### Medicines Management: High Risk Medicines

Harprit Sangha
Care Home Pharmacist





**Birmingham and Solihull** 

#### What is a high risk medicine?

High risk medicines are medicines that are most likely to cause significant harm to the patient, even when used as intended



### Why are certain medicines considered high risk?



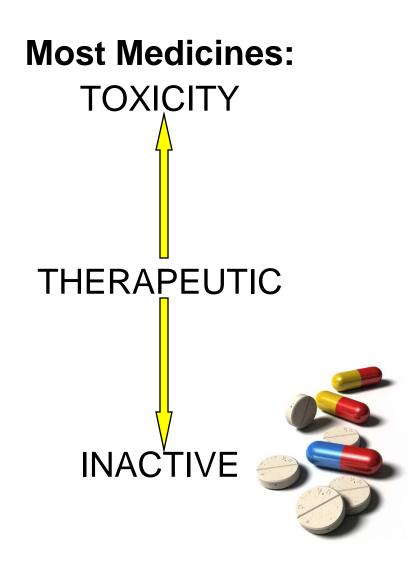
### Why are certain medicines considered high risk?

Medicines with Narrow Therapeutic Index:

TOXICITY

THERAPEUTIC

INACTIVE



### Why are certain medicines considered high risk? Cont...

#### High risk in certain groups:

- Older people, especially if frail
- Multiple medical conditions
- Polypharmacy
- Acute illness e.g. infection
- Ambivalent about taking medication

- Warfarin
- Digoxin
- Lithium
- Insulin
- Hypnotics
- Antipsychotics



#### Warfarin

- Anticoagulant prevents blood clots
- Narrow therapeutic index
- Monitoring requirements (regular INR test)
- Dose dependent on INR result
- Most serious side effect is bleeding
- Numerous factors effect INR e.g. missed/extra doses, other meds, diet, alcohol, other illnesses
- Ensure accurate record of dosage given

#### Lithium

- Mood stabiliser e.g. bipolar disorder
- Narrow therapeutic index
- Monitoring requirements blood tests
- Dose may be adjusted based on blood test results
- Affected by certain medicines
- Possible features of toxicity anorexia, diarrhoea, vomiting, drowsiness, dysarthria, dizziness and tremor.

#### **Digoxin**

- For Heart Failure and irregular heartbeat
- Narrow therapeutic index
- Monitoring requirements e.g. blood tests, pulse checks (omit if pulse<60)</li>
- Low potassium levels toxicity
- Possible features of toxicity anorexia, nausea, vomiting, occ. diarrhoea and confusion (esp. in elderly)

#### Insulin

- Top 10 high alert medicine worldwide
- Important cause of hospital admissions
- Serious harm severe hypoglycaemia
- Common causes missed doses, wrong doses, inadequate monitoring.
- Ensure dose given is recorded

#### **Hypnotics**

- Examples Nitrazepam, Temazepam, Zopiclone
- Older people more sensitive to effects
- Common side-effects 1 drowsiness, sedation and higher risk of falls/fractures
- Encourage 'PRN' use, short duration and lowest effective dose
- Only licensed for short-term use (up to 4 weeks)

#### **Antipsychotics**

- Examples Risperidone, Olanzapine
- Evidence of serious harm in older patients with dementia e.g. îrisk of stroke
- Inappropriate prescribing continues
- Monitoring required blood tests, BP, pulse, weight.
- Regular reviews
- Use of non-pharmacological interventions is preferable.

#### Possible actions to prevent harm

- Good understanding of the medicine at initiation
- Regular medication reviews
- Regular monitoring
- Reliable systems in place to communicate any monitoring
- Appropriate documentation in place

### National Patient Safety Agency (NPSA)



National Patient Safety Agency

**National Reporting and Learning Service** 



### NPSA Patient Safety Alerts: Examples

- Actions that can make anticoagulant therapy safer (March 2007) – e.g. Warfarin patient
- Safer Lithium Therapy (December 2009)
- Safer administration of insulin (Rapid Response Report – June 2010)
- The adult patient's passport to safer use of insulin (March 2011)

#### Central Alerting System (CAS)

The Central Alerting System (CAS) enables alerts and urgent patient specific guidance to be accessed at any time. These alerts include safety information about medicines and appliances.

- CAS website (<u>www.cas.dh.gov.uk</u>)
- Register by email: safetyalerts@dh.gsi.gov.uk



### **Any Questions?**

#### Thank you for listening

