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## Executive Summary

This paper follows on from “An Assessment Framework for Aged Care” and “Overlaps between Initial Intake Assessments and ACAT Assessment and Suggested Modifications”.

The first paper covered the structure and components of the assessment framework and the most important considerations about how it would be introduced. It covered current assessment strategies relating to the levels of service and identified issues relating to the gaps and overlaps of information that may be relevant for the national assessment system. To illustrate the concepts the paper reviewed examples of commonly used assessment tools and included the recent experience with national trials and demonstrations.

The second paper examined current assessment strategies relating to these levels of service and reviewed them in terms of reducing the gaps and overlaps of information in the aged care system. It gave a brief summary of the levels and principles of assessment and the design features required for the national assessment system. Previous experience developing national intake assessment tools and the lessons learnt in trials and demonstrations suggested how the new “front end” of the assessment system, i.e. Levels One and Two, should work. A critical part of this is how it links to the “back end” of comprehensive assessment, i.e. Level Three.

This paper anticipates the requirements of a simplified system operating in a primarily electronic environment and summarises the issues relating to triggers, algorithms and priority settings discussed in the previous papers. Overall a simpler set of triggers of algorithms than occurs with the ACCNA-R is recommended. The final report for this Project will outline the final components of the assessment tool. As these components have not yet been finalised, it is not possible to definitively outline the exact triggers, algorithms and priority settings to be used in the tool. The final paper will include final recommendations on these factors and how they are incorporated into the final recommended tool.

This paper also highlights some of the issues concerning the development of funding models. The development of a system that can determine how people use the assessment and service system, and compare it with the costs of providing these services will facilitate the development and refinement of funding models for users of packaged and residential care.

There has been a considerable investment in assessment systems by many jurisdictions and service providers in Australia. Triggers, algorithms and ways of assigning priority settings are currently used in many of these assessment systems. The next logical step is to incorporate the lessons learnt from the existing systems, trials and demonstration projects into a national system. As the national system is implemented, data will be able to be collected about how the triggers, algorithms and priority setting tools are used to help people make their way through the assessment and service systems. These data, if contained in a continuous record, can be used to test whether people’s needs are being met in practice and to inform refinements to the triggers, algorithms and priority setting tools.

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## 1 Triggers

One of the aims of the front end to the aged care system will be to streamline the path that people take through the variety of possible assessments they will encounter along the way. People should only receive an assessment when a need for that assessment has been identified or “triggered” by relevant information. The items used to determine the person’s need for assessment can be stand-alone questions used specifically to identify the need for further assessment in a particular domain, or they can be prompted by a combination of individual items (giving a derived data item) that is built into an electronic system as part of an initial Level One functional assessment.

Triggers can also be useful to personalise assessments for people from special needs groups to assist them to navigate the assessment and service systems in ways that are more appropriate for them. The aim is to accommodate and understand cultural differences, offset disadvantage or identify those who may have specific entitlements. Groups identified under the *Aged Care Act 1997* and *Allocation Principles 1997* as special needs groups include:

- people from Aboriginal and Torres Strait Islander communities
- people from non-English speaking backgrounds or are culturally and linguistically diverse
- people who live in rural and remote areas
- people who are financially and socially disadvantaged
- people of any kind (if any) who are specified in the Allocation Principles of the Aged Care Act 1997
- veterans and war widows
- people who are homeless or at risk of becoming homeless
- ‘care leavers’ who are people brought up in care away from their family as state wards or raised in Children’s Homes, orphanages or other institutions, or in foster care.

People from these groups may prefer to seek assistance from services that they know and trust, or from specialised assessment services aimed at those groups in particular. Veterans Home Care is a current example of a specialised assessment service for an identified special needs group with its own level of entitlements. Service seekers from these groups can be given a choice to be assessed either through a mainstream assessment agency or directly by appropriately trained and qualified assessors in other agencies that are then able to be linked to the overall assessment information system. People can be informed of this choice by the provision of public information or when a person in a mainstream assessment agency is identified as belonging to a special needs group then a trigger question can ensure that the person has been made aware of the choices available to them.

An example of a stand-alone trigger question is “How much did your health interfere with your normal activities (outside and/or inside the home) during the past 4 weeks?” If the person responds “Moderately” or “Quite a lot”, this triggers a recommendation to the assessor that further investigation into the person’s health is warranted through the completion of a “Health Conditions Profile”.

Answers to questions in the Level One Functional Assessment such as those that relate to a person’s capacity to handle medicine, finances, etc, can also be combined and used to trigger further assessment for that person in the cognitive domain.

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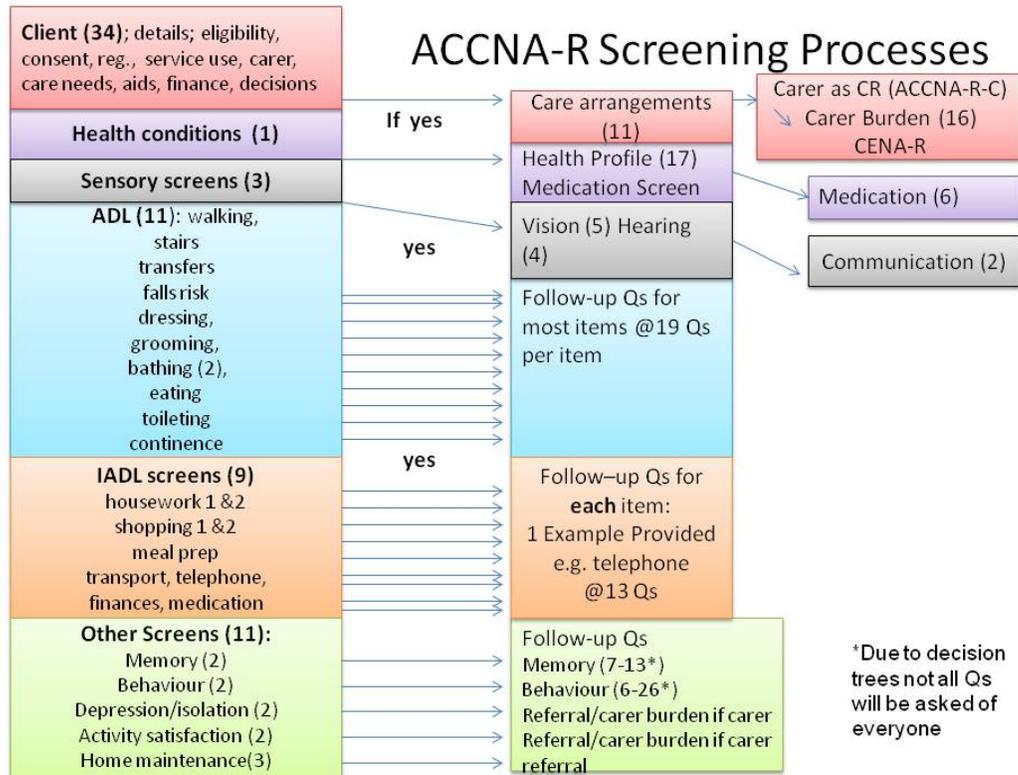
Although recommended by particular items or scores, assessments that are suggested by trigger items should not be mandatory as there may be other relevant information provided to the assessor that may make this pathway unnecessary. The recommended assessment may already have been done or may not be feasible or may not be relevant given other circumstances of the person's life. For example, a person who has been assessed may be recommended for home modifications but may be making arrangements to change to other accommodation. People living in isolated areas may not have access to the range of assessments available in metropolitan areas. In such cases assessor judgement will be required to review the recommended referrals.

However, it is important that the recommended assessments still be recorded as part of the initial assessment of their needs as the person's circumstances may change and the recommended assessment may then become a viable path for the person. Recording the reason for the assessor's judgement to not accept the recommendation may also indicate where needs are unmet and provide useful information about the reasons for the continuation of any unmet need.

### ***1.1 Triggers in ACCNA-R***

The ACCNA-R follows a tiered assessment approach which includes functional screening items and trigger items at the initial assessment phase leading to further assessment. This is illustrated in Figure 1. The first part of the initial screen includes a series of Yes/No trigger questions concerning whether the care applicant has any health, or sensory (vision/hearing) or communication issues. This is followed by trigger questions concerning whether the applicant has any difficulty (or any emerging issues) with the IADL activities of housework, shopping, meal preparation, transport, telephone, medication, finances and ADL items about mobility around home and garden, getting in or out of bed/chair, walking up and down stairs, dressing, grooming, eating, toileting, bathing/ showering continence and falls risk. There are also trigger items on whether the client is sad or depressed, whether isolated or lonely and satisfaction with the level of activity, participation and social involvement. There are then two assessor rated trigger items concerning memory problems and behaviours of concern. These are followed by the consent and eligibility items.

Figure 1 ACCNA-R Screening Processes



If the care applicant has a ‘yes’ response to any item this triggers a follow up assessment for that item. For example if the applicant has any health problem (which is likely to be most clients) then they will be asked 14 questions about their health conditions. If the client endorses the medication screen, a further 6 questions concerning medication use are then asked.

For functional abilities, if the client endorses an ADL/IADL item, then a follow up screen pertaining to only that ADL/IADL item would be triggered in the ‘base assessment’ pathway. They would not receive an assessment of their overall IADL function as occurs with the ACCNA/ONI in the initial screen as this has been replaced by the simple yes/no trigger items rather than response categories that reflect the degree of difficulty. If the client indicated they had problems using the telephone then nine follow up questions would be asked. A similar number of questions would be asked for every IADL or ADL item that is endorsed.

The advantage of the Yes/No screen questions is that the applicant is only asked further questions concerning their areas of identified difficulty. For some clients there may be only a few areas of difficulty which would lead to a shorter assessment that may be quite amenable to phone interview.

The disadvantage that can be seen from the examples above is that for an applicant that endorsed a number of these items the assessment could be very lengthy and become increasingly difficult to do over the phone. This issue was raised in the evaluation of the Access Points Trial (KPMG, 2009) where feedback indicated assessors viewed the

approach as a 'comprehensive assessment' rather than an 'initial needs assessment' approach and that the average assessment time for clients was 45-75 minutes.

Another disadvantage of using the Yes/No screening approach (vs. graded response categories) for the initial functional items is that it would be difficult to derive data from this system that could generate an average IADL and ADL profile for groups of applicants. Aggregating summary score data for functional abilities is useful for service planning purposes.

### ***1.2 Triggers in ACCNA/ONI***

The ACCNA/ONI set of tools uses a simpler approach than the ACCNA-R that does not attempt to be comprehensive at the initial point of contact.

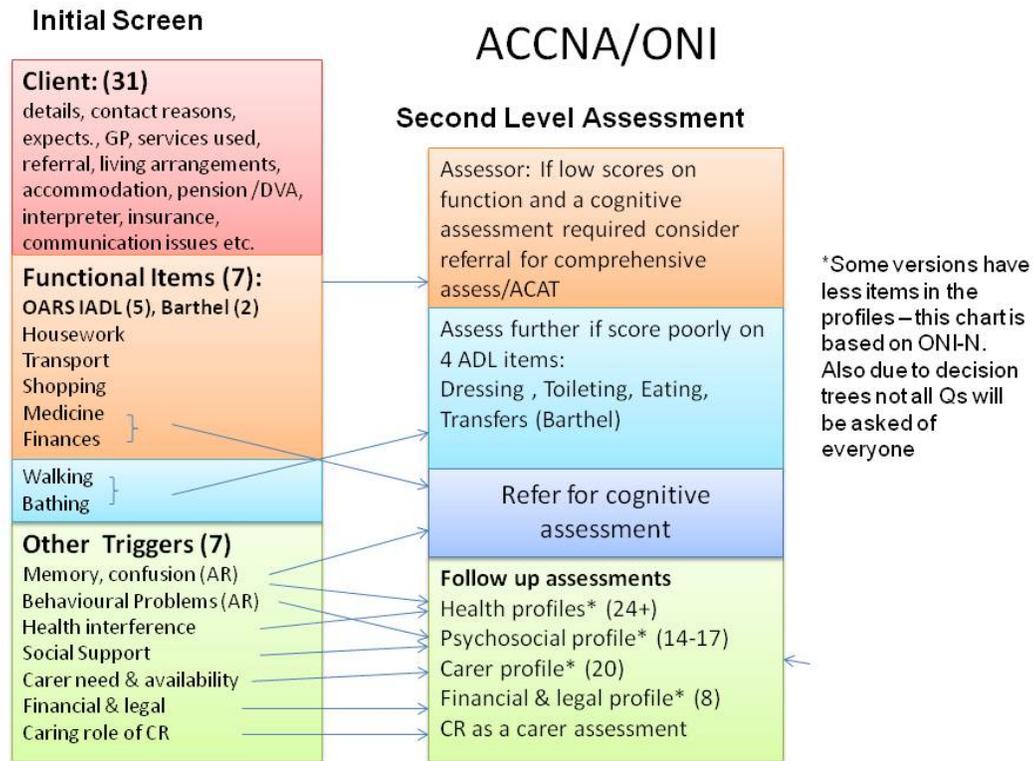
The ACCNA/ONI model uses assessor judgements from two questions in the Functional Profile and a set of identified questions whose sole role is to determine whether further investigation in particular domains is needed. If the assessor rated item concerning cognition (whether the client has memory problems or gets confused) is checked and the functional screening items has indicated that the client cannot manage finances or medication then a cognitive assessment or referral for comprehensive assessment would also be warranted.

These trigger questions leading to further investigation relate to:

- Health interference
- Social support
- Carer need
- Person's caring role
- Financial and legal issues.

These triggers prompt a second level of assessment using a follow-up profile as shown in Figure 2. The ACCNA/ONI also uses assessor judgements about a person's cognitive ability and any behavioural problems to trigger investigation using the health and psychosocial profiles, and possible referral to cognitive assessment.

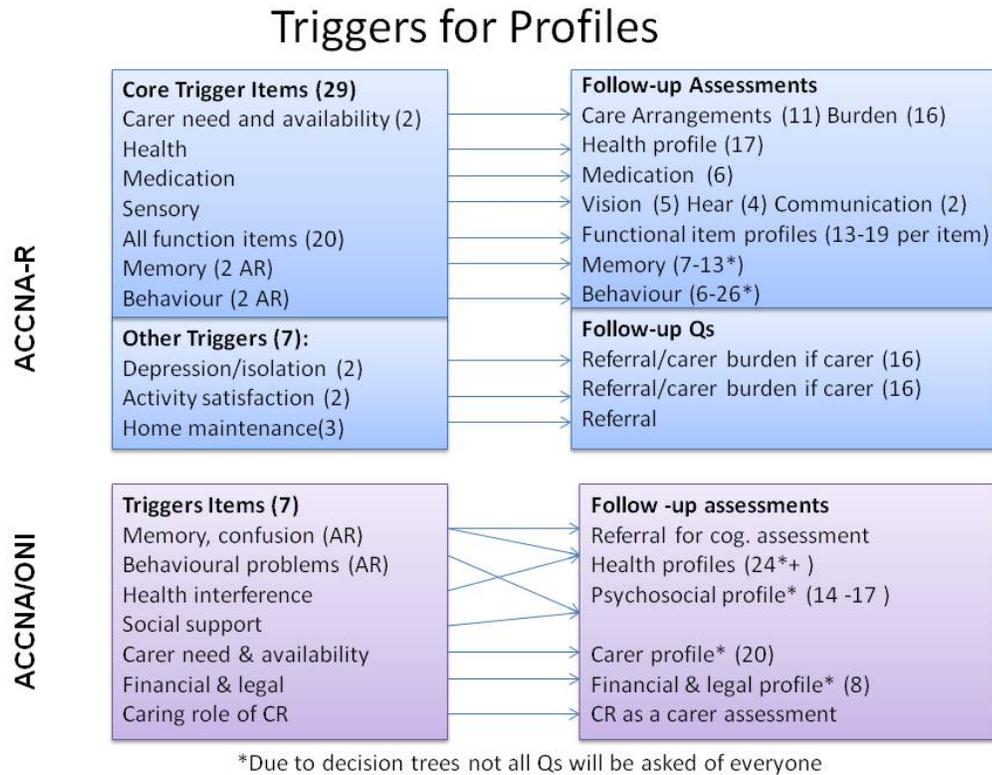
**Figure 2 ACCNA/ONI Screening Processes**



### 1.3 Comparison

Figure 3 below illustrates the trigger systems within the ACCNA/ONI family and the ACCNA-R tools. It can be seen that the trigger system within the ACCNA-R is far more complex than for the ACCNA/ONI tools resulting in a lengthier assessment time for most clients. This is because each functional item is also a trigger for further assessment if it is endorsed. It is noted that medication and sensory function are separate profiles in the ACCNA-R and these items are both included in the health profile for the ACCNA/ONI. Another key difference is that if depression is triggered in the ACCNA-R for the care recipient this leads directly to a referral whereas in the ACCNA/ONI the psychosocial profile would be completed. Overall, a more straightforward set of triggers, algorithms and business rules as included in the ACCNA/ONI family is recommended although some modifications will be required for the new assessment tool.

**Figure 3** Triggers for Profiles



Some revisions to the business rules for the ACCNA/ONI family should be considered. For example, if the person is rated as confused, has problems with medications and finances and the overall functional score is low it is likely that they will require a comprehensive assessment including a cognitive assessment. The issue may be whether it is better to refer these clients directly to a face to face comprehensive assessment or to undertake the second level (face to face) screen prior to referral.

The ACCNA uses overall function scores and trigger items for initial assessment and to identify clients requiring further assessment or referral for comprehensive assessment. By comparison in the ACCNA-R the functional screen has been embedded in the use of a larger set of IADL and ADL trigger items for all clients with yes/no response categories which then trigger quite detailed follow up questions for any item endorsed (usually 19 questions per item). It is also not possible to derive an overall score on function for these clients. These features of the ACCNA-R make it less suitable for use as a new front end assessment tool.

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## 2 Algorithms

An algorithm is a combination of data elements based on a set of rules used to assist decision-making about the services or assessments to which a person should be referred to. Another way of describing an algorithm is as a business rule for using scores and scales and codifying assessor judgements. The algorithm provides a standardised way of combining key information so that people who meet the same criteria are recommended for referral to the same service type or assessment, no matter where they are assessed and by whom.

With data of sufficient quality and quantity to sustain rigorous analysis, these rules can be refined by looking backwards through client records over time in order to examine how well the initial settings worked. Did the rules select people with a capacity to benefit from the recommended interventions, were the services the clients received relevant to achieving their goals?

For example, if it is discovered that too many referrals or inappropriate referrals are being made to particular service types or assessment types, criteria within the algorithm can be adjusted, or extra criteria may be added to better target the people being recommended for referral. Analysis of referrals may also indicate that some people may not be automatically recommended for referral to services or assessments when the rules recommend that they should be.

### ***2.1 Algorithms in ACCNA-R***

The CCASS uses an algorithm based on the responses to questions to generate the triggers and assign priority and urgency for each referral to a specific service type. The assessor can use their own judgement to determine whether the system generated responses are accurate and if they do not agree they can decline to create a referral (DOHA, 2009b).

The ACCNA-R uses algorithms for 34 different referral types (Dialog, 2011). These are:

- Behaviour
- Carer burden
- Child disability
- Cognitive assessment
- Consideration should be given to a more comprehensive assessment of needs in areas
- Continence
- CR as a Carer assessment
- Depression
- Dietician
- Domestic function
- Domestic function/Home maintenance/Formal linen service
- Domestic function/Meals assistance
- DVA
- Emergency accommodation
- GP
- Hearing assessment
- Home maintenance

- 
- Housing
  - Inadequate current formal services
  - Legal or financial
  - Living skills referral
  - Medication/Nursing or Pharmacist review
  - Memory/Cognitive
  - Mobility
  - Mobility/Home maintenance
  - Nursing
  - Nursing/Allied Health
  - Palliative care
  - Provision of goods and equipment
  - Rehabilitation/Physiotherapy
  - Sight assessment
  - Social participation
  - Speech assessment
  - Transport.

The algorithms for these are complex as they establish both the recommended need for the referral and the priority of the recommended referral.

This is a 9 step process as indicated in. In each domain, information is included to show how client needs are identified. This may occur directly from the assessment process or involve a scaled response from an item rating. The interaction of how fully the person's needs are met then determines if the need is currently being met. Additionally an indication of a recent deterioration then further informs the generation of the item priority by acting as a 'modifier' at the item level. Where applicable, domain need summaries are then described. These provide a useful summary of the person's domain level dependency (e.g. high dependency in the personal care area) but this does not take into account formal or informal support provided carer circumstances or unmet need.

The referral and priority model however takes all factors into account and this is described in the model as the Priority for a domain level referral. Where appropriate, the recommendation for a referral to a more comprehensive assessment is then also described (in health, ADL and IADL domains, behaviour, continence etc).

In summary, a person may have a series of needs identified, a set of referrals (with priorities for service level assessment) associated with those needs (taking into account unmet need and recent deterioration) and also a summary of need/dependency in the domain and an assigned domain priorities.

**Table 1 ACCNA-R Draft Priority Model**

Step 1.	Item Rating	(1) Independent (2) Emerging difficulty (3) Supervision (4) Physical assistance.
Step 2.	Formal Support Provided	e.g. HACC services.
Step 3.	Carer Support Provided	Informal support e.g. available, lives with, lives alone.
Step 4.	Overall Need Met [using 3/4]	Assessor Judgement of unmet need: Using previous items: (1) Completely met (2) Partially met (3)Not adequately met.
Step 5.	Recent deterioration	Has the problem become worse in the last 6 months?
Step 6.	Priority for Item Level Referral set from steps1-5. e.g. the item is bathing	This rating takes into account formal and informal support, unmet needs and recent deterioration.
Step 7.	Domain need summary e.g. the Personal Care domain has a need scale comprised of a number of ADL items	This domain level scaled need summary is independent of any other factors such as the degree to which needs are met.
Step 8.	Priority for Domain Level Referral e.g. overall personal care.	The Domain Priority takes into account formal and informal support, unmet needs and recent deterioration. It enables the Service Provider to look at the recommendation for an overall domain in contrast to a specific item in the domain (refer step 6).
Step 9.	Referral / Service Type	For example, HACC service, nursing, comprehensive, health) Referral Rating: 1-No referral 2-No referral but reassess in 3 months 3-Yes provide referral. If a referral is recommended, the priority is as follows: Referral Priority: (1) Low (2) Medium (3) High.

In the ACCNA-R there are many possible combinations of items to recommend referrals. For example, there are six different algorithms to recommend referrals to GPs. A referral priority is then required for each of these. An example is that of a person who has reported moderate to very severe pain in the last 4 weeks, has not seen a health professional about the pain, and has a regular GP, the referral priority is calculated below in Table 2.

**Table 2 Priority Setting for a Referral to a GP**

Algorithm	Referral Priority
If ("How much bodily pain have you had during the past 4 weeks?" answer is "Severe" or "Very Severe" AND "Have you seen a health professional about the pain you are experiencing?" answer is "No" AND "Do you have a regular General Practitioner (GP)?" answer is "Yes")	High
If ("How much bodily pain have you had during the past 4 weeks?" answer is Moderate AND "Have you seen a health professional about the pain you are experiencing?" answer is "No" AND "Do you have a regular General Practitioner (GP)?" answer is "Yes")	Moderate

## 2.2 Algorithms in ACCNA/ONI

The ACCNA/ONI uses a simpler approach. The ACCNA/ONI approach uses algorithms to recommend referrals to particular types of external assessment. These algorithms were initially developed using expert opinion. It was anticipated that they would be refined over time in response to data collected when in widespread use. The algorithms that were used in the ACCNA trial to recommend referrals are shown in Table 3.

**Table 3 Referral Algorithms used in the ACCNA**

Assessment Type: Referral	Algorithm
Self care function	Score of less than 3 on either Functional Profile Item 6 or 7 (Can you walk, Can you take a bath or shower?)
Rehabilitation	Assistance is required to reduce rate of decline in level of function and independence
Medical	If No GP, automatic referral to GP
	OR
	Referral for primary care mental health assessment if total Kessler K-10 score is 16-29 (psychosocial profile)
Cognitive	If the CR scored less than 3 on either Item 4 or Item 5 in the Functional Profile (Can you take your own medicine, Can you handle your own money?) AND the CR has no physical disabilities or problems with English literacy that may account for the CR not being independent on these items
	OR
	If the CR scored 1 on Item 8 of the Functional Profile (Does the person have any memory problems or get confused?)
	OR
	If medical diagnosis of dementia in the Health Conditions Profile AND has not been recently assessed by a doctor
Hearing	Hearing (with hearing aid, if used) is fair or poor
Home modification	If home modifications are suggested AND Functional Profile scores of either 1 or 2 on items 2 (Can you get to places out of walking distance?) and/or 6 (Can you walk?)
	OR
	If CR has had 1 or more falls in the last 6 months
Provision of goods and equipment	If provision of equipment is suggested AND Functional Profile scores of either 1 or 2 on items 2 (Can you get to places out of walking distance?) and/or 6 (Can you walk?)
	OR
	If CR has had 1 or more falls in the last 6 months
Speech	CR needs help to communicate AND has not seen a health professional about this
Vision	Vision (with glasses, if used) is fair or poor
Mental health	A specialist mental health assessment if Kessler K10 score is 30 or more
Behaviour	Functional Profile item 9 (Does the person have behavioural problems (e.g. aggression, wandering or agitation?) score is 1
Carer Needs	Carer is needed and carer arrangements have broken down or are likely to break down
Child Disability	CR cares for a child with a disability
Caring for other	Assessor considers person being cared for is at risk

The Report on the ACCNA Field Trial recommended that another algorithm to recommend referral to comprehensive assessment be trialled (Samsa, 2007). This algorithm proposed that a person should be referred for comprehensive (Level Three) assessment if he or she had any of the following characteristics:

- Age (85 years and over)
- Lives alone
- Carer stress
- Diagnosis of dementia
- Major mobility problems.

The ACCNA/ONI approach requires that the assessor make a judgement to rate the urgency of each referral taking into account all the information that is available to them.

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### 3 Priority Setting

There is a limited supply of services and that supply is never likely to meet the demand created by all people who require them. The most common strategy for managing this demand is by restricting the numbers of services or packages that are available by creating waiting lists of those who are eligible.

More sophisticated approaches allocate priority on the basis of relative need, taking into account that some people may have greater needs for these services than others or that more urgency is required in the response that is commensurate with their needs. It may not be appropriate that a person who has greater needs should wait the same length of time as another person with a lesser need, nor that the timeliness of the service response should be compromised by a routine waiting period for an assessment to be carried out.

Many services have extensive waiting lists and their own ways of assigning priority for receiving an assessment and determining a priority for particular types of services. In a context of limited supply this means that people may wait until they are functionally more dependent in order to receive basic services. As well as limiting the person's options for improving their health or functional abilities, or opportunities to promote wellness, this also leads to inequities because access may not be based on need but may be due to local variations in the availability of particular types of services.

Waiting lists for Aged Care Packages for clients with more complex needs highlight how, in practice, there is no clear distinction between basic and more comprehensive care. HACC services are regularly required to continue to provide services to clients who require a higher level of care, either because of increasing frailty, the breakdown of carer arrangements or after a hospital episode (Willoughby City Council, 2011). Basic services like domestic assistance and transport should be included as part of a care package.

Current assessment tools such as the ACCNA/ONI have demonstrated that it is possible to develop simple tools that can give a priority to a person's need for service at one point in time, usually at the point of first contact. The Priority Tool uses an algorithm using the functional profile, carer situation and psychosocial or other issues. This does not determine a person's priority for a specific service as this is best done by a service specific assessment, but rather gives a snapshot of the person and their current situation.

A person's priority for service is different to the issue of urgency of service. Urgency of service relates to the need for an immediate response to referrals made by the assessor. Each referral to a service that is made after an assessment can be coded with a rating for urgency such as:

- Low
- Routine
- Urgent.

This should be based on the judgement of the assessor, as they will need to take into account all relevant circumstances.

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### ***3.1 Priority Setting in the ACCNA-R***

The ACCNA-R has also modified the ACCNA priority setting process which is shown in Table 4 and discussed in Section 3.2 below. As can be seen from the ACCNA-R examples, if a follow up assessment is taken for a particular aspect of function then questions are asked concerning unmet need and recent deterioration. The ACCNA-R approach considers that care domain aspects (e.g. domestic assistance, personal care, behavioural needs, health care needs etc.) must have referrals and priorities generated for each of the identified care need areas (AACS, 2010).

For example, a person may have a triggered referral for domestic assistance that is set at a low priority but a triggered referral for the personal care domain that is set as a high priority. Also two people may have the same level of dependency and triggered referrals generated but they may have a different priority for service assessment indicated against the referrals (AACS, 2010). By contrast the ACCNA and ONI tools produce a single overall priority for the applicant as can be seen in Table 4.

In the ACCNA-R, the questions about unmet need and recent deterioration are used along with health status/condition and personal care in the algorithms to determine the urgency of each particular recommended referral. The urgency is determined by the relative importance where urgent action is required for a health/wellbeing/life threatening issue taken together with the priority for the relevant domain.

### ***3.2 Priority Setting in ACCNA/ONI***

A priority setting tool has been used in the ACCNA/ONI suite of assessment tools for almost 10 years. This tool offers a way to combine a lot of summarised screening information in the form of selected standard data items that were chosen on the basis of their ability to predict levels of need and to act as useful proxies or indicators for risks and urgency.

This tool was refined using routine assessment data from NSW Home Care in 2003 and tested for its useability in the 2004-2006 state-wide implementation of the ONI system in Queensland. The Queensland tool (including its scales and indices, triggers and prompts) was designed for an electronic primary health care environment as well as being useable as a paper or interactive PDF format with limited electronic inter-operability. It was supported by algorithms that could be modified according to service availability or policy issues (Stevermuer, 2007). Its components are identified below in Table 4

**Table 4** *ONI Priority Rating Tool*

Risk	Need			
	Low Function	Medium Function		Good function but health, psychosocial or other problems
		With significant psychosocial or other problems	With no significant psychosocial or other problems	
No carer able to provide necessary care	1	1	2	5
Carer arrangements exist but are unsustainable without additional resources	3	3	4	7
Carer arrangements suitable and sustainable OR Carer not required	6	6	8	9

The ONI's Priority Rating Tool was designed for use as a paper or an electronic version. The paper version relied on combining particular item scores and assessor judgements and the electronic version was designed so that a priority was automatically generated when the minimum numbers of relevant items were completed. The Priority Rating Tool (as well as other triggers and prompts) was supported by algorithms that could be modified according to service availability or policy issues (Stevermuer, 2007). This tool offers a way to combine a lot of summarised screening information in the form of selected standard data items that were chosen on the basis of their ability to predict levels of need and to act as useful proxies or indicators for risks and urgency.

### ***3.3 Comparison of Priority Setting Approaches***

The purpose of priority setting is to allow people to be consistently screened for their needs and their risks, with the intention that those with greater needs will get access to services earlier.

The ONI/ ACCNA priority rating tool provides a way of determining an individual person's priority for community care services, based on their needs and risks, and is an optional tool for service providers to use if they are in a service environment requiring demand management and where sufficient information is able to be routinely collected.

The ACCNA-R determines urgency of referrals in each identified domain of need. This information may be useful for agencies that receive the referral but does not look at the overall situation of the person being assessed.

The ACCNA/ONI's Priority Rating Tool is preferred because it is more straightforward to use in routine practice than the ACCNA-R approach and produces one overall priority rating per client at the time of assessment rather than several.

The preferred entry point tool should offer a way to combine summarised screening information in the form of selected standard data items and assessor judgements that can then be used to assign a priority rating at the time of assessment. The core information items collected at the entry point are routinely used in most community care systems; the nine-item functional screen having been incorporated into the HACC MDS. Their ability to predict levels of need and to act as useful proxies or indicators for risks and urgency has been tested in the field (Stevermuer, 2007).

Then, at re-assessment the same information collected at a second point in time will be useful to create *change scores*. Change scores will be of more relevance than a priority rating as they can be interpreted as indicators of the outcomes of the interventions, or the effects of waiting for a particular service.

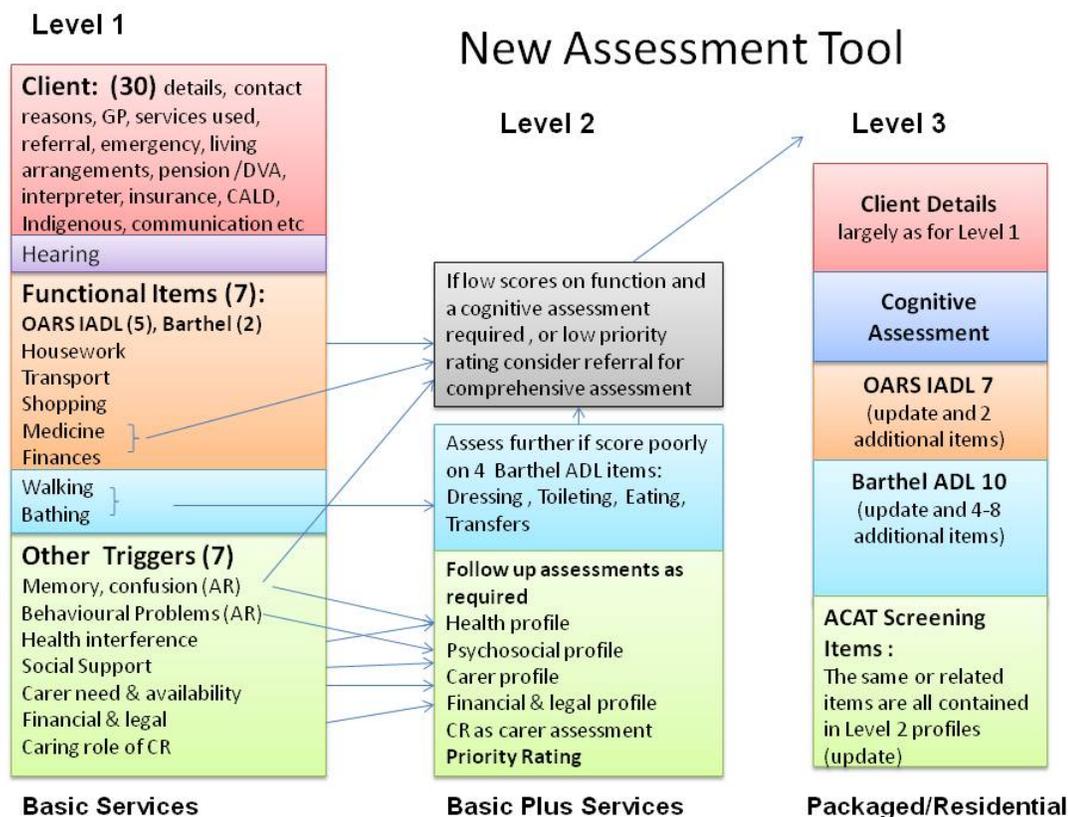
## 4 A Recommended Model: Triggers Algorithms and Priority Settings

The recommended model of assessment shown in Figure 4 outlines a three stage assessment process. Three types of service need are identified which correspond to different levels of assessment:

- Basic Care - Broad and shallow core assessment with no follow-up profile assessment (Level One)
- Basic Plus - Broad and shallow core assessment plus relevant profile assessment (Level Two)
- Packaged Care/Residential Care - Comprehensive assessment (Level Three).

In all cases, the initial contact is for a broad and shallow core assessment that does not include any profile assessments. If these are required, a further appointment is made. Following the Level Two assessment if major problems are identified the client is likely to be referred for comprehensive assessment (Level Three) which is currently undertaken by ACATs.

**Figure 4 Recommended Model**



### ***4.1 Level One Triggers***

The recommended Level One Assessment includes an assessment of the person's overall functioning, and a set of trigger questions that indicate whether a more in-depth examination of identified domains is warranted. Assessor judgements about whether the person has cognitive or behavioural problems can also be used to trigger Level Two assessments about a person's health and psychosocial condition.

### ***4.2 Algorithms***

Algorithms (or business rules) are used at Level One and Two assessments to recommend that the person be referred to more specialised individual assessment. Algorithms can also be used to recommend to assessors that a person be referred to Level Three Assessment. For example, if a person has low scores on function including the inability to manage their finances and they are rated as having memory problems or as being confused, then a direct referral for a Level Three assessment may be warranted.

### ***4.3 Priority Settings***

The ACCNA-R approach to Priority Setting considers that care domain aspects (e.g. domestic assistance, personal care, behavioural needs, health care needs etc.) must have referrals and priorities generated for each of the identified care need areas. By contrast the ACCNA and ONI tools produce a single overall priority rating for the applicant. The simpler approach of the ACCNA/ONI family is recommended for the new front end of the assessment system as the ACCNA-R approach is seen as being unnecessarily complex for this stage of assessment.

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## 5 Funding Issues

As discussed in “An Assessment Framework for Aged Care”, Basic Care is the provision of a small number of low-level services, such as Meals on Wheels services, Community Transport. Basic Plus Care is either the provision of a wider range of services, a higher volume of a small range of services for a person with more complex needs, or a person who needs a high level of need on a periodic basis. Packaged/ Residential Care is the provision of a variety of care services that is planned to meet the needs of an individual with complex needs (e.g. current CACP, EACH and TCP packages) and approval for Residential Care including respite care.

It is anticipated that community aged care services that are provided to people as part of Basic and Basic Plus care will generally be provided by block-funded services similar to the provision of most types of current Home and Community Care services. Packaged aged care and residential care services will be provided as part of a package of care that has been recommended by a Level Three assessment.

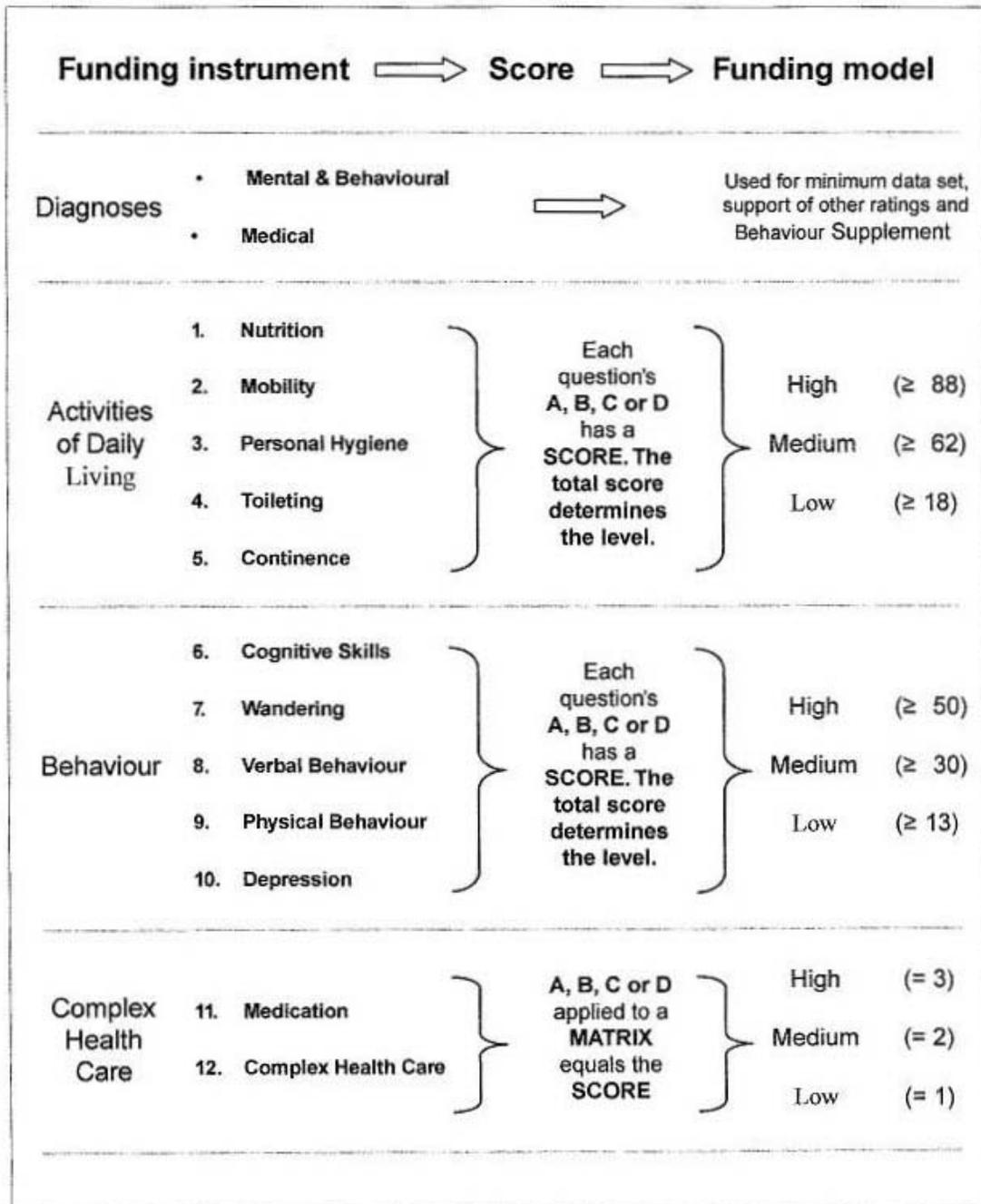
Funding for residential care places is currently provided by using the Aged Care Funding Instrument (ACFI). In the ACFI diagnostic information and 12 questions are used to categorise care recipients within low, medium or high care need bands and the funding for residential aged care is based upon this. The questions used for the determining the level of need are activities of daily living (ADL: nutrition/eating, mobility, personal hygiene, toileting, continence); behavioural supplement (behaviours of concern, cognitive status as assessed by Psychogeriatric Assessment Scales – Cognitive Impairment Scale (PAS-CIS), and depression as assessed by the Cornell Scale for Depression; and a Complex Health Supplement (CHC) which contains items on medication and complex health care.

The ratings from each item area are then added to generate a 4 level classification for each area relating the level of care required (independent = A; high level of assistance required = D). Each of these levels has a score associated with it and these are added for each domain (e.g. ADL) and the high/medium/low classification for each domain is based on this. This is demonstrated in Table 5 below (DOHA, 2009a).

Under the new definition (DOHA, 2009a), to be appraised as High Care, the resident must have:

- A score of High in the ADL Domain; or
- A score of High in the CHC Domain; or
- A score of High in the Behaviour Domain together with a score above Nil in at least one of the ADL or CHC domains; or
- A score of Medium or High in at least two of the three domains.

**Table 5 Interaction of the Aged Care Funding Instrument and the Funding Model**



It can be seen from the above that additive rules based on scores are used to determine the category of need which then attracts differential funding. The clients categorised at any level can arrive there based on quite different needs for care.

Another approach is to use a branching classification structure (Eagar and Owen, 2001). In a branching structure (like that typically used in health), groups are formed based on both expected service cost and a person's characteristics. People with different needs are allocated to different groups even if the expected service cost is the same. There are three criteria for a classification system that uses a branching structure:

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- Each of the groups is 'iso-resource' - that is, people in each group require similar levels of resources;
  - Each of the groups is sensible - people in each group require similar types of services because they have similar types of needs; and
  - There are a manageable number of groups. If there are too few groups, each group will be too heterogeneous for the classes to be meaningful. If there are too many, they will not be able to be used for the purposes for which they were intended – population needs assessment, service planning and purchasing.

In an additive structure (like the residential aged care model), groups are formed based solely on expected service cost. People expected to require high cost support and care are all allocated to the 'high need' group even if their needs are different. There is no requirement that each group include people with similar types of needs.

There are two criteria for a care classification that uses an additive structure:

- Each of the groups is 'iso-resource'. That is, people in each group require similar levels of resources; and
- There are a manageable number of groups.

The difference is best illustrated by example. Two people with a disability both need intensive support and are both expected to require more than 40 hours of services a month. One is young and has an intellectual disability. The other is old and has a physical disability. In an additive model, both would be allocated to the same 'intensive need' group. In a branching model, they would be allocated to different groups because their needs (whilst equivalent in resource intensity) are judged to be different.

The main advantages of the branching structure are in looking ahead to the ability to monitor outcomes and track changes over time. The additive structure, while not being as sensitive to questions of outcomes, has distinct advantages in its ease of use.

The development of funding bands and a case classification system is outside the scope of this project but consideration of this aspect needs to be kept in mind when developing a new front end for the assessment system. There are three aspects to be considered in developing a classification system:

- Assessment information about users
- Service utilisation by users
- Costs of use.

The development of a system that can determine how people use the assessment and service system, and compare it with the costs of providing these services will facilitate the development and refinement of a classification system for users of packaged and residential care.

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## 6 Conclusion

Triggers to assessment profiles, algorithms to recommend referrals, and setting of priorities are components of an effective electronic decision support tool to support assessors in making the best decisions to assist client journeys through the service system.

Triggers will make Level One assessments more efficient and help to minimise the burden of assessment both on clients and the service system. These triggers will help to ensure that people are asked the right sets of questions about what they can do and what they need.

Algorithms to recommend that a person be referred to external assessment or services can ensure that people around Australia will receive the same recommendation about the types of assessment and services that they need. These assessments and services may not be available but this data about unmet need can be used for planning purposes to identify where services and assessments need to be provided.

The situation and needs of people being assessed will vary greatly, and it is important to realise that it is unlikely that all identified needs can be met. It is therefore important to prioritise people seeking assistance, so that those with the greatest need have a greater priority for service. Priority setting may be done for the person as a whole, or for individual domains. It is recommended that priority setting be adopted for the person as a whole as it is straightforward to use in routine practice.

The development of funding formulae such as the ACFI helps to ensure that people with the same needs receive the same resources throughout Australia. The development of a system that can determine how people use the assessment and service system, and compare it with the costs of providing these services will facilitate the development and refinement of a classification system for users of packaged and residential care.

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