated an approximate number of workers.

In all options for funding classification assessment we have proposed using registered nurses.

This was because the AHSRI proposed them as sufficiently qualified to use the tool and also because providers indicated a preference for using RNs during consultation.

Under the most labour intensive scenario of an external workforce implementation - the in-situ model – there are approximately 1,000 assessors required across Australia. These workers replace existing workers rather than create new positions. The providers will no longer need to employ ACFI co-ordinators and there is also no ACATs or their required staff. Not all ACFI co-ordinators are RNs and not all ACATs are RNs.

Across the providers surveyed 80% used RNs as the primary ACFI co-ordinator role and used one for every 60 places. If we make those estimates more conservative assumptions, using an ACFI co-ordinator for every 100 occupied beds and RNs only 50% of co-ordinator roles, we still have approximately 900 registered nurses freed up.

There are no public precise figures on the number of ACAT assessors although there are 67 offices. Based on population estimates and a conservative assumption of the ratio of ACAT assessors to population there would be more than 600 ACAT assessors. Not all ACATs are RNs, so again if we assume a conservative 20% of assessors are RNs, this would still free up more than 120 RNs.

According to what is known publicly, discussions with providers and surveys of existing ACFI costs, it would appear that even under the most labour intensive external assessment scenario, there are ***sufficient workers already in the system to undertake external assessment of funding classification***. Of course there needs to be care taken to the transition under any of the scenarios. A separate transition strategy must play close attention to the need to retain qualified workers within the sector. This will be more acute in rural areas.

The final method chosen for assessment and ACAP will determine the number and nature the workforce required.

Under all scenarios, it is possible to utilise external contracts or internal workforce. Pioneering Economics has not been asked specifically to look at the merits of utilising a contracted workforce or an internal staff or combination model. There are benefits and drawbacks to each of the choices. Given feedback from providers about the lack of consistency of ACATs the government should place greater emphasis on consistency of application of whatever tool or guidelines they impose. This would imply there are greater benefits for an internal workforce or at least one with strong internal oversight to ensure consistency.

6.8. Method of employment

Pioneering Economics examined the likely costs of external assessments under different scenarios. It remains an open question whether the government would employ assessors directly or through third party contract arrangement. There may be potential benefits and costs to direct employment and contracted assessors.

The experience speaking with providers emphasised the need for greater consistency in

assessments than they currently experience with ACAT assessments. There is also the need for probity associated with the direct allocation of a funding program of this magnitude.

In addition, the roll-out of the assessment tool may require adjustments to the details and nature of external assessment which means the workforce will need to be responsive to potentially large changes in assessment criteria.

These factors combined imply the program needs to have strong emphasis on the oversight of the assessors and the need to be flexible. The choice of method for employing assessors needs to be examined closely with these factors in mind.

Appendix A - Parameter list

Re-appraisal

- Re-appraisal rate (of resi places) – share of residential care places re-appraised annually
- Re-appraisal time – Time taken to perform an in –resi assessment
- Travel time – Time saved due to travel to residential care provider not the home

Travel

- Cars per FTE – How many cars are needed for each FTE in the office as not all the assessment time is face-to face
- Fixed cost of a car – annual cost of leasing a car
- Annual cost per hour travel – increase in transport cost for each additional travel hour per visit

Office

- Office space cost (purchase) – The cost per square meter of office space for a given density
- CBD – Inner city CBD type location for major capitals
- Urban centre – A secondary major hub within metropolitan city or large town
- Regional Centre – A non-traditional office location readily available
- Rental yield – cost of capital metric to relate purchase price
- Running costs – direct running costs of office, IT support, electricity, telecommunications, cleaning, sundries
- Office space per FTE – the amount of office space required per FTE, for example a 6 person office may take up 100m2

Population

- Assessments per 1000 over 70 – simply the share of 70+ that you estimate require an assessment in their home (excluding residential care)

Workforce

- Time per assessment (hours) – the time taken to perform an assessment, excluding travel time but including time to complete entries into My Aged Care
- Working days per annum (excluding leave) – simple calculation of the number of working days after provision for leave
- Development days – Professional development days, staff support days, moderation

days

- Additional time off (to compensate for travel) – bonus leave days for those exposed to frequent travel
- On costs for government staff – super, insurance, etc…
- RN5 2017/18 award weekly rate – wage for staff undertaking assessments
- Admin salary (middle band APS4) – wage for support staff in offices
- Admin staff - Specify the number of support staff you require for each RN FTE
- per FTE