

# Developing a framework to implement ICD-11 in Australian health services



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## Abstract

Australia uses morbidity data for a range of activities including safety and quality monitoring, benchmarking, research and funding models, including public hospital funding through activity based funding (ABF). Australia is currently assessing the gaps and opportunities that ICD-11 can offer as a replacement to the Australian Modification of ICD-10.

## Current use of ICD in Australian health services

Since 1998, Australia has used the International Classification of Diseases, Tenth Revision (ICD-10) as the basis for the Australian Modification (ICD-10-AM) which is used to classify admitted patient care morbidity and activity in Australian health services.

Regular refinement has produced new releases called editions. The Independent Health and Aged Care Pricing Authority (IHACPA) took over classification development under Australia's National Health Reform Act in 2011 and transitioned its development. IHACPA established a Governance Framework outlining a principles-based approach for the process, decisions and priorities for ICD-10-AM development.

Since the cessation of ICD-10 development, IHACPA has updated the decision principles to limit ICD-10-AM development in preparation for a potential move to ICD-11 and to ensure any updates that are made align with ICD-11.

An example of this approach was to replace outdated and stigmatising content in ICD-10-AM Twelfth Edition. While the content was replaced in code and category titles, ICD-11 offers additional benefits to ICD-10(-AM) due to its structural differences making a further argument to limit, if not freeze, further development of ICD-10-AM.

ICD-10-AM content	Alignment with ICD-11	Added benefits in ICD-11 structure
F64 <i>Gender identity disorder</i>	Updated category to <i>Gender incongruence</i>	Gender incongruence removed from Mental and Behavioural Disorders chapter, further reducing stigma
F84.5 <i>Asperger's syndrome</i>	Converted to category F84 <i>Autism spectrum disorder</i>	<i>Autism spectrum disorder pre-coordinates presence or absence of impairments, the ability to due this in ICD-10-AM is limited due to its structure</i>

## Mapping ICD-10-AM to ICD-11 the most important first step

In Australia IHACPA commenced a rigorous mapping process between ICD-10-AM and ICD-11 in 2023 to create an enduring cross-walk between the classifications. The process is outlined in documentation that sets out the scope, method, quality assurance and maintenance of the project and is based on the WHO-FIC mapping guidance.

It is important for Australia to understand the ICD-10-AM codes represented as stem codes in ICD-11 given the role they may play in casemix classifications, such as the AR-DRG classification. Below are some preliminary results of mapping ICD-10-AM codes from Chapter 15 Pregnancy, childbirth and the puerperium to ICD-11 MMS stem codes.

**Results:** Chapter 15 ICD-10-AM codes to ICD-11 MMS stem without post-coordination.

Category	Maps	Example source ICD-10-AM	Example target ICD-11
Exact match	329	O24.29 <i>Pre-existing other specified diabetes mellitus in pregnancy, childbirth and the puerperium, unspecified</i>	JA63.Y <i>Other specified diabetes mellitus in pregnancy</i>
Greater specificity	1	O21.9 <i>Vomiting in pregnancy, not elsewhere classified</i>	JA60.Z <i>Excessive vomiting in pregnancy, unspecified</i>
Lesser specificity	86	O35.6 <i>Maternal care for (suspected) damage to fetus by radiation</i>	JA85.Y <i>Maternal care for known or suspected other specified fetal abnormality or damage</i>
Stem match not possible	7	O09.1 <i>Duration of pregnancy 5-13 completed weeks</i>	(XT09 <i>Duration of pregnancy 5-13 completed weeks</i> )

The matches categorised as 'Lesser specificity' were then fully mapped using post-coordination to ensure the mapping process yielded multiple benefits.

The results indicated that while post-coordination could achieve an exact match for some, development proposals may need to be submitted to ensure Australian concepts are still able to be captured.

The ICD-10-AM code O71.02 *Traumatic rupture of uterus before onset of labour* has the closest match in ICD-11 to JB0A.0 *Rupture of uterus before onset of labour*, but there are no options to post-coordinate the rupture to distinguish traumatic from spontaneous

**Results:** Lesser specificity with post-coordination

	Browser options only	Manual post-coordination required	Match not possible
Exact match	22	13	-
Partial match	7	3	41

## Framework for a decision

IHACPA's implementation framework to support a decision to move from ICD-10-AM to ICD-11 in Australian health services:

1. Mapping project to assess maturity
2. Early implementation of cluster coding
3. Assess classification impacts
4. Cost-benefit analysis
5. Determine if an Australian linearisation is necessary
6. Replace ICD Toolkit to support change.

## Opportunities in ICD-11

Significant gaps between ICD-10-AM and ICD-11 will be reviewed with the potential for ICD-11 development proposals to be lodged on the WHO-FIC maintenance platform for consideration by CSAC.

Once it is known whether these proposals will be progressed, Australia will be in a better position to determine whether an ICD-11 national linearisation is required.

Australia's classification outputs such as the Tabular Lists, Alphabetic Indices, electronic code lists and mapping tables are managed by bespoke software known as the ICD Toolkit. Currently the ICD Toolkit has limited flexibility and is being investigated for replacement by a product that can manage multiple classifications and terminologies. It is anticipated that the updated ICD Toolkit will be able to use the ICD-10-AM/ICD-11 cross-walks, manage any Australian linearisation's required in ICD-11 and flow this into the relevant casemix classifications.

## Future considerations

Creation of a cross-walk is the first step in Australia's implementation framework for ICD-11. Once the cross-walk is created it will be used to assist with the impacts on casemix classifications such as those based on ICD-10-AM which are used in acute admitted care (AR-DRGs) or emergency care (AECC). It will also be an opportunity to review other casemix classifications to determine if ICD-11 could be used in place of existing arrangements.

The introduction of new metadata reporting standards introduces the concept of cluster coding in an environment of ICD-10-AM which will socialise the workforce with the concept of post-coordination prior to ICD-11. More on this topic is covered in another poster.