



## ***University of Otago Injury Prevention and Research Unit***

### ***WORKSHOP: Understanding ICD-10-AM morbidity and mortality coded data: Applications for injury surveillance***

**Location:** University of Otago, Dunedin, New Zealand

**Date:** Wednesday 14 and Thursday 15 July 2010

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#### **Presenters:**

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Garry Waller – Senior Classification Officer; Centre for Health Information Research and Training, Queensland University of Technology.

#### **Summary:**

Currently there is a lack of knowledge, understanding, and familiarity of researchers with using hospital (morbidity) and death certificate (mortality) data for injury surveillance and thus it is currently not being used to its full potential. This Injury Prevent and Research Unit (IPRU) sponsored workshop conducted by the National Centre for Health Information Research and Training (NCHIRT) will assist injury researchers to gain a better understanding of the quality and utility of hospital morbidity and mortality data for injury surveillance purposes. This workshop will provide an overview of the key issues to consider when using coded morbidity and mortality data. Participants will be given hands-on experience in the process of coding cause of injury events, with specific information provided and discussion facilitated around those areas identified as particularly difficult and unclear. The processes used to collect, code and compile cause of injury morbidity and mortality data and the implications of these processes for data quality will be described in detail. Approaches for making better use and more effective interpretation of these data will be presented. Processes for revisions of the current classification systems will be described.

## Objectives

The overall objectives of this workshop is to provide participants with a good understanding of the processes, tools, issues, and approaches for utilising morbidity and mortality data for injury surveillance purposes. The specific objectives are:

1. To provide an overview of the principles of classification, the ICD-10-AM and ICD-10 structure and the basics of clinical coding for both morbidity and mortality.
2. To examine the injury and external cause classification system and clinical coding processes pertaining to these in detail.
3. To discuss methodological issues regarding the use of coded data for injury surveillance purposes.
4. To exchange experiences, methods, and tools to facilitate more robust uses of hospital data for injury surveillance purposes.

## Overview

- Overview of ICD-10-AM morbidity and mortality coding for *Chapter 19 Injury, poisoning and certain other consequences of external causes* and *Chapter 20 External causes of morbidity and mortality*.
  - ICD-10-AM morbidity coding focusing on the concepts of Principal Diagnosis, Additional Diagnoses, multiple coding and sequencing for injury prevention.
  - ICD-10-AM mortality coding focusing on the concepts of ICD-10 underlying cause of death (UCOD) and multiple cause of death (MCOD) coding, using additional information, specialty data sets and presentation of data for quality assurance and data utility.
  - WHO selection and modification rules for UCOD as they relate to injury deaths.
- Focus sessions on the idiosyncrasies of each section of *ICD-10-AM Chapter 20 External Causes of Morbidity and Mortality*.
- Issues to consider when analysing coded morbidity and mortality data sets for injury prevention.
- Assessing reliability of coded data.
- Code selection techniques.
- Utility of Principal and Additional Diagnosis codes.
- Utility of UCOD and MCODE codes.

## Program Outline – Day 1

### Session 1

Introduction to ICD-10-AM

- Structure
- Principles of Classification

Volume 1 – Tabular List

Volume 2 - Alphabetic Index

Volume 5 – Australian Coding Standards

Basic Coding Guidelines

Differences between ICD-10 and ICD-10-AM

### Session 2

Overview of morbidity coding:

- Principal Diagnosis (PDx) - Nature of Injury
- Additional Diagnosis (ADx) - External Cause of Injury
- Mechanism
- Object
- Transport injuries
- Place of Occurrence
- Activity
- Injury codes from other chapters

### Session 3

Overview of mortality coding

- Medical Certificate of Cause of Death
- MCODE
- Concept of UCOD
- Selection and Modification of UCOD
- MMDS Decision Tables
- Maternal injury deaths
- Perinatal injury deaths
- Using additional information

### Session 4

Chapter 20 External causes of morbidity and mortality

- Intent overview
- Transport Accidents
  - Definitions
  - Exclusions

## Program Outline – Day 2

### Session 1

#### Accidental injury

- Falls, from, off, on, into, onto  
Exclusions - when a fall is not a fall, Documentation - interpretation
- Inanimate mechanical forces  
Foreign bodies, Contact with
- Animate mechanical forces – kicked, bitten and scratched
- Envenomation - Katipos, white tailed spiders, stingrays, kina, sea-snakes and jellyfish, catfish, scorpion fish and the spiny dogfish.
- Drowning, submersion and other threats to breathing
- Exposure to ...
- Forces of nature – earthquake, avalanche, volcano, cyclone, tsunami.
- Poisoning

### Session 2

- Intentional Self Harm
- Assault
- Undetermined intent
- Legal intervention and War
- Complications and Adverse effects
- Sequelae
- Supplementary factors  
Alcohol, Place of Occurrence, Activity

### Session 3

#### Using Morbidity and Mortality Data

- Data quality issues
- Assessing the reliability of coded data
- Code selection for case selection
- PDx and ADx
- UCOD and MCOD

### Session 4

Open forum for discussing issues, techniques and approaches when using morbidity and mortality data

Course evaluation