

Coding Notes



HIPE & NPRS Unit
Health Policy &
Information
Division

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A New Era for Clinical Coding Audit in Ireland The HIPE Coding Audit Toolkit[©]

HIPE Chart Based Audit

Good quality data is a key objective within HIPE. The W-HIPE data entry software applies stringent data quality checks at point of entry for a coded case. Hospital exports to the ESRI are also reviewed as part of procedures to ensure that highest quality data are collected by the HIPE system. These activities are further enhanced by regular chart-based audit which is the cornerstone of good quality coded data. Regular audit provides information on the quality and accuracy of the clinical and administrative data collected by HIPE.

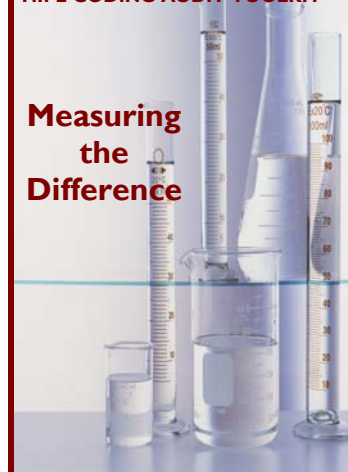
Audits are routinely carried out as part of the HIPE function in hospitals. By reviewing, recoding, comparing and analysing the source document (the chart) HIPE chart based audit ensures high standards of data quality are maintained. The audit results also provide important information for coders, coding supervisors and hospital management on the quality of HIPE coding locally and identify specific issues that may need to be addressed.

Chart based audits are done on a regular basis by local staff. The ESRI also conduct audit in hospitals either at the request of the hospital or to review a national issue. To make this process more efficient for all concerned the Audit team in the ESRI have developed a

Coding Audit Toolkit[©]. This exciting and unique innovation will provide hospitals with software with built-in audit methodology providing fast-tracks to sample selection, data comparison and report writing to name just a few of the many features.

HIPE CODING AUDIT TOOLKIT[©]

Measuring
the
Difference



HIPE audit has the following benefits:

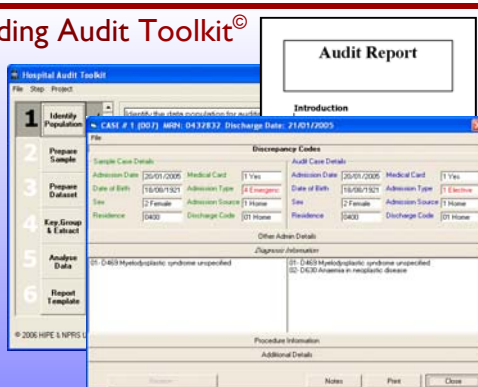
- Measure data quality
- Ownership of data quality
- Improvement in data quality
- Maintain high standards of data quality
- Increased knowledge of coding guidelines
- Increased transparency and dialogue on HIPE issues within hospital.
- Highlight training requirements
- Highlight chart documentation issues
- Accurate recording of hospital activity
- Correction of errors found for hospital data as necessary.

Inside this issue:

HIPE Coding Audit Toolkit [©]	1
Coding Guidelines	3
Access to HIPE Data	4
Recent National Reports Using HIPE Data	4
W-HIPE Reporter Enhancements	5
Report on Perinatal Statistics for 2002	5
Cracking the Code	6
Dates for your diary	8

Audit Steps Facilitated by the HIPE Coding Audit Toolkit[©]

1. Population Identification
2. Sample Preparation
3. Dataset Preparation
4. Keying, Grouping & Extracting
5. Case Analysis
6. Report Preparation



HIPE Coding Audit Toolkit®

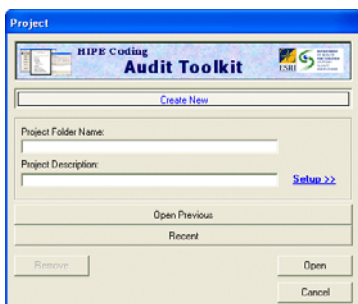
The HIPE Coding Audit Toolkit®, developed by the HIPE&NPRS Unit at the ESRI, allows hospitals to conduct and report on chart based HIPE coding audits in a standardised format utilising existing HIPE systems to assess the quality of coding and reflect hospital activity accurately.

Audit is an integral part of the HIPE process and the HIPE Coding Audit software will function alongside the Windows HIPE (W-HIPE) software to enable efficient and consistent audit processes both nationally and locally. The HIPE Coding Audit software has been designed and developed for use alongside the existing W-HIPE data entry and reporting software. Audit staff will be familiar with the use of the W-HIPE software thus making it easy to use the Audit software.

Features of the HIPE Coding Audit Toolkit®

- Audit project file and folder management.
- 'Wizard-style' project completion.
- Generation of sample extracts (random and targeted).
- Sample case list printing for chart retrieval.
- Detailed case printing for open audits.
- Integrated HIPE Audit summary sheet for code re-abstraction.
- Facilitates W-HIPE data entry and grouping of re-coded cases.
- In-depth comparison of original codes to re-abstracted codes.
- Storing of case comparison for further investigation.
- Allows for addition of Discrepancy Categories to compared cases.
- Facility to add free text notes to compared cases.
- Summary report available for all comparisons.
- Reports output to Text and MS Excel.
- Detailed case reports showing sample and audit coding for each case.

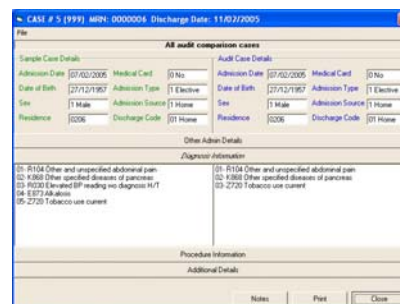
HIPE Coding Audit Toolkit® - SCREENSHOT ILLUSTRATIONS



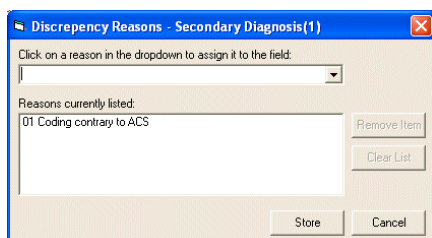
Audit Project Management



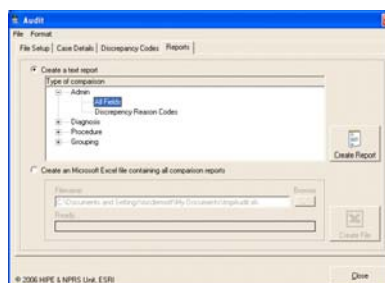
Main Dialog Screen



Viewing Case Details (side-by-side)



Assigning a Discrepancy Category



Report Generation

HIPE Audit Toolkit® Launch

The HIPE Audit Toolkit® will be launched at this year's National Casemix Conference (please see page 8 for details). Demonstrations of the software and audit training will be held on the Thursday and Friday (April 6-7, 2006). If you would like to participate in these sessions and receive information on obtaining the software and licence please register at the HIPE & NPRS Unit stand at the Conference.

Coding Guidelines



Diabetes - General Classification Principles

Impaired glucose regulation and diabetes code(s) are found in **Chapter IV Endocrine, nutritional and metabolic diseases (E00-E89)** within the code range E09-E14.

In codes E10-E14 the third character always identifies the type of diabetes (Type 1, Type 2, Other, Unspecified) and will always be the same on a coded record regardless of how many diabetes codes are assigned.

ACS 0401 Diabetes Mellitus and Impaired Glucose Regulation provides a great deal of information on the coding of diabetes. It is important for coders to become familiar with the content of this ACS, in particular the General Classification Principles which can be found at the beginning. The examples below supplement these principles outlined in ACS 0401.

* **In addition** to the impaired glucose regulation and diabetes code(s) from E09-E14, assign codes from other chapters when necessary to fully describe the clinical diagnosis. These additional codes should be sequenced **AFTER** the E09-E14 code(s).

Example 1 A patient is admitted with Type 2 diabetes with hypertension.

Index: Diabetes, diabetic	Code: E11.72 Type 2 DM with features of insulin resistance
- with	I10 Essential (primary) hypertension
- - hypertension E1-.72	

An additional code from the circulatory chapter is required to fully capture the clinical diagnosis as the diabetes code title does not describe that the patient has hypertension.

* **Only conditions indexed under 'Diabetes, diabetic'** can be classified to 'with complication' categories in E10-E14.

Example 2 A patient is admitted with myocardial infarction, they are also a Type 1 diabetic.

Index: Diabetes, diabetic	Code: I21.9 Acute myocardial infarction, unspecified
- with	E10.9 Type 1 diabetes mellitus without complication
→ - mononeuropathy	
- necrobiosis lipoidica diabetorum	

Myocardial infarction is not listed in the Index under 'Diabetes, diabetic' therefore it is not coded as a diabetic complication.

* **ALL current complications of diabetes** should be coded to properly reflect the severity of each case of diabetes. This may require a number of codes to be assigned.

Example 3 A patient is admitted for Type 1 diabetic ketoacidosis. They also have retinopathy. Their diabetes was noted to be unstable during the admission.

Index: Diabetes, diabetic	Code: E10.11 Type 1 DM with ketoacidosis, without coma
- with	E10.31 Type 1 DM with background retinopathy
- - hypertension E1-.72	E10.65 Type 1 DM with poor control
- - ketoacidosis E1-.11	
- unstable E1-.65	

A code will be assigned for all diabetic complications even if they do not meet the criteria outlined in ACS 0002 *Additional diagnosis*. ACS 0401 *Diabetes* is a specialty standard where the coder is instructed to code conditions which do not meet the additional diagnosis criteria.

* **Where the form of diabetes is not specified**, particularly in patients under the age of 40 years, further clarification should be sought from the clinician before assigning E14.- *Unspecified diabetes mellitus*.



Access to HIPE Data



HIPE data is available nationally from the HIPE Unit within the Health Policy and Information Division, ESRI. In 2005 over 200 requests were handled from a variety of users, including hospitals, health professionals, universities, commercial companies, charities and journalists.

When someone in a hospital requires HIPE data not locally available they need to contact the HIPE Unit with a clear specification of their data requirements. All report requests provided by the ESRI must respect confidentiality constraints protecting patient, doctor and hospital identification. The HIPE Information Leaflet, HIPE Instruction Manual, copy of HIPE Summary Sheet and HIPE Report are useful in providing background data on HIPE and these are all available on our website, www.esri.ie.

Each local Department of Public Health is provided with HIPE data on residents and hospital discharges within the relevant geographical area. This facility is intended to assist with planning and monitoring of the utilisation of hospital services by defined populations and within defined geographical areas. The HIPE Unit has a list of the relevant contact people, if these data are required.

If you have any queries please contact the Data Management section of the Health Policy and Information Division, where Fionnola and Aisling will be deal with your request.

Email: fionnola.kelly@esri.ie or aisling.mulligan@esri.ie

Recent National Reports using HIPE Data

HIPE data continues to be recognised as an important source of information on hospital activity in Ireland and two reports published recently of national interest cite HIPE as an important source.



The Lourdes Hospital Inquiry published in March 2006 states that “the national HIPE database.... is a rich source of easily obtainable accurate statistical information”.

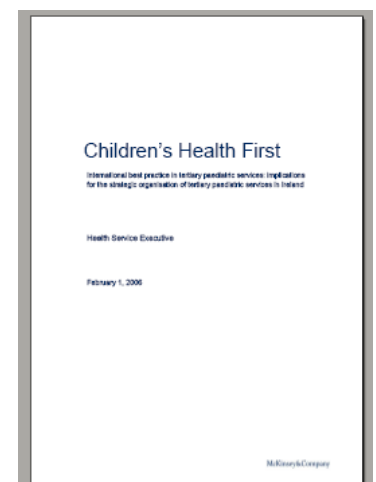
To read the full report see:

<http://www.dohc.ie/publications/lourdes.html>

The recent report **Children's Health First - International best practice in tertiary paediatric services**, used HIPE data extensively in estimating demand for tertiary paediatric services for Ireland. The report states that use of HIPE data allowed for review of 'real case data when estimating bed demand'.

To read the full report see:

<http://www.hse.ie/en/Publications/HSEPublications/ChildrensHealthFirst/>



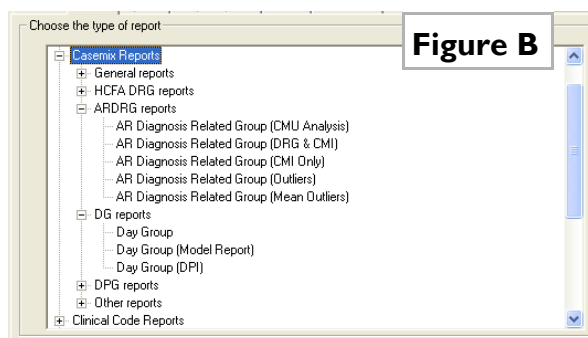
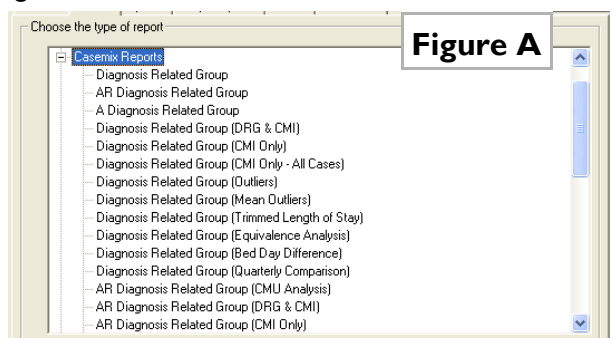
W-HIPE Reporter Enhancements



The recent versions of W-HIPE contain some useful enhancements to the Reporter software. Three of the principal modifications are as follows:

Casemix Reports

Due to the increase in the number of casemix reports associated with the introduction of ARDRGs and DGs, it became necessary to further categorise the reports. Prior to this, casemix reports were listed in one list (see fig A). This modification splits the reports into different types (see fig B) and allows the user to see the reports relating to AR-DRGs, DGs, HCFA DRGs etc.



National Cancer Registry (NCR Reports)

The preparation of NCR reports have been simplified by a reduction of the number of reporting options to two. It became clear that users were either preparing printed reports or encrypted files for the NCR. Hence the two new reporting options, *Print Report* and *Encrypted File* were introduced replacing the wide range of formats that were available before.

Reports written to Excel

The facility to write reports to Excel has been enhanced. Previously the system would allow up to four reports to be written to a single Excel spreadsheet. This has now been changed to so that there is no limit in the number of reports.

Please contact the IT & Data Management team in the HIPE Unit at the ESRI if you have any queries about Reports.

Report on Perinatal Statistics for 2002

The National Perinatal Reporting System (NPRS) is the principal source of national data on perinatal events in Ireland. Each NPRS record represents each individual birth that occurs either in a hospital or as a homebirth in Ireland each year. The most recent report on perinatal statistics is for 2002. Some highlights from the Report include:

- In 2002, 60,865 births were notified to the NPRS, this represents a 4.5 per cent increase in births for 2002 compared with 2001.
- The birth rate is estimated at 15.5 per 1,000 population.
- The perinatal mortality rate was 8.4 per 1,000 live and stillbirths in 2002, a decrease of 2.3 per cent since 2001.
- Delivery by caesarean section is estimated at 22.4 per cent of all live births in 2002, a marginal increase on the 22.0 per cent estimated for 2001.
- The average birth weight of babies born in 2002 is estimated at 3,474g.
- In 2002, as in 2001, single mothers accounted for 30 per cent of all women giving birth.
- The average age of single mothers increases slightly each year. Over the last decade this has increased from 23 years in 1993 to 26 years in 2002.
- The trend in the breastfeeding rate continues to be upward at 41.1 per cent in 2002 compared to 39.1 per cent in 2001.
- There were 288 home births attended by independent domiciliary midwives in 2002 compared with 245 such births in 2001.



Please contact the NPRS Unit in the Health Policy and Information Division at the ESRI if you would like a copy of the Report on Perinatal Statistics for 2002.



Cracking the Code

A selection of ICD-10-AM related queries.

Magnetic resonance angiography (MRA)

See Index entry (Volume 4):

Angiography

- by
- - magnetic resonance
- - - by site



Infected burns

Where there is documentation of 'infected burn', the following codes are assigned:

- A code for the site of burn (T20-T30)
- A code for the extent of body surface area involved (T31)
- T79.3 *Post traumatic wound infection, NEC*
- A code from B95-B97 to indicate the infective organism if known.

I25.2 Old myocardial infarction

When is it appropriate to assign I25.2?

The NCCH has given the following advice which can be used in addition to ACS 0940 *Ischaemic heart disease* regarding the use of I25.2 *Old myocardial infarction*:

'When a patient is admitted for a cardiac condition, it is appropriate to assign a code for 'old MI' if this is documented in the patient's history. It would almost always be clinically relevant and affect the treatment of the cardiac condition for the current episode of care.'

Abdominal pain complicating pregnancy

The following codes are assigned for abdominal pain complicating pregnancy:

- O99.8 *Other specified diseases complicating pregnancy, childbirth and the puerperium*
- R10.- *Abdominal and pelvic pain*

CT pulmonary angiogram

Spiral angiography is the technical term used for CT (computerised tomography) angiography.

See Index entry (Volume 4):

Angiography

- by
- - spiral
- - - chest

The correct code to assign is:

57350-02 [1966] *Spiral angiography by computerised tomography of chest, with intravenous contrast medium*

Assigning Z51.1 for benign neoplasm

A patient with a benign neoplasm is admitted for day case chemotherapy. Is Z51.1 Pharmacotherapy session for neoplasm still assigned as principal diagnosis?

Yes. The code title at Z51.1 'Pharmacotherapy session for neoplasm' does not specify that the neoplasm has to be benign or malignant, and can therefore be used for either condition.

Cancelled day case chemotherapy

What codes are assigned for a patient who has cancelled day case chemotherapy?

For same day admissions for chemotherapy for neoplasm where the procedure is cancelled assign:

- Z51.1 *Pharmacotherapy session for neoplasm*
- The appropriate neoplasm code/s
- Z53.- *Persons encountering health services for specific procedures not carried out*
- A code for the contraindication if applicable

For multi day admissions for chemotherapy for neoplasm, even if the intention was same day, where the procedure is cancelled, assign:

- The appropriate neoplasm code/s
- Z53.- *Persons encountering health services for specific procedures not carried out*
- A code for the contraindication if applicable

Prerenal failure / impairment

Is there a code in ICD-10-AM for prerenal failure / impairment?

Prerenal failure is a type of acute renal failure. A code from the following category can be assigned:

N17 *Acute renal failure*

Diabetes with acute on chronic renal failure

How is diabetes with acute on chronic renal failure coded?

As per ACS 0001 *Principal diagnosis*, assign codes for both the acute and chronic conditions. The acute condition will be sequenced first. The following codes will be assigned for the case cited:

E1-.29 **Diabetes mellitus with other specified renal complication*

N17.9 *Acute renal failure, unspecified*

E1-.23 **Diabetes mellitus with advanced renal disease*

N18.90 *Unspecified chronic renal failure*

ASA scores

If the anaesthetist documents two ASA scores such as 2/3, which code should be assigned?

Such a score should be clarified with the anaesthetist, however if this is not possible, then the code representing the higher score will be assigned. An ASA score of 3 would be assigned in the case cited.

Activity code for hurling

Is there a sporting activity code for hurling?

The following sporting activity while injured code can be assigned for hurling:
U51.8 *Other specified team bat or stick sport*



Chemotherapy via Port-A-Cath

What is the code for IV chemotherapy administered via Port-A-Cath?

Assign: 96204-00 [1920] Administration of pharmaceutical agent via external vascular catheter, anti-neoplastic agent. The NCCH recognises that the above advice is in conflict with the term 'external' but considers this the best code available to classify the procedure performed.

Place of occurrence for adverse effect

Is it necessary to assign a place of occurrence code when coding adverse effects of drugs?

In Ireland, a place of occurrence code is not required when coding adverse effects of drugs (code range Y40-Y59).

External Cause Codes

When is it appropriate to assign external cause codes?

As per ACS 2001 External cause code use and sequencing, 'an external cause code must be used with codes from S00-T98 and Z04.1-Z04.5 and for complications and abnormal reactions which are classified outside the Injury Chapter.'

Neonatal viral illness

The following codes are assigned for documentation of 'neonatal viral illness':

P39.8 *Other specified infections specified to the perinatal period*

B34.9 *Viral infection, unspecified*

Type 1 and Type 2 Respiratory Failure

What codes are assigned for Type 1 and Type 2 respiratory failure?

Unless the respiratory failure is described as acute or chronic, the following code is assigned:

J96.9 *Respiratory failure, unspecified*

Bone Marrow Aspiration

How is the code for bone marrow aspiration found in the Alphabetic List of Procedures?

See Index entry (Volume 4):

Biopsy

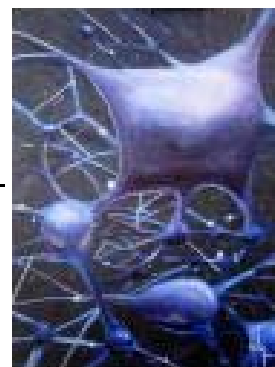
- bone
- - marrow
- - - aspiration



Abnormal microbiology results

A patient had E. Coli identified on MSU (mid stream urine) test and was treated with antibiotics but there was no mention of a urinary tract infection (UTI) in the chart. Can a code be assigned for the UTI?

No. Example 3 in ACS 0010 General abstraction guidelines states 'Do not code N39.0 Urinary tract infection, site not specified where only a microbiology result shows organism(s) have been cultured, unless the treating clinician has documented that the patient has a UTI.'



Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)

The following code is assigned for a diagnosis of CIDP:

G62.8 *Other specified polyneuropathies*

Respiratory tract infection

What is the code for a patient with a respiratory tract infection that is not specified as upper or lower?

See Index (Volume 4):

Infection

- respiratory (tract) NEC

Unless the infection is further specified, the correct code to assign is:

J98.8 *Other specified respiratory disorders*

Do you have a coding query?

Please contact the HIPE Unit or email: hipecodingquery@esri.ie

Remember to provide as much information as possible.

Use the Coding Help Sheet as a guide to the amount of detail required.



Dates For Your Diary

Annual National Casemix Conference

Date: Wednesday 5th April - Friday 7th April, 2006

Venue: The Grand Hotel, Malahide

For registration form and information, please contact Adele Gannon in the Department of Health & Children. The HIPE & NPRS Unit will have a stand at the Conference.



Basic ICD-10-AM Coding Courses

Dates: Tuesday 25th April - Friday 28th April, 2006

Tuesday 5th September - Friday 8th September, 2006

Venue: ESRI, 4 Burlington Rd, Dublin 4

These four day courses are intended for HIPE staff who work in the HIPE Department and who will code discharges using ICD-10-AM. If you have coding staff that require basic training, please contact Marie Glynn, Training Co-ordinator, HIPE Unit, Health Policy & Information Division, at the ESRI.

Intermediate ICD-10-AM Coding Course

Date: Tuesday 30th May - Thursday 1st June, 2006

Venue: ESRI, 4 Burlington Rd, Dublin 4

Candidates will be contacted with details of this three day course.

Galway Refresher Coding Course

*** Limited places still available**

Date: Wednesday 3rd May - Thursday 4th May, 2006

Venue: Harbour Hotel, Galway

This two day course will be a great opportunity for experienced coders to refresh coding skills, check up on guidelines and cut down on queries returned from the ESRI to the hospital. The refresher courses held to date in Dublin, Cork and Cavan have been very successful with excellent feedback from attendees. Further information from Marie Glynn, Training Co-ordinator, HIPE Unit, Health Policy & Information Division, at the ESRI.

Obstetrics Coding & Case Study Workshop

Date: Tuesday 16th May, 2006

Venue: ESRI, 4 Burlington Rd, Dublin 4

Further information from Marie Glynn, Training Co-ordinator, HIPE Unit, Health Policy & Information Division, at the ESRI.

And the winner is.....

Congratulations to Martina Hennessy of Cork University Hospital, who is the winner of our Christmas Crossword Competition. Your prize is on the way!

Keep in touch:

If you have any ideas for future topics for Coding Notes please let us know. Thanks and keep in touch.

Danielle Calvert, HIPE Unit, Health Policy & Information Division, ESRI, 4 Burlington Road, Dublin 4

Phone: 01 630 7185 Email: danielle.calvert@esri.ie