Appendix C – The AR-DRG numbering system  31
   C.1. Structure  31
   C.2. Broad group  31
   C.3. Adjacent DRG  31
   C.4. Split indicator  32
   C.5. AR-DRG treatment of severity  33
   C.6. Example 1: DRG assignment  34
   C.7. Example 2: DRG assignment  35
   C.8. Impact of CCS on cost signature  36

Appendix D – Sample discharge summary  37

Glossary  41

References  43

iSoBAR Backpage
Foreword

Clinical documentation plays an important role in ensuring the quality and safety of patient care as well as contributing to medical research and the delivery of evidence based care.

Producing accurate clinical documentation which captures consistent and transparent information about how a patient has been cared for is a fundamental aspect of a clinician’s role.

Activity Based Funding and Management (ABF/ABM) is the new way of managing the health service in WA. Ultimately ABF/ABM will ensure health resources flow to where they are most needed.

ABF/ABM relies on timely and accurate information about patients and their care to ensure the ongoing delivery of safe high quality care to the community of WA. This information will enable the community, clinicians, public servants and Government to make informed decisions about how and where we deliver healthcare across WA.

Working together, each of us has a role to play in delivering excellence in healthcare to the people of Western Australia.

This booklet has been developed to support all clinicians in that aspect of their work.
Acknowledgements

This document was developed by the Activity Based Funding and Management Team within the Performance Activity and Quality Division of WA Health. The team would like to thank staff across WA Health for their contributions. In particular, the team extends a thank you to colleagues from Area Health Services, Health Networks and the Postgraduate Medical Council of Western Australia.

We wish to also acknowledge the authors of the Alfred Casemix Clinical Handbook 10th Edition (2009 – 2010)(1), and the National Casemix and Classification Centre (NCCC), University of Wollongong – Good Clinical Documentation Guide(2), on which this handbook was based.

Finally, the purpose of activity based health improvement reform is to improve health services and hospitals for WA patients, communities and populations. We acknowledge and thank them as our partners in improvement.

Activity Based Funding and Management Team
July 2011

Intranet: http://activity
Internet: www.health.wa.gov.au/activity
1. Introduction

1.1 Why is this important?

The quality of the information in a patient’s medical record is a key element of the safety and quality of the care we deliver.

Accurate and timely health information is vital to safe and effective handover of care between healthcare professionals.

Casemix and diagnosis related groups (DRGs) are ways of organising the health system as efficiently and effectively as possible so that we can provide safe high quality care to the WA community.

Casemix and DRGs are used to categorise, classify and count the diverse range of care that is provided in our public hospitals.

It’s important for clinicians to understand this because:

- it impacts on how services are funded – we need an accurate picture of the services we provide so we can ensure services are funded properly.
- it impacts on how services are delivered and the workforce required to deliver them – future plans for clinical services are based on information about the current and future health needs of the community.

The handbook outlines the clinical coding process, from its use of complications or co-morbidities to determine care and complexity levels, to the final assignment of DRGs. It shows how the DRG is then used to drive the Activity Based Funding and Management approach.

One of the key components of this resource is highlighting the importance of accurately documenting clinical information in the patient’s medical record and producing an accurate and timely discharge summary.

The information you create as part of a patient’s medical record is used in many different ways.

Health information should be legible, timely and accurate.

It is essential for safe and effective communication between health professionals.
1.2 The documentation process from patient admission to end data

Documentation related to episode of care

Discharge summary completion

Abstraction of information from the clinical record

Assignment of ICD-10-AM codes for diseases and procedures

Assignment of DRGs

National Centre for Classification in Health. 2003
2. The casemix system

2.1 What is casemix?
Casemix refers to the range and types of patients (the mix of cases) treated by a hospital or other health service. It provides a way of describing and comparing hospitals and other services, thereby assisting in planning and management of a health care system.

Casemix classifications put patients into clinically meaningful groups that use similar health-care resources. By doing so, the clinical activity, quality and cost-efficiency of different hospitals can be compared.

However, the introduction of an activity based funding (ABF) framework in WA is not just about hospital casemix. It can include community care and/or chronic disease programs, preventive health programs, shared maternity care, sub acute and step down care, living well when older, education, training, research and other services.

Casemix data is used for many purposes, including, clinical research, funding and financial management, identifying epidemiological patterns and disease trends, reviewing resource consumption, workforce and facilities planning, monitoring quality of care, and making comparisons between facilities, areas and states.

2.2 What are diagnosis related groups (DRGs)?
Diagnosis Related Groups (DRGs) are commonly used as the basis of an inpatient classification system. These provide a means of relating the number and type of acute inpatients treated in a hospital (casemix) to the resources required by the hospital to treat these patients.

The aim of DRGs is to group patients into groups which are both clinically meaningful and homogeneous in terms of resource utilisation. Relevant diagnoses and procedures are coded for each admitted patient episode and the combination of codes for each episode guide its assignment to a DRG by way of using DRG grouper software.

The patient classification system used throughout Australia to classify admitted patient episodes is the Australian Refined Diagnosis Related Groups – commonly referred to as AR-DRGs. The Department of Health Western Australia currently uses Version 6.0 of the AR-DRG Classification system to define the casemix for admitted patients.
2.3 DRG structure

This indicates the MDC* to which the DRG belongs.

There are 23 MDCs.

This indicates and ranks the resource consumption of a DRG.

This indicates the partition to which the DRG belongs.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>highest</td>
</tr>
<tr>
<td>6</td>
<td>second highest</td>
</tr>
<tr>
<td>5</td>
<td>third highest</td>
</tr>
<tr>
<td>A</td>
<td>fourth highest</td>
</tr>
<tr>
<td>Z</td>
<td>no split</td>
</tr>
</tbody>
</table>

Example: Chronic Obstructive Airways Disease with Catastrophic CC**

* MDC = Major diagnostic category
** CC = Complication and/or co-morbidity

2.4 Uses of DRGs

Apart from casemix, DRGs are valuable in other ways. They can be used:

- to compare how different hospitals treat patients with similar conditions;
- to identify treatment trends;
- in quality improvement activities;
- to identify the types of patients hospitals treat and assist in role delineation;
- to assist cost recovery activities in the WA health system;
- to enable identification, measurement and quantification of payment to contracted services; and
- for retrospective data analysis for research.

2.5 What is clinical coding?

Coding involves reviewing and abstracting information from the medical record based on documented clinical information and translating this clinical information into code. Information coded includes:

- principal diagnosis;
- other primary diagnoses;
- co-morbidities relevant to the admission;
- complications; and
- procedures performed (both therapeutic and diagnostic).

Through accurate documentation, the clinical coder can translate information into a series of alphanumerical and/or numerical codes to reflect the complete clinical picture.

ICD-10-AM consists of:
- A disease classification based on the World Health Organisation’s publication ICD-10 with modifications to ensure a current and appropriate classification for Australian clinical practice;
- An Australian procedure classification, the Australian Classification of Health Interventions (ACHI), which is based on the Medicare Benefits Schedule (MBS); and
- Australian Coding Standards (ACS); a set of specific rules, which aim to standardise clinical coding practice nationally, covering both general principles and specific specialty issues (3).

2.6 How is a DRG assigned?

The ICD-10-AM codes included in the clinical documentation of the episode of care are entered onto the hospital computer system by the clinical coder. The DRG grouper (software) considers the codes and other patient information in order to assign a DRG to the specific inpatient episode. Diagram 2 (page 10) displays the DRG classification process.

AR-DRG version 6.0 incorporates 698 AR-DRGs, most of which are organised into 23 Major Diagnostic Categories (MDCs) – generally based on body systems (See Appendix A page 28). Each MDC contains three partitions - surgical, other and medical DRGs. The presence or absence of operating room and non-operating room procedures is generally responsible for the assignment of a record to one or the other of these partitions.

For some MDCs and DRGs there are variables, other than ICD-10-AM codes, which may affect DRG assignment. These variables are:
- patient age and sex;
- length of stay;
- same day status;
- admission weight for infants aged <365 days;
- mental health legal status; and
- mode of separation.

Note: Ethnicity and/or Indigenous status have no bearing on DRG assignment.
Diagram 2: Typical DRG classification process

Diagnoses and procedures coded using ICD-10-AM

1. Identify principal diagnosis
2. Assigned to a Major Diagnostic Category (MDC) (23 groups)
   - Exceptions
     - Age <29 days
     - Age <1 year with an admission weight <2,500g
     - Principal or secondary diagnosis of HIV or related condition
     - Liver, heart, lung, bone marrow or multiple organ transplant
     - Significant trauma >1 body site
     - ECMO without cardiac surgery
     - Tracheostomy/MV > 95 hours
   - Assigned to Pre-MDC DRG
3. Check for significant OR procedure
   - NO
4. Check for non-OR procedure
   - NO
     - MEDICAL PARTITION
       - Grouped according to principal diagnosis, e.g. neoplasm, specific conditions, symptoms, other
       - Checked for: CC, age, other split
       - DRG assigned
     - YES
5. OTHER PARTITION
   - Grouped according to principal diagnosis and non-OR procedure
   - Checked for: CC, age, other split
   - DRG assigned
6. YES
   - SURGICAL PARTITION
     - Grouped according to type of surgery, e.g. major, minor, other, unrelated to principal diagnosis
     - Checked for: CC, age, other split
     - DRG assigned
Prior to allocation to an MDC, pre-MDC processing occurs, which has two functions. Firstly, it identifies and assigns the 11 very high cost DRGs that comprise the pre-MDC category. Secondly, it changes MDC assignment, where the MDC is not defined exclusively on the basis of principal diagnosis.

In pre-MDC processing the following is ascertained:

- Was there a transplant – liver, lung, heart, bone marrow or kidney?
- Did extracorporeal membrane oxygenation (ECMO), without cardiac surgery, take place?
- Was significant trauma treated at more than one body site?
- Was the patient <28 days old, or aged <1 year with admission weight <2500 gms?
- Did the diagnosis include a principal diagnosis related to HIV and an additional diagnosis of HIV?
- Was there a tracheostomy or did ventilation occur for > 95 hours?
- Did the episode involve a Ventricular Assist Device, spinal infusion device or neurostimulator device?
- Did the diagnoses include acute quadriplegia or paraplegia?

2.7 What are complication and/or co-morbidity codes (CCs)?

Complication and/or Co-morbidity (CC) codes are additional diagnoses that are likely to result in significantly greater resource consumption during an inpatient episode. Each of these additional diagnoses is assigned a Complication and Co-morbidity Level (CCL) and from these, a Patient Care Complexity Level (PCCL) is then calculated and assigned for every record. The PCCL is a measure of the cumulative effect of a patient’s complications and co-morbidities. Adjacent DRGs have differing levels of resource consumption and are split on the basis of PCCL, malignancy, same day status, mental health status and mode of separation.

A **Complication** is a condition not present on admission which arises during the patient stay, or is the result of a procedure or treatment during the stay. Examples are:

- embolism
- drug reaction
- urinary tract infection (UTI)
- post-operative infections.
A **Co-morbidity** is a condition that exists at the time of admission, which affects patient care in terms of requiring:

- therapeutic treatment
- diagnostic procedures
- increased clinical care and/or monitoring

One or more of the above factors will generally result in an extended length of stay. The inclusion or exclusion of CCs has a dramatic impact on the DRG assigned and therefore an appropriate remuneration for the resources used, especially under an activity based funding framework. It is crucial that any complications of treatment or surgery, and any relevant additional diagnoses are documented, to ensure accurate DRG assignment with subsequent appropriate funding to the health service.

For more detailed information refer to the following Appendices:

- **Appendix A** (page 28) – AR-DRG Major Diagnostic Categories
- **Appendix B** (page 29) – Common Complications and Co-Morbidities
- **Appendix C** (page 31) – The AR-DRG Numbering System

### 2.8 Cost weights

A cost weight is a weighted activity unit. Each episode of care is assigned a DRG and each DRG has a cost weight which is a measure of the cost of treatment of the average inpatient in the DRG. This weight reflects the expected resource intensity of the cases that fall into that DRG, relative to all other DRGs. In WA a DRG cost weight schedule has been developed using three years of indexed episode level costed information to define relative weights for each DRG.

In brief, an average cost across all DRGs is used as the reference value and given a weight of 1. DRGs are then weighted relative to this reference value, thus creating a weighting schedule across all DRGs.

**The weighted activity unit (iWAU) of a knee replacement admission (4.7813) will have a greater weight than that of a dialysis admission (0.1309) due to the greater complexity and costs involved.**
2.9 What are iWAUs?

WA public hospitals are funded based on the level and type of activity they are expected to provide. Inpatient activity, for funding purposes, is measured as weighted separations. That is, the expected activity throughput (at DRG level) weighted by the corresponding DRG cost weight using inpatient weighted activity units (iWAUs). The defined weighted activity is then multiplied by the calculated base rate for the year and for the particular hospital, to determine funding levels(4).

2.10 Length of stay and nights of stay

A patient’s Length of Stay (LOS) is an important factor in the calculation of the hospital's resource use. However, for the purpose of the WA ABF/ABM model, Nights of Stay (NOS) is the preferred measure for calculating weighted activity. For instance, a same-day patient will have a LOS of one; however the same patient will have zero NOS.

An Average Nights of Stay is determined for each DRG, along with a low-boundary and a high-boundary point. The Low Boundary Point (LBP) sets the low boundary for the variation in the length of stay from the average nights of stay. The LBP is one third of the average nights of stay. The High Boundary Point (HBP) sets the upper boundary for the variation of the NOS from the average nights of stay. The HBP is calculated at three times the average nights of stay. See Diagram 3 on page 14.

2.11 Central episode

Central episodes have a length of stay within the low and high boundary points and all central episodes within each DRG are funded at the same rate. Reduction in the length of stay for central episodes improves the efficiency of a hospital. If a patient is discharged before the central episode average NOS the health service keeps the credit for the full episode payment. Conversely, the cost of an episode of care with above average LOS may exceed the payment the hospital received for that episode of care. See Diagram 3 on page 14.
2.12 Inpatient cost modelling: DRG cost signature

**Diagram 3:** Illustrates an example of a DRG cost signature with the respective areas highlighted. The frequency of cases for this DRG is represented by the bell curve.
Clinical documentation
3. Clinical documentation

The primary benefit of good documentation is to support the provision of high quality and safe patient care. It ensures that all clinical staff caring for patients in present or future episodes have access to the records they need to optimally care for the patient\(^2\). Problems with communication, and in particular documentation, are widely recognised as major contributing factors in the occurrence of adverse events.

Good clinical documentation also ensures reliable information is available for other purposes such as research, planning, and in providing the information required to produce quality coded clinical data to be used in activity based funding.

It is therefore in the best interest of every patient and provider that the medical record contains complete and accurate documentation of each episode of care.

Ensuring that clinical information is documented in the medical record is crucial for safe and high quality patient care. It also facilitates coding and accurate DRG assignment and subsequent appropriate funding to the health service.

The following are general guidelines for clinical documentation. You should refer to your health service policies for details of local requirements.

Ensure that documentation is complete.

Ensure **daily progress notes** or care plans are documented.

Ensure a **discharge summary** is completed at the **time of discharge**.

Where clinically relevant, the following information should be included in every health record.

- History – presenting problem; history of presenting problem; other past history; personal history; and family history
- Examination
- Diagnosis
- Management
- Discharge planning
- Procedures
- Anaesthetic record
- Progress notes
- Discharge summary
- Outpatient and Emergency Department notes.
Use commonly accepted terminology and abbreviations

Spell out abbreviations when there could be confusion as to its meaning, for example, PE – pulmonary embolism or pleural effusion?

Avoid the use of eponyms unless its use is clear or commonly accepted, for example, Jaboulay procedure – gastroenterostomy or repair of hydrocele?

Timeliness of documentation is important

The accuracy of clinical documentation is improved if the information is recorded as soon as possible. Ensuring the timely completion of discharge summaries also improves communication with other healthcare practitioners.

Write legibly

Communication with other healthcare practitioners and clinical coders is improved when documentation is legible.

Work closely with clinical coders

The coder and clinician working together will improve the standard of both coding and documentation.
4. Clinical handover

Clinical handover is the transfer of professional responsibility and accountability for some or all aspects of care for a patient, or group of patients, to another person or professional group on a temporary or permanent basis\(^{(10)}\).

**Good clinical handover is essential for protecting patient safety**

Poor handover has been shown to lead to:
- incorrect treatment;
- delays in diagnosis and treatment;
- adverse events;
- increased length of stay and expenditure;
- unnecessary tests, treatments and communications;
- patient complaints; and
- malpractice claims\(^{(10)},(11),(12)\).

The aim of clinical handover is to achieve the effective communication of high-quality, relevant clinical information at any time when responsibility and accountability for patient care is transferred.

It is recommended that clinical handovers initiated by WA Health staff are structured according to the iSoBAR\(^{(0)}\) tool (see back page).

These include, but are not limited to:
- escalation of the deteriorating patient;
- shift-to-shift handovers;
- intra-hospital transfers;
- transfers from a hospital to other inpatient facility; and
- transfers from a hospital to a community based service.
5. Discharge summary – what to include

The Discharge Summary may be the only form of communication that accompanies the patient to the next setting of care. Delayed or inaccurate communication between hospital-based and primary care physicians at hospital discharge may negatively affect continuity of care and contribute to adverse events.

The hospital discharge summary is the primary document communicating a patient’s care plan to the post-hospital care team.

The diagnoses and procedures documented on the Discharge Summary should accurately describe why the patient was admitted to hospital and how they were treated. This forms the basis for assignment of codes by the clinical coder, along with reference to all other documentation pertaining to the admission.

5.1 Requirements of the discharge summary

The most important requirements of a discharge summary are that it be complete, accurate and timely. This is necessary for adequate communication between health care providers (e.g. between hospital doctors and the family general practitioner). It also ensures that each inpatient episode is coded accurately and as soon as possible after discharge. The unit and hospital activity can, thereby, be measured, analysed, and reported on a regular basis.

A complete Discharge Summary is required for each admitted patient episode, with the following exceptions only:

- healthy newborns (babies in their birth episode, with no perinatal morbidity)
- recurring care episodes (e.g. same day infusions, transfusions, dialysis for treatment of the same conditions over weeks or months) – one global discharge summary covering all episodes suffices.

There must be supporting documentation in the medical record for all diagnoses and procedures recorded.

5.2 Principal diagnosis

The principal diagnosis is defined as; “The diagnosis, established after study, to be chiefly responsible for occasioning the patient’s episode of care in hospital (or attendance at the health care facility).”
Clear designation of the single diagnosis which best meets the definition of principal diagnosis is critical. The phrase “after study” means after evaluation of findings to establish the condition that was chiefly responsible for occasioning the episode of care. The condition established after study may or may not confirm the admitting diagnosis.

Evaluation in this context considers the results of diagnostic tests performed during the episode. It does not include information obtained from subsequent outpatient attendances or subsequent admissions.

*Note: Procedures must not be recorded as a diagnosis. Tonsillectomy, arthroscopy, hysterectomy, are not acceptable principal diagnoses. The reason the patient underwent the procedure (diagnosis) should be recorded.*

Events must not be recorded as the principal diagnosis e.g. “fall”, “MVA”.

5.2.1 Past history
Details regarding a patient’s relevant past medical and surgical history (e.g. appendicectomy, CABGs, cardiac pacemaker).

5.2.2 Presenting problem
The symptom(s) which led the patient to present for treatment e.g. abdominal pain, haematemesis, chest pain.

5.2.3 Additional diagnoses (complications and co-morbidities)
These diagnoses affect patient care in terms of requiring (for that admission) any of the following:
- commencement, alteration or adjustment of therapeutic treatment
- diagnostic procedures
- increased clinical care / monitoring
- alteration of the standard treatment protocol for a particular procedure.

Do not include past history here unless relevant to this admission.

It is important to indicate how the condition was actively treated or assessed for all conditions listed as “additional diagnoses”. Additional Diagnoses may be sub-categorised on discharge summaries as either complications or co-morbidities.

**Example**
- Type 2 Diabetes Mellitus, which has required increased monitoring during the patient’s episode of care.
- Chronic Obstructive Airways Disease where a lung scan has been performed.
Co-morbid conditions
Pre-existing conditions which are clinically significant for this admission and which may in some cases be causally linked to the principal diagnosis.

Example – co-morbidity
Chronic kidney disease (CKD) secondary to type 2 Diabetes Mellitus. Where CKD is the principal diagnosis, diabetes in this instance would be a co-morbidity.

Complications
A complication can best be described as a condition, not present at the time of admission, but which arises during the admission and which affects the patient’s management and/or length of stay.

Example – complication
- Infection of surgical wound
- Accidental laceration of bladder during caesarean section

In its broadest sense a complication can:
- Be intimately related to the disease process
- Result from lack of an intervention (e.g. failure to treat a condition)
- Be related to a complex interaction between the disease process and the intervention
- Be directly related to an intervention (e.g. (non) invasive procedures, surgery, anaesthesia, medication).

If a condition or injury is related to a surgical/procedural intervention, rather than being related to the patient’s disease process, then this should be clearly documented in the progress notes and/or operation report and on the discharge summary e.g. ‘Acute urinary retention following hernia repair, requiring catheterisation. Patient also has benign prostatic hypertrophy (BPH)’.

Based on this documentation the coder cannot assign a post operative urinary retention code as it is not clear whether the urinary retention is directly related to the surgery or is associated with BPH. A clear causal relationship must be documented for the coder to capture procedural complications.
5.2.4 Clinical incidents and adverse events
The World Health Organisation defines an adverse event as an injury caused by medical management or complication thereof, instead of the underlying disease. It results in an increase in the level of care and/or prolonged hospitalisation and/or disability at the time of discharge\(^7\). Medical management refers to management under health care services. Sentinel events refer to unexpected occurrences involving death or serious physical or psychological injury, or risk thereof.

Clinical incidents, adverse events and sentinel events are to be reported and managed in accordance with the current Clinical Incident Management, Sentinel Event and WA Review of Mortality Policies\(^6\).

All clinical incidents should be factually documented in the patient’s medical record thus ensuring accurate coding and inclusion in DRG classification.

5.2.5 Operations / procedures
The principal procedure is the most significant procedure that was performed for treatment of the principal diagnosis. All significant procedures undertaken from the time of admission to the time of discharge should be documented. This includes diagnostic, therapeutic and allied health procedures.

5.2.6 Relevant investigation results
Include the results of all investigations conducted, which are considered to have a bearing, or impact on the management of the patient during this episode of care.

5.2.7 Treatment and progress
Describe in significant detail the patient’s treatment and progress during this episode of care.

5.2.8 Medications
Current medications indicating the status of each medication relative to the admission status (new, increased dose, decreased dose, ceased or unchanged) with dose, duration, purpose and supply.
5.2.9 Future plan of management
Describe details regarding the plans for managing the wellbeing of the patient in the future. Relevant information given to the patient e.g. activity level, wound care. Follow up arrangements including referrals to other health care providers.
Notes
Steps to completing a good discharge summary
6. Steps to completing a good discharge summary

6.1 Content

- Ensure that the patient’s conditions and diagnoses are documented and substantiated throughout the medical record, not just in the discharge summary i.e. in progress notes, investigation results. Clinical coders require documented evidence of a particular condition being treated during the episode of care before assigning the corresponding code.
- Note any complications that may have arisen and their cause if known.
- Document any clinical incident, adverse event or sentinel event that may have arisen during the patient’s stay in hospital. (Note that only facts should be documented.) Any contributing factors or investigations should only be managed in accordance with the Clinical Incident Management, Sentinel Event and WA Review of Mortality Policies. Document cause of death e.g. respiratory failure, renal failure.
- Document all diagnostic and therapeutic interventions, described as specifically as possible.
- Include past medical/surgical history and future progress/management.

6.2 Clarity

- Itemise each diagnosis which should be coded. Diagnoses which need to be deduced from long descriptive paragraphs will be missed.
- Ensure that diagnoses documented in the progress notes are also documented in the discharge summary. If this is not done, the correct diagnosis may be missed by clinical coders.

Example 1

“Tissue removed at debridement, post-hemiarthroplasty, grew pseudomonas and enterococcus”. A diagnosis of infection was intended. However, the term “infection” was not listed and the appropriate code was not assigned.

- Make references to results pending. The clinical coding may require updating when all results are finally reviewed.
- Avoid non-standardised terminology e.g. “dyscopia”.
- Specify how accidents happen and where they occur e.g. slipped on pathway at home, fall from ladder at work.
- Medical abbreviations, acronyms and eponyms may be used, as long as they have standard well-recognised meanings. Any ambiguity should be avoided.

**Example 2**
The abbreviation “PE” was used throughout the medical record and on the discharge summary and was coded as pulmonary embolus. The clinician later confirmed the intended diagnosis was pericardial effusion.

- Be as specific as possible in diagnosis documentation e.g. whether a condition is acute or chronic or both: whether liver disease is known to be fibrosis, cirrhosis, etc
- Clinical coders will not be able to judge the clinical significance of laboratory or histopathology results, nor are they required to make these judgements. Any such findings, where significant, need to be included in an itemised diagnosis e.g. UTI – E coli. Underlining abnormal biochemistry (e.g. K, Na+), in the progress notes, will not guarantee that the condition is coded. The diagnoses should be itemised on the discharge summary (e.g. hypokalaemia, hyponatremia) if deemed clinically significant.
- Specify, if known, the duration or approximate duration of any loss of consciousness associated with head injury.

### 6.3 Sequencing
- Clear designation of the **single** diagnosis which best meets the definition of principal diagnosis is critical.
- All other significant diagnoses should be listed as additional.
- Clinical coders cannot code “?” or “possible” or differential diagnoses as the principal.
- Clinical coders will require guidance as to whether the most significant symptom (e.g. chest pain) or the most likely presumptive diagnosis (e.g. angina) should be coded.
- Avoid leading with symptoms if the underlying cause has been established. For example a principal diagnosis of “cardiac syncope - atrial fibrillation new” runs the risk of being coded primarily to a symptom code (syncope) instead of to atrial fibrillation.
- Trauma – in multiple injuries, sequence the single injury which poses the most severe threat to life or limb, as the principal diagnosis. Where multiple injuries are life threatening, or none of the injuries are life-threatening, it is the doctor’s prerogative to select the most severe or clinically significant injury as principal diagnosis.
7. Clinical information audit program

The Performance Activity and Quality Division regularly conducts clinical information audits of public hospital inpatient episodes. The aim of these audits is to examine the inpatient data, with emphasis on accuracy of ICD-10 coding and AR-DRG assignment. Episodes randomly selected for audit are re-coded from the source data at hospital level through review of the discharge summaries and the medical records themselves.

These audits provide an opportunity to enhance communication between clinicians and clinical coders, raising any anomalies in the ICD-10-AM classification, AR-DRG grouper or relative weights assigned to DRGs. These anomalies may be reported to the relevant State and Commonwealth bodies for consideration in the revision processes for future versions of the classification and/or grouper software. The audits are conducted by a small team of nationally-accredited auditors, based in the Business & Financial Modelling Branch.

Audits allow us to develop a number of guidelines on how to accurately document diagnoses and procedures to ensure that the hospital is adequately reimbursed for the patients treated.

Accuracy of coded patient information can improve with:

- Greater understanding by clinical coders of disease processes, interventional techniques, and clinical practice relevant to their particular hospital.
- Enhanced understanding of the hospital’s casemix and activity based funding profile.
- Greater understanding by clinicians of what coders require from discharge summaries and inpatient notes, in order to comprehensively code a patient’s episode and;
- A better understanding by clinicians, coders and Health Information Managers, of the DRG allocation process and factors influencing accurate DRG assignment.
Appendix A – AR-DRG major diagnostic categories

<table>
<thead>
<tr>
<th>PreMDC</th>
<th>MDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Transplant</td>
</tr>
<tr>
<td>B</td>
<td>Nervous System</td>
</tr>
<tr>
<td>C</td>
<td>Eye</td>
</tr>
<tr>
<td>D</td>
<td>Ear, Nose Mouth and Throat</td>
</tr>
<tr>
<td>E</td>
<td>Respiratory System</td>
</tr>
<tr>
<td>F</td>
<td>Circulatory System</td>
</tr>
<tr>
<td>G</td>
<td>Digestive System</td>
</tr>
<tr>
<td>H</td>
<td>Hepatobiliary System and Pancreas</td>
</tr>
<tr>
<td>I</td>
<td>Musculoskeletal System and Connective Tissue</td>
</tr>
<tr>
<td>J</td>
<td>Skin, Subcutaneous Tissue and Breast</td>
</tr>
<tr>
<td>K</td>
<td>Endocrine, Nutritional and Metabolic Diseases and Disorders</td>
</tr>
<tr>
<td>L</td>
<td>Kidney and Urinary tract</td>
</tr>
<tr>
<td>M</td>
<td>Male Reproductive System</td>
</tr>
<tr>
<td>N</td>
<td>Female Reproductive System</td>
</tr>
<tr>
<td>O</td>
<td>Pregnancy, Childbirth and the Puerperium</td>
</tr>
<tr>
<td>P</td>
<td>Newborns and other Neonates</td>
</tr>
<tr>
<td>Q</td>
<td>Blood and Blood Forming Organs and Immunological Disorders</td>
</tr>
<tr>
<td>R</td>
<td>Neoplastic</td>
</tr>
<tr>
<td>S, T</td>
<td>Infectious and Parasitic</td>
</tr>
<tr>
<td>U</td>
<td>Mental Health</td>
</tr>
<tr>
<td>V</td>
<td>Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders</td>
</tr>
<tr>
<td>W, X</td>
<td>Injuries, Poisonings and Toxic Effects of Drugs</td>
</tr>
<tr>
<td>Y</td>
<td>Burns</td>
</tr>
<tr>
<td>Z</td>
<td>Factors Influencing Health Status and Other Contacts with Health Services</td>
</tr>
</tbody>
</table>
Common complications
Appendix B – Common complications and co-morbidities

- Acute myocardial infarction, NSTEMI or STEMI
- Agranulocytosis
- Anaemia, please specify type e.g. Due to blood loss, acute or chronic, aplastic, etc.
- Angina pectoris, unstable or stable
- Atrial fibrillation or flutter
- Bronchiectasis
- Candidal infections, specify site
- Cardiogenic shock
- Cardiomyopathy, specify type
- Cellulitis
- Cerebral infarction
- Cirrhosis of liver (Alcoholic or Non-Alcoholic)
- Chronic Obstructive Pulmonary Disease
- Chronic viral hepatitis C, B etc
- Coagulation defects
- Congestive heart failure
- Decubitus (pressure) ulcer, specify stage
- Delirium, acute brain syndrome and underlying cause if known
- Diabetes mellitus (specify any micro or macro vascular complications) and Type
- Dementia, specify type
- Disruption or dehiscence of open wound
- Embolism and/or thrombosis
- Haemorrhage and haematoma complicating a procedure
- Heart valve stenosis / regurgitation
- Hereditary factor deficiency
- Hypokalaemia / hyperkalaemia
- Hypopituitarism
- Hyperosmolality and hypernatraemia/hyponatraemia
- Ileus
- Infection and inflammatory reactions due to internal devices
- Intestinal obstruction (and cause if known)
- Impaction of intestine
- Interstitial pulmonary diseases
- Left ventricular failure
- Mechanical complications of any devices or implants including:
  - Breakdown (mechanical),
  - Displacement,
  - Leakage,
  - Malposition,
  - Obstruction,
  - Mechanical Perforation,
  - Protrusion,
  - Mechanical complication of internal joint prosthesis
- Complications following infusion, transfusion and therapeutic injection e.g. Transfusion reactions
- Pathological fractures
- Phlebitis and thrombophlebitis of any vessel
- Pleural effusion
- Pneumonia, specify organism if known
- Pneumonitis, aspiration
- Post procedural respiratory disorders
- Pulmonary collapse/atelectasis
- Pulmonary embolism
- Pulmonary hypertension, primary or secondary
- Renal failure, acute or chronic
- Renal impairment, acute or chronic
- Respiratory failure, acute or chronic. Note: Please specify chronicity as respiratory failure “unspecified” does not affect DRG assignment
- Retention of urine
- Sepsis, identify organism
- Tachycardia or other arrhythmias
- Thalassaemia, specify type and variant
- Thrombocytopenia, primary or secondary
- Ulcers of any site
- Use of Alcohol/Drugs, specify dependence, harmful use, withdrawal, withdrawal with delirium
- Ventricular fibrillation and flutter
- Wound infection following a procedure.
Appendix C – The AR-DRG numbering system

C.1. Structure

The AR-DRG numbering system has a logic that reveals:

1. The broad group (usually the MDC) to which the DRG belongs
2. The adjacent DRG (and the adjacent DRG’s location in terms of a tripartite distribution between medical surgical and other partitions)
3. The existence/nature of splits based on resource consumption.

The format of each AR-DRG number consists of four alphanumeric characters organised in terms of ‘ADDS’. These are described in the following sections.

C.2. Broad group

A indicates the broad group to which the DRG belongs:

Different letters of the alphabet have been used to signify the broad group while the number 8 has been used to identify a residual group of DRGs which capture atypical cases (Operating Room Procedures Unrelated to Principal Diagnosis).

See Appendix A (page 28) for all 23 MDCs.

C.3. Adjacent DRG

DD identifies the partition to which the DRG belongs.

01 - 39 indicates surgical partitions
40 - 59 indicates other partitions
60 - 99 indicates medical partitions

The second and third characters are digits. DRGs that begin with the same letter and share the same middle digits are called adjacent DRGs e.g. A01B and A01C.

Within the surgical and other partitions, the adjacent DRGs are generally ranked from highest to lowest resource consumption e.g. B01 has higher resource consumption than B06.
C.4. Split indicator

S is a split indicator that ranks DRGs within adjacent DRGs on the basis of their consumption of resources. The last character designates the relative importance of DRGs within an adjacent DRG in terms of resource consumption; any one of a number of values may be used:

- **A** highest consumption of resources within adjacent DRG
- **B** second highest consumption of resources
- **C** third highest consumption of resources
- **D** fourth highest consumption of resources
- **Z** no split for the adjacent DRG

The meaning of the split indicator may be gathered from the names of the DRGs. For example:

- **B70A** Stroke and Other Cardiovascular Disorders W Catastrophic CC
- **B70B** Stroke and Other Cardiovascular Disorders W Severe CC
- **B70C** Stroke and Other Cardiovascular Disorders W/O Catastrophic or Severe CC
- **B70D** Stroke and Other Cardiovascular Disorders, Died or Transferred <5 Days
- **E63Z** Sleep Apnoea (the only DRG in adjacent DRG E63)
C.5. AR-DRG treatment of severity

Complication and Co-morbidity Levels (CCLs)

Complication and Co-morbidity Levels (CCLs) are severity weights which are given to all diagnoses. The values are:

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>the code is not complication or co-morbidity; or the code forms part of the definition for the adjacent DRG; or the code is excluded as a complication/co-morbidity in the assigned adjacent DRG; or the code is a complication/co-morbidity, but is closely related to the principal diagnosis; or exactly the same code appears elsewhere in the record</td>
</tr>
<tr>
<td>1</td>
<td>the code is a minor complication/comorbidity</td>
</tr>
<tr>
<td>2</td>
<td>the code is a moderate complication/comorbidity</td>
</tr>
<tr>
<td>3</td>
<td>the code is a severe complication/comorbidity</td>
</tr>
<tr>
<td>4</td>
<td>the code is a catastrophic complication/comorbidity</td>
</tr>
</tbody>
</table>

Patient Clinical Complexity Levels (PCCLs)

From these CCLs a Patient Clinical Complexity Level (PCCL) is calculated for each episode using a complex algorithm. The PCCL calculation has been designed to prevent similar conditions from being counted more than once. A PCCL value of:

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>no CC effect</td>
</tr>
<tr>
<td>1</td>
<td>minor CC</td>
</tr>
<tr>
<td>2</td>
<td>moderate CC</td>
</tr>
<tr>
<td>3</td>
<td>severe CC</td>
</tr>
<tr>
<td>4</td>
<td>catastrophic CC</td>
</tr>
</tbody>
</table>
C.6. Example 1: DRG assignment

**I03B Hip replacement W/O Catastrophic CC**

<table>
<thead>
<tr>
<th>Principal Diagnosis:</th>
<th>Other primary coxarthrosis</th>
<th>M161</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure:</td>
<td>Total arthroplasty of hip, unilateral</td>
<td>4931800</td>
</tr>
<tr>
<td>Other Procedure:</td>
<td>General anaesthesia</td>
<td>9251429</td>
</tr>
<tr>
<td>PCCL</td>
<td>0 – SDX is not a CC, or is included in the definition for the adjacent DRG</td>
<td></td>
</tr>
<tr>
<td><strong>AR-DRG:</strong></td>
<td>I03B Hip replacement W/O Catastrophic CC</td>
<td></td>
</tr>
</tbody>
</table>

**Principal Diagnosis:** Other primary coxarthrosis  

From the principal diagnosis, a MDC can be determined i.e. Other primary coxarthrosis is classified under Musculoskeletal system and connective tissue (I).

**procedure:** Total arthroplasty of hip, unilateral  

Other Procedure: General anaesthesia  

Procedure and other procedure classify this episode under a surgical partition. A classification of 03 is assigned to demonstrate higher resource consumption.

**PCCL:** 0 – SDX is not a CC, or is included in ADRG definition, or is excluded

Finally, a Patient Clinical Complexity level of 0 indicates there is no complication or co-Morbidity effect. The episode is thus given a split indicator rank B demonstrating second highest consumption of resources.

*Note: The split indicator rank in this case is attributed to the procedure requiring a high level of resources due to prosthetics etc rather than a high level of resources due to the risk of a high CCL.*
C.7. Example 2: DRG assignment

**I03A Hip replacement W Catastrophic CC**

<table>
<thead>
<tr>
<th>Principal Diagnosis</th>
<th>Other primary coxarthrosis</th>
<th>M161</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Diagnosis</td>
<td>Systemic inflammatory response syndrome (SIRS) of infectious origin with acute organ failure CC, CCL = 3</td>
<td>R651</td>
</tr>
<tr>
<td>Procedure</td>
<td>Total arthroplasty of hip, unilateral</td>
<td>4931800</td>
</tr>
<tr>
<td>Other Procedure</td>
<td>General anaesthesia</td>
<td>9251429</td>
</tr>
<tr>
<td>PCCL</td>
<td>4 – SDX is a catastrophic CC</td>
<td></td>
</tr>
<tr>
<td>AR-DRG</td>
<td>I03A Hip replacement W Catastrophic CC</td>
<td></td>
</tr>
</tbody>
</table>

**Other Diagnosis:** Systemic inflammatory response syndrome (SIRS) of infectious origin with acute organ failure CC, CCL = 3

Principal diagnosis remains as in Example 1. Other diagnosis introduces a complication and co-morbidity level of 3 where the code is a server CC.

Procedure and Other Procedure remain as in Example 1.

PCCL 4 – SDX is a catastrophic CC

Due to the added CCL level, the Patient Clinical Complexity Level is now elevated to 4 demonstrating a catastrophic CC. Therefore the DRG assignment will now be:
C.8. Impact of CCs on cost signature

In theory, a DRG with complications and co-morbidities would have higher average nights of stay, when compared to a DRG without complications and co-morbidity.

**Diagram 4:** Illustrates the cost signature of two adjacent DRGs, one with Catastrophic CC and one without Catastrophic CC.

![Diagram](image)

*Note: This would be the expected effect in general terms. On a case-by-case basis, these elements may be subject to change and may not hold.*
Sample discharge summary
Appendix D – Sample discharge summary

Medical Records Copy

WA Health Hospital

Patient: FINE, ADAM BRUCE
189 ROYAL STREET
EAST PERTH 6004
dob: 7 June 1934

Admitted: 15 May 2010
Discharged: 03 June 2010
LOS: 20 days
D/C Reason: Care Complete (Clinician’s Decision)
D/C Destination: Private Residence – Self Caring
Specialty: Department of General Medicine
Consultant: HIGGINS, HENRY

Principal Diagnoses: (responsible for admission)
– Glaucoma

Secondary Diagnoses / Complications:
(which were treated or delayed discharge / progress)
– Renal Insufficiency
– Urethral Bleeding – Male
– Urinary Retention
– UTI

Other Conditions / Problems:
(active conditions / problems during this admission)
– Diabetes Mellitus
– Hypertension

Interventions / Procedures: (during this admission)
– Trabeculectomy
– Cystoscopy

History:
Emergency admission for trabeculectomy and 5FU injection for primary open angle glaucoma with high IOP not responding to maximum medical therapy (via Eye Clinic Outpatient appointment)

Findings:
IOP 38mm Hg
Interpreted Summary of Significant Results:

On admission:
- UEC: Na 139 K 4.1 BC 25 Ur 8.5 Cr 98

Post-op:
- Bladder scan >1000ml
- UEC: Na 140 K 4.1 BC 22 Ur 11.0 Cr 123
- Urine: E Coli on 24/05/10, fully sensitive to antibiotics
- CT head: 27/05/10 – No acute changes / bleed / infarct

On discharge:
- Bloods done in Rehab Ward at the time of discharge,
  - FBP: Hb120 WCC 8.8 Platelet 321 7.03
  - Ue: Na 144 K 4.0 BC 29 Ur 8.9 Cr 103
  - CRP: 92
  - Mg: 0.77 (0.7 – 1.10)
  - PO4: 0.93 (0.80 – 1.50)
  - VIT B12 AND FOLATE NORMAL
  - VIT D: 26 (>50 nmol/L)
  - TFT: TSH 0.95 T4 18

Clinical Management:
1. Admitted for surgery as described above, which proceeded without complication on Thursday evening
2. Postoperatively the nursing staff noted he had a distended bladder on bladder scan, and an ICD was inserted as per protocol, draining 1750ml in 20 minutes
3. Overnight (15/5/10) the patient became confused and removed his ICD, resulting in urethral trauma and frank haematuria. Attempts to reinsert ICD failed on the ward
4. The following morning (16/5/10), Urology were consulted and an ICD inserted via flexible cytoscopy
5. Nil further problems noted postoperatively, with nil further episodes of confusion and clear urine draining via ICD.
Transferred to GRU for further rehab

1. Medically-Episodes of visual and auditory hallucinations while in the ward. Patient aware that he is hallucinating. Stated that he had similar episodes before. No records re: the above found from the old notes or from the GP. Investigated. No cause suggestive of hallucinations noted except for E coli UTI which was treated with Trimethoprim. Hallucinations subsided few days later.

2. MOBILITY – Remained independent in mobility and all ADL.

3. Cognition-Query re decreased cognition and STML during admission in the ward. OT and SW assessment showed no significant STML. CT scan head showed no significant change. No need for further assessment at this point in time.

Social Issues:
Lives alone. Normally independent with all ADL. NO SERVICES IN PLACE.
Silverchain referral done for regular eye care.

Instructions to GP:
Things to note:
1. Glaucoma – please encourage Mr Fine to remain compliant with glaucoma medications his right eye should be normotensive as a result of surgery but his left eye is still at risk.
2. Eye clinic follow-up 11/06/10.
3. UTI, repeat MSU if clinically relevant.
4. Mr Fine might benefit from an OP psychogeriatric review if there are further episodes of hallucinations.

Information to Patient:
You will need to attend the OP eye clinic on 11/06/10

Review Details:
Eye Clinic follow-up 11/06/10

Copies To:
Patient, Recipients, Consultant, Medical Records
Dr John Dolittle, WA Health Medical Centre
### Discharge Medications:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dosage</th>
<th>Reason(s)</th>
<th>Special Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atorvastatin Calcium Tablets 40mg</td>
<td>1 at bed time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irbesartan Tablets 300mg</td>
<td>1 in the morning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorsig Eye Ointment 1%</td>
<td>1 in the morning</td>
<td>1 in the evening</td>
<td></td>
</tr>
<tr>
<td>Gliclazide MR SR Tablet 30mg</td>
<td>1 in the morning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metformin hydrochloride Tablets 850mg</td>
<td>1 in the morning</td>
<td>1 in the evening</td>
<td></td>
</tr>
<tr>
<td>Nifedipine SR Tablets 30mg</td>
<td>1 in the morning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ocuflox Eye Drops 3mg <strong>New</strong> RIGHT eye</td>
<td>1 in the morning</td>
<td>1 at midday 1 early evening 1 at bedtime</td>
<td></td>
</tr>
<tr>
<td>PredForte Eye Drops <strong>New</strong> RIGHT eye</td>
<td>1 in the morning</td>
<td>1 at midday 1 early evening 1 at bedtime</td>
<td></td>
</tr>
<tr>
<td>Tamsulosin hydrochloride Caps 400mcg</td>
<td>1 in the morning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travatan Eye Drops 40mcg <strong>New</strong> LEFT eye</td>
<td>1 at bedtime</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***End of Summary***

The contents of this document are confidential and protected by professional privilege. The information is intended only for the primary care providers of patients who have been managed by WA Health Service. If you are not the intended recipient, you are hereby notified that any use, reproduction, disclosure or distribution of the information contained in this document is prohibited.
Glossary
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHI</td>
<td>Australian Classification of Health Interventions</td>
</tr>
<tr>
<td>ACS</td>
<td>Australian Coding Standards.</td>
</tr>
<tr>
<td>Additional Diagnosis</td>
<td>A condition either coexisting with the principal diagnosis or arising during the admission.</td>
</tr>
<tr>
<td>AR-DRGs (Australian Refined Diagnosis Related Groups)</td>
<td>This DRG system has been developed to appropriately reflect clinical practice in the Australian health care environment.</td>
</tr>
<tr>
<td>Casemix</td>
<td>The types or mix of patients that a particular hospital treats.</td>
</tr>
<tr>
<td>CCL</td>
<td>Complication and co-morbidity levels: severity weights given to all associated diagnoses in order to calculate the PCCL (see below).</td>
</tr>
<tr>
<td>CCs: Complication or Co-morbidities</td>
<td>Those conditions that because of their presence with a specific principal diagnosis, would cause an increase in length of stay by at least one day.</td>
</tr>
<tr>
<td>Complications</td>
<td>The condition(s) not present on admission, which arises during the patient’s stay which affects the treatment of the patient.</td>
</tr>
<tr>
<td>Co-morbidities</td>
<td>The condition(s) that exists at the time of the admission which affect patient care in terms of requiring treatment, diagnostic procedures and increasing nurse care/monitoring.</td>
</tr>
<tr>
<td>Cost Weight</td>
<td>The weight assigned to a DRG which reflects the amount of hospital resources an average patient in that DRG is expected to consume for that admission relative to other DRGs.</td>
</tr>
<tr>
<td>DRG (Diagnosis Related Group)</td>
<td>A patient classification system used to relate the number of type of patients treated in a hospital (the casemix) to the resources required by the hospital to treat those patients.</td>
</tr>
<tr>
<td>Grouper / DRG Grouper</td>
<td>A software package that assigns each patient discharge one particular DRG, according to their discharge diagnosis(es) and, if applicable, procedure(s) the patient underwent during their stay, age and discharge status.</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ICD-10-AM</td>
<td>International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification. The coding classification system used to classify the diagnoses and procedures of every inpatient separation.</td>
</tr>
<tr>
<td>LOS</td>
<td>Length of stay</td>
</tr>
<tr>
<td>NOS</td>
<td>Nights of Stay</td>
</tr>
<tr>
<td>MBS</td>
<td>Medicare Benefits Schedule</td>
</tr>
<tr>
<td>MDC (Major Diagnostic Category)</td>
<td>23 categories that relate to main body systems. After discharge, patient admissions are classified into an MDC (according to the ICD-10-AM code) before they are further defined and classified into a DRG.</td>
</tr>
<tr>
<td>NCCC</td>
<td>National Casemix and Classification Centre (NCCH defunct as of 1 July 2010).</td>
</tr>
<tr>
<td>Outlier</td>
<td>An outlier is a case, which either clinically or statistically does not fit with most of the other cases assigned to the DRG. Length of stay and/or cost are the major measures used for identification of outliers.</td>
</tr>
<tr>
<td>PCCL</td>
<td>Patient clinical complexity level: calculated on CCL combinations using an algorithm. Each DRG will have a PCCL calculated.</td>
</tr>
<tr>
<td>Principal Diagnosis</td>
<td>The condition established after study to be chiefly responsible for occasioning the admission of the patient to hospital.</td>
</tr>
<tr>
<td>Procedures</td>
<td>Diagnostic and therapeutic operations and procedures carried out whilst an inpatient.</td>
</tr>
</tbody>
</table>
References


Notes
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDENTIFY</td>
<td>Introduce yourself (hospital, ward, role, job). Introduce your patient (name, DOB, age, gender, location).</td>
</tr>
<tr>
<td>SITUATION</td>
<td>Why are you handing over? Briefly state the problem, what, when, how severe? Admission date and diagnosis. Principal problem, reason for handover/transfer.</td>
</tr>
<tr>
<td>OBSERVATIONS</td>
<td>Most recent vital signs Lines in (IVs) Lines out (drains).</td>
</tr>
</tbody>
</table>
| BACKGROUND    | Relevant information related to the patient:  
• current relevant medications  
• allergies  
• IV fluids  
• test results (date and time done, comparison to previous results)  
• resuscitation status  
• relevant social information. |
| ASSESSMENT    | What do you think is happening? What is the problem (results of assessment, vital signs and symptoms)? |
| AGREE A PLAN  | What is your assessment of the situation? What are you wanting (advice, orders, transfer)? What is the level of urgency? What is the plan? |
| REQUEST/RECOMMENDATION | What are you asking the receiver(s) to do? |
| READBACK      | Clarify and check for shared understanding. Who is responsible for what and by when? |
| READY FOR DISCHARGE | What needs to be achieved for discharge and by whom? Communicate the plan with the patient/carer and ward clinical staff. |
This document can be made available in alternative formats on request for a person with a disability.