

# **Medicines Management** in the spotlight

## **Aseptic Dispensing of Unlicensed Drugs**

**‘New’ Ways of Working?**

Tom Gray

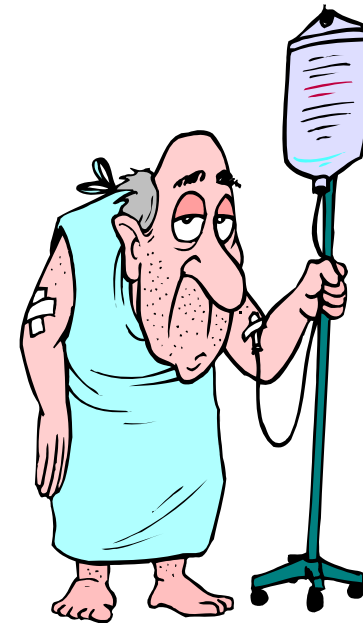
Chief Pharmacist

**Derby Hospitals NHS Foundation Trust**

# Introduction

## Aseptic dispensing of unlicensed drugs

- **Healthcare Commission**
  - The question?
- **National standards**
  - Why they matter
- **Ward based IV Therapy**
  - The evidence
- **Balancing the Risks**
  - Risk assessment
- **‘New’ ways of working**
  - Pharmacy vs. Ward
- **Key messages**



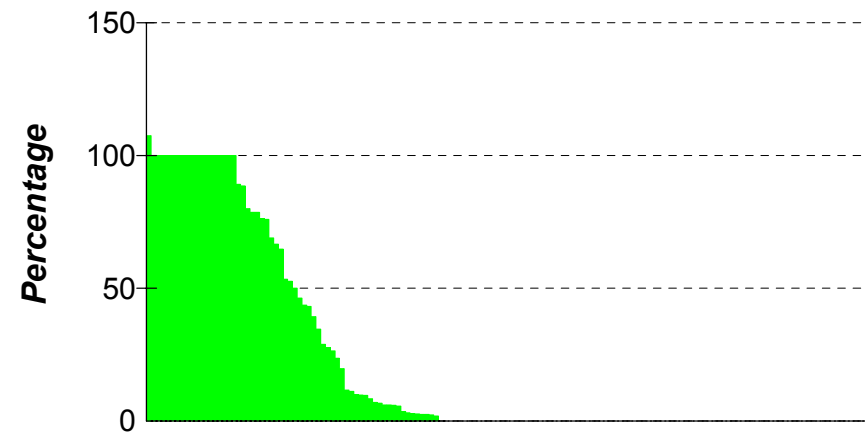
# Healthcare Commission

Inspecting, Informing, Improving

- What question?
- Context
- Overview
  - Aseptic preparation
  - Ward preparation
  - Pharmacy preparation
- Why it matters?

‘How are aseptic preparations managed in your Trust?’

**% WARD PREPARATION WITH RISK ASSESSMENT**



*Acute Hospitals England (n=153)*

# National Standards

## Aseptic preparation of unlicensed drugs

- Why they matter
- History
  - Breckenridge 1976
  - MCA 1994
  - EL(96)95
  - EL(97)52
- National Standards
  - Pharmacy preparation
  - Ward preparation
- Pharmacy Standards
  - ✓ Aseptic Dispensing for NHS Patients – 1994 (Farwell)
  - ✓ Quality assurance of aseptic preparation services – 1996
- Ward standards
  - ? Local Medicines Codes
  - ? Manual of clinical nursing procedures (Royal Marsden)
  - ? Preparation of injections in near-patient areas (NHS Scotland 2002)

# Ward based IV Therapy

Safe, **effective**, appropriate?

- **Preparation**
  - Environment
  - Training
  - Technique
- **Presentation**
  - Container
  - labelling
- **Administration**
  - Rate
  - Documentation
  - Checking

	%	UK	D	Fr
Cleaning		0	4	80
Qualified / IV Trained		Av = 10 / 6 yrs		
Poor technique		100	58	19
Wrong diluent		1	49	18
No / incorrect label		43	99	20
Wrong rate		49	21	5
<i>Qual Safe Health Care 2005; 14: 190-5</i>				

# Risk Assessment

Safe, effective, **appropriate**

- Systematic approach to:
  - Identify hazards
  - Eliminate at source
  - Assess remaining risk
  - Implement controls
  - Document the outcome
- Tools
  - NHS Scotland 2002
  - Hosp Pharm 2005; 12:150-4
  - NPSA Alert (due Q1 2007)

“Many Trusts had special sterile pharmacy areas, but **73% had not done a risk assessment** on at least 25% of wards to determine which medicine preparation should move into these areas”.

*Press release*

*Healthcare Commission Aug 2006*

# Balancing the risks

Preparation of injections in near patient areas. **NHS Scotland 2002**

- ✓ IV injection only when no other route available
- ? Supply in ready to administer form (includes ampoules)
- ✓ No storage in near patient area – administer immediately
- ✓ Undertake risk assessment to identify best approach
- ✓ All cytotoxic and parenteral nutrition prepared in pharmacy
- ✓ Staff (patients/carers) must be trained using safe procedures
- ? Recommend simple bolus administration where possible
- ✓ Regular audit every 12-18 months with remedial action plan
- ✓ Pharmacy aseptic services comply with national standards

# Balancing the risks

Safer use of injectable medicines in near patient areas. **NPSA 2007**

- ✓ Risk assessment of injectable medicines used
- ✓ Up to date procedures for the preparation and administration
- ✓ Essential information to support safe use of IV medicines
- ✓ 'Checklist' to monitor and record safe administration
- ✓ 'Purchasing for safety' policies to minimise risk with products
- ✓ Training and competency assessment for all staff involved
- ✓ Audit against practice standards and governance report

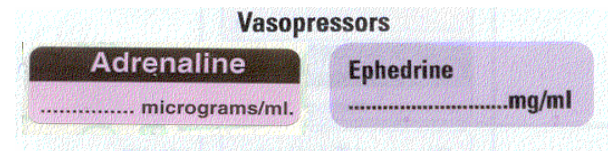
# Medication Errors

## Designed for safety?

1. Amiodarone PFS administered instead of Adrenaline PFS in cardiac arrest
  2. Male patient. Severe asthma  
Rx 2 G IV magnesium infusion.  
4 Grams magnesium was administered by rapid IV bolus
- “Innovative presentations”
  - “The product is presented in our familiar yellow box ...”
  - “Dilute before IV Administration”

## Labelling

E.g. Critical Care Labelling  
Royal College of Anaesthetists



# Pharmacy versus Ward

## The Reality!

### Pharmacy preparation

- ✓ Controlled environment
- ✓ Knowledge, skills & experience
- ✓ Quality assurance / controls
- ✓ Systematic documentation
- ✓ Ongoing risk management
- ✗ Less responsive
- ✗ Remote from patient / MDT
- ✗ Limited capacity

### Ward Preparation

- ✗ Uncontrolled environment
- ✗ Variable skills, limited knowledge
- ✗ Little / no quality assurance
- ✗ Minimal documentation / checks
- ✗ Variable risk management
- ✓ More responsive
- ✓ Direct access to patient / MDT
- ✗ Limited capacity

# 'New' ways of working

## Bringing pharmacy closer to the patient

- Tried and tested
  - Risk assessment
  - Reconstitution devices
  - Information / IV checklist
- Fresh initiatives
  - Modernising manufacturing
  - Purchasing for safety
  - NPSA initiatives
- New opportunities
  - 'Design for safety'
  - Decentralised facilities
  - Multidisciplinary team

### Decentralised Pharmacy Services

- 'From CIVAS to DIVAS'
- Near patient dispensing
- Improved communication
- Access to pharmacy services
- Responsive and appropriate
- Tailored to patient needs
- Monitoring and follow-up
  
- Multi-skilled team working
- Medicines management service

# Key messages

## Getting it Right

- Risks can never be entirely eliminated – Assess them!
- Part of wider medicines risk management strategy
- Balance 'ideals' with needs of patients
- Aseptic preparation, dispensing and administration
- Standardise products as well as practices
- Maximise the impact of **pharmacy** in ward areas

