

Safety and Quality Use of Medicines

HINZ Seminar –
16th June, 2005

Context

- DHBs and collaboration
- Medication safety as one of the joint projects
- DHBNZ Group established
 - 8 DHBs, Pharmac, MOH, primary care and a consumer
- National forum

Why?

- **Apart from advice, giving medicines is the commonest therapeutic intervention in healthcare**
 - Medication error is any preventable event that may lead to inappropriate medication use or harm
 - An adverse reaction is one which is unintended and noxious and often occurs at doses normally used for therapy
- **Error and adverse events in healthcare are significant**
 - Medication error makes up 20-40% of incidents in reporting systems
 - Medication error makes up 10-20% of adverse events
 - Identified as a priority area for action by the Institute of Medicine (USA)

Initial Agenda

- Strategy
- High Risk Medicines
- Good Prescribing Practice
- Technology and Information Technology
- Primary secondary interface
- Audit

National Strategy

- Medicines safety and current NZ situation
- Aim and Objectives
 - **To achieve safer, more effective and more appropriate use of medicines so that health outcomes are improved for the community**
 - Culture of safety
 - Encourage DHB collaboration and initiatives
 - Improve practice standards (PDA)
 - Identify & mitigate high risk situations/medicines
 - Effectiveness and efficiency of infrastructure
 - Improve primary secondary interface
 - Culture of enquiry

Key Elements of National Strategy

- Leadership
- Best practice
- High risk situations and medicines
- Systems and technology
- Primary secondary interface
- Audit, evaluation and research (Learning)

Comparison of Strategies

Strategy	Breadth	Cost	Clinical Allure
Ad Hoc	Narrow	Low	High
Culture of safety	Broad	Low	Apple Pie
Best Practice	Variable	Low	High
Pareto	Broad	Moderate	Variable
High Tech.	Broad	High	Variable

Leadership

- National leadership
 - Central responsibility
 - Lack of national strategy
 - Trans Tasman Harmonisation
 - Industry
- Local leadership
 - DHBs
 - Professional
 - Academic

How can health informatics help?

- The knowledge, skills and tools which enable information to be collected, managed, used and shared to support the delivery of healthcare and to promote health
- Large menu of possibilities
- Choice and implementation are actually business challenges

Systems

- Analysis, management and prevention
 - Electronic medical record and discharge letter
 - National medicines chart
 - Patient held record
 - Pharmacy management system
 - Adverse event and error reporting systems
 - Computerised audit systems
 - Learning and ownership
- Identification
 - Labelling and packaging
 - Bar coding and RFID

Systems

- Automated distribution
 - Pyxis
 - Smart Pumps
- Information
 - Independent medicines information and support for professionals and consumers
 - National formulary (not just for community)
- Smart systems
 - Electronic order entry for medicines
 - Electronic transfer of prescriptions between interfaces
 - Decision support systems and smart alerts
 - Point of care medication charting systems (IDAS)

Summary

- Big problem because of the frequency of medication use and the commonest target group being the elderly
- Plenty of opportunity to do better
- Critical success factors
 - leadership and commitment
 - ownership and learning
 - appropriate use of applied technology and systems to aid clinical judgement
 - consumer involvement