## **Consultant Contract 2008 – Measurement of Public:Private Mix**

#### **Contents:**

- Letter to Consultant from Barry O'Brien, HSE Lead, Consultant Contract Implementation – issued on 1<sup>st</sup> August 2008
- Consultant Contract 2008 Agreed Measurement Systems for public:private mix issued on 1<sup>st</sup> August 2008
- ESRI Information note on measurement of Inpatient & Daycase Activity issued on 1<sup>st</sup> August 2008
- ESRI Explanatory Note on Individual Consultant Report issued on 1<sup>st</sup> August 2008
- ESRI Guidance to Consultants on reporting of HIPE Data issued on 1<sup>st</sup> September 2008

Those Consultants employed in 2006 were also issued with ESRI data on their public:private mix in 2006 via local HiPE and Casemix Departments.



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31st July 2008

#### Dear Colleague,

I write following issue of the Consultant Contract 2008 and associated documentation.

The regulation and measurement of public and private practice is a key element of Consultant Contract 2008.

While Consultant Contract 2008 will facilitate the introduction of a Consultant-provided service, achieving this will require the integral participation of Consultants in the organisation, delivery and quality assurance of clinical services and the related management of the mix of public and private patients using such services.

A shared goal is to ensure that patients — whether public or private - receive equal access to care, subject only to clinical need.

In this context, Consultant Contract 2008 provides for a commitment to public sector service alone (Contract Type A) - meaning that Consultants would treat all patients within the public hospital or public community facility without fee income arising; and for Contract Type B and B\* — which provide for the regulation of the Consultant's public and private clinical activities to a 80:20 ratio or, for existing Consultants and based on private practice in 2006 - to an upper limit of 70:30.

Enclosed is documentation describing the agreement between management and the medical organisations on the measurement systems to be used to evaluate and record public:private mix. Also attached is an information note from the Economic and Social Research Institute (ESRI) regarding the measurement of inpatient and daycase activity.

Separately, information on existing Consultants' recorded public:private mix in 2006 is issuing to employers and should be provided to Consultants without delay. This will determine – subject to consultation with the Consultant and an upper limit of 30% – the extent to which the Consultant may engage in private practice under Consultant Contract 2008.

A key measure of the success of Consultant Contract 2008 will be the extent to which we can assure those receiving our services that they will be treated — at a minimum — in line with the required ratio. I look forward to working with you to achieve same.

Barry O'Brien

House T' XSais

Assistant National Director, Human Resources and Lead, Consultant Contract Implementation

# GUIDANCE FOR HOSPITAL MANAGERS, CLINICAL DIRECTORS AND CONSULTANTS:

KEY POINTS AGREED REGARDING THE MEASUREMENT SYSTEMS FOR PUBLIC/PRIVATE MIX IN THE CONSULTANT CONTRACT 2008

Following discussions with the Joint Committee comprising IHCA, IMO, HSE and DoHC representatives, the following are the main features of the 3 measurement systems specified in the new Consultant Contract, effective 1<sup>st</sup> September 2008 for Inpatients – Outpatients – Diagnostics:

#### A. GENERAL

- 1. The role of the Clinical Director is central in applying the measurement systems results and follow up with Consultants; reports will issue monthly to each Consultant and the Clinical Director.
- 2. Further to the Consultant Contract, 2008, 3 measurement systems (leach for inpatient/day care; outpatient; diagnostics) will be in place and each will be weighted. Initially weighting applies to inpatient/day care activity, with an interim weighting for outpatients by new and return attendances. In time, a more refined weighting will apply to outpatients and diagnostics.
- 3. An appeals process will be available through the Clinical Director where a Consultant considers the monthly measurement results are inaccurate or inequitable.
- 4. The systems outlined for 1<sup>st</sup> September implementation will be subject to review by the Joint Committee, which will act as a reference group forward.

### **B.** INPATIENT AND DAY CASES:

- 1. The Case Mix System/HIPE will be the basis to report monthly on a case mix adjusted (CMU) basis for inpatient and day cases, by public and private ratio. All Consultant encounters in a case will be recorded and reported. The HIPE system will be amended by the ERSI to reflect the categories of Consultant input into each patient case, based on being a primary or secondary Consultant, performing an operation: etc. These categories are included in the explanatory paper enclosed.
- 2. The 2006 public/private ratio will be the base for individual existing Consultants for their maximum public/private ratio going forward: e.g.
  - a. If a Consultant's ratio for 2006 is less than 80/20 (20% max. private), it becomes 80/20 forward.
  - b. If a Consultant's ratio is between 80:20 and 70:30 it remains at that individual's specific ratio e.g. 75:25 in 2006 becomes the base ratio going forward.
  - c. If the ratio exceeds 30% private, it reverts to 70:30, (30% max. private).
  - d. Consultants have expressed concern that the 2006 ratio as the base forward might not be complete in some instances. Further, previously the discharge Consultant only would generally have recorded into the

HIPE summary; whereby in the new arrangement all Consultant encounters will be recorded to accurately reflect Consultant activity. Where a Consultant considers that their 2006 base private/public ratio is not accurate they can:

i. With the Clinical Director's agreement, seek a review at hospital level in which the Consultant provides verification of their private patients in the period; or documentation of public patient volume where this has not been captured on the hospital system. Such reviews would be dealt with pragmatically and fairly; a final fall back position is where a Clinical Director after assessing the verification provided, would propose the individual Consultant base be the 70/30 ratio. The timeframe for raising such instances on the 2006 results with the Clinical Director is 2008 year end; any agreed retrospective amendments will be made then.

ii.

- 3. The 2006 base data is prepared by the ESRI and distributed to hospitals, encrypted, in parallel with this communication for review by individual Consultants. The communication on the revised HIPE form, and the guidelines for Consultants regarding input, are also enclosed.
- 4. In instances where there is an apparent disparity between established international casemix values and the perceived medical input, a Consultant can revert to the Clinical Director regarding their specific caseload.
- 5. The contract specifies the ratio is based on clinical activity solely; it is agreed the measurement will proceed on this basis.
- 6. It is clearly important, in order to assure accurate and complete monthly reports for Consultant activity, that the HIPE input form is completed fully and on time.

## C. OUTPATIENTS:

- 1. The maximum agreed ratio for Outpatients for existing Consultants is 70:30 (30% max. private).
- 2. Public and private out-patients will be reported at Consultant level by volume, adjusted for weighting, on a new and return basis. A new attendance will carry 3 times the weight of a return patient. This method will be subject to review at the end of the year to determine its continuing appropriateness or otherwise. A more refined casemix measurement system for outpatients is in process of development.
- 3. Hospital PAS systems already have the capacity to provide public OPD activity by volume. Private outpatient clinics will interface with PAS to provide private patient activity by volume. It is agreed to operate a Common Registration System for all patients (in public and private clinics) on a public site. Patient input to the PAS system will occur from all private clinics and public clinics, upon the patient attending the hospital; all patients will have a standard hospital number.
- 4. All patients in public OPD are deemed public patients; no private activity or billing is permitted.

#### D. DIAGNOSTICS:

- 1. It is clearly important, in order to assure accurate and complete monthly reports for Consultant activity, that the HIPE input form is completed fully and on time.
- 2. For radiology and pathology, the initial measurement system will be based on patient volume, public or private status derived from the hospital PAS system which interfaces with the radiology and laboratory information systems.
  - a. For radiology: volume and source of referral is available on the radiology information systems.
  - b. For pathology, volume is available; amendment will be made to PAS and laboratory systems, to record private patient status.
- 3. It is acknowledged, that for purposes of measuring activity, a more appropriate weighting/banding system is needed for diagnostics. It is agreed to jointly progress more appropriate weighting / banding systems which are currently used for private billing of insurers; to both public and private patients. An interim method limited to calculating volume and ratio, by public and private activity, will proceed from 1<sup>st</sup> September; these systems will be amended when agreement is reached on more detailed weighting methods.

The basis for the use of measurement systems in ensuring the agreed public/private ratio is set out at Section 20 of the Consultant Contract 2008.

For additional information or queries, please contact your Clinical Director or Hospital CEO/Manager. Consultants are encouraged to review the accompanying explanatory documentation prior to referring queries.

**July 31<sup>st</sup> 2008** 



# Monitoring Public/Private Mix for Consultant Contract

Information Note on
Measurement of
Day Case and In-Patient Activity

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## 1. Introduction

The terms of the proposed new consultant contract include the provision to monitor and measure the public and private activity undertaken by consultants. In particular, the contract specifies that 'the volume of practice shall refer to patient throughput adjusted for complexity through the medium of the Casemix system'. This information note discusses how public and private day case and in-patient activity will be measured to satisfy this requirement of the new contract. Specifically, the objectives of this note are twofold. First, it provides an overview of the sources of data on casemix-adjusted public and private day case and in-patient activity in Ireland. Second, the document will outline the method adopted for the measurement of day case and in-patient activity at individual consultant level. It should be noted that the focus of this paper is day case and in-patient activity only; the proposed systems for the measurement of diagnostic and out-patient activity are the subject of separate documents.

The remainder of this paper is structured as follows:

- Section 2 presents background information on the data sources used to measure and monitor consultants' public and private day case and in-patient activity;
- National data on day case and in-patient discharges, together with their casemix adjustment, are presented in Section 3;
- Section 4 discusses the proposed changes to the HIPE data collection process necessary to facilitate the measurement and monitoring of individual consultants' public and private day case and in-patient activity;
- The method for allocating day case and in-patient activity to individual consultants is outlined in Section 5;
- Section 6 presents a sample of the monthly report which will be prepared for each consultant in each hospital.

## 2. Data Sources

The measurement of public and private day case and in-patient activity under the proposed new consultant contract draws on data from the following two sources:

- The Hospital In-Patient Enquiry (HIPE) Scheme;
- The National Casemix Programme.

Further details of these data sources are contained in the glossary and are available at www.hipe.ie

## 2.1 The Hospital In-Patient Enquiry (HIPE) Scheme

The HIPE scheme collects administrative, clinical and demographic data on discharges (including day cases and in-patients) from, and deaths in, all Irish public hospitals. Management of the HIPE scheme is the responsibility of the Health Research and Information Division at the Economic and Social Research Institute (ESRI). Coverage of HIPE data has been consistently high with over 95 per cent of discharges from participating hospitals reported to HIPE since the mid-1990s.

Of the fields currently collected through HIPE, those of particular interest pertaining to the measurement of public and private day case and in-patient activity at consultant level include:<sup>2</sup>

- Public/private status on discharge refers to whether the patient was public or private to the consultant on discharge;
- Admitting consultant refers to the consultant responsible for admitting the patient;

<sup>&</sup>lt;sup>1</sup> For historic reasons, some long stay hospitals report data to HIPE. Two private hospitals also participate in HIPE. For the purposes of this information note, the long stay hospitals are included in the analysis presented, but the private hospitals are excluded.

<sup>&</sup>lt;sup>2</sup> Further information on these and other variables collected through HIPE is contained in the HIPE Instruction Manuals, which are available from: http://www.esri.ie/health information/hipe/data elements 2/

- Discharge consultant refers to the consultant responsible for discharging the patient;
- Diagnosis consultant refers to the consultant responsible for making any one of up to 20 diagnoses (including the principal diagnosis);
- Procedure consultant refers to the consultant responsible for undertaking any one of up to 20 procedures (including the principal procedure).

In HIPE, each consultant on the discharge record has a unique code which is encrypted when the data are exported from the hospital to the ESRI. Even if the consultant works in more than one hospital, the same unique code applies.

#### 2.2 The National Casemix Programme

In the new consultant contract, it has been proposed that for the measurement of consultants' public and private activity, the HIPE data on day cases and in-patients will be adjusted for casemix using parameters estimated by the National Casemix Programme. This commitment is to ensure that the consultants' workload measure takes account of the level of complexity of discharges treated. Under the National Casemix Programme, discharges are assigned to similar groups (known as diagnosis related groups (DRGs)) on the basis of their principal and secondary diagnoses, procedures performed, age, sex, and discharge status.<sup>3</sup>

In addition to using activity data from HIPE, the casemix programme also allocates costs to DRGs using the specialty cost data submitted by hospitals to the HSE. The resource intensity of a particular DRG, known as its relative value (RV), is derived by comparing the average cost of treating a patient within a given DRG to the average cost of treating all patients across all DRGs (see HSE Casemix Unit, *Ready Reckoner* 

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<sup>&</sup>lt;sup>3</sup> For discharges from 1 January 2005, diagnoses and procedures reported to the HIPE system are coded using the 4th Edition of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM). At the same time, the Australian-Refined Diagnosis Related Groups (AR-DRGs, Version 5.1) was adopted as the national standard for casemix assignment.

of Acute Hospital Inpatient and Daycase Activity & Costs (Summarised by DRG)
Relating to 2006 Costs & Activity).

Casemix models for day cases and in-patients are estimated separately on an annual basis. The RV for a day case is equivalent to the day casemix units (DCMUs) for that case. For each in-patient discharge within a particular DRG, the RV, together with the patient's length of stay, are used to calculate the in-patient casemix units (ICMUs) generated by that patient (see Appendix A for more details on the calculation of casemix units (CMUs) for day cases and in-patients). The different casemix models for day cases and in-patients mean that the models' outputs (including DCMUs and ICMUs) are not directly comparable and, therefore, it is not possible to aggregate the parameters from the day case model with those from the in-patient model.

Section 5 discusses how the casemix-adjusted public/private mix of day case and inpatient activity for each consultant can be estimated taking account of the consultant's involvement in each particular case (that is, for example, whether the consultant made a diagnosis or performed a procedure).

## 3. Analysis of 2006 Discharges Using HIPE and Casemix

This section presents an overview of analysis undertaken to examine the public/private breakdown nationally in 2006 using HIPE and casemix data. The HIPE data relate to discharges which occurred during the calendar year 2006. As different casemix models are estimated for day cases and in-patients, these two groups have been analysed separately.

According to Table 1, there were 1,211,563 discharges between 1 January and 31 December 2006 reported to HIPE by participating public hospitals – 582,023 were inpatients and the remaining 629,540 were day cases. The in-patient discharges equated to approximately 587,165 ICMUs, while the day cases translated to 613,813 DCMUs. The breakdown between public and private workload estimated by CMUs and discharges is presented separately for day cases and in-patients in Table 1.

Table 1: Disaggregation of In-Patient Discharges and ICMUs, and Day Case Discharges and DCMUs, by Public/Private Status on Discharge, 2006

	Public	Private	Total
In-Patients		<u>.</u>	
ICMUs	432,585.584	154,579.052	587,164.636
	(73.7%)	(26.3%)	(100.0%)
Discharges	427,480	154,543	582,023
_	(73.4%)	(26.6%)	(100.0%)
Day Cases			
DCMUs	473,324.531	140,488.384	613,812.915
	(77.1%)	(22.9%)	(100.0%)
Discharges	507,426	122,114	629,540
	(80.6%)	(19.4%)	(100.0%)

Notes: ICMUs, in-patient casemix units. DCMUs, day casemix units.

## 4. Proposed Changes to HIPE Data Collection Process

Using HIPE data to measure and monitor public and private day case and in-patient activity will necessitate some enhancements to the existing system. Specifically, it is proposed to collect the following data items for discharges from 1 September 2008:

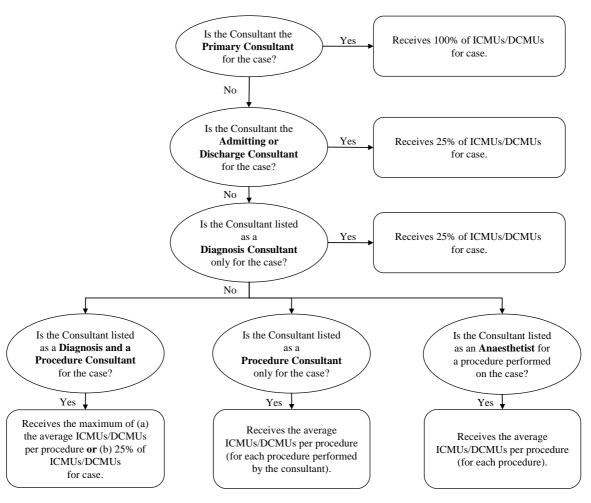
- Primary Consultant: The primary consultant will be nominated as the consultant with overall responsibility for the patient;
- Public/private status for each consultant: Consultants will have the opportunity to indicate whether their involvement in a particular case is on a public or private basis;
- Anaesthetist: each anaesthetist involved in a case will be identified.

Appendix B contains a provisional draft of how these changes may be incorporated into a new HIPE summary sheet.

#### 5. Allocation of Day Case and In-Patient Casemix Units to **Individual Consultants**

Figure 1 summarises how the ICMUs and DCMUs associated with a particular discharge will be allocated to each consultant involved in the case, depending on the individual consultant involvement. This procedure, together with the relative weightings, have been agreed by the HSE and the consultants' representative organisations.4

Figure 1: Summary Flow Chart for Calculating the ICMUs/DCMUs **Allocation for a Consultant** 



Note: The maximum allocation of ICMUs/DCMUs for any single consultant on any single discharge can be no greater than 100% of the case ICMUs/DCMUs.

<sup>4</sup> The methodology used for the allocation of CMUs may be subject to review following further detailed investigation of the available data and the approach applied.

For the purpose of analysing the 2006 HIPE and casemix data for individual consultant reports, the allocation method has been modified because some of the required parameters (as per Section 4) were not available. For example, for the 2006 analysis, the discharge consultant is designated as the primary consultant as this information was not collected in 2006. The issues involved in the generation of the individual consultant reports based on 2006 HIPE and casemix data are discussed in Appendix C.

## **6.** Sample Reports for Individual Consultants

Consultants will receive regular reports on the public/private breakdown of their day cases and in-patients. These reports will be specific to each hospital in which the consultant works. The template for these reports is shown in Box 1 below, together with a description of their contents in Box 2. The field 'Consultant Code' refers to the 4-character encrypted code, unique to each consultant. The field 'Consultant Name' can only be populated by the hospital to which the particular consultant's report refers.

**Box 1: Template for Individual Consultant Report** 

ESRI Report For www.esri.ie	Encrypted Consultant Code	Consultant Name (available from hospital)
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## **In-Patients**

	Public	Private	Total
In-Patient Casemix Units (ICMUs)	N	N	N
	(%)	(%)	(100.0%)
Discharges	N	N	N
	(%)	(%)	(100.0%)

## Day Cases

	Public	Private	Total
Day Casemix Units (DCMUs)	N (%)	N (%)	N (100.0%)
Discharges	N (%)	N (%)	N (100.0%)

Data based on Discharges between 01/01/2006 and 31/12/2006 for Hospital.

Please see Explanatory Note on individual consultant reports (31/07/2008) for background information available from the HIPE Office.

**Box 2: Description of Contents of Individual Consultant Report** 

	Public	Private	Total
In-Patient	N = Number of public ICMUs	N = Number of private ICMUs	<b>N</b> = Number of total (public and private)
Casemix Units (ICMUs)	(%) = Percentage of total ICMUs that were public	(%) = Percentage of total ICMUs that were private	iCMUs (100.0%
	N	N	N
	= Number of public in-patient discharges	= Number of private in-patient discharges	= Number of total (public and private)
Discharges	(%)	(%)	in-patient discharges
	= Percentage of total in-patient discharges that were public	= Percentage of total in-patient discharges that were private	(100.0%

## Day Cases

	Public	Private	Total
Day Casemix Units (DCMUs)	N = Number of public DCMUs  (%) = Percentage of total DCMUs that were public	N = Number of private DCMUs  (%) = Percentage of total DCMUs that were private	N = Number of total (public and private) DCMUs (100.0%)
Discharges	N = Number of public day cases  (%) = Percentage of total day cases that were public	N = Number of private day cases (%) = Percentage of total day cases that were private	N = Number of total (public and private) day cases (100.0%)

Glossary

Admitting Consultant

The admitting consultant is responsible for admitting the patient.

Australian Coding Standards (ACS)

The Australian Coding Standards (ACS) are clinical coding standards, which have been written with the basic objective of satisfying sound coding convention according to the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM). ICD-10-AM is the coding classification scheme currently in use in Ireland.

Australian Refined Diagnosis Related Group (AR-DRG) Australian Refined Diagnosis Related Groups (AR-DRGs) is a patient classification system which provides a clinically meaningful way of relating the number and type of patients treated in a hospital (that is, its casemix) to the resources required by the hospital. Each AR-DRG represents a class of patients with similar clinical conditions requiring similar hospital services. The classification categorises episodes of care into groups with similar conditions and similar usage of hospital resources, using information in the hospital discharge record such as the diagnoses, procedures and demographic characteristics of the patient. Version 5.1 of the AR-DRGs has been used as a patient classification system for the National Casemix Programme in Ireland since 1 January 2005.

Casemix

Casemix is a method of quantifying hospital workload taking account of the complexity and resource-intensity of the services provided. The National Casemix Programme in Ireland is operated by the HSE.

Casemix Units (CMUs)

Casemix units (CMUs) are discharges adjusted for their levels of complexity. Casemix units are calculated separately for day cases and in-patients. The CMUs for day cases are dependent on the relative value of the relevant DRG. For in-patients, the estimation of CMUs is determined by the relative value (RV) of the relevant DRG and the length of stay of the discharge.

Consultant

Each consultant has a unique number assigned by the ESRI which can only be used for that consultant. Outside the hospital setting, these numbers are encrypted.

Day Case

A day case is admitted to hospital for treatment on a planned (rather than an emergency) basis and who is discharged alive, as scheduled, on the same day. Births are excluded from this definition. This may also be referred to as a statistical day case.

Day Casemix Units (DCMUs)

Day casemix units (DCMUs) refer to the casemix units for day cases.

Diagnosis

A diagnosis is the identification of the nature or cause of a condition. A principal diagnosis and up to 19 secondary diagnoses can be recorded in the Hospital In-Patient Enquiry (HIPE) Scheme.

Diagnosis Related Groups (DRGs)

Diagnosis related groups (DRGs) are a patient classification scheme that provides a clinically meaningful way of relating the types of patients treated in a hospital to the resources required by the hospital.

Discharge Consultant

The discharge consultant is responsible for the discharge of the patient from hospital at the end of the episode of care.

Hospital In-Patient Enquiry (HIPE) Scheme

The Hospital In-Patient Enquiry (HIPE) Scheme is a computer-based health information system designed to collect clinical and administrative data on discharges from, and deaths in, participating hospitals in Ireland. The Economic and Social Research Institute (ESRI) is contracted by the HSE to oversee the administration and management of this system. The unit of measurement in HIPE is a patient's discharge. Further information and annual reports on HIPE are available at www.hipe.ie

International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), 4th Edition ICD-10-AM, the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification, 4th Edition is the classification used in HIPE to code diagnoses and procedures for discharges from 1 January 2005.

In-Patient

An in-patient is admitted to hospital for treatment or investigation on a planned or emergency basis. While a planned in-patient would stay for at least one night, in the case of emergency admissions, the date of admission and discharge may be the same.

In-Patient Casemix Units (ICMUs)

In-patient casemix units (ICMUs) refer to the casemix units for inpatients.

Irish Coding Standards (ICS)

The Irish Coding Standards (ICS) for ICD-10-AM apply to all activity coded in HIPE in Ireland. The purpose of the ICS is to complement the ACS and to provide guidance and instruction on all aspects of HIPE data collection.

Principal Diagnosis

A 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)" (see ACS 0001).

Principal Procedure

A principal procedure is defined as a procedure that is performed for definitive treatment (rather than one performed for diagnostic or exploratory purposes). If more than one procedure appears to meet this definition, then the procedure most related to the principal diagnosis is designated as the principal procedure.

Procedure A procedure is defined as a clinical intervention that is surgical in

> nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training, and/or requires special facilities or equipment

available only in an acute care setting (see ACS 0016).

Public/Private Status The public/private status of the discharge refers to whether the patient

> was public/private to the consultant. Each consultant involved in a discharge must record whether the patient is public/private to them.

Public/Private Status on The public/private status of the discharge at the time of discharge

Discharge

refers to whether the patient was public/private to the discharge

consultant at the time of discharge.

Relative Value (RV) Relative values (RVs) refer to the resource intensities of DRGs. An

average DRG has an RV of 1. A comparatively more (less) resource

intensive DRG would have an RV greater (less) than 1.

Secondary (Additional)

Diagnosis

A secondary (or additional) diagnosis is defined as "a condition or complaint either coexisting with the principal diagnosis or arising

during the episode of care or attendance at a health care facility" (see

ACS 0002).

Appendices

## **Appendix A:** Calculation of Casemix Units

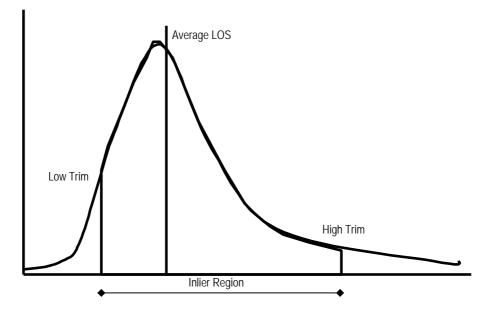
#### Introduction

This appendix outlines the methodology for the calculation of CMUs for both an inpatient and a day case. The methodology and formulae needed to determine the CMUs are described using a flowchart, followed by a series of examples.

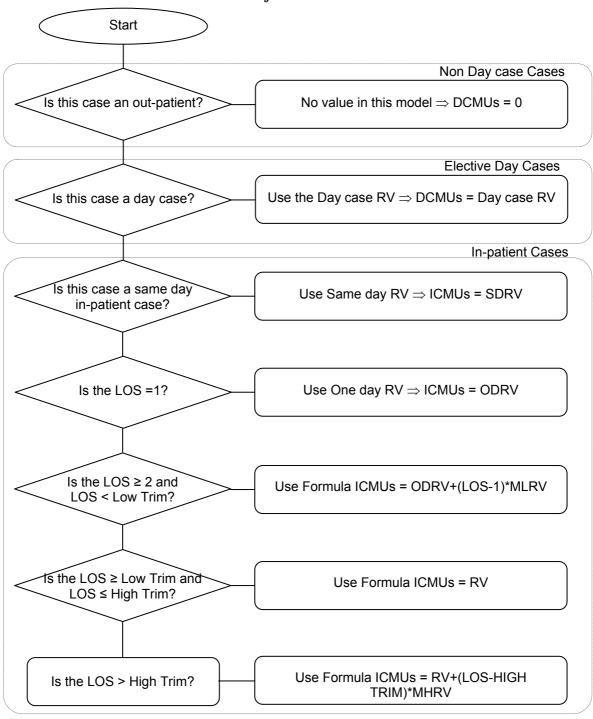
#### Data Concepts

The following data definitions are used in this document for analysing the length of stay of cases:

- □ Low/High trim: The low trim point and high trim point are boundary values determined statistically on the basis that it is expected that 95% of the length of stays of the patients can be found between the two boundaries.
- □ Inlier: A case is an inlier if the length of stay is between the low trim point and high trim point boundary values.
- □ Same day in-patient: A case is a same day in-patient case if the in-patient is admitted and discharged on the same day.
- One day in-patient: A case is a one day in-patient case if the patient is admitted on one day and discharged on the following day.



How to Calculate the DCMUs/ICMUs of a Case



Legend

Symbol	Description
CMUs	Casemix Units
ICMUs	In-Patient Casemix Units
DCMUs	Day Casemix Units (from elective Day case model)
LOS	Length of Stay
MHRV	Multi Day High Relative Value (per day)
MLRV	Multi Day Low Relative Value (per day)
ODRV	One Day Relative Value
RV	Relative Value (also referred to as Inlier relative value)
SDRV	Same Day Relative Value

# Examples of CMU calculation

The following five examples illustrate of ICMU calculations.

Ex	Details Of Case	DRG	ICMU Calculation	ICMU value
1	Patient admitted on the 28/04/2008 and discharged the following day.	E65A – Chronic Obstructive Airways Disease W Catastrophic or Severe CC	This case is a <i>one day in-patient case</i> as the patient stayed in hospital for one day. The ICMUs in this case are the one day RV.	0.6713
2	Patient admitted on the 10/01/2008 and Discharge on 03/02/2008. The length of stay of this case is 24 days.	E65A – Chronic Obstructive Airways Disease W Catastrophic or Severe CC	This is an <i>inlier</i> case as the length of stay is between the low and upper trim points (2, 28 respectively). The ICMUs in this case are the inlier RV.	1.3281
3	Patient admitted and discharged on the same day as an in-patient.	E65B – Chronic Obstructive Airways Disease W/O Catastrophic or Severe CC	This is a <i>same day in-patient</i> as the admission and discharge dates are the same. The ICMUs for this case are the same day RV.	0.4274
4	Patient admitted on the 22/02/2008 and discharged on the 26/03/2008. The length of stay of the case is 33 days. This case was grouped to E65B.	E65B – Chronic Obstructive Airways Disease W/O Catastrophic or Severe CC	As the length of stay is higher than the upper trim point (that is, 24), this case is classified as <i>multi high</i> . The ICMUs are calculated based on the inlier RV and the multi high RV (this is a per-diem rate).	1.7022 (0.8463+9*0.0951)
5	Patient admitted on the 23/03/2008 and discharged on the 26/03/2008. The length of stay of this case is 3 days.	I03A – Hip Revision W Catastrophic or Severe CC	This case lies between the one day and inlier sections and is therefore a <i>multi low case</i> . The ICMUs are calculated based on the one day RV and the multi low RV (this is a per-diem rate).	3.0946 (2.274+2*0.4103)

**Appendix B: Provisional Amended HIPE Summary Sheet** 

## Proposed format from September 2008: provisional



## Hospital In-Patient Enquiry (HIPE) Summary Sheet

				Hosp No:	
Patient Discharge Inf	ormation				
Medical Record Number		1 1	DOB	/ /	Sex
Type (priority) of Admission	W/List Mode If = 1-2 If = 4-7	Date of T PDU/Reh Transfer		/	/
Admission Date	1 1				
Source of Admission Discharge Date	/ /		10 Iry Leave D Imit Weigh		
Discharge Code					
Patient Details					
Name			ı	Marital Status	
GMS Number	1 1 1 1 1	1 1		Medical Card	
Area of Residence	Discharge	Status			
Day Case	Day Ward	i		Day Ward ID	
Days in a: Public Bed	Private/Semi Priv	/ate Bed		Days in an Inter Care Environme	
Admitting Ward		ī	Discharge '	Ward	
Admitting Consultant	Con	sultant Name			
Discharge Consultant		sultant Name			
Primary Consultant		sultant Name			
SIGNED:			D	ATE:	

Please refer to the HIPE Instruction Manual for more detail – http://www.esri.ie/health\_information/hipe/data\_elements\_2/

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	ICD-10-AM Code	Diagnosis	Public / Private	Consultant Name	Specialty
(1)		Principal			
(2)					
(3)					
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					
(10)			ПП		
(11)					
(12)					
(13)					
(14)					
(15)					
(16)					
(17)					
(18)					
(19)					
			Up to 20 diagnosis codes may be entered on W-HIPE as a	ppropriate	
(20)	1 1 1 1 1	-			

	Procedure/	Disab Na	Proceedings	Dublic / Debute	Ormanikant Nama	Amazadkadist
	Intervention Codes	Block No.	Procedure	Public / Private	Consultant Name	Anaesthetist
(1)		[ ]	Principal			
(2)		[ ]				
(3)		[ ]				
(4)		[ ]				
(5)		[ ]				
(6)		[ ]				
(7)		[ ]				
(8)		[ ]				
(9)		[ ]				
(10)		[ ]				
(11)		[ ]				
(12)		[ ]		$\overline{\Box}$		
(13)		][ ]		$\overline{\Box}$		
(14)		[ ]		$\overline{\Pi}\overline{\Pi}$		
(15)		][ ]		$\overline{\Pi}\overline{\Pi}$		
(16)		][ ]		ПП		
(17)		[ ]		ПП		
(18)		[ ]		ПП		
(19)				<u> </u>		
(20)	Up to 20 p	procedure cod	es may be entered on W-HIPE as appr	ropriate	Note: Code Anaesthetics as appropriate Remember: ACS 0042 – Procedures not	e – ACS 0042 normally coded
				<del></del>		
D	Pate of 1st Procedure /	1	Comments:			
	Date of Principal Procedure /	/		25		

# Appendix C: Notes Applying to the Individual Consultant Reports developed from the 2006 National File

#### Introduction

The individual consultant reports generated for 2006 used the final national file containing discharges from public hospitals between 01/01/2006 and 31/12/2006. A small number of cases (2.7% of total discharges from participating public HIPE hospitals) were excluded from the analysis prior to estimating discharges and CMUs at individual consultant level.

In the National Casemix Programme, day cases which are returned to the HIPE scheme but where there was no indication that the patient attended a dedicated day case ward, are designated as out-patients. As out-patient activity is captured separately as part of another measurement stream, these cases were excluded from the measurement of day cases within the HIPE system. A small number of other cases were also excluded from the analysis on the basis that they did not meet the criteria for inclusion in the casemix model and, therefore, a CMU calculation could not be undertaken.

## Preparation of the 2006 National File

For the analysis of the 2006 data for the production of individual consultant reports, the casemix programme was run on the national file. The methodology used for the allocation of CMUs may be subject to review following further detailed investigation of the available data and the approach applied. The following points should be noted:

- All in-patient cases were allocated CMUs (referred to as ICMUs) using the appropriate national or paediatric casemix model.<sup>5</sup>
- All day cases were analysed using the national day case model for the estimation of DCMUs.

 $^{5}$  The paediatric casemix model is applied to activity undertaken in paediatric hospitals.

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- The distinction between in-patients and day cases was on the basis of the statistical day case definition used as part of the National Casemix Programme.<sup>6</sup>
- The calculation of the average CMUs per procedure was based on the median value. For in-patients, the median was calculated using inlier RVs.
- Anaesthetic procedure codes were excluded from the analysis as the 2006 data did not collect workload at individual anaesthetist level.
- Allied health interventions were excluded.
- The primary consultant was set equal to the discharge consultant (as primary consultant was not collected in 2006).
- The public/private status for the consultant responsible for each diagnosis and procedure was set to the public/private status of the case on discharge (as public/private status was not collected for all consultant encounters in 2006).

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<sup>&</sup>lt;sup>6</sup> A definition of statistical day case is contained in the glossary.



## **Explanatory Notes on Individual Consultants Report**

## 31 July 2008

## **In-Patients**

	Public	Private	Total
In-Patient Casemix Units (ICMUs)*	N = Number of public ICMUs  (%) = Percentage of total ICMUs that were public	N = Number of private ICMUs  (%) = Percentage of total ICMUs that were private	N = Number of total (public and private) ICMUs (100.0%)
Discharges	N  = Number of public inpatient discharges  (%)  = Percentage of total inpatient discharges that were public	N = Number of private inpatient discharges  (%) = Percentage of total inpatient discharges that were private	N = Number of total (public and private) in-patient discharges (100.0%)

## **Day Cases**

	Public	Private	Total
Day Casemix Units (DCMUs)*	N = Number of public DCMUs  (%) = Percentage of total DCMUs that were public	N = Number of private DCMUs  (%) = Percentage of total DCMUs that were private	N = Number of total (public and private) DCMUs (100.0%)
Discharges	N = Number of public day cases  (%) = Percentage of total day cases that were public	N = Number of private day cases  (%) = Percentage of total day cases that were private	N = Number of total (public and private) day cases (100.0%)

Notes: These explanatory notes accompany the individual consultant reports.

For further information on the calculation and allocation of ICMUs and DCMUs, see Health Research and Information Division, ESRI, *Information Note on Measurement of Day Case and In-Patient Activity*, July 2008. This information note can be obtained from hospitals.

## **ESRI** Guidance to Consultants on reporting HIPE Data

This guidance is designed to ensure consistency in the implementation of the measurement system for Day Case and In-Patient Activity agreed as part of Consultant contract 2008. It should be issued to all Consultants:

- As the medical record/patient chart/clinical notes are the source of information reported to HIPE, all relevant Consultant/patient encounters need to be clearly documented to ensure the data are complete and accurate.
- To ensure that the data are available for monthly reports, timely reporting of relevant information by Consultants is requested.
- Where a patient is reported to have been seen by more than one Consultant, the Primary Consultant needs to be clearly designated on the patient chart. In the event that this information is missing, the Discharge Consultant will be designated as the Primary Consultant.
- Where a patient encounter is reported but the relevant Consultant is not designated, the default option is that the Primary Consultant will be reported for this patient encounter.
- Consultants should ensure that all members of their teams identify clearly the Consultant for whom they are working in completing medical charts.
- Where appropriate, the Consultant anaesthetist is to be specified for the relevant procedure
- Where relevant, patient encounters with Consultant intensivists are to be reported.
- Public private status is consistent throughout the hospital stay and for all Consultant encounters.

Close liaison with hospital HIPE departments is encouraged to ensure that all relevant Consultant/patient encounters are reported accurately and on a timely basis.