Centre for Health Services Research

**11 August 2021**

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# interRAI and the ieMR

Options for adoption

# interRAI and the ieMR

Final

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| Lead Unit | Centre for Health Services Research |
| Centre Director | Professor Len Gray |
| Lead Author/s | Alyssa Welch, Bonnie Pimm, Len Gray |
| Contributors | Professor Amanda Henderson, UQ and QH<br>Ms Kerri Holzhouser<br>Dr Raelene Donovan<br>Mr Josh Simmons/Cameron Ballantine |
| Release date: | August 12, 2021 |
| Enquiries and responses to: | len.gray@uq.edu.au |

# List of Acronyms

| Acronym | Definition |
|---|---|
| CGA | Comprehensive Geriatric Assessment |
| CHSR | Centre for Health Services Research |
| iAC | interRAI Acute Care |
| ieMR | Integrated electronic medical record |
| MSHHS | Metro South Hospital and Health Service |
| PAH | Princess Alexandra Hospital |
| QEII | Queen Elizabeth II Jubilee Hospital |
| QH | Queensland Health |
| TPCH | The Prince Charles Hospital |
| UQ | University of Queensland |

# Contents



# Tables

# Executive Summary

The interRAI Acute Care assessment system offers an important opportunity to improve the integrity and efficiency of the nurse assessment process, with consequent benefits to other professional and administrative groups that are interested in the functional and psychosocial needs of patients admitted to acute care hospitals in Queensland.

The current project was undertaken to examine the feasibility and logistics of integrating this assessment protocol into the Queensland Health Cerner ieMR environment. It was not designed to evaluate the desirability of the interRAI system per se; however, the arguments in favour of its use are articulated in the introductory sections of this report.

Two broad options were determined in the course of the project: integration of interRAI data elements into the Cerner environment, or adoption of a commercially available software solution for nurse assessment built around the interRAI system.

The project was not completed to its original specification because of the intense disruptions associated with the COVID-19 pandemic. Therefore, our conclusions must be considered as 'preliminary' subject to further investigation.

We concluded that the best solution is to integrate the interRAI Acute Care system into the current nursing assessment schedule. It would constitute a 'mandatory' component of the nurse admission assessment and would be configured to enable it to be updated as patient status changed throughout the course of the admission. The assessment would provide a rich and robust source of information to inform nurse care planning and contribute to assessment and care planning schedules of other disciplines contributing to patient management.

# Setting the context

## Introduction

Standardised data within an electronic medical record provides a wide range of opportunities to re-use information for both clinical and administrative purposes - beyond direct observation. These purposes include data sharing across and beyond the health service; real-time data analytics to support risk assessment, predict care outcomes, and facilitate care planning and treatment; caseload analysis; quality improvement; and service planning.

Information pertaining to functional and psychosocial needs is often poorly recorded and unstructured in its format within a health record. This information is vital to understanding and responding to a patient's broader requirements; to contribute to prediction of outcomes; and to ensure safe and thoughtful discharge.

The Queensland Health electronic medical record (ieMR) contains a plethora of structured information relating to these particular needs. However, it is located in disparate locations within the record, is recorded by several disciplines including nursing and allied health, is not fully standardised to a uniform specification and is currently not utilised to secure most of the desirable outputs delineated above.

The interRAI Acute Care (AC) assessment system is designed to capture key information related to the functional and psychosocial needs of adult hospital inpatients.[1] It is part of an extensive group of systems that form the interRAI Suite of Assessment systems that cover a wide range of target populations and care settings, including paediatric and aged care, intellectual disability, mental health and hospital care.[2] These systems comprise data elements that are carefully crafted and tested to ensure relevance and reliability. Importantly, clinical phenomena are recorded in the same configuration in all systems, regardless of the setting.[3]

To the best of our knowledge, there are no similar systems to the interRAI AC that are designed to capture functional and psychosocial information that have the potential for international application.

The interRAI AC was developed in Australia and New Zealand, in partnership with interRAI international. Much of the field testing occurred in local Brisbane hospitals. It was released in 2017. Internationally, at least 5 software vendors have produced solutions for recording and interpreting the interRAI AC, and implementations are known to be proceeding in several nations, including Canada and New Zealand.

## The Current Project

*There is interest in adopting the interRAI AC assessment system within the QH ieMR. This task is likely to pose important challenges. This report was commissioned to identify the opportunities and barriers to its inclusion in the ieMR.*

The report is presented in four sections:

1. An overview of the interRAI AC assessment system and the Queensland Health ieMR environment.

2. A report on a project that examined the ieMR and its potential relationship to the interRAI AC.
3. Options for integrating the interRAI AC into the ieMR environment.
4. Conclusion and recommendations

# Section 1: Background

## interRAI Systems

The interRAI international research collaborative has developed a set of integrated assessment systems to support decision making in acute care. The centre-piece is the "interRAI AC" that was developed to support nursing assessment of all adult inpatients. The system has many positive features that render it a desirable inclusion into the ieMR environment operated by Queensland Health. These advantages include:

- international data standardisation
- reduction of nursing documentation burden
- improved compliance with reporting of core patient data
- conformity to the Australian Commission for Quality and Safety in Health Care comprehensive care standards
- inter-operability with other interRAI systems within and beyond the hospital environment.

The interRAI AC was released internationally in early 2017.

Training manuals and software code are available to support implementation.

Given the initial interest among software vendors and providers, and the absence of a robust alternative, the interRAI AC has the potential to become the international standard for recording and interpreting functional and psychosocial problems in acute care.

### interRAI

interRAI is a not-for-profit collaborative network of researchers and practitioners in over 40 countries committed to improving care for persons who are disabled or medically complex. The consortium strives to promote evidence-informed clinical practice and policy decision-making through the collection and interpretation of high-quality data about the characteristics and outcomes of persons across a variety of health and social services settings.

Although each instrument in the interRAI suite has been developed for a particular population and setting, they are designed to work together to form an integrated health information system. interRAI instruments all share a common language, that is, they refer to the same clinical concept in the same way across instruments. Using common measures enables clinicians and providers in different care settings to improve continuity of care and to integrate care/supports for each individual. Common language also empowers families, advocates, and payers to track the progress of program participants across settings.

As an organisation, interRAI maintains high standards for the quality of measures used in its instrument systems. Each version of a system represents the results of rigorous research and

testing to establish the reliability and validity of the clinical observations, outcome measures, assessment protocols, case-mix algorithms, and quality indicators. Systems are designed primarily for clinical decision support, but because the clinical observations are standardised and reliable, they are immensely useful for local and system level administration.

Professor Len Gray, Director of the Centre for Health Services Research (CHSR) at UQ, is a member of the interRAI Board and leads both interRAI Australia and the interRAI Network in Acute Care (iNAC), which is responsible for research and development of assessment systems related to hospital care. Several other UQ researchers are interRAI "Fellows". The development work and research related to interRAI's hospital systems (other systems relate to aged care, mental health and disability services) is led by the team at the CHSR. CHSR hosts the Australian interRAI coordinating centre and leads development of interRAI hospital systems internationally (see www.interRAI-au.org).

## Licensing

interRAI actively pursues partnerships with organisations and governments that wish to adopt its tools. Use is permitted only by written license with interRAI. Licensing by commercial users (including software vendors) usually requires royalty payments for use of interRAI's intellectual property. Revenues are used solely for necessary administration, research and development purposes.

In the case of hospitals with large eMR providers (as is the case with Queensland Health), royalties do apply, although the fee structure is negotiated on the basis of bed numbers or population served.

It should be noted royalties apply to many standardised systems such as SNOMED-CT, the Functional Independent Measure (FIM) and Mini-Mental State Examination (MMSE). These organisations, like interRAI, tend to be 'not-for-profit', but require income to support distribution, research and development. These licence fees may be paid by central governments, peak organisations, health service providers or software vendors.

The scales, algorithms, and case-mix measures based on interRAI assessment instruments are not subject to copyright and are thus available to everyone (although the individual items on which they are based are copyright).

The major conditions embedded in interRAI's licenses include:

- the instrument is not to be changed substantially (excepting individual identifiers and demographics), although additional items can be added;
- only licensed translations can be used;
- the instrument will not be incorporated into products to be sold to or paid for by others;
- the organisation will make appropriate efforts to inform others of the copyright status of the instrument;
- interRAI's logo and copyright notice are to appear on the form and any other publication;
- authors, author institutions, and translators (as appropriate) are to be acknowledged in any document where authors would usually be listed;
- electronic data from use of the instrument are to be shared with interRAI, subject to existing laws on confidentiality and data use.

Several software vendors (across 5 nations) have developed an electronic platform for interRAI AC, under license from interRAI. As yet, we are not aware of the outcomes of these implementations.

## The interRAI Acute Care

The interRAI AC assessment is the central component of the interRAI Hospital Assessment Systems (www.interrai.org). It was primarily developed in Australia and New Zealand, where the majority of field testing took place (including Princess Alexandra Hospital and Queen Elizabeth II Hospital in Brisbane). It is designed for use among all adult patients who are admitted for an overnight stay in hospital. The interRAI AC is designed to form part of the general nursing admission assessment that is offered to all adult patients on arrival at an inpatient unit. The interRAI AC is to be used alongside other nursing assessment information that usually includes clinical, biometric and administrative information. Assessments are conducted upon admission, are updated during the episode of care and inform the discharge assessments. An underlying principle of all interRAI systems is to: *collect data once, use it multiple ways*.

The interRAI AC includes 56 clinical observations.[1] It uses a consistent coding approach across all assessment items to simplify reporting and support comparison of equivalent items. It reduces the documentation burden on nurses, while preserving the accuracy of diagnostic and risk screening. When supported by software, it uses algorithms to generate a suite of 'applications' to guide care planning, service administration and quality improvement. Outputs include problem lists, diagnostic and risk screeners, scales to measure severity, and quality indicators (Table 1). Many of these have been tested to ensure validity.[4-8] If integrated into an eMR, its data elements and applications become available to support an even broader range of applications derived from the entire system.

***Table 1: Examples of interRAI AC clinical outputs***

| Severity scales | Diagnostic screeners | Risk screeners |
|---|---|---|
| Activities of Daily Living Scale | Delirium | Delirium |
| Cognitive Performance Scale | Cognitive impairment | Falls |
| Short Depression Scale | Malnutrition | Pressure Injury |
| Communication Scale | | Institutional Care |
| Pressure Injury Risk Scale | | Frailty Index |
| Pain Scale | | |
| Body Mass Index | | |

interRAI AC data is designed to offer value to other professional disciplines who are involved in the case. The value may be in the form of baseline data for a specialist assessment or as an alert to other professions of a need for their involvement where it is not routine.

## The QEII Pilot Study

The interRAI AC was piloted at Queen Elizabeth II Jubilee Hospital (QEII) in early 2018. All adult patients (aged 18 and older) admitted to seven wards were assessed upon admission using the interRAI AC. The interRAI AC was piloted as a stand-alone system (no integration with existing systems was performed), supported by software developed under license by Oy Raisoft, a Finnish software company. The interRAI AC assessment system and software was planned as a replacement for the paper-based nursing assessment system. The trial was complicated by the concurrent training for introduction of the ieMR, but nonetheless the overall outcomes were positive and are published in the peer-reviewed literature.[9]

Despite challenges to implementing a system-wide change, evaluation results demonstrated considerable efficiency gains in the nursing assessment system. Key points from the implementation and evaluation showed that, in comparison with usual practice, the interRAI AC was able to improve the integrity and compliance of nurse assessments by reducing missing data, identifying key risk domains to facilitate management of care, and reducing documentation burden by minimising duplication of assessment items. Implementation in a digital environment enabled risk assessment to comply with the 2017 National Safety and Quality Health Service Standards for comprehensive care in the general adult hospital population. For successful implementation of the interRAI AC, study findings suggested the need for interoperability with other information systems, access to training, and continued leadership support.[9]

The pilot did not proceed to ongoing implementation primarily because of other priorities, including that it was not possible to integrate it into the Cerner eMR environment at that time.

Further development work, beyond the trial, has identified necessary features to improve the day-to-day utility of an interRAI AC based system, including:

- The need to commence assessment in the emergency department or pre-admission clinic, where appropriate. In the case of emergency department assessment, at a minimum, risk screening for pressure injury and diagnostic screening for delirium should be undertaken. In the case of pre-admission clinics, the majority of essential information can be recruited in the clinic, with only a need to confirm its accuracy at arrival in the inpatient setting.
- An ability to update information, real-time, so that at any time point, patient profiles and derivative applications are up-to-date. For example, risk screeners are adjusted in line with changes in patient status.
- Assessment data should be presented to the nurse in the process of care plan construction. Prompts to respond to problems and risks should be displayed prominently in a computer generated draft care plan.

## The Evaluating Quality Care project

In 2017, CHSR secured grant funding from the National Health and Medical Research Council of Australia to conduct research on translating the interRAI AC from pilot stage to wider implementation (the Evaluating Quality Care (eQC) project). Funding was provided to observe and report the implementation of the interRAI AC into eight Australian hospitals. The interRAI AC was to be implemented into all Tasmanian public hospitals in July 2020, supported by the Raisoft solution. However, the implementation did not proceed for several reasons: The COVID 19

pandemic caused the Tasmanian Health Department to review all planned information technology (and the majority were deferred or abandoned); there were significant technical / legal issues that needed to be resolved with the software vendor that were protracted; and the senior staff within the Health Department who were the program sponsors left the organisation. Discussions continue with several other hospitals across Australia, but all have restrictions related to the pandemic that complicate the opportunities for uptake.

### Use of interRAI systems in Queensland Health

The interRAI AC for Comprehensive Geriatric Assessment (AC-CGA) is an expanded version of the interRAI AC, containing 110 observations (compared to 56 in the AC). It is designed for inpatient Geriatric Evaluation and Management units, and geriatric consultation services. The UQ team constructed a software version of this system in 2009, which was adopted by Queensland Health shortly thereafter as an "enterprise system".[10] It is available to users across Queensland Health via a web portal, and training is available from UQ. It has been used primarily to support consultations services at Princess Alexandra Hospital, and for case preparation of patients in rural hospitals who are referred to metropolitan centres for geriatric consultation mediated by telehealth.[11] While it has been used at some time by over 20 hospitals, continued routine use has largely been limited to Metro South Health.

All other use of interRAI systems has been in the context of research projects, encompassing inpatient services (PAH, QEII, RBWH, TPCH, etc) (interRAI AC, AC-CGA) and transition care programs (interRAI Home Care). The interRAI AC is currently supporting an intervention trial in Western Australia.

## The Queensland Health ieMR

The Queensland Health ieMR is based on architecture provided by the Cerner company, based in the USA. The ieMR commenced use in 2017 at the Princess Alexandra Hospital in Brisbane and was subsequently rolled out to multiple hospitals across the state. Complete rollout has paused but is expected to recommence in the near future. It will support all major hospitals operated by Queensland Health. At this time, the system will not be introduced to smaller rural hospitals.

The ieMR provides a home for both free text notes and structured information. The latter is presented to user groups according to their professional discipline. The structured data represents a combination of data elements offered in the Cerner base product, as well as locally developed data elements.

Functional and psychosocial data are required and recorded by a range of disciplines within the ieMR environment. The largest set of data is collected by nursing staff, predominantly as part of the admission procedure. Other data is collected by allied health staff. The data is a combination of published toolsets (e.g., the Waterlow schedule for pressure injury assessment) and locally developed data items. The latter have not been tested formally for their psychometric properties. In total, the nursing assessment contains in excess of 500 data items that relate to function and psychosocial needs. There are reports of documentation burden and poor compliance. While there is provision to update the day-to-day items such as activities of daily living, pain, etc., in the

Interactive view, there is to date very little re-use of these data items for decision support, discharge protocol or administrative functions.

## The Comprehensive Care Standard

The second edition Comprehensive Care Standard was released by the Australian Commission on Safety and Quality in Health Care in 2017 for implementation into all Australian hospitals from January 2018.[12] This new standard covers the areas of clinical governance and quality improvement to support comprehensive care; developing the comprehensive care plan; delivering comprehensive care; and minimising patient harm. Specific harms identified for minimisation include:

- pressure injuries
- falls
- poor nutrition and malnutrition
- cognitive impairment
- unpredictable behaviours
- restrictive practices.

Alignment of the interRAI AC with each criterion in the new Comprehensive Care Standard is provided at **Appendix A**. In brief, when implemented with the support of a software solution, the interRAI AC assessment system can support compliance with new Standard for the majority of assessment domains.

## How the interRAI AC could be utilised within Queensland Health

The interRAI AC could be integrated into the Queensland Health environment as follows:

- It would constitute the **core data set** that pertains to measurement of function and psychosocial status. It would replace similar data currently in use and reduce the volume of data burden currently experienced by nursing staff.
- The interRAI AC would directly support nursing care planning. It would identify key risks and opportunities for improvement that inform a significant proportion of current nursing responsibilities. The interRAI AC applications would semi-automatically inform the care plan, prompting nurses to accommodate key issues into the plan.
- Triggers within the interRAI AC would prompt additional assessment where appropriate (e.g., presence of pain triggers a full pain assessment; if patient is a smoker, smoking assessment, etc). (Figure 1)
- The interRAI AC also contains important alerts to medical and allied health professionals. These alerts would assist in referral and surveillance, improving the efficiency of their involvement in care. Patients with particular characteristics (e.g., need for nutritional assessment, geriatric assessment, rehabilitation or mental health assessment) would be highlighted and represent early notification to specialist services within a hospital.
- Software could be configured to enable continuous updating of interRAI AC content, with important attendant benefits: Risk assessment could be continuously updated; care plan prompts would ensure that assessment remains aligned with care delivery; the information

could inform a discharge profile that illustrates changes in functional status from pre-admission to discharge.

- Robust standardised functional and psychosocial data creates the opportunity for sophisticated data modelling and decision support. Such data will contribute to refined risk assessment, casemix evaluation and appraisal of quality.
- For patients with complex functional and psychosocial problems, the data would be configured to contribute to discharge profiling and reporting.
- Current work in progress to render interRAI systems HL7 FHIR[1] compliant will enable exchange of data with systems external to Queensland Health, including primary care and residential aged care facilities.

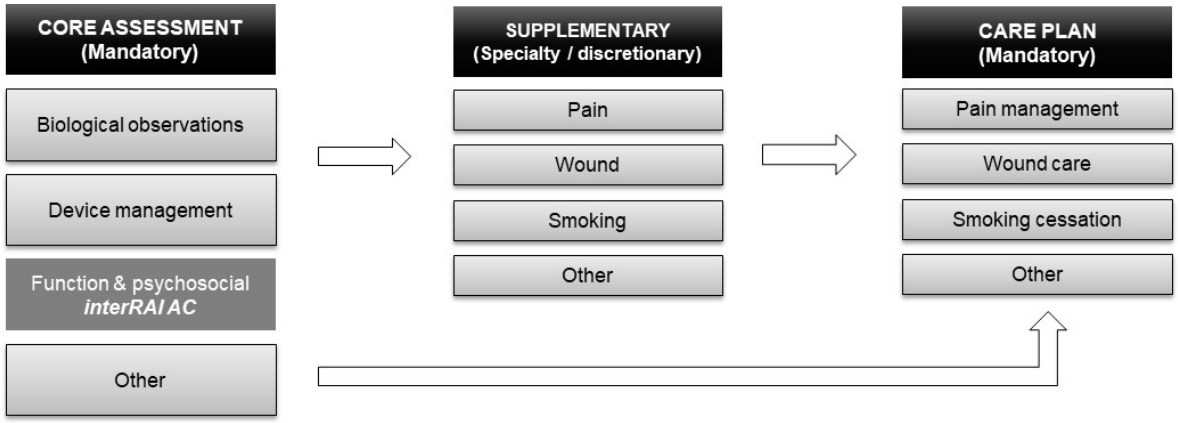



*Figure 1: Schema illustrating how the interRAI Acute Care system could be integrated into the admission procedure for adult inpatients*

In summary, integration of the interRAI AC offers the following advantages:

- Availability of international standard data pertaining to functional and psychosocial needs
- Integrated alerts for further assessment of specific issues
- Reduced data burden
- Precision nurse care planning
- Alerts / prompts to refer to specialist hospital services (including allied health specialties)
- Improved compliance with the ACSQHC Comprehensive Care standard for assessment
- Opportunities for sophisticated data analytics, leading to improved efficiency and quality
- Enhanced data sharing with systems external to Queensland Health

[1] Health Language 7 – Fast Health Interoperability Resources (HL7 FHIR) is the emerging standard for data exchange among software systems.

# Section 2: Feasibility

The purpose of the project reported here was to examine the feasibility of integrating an interRAI AC system into the Queensland Health Cerner ieMR environment. The findings of this study are relevant to all hospitals that use Cerner systems in Queensland.

## Objectives

The project had 3 broad objectives, to:

- examine the current nurse assessment system within the Cerner ieMR environment, with regard to clinical content (data items and derivative applications);
- identify opportunities for integration of interRAI AC into the Cerner ieMR environment to support clinical workflow; and
- examine the logistics and possible costs of integration with/into the Cerner ieMR environment

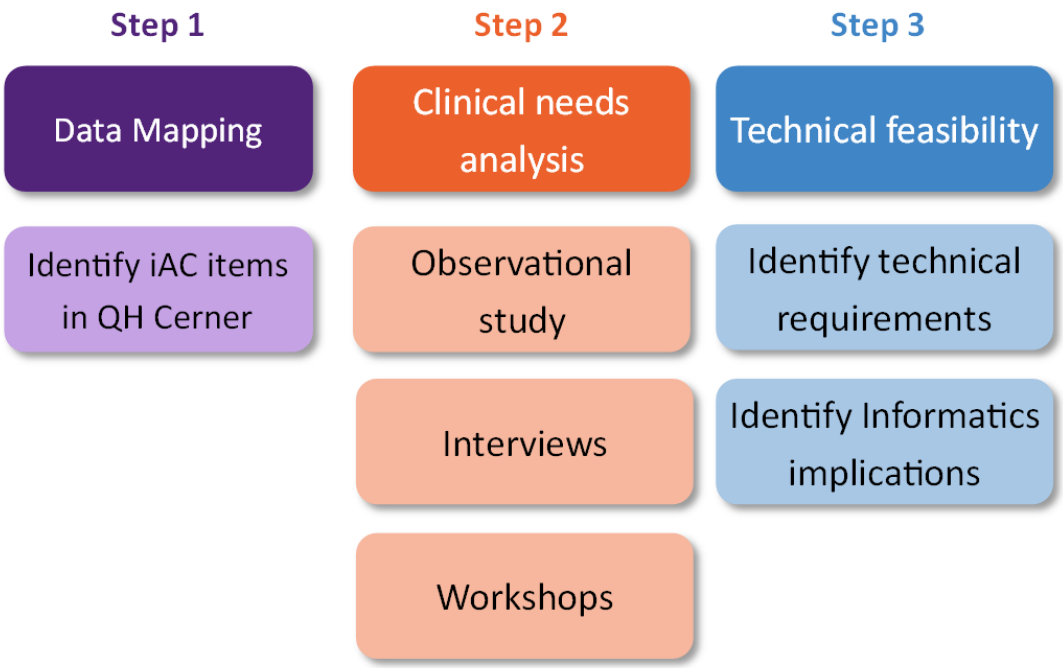
## Approach and Findings

Three sets of tasks were contemplated:

Step 1 involved data mapping and options identification.

Steps 2 and 3 were commenced but could not proceed to finalisation.

Pre-occupation of key stakeholders with COVID matters, and limited resources available for this project curtailed original plans to proceed through all proposed steps. These limitations are reflected in the findings reported below.



## Step 1: Data Mapping

CHSR researchers, in conjunction with Digital Hospital Adoption Service at MSHHS, undertook a preliminary exercise to map all 56 core items– essentially clinical observations - in the interRAI AC assessment to related items in the Queensland Health ieMR. Details of this mapping exercise are contained in the **Appendix B: Mapping the interRAI AC to the Queensland Health ieMR Cerner environment**.

Working from the interRAI AC item set, the Digital Hospital Adoption Service reviewed the ieMR and identified items that correspond with the clinical content area contained in each interRAI item. These fields were reviewed by interRAI experts in CHSR and a further 'workflow/functional' search of the ieMR was conducted to identify any further possible overlaps. Each identified Cerner field was then reviewed to identify if the Cerner item could be mapped in its current form to the interRAI item, or whether the interRAI item was not adequately captured in Cerner.

Where a match was identified, a judgment was made as to whether the current ieMR data item could be mapped to the equivalent interRAI item, and a comment was offered regarding the precision to which this mapping could be offered.

No specific consideration was given during this mapping phase to assess:

- current completion rates of the existing Cerner item
- which specialty (e.g. nursing, physiotherapy) principally completed the form
- whether the item was part of a broader set of condition-specific indicators

The analysis demonstrated that the majority of concepts captured in the interRAI AC exist within the current ieMR. Some could be mapped with reasonable precision, but for the majority, this is not feasible.

It is important to note that these concepts are found in a wide range of contexts within the ieMR, not necessarily in a single discipline area, such as nursing. Within the ieMR, there is lack of clarity around which items are "mandatory", whereas the interRAI Acute Care items would be standard for all adult inpatients.

## Step 2: Clinical needs analysis

This analysis was proposed in the context of the possible integration options as a 'clinical feasibility check.'

Once the viability of an integration option had been considered, an understanding of how the clinical staff are currently using the ieMR was sought, including:

- Which items do they regularly complete?
- What criteria do they use for selecting which items to complete?
- What are the main barriers to completing more items?
- What information is most useful to nursing staff when planning care for patients admitted to their ward?
- What 'workarounds' are used by nursing staff to manage the Cerner system?

This work was not completed methodically because of the aforementioned project constraints. Our advice is largely anecdotal and does not warrant extensive reporting. The following factors were identified as potentially impacting the use of the ieMR:

- The large inventory of items within the ieMR demands extensive human resources for completion.
- There is lack of clarity around which item sets are mandatory.
- As a result of documentation burden, there are issues with compliance.
- There are 'workarounds' that nurses have identified that enable apparent completion of assessments (as recognised by the computer software) that avoid actual completion of many items.
- Much of the information within the assessment schedule is not, at least for the present, re-used for decision support.
- Although there has been some use of customised 'dashboards' ostensibly designed to turn some of the ieMR data into information for clinical care and workforce management, their proliferation is another indicator of the disjointed collection and reporting of patient data in the ieMR.

If substantiated, these observations suggest that there is unsustainable documentation burden, that ultimately must be resolved by increasing staffing or streamlining the data inventory.

## Step 3: Technical feasibility

Alongside the clinical needs analysis and feasibility assessment, the technical feasibility and implications of changes to the Queensland Health Cerner environment were considered, including integration, flow-on effects of changing individual items, and removing others. Again, the scope of this work was constrained as indicated above. Our general observations are reflected in the options set offered in the next section.

# Section 3: Options

A preliminary review of the Queensland Health ieMR (Step 1) was conducted to identify items that mirrored, mapped or could be modified to enable capture of interRAI AC items within the current Queensland Health ieMR. A summary of the data mapping is in Table 2.

***Table 2: Summary of data mapping***

| Review outcome | Number of iAC items |
|---|---|
| Suitable for use in current format | 27 items |
| Suitable for use with mapping of current options to iAC response options | 11 items |
| Similar item/s in system but cannot be mapped to iAC item | 14 items |
| No similar items identified | 6 items |

On the basis of this preliminary review, two options were considered for incorporation of the interRAI AC assessment into the Queensland Health ieMR: 1) to modify current items in the Queensland Health ieMR to include the interRAI AC items; or 2) to integrate specialist interRAI AC software with the Cerner environment. Modification of the ieMR could occur in one of two ways: a) identify and modify items where they currently live in the system, then use the Cerner dashboard functionality to compile risk and screener reports; or b) develop a mandatory assessment tool that includes all 56 interRAI AC items, ideally within the Nursing iView – this includes removing duplicate items from other iViews and assessments.

## Option 1a – Modify ieMR items and develop an interRAI AC dashboard

This option involves building algorithms into the Cerner software to capture and collate data reported in items throughout the Queensland Health ieMR, develop composite measures that can replicate the screeners, scales and risks incorporated in the interRAI AC assessment, and report this in an interRAI AC dashboard.

### Features

- Addition or modification of items in the current ieMR infrastructure and user interface (i.e. no items are moved from their current instrument/view).
- Creation of a dashboard that draws the interRAI AC items from their system location, develops composite measures, and presents interRAI AC risks, scales and screeners.
- No change to the structure of the current Queensland Health ieMR
- Duplicate / similar items are not removed
- Limited education or training are required to implement the change and/or use the new interRAI AC dashboard.

## Options analysis

| Strengths | Weaknesses |
|---|---|
| Minimal modifications required to the current ieMR | No reduction of duplicate measures in ieMR |
| No extensive change management or training required | No change to compliance with current items in ieMR |
| iAC dashboard is opportunity to introduce concept of interRAI AC and may be a useful tool for NUMs and nursing executive | Unlikely to achieve benefits of real time monitoring of iAC risks, scales and screeners at patient, ward and hospital level |
| Post-hoc reporting and extraction of iAC data for research and analysis purposes will be possible | No change to compliance, as interRAI AC items are scattered and not mandatory |
| | Additional items would need to be included exacerbating workloads |
| | Does not include clinical governance or compliance with the Comprehensive Care Standards. |
| | |
| **Opportunities** | **Threats** |
| Opportunity to start discussion on standardised data collection and options for reducing duplication in the Queensland Health ieMR | Barriers to implementation may arise from reluctance to add more items and further complicate the Queensland Health ieMR |

## Actions

In order to progress this option, the following actions are required:

1. Review of interRAI AC to ieMR mapping options outlined in the Supplemental Report: Mapping the interRAI AC to the Queensland Health ieMR Cerner environment by a panel of interRAI AC experts to assess suitability of mapping options.
2. Examination of current use of identified ieMR fields and functions in the Queensland Health environment:
    - Completion rates as a percentage of admitted patients
    - Occupation type completing field
    - Triggers for field completion
    - Frequency of item review
    - Other fields or assessment items dependent on the field
3. Reconfiguration of the back-end analytics to exploit the interRAI AC data offerings.

**Note: An item-by-item summary of data mapping under option 1A is contained in the Appendix B.**

## Option 1b – Develop a mandatory interRAI AC interactive view and dashboard

This option requires an extensive revision and relocation of assessment items in the ieMR, development of a new assessment in the Nursing iView, and nursing practise change to make the assessment mandatory for all adult patients admitted into acute care wards.

The data elements of the interRAI AC would be incorporated into routine nursing care assessments within the ieMR. This assessment would be compulsory for all inpatients and would form the centre-piece of the functional and psychosocial components of the nursing assessment, in addition to information around biometrics and nursing procedures. The nursing assessments would be summarised and presented clearly as a discrete "MPage"[2].

Items that duplicate the interRAI AC items would be identified and retired from the ieMR. Existing specialised assessments would be retained – most would be 'triggered' by observations within the interRAI Acute Care (e.g., if the patient has pain, a full pain assessment is conducted, or if the person is a smoker, a smoking protocol is triggered).

In retiring items, there would need to be a process to examine the dependencies (in a digital sense) of retired items. Some existing items and / or screeners inform actions and dashboards. Replacement of items would require re-engineering of digital connections. There would also need to be a 'ratification' process to ensure that such adjustments do not prejudice the scientific integrity of the connection. For example, if the interRAI system were to replace the Braden pressure injury risk assessment, our clinicians must be confident that the new solution has equal or improved predictive validity.

To ensure a smooth transition, a 3 step process could be instigated. First, add the interRAI AC to the assessment tools currently in place. Second, identify redundant items without dependencies and remove. Third, identify redundant items that do have dependencies and remove them only after the digital connections have been renovated.

The interRAI AC was not developed to support Paediatric and Maternity Care. Therefore, some attention will be required to ensure that any adjustments made to the ieMR do not interfere with the assessment procedures for those patient groups. A future project could be to develop an adjusted interRAI AC that is customised to those populations.

Applications developed to support the interRAI AC assessment would be coded into the Queensland Health ieMR to enable immediate calculation (e.g., pressure injury risk, screen for cognitive impairment, activities of daily living scale). In line with the current Cerner configuration, all observations and derivative applications would be utilised to construct a patient 'profile' and to prompt care planning actions to be considered and ratified by nursing staff. Similarly, algorithms that identify the potential involvement of other staff (e.g., Speech Pathology) would also be calculated and presented to relevant staff as a prompt for referral and / or automatic consultation.

[2] Cerner Corporation offers MPages as way to customize workflows within Cerner Millennium® at the Organizer or Chart level within the PowerChart® framework. This tool allows clients to create custom workflows with a large range of possibilities.

## Features

- Consolidation of all iAC-related items and sub-menus in the nursing iView into a new Adult Systems Assessment menu: Functional Cognitive and Psychosocial
- Linkage and/or relocation of iAC matched or suitable items in other Ad Hoc Charts into new Adult Systems Assessment menu
- Availability of iAC results to other specialties and/or pre-population of Ad Hoc Charts with Systems Assessment data
- Creation of a dashboard that consolidates and presents interRAI AC risks, scales and screeners
- Retention of all Ad Hoc Chart options
- Extensive re-training of nursing staff in location and scoring of iAC items

## Options analysis

| **Advantages** | **Disadvantages** |
|---|---|
| Reduction of duplicate / redundant items in ieMR | Extensive change management and retraining of nursing staff required |
| Risk-based decision making reduces unnecessary comprehensive assessments | Extensive redesign of ieMR items required – redesign at QH's cost, may need to be outsourced |
| Simpler calculation of interRAI AC risks, scales and screeners | May disrupt current patterns of work among disciplines that have adapted to the current ieMR environment |
| Improvement in interdisciplinary communication about functional, cognitive and psychosocial status of acute care patients | |
| Potential to increase compliance with core items by focusing assessment in one component of the Adult Systems Assessment AND reducing the number and locations of available options. | |
| | |
| **Opportunities** | **Threats** |
| Opportunity for state-wide reporting of functional, cognitive and psychosocial data if non-ieMR hospitals implement specialist interRAI AC software. | Barriers to change may arise from:<br>• removal or modification of established tools<br>• assessment by nurses of items currently performed by other clinicians, e.g., physiotherapists, occupational therapists |
| Quality indicator generation and benchmarking possible across wards, hospitals and HHSs using evidence-based indicators | Significant modification of the Cerner system at the core of the QH ieMR may not be supported by Cerner in relation to licensing or technical maintenance and support |

| | |
|---|---|
| Use of a data set that is internationally recognised as a “standard”, enabling comparative analyses to be conducted internationally and locally. Ability to capitalise on future decision support tools developed internationally within and beyond the interRAI community. | A license for use of assessment items required from interRAI. Expectation of interRAI for facilities to provide de-identified data for analysis. Licence fees are likely to apply. |
| Use of a data set that is compatible with other interRAI systems that could and may be used in the future within other care delivery systems, such as aged care programs and facilities. | interRAI seeks access to deidentified data for research and development purposes. |
| Opportunity to work collaboratively with other iAC users locally and internationally for quality improvement and research purposes | |

## Actions

In order to progress this option, the following actions are required:

1. Development of a new MPage to support data collection with the interRAI AC.
2. Retirement of existing, now redundant data items that are replaced by the interRAI AC.
3. Renovation of the structure of the nursing assessment to identify mandatory and optional assessment modules, but with automated triggers from the interRAI AC to mandated supplementary assessments.
4. Review of the data requirements for all disciplines that record functional and psycho-social information, to increase data efficiency and remove duplication

## Option 2 – Integration of interRAI AC software solution

Several software solutions are available to support the electronic administration of the interRAI AC. Under Option 2, a software solution would be selected for integration with the Cerner environment in ieMR hospitals and as a standalone solution in non-ieMR hospitals.

### Features

- Procurement of interRAI AC software solution
- Integration of interRAI AC software solution with Cerner in ieMR hospitals
- Implementation of interRAI AC software solution as a standalone system in non-ieMR hospitals
- Removal of similar or duplicate assessment items from ieMR, but retention of detailed assessments recommended by the interRAI AC risks, screeners and scales.

### Options analysis

| **Strengths** | **Weaknesses** |
|---|---|
| Reduction of duplicate / redundant items in ieMR | Extensive change management and retraining of nursing staff required |
| Risk-based decision making reduces unnecessary comprehensive assessments | Extensive redesign of ieMR items required – redesign at QH's cost, may need to be outsourced |
| Specialised software may support nursing workflow and care planning | Queensland Health resistance to adding modules |
| Improvement in interdisciplinary communication about functional, cognitive and psychosocial status of acute care patients | |
| Significantly higher likelihood of collection of standard minimum data due to flagging or incomplete items and requirement for items to be completed before screeners and scales can be calculated. | |
| | |
| **Opportunities** | **Threats** |
| Interest in electronic records and high cost of full Cerner implementation at all sites: lower cost state-wide solution for standardised assessment and reporting | Barriers to change may arise from:<br>• removal or modification of established tools<br>• assessment by nurses of items currently performed by other clinicians, e.g., physiotherapists, occupational therapists |
| Quality indicator generation and benchmarking possible across wards, hospitals and HHSs using evidence-based indicators | Integration of software solution requires significant time and resource commitment from both Queensland Health and Cerner. Technical restraints may render integration infeasible. |
| | A license for use of assessment items required from interRAI. |

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| | Expectation of interRAI for facilities to provide de-identified data for analysis |
| | Ability to fit it into the clinical workflow with Cerner |

### Actions

In order to progress this option, the following actions are required:

1. Identify suitable software vendors and appraise their offerings
2. Establish a selection process
3. Build integration solution, including rationalisation of current data elements as per Actions 2-4 presented in Option 1B above.

# Section 4: Conclusions

This report is predicated on the desire to incorporate the interRAI AC into the Cerner environment. The arguments in favour of this action are plentiful and articulated earlier in this report.

The focus of our deliberations was how best achieve this, taking into account a variety of considerations, including feasibility, availability and cost of software, workforce and workflow adjustments, and compatibility with the current ieMR environment. Unfortunately, the project was not completed to the original specification because of the disruptions associated with the COVID-19 pandemic. Therefore our conclusions are tentative, and may require further research to finalise a pathway forward.

Based on the aforementioned considerations, our preliminary view is that the interRAI AC would be best implemented by creating a discrete assessment within the Cerner environment (in the form of an “MPage”). This would be a core component of every nurse admission assessment. Data and derivative applications would be available to inform nurse care planning, support ancillary assessments performed by other disciplines, and to alert others of the need for their involvement in the case.

To ratify this recommendation, further consultations are required within the nursing and broader health professional environment, and within the informatics and information technology communities. Detailed review of current data elements is required with retirement of redundant observations. Discrete decisions are required to identify other data elements that are mandatory, and the triggers for supplementary assessments. Ideally, a process of harmonisation of nursing, medical and allied health structured assessments would be undertaken to remove duplication. An undertaking of this scale will require costing estimates, detailed implementation plan and the collaborative efforts of key stakeholders in the nursing and health care, technical and interRAI fields.

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# Appendix A

## How the interRAI AC system addresses the Comprehensive Care Standard

The primary aims of the National Safety and Quality Health Service Standards are to protect the public from harm and to improve the quality of healthcare provision. One of these standards, the Comprehensive Care Standard, relates to the delivery of comprehensive care for patients within a health service organisation.

'Comprehensive care' is defined as including at least two of the following elements:

- Screening and assessment for common clinical risks associated with cognitive, behavioural, mental and/or physical conditions
- Integrated multidisciplinary care planning
- The delivery of integrated, multidisciplinary care and/or team work and collaboration across specialties and disciplines.

**The following document outlines how the interRAI Hospital Systems and specifically the interRAI AC assessment addresses the Comprehensive Care Standards.**

Prepared by:

Dr Nancye Peel

Ms Bonnie Pimm

Professor Amanda Henderson

Professor Len Gray

Centre for Health Services Research

Faculty of Medicine

The University of Queensland

8 April 2019

## HOW THE INTERRAI ASSESSMENT SYSTEM ADDRESSES THE COMPREHENSIVE CARE STANDARDS [12]

**[NOTE: ITEMS HIGHLIGHTED IN YELLOW WITHIN THE COMPREHENSIVE CARE STANDARDS REFER TO BUSINESS OR ORGANISATIONAL PROCESSES WHICH ARE NOT SPECIFICALLY ADDRESSED BY THE INTERRAI AC]**

| Comprehensive Care Standard | | Evidence from interRAI hospital assessment system to support the Comprehensive Care Standard |
|---|---|---|
| **Clinical governance and quality improvement to support comprehensive care** | | |
| **Integrating clinical governance** | 5.1<br>a. Implementing policies and procedures for comprehensive care<br>b. Managing risks associated with comprehensive care<br>c. Identifying training requirements to deliver comprehensive care | 5.1<br>a. The interRAI hospital assessment system supports organisation-wide screening and documentation of assessment processes. It allows for seamless transition across the continuum of hospitalisation from admission, through the hospital stay to discharge. It is also compatible with other interRAI assessment systems including post-acute care and rehabilitation, community and palliative care, and long term residential care.<br>b. The system is designed to identify, monitor, manage, and review risks of patient harm.<br>c. Manuals and training in assessment systems for comprehensive care are provided.<br>d. Real time reporting allows for early identification of incidents and targeted training needs. |
| **Applying quality improvement systems** | 5.2<br>a. Monitoring the delivery of comprehensive care<br>b. Implementing strategies to improve the outcomes<br>c. Reporting on delivery of comprehensive care | 5.2<br>The interRAI AC provides a system:<br>a. to monitor and report in real time the delivery of comprehensive care.<br>b. to inform strategies to improve outcomes.<br>c. to monitor outcomes of care (quality indicators).<br>Software can be configured for individualised documentation of planned and delivered care. |
| **Partnering with consumers** | 5.3<br>a. Actively involve patients in their own care<br>b. Meet the patient's information needs<br>c. Share decision-making | 5.3<br>The assessment manual specifies that where possible the patient is the primary source of information (and accordingly acknowledges their preferences and needs) in gathering information. Other supporting information is from family care givers as well direct observations, staff interviews and medical record review.<br>Software can allow for customised documentation for patient sign-off of care plan. |

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| **Designing systems to support comprehensive care** | 5.4<br>a. Support clinicians to develop, document and communicate comprehensive plans for patients' care and treatment<br>b. Provide care to patients in the setting that best meets their clinical needs<br>c. Ensure timely referral of patients with specialist healthcare needs to relevant services<br>d. Identify, at all times, the clinician with overall accountability for a patient's care | 5.4<br>The interRAI AC provides a system for screening and assessment, alerts for risk so that comprehensive care plans can be prepared, and shared with multidisciplinary teams. Software can allow for:<br>a. customised care plans populated from individual assessment results including risk screens and problem lists.<br>b. identification of specific risks and problems for individual patients to assist with early referral to relevant services.<br>c. care plan able to be customised to direct specific assessment results e.g., Falls risk or balance problem, to specific services e.g., Physiotherapist review. |
| **Collaboration and teamwork** | 5.5<br>a. Support multidisciplinary collaboration and teamwork<br>b. Define the roles and responsibilities of each clinician working in a team<br><br>5.6<br>Clinicians work collaboratively to plan and deliver comprehensive care | 5.5<br>a. The interRAI AC assessment items are rigorously tested and validated to be understood by a range of health professionals. Therefore, the assessment can act as one consistent source of information for use across multiple groups to collaboratively inform care planning. Outputs include documentation about patients with complex needs for multidisciplinary meetings or case conferences.<br>5.6<br>Software can allow for individual disciplines to populate care plan from assessment results. Care plans can also be customised to include sections for multidisciplinary staff to write free text goals and interventions for comprehensive care visible to all other staff. |

| Developing the comprehensive care plan | | |
|---|---|---|
| **Planning for comprehensive care** | 5.7<br>Provide services:<br>a. For integrated and timely screening and assessment<br>b. That identify the risks of harm in the 'Minimising patient harm' criterion<br>5.8<br>Identify patients as being of Aboriginal and/or Torres Strait Islander origin, and record this information in administrative and clinical information systems<br>5.9<br>Patients are supported to document clear advance care plans | 5.7<br>a. interRAI provides resources and tools developed for screening and assessment of clinical conditions and risks outlined in the 'Minimising patient harm' criterion in a timely manner.<br><br>5.8<br>Intake history identifies patients as being of Aboriginal and/or Torres Strait Islander origin, and records this information in administrative and clinical information systems.<br><br>5.9<br>Presence of advance care plans is recorded. |
| **Screening of risk** | 5.10<br>Clinicians use relevant screening processes:<br>a. On presentation, during clinical examination and history taking, and when required during care<br>b. To identify cognitive, behavioural, mental and physical conditions, issues, and risks of harm<br>c. To identify social and other circumstances that may compound these risks | 5.10<br>a & b. interRAI provides a set of clinical items for recording cognitive, behavioural, mental and physical conditions, functional and psychosocial issues, at admission and throughout the care episode in real time supported by validated algorithms to assess risk of harm (eg falls, pressure injury)<br>c. The assessment includes multiple items regarding social situation and carer support to inform care and identify risks early. |
| **Clinical assessment** | 5.11<br>Clinicians comprehensively assess the conditions and risks identified through the screening process | 5.11<br>interRAI provides standardised assessment processes, tools and resources. Imbedded in the interRAI instruments are validated scales to identify the presence and extent of deficits (eg Cognitive Performance Scale, Activities of Daily Living Scale, Frailty Index), diagnostic and risk screeners. |

| | | |
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| **Developing the comprehensive care plan** | 5.12<br>Clinicians document the findings of the screening and clinical assessment processes, including any relevant alerts, in the healthcare record<br><br>5.13<br>Clinicians use processes for shared decision making to develop and document a comprehensive and individualised plan that:<br>a. Addresses the significance and complexity of the patient's health issues and risks of harm<br>b. Identifies agreed goals and actions for the patient's treatment and care<br>c. Identifies the support people a patient wants involved in communications and decision-making about their care<br>d. Commences discharge planning at the beginning of the episode of care<br>e. Includes a plan for referral to follow-up services if appropriate and available<br>f. Is consistent with best practice and evidence | 5.12<br>interRAI produces a patient profile in the form of problem lists, diagnostic and risk screeners, scales including relevant alerts for the health care record.<br><br>5.13<br>a. The outputs in the the form of problem lists, diagnostic and risk screeners, severity scales alert clinicians to the complexity of patient's health issues and risk of harm, and trigger suggestions for developing a comprehensive care plan through Clinical Action Protocols. This can be used for shared decision making. The interRAI assessment asks about appointed EPOA or decision makers. Note sections are available for each item to elaborate or identify any other supporting information. These can be added to the care plan.<br>b. The software can allow for the care plan to be customised to include agreed goals and actions for patient treatment and care.<br>c. The care plan can be customised to identify other support people involved in communication and decision making.<br>d. The care plan includes discharge planning at initial assessment.<br>e. The interRAI AC instrument has a discharge assessment and report which identifies changes from the admission assessment. The report can be printed and sent with the patient or to other care providers involved and identify any further referrals or follow-up after discharge.<br>f. interRAI provides a set of clinical items for recording cognitive, behavioural, mental and physical conditions, functional and psychosocial issues, at admission and throughout the care episode in real time supported by validated algorithms to assess risk of harm (e.g., falls, pressure injury) consistent with best practice and evidence. |

| **Delivering comprehensive care** | | |
|---|---|---|
| **Using the comprehensive care plan** | 5.14<br>The workforce, patients, carers and families work in partnership to:<br>a. Use the comprehensive care plan to deliver care<br>b. Monitor the effectiveness of the comprehensive care plan in meeting the goals of care<br>c. Review and update the comprehensive care plan if it is not effective<br>d. Reassess the patient's needs if changes in diagnosis, behaviour, cognition, or mental or physical condition occur | 5.14<br>The software can allow for:<br>a. A customized comprehensive and individualised care plan using assessment results including health issues and risks of harm.<br>b. Care plan evaluation of care goals and interventions.<br>c. Care plans to be reviewed and updated on a shift by shift basis.<br>d. Provision for regular review (at handover) and for reassessing the patient's needs if changes in behaviour, cognition, or mental or physical condition occur. Risk status is then automatically updated in the patient's profile. |
| **Comprehensive care at the end of life** | 5.15<br>The health service organisation has processes to identify patients who are at the end of life that are consistent with the National Consensus Statement: Essential elements for safe and high-quality end-of-life care<br>5.16<br>The health service organisation providing end-of-life care has processes to provide clinicians with access to specialist palliative care advice<br>5.17<br>The health service organisation has processes to ensure that current advance care plans:<br>a. Can be received from patients<br>b. Are documented in the patient's healthcare record<br>5.18<br>The health service organisation provides access to supervision and support for the workforce providing end-of-life care<br>5.19<br>The health service organisation has processes for routinely reviewing the safety and quality of end-of-life care that is provided against the planned goals of care<br>5.20 | 5.15<br>The assessment identifies patients whose conditions are unstable /precarious/deteriorating and whose frailty level would indicate consideration of end-of-life care.<br><br>5.17<br>b. The interRAI AC documents presence of advance care plans. |

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| | Clinicians support patients, carers and families to make shared decisions about end-of-life care in accordance with the National Consensus Statement: Essential elements for safe and high-quality end-of-life care | |

| Comprehensive Care Standard | | Evidence from interRAI hospital system to support Comprehensive Care Standard |
|---|---|---|
| **Minimising patient harm** | | |
| **Preventing and managing pressure injuries** | 5.21<br>The health service organisation providing services to patients at risk of pressure injuries has systems for pressure injury prevention and wound management that are consistent with best-practice guidelines<br>5.22<br>Clinicians providing care to patients at risk of developing, or with, a pressure injury conduct comprehensive skin inspections in accordance with best-practice time frames and frequency<br>5.23<br>The health service organisation providing services to patients at risk of pressure injuries ensures that:<br>a. Patients, carers and families are provided with information about preventing pressure injuries<br>b. Equipment, devices and products are used in line with best-practice guidelines to prevent and effectively manage pressure injuries | 5.21<br>interRAI hospital systems contain a validated pressure injury risk scale to alert clinicians to patients who have or who are at risk of pressure injury. Alerts will trigger need for a care plan for prevention and wound management.<br>5.22<br>Use of the tool at clinical handover ensures regular skin integrity assessments and provides real time updates if changes occur. Care planning responses within the software are consistent with best practice guidelines for pressure injury prevention and wound management.<br>5.23<br>a. The software allows for a printed care plan which includes preventative interventions and care options for patients at risk of pressure injury. |
| **Preventing falls and harm from falls** | 5.24<br>The health service organisation providing services to patients at risk of falls has systems that are consistent with best-practice guidelines for:<br>a. Falls prevention<br>b. Minimising harm from falls<br>c. Post-fall management<br>5.25<br>The health service organisation providing services to patients at risk of falls ensures that equipment, devices and tools are available to promote safe mobility and manage the risks of falls | 5.24<br>a. interRAI hospital systems contain a validated falls risk screener to alert clinicians of patients who have had or who are at risk of falls. Alerts will trigger need for a care plan for falls prevention.<br>b. Care planning responses within the software are consistent with best practice guidelines for Falls Prevention.<br>c. Triggered Clinical Action Protocols (CAPs) identify evaluation points for minimising harm from falls and generic post-fall management (though this will be influenced by organisational policies and procedures). |

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| | 5.26<br>Clinicians providing care to patients at risk of falls provide patients, carers and families with information about reducing falls risks and falls prevention strategies | 5.26<br>The software allows for a printed care plan which includes preventative interventions and care options for patients at risk of falls. |
| **Nutrition and hydration** | 5.27<br>The health service organisation that admits patients overnight has systems for the preparation and distribution of food and fluids that include nutrition care plans based on current evidence and best practice<br>5.28<br>The workforce uses the systems for preparation and distribution of food and fluids to:<br>a. Meet patients' nutritional needs and requirements<br>b. Monitor the nutritional care of patients at risk<br>c. Identify, and provide access to, nutritional support for patients who cannot meet their nutritional requirements with food alone<br>d. Support patients who require assistance with eating and drinking | 5.27<br>interRAI hospital systems screens for nutritional issues to alert clinicians of patients who have or who are at risk of undernutrition. Alerts will trigger need for a care plan for nutrition interventions.The tool has the capacity to inform appropriate food and fluid preparation and distribution for individual patients.<br>5.28<br>Nutritional requirements, including the support patients require regarding assistance with eating and drinking, can be included in the Care Plan.<br>Use of the tool at clinical handover or assessment review ensures regular assessment of nutrition and hydration and provides real time updates if changes occur. |
| **Preventing delirium and managing cognitive impairment** | 5.29<br>The health service organisation providing services to patients who have cognitive impairment or are at risk of developing delirium has a system for caring for patients with cognitive impairment to:<br>a. Incorporate best-practice strategies for early recognition, prevention, treatment and management of cognitive impairment in the care plan, including the Delirium Clinical Care Standard, where relevant<br>b. Manage the use of antipsychotics and other psychoactive medicines, in accordance with best practice and legislation<br>5.30<br>Clinicians providing care to patients who have cognitive impairment or are at risk of developing delirium use the system for caring for patients with cognitive impairment to:<br>a. Recognise, prevent, treat and manage cognitive impairment | 5.29<br>interRAI hospital systems contain a validated diagnostic and risk screener to alert clinicians to patients who have cognitive impairment and/or delirium or who are at risk of developing delirium. Alerts will trigger the need to address these issues in the care plan.<br>The software allows for a printed care plan which includes interventions (according to best practice) and care options for patients at risk of, or with existing cognitive impairment and/or delirium.<br><br>5.30<br>a. Triggered Clinical Action Points (CAPs) identify further evaluation and interventions for patients with cognitive impairment or delirium. These can be incorporated into the care plan and updated on a regular basis. |

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| | b. Collaborate with patients, carers and families to understand the patient and implement individualised strategies that minimise any anxiety or distress while they are receiving care | b. The software allows customised documentation identifying participants in care planning and decision making. There are several items in the assessment schedule identifying patient anxiety and potential carer/ support person distress. These can be included in the RAIsoft care plan and individualised interventions documented. |
| **Predicting, preventing and managing self-harm and suicide** | 5.31<br>The health service organisation has systems to support collaboration with patients, carers and families to:<br>a. Identify when a patient is at risk of self-harm<br>b. Identify when a patient is at risk of suicide<br>c. Safely and effectively respond to patients who are distressed, have thoughts of self-harm or suicide, or have self-harmed<br>5.32<br>The health service organisation ensures that follow-up arrangements are developed, communicated and implemented for people who have harmed themselves or reported suicidal thoughts | 5.31<br>a. interRAI hospital systems contain a validated scales to alert clinicians of patients who have self-reported depression. Alerts will trigger need for a care planning to address this issue.<br>b. The interRAI AC does not specifically ask about self-harm or suicide.<br>c. Care plans can be customised to incorporate information about whether a patient is at risk of self-harm or suicide and appropriate interventions. |
| **Predicting, preventing and managing aggression and violence** | 5.33<br>The health service organisation has processes to identify and mitigate situations that may precipitate aggression<br>5.34<br>The health service organisation has processes to support collaboration with patients, carers and families to:<br>a. Identify patients at risk of becoming aggressive or violent<br>b. Implement de-escalation strategies<br>c. Safely manage aggression, and minimise harm to patients, carers, families and the workforce | 5.33<br>The interRAI AC assessment identifies patients with behavioural symptoms including possible verbal or physical aggression.<br>5.34<br>Care plans can be customised to incorporate information about whether a patient is at risk of becoming aggressive and interventions to de-escalate the behaviour and minimise risk to others. |
| **Minimising restrictive practices: restraint** | 5.35<br>Where restraint is clinically necessary to prevent harm, the health service organisation has systems that:<br>a. Minimise and, where possible, eliminate the use of restraint<br>b. Govern the use of restraint in accordance with legislation | 5.35<br>While the interRAI AC assessment does not specifically ask about the use of restraints, the care plan can be customised to incorporate information about need for restraint according to organisational policies and guidelines. |

| | | |
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| | c. Report use of restraint to the governing body | |
| **Minimising restrictive practices: seclusion** | 5.36<br>Where seclusion is clinically necessary to prevent harm and is permitted under legislation, the health service organisation has systems that:<br>a. Minimise and, where possible, eliminate the use of seclusion<br>b. Govern the use of seclusion in accordance with legislation<br>c. Report use of seclusion to the governing body | 5.36<br>While the interRAI assessment does not specifically ask about seclusion, the care plan can be customised to incorporate information about the use of seclusion according to organisational policies and guidelines. |

# Appendix B

## Mapping the interRAI AC to the Queensland Health ieMR Cerner environment.

### About this document

This report details a matching exercise that was undertaken to identify data elements within the Cerner iEMR environment that record the same or similar concepts to those contained in the interRAI Acute Care assessment system.

Where a match was identified, a judgment was made as to whether the current iEMR data item could be mapped to the equivalent interRAI item, and a comment was offered regarding the precision to which this mapping could be offered.

The analysis demonstrated that the majority of concepts captured in the interRAI AC exist within the current iEMR. Some could be mapped with reasonable precision, but for the majority, this is not feasible.

It is important to note that these concepts are found in a wide range of contexts within the iEMR, not necessarily in a single discipline area, such as nursing. Within the iEMR, there is lack of clarity around which items are “mandatory”, whereas the interRAI Acute Care items would be standard for all adult inpatients.

*Please note that interRAI data items displayed here are copyright and should not be utilised without a licence from interRAI.*

## Section A: Identification Information

Identification information is collected by the Queensland Health ieMR. Under any of the options presented in the Integration Options Report, ieMR should remain the single source of truth for this data.

| iCode | Item | Response options |
|---|---|---|
| iA1a | Name - First | |
| iA1b | Name - Initial | |
| iA1c | Name - Last | |
| iA1d | Name - Jr/Sr | |
| iA2 | Gender | |
| iA3 | Birthdate | |
| iA4 | Marital Status | 1 Never married<br>2 Married<br>3 Partner / significant other<br>4 Widowed<br>5 Separated<br>6 Divorced |
| iA45 | Country of birth | |
| iB3k | Indigenous status | Is the patient of Aboriginal or Torres Strait Islander status?<br>**1** Yes, Aboriginal<br>**2** Yes, Torres Strait Islander<br>**3** Yes, both<br>**4** No, neither |
| iB4 | Primary language | Main language spoken at home<br>**1** English<br>**2** Other: TEXT |
| iA19 | Hospital Name | |
| iA6c | Unit identifier | |
| iA20 | Treating Doctor | |

## Section B: Intake and Initial History

Identification information is collected by the Queensland Health ieMR. Under any of the options presented in the Integration Options Report, ieMR should remain the single source of truth for this data.

| iCode | Item | Response options |
|---|---|---|
| iA11a | Residential Status-Admitted from | **1** Private residence - owned / purchasing<br>- client owns / is purchasing<br>- family member or related person owns / is purchasing<br>**2** Private residence - private rental<br>**3** Private residence - public rental or community housing: indigenous community / settlement<br>**4** Independent living within a retirement village<br>**5** Boarding house / rooming house / private hostel<br>**6** Supported community accommodation<br>**7** Short-term crisis, emergency, or transitional accommodation<br>**8** Mental health residence - e.g., psychiatric group home<br>**9** Group home for patients with physical disability<br>**10** Setting for patients with intellectual disability<br>**11** Residential aged care service<br>**12** Acute care hospital<br>**13** Hospice facility / palliative care unit<br>**14** Rehabilitation hospital / unit<br>**15** Psychiatric hospital / unit<br>**16** Correctional facility<br>**17** Public place / temporary shelter<br>**18** Other |
| iA12a | Living Arrangement prior to admission | **1** Alone<br>**2** With spouse / partner only<br>**3** With spouse / partner and others<br>**4** With child (not spouse or partner)<br>**5** With parent(s) or guardian(s)<br>**6** With sibling(s)<br>**7** With other relative(s)<br>**8** With non-relative(s)<br>**9** In residential care / other institutional setting |
| iA13b | Time since last hospital stay (AC) | **0** No hospitalisation within 180 days<br>**1** 91 - 180 days ago<br>**2** 31 - 90 days ago<br>**3** 15 - 30 days ago<br>**4** 8 - 14 days ago<br>**5** In the last 7 days<br>**6** Transferred from another hospital |
| iB43 | Infection control | Enforced isolation or restriction of free movement to prevent the spread of a contagious disease (e.g. isolation or quarantine)<br>**0** No<br>**1** Yes |

| | | |
|---|---|---|
| iBB1 | Employment status | **1** Employed<br>**2** Unemployed, seeking employment<br>**3** Unemployed, not seeking employment |

## Section C: Cognition

### iC1 – Cognitive skills for daily decision making

| interRAI Code | iC1 |
|---|---|
| **Item name** | Cognitive skills for daily decision making |
| **Response options** | Making decisions regarding tasks of daily live - e.g. when to get up or have meals, which clothes to wear or activities to do<br>0 Independent - decisions consistent, reasonable and safe<br>1 Modified independence - some difficulty in new situations only<br>2 Minimally impaired - In specific recurring situations, decisions become poor or unsafe, cues / supervision necessary at those times<br>3 Moderately impaired - Decisions consistently poor or unsafe; cues / supervision required at all times<br>4 Severely impaired - never or rarely makes decisions<br>5 No discernible consciousness, coma |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | Nursing Assessment Interactive View > Adult Risk Assessments > Cognition > Clinical concern for cognitive function |
| **Mapping options** | n/a |
| **What other related items (and location) are captured in the ieMR?** | n/a |

## iC2a – Memory / recall ability

| interRAI Code | iC2a |
|---|---|
| **Item name** | Memory / recall ability |
| **Response options** | Short term memory OK - appears to recall after 5 minutes<br>0 Yes, memory OK<br>1 Memory problem |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose?** | No |
| **Current ieMR location/s** | Ad hoc charting > Allied Health and Community > RUDAS |
| **Mapping options** | If RUDAS = 4, iC2a = ?<br>If RUDAS = 3, iC2a = ?<br>If RUDAS = 2, iC2a = ?<br>If RUDAS = 1, iC2a = ? |
| **What other related items (and location) are captured in the ieMR?** | Ad hoc charting > Allied Health and Community > ACE-R<br>Ad hoc charting > Allied Health and Community > ACE-III |
| **Notes** | ACE-III and ACE-R are like GP-Cog. Does generate score for Memory derived from ability to remember name and address. Score out of 26. Could develop a threshold to translate to yes, ok or memory problem. However, both are very comprehensive and lengthy<br><br>RUDAS asks to remember four item shopping list. Gives score out of 4 for Memory Recall. Could set a threshold for yes/no. Shorter task. |

## iC3c – Periodic disordered thinking or awareness

| interRAI Code | iC3c |
|---|---|
| **Item name** | Periodic disordered thinking or awareness |
| **Response options** | Mental function varies over the course of the day - e.g. sometimes better, sometimes worse<br>0 Behaviour not present<br>1 Behaviour present, consistent with usual functioning<br>2 Behaviour present, different from usual functioning, e.g. new onset or worsening |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose?** | Yes |
| **Current ieMR location/s** | Interactive View > Adult Systems Assessment > Confusion Assessment Method (CAM) |
| **Mapping options** | IF: CAM Item 3 (disorganised thinking) is no iC3c = 0<br>IF: CAM Item 3 (disorganised thinking) is yes AND Feature 1 (acute onset) is no, iC3c = 1<br>IF: CAM Item 3 (disorganised thinking) is yes AND Feature 1 (acute onset) is yes, iC3c = 2 |
| **What other related items (and location) are captured in the ieMR?** | n/a |
| **Notes** | *Disorganised thinking item:*<br>Was the patient's thinking disorganised or incoherent, such as rambling or irrelevant conversations, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?<br><br>Need to understand current end-point for CAM score. CAM also includes:<br>• Acute onset and fluctuating course (acute change in mental status from the patient's baseline, changes through day)<br>  ○ Covered in iC4<br>• Inattention (difficulty focusing attention, easily distractible, having difficulty keeping track of what was being said)<br>  ○ Not covered by iAC<br>• Altered level of consciousness (options alert normal, vigilant, lethargic, stupor, or coma)<br>  ○ Not covered by iAC |

## iC4 – Acute change in Mental Status from patient's usual functioning

| interRAI Code | iC4 |
|---|---|
| **Item name** | Acute change in Mental Status from patient's usual functioning |
| **Response options** | e.g. restlessness, lethargy, difficult to arouse, altered environmental perception<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Interactive View > Adult Systems Assessment > Confusion Assessment Method (CAM) |
| **Mapping options** | IF: CAM Item (acute onset) is no iC4 = 0<br>IF: CAM Item (acute onset) is yes iC4 = 1 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | *Acute onset and fluctuating course item:*<br>This feature is usually obtained from a family member or nurse and is shown by positive responses to the following questions: Is there evidence of an acute change in mental status from the patient's baseline? Did the (abnormal) behaviour fluctuate during the day, that is, tend to come and go, or increase or decrease in severity?<br><br>Need to understand current end-point for CAM score. CAM also includes:<br>• Disordered thinking (thinking disorganised or incoherent, rambling, irrelevant conversations, unclear or illogical flow of ideas, or unpredictable switching from subject to subject)<br>  ○ Covered in iC3c<br>• Inattention (difficulty focusing attention, easily distractible, having difficulty keeping track of what was being said)<br>  ○ Not covered by iAC<br>• Altered level of consciousness (options alert normal, vigilant, lethargic, stupor, or coma)<br>  ○ Not covered by iAC |

## Section D: Communication and Vision

### iD1 – Making self understood (Expression)

| interRAI Code | iD1 |
|---|---|
| **Item name** | Making self understood (Expression) |
| **Response options** | Expressing information consent - both verbal and non-verbal<br>0 Understood - Expresses ideas without difficulty<br>1 Usually understood - difficulty finding words or finishing thoughts, BUT if given time, little or no prompting required<br>2 Often understood - Difficulty finding words or finishing thoughts AND prompting usually required<br>3 Sometimes understood - ability is limited to making concrete requests<br>4 Rarely or never understood |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | 1. Nursing Assessment Interactive View > Adult Systems Assessment > Neurological > Characteristics of Speech<br>2. Nursing Assessment Interactive View > Adult Systems Assessment > Neurological > Characteristics of Communication<br>3. Nursing Assessment Interactive View > Adult Systems Assessment > Mental Status > Speech<br>4. Allied and Community Health Powerform option > Frenchay Aphasia Screening Test (FAST) |
| **Mapping options** | Frenchay may be able to be scaled and mapped, but likely only completed by Occupational or Speech Therapists, not nursing staff. Characteristics of Speech and Communication options not able to be mapped |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | <u>Characteristics of speech</u> options:<br>Clear – Disturbance in voice pitch or intensity<br>Hoarse – Imprecise<br>Inarticulate – Nasal<br>No vocalisation – Slowed<br>Slurred – Stutters<br>Unintelligible – Unable to assess<br><br><u>Characteristics of communication</u> options:<br>Appropriate – Expressive language difficulty<br>No communicative intent – Receptive language difficulty<br>Inappropriate<br><br><u>Mental Status – Speech</u> options:<br>Normal rate, tone and volume – Rapid speech<br>Pressured speech – Poverty of speech<br>Soft speech – Loud speech<br>Unintelligible – Thought disorder |

| | |
|---|---|
| | Other<br><br>Frenchay Aphasia Screening Test options:<br>Comprehension A (x/5) + Comprehension B (x/5) = Comprehension total (x/10)<br>Expression A (x/5) + Expression B (x/5) = Expression total (x/10) |

## iD2 – Ability to understand others (Comprehension)

| interRAI Code | iD2 |
|---|---|
| **Item name** | Ability to understand others (Comprehension) |
| **Response options** | Understanding verbal information content (however able; with hearing appliance normally used)<br>0 Understands - clear comprehension<br>1 Usually understands - misses some part / intent of message, BUT comprehends most conversation<br>2 Often understands - misses some part / intent of message, BUT with repetition or explanation can often comprehend conversation<br>3 Sometimes understands - response adequately to simple, direct communication only<br>4 Rarely or never understands |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | Currently in 2 places:<br>Adult Systems Interactive View > Neurological > Characteristics of Speech and Characteristics of Communication<br>Allied and Community Health Powerform option > Frenchay Aphasia Screening Test (FAST) |
| **Mapping options** | Frenchay may be able to be scaled and mapped, but likely only completed by Occupational or Speech Therapists, not nursing staff.<br>Characteristics of Speech and Communication options not able to be mapped |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | <u>Characteristics of speech</u> options:<br>Clear<br>Hoarse<br>Inarticulate<br>No vocalisation<br>Slurred<br>Unintelligible<br>Disturbance in voice pitch or intensity<br>Imprecise<br>Nasal<br>Slowed<br>Stutters<br>Unable to assess<br><br><u>Characteristics of communication</u> options:<br>Appropriate<br>No communicative intent<br>Inappropriate<br>Expressive language difficulty<br>Receptive language difficulty<br><br><u>Frenchay Aphasia Screening Test</u> options:<br>Comprehension A (x/5) + Comprehension B (x/5) = Comprehension total (x/10)<br>Expression A (x/5) + Expression B (x/5) = Expression total (x/10) |

## iD3a – Hearing

| interRAI Code | iD3a |
|---|---|
| **Item name** | Hearing |
| **Response options** | Ability to hear (without hearing appliance)<br>0 Adequate - no difficulty in normal conversation, social interaction, listening to TV<br>1 Minimal difficulty - difficulty only in some environments (for example, when person speaks softly or is more than 2 metres away)<br>2 Moderate difficulty - problem hearing normal conversation; requires quiet setting to hear well<br>3 Severe difficulty - difficulty in all situations (e.g. speaker has to talk loudly or speak very slowly; or patient reports that all speech is mumbled)<br>4 No hearing |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | ContinuousDoc > Documentation > Admission History Adult > Functional > **Sensory Deficits** |
| **Mapping options** | n/a |
| **What other related items (and location) are captured in the ieMR?** | n/a |
| **Notes** | Sensory deficits options are:<br>• Blind, left eye<br>• Blind, right eye<br>• Hearing deficit, left ear<br>• Hearing deficit, right ear<br>• Nonverbal<br>• Sensation/Touch deficit<br>• Speech deficit<br>• Unconnected visual impairment<br>• other |

## iD4a – Vision

| interRAI Code | iD4a |
|---|---|
| **Item name** | Vision |
| **Response options** | Ability to see in adequate light (without visual appliance)<br>0 Adequate - sees find detail, including regular print in newspapers or books<br>1 Minimal difficulty - sees large print but not regular print in newspapers / books<br>2 Moderate difficulty - limited vision; not able to see newspaper headlines but can identify objects in his or her environment<br>3 Severe difficulty - object identification in question, but his or her eyes appear to follow objects (especially persons walking by) or the patient sees only light colours, or shapes<br>4 No vision |
| **Is similar or mappable item captured in the ieMR?** | No |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | ContinuousDoc > Documentation > Admission History Adult > Functional > **Sensory Deficits** |
| **Mapping options** | n/a |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Sensory deficits options are:<br>• Blind, left eye<br>• Blind, right eye<br>• Hearing deficit, left ear<br>• Hearing deficit, right ear<br>• Nonverbal<br>• Sensation/Touch deficit<br>• Speech deficit<br>• Unconnected visual impairment<br>• other |

## Section E: Mood and Behaviour

### iE2d – Self-reported mood: interest

| interRAI Code | iE2d |
|---|---|
| **Item name** | Self-reported mood: interest |
| **Response options** | Ask 'In the last 24 hours, how often have you felt … little interest or pleasure in the things you normally enjoy?<br>0 Not in the last 24 hours<br>1 Not in the last 24 hours, but often feel that way<br>2 Yes, felt that way in the past 24 hours<br>8 Patient could not (would not) respond |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Allied and Community Health Powerform option > PHQ-4 |
| **Mapping options** | IF PHQ item 3 = 0; iE2d = 0<br>IF PHQ item 3 = 1, iE2d = 1<br>IF PHQ item 3 = 2, iE2d = 2<br>IF PHQ item 3 = 3, iE2d = 2 |
| **What other related items (and location) are captured in the ieMR?** | Nursing Interactive View > Adult Systems Assessment > Mental Status > Mood |
| **Notes** | PHQ-4 only in Allied Health and Community Powerforms – not included in nursing assessment. Has four questions and options:<br>*Over the past 2 weeks, how often have you been bothered by the following problems:*<br>1. Feeling nervous, anxious or on edge<br>2. Not being able to stop or control worrying<br>3. Little interest or pleasure in doing things<br>4. Feeling down, depressed, or hopeless.<br>Answers: 0 - not at all; 1 - several days; 2 - more than half the days; 3 - nearly every day<br><br>*NOTE: 'Not being able to stop or control worrying' not covered by iAC*<br><br>Adult Systems Assessment interactive view > Mental Status > Mood options cannot be mapped:<br>Depressed Elevated<br>Labile Appropriate<br>Euthymic Anhedonic<br>Dysthymic Anxious<br>Fearful Irritable<br>Other |

## iE2e – Self-reported mood: anxious

| interRAI Code | iE2e |
|---|---|
| **Item name** | Self-reported mood: anxious |
| **Response options** | Ask 'In the last 24 hours, how often have you felt … anxious, restless or uneasy?<br>0 Not in the last 24 hours<br>1 Not in the last 24 hours, but often feel that way<br>2 Yes, felt that way in the past 24 hours<br>8 Patient could not (would not) respond |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Allied and Community Health Powerform option > PHQ-4 |
| **Mapping options** | IF PHQ item 1 = 0; iE2d = 0<br>IF PHQ item 1 = 1, iE2d = 1<br>IF PHQ item 1 = 2, iE2d = 2<br>IF PHQ item 1 = 3, iE2d = 2 |
| **What other related items (and location) are captured in the ieMR?** | Nursing Interactive View > Adult Systems Assessment > Mental Status > Mood |
| **Notes** | PHQ-4 only in Allied Health and Community Powerforms – not included in nursing assessment. Has four questions and options:<br>*Over the past 2 weeks, how often have you been bothered by the following problems:*<br>1. Feeling nervous, anxious or on edge<br>2. Not being able to stop or control worrying<br>3. Little interest or pleasure in doing things<br>4. Feeling down, depressed, or hopeless.<br><br>Answers: 0 - not at all; 1 - several days; 2 - more than half the days; 3 - nearly every day<br><br>*NOTE: 'Not being able to stop or control worrying' not covered by iAC*<br><br>Adult Systems Assessment interactive view > Mental Status > Mood options:<br>Depressed Elevated<br>Labile Appropriate<br>Euthymic Anhedonic<br>Dysthymic Anxious<br>Fearful Irritable<br>Other |

## iE2f – Self-reported mood: sad

| interRAI Code | iE2f |
|---|---|
| **Item name** | Self-reported mood: sad |
| **Response options** | Ask 'In the last 24 hours, how often have you felt … sad, depressed, or hopeless?<br>0 Not in the last 24 hours<br>1 Not in the last 24 hours, but often feel that way<br>2 Yes, felt that way in the past 24 hours<br>8 Patient could not (would not) respond |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Allied and Community Health Powerform option > PHQ-4 |
| **Mapping options** | IF PHQ item 4 = 0; iE2d = 0<br>IF PHQ item 4 = 1, iE2d = 1<br>IF PHQ item 4 = 2, iE2d = 2<br>IF PHQ item 4 = 3, iE2d = 2 |
| **What other related items (and location) are captured in the ieMR?** | Nursing Interactive View > Adult Systems Assessment > Mental Status > Mood |
| **Notes** | PHQ-4 only in Allied Health and Community Powerforms – not included in nursing assessment. Has four questions and options:<br>*Over the past 2 weeks, how often have you been bothered by the following problems:*<br>1. Feeling nervous, anxious or on edge<br>2. Not being able to stop or control worrying<br>3. Little interest or pleasure in doing things<br>4. Feeling down, depressed, or hopeless.<br><br>Answers: 0 - not at all; 1 - several days; 2 - more than half the days; 3 - nearly every day<br><br>*NOTE: 'Not being able to stop or control worrying' not covered by iAC*<br><br>Adult Systems Assessment interactive view > Mental Status > Mood options:<br>Depressed Elevated<br>Labile Appropriate<br>Euthymic Anhedonic<br>Dysthymic Anxious<br>Fearful Irritable<br>Other |
| **Action required** | Make PHQ-4 coding and options available through<br>Adult Systems Assessment interactive view > Mental Status > Mood<br>[may need separate item for each PHQ-4 question] |

## iJ7 – Self-reported health

| interRAI Code | iJ7 |
|---|---|
| **Item name** | Self-reported health |
| **Response options** | Ask "In general how would you rate your health?"<br>0 Excellent<br>1 Good<br>2 Fair<br>3 Poor<br>8 Could not (would not) respond |
| **Is similar or mappable item captured in the ieMR?** | No. could not find equivalent item in ieMR |
| **Cerner field name** | |
| **Is item fit for purpose** | |
| **Current ieMR location/s** | |
| **Mapping options** | |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |
| **Action required** | |

## iE8 – Behaviour symptoms: any one or more

| interRAI Code | iE8 |
|---|---|
| **Item name** | Behaviour symptoms: any one or more |
| **Response options** | In the LAST 24 hours, presence of any one or more of the following: verbal abuse, physical abuse, resisting care, socially inappropriate or disruptive behaviour, or inappropriate public sexual behaviour or public disrobing<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Nursing Interactive View > Adult Systems Assessment > Mental Status > Behaviour |
| **Mapping options** | If any of the following are present, iE8=1<br>• Agitated<br>• Combative<br>• Hostile<br>• Aggressive<br>• Impulsive<br>• Inappropriate<br>• Self injurious<br>• Uncooperative<br>• Dissociating<br>• Disinhibited<br><br>If none are present, iE8=0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Behaviour options:<br>Appropriate<br>Calm<br>Agitated<br>Combative<br>Hostile<br>Impulsive<br>Restless<br>Uncooperative<br>Passive<br>Disinhibited<br>Poor eye contact<br>Confusion<br>Cooperative<br>Apathetic<br>Crying<br>Aggressive<br>Inappropriate<br>Self injurious<br>Withdrawn<br>Dissociating<br>Disorganised<br><br>Replacing current item with iAC item will result in a loss of detail that may be required for care. Keep item and map to iAC. |

## Section F: Functional Status

### iG2b – Hygiene - performance

| interRAI Code | iG2b |
|---|---|
| **Item name** | Hygiene – performance |
| **Response options** | Most dependent episode over the past 24 hours<br>a. PERSONAL HYGIENE - how manages personal hygiene, including combing hair, brushing teeth, shaving, applying makeup, washing and drying face and hands. EXCLUDE BATHS AND SHOWERS<br>0 Independent - No physical assistance, set-up or supervision in any episode<br>1 Set-up help only - Article or device provided or placed within reach, no physical assistance or supervision in any episode<br>2 Supervision - oversight / cueing<br>3 Limited assistance - guided manoeuvring of limbs, physical guidance without taking weight<br>4 Extensive assistance - weight-bearing support (including lifting limbs) by one helper where patient still performs 50% or more of subtasks<br>5 Maximal assistance - weight-bearing support (including lifting limbs) by two or more helpers OR weight-bearing support for more than 50% of subtasks<br>6 Total dependence - full performance by others during all episodes<br>8 Activity did not occur - during entire period |
| **Is similar or mappable item captured in the ieMR?** | Maybe |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Functional Independence Measure Powerform |
| **Mapping options** | If FIM_grooming is already in system and added to ADL:<br>IF FIM_grooming = 1, iG2b = 6<br>IF FIM_grooming = 2, iG2b = 5<br>IF FIM_grooming = 3, iG2b = 4<br>IF FIM_grooming = 4, iG2b = 3<br>IF FIM_grooming = 5, iG2b = 2<br>IF FIM_grooming = 6, iG2b = 1<br>IF FIM_grooming = 7, iG2b = 0 |
| **What other related items (and location) are captured in the ieMR?** | Nursing Interactive View > Adult Systems Assessment > Activities of Daily Living > Hygiene ADLs (accepted/refused options)<br>• Personal care provided<br>• Elimination assistance offered Q2H<br>• Bed bath<br>• Foot care<br>• Hair care<br>• Oral care<br>• Dental needs<br>• Peri care<br>• Shave<br>• Shower |
| **Notes** | Unsure if FIM grooming item is included in ieMR.<br>No direct mapping option for total dependence<br>May need to add explanatory text to ensure consistency with interRAI Acute Care. FIM usually only administered in a rehab setting. |

## iG2j – Eating - performance

| interRAI Code | iG2b |
|---|---|
| **Item name** | Eating – performance |
| **Response options** | Most dependent episode over the past 24 hours<br>b. EATING - how eats and drinks (regardless of skill). Includes intake of nourishment by other means (e.g. tube feeding, TPN)<br>0 Independent - No physical assistance, set-up or supervision in any episode<br>1 Set-up help only - Article or device provided or placed within reach, no physical assistance or supervision in any episode<br>2 Supervision - oversight / cueing<br>3 Limited assistance - guided manoeuvring of limbs, physical guidance without taking weight<br>4 Extensive assistance - weight-bearing support (including lifting limbs) by one helper where patient still performs 50% or more of subtasks<br>5 Maximal assistance - weight-bearing support (including lifting limbs) by two or more helpers OR weight-bearing support for more than 50% of subtasks<br>6 Total dependence - full performance by others during all episodes<br>8 Activity did not occur - during entire period |
| **Is similar or mappable item captured in the ieMR?** | Possibly |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Functional Independence Measure Powerform |
| **Mapping options** | IF the Eating FIM item is used:<br>1 = Total contact assistance; iG2j = 6<br>2 = Maximal contact assistance; iG2j = 5<br>3 = Moderate contact assistance; iG2j = 4<br>4 = Minimal contact assistance; iG2j = 3<br>5 = Supervision or setup; iG2j = 1<br>6 = Modified independence; iG2j = 1<br>7 = Complete independence; iG2j = 0 |
| **What other related items (and location) are captured in the ieMR?** | ContinuousDoc > Documentation > Admission History Adult > Nutrition > Nutritional Screen<br><br>Powerforms for: Inpatient OT Daily documentation, Inpatient OT Discharge summary, Inpatient OT evaluation, or the Community iView (FIM, RUG) |
| **Notes** | This item is captured multiple times across Powerforms in various formats and at different points of care for: Inpatient OT Daily documentation, Inpatient OT Discharge summary, Inpatient OT evaluation, or the Community iView (FIM, RUG)<br><br>It's unclear if the Admission History Adult item can be modified post-admission. |

## iG2e – Walking – performance

| interRAI Code | iG2e |
|---|---|
| **Item name** | Walking – performance |
| **Response options** | Most dependent episode over the past 24 hours. WALKING - how walks between locations on same floor indoors<br>0 Independent - No physical assistance, set-up or supervision in any episode<br>1 Set-up help only - Article or device provided or placed within reach, no physical assistance or supervision in any episode<br>2 Supervision - oversight / cueing<br>3 Limited assistance - guided manoeuvring of limbs, physical guidance without taking weight<br>4 Extensive assistance - weight-bearing support (including lifting limbs) by one helper where patient still performs 50% or more of subtasks<br>5 Maximal assistance - weight-bearing support (including lifting limbs) by two or more helpers OR weight-bearing support for more than 50% of subtasks<br>6 Total dependence - full performance by others during all episodes<br>8 Activity did not occur - during entire period |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose?** | No |
| **Current ieMR location/s** | Nursing Interactive View > Adult Systems Assessment > Activities of Daily Living > **Ambulation assistance** |
| **Mapping options** | Ambulation assistance options<br>• Independent; iG2e = 0<br>• Chair rise assistance; iG2e = 3<br>• Standby assistance; iG2e = 2<br>• One person assistance; iG2e = 4<br>• Two person assistance; iG2e = 5 or 6<br><br>No equivalent options for 1, and inaccurate mapping for 5 and 6. Would not recommend mapping |
| **What other related items (and location) are captured in the ieMR?** | Functional Independence Measure Powerform > Walk/Wheelchair |
| **Notes** | |

## iG2h – Toilet use – performance

| interRAI Code | iG2h |
|---|---|
| **Item name** | Toilet use – performance |
| **Response options** | Most dependent episode over the past 24 hours. TOILET USE - How uses the toilet room (or commode, bedpan, urinal), cleanses self after toilet use or incontinent episodes, changes pad, manages ostomy or catheter, adjust clothes EXCLUDE TRANSFER ON AND OFF TOILET<br>0 Independent - No physical assistance, set-up or supervision in any episode<br>1 Set-up help only - Article or device provided or placed within reach, no physical assistance or supervision in any episode<br>2 Supervision - oversight / cueing<br>3 Limited assistance - guided manoeuvring of limbs, physical guidance without taking weight<br>4 Extensive assistance - weight-bearing support (including lifting limbs) by one helper where patient still performs 50% or more of subtasks<br>5 Maximal assistance - weight-bearing support (including lifting limbs) by two or more helpers OR weight-bearing support for more than 50% of subtasks<br>6 Total dependence - full performance by others during all episodes<br>8 Activity did not occur - during entire period |
| **Is similar or mappable item captured in the ieMR?** | Possible |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Functional Independence Measure Powerform |
| **Mapping options** | FIM toileting item:<br>1 = Total contact assistance; iG2h = 6<br>2 = Maximal contact assistance; iG2h = 5<br>3 = Moderate contact assistance; iG2h = 4<br>4 = Minimal contact assistance; iG2h = 3<br>5 = Supervision or setup; iG2h = 2<br>6 = Modified independence; iG2h = 1<br>7 = Complete independence; iG2h = 0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | If FIM toileting option is available through FIM Powerform, item can be included under ADL or new Functional item<br><br>If not, insert interRAI Acute Care item<br><br>No direct mapping option for total dependence<br><br>May need to add explanatory text to ensure consistency with iAC<br>Part of FIM. Check if full FIM included in Cerner. |
| **Action required** | Identify location of FIM and check if FIM item included<br>If YES, copy / link FIM item into Activities of Daily Living menu options in Adult Systems Assessment interactive view<br>If NO, add interRAI Acute Care item to Activities of Daily Living menu options in Adult Systems Assessment interactive view |

## iG2g – Transfer toilet – performance

| interRAI Code | iG2g |
|---|---|
| **Item name** | Transfer toilet – performance |
| **Response options** | Most dependent episode over the past 24 hours. TRANSFER TOILET - how moves on and off the toilet or commode<br>0 Independent - No physical assistance, set-up or supervision in any episode<br>1 Set-up help only - Article or device provided or placed within reach, no physical assistance or supervision in any episode<br>2 Supervision - oversight / cueing<br>3 Limited assistance - guided manoeuvring of limbs, physical guidance without taking weight<br>4 Extensive assistance - weight-bearing support (including lifting limbs) by one helper where patient still performs 50% or more of subtasks<br>5 Maximal assistance - weight-bearing support (including lifting limbs) by two or more helpers OR weight-bearing support for more than 50% of subtasks<br>6 Total dependence - full performance by others during all episodes<br>8 Activity did not occur - during entire period |
| **Is similar or mappable item captured in the ieMR?** | Possible |
| **Is item fit for purpose** | Possible |
| **Current ieMR location/s** | Functional Independence Measure Powerform |
| **Mapping options** | FIM transfer toilet item:<br>1 = Total contact assistance; iG2h = 6<br>2 = Maximal contact assistance; iG2h = 5<br>3 = Moderate contact assistance; iG2h = 4<br>4 = Minimal contact assistance; iG2h = 3<br>5 = Supervision or setup; iG2h = 2<br>6 = Modified independence; iG2h = 1<br>7 = Complete independence; iG2h = 0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Check if FIM toilet transfer item is included in ieMR<br>If not, insert interRAI Acute Care item<br>No direct mapping option for total dependence<br>May need to add explanatory text to ensure consistency with iAC |

## iG2i – Bed mobility – performance

| interRAI Code | iG2i |
|---|---|
| **Item name** | Bed mobility – performance |
| **Response options** | Most dependent episode over the past 24 hours. BED MOBILITY - how moves to and from lying position, turns side to side, and positions body while in bed.<br>0 Independent - No physical assistance, set-up or supervision in any episode<br>1 Set-up help only - Article or device provided or placed within reach, no physical assistance or supervision in any episode<br>2 Supervision - oversight / cueing<br>3 Limited assistance - guided manoeuvring of limbs, physical guidance without taking weight<br>4 Extensive assistance - weight-bearing support (including lifting limbs) by one helper where patient still performs 50% or more of subtasks<br>5 Maximal assistance - weight-bearing support (including lifting limbs) by two or more helpers OR weight-bearing support for more than 50% of subtasks<br>6 Total dependence - full performance by others during all episodes<br>8 Activity did not occur - during entire period |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | Nursing Interactive view > Adult Systems Assessment > Activities of Daily Living > Bed mobility assistance |
| **Mapping options** | • If Not able to assist, iG2i = 5-6<br>• If Able to assist, iG2i = 3-4<br>• If Supervision, iG2i = 1-2<br>• If Independent, iG2i = 0<br><br>Inaccurate mapping. Would not recommend. |
| **What other related items (and location) are captured in the ieMR?** | Also in physio/OT assessments: bed mobility roll left; bed mobility roll right. |
| **Notes** | |

## iG2a – Bathing – performance

| interRAI Code | iG2a |
|---|---|
| **Item name** | Bathing – performance |
| **Response options** | Most dependent episode over the past 24 hours. BATHING (pre-morbid) - How takes full body bath or shower, including how transfers in and out of tub or shower AND how each part of body is bathed: arms, upper and lower legs, chest, abdomen, perineal area. EXCLUDE WASHING OF BACK AND HAIR<br>0 Independent - No physical assistance, set-up or supervision in any episode<br>1 Set-up help only - Article or device provided or placed within reach, no physical assistance or supervision in any episode<br>2 Supervision - oversight / cueing<br>3 Limited assistance - guided manoeuvring of limbs, physical guidance without taking weight<br>4 Extensive assistance - weight-bearing support (including lifting limbs) by one helper where patient still performs 50% or more of subtasks<br>5 Maximal assistance - weight-bearing support (including lifting limbs) by two or more helpers OR weight-bearing support for more than 50% of subtasks<br>6 Total dependence - full performance by others during all episodes<br>8 Activity did not occur - during entire period |
| **Is similar or mappable item captured in the ieMR?** | Possible |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Functional Independence Measure Powerform > bathing |
| **Mapping options** | IF the FIM_bathing item is used:<br>1 = Total contact assistance; iG2a = 6<br>2 = Maximal contact assistance; iG2a = 5<br>3 = Moderate contact assistance; iG2a = 4<br>4 = Minimal contact assistance; iG2a = 3<br>5 = Supervision or setup; iG2a = 1<br>6 = Modified independence; iG2a = 1<br>7 = Complete independence; iG2a = 0 |
| **What other related items (and location) are captured in the ieMR?** | Nursing Interactive View > Adult Systems Assessment > Activities of Daily Living > Hygiene ADLs (accepted/refused options)<br>• Personal care provided<br>• Elimination assistance offered Q2H<br>• Bed bath<br>• Foot care<br>• Hair care<br>• Oral care<br>• Dental needs<br>• Peri care<br>• Shave<br>• Shower |
| **Notes** | If FIM bathing option is available through FIM Powerform, item can be included under ADL or new Functional item<br>If not, insert interRAI Acute Care item<br>May need to add explanatory text to ensure consistency with iAC |

## iG2d – Dressing lower body – performance

| interRAI Code | iG2d |
|---|---|
| **Item name** | Dressing lower body – performance |
| **Response options** | Most dependent episode over the past 24 hours. DRESSING LOWER BODY (PRE-MORBID) - how dresses and undresses (street clothes, underwear) from the waist down, including prostheses, orthotics, belts, pants, skirts, shoes, fasteners, etc.<br>0 Independent - No physical assistance, set-up or supervision in any episode<br>1 Set-up help only - Article or device provided or placed within reach, no physical assistance or supervision in any episode<br>2 Supervision - oversight / cueing<br>3 Limited assistance - guided manoeuvring of limbs, physical guidance without taking weight<br>4 Extensive assistance - weight-bearing support (including lifting limbs) by one helper where patient still performs 50% or more of subtasks<br>5 Maximal assistance - weight-bearing support (including lifting limbs) by two or more helpers OR weight-bearing support for more than 50% of subtasks<br>6 Total dependence - full performance by others during all episodes<br>8 Activity did not occur - during entire period |
| **Is similar or mappable item captured in the ieMR?** | Possible |
| **Is item fit for purpose** | Possible |
| **Current ieMR location/s** | Functional Independence Measure Powerform |
| **Mapping options** | IF the FIM_dressing_lower item is used:<br>1 = Total contact assistance; iG2d = 6<br>2 = Maximal contact assistance; iG2d = 5<br>3 = Moderate contact assistance; iG2d = 4<br>4 = Minimal contact assistance; iG2d = 3<br>5 = Supervision or setup; iG2d = 1<br>6 = Modified independence; iG2d = 1<br>7 = Complete independence; iG2d = 0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | If FIM dressing – lower option is available through FIM Powerform, item can be included under ADL or new Functional item<br>If not, insert interRAI Acute Care item<br>May need to add explanatory text to ensure consistency with iAC |

## iJ2oo – Balance

| interRAI Code | iJ2oo |
|---|---|
| **Item name** | Balance |
| **Response options** | Difficulty or unable to move to a standing position unassisted<br>0 Not present<br>1 Present |
| **Is similar or mappable item captured in the ieMR?** | Possible |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Allied Health and Community Powerform: Berg Balance Scale > **Sitting to Standing** |
| **Mapping options** | Berg Balance Scale; Sitting to Standing<br>Instructions: please stand up. Try not to use your hand for support<br>4 = Able to stand without using hand and stabilise independently<br>3 = Able to stand independently using hands<br>2 = Able to stand using hand after several tries<br>1 = Needs minimal aid to stand or stabilise<br>0 = Needs moderate or maximal assist to stand<br><br>If Sitting to Standing score = 0-2; iJ200 = 1<br>If Sitting to Standing score = 3-4; iJ200 = 0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Not currently part of the nursing iView assessment, conducted by allied health and community health staff |

## iG6b – Activity level

| interRAI Code | iG6b |
|---|---|
| **Item name** | Activity level |
| **Response options** | In the 3 days prior to the onset of the illness precipitating admission, number of days went out of the house or building in which he or she resides (no matter how short the period)<br>0 No days out<br>1 Did not go out in last 3 days, but usually goes out over a 3 day period<br>2 1-2 days<br>3 3 days |
| **Is similar or mappable item captured in the ieMR?** | No |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | n/a |
| **Mapping options** | |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## iG1dd – Managing **medications**

| interRAI Code | iG1dd |
|---|---|
| **Item name** | Managing medications |
| **Response options** | Code PERFORMANCE in activity around the home or in the community during the LAST 3 DAYS prior to onset of acute illness precipitating admission<br>Managing medications - How medications are managed (e.g. remembering to take medicines, opening bottles, taking correct rug dosages, giving injections, applying ointments)<br>0 Independent<br>1 Set-up help only<br>2 Supervision or any assistance during task<br>8 Activity did not occur (no medications prescribed) |
| **Is similar or mappable item captured in the ieMR?** | Possibly |
| **Is item fit for purpose** | Possibly |
| **Current ieMR location/s** | Help Team Functional Assessment Powerform (unsighted) |
| **Mapping options** | Can you take your own medicines?<br>IF answer is Independently, iG1dd = 0<br>IF answer is With Assistance, iG1dd = 1<br>IF answer is Unable, iG1dd = 2<br>IF answer is missing, iG1dd = 8 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Unable to locate this Powerform – is it still in use? |

## iG3 – Primary mode of locomotion indoors

| interRAI Code | iG3 |
|---|---|
| **Item name** | Primary mode of locomotion indoors |
| **Response options** | Primary mode of locomotion indoors<br>0 Walking, no assistive device<br>1 Walking, uses assistive device - e.g. cane, walker, crutch, pushing wheelchair<br>2 Wheelchair, scooter<br>3 Bed-bound<br>Complete the pre-morbid item if the admission score is >0<br>Pre-morbid Primary Mode of Locomotion - in the 3 days prior to the onset of the acute illness that resulted in the admission, how primary locomotion was managed |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | Powerform: Functional Independence Measure |
| **Mapping options** | IF FIM_Walk = W, iG3 = 0<br>IF FIM_Walk = C, iG3 = 2<br>IF FIM_Walk = B, iG3 = 1<br><br>No match for bed-bound in this item |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | May need to add explanatory text to ensure consistency with iAC |

## Section G: Spiritual and Cultural Needs

### iLL5 – Spiritual and cultural needs

| interRAI Code | iLL5 |
|---|---|
| **Item name** | Spiritual and cultural needs |
| **Response options** | Person has specific spiritual or cultural requirements that must be addressed in hospital<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | n/a |
| **Is item fit for purpose** | n/a |
| **Current ieMR location/s** | n/a |
| **Mapping options** | |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | This item does not inform and current interRAI derivative applications. |

## Section H: Continence

### iH1 – Bladder continence

| interRAI Code | iH1 |
|---|---|
| **Item name** | Bladder continence |
| **Response options** | Bladder continence:<br>0 Continent - complete control; DOES NOT USE any catheter or other urinary collection device<br>1 Control with any catheter or ostomy<br>2 Infrequently incontinent - not incontinent over last 24 hours, but does have incontinent episodes<br>3 Occasionally incontinent<br>4 Frequently incontinent - incontinent daily, but some control present<br>5 Incontinent - no control present<br>8 Did not occur - no urine output from bladder<br><br>Complete the pre-morbid item if the admission score is >0<br>Pre-morbid Bladder Continence - Record pattern of bladder continence in the 3 days prior to the onset of the acute illness that resulted in the admission |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Possibly |
| **Current ieMR location/s** | Nursing Interactive View > Adult Systems Assessment > Genitourinary > **Urinary elimination** |
| **Mapping options** | • If *Voiding, no difficulties*, iH2 = 0<br>• If *Voiding with difficulties*, iH2 = ??<br>• If *Not voiding*, iH2 = ??<br>• If *In/out catheter*, iH2 = 1<br>• If *Incontinence pad*, iH2 = check frequency<br>• If *Indwelling catheter*, iH2 = 1<br>• If *Intermittent clean self catheterisation*, iH2 = 1<br>• If *Intermittent straight catheter*, iH2 = 1<br>• If *Suprapubic catheter*, iH2 = 1<br>• If *Nephrostomy tube*, iH2 = 3<br>• If *Urinary sheath*, iH2 = ??<br>• If *Urostomy*, iH2 = ?? |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Current item may not be easily mappable to the iAC, but contains more information to inform care planning. Would not recommend replacing with iAC item |

## iH2 – Urinary collection device

| interRAI Code | iH2 |
|---|---|
| **Item name** | Urinary collection device |
| **Response options** | Urinary Collection Device<br>0 None<br>1 Condom catheter<br>2 Indwelling catheter<br>3 Cystostomy, nephrostomy, ureterostomy<br><br>Complete the pre-morbid item if the admission score is >0<br>Pre-morbid Urinary Collection Device - in the 3 days prior to the onset of the acute illness that resulted in the admission, presence of any urinary collection device |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Possibly |
| **Current ieMR location/s** | Nursing Interactive View > Adult Systems Assessment > Genitourinary > **Urinary elimination** |
| **Mapping options** | • If *Voiding, no difficulties*, iH2 = 0<br>• If *Voiding with difficulties*, iH2 = 0<br>• If *Not voiding*, iH2 = 0<br>• If *In/out catheter*, iH2 = 1<br>• If *Incontinence pad*, iH2 = 0<br>• If *Indwelling catheter*, iH2 = 2<br>• If *Intermittent clean self catheterisation*, iH2 = ??<br>• If *Intermittent straight catheter*, iH2 = ??<br>• If *Suprapubic catheter*, iH2 = ??<br>• If *Nephrostomy tube*, iH2 = 3<br>• If *Urinary sheath*, iH2 = ??<br>• If *Urostomy*, iH2 = 3 |
| **What other related items (and location) are captured in the ieMR?** | Admission History Adult – Social History screen has question about lines/tubes present on admission with Indwelling urinary catheter option. This item could be amended to provide more information and pre-populate the Urinary elimination assessment. |
| **Notes** | Current item may not be easily mappable to the iAC, but contains more information to inform care planning. Would not recommend replacing with iAC item |

## iH3 – Bowel continence

| interRAI Code | iH3 |
|---|---|
| **Item name** | Bowel continence |
| **Response options** | Bowel continence<br>0 Continent - complete control; DOES NOT USE any type of ostomy device<br>1 Managed with ostomy<br>2 Infrequently incontinent - not incontinent ofer last 24 hours, but does have incontinent episodes<br>3 Occasionally incontinent<br>4 Frequently incontinent - incontinent daily, but some control present<br>5 Incontinent - no control present<br>8 Did not occur - no bowel movement |
| **Is similar or mappable item captured in the ieMR?** | Possibly |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | Nursing interactive view > Adult Systems Assessment > Gastrointestinal > GI symptoms |
| **Mapping options** | • If *None*, iH3 = 0<br>• If *Abdominal tenderness*, no mapping to iH3<br>• If *Anorexia*, no mapping to iH3<br>• If *Belching*, no mapping to iH3<br>• If *Constipation*, no mapping to iH3<br>• If *Cramping*, no mapping to iH3<br>• If *Diarrhoea*, need to know if frequent and/or managed<br>• If *Flatulence*, no mapping to iH3<br>• If *Heartburn*, no mapping to iH3<br>• If *Hiccoughing*, no mapping to iH3<br>• If *Impaction*, no mapping to iH3<br>• If *Incontinence*, need to know if frequent and/or managed<br>• If *Nausea*<br>• … |
| **What other related items (and location) are captured in the ieMR?** | • |
| **Notes** | May be able to modify options |
| **Action required** | |

## iH9 – Other elimination problem

| interRAI Code | iH9 |
|---|---|
| **Item name** | Other elimination problem |
| **Response options** | Other Elimination problem e.g. diarrhoea, constipation, frequency or urgency of urination<br>0 Not present<br>1 Present |
| **Is similar or mappable item captured in the ieMR?** | |
| **Is item fit for purpose** | |
| **Current ieMR location/s** | |
| **Mapping options** | |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | No equivalent identified |
| **Action required** | |

## Section I: Health Conditions

### iJ1b – Falls (CA)

| interRAI Code | iJ1b |
|---|---|
| **Item name** | Falls |
| **Response options** | 0 No fall in last 90 days<br>1 One or more falls in last 90 days |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult – Falls |
| **Mapping options** | History of falls options:<br>If Immediately prior to hospitalisation is Yes, iJ1b = 1<br>If Within last three months is Yes, iJ1b = 1<br>If Within last one year is Yes, iJ1b = 0<br>If all No, iJ1b = 0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Check if all sections are completed for all patients on admission |
| **Action required** | Draw item directly from Admission History to calculate Falls and Frailty measures |

## iJ3 – Dyspnoea

| interRAI Code | iJ3 |
|---|---|
| **Item name** | Dyspnoea |
| **Response options** | Dyspnoea<br>0 Absence of symptoms<br>1 Absent at rest, but present when performed moderate activities<br>2 Absent at rest, but present when performed normal day-to-day activities<br>3 Present at rest |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | Nursing Interactive View > Adult Systems Assessment > Respiratory > Respiratory Symptoms |
| **Mapping options** | Respiratory symptoms:<br>• If *None*, iJ3 = 0<br>• If *Cough*, need to understand frequency<br>• If *Denies shortness of breath at rest*, need to understand if present during activity<br>• If *Denies shortness of breath with usual activity*, need to understand if present during moderate activities and/or at rest<br>• If *Drooling*, cannot be mapped to iJ3<br>• If *Shortness of breath*, need to understand if present during activity and/or at rest<br>• If *Other*, cannot be mapped to iJ3 |
| **What other related items (and location) are captured in the ieMR?** | Various community and allied health powerforms |
| **Notes** | Most other items seem to be formal assessments conducted by physiotherapists or OTs. |

## iJ5h – Pain frequency (AC)

| interRAI Code | iJ5h |
|---|---|
| **Item name** | Pain frequency (AC) |
| **Response options** | PAIN SYMPTOMS<br>Note: always ask the patient about frequency, intensity and control. Observe patient and ask others who are in contact with patient<br>b. Frequency with which patient complains of or shows evidence or pain including grimacing, teeth clenching, moaning, withdrawal when touched, or other non-verbal signs suggesting pain<br>0 No pain<br>1 Mild<br>2 Moderate<br>3 Severe<br>4 Times when pain is horrible or excruciating<br><br>If item score is 0, Skip to I4 |
| **Is similar or mappable item captured in the ieMR?** | No |
| **Is item fit for purpose** | n/a |
| **Current ieMR location/s** | n/a |
| **Mapping options** | n/a |
| **What other related items (and location) are captured in the ieMR?** | n/a |
| **Notes** | Could not locate specific item that maps to iAC |

## iJ5b – Pain intensity

| interRAI Code | iJ5b |
|---|---|
| **Item name** | Pain intensity |
| **Response options** | PAIN SYMPTOMS<br>Note: always ask the patient about frequency, intensity and control. Observe patient and ask others who are in contact with patient<br>b. Intensity of highest level of pain present<br>0 No pain<br>1 Mild<br>2 Moderate<br>3 Severe<br>4 Times when pain is horrible or excruciating |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Nursing Interactive View > Adult Quick View > Pain Assessment > Pain Assessment > Numeric rating at rest |
| **Mapping options** | Numeric rating at rest:<br>If rating = 10 severe pain; iJ5b = 4<br>If rating = 9 severe pain; iJ5b = 3<br>If rating = 8 severe pain; iJ5b = 3<br>If rating = 7 moderate pain; iJ5b = 2<br>If rating = 6 moderate pain; iJ5b = 2<br>If rating = 5 moderate pain; iJ5b = 2<br>If rating = 4 moderate pain; iJ5b = 2<br>If rating = 3 mild pain; iJ5b = 1<br>If rating = 2 mild pain; iJ5b = 1<br>If rating = 1 mild pain; iJ5b = 1<br>If rating = 0 no pain; iJ5b = 0 |
| **What other related items (and location) are captured in the ieMR?** | Interactive View > Adult Quick View > Pain Assessment > Pain Assessment > PAINAD Scale (Pain assessment in advanced dementia) may be suitable for *non-verbal patients*:<br>• Breathing independent of vocalisation (normal; occasional laboured breathing, short period hyperventilation; noisy laboured breathing, long periods of hyperventilation, Cheyne-stokes respirations)<br>• Negative vocalisation (none; occasional moan or groan, low level speech with negative or disapproving quality; repeated troubled calling out, loud moaning or groaning, crying)<br>• Facial expression (smiling or inexpressive; sad, frightened, frowning; facial grimacing)<br>• Body language (relaxed; tense, distressed pacing, fidgeting; rigid, fists clenched, knees pulled up, pulling or pushing away, striking out)<br>• Consolability (no need to console; distracted or reassured by voice or touch; unable to console, distract or reassure) |
| **Notes** | |

## iJ8a – Smokes tobacco

| interRAI Code | iJ8a |
|---|---|
| **Item name** | Smokes tobacco |
| **Response options** | a. Smokes tobacco daily<br>0 No<br>1 Not in the last 3 days, but is usually a smoker<br>2 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult > Social History |
| **Mapping options** | Have you smoked tobacco in the last 30 days?<br>If yes AND tobacco last use is <3 days, iJ8a = 2<br>If yes AND tobacco last use is >3 days, iJ8a = 1<br>If no, iJ8a = 0<br><br>if yes, Tobacco last use (smoking cessation pathway triggered) |
| **What other related items (and location) are captured in the ieMR?** | Nursing Interactive View > Adult Risk Assessments > Substance Use > Tobacco |
| **Notes** | Both items ask about tobacco use in **past 30 days**.<br><br>As this triggers an order for the smoking cessation pathway, the window may not be modifiable. |

## iJ8b – Alcohol

| interRAI Code | iJ8b |
|---|---|
| **Item name** | Alcohol |
| **Response options** | b. Alcohol - highest number of drinks in any 'single setting' in last 14 days<br>0 None<br>1 1<br>2 2 - 4<br>3 5 or more |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | No |
| **Current ieMR location/s** | Adult Risk Assessments – Substance Use – Alcohol |
| **Mapping options** | Cannot be mapped. Response options:<br>• Alcohol<br>• Drink daily<br>• Drink > 6 standard drinks/session<br>• Drug and alcohol liaison contacted<br>• Consent obtained from patient |
| **What other related items (and location) are captured in the ieMR?** | Admission History Adult > Social History<br>Alcohol last use (date/time of last use) |
| **Notes** | |

## iJ8d – Other substances (AC)

| interRAI Code | iJ8d |
|---|---|
| **Item name** | Other substances (AC) |
| **Response options** | c. Other substances - e.g. hallucinogens, stimulants, opiates, other psychoactive substances. EXCLUDE PRESCRIPTION MEDICATIONS<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Possibly |
| **Current ieMR location/s** | Adult Risk Assessments – Substance Use – Other Drugs |
| **Mapping options** | Options under Other Drugs:<br>Other Drugs<br>Type of other drugs<br>Injected any drugs in previous 2 months<br>On opiate replacement therapy<br>Alcohol and drug liaison contacted<br>What type of opiate therapy are you on? |
| **What other related items (and location) are captured in the ieMR?** | Admission History Adult > Social History<br>Recreational drug last use (date/time) |
| **Notes** | |

## iM2 – Drug allergy

| interRAI Code | iM2 |
|---|---|
| **Item name** | Drug allergy |
| **Response options** | ALLERGIES / ADVERSE REACTIONS<br>a. To any drug<br>0 No<br>1 Yes<br>Specify ….. |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Standalone menu for Allergies |
| **Mapping options** | If Allergies section contains content classified as ‘Drug’, iM2 = 1. |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Able to add directly from any screen. |

## iM21 – Allergy to food/latex/other

| interRAI Code | iM21 |
|---|---|
| **Item name** | Allergy to food/latex/other |
| **Response options** | ALLERGIES / ADVERSE REACTIONS<br>a. To food / latex / other<br>0 No<br>1 Yes<br>Specify ….. |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Standalone menu for Allergies |
| **Mapping options** | Precise mapping can be conducted with review of category options for allergies menu, e.g.<br>If Allergies section contains content classified as ‘Food’, iM2 = 1. |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Able to add directly from any screen. |

## iJ20 – Sleep

| interRAI Code | iJ20 |
|---|---|
| **Item name** | Sleep |
| **Response options** | Difficulty falling or staying asleep; waking up too early; restlessness; non-restful sleep<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult – Functional |
| **Mapping options** | Sleeping Behaviours item options:<br>• Reverse sleep-wake cycle<br>• Difficulty awakening<br>• Difficulty falling asleep<br>• Difficulty sleeping at night<br>• Early morning awakening<br>• Enuresis<br>• Hypersomnia<br>• Middle of night awakening<br>• Night terrors<br>• Nightmares<br>• Reports no problems<br>• Sleepwalking<br>• Restless sleeper<br>• Other:<br>If any of the above selected, iJ20 = 1.<br>If none selected, iJ20 = 0. |
| **What other related items (and location) are captured in the ieMR?** | Nursing Interactive View > Adult Systems Assessment > Behavioural Observation > Sleep<br>A – Awake, or awake at times in last hour<br>S – Uninterrupted sleep or last hour |
| **Notes** | *Does this need to be monitored over time during admission?* |

## iJ6a – Instability of conditions

| interRAI Code | iJ6a |
|---|---|
| **Item name** | Instability of conditions |
| **Response options** | Conditions / diseases make cognitive, ADL, mood or behaviour patterns unstable (fluctuating, precarious, or deteriorating)<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | No |
| **Is item fit for purpose** | n/a |
| **Current ieMR location/s** | n/a |
| **Mapping options** | n/a |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## Section J: Oral and Nutritional Status

### iK1ab – Height - cm

| interRAI Code | iK1ab |
|---|---|
| **Item name** | Height – cm |
| **Response options** | Height in centimetres |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Basic Admission Information – Adult |
| **Mapping options** | Height/Length Measured (cm) feeds directly into interRAI Acute Care calculations |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | BMI automatically calculated |

### iK1bb – Weight – kg

| interRAI Code | iK1bb |
|---|---|
| **Item name** | Weight – kg |
| **Response options** | Weight in kilograms |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Basic Admission Information – Adult |
| **Mapping options** | Weight Measured (kg) feeds directly into interRAI Acute Care calculations |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | BMI automatically calculated |

## iK2a – Weight loss

| interRAI Code | iJ2a |
|---|---|
| **Item name** | Weight loss |
| **Response options** | Unintentional weight loss of 5% or more in LAST 30 DAYS, or 10% or more in LAST 180 DAYS<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Maybe |
| **Current ieMR location/s** | Admission History Adult > Nutritional Screen |
| **Mapping options** | Unintentional weight change greater than 5 kgs in the last 6 months?<br>• If yes, calculate as a percentage of weight, iJ2a = 1 if >5%<br>• If no, iJ2a = 0 |
| **What other related items (and location) are captured in the ieMR?** | Nursing Interactive View > Adult Risk Assessments > Modified Waterlow Risk Score – Lost weight recently without trying:<br>• Check if weight loss is visible in 'weight measured'<br>• If weight loss, check it was WITHOUG TRYING. Select NO if trying to lose weight<br>• If patient unsure of weight loss, ask 'are your clothes, belt or watch any looser? Select YES if looser. |
| **Notes** | |
| **Action required** | |

## iK23 – Mode of nutritional intake (0-2, AC)

| interRAI Code | iK23 |
|---|---|
| **Item name** | Mode of nutritional intake (0-2, AC) |
| **Response options** | 0 Normal<br>1 Diet modification required - e.g. pureed or minced diet<br>2 PEG tube or other feeding |
| **Is similar or mappable item captured in the ieMR?** | Possibly |
| **Is item fit for purpose** | Possibly |
| **Mapping options** | • If *Constipation*, no mapping to iK23<br>• If *Eating disorder*, no mapping to iK23<br>• If *Enteral feedings*, iK23 = 2<br>• If *Fluid intake less than 50% of normal*, no mapping to iK23<br>• If *Impaired nutritional intake*, more info required for mapping to iK23<br>• If *Nausea, vomiting, diarrhoea*, no mapping to iK23<br>• If *Skin breakdown or pressure ulcer*, no mapping to iK23<br>• If *TPN*, no mapping to iK23<br>• If *Other*, no mapping to iK23 |
| **What other related items (and location) are captured in the ieMR?** | Nursing interactive view > Adult Systems Assessment > Gastrointestinal > Nutrition risk factors<br><br>Admission History Adult – Social History screen has question about lines/tubes present on admission with Feeding tube option |
| **Notes** | |

## **iK4a –** Dentures

| interRAI Code | iK4a |
|---|---|
| **Item name** | Dentures |
| **Response options** | DENTAL OR ORAL<br>Experienced any of the following over the last 3 days:<br>a. Wears a denture (or removable prosthesis)<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult > Nutritional Screen |
| **Mapping options** | Dentures:<br>If yes, iK4a = 1<br>If no, iK4a = 0 |
| **What other related items (and location) are captured in the ieMR?** | n/a |
| **Notes** | |

## iK24 – Other dental or oral problems (0,1, AC)

| interRAI Code | iK24 |
|---|---|
| **Item name** | Other dental or oral problems (0,1, AC) |
| **Response options** | DENTAL OR ORAL<br>Experienced any of the following over the last 3 days:<br>b. Other dental / oral problems - e.g. broken or not intact natural teeth; mouth or facial discomfort; dry mouth; difficulty chewing; mucosal inflammation<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Possibly |
| **Current ieMR location/s** | Nursing interactive view > Adult Systems Assessment > Gastrointestinal > Eating difficulties |
| **Mapping options** | • If *Chewing*, iK24 = 1<br>• If *Loose teeth*, iK24 = 1<br>• If *No teeth*, iK24 = 1<br>• If *Swallowing*, iK24 = 1<br>• If *Other*, iK24 = 1 |
| **What other related items (and location) are captured in the ieMR?** | Admission History Adult > Nutritional Screen > Eating difficulties<br>• Chewing<br>• Loose teeth<br>• No teeth<br>• Swallowing<br>• Other |
| **Notes** | |

## Section K: Skin Conditions

### iL1 – Most severe pressure ulcer

| interRAI Code | iL1 |
|---|---|
| **Item name** | Most severe pressure ulcer |
| **Response options** | 0 No pressure ulcer<br>1 Any area of persistent skin redness<br>2 Partial lost of skin layers<br>3 Deep craters in the skin<br>4 Breaks in skin exposing muscle or bone<br>5 Not codeable - e.g. necrotic eschar predominant |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Possibly (staging mapping required) |
| **Current ieMR location/s** | Nursing Interactive View > Adult Systems Assessment > Incision / Wound > Skin Alterations > Pressure Injury > [body region] > Pressure Injury Stage |
| **Mapping options** | Response options are:<br>• Stage 1<br>• Stage 2<br>• Stage 3<br>• Stage 4<br>• Unstageable<br>• Suspected deep tissue injury<br>• Mucosal membrane |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## iL2 – Prior pressure ulcer

| interRAI Code | iL2 |
|---|---|
| **Item name** | Prior pressure ulcer |
| **Response options** | Prior pressure ulcer, now healed<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Possibly |
| **Current ieMR location/s** | Adult Risk Assessments – Modified Waterlow Risk Score > Previous pressure injury |
| **Mapping options** | If yes, iL2 = 1<br>If no, iL2 = 0 |
| **What other related items (and location) are captured in the ieMR?** | Adult Risk Assessments – Skin Inspection |
| **Notes** | Modified Waterlow asks if previous pressure injury, does not ask if it is healed. |

## iL10 – Other problems with skin integrity

| interRAI Code | iL10 |
|---|---|
| **Item name** | Other problems with skin integrity |
| **Response options** | 0 No change<br>1 Change to skin integrity - e.g. venous / arterial ulcers, skin tears, wounds, cuts, rashes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Nursing Interactive View > Adult Risk Assessments > Skin Inspection |
| **Mapping options** | If Skin inspection – wound present = Yes, iL10 = 1<br>If Skin inspection – skin tear(s) present = Yes, iL10 = 1 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## Section L: Responsibilities and Directives

### iO4 – Enduring power of attorney (AC)

| interRAI Code | iO4 |
|---|---|
| **Item name** | Enduring power of attorney (AC) |
| **Response options** | 0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult > Medico-Legal |
| **Mapping options** | If Enduring power of attorney = Yes, iO4 = 1<br>If Enduring power of attorney = No, iO4 = 0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

### iO5 – Advance directive (AC)

| interRAI Code | iO5 |
|---|---|
| **Item name** | Advance directive (AC) |
| **Response options** | 0 Not in place<br>1 In place |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult > Medico-Legal |
| **Mapping options** | If Advance health directive = Yes, iO4 = 1<br>If Advance health directive = No, iO4 = 0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## iO6a – Other formal care plan (AC)

| interRAI Code | iO6a |
|---|---|
| **Item name** | Other formal care plan (AC) |
| **Response options** | 0 No<br>1 Yes<br>Specify … |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Possibly |
| **Current ieMR location/s** | Admission History Adult > Medico-Legal |
| **Mapping options** | If either ARP or Statement of choices = Yes, iO6a = 1<br>If either ARP or Statement of choices = No, iO6a = 0 |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | Only asks about Active acute resus plan and Statement of choices |
| **Action required** | Draw information direct from admission history |

## Section M: Discharge preparation

### iR10a – Prior community services

| interRAI Code | iR10a |
|---|---|
| **Item name** | Prior community services |
| **Response options** | Was the person receiving formal (other than family and friends) support services prior to admission?<br>0 No<br>1 Yes<br>2 Living in institutional setting |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult – Living and Resources – Special services and community resources |
| **Mapping options** | Special services and community resources options:<br>• Aboriginal and Torres Strait Islander Liaison Officer<br>• Adult Protective Services<br>• Child Protective Services<br>• Clergy<br>• Counselling<br>• Court order<br>• Discharge transportation<br>• Gifted program<br>• Housekeeping<br>• Meal delivery/preparation<br>• Restraining order<br>• Schooling<br>• Special education<br>• Support group<br>• WIC<br>• Other<br>• Accommodation Ownership options include:<br>• Boarding house<br>• Retirement village<br>• Supported accommodation<br>• Emergency accommodation<br>• RACF<br>• Correctional facility |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## iR6e – Support person pos. abt. Discharge (AC)

| interRAI Code | iR6e |
|---|---|
| **Item name** | Support person pos. abt. Discharge (AC) |
| **Response options** | Has a support person who is positive toward discharge or maintaining residence in the community<br>0 No<br>1 Yes<br>2 Living in institutional setting |
| **Is similar or mappable item captured in the ieMR?** | No |
| **Is item fit for purpose** | n/a |
| **Current ieMR location/s** | |
| **Mapping options** | |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## iF7d – Family overwhelmed

| interRAI Code | iF7d |
|---|---|
| **Item name** | Family overwhelmed |
| **Response options** | Family or close friends report feeling overwhelmed by patient's illness<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | No |
| **Is item fit for purpose** | n/a |
| **Current ieMR location/s** | |
| **Mapping options** | |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## iA11b – Residential Status-Usual

| interRAI Code | iA11b |
|---|---|
| **Item name** | Residential Status-Usual |
| **Response options** | 1 Private residence - owned / purchasing<br>- client owns / is purchasing<br>- family member or related person owns / is purchasing<br>2 Private residence - private rental<br>3 Private residence - public rental or community housing: indigenous community / settlement<br>4 Independent living within a retirement village<br>5 Boarding house / rooming house / private hostel<br>6 Supported community accommodation<br>7 Short-term crisis, emergency, or transitional accommodation<br>8 Mental health residence - e.g. psychiatric group home<br>9 Group home for patients with physical disability<br>10 Setting for patients with intellectual disability<br>11 Residential aged care service<br>12 Acute care hospital<br>13 Hospice facility / palliative care unit<br>14 Rehabilitation hospital / unit<br>15 Psychiatric hospital / unit<br>16 Correctional facility<br>17 Public place / temporary shelter<br>18 Other |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult – Living and Resources – Accommodation Ownership |
| **Mapping options** | Accommodation Ownership options are:<br>• Privately owned home<br>• Private rental<br>• Public rental<br>• Boarding house<br>• Retirement village<br>• Supported accommodation<br>• Emergency accommodation<br>• RACF<br>• On wait list for public rental<br>• Homeless<br>• Correctional facility |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## iR10b – Prior community services reinitiated

| interRAI Code | iR10b |
|---|---|
| **Item name** | Prior community services reinitiated |
| **Response options** | Formal support services received prior to admission have been reinitiated?<br>0 No<br>1 Yes |
| **Is similar or mappable item captured in the ieMR?** | Yes |
| **Is item fit for purpose** | Yes |
| **Current ieMR location/s** | Admission History Adult – Living and Resources – Special services and community resources |
| **Mapping options** | Special services and community resources options:<br>• Aboriginal and Torres Strait Islander Liaison Officer<br>• Adult Protective Services<br>• Child Protective Services<br>• Clergy<br>• Counselling<br>• Court order<br>• Discharge transportation<br>• Gifted program<br>• Housekeeping<br>• Meal delivery/preparation<br>• Restraining order<br>• Schooling<br>• Special education<br>• Support group<br>• WIC<br>• Other<br>• Accommodation Ownership options include:<br>• Boarding house<br>• Retirement village<br>• Supported accommodation<br>• Emergency accommodation<br>• RACF<br>• Correctional facility |
| **What other related items (and location) are captured in the ieMR?** | |
| **Notes** | |

## Contact details

**Professor Len Gray**
T +61 7 **31765530**
E len.gray@uq.edu.au
W uq.edu.au/chsr

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