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The Resource Utilisation and Classification Study (RUCS)

Study One Guide: Service utilisation data collection

February 2018

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UNIVERSITY OF WOLLONGONG

Suggested citation

McNamee J, Loggie C, Samsa P and Gordon R (2018) ***The Resource Utilisation and Classification Study (RUCS) – Study One Guide: Service utilisation data collection***. Australian Health Services Research Institute, University of Wollongong.

Preface

This guide was developed by the Australian Health Service Research Institute (AHSRI) at the University of Wollongong to assist participants in the service utilisation data collection in Study One of the 'Resource Utilisation and Classification Development Study' (RUCS).

AHSRI has been commissioned by the Commonwealth Department of Health to undertake the RUCS, which incorporates a study of current resource use in residential aged care and the development of a system that classifies residents based on their use of these resources. This is a very important study that will have implications for future aged care funding arrangements.

The service utilisation data collection is a critical component of the RUCS, and all staff involved in the data collection should ensure that they are familiar with the information in the guide. The guide includes a set of business rules about what information should be collected and instructions on how to collect it.

How to use this guide

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If you want the answers to some frequently asked questions download the *Study One Guide: Frequently asked questions* (available at https://ahsri.uow.edu.au/content/groups/public/@web/@chsd/documents/doc/uow244011.pdf)

Background information on the Resource Utilisation and Classification Study (RUCS)

In late 2016 the Commonwealth Department of Health commissioned The Australian Health Service Research Institute (AHSRI) to undertake a review of funding options for residential aged care. Two key findings of that review that was completed in February 2017 were that; the Aged Care Funding Instrument (ACFI) was no longer fit for purpose for a number of reasons but most significantly that it is not based on the resident characteristics that drive the amount of care provided and the use of care resources; and that the payment levels that are currently set in the ACFI are not informed by the actual costs of providing care.

In this review AHSRI's recommendations included;

1. The development of a new system for classifying residents in aged care for payment purposes that accounts for all of conditions and care needs of residents in combination rather than seeing them as different issues in isolation.
2. That a resource utilisation (costing) study be undertaken to both better understand the real costs of providing care and to inform the classification development.
3. That a more appropriate funding model would include two components; a fixed payment that recognised the costs that are equally shared across all residents and not affected by differences in resident care need or small fluctuations in occupancy of the care home; and a variable component to address the different individualised care needs of residents. This was referred to as a blended payment model.

This Resource Utilisation and Classification Study (RUCS) is in direct response to those recommendations.

Why is the RUCS important?

This is a key research project that will provide critical information for the design of future funding models for residential aged care. The major outcome of the study is the development and testing of an alternative funding model that would represent the most significant reform of aged care funding for some time.

This approach has **six core elements**:

1. Assessment for funding that is separate from the assessment done for care planning.
2. Assessment for care planning to be undertaken by the residential aged care facility.
   - based on resident strengths, needs and preferences and underpinned by Consumer Directed Care (CDC) principles.
3. Assessment for funding purposes to be undertaken by external assessors.
   - capturing only the information necessary to assign a resident to a payment class.
4. A one-off adjustment payment for each new resident recognising additional, but time-limited, resource requirements when someone initially enters residential care.
5. A fixed price per day for the costs of care that are shared equally by all residents, which may vary by facility characteristics such as location, size and specialisation.
6. A variable price per day for the costs of individualised care for each resident based on each resident's casemix funding class. Price per class would be standardised across Australia.

The three RUCS studies

The RUCS comprises three sub-studies which will be progressively undertaken from March 2018:

Study One – the service utilisation and classification development study

This study will identify the drivers of cost that are related to aged care residents' individual need for care (variable costs). A casemix classification system will be developed which will classify residents into groups with similar needs and care costs. This study is being undertaken in 30 care homes across three clusters; the Hunter Region of NSW, metropolitan Melbourne, and Northern Queensland. ***Your facility is participating in Study One***.

Study Two – the fixed and variable costs analysis study

The purpose of Study Two is to understand the costs of care within care homes that are determined by the size, regional location or specialisation of the home, rather than the characteristics of the individual residents. This analysis will be used to inform the fixed payment component of the funding model, and to test whether there are seasonal differences in costs that need to be taken into account. This study will also ensure that the detailed costs collected in Study One are representative of the sector.

Study Three – the casemix profiling study

The purpose of Study Three is to determine the range of different types of residents across Australia in terms of their clinical (or casemix) profile and their care resource requirements. The outcome of the study will be a national casemix profile of residential aged care which can be used to inform the development of funding models in the future.

What is the service utilisation data collection?

The service utilisation data collection will capture the amount of time spent providing specific care activities to individual residents and is a key component of Study One. This information will assist in understanding the amount of care given to different residents and which care are driving the costs of delivering resident care.

The data collection will be undertaken for one calendar month between March 2018 and May 2018. During this time staff involved in delivering care to residents will record the amount of time spent undertaking certain types of activities during their shift. There will be some investment of effort required of staff over the month, but this should only amount to a few additional minutes per day.

Care time will be captured using barcode scanning technology which will make the data collection more efficient and accurate. Barcode scanners will be provided to staff along with the barcodes to be scanned to collect the required information. At the end of each shift the data will be uploaded from the barcode reader to a computer. The data will then be sent to a secure server at AHSRI.

The additional two components of Study One in which your facility is participating are:

- **a resident clinical assessment data collection** – this will be done by external assessors who will be visiting your facility to complete the resident assessments. You may be asked to provide some information about the care needs of a resident to assist the assessor in completing some of the questions in the assessment tool.
- **a financial data collection** – this will be a one off data extract done by finance staff from your facility.

Business rules for the service utilisation data collection

Shared care' vs 'individual' care

One of the unique features of this data collection is that it makes a distinction between shared care that is generally provided to all residents equally or where every resident has an equal opportunity to receive the care, and individual care. The focus of the service utilisation data collection is on the individual care provided to residents. These concepts are explained in this guide to assist the data collection.

Individual care is a block of time spent providing care to one (or more) residents that is related to the particular care needs of that resident. Individual care time is likely to be associated with differences in the function, cognition, behaviour and clinical needs of residents. Care provided in a resident's room is more likely to be individual care.

Shared care is time spent undertaking activities that are normally provided in roughly 'equal' amounts for all residents over time.

As a general guide, care activities of less than ten minutes will be shared time. However, if a resident receives care for numerous periods of less than ten minutes, for example to manage behaviour, this could be recorded as individual care at the end of the shift.

Business rules for capturing individual care

To ensure consistency of the data collection across all facilities and clusters the following business rules should be followed in capturing time spent delivering individual care:

- Record individual care activities in real time wherever possible.
- Use time blocks where it is not practical to record in real time.
- If you are doing multiple 'individual' care activities at the same time, use the 'combined care' activity code. This is most likely to occur in the resident's room.
- Individual time includes face-to-face time and indirect time such as case management.
- If more than one staff member is providing 'individual' care to a resident at the same time, each should record their time separately.
- If more than one resident is participating in an activity, record the total time and each resident involved.
- Some individual care activities are only undertaken by nurses.

The individual care activities where staff time should be captured.

Table 1 provides a guide to the types of activities that should be captured under each of the general care activity categories. These are activities that may be undertaken by any member of care staff.

These activities are listed as examples only and not intended to be an exhaustive list. If you are confident that a service you provide is individual care and you cannot decide under which category it should be captured, capture it under the category that is the closest fit initially (so that we don't miss the opportunity to capture that time) and contact your site coordinator or cluster coordinator for advice.

Table 1 Individual general care activities

General care activities	Examples
Combined care in the residents room	When you enter the resident's room to provide a number of individual care services together or consecutively the total time may be captured under this one activity. For example, you may assist the resident to move to their bathroom, and then assist with showering and dressing – after which you may attend to some pressure area care.
Personal care/hygiene	Routine hygiene (e.g. daily shower or wash) Continence related hygiene (e.g. shower or wash following pad change). Shaving or personal grooming where the resident is unable to complete those tasks. Attention to oral hygiene. Dressing a resident or providing assistance with dressing. Toileting and assisting with toileting. Emptying/changing stoma or catheter bag.
Assistance with mobility	Assisting a resident with transfer to and from a bed or a chair. Transferring a resident to or from the dining room, lounge or other parts of the facility. Assistance with mobility outside the facility as required. Assisting the resident with the operation of a mobility device.
Assistance with feeding	Assisting a resident with eating and drinking. This includes sitting with the residents and either delivering the food to their mouth or continually prompting them to feed themselves and chew and swallow the food. This activity is to be captured for residents with either cognitive issues or physical difficulties with chewing and swallowing, for example due to stroke. Do not capture time spent preparing meals and cutting-up or mashing food to make it easier for the resident to feed themselves.
Pressure area/skin care	Care to existing pressure areas or wounds not requiring complex management. Repositioning residents in a bed or chair where they have mobility issues and have or are at risk of developing pressure areas. Do not capture general skin care and the application of moisturiser to maintain skin integrity. This is an activity that would be generally undertaken for most or all of the residents in care.

General care activities	Examples
Assessment and/or care planning	This could involve a number of different types of activities, particularly those activities that are undertaken when a resident first arrives in the facility. This may include; • Physical assessment and measurement (weight etc). • Speaking with families and carers to obtain a resident history. • Consulting with the multidisciplinary care team regarding an individual resident. • The development of an individualised care plan. • Developing a plan for re-ablement or a strategy to address acute problems and behavioural issues for a resident.
Assistance with oral medication	The preparation and delivery of oral medications where the resident is not able to manage themselves, either for cognitive or physical reasons. This involves the staying with the resident and prompting them to swallow the tablet and/or supervising them to ensure the medication has been taken. When tablets are crushed and added to food which is then spooned into the mouth as part of the meal, this should be captured as 'assistance with feeding'. Do not capture the delivery of medications where a resident is able to manage taking those medications themselves as this is a shared care activity.
Re-ablement / therapies	Time with an individual or group of residents in physical therapy sessions that improve or maintain ADL function or mobility. May include passive and active exercises or craft sessions etc. This could involve multiple residents in one time allocation and, if so, should be captured against each resident.
Social activities/talking with resident	Time spent in socially and mentally stimulating activities. Emotional support and a calming conversation or counselling for residents with mental health or behavioural issues is included. This could involve multiple residents in one time allocation and, if so, should be captured against each resident. Do not capture general day-to-day conversations and communication with the resident. If you are talking with the resident at the same time as you are undertaking another one of the activities listed above, capture the time against the specific activity.

Nursing care activities where staff time should be captured.

Table 2 includes a list of the care activities for medical conditions that would usually be undertaken by staff with nursing training. In some circumstances personal care workers will undertake these tasks under the guidance of trained nursing staff and/or following a prescribed protocol. If this is the case the care worker carrying out the task should capture the time taken against the appropriate activity type.

Table 2 Individual nursing care activities

Technical nursing care	Description of examples
Oxygen	Monitoring usage and supply of oxygen. Maintaining airways (suctioning).
Enteral feeding	Care of the stoma for PEG tubes and J tubes. Ensuring the feeding tube flows freely. Monitoring of hydration and bowel movements.
Tracheostomy care	Care of the stoma, keeping it clean and removing discharge or mucous to reduce risk of infection. Maintaining skin integrity around the stoma and under the tape. Ensuring the tube is correctly positioned and secured and free of obstruction.
Catheter care	Ensuring urine is flowing freely (no kinks or blockages in tubing). Maintaining catheter hygiene. Changing the catheter. Securing catheter to prevent pulling, breaking and blockage. Care of the stoma for suprapubic catheters.
Stoma care	Checking and maintaining skin integrity around the stoma. Keeping the stoma area clean and dry. Ensuring that the appropriate sized bag has been fitted to reduce the risk of leakage and skin integrity issues.
Peritoneal dialysis	Taking regular observations (temperature, pulse, blood pressure). Measuring weight and girth daily. Monitoring hydration and nutritional intake and urinary output. Undertaking daily urinalysis.
Daily injections	Depending on medication may require one or two staff to check medication and oversee administration. Monitor injection site/s and re-site if appropriate. Monitor the resident to detect any adverse reactions.
Complex wound management	Management of a wound/s that is/are slow to heal due to exudate, comorbidities, infection or polypharmacy. Provision of frequent wound care and additional monitoring of skin integrity for complex wounds. Use of protective dressings and frames to promote healing. Ensuing nutrition levels are maintained to promote skin health.

Shared activities where the staff time should not be captured.

Table 3 includes a list of care activities that are considered shared care for the purposes of the RUCS. These activities are generally provided across the facility, are services that each resident has the opportunity to receive, or are the care management tasks that benefit every resident, however indirectly.

Do not capture time spent undertaking these types of activities. If you are unsure about whether any activity you are undertaking is shared or individual please contact your site coordinator or the cluster coordinator for your region.

Table 3 Shared care activities

Shared activity category	Description of examples
Administration	Facility management Staff training Meetings Governance activities
General resident care	Waking residents and bed making routine. Travel time between episodes of individual care provision. General assistance with skin care and grooming where the residents is able to complete these tasks. Helping resident with a single item of clothing (ie putting on a cardigan or shoes). The delivery of meals, either to the resident in their room, dining room or elsewhere, and clearing away afterwards. Generally talking with the resident about how they are feeling, exchanging 'pleasantries' etc. General supervision of dining room, activities room or other area. Night staff supervision of the facility and providing some care as required. Managing stocks and supplies and general tidying, both within the resident's room and in the facility generally. Care of the deceased.
Infection control	Managing personal infection control, including PPE and handwashing. Coordinating services around current infection control issues.
Care communication	Routine care documentation and maintenance of clinical records. Regular communication within the care team or external care providers about residents. Providing assistance at routine GP visits. General communication with the family about the status/ welfare of the resident.

Overview of the data collection process

- A barcode scanner will be used to capture certain care activities provided to residents by scanning barcodes to collect information on:
    - the staff member providing the care
    - the care activity
    - the resident receiving the care
    - the location of the care activity (whether in resident room)
    - the of amount care time provided.
- The barcodes to be scanned are provided on cards, sheets and sticky labels
- The scans are uploaded onto a computer at the end of each shift

Instructions for using the barcode scanner

- The scanner is matchbox sized and is attached to a lanyard
- Scanning is easy. Press the big button to trigger the laser.
- Position the laser so it covers the entire barcode from a 45 degree angle. You will hear a small beep and see a green flash which indicates a successful read.
- The scanner has a built in clock and records the date and time you scanned so you don't have to manually enter it
- The system will correct simple mistakes such as scanning "STOP" twice and scanning the same resident ID twice
- The barcode scanner needs to be charged regularly using the USB charging cable provided.

How to collect care activity data

➢ *STEP 1*

- Collect your barcode scanner at the beginning of your shift

➢ *STEP 2*

- Scan your unique staff ID barcode (this only needs to be done once each shift)

➢ *STEP 3*

- During your shift use the barcode scanner to capture the care activities.

This can be done in two ways:

- in 'real time' as the care is being provided, by using the barcode reader to automatically record the time spent delivering a care activity as it is being provided.
- as a 'delayed' capture after the care activity has been provided, by scanning time blocks to capture the care time.

Instructions for scanning care activities

Care activity 'real time' capture – single resident 	• Scan the barcode for the care activity you are providing to start the capture (*the scanner records the time*). • Scan the resident ID barcode. • Scan barcode if the care was provided in the resident room. • Scan "STOP" barcode when the activity is completed.
Care activity 'delayed' capture – single resident 	• Scan the barcode for the care activity you have provided. • Scan the time block(s) to indicate the total care time, e.g. for 60 minutes scan the 30 minute barcode two times (t*his will override the recording of the time in the scanner).* • Scan the resident ID barcode. • Scan barcode if the care was provided in the resident room. • Scan "STOP" barcode.
Multiple resident care activity capture 	• Follow the normal scanning process but scan all of the resident IDs that were involved in the care activity *(the total time captured will be divided equally between the residents).*
Care activity captured on a following day 	• Follow the normal scanning process but also scan the appropriate 'activity date' barcode that the care activity was provided on **before** scanning "STOP" *(this will set the date to the date that the service was provided).*

- Scanning the "Cancel/Restart" barcode removes all the scans you have performed since the last "STOP". Please note that once you have scanned "STOP" the care activity capture can't be deleted.

➢ *STEP 4*

- Upload the scans from the barcode scanner

Instructions for uploading the data

- The ABC software application has to be running, and logged in with the user details, which will be provided to each site.
- Attach your scanner to the nominated study computer via the USB cable.
- Click the "Load from Scanner' icon on the top corner of the screen.

- You only need to click 'Load from scanner' one time and it will upload all of the data from the scanner, that is, for the current day and past days if you have data that spans across multiple days in the scanner.
- Upon a successful data upload, the scan data will be wiped from your scanner to prepare it for the next data collection.
- Data should be uploaded at the end of each shift to ensure that it is cleared for the next staff member.

➢ ***STEP 5***

- Return the barcode scanner to the charging dock

(note that if the bar code reader is not recharged and 'goes dead' it must re-initalised before it can be used again – contact your site coordinator or the cluster coordinator).

Where to get help

Your cluster coordinator will be available throughout the data collection to assist your facility with additional training, trouble shooting, and answering queries. You can also contact your site contact or team leader.

Your cluster coordinator is…….

Your site coordinator is ……..

The AHSRI project team can be contacted on (02) ……or by email at

rucs-uow@uow.edu.au

Further information about the RUCS can be found at https://ahsri.uow.edu.au/rucs/index.html