



HEALTH QUALITY & SAFETY COMMISSION NEW ZEALAND

Kupu Taurangi Hauora o Aotearoa



Medicines management

Safer use of medicines

NZNO Professional Forum 2019

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The plan

- The Commission
- Types of error
- Types of intervention to prevent error
- Just culture
- Reporting errors
- Look after each other

Learning outcomes

- At the end of this session you will be able to:
 1. Discuss recent HQSC initiatives to improve patient safety
 2. Describe actions you can take as a nurse to reduce the likelihood of a medication error
 3. List system level interventions that can reduce medication error

HQSC: The Commission

We work towards achieving the New Zealand Triple Aim for Quality Improvement:

- improved quality, safety and experience of care
- improved health and equity for all populations
- better value for public health system resources



Principles

- Vision = a world-class patient-centred health and disability sector
- Doing the right thing – and doing it right
- Work with clinicians, providers and consumers to improve health and disability services
- Quality and safety improvements will mean fewer people harmed, more lives saved, and financial savings within the sector



HEALTH QUALITY & SAFETY
COMMISSION NEW ZEALAND

Kupu Taurangi Hauora o Aotearoa



mission

value

connected

creativity &
innovation, &
and debate

integrity, trust
courage

[Link](#)

What the Commission does ⁽¹⁾

- Monitor and report on quality and safety
 - Support reporting and management of health care incidents
- Build sector capability for quality and safety improvement
- Support clinicians to be leaders of quality and safety improvement and follow best practice
- Build consumer engagement and partnership
- Influence the health quality and safety agenda and be a catalyst for change

What the Commission does (2)



POMRC

Perioperative Mortality
Review Committee



**Child and Youth
Mortality Review
Committee**

**Family Violence Death
Review Committee**



He tao huata e taea te karo

**Perinatal and
Maternal Mortality
Review Committee**

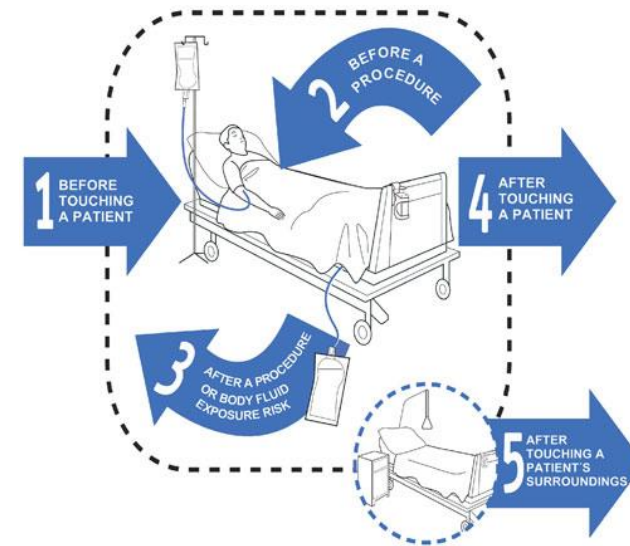


*He matenga ohore, he wairua uiui,
wairua mutungakore*

**Suicide
Mortality
Review
Committee**

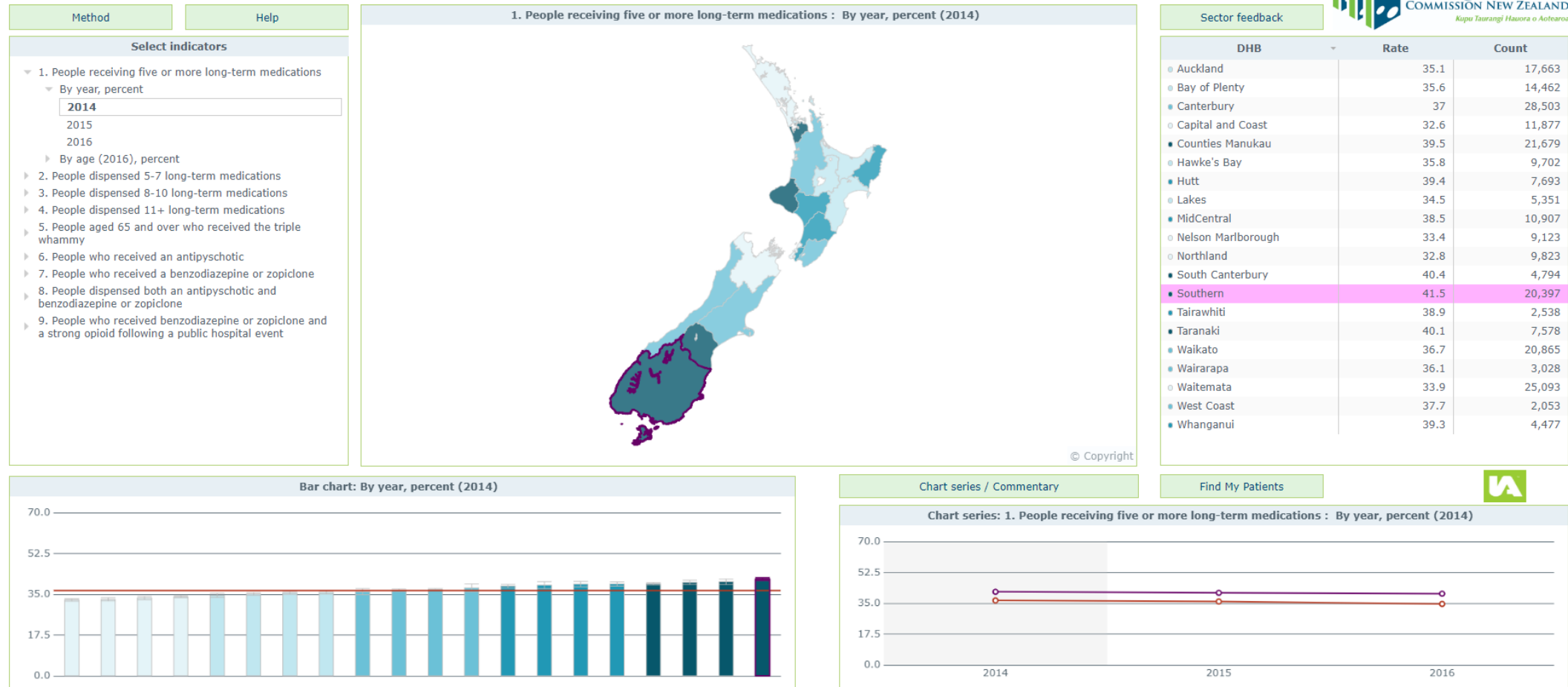
Specific programmes

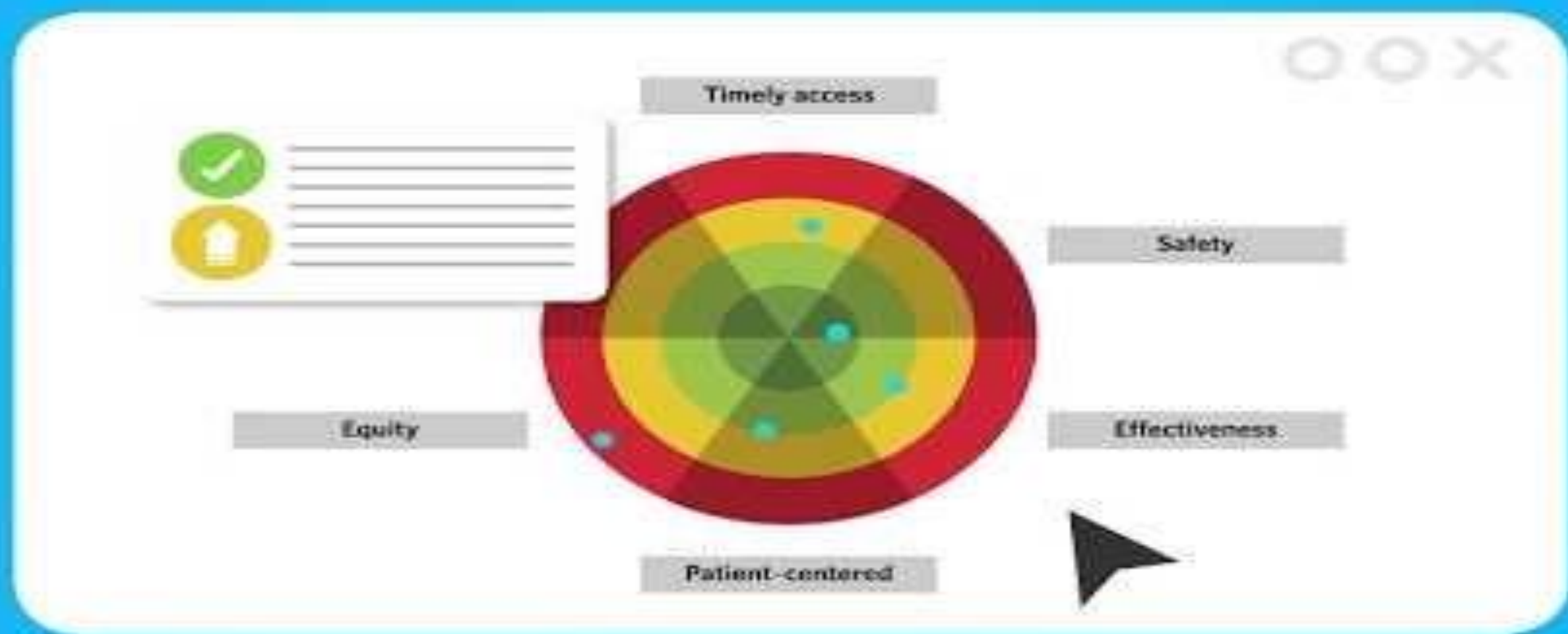
- Hand hygiene
- Infection prevention
- Safe surgery
- Fall programme
- Pressure injuries
- Deteriorating patient
- Advance care planning
- Aged residential care (ARC)
- Mental Health & Addiction



Atlas of healthcare variation: polypharmacy

HQSC Atlas of Healthcare Variation | Polypharmacy in older people







Medication safety programme

Aim: to improve medication safety by leading and guiding the sector on:

- Safe prescribing, dispensing, administration and monitoring of medicines
- Accurate and timely transfer of medicine information at transition points of care
- Reducing harm from high-risk medicines and situations
- Providing expert advice, tools, resources for the sector

Current Priorities (medication safety) ⁽¹⁾

1. Safe use of opioids

- Quality and safety marker (QSM) development
- Opioid stewardship

2. Consumer engagement

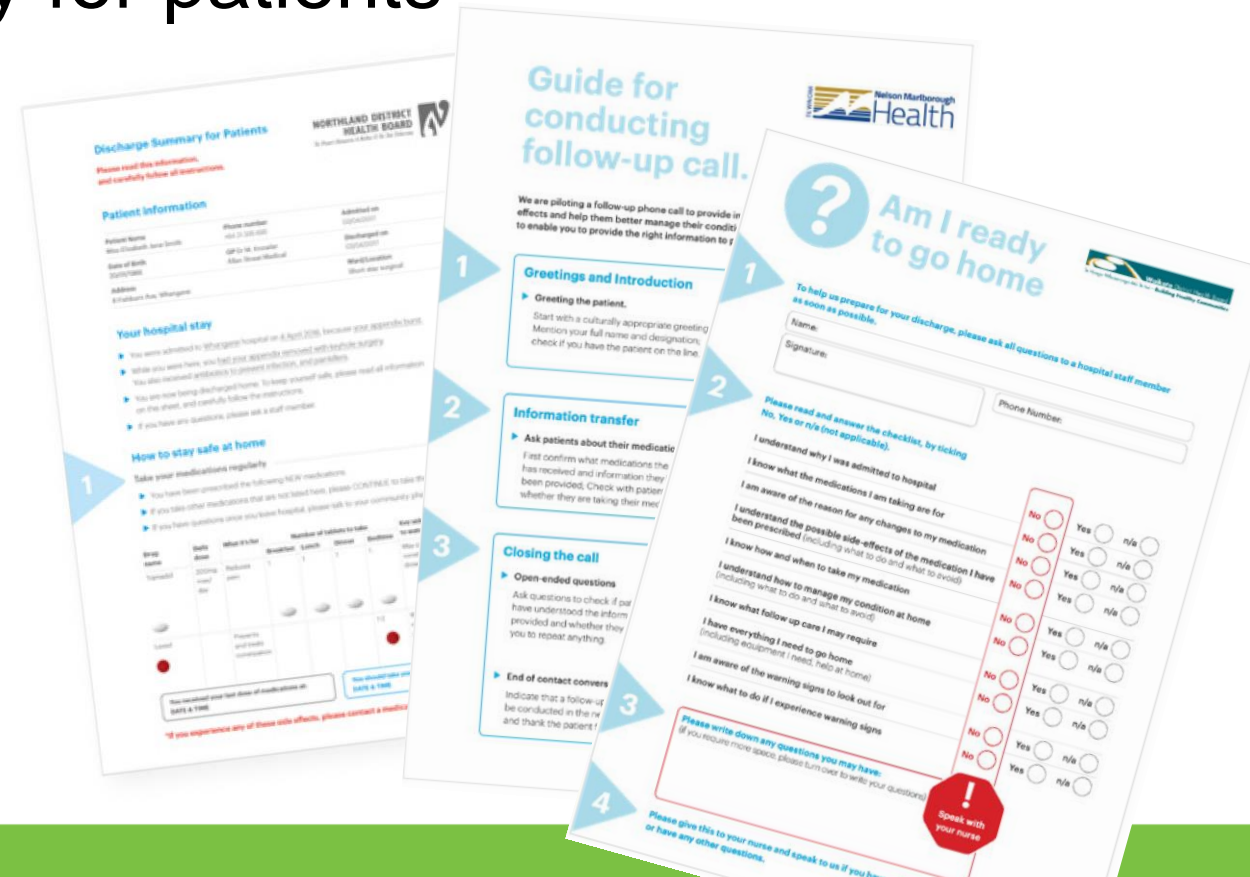
- In-patient experience
 - building on the results from the recent discharge experience project in four DHBs
 - *'Raising the Bar on the National Patient Experience Survey'*
 - Medication side effect question - Did a member of staff tell you about medication side effects to watch for when you went home?



Three co-designed nudges

(consumers and local hospital staff)

1. Optimised discharge summary for patients
2. Home safe checklist
3. Follow-up phone calls



The image displays three co-designed nudges for patient discharge and follow-up:

- Discharge Summary for Patients (Northland District Health Board):** This form provides patient information (Name, Date of Birth, Address, Phone Number, Discharged on, Discharged to, Ward/Location) and instructions on how to stay safe at home. It includes a table for recording medication intake (Drug name, Dose, Frequency, Number of tablets to take, How to take) and a section for patient feedback (How satisfied you are with the information, How satisfied you are with the advice given).
- Guide for conducting follow-up call (Nelson Marlborough Health):** This guide outlines the steps for conducting a follow-up phone call, including Greeting and Introduction, Information transfer, and Closing the call. It includes a checklist for the caller to follow.
- Am I ready to go home (Nelson Marlborough Health):** This checklist is designed to help patients prepare for their discharge. It includes a section for the patient to complete (Name, Signature, Phone Number) and a section for the hospital staff member to complete (Name, Signature, Phone Number). The checklist covers various aspects of readiness, such as understanding the reason for admission, understanding the medication, understanding the side effects of the medication, understanding how to manage the condition at home, and understanding the warning signs to look out for.

Current Priorities (medication safety) ⁽²⁾

3. Support electronic medicines systems

- NZePS
- ePharmacy, eMedRec, ePA
- e-Health Record

4. Medicine reconciliation (electronic and paper)

- Quality and safety marker (QSM) – revisit
- Information, technical questions

Current Priorities ⁽³⁾

5. Aged residential care (ARC)
6. National medication chart review
7. Tall Man lettering review
 - Look-alike sound-alike

diPYRIDAMOLe	diSOPYRAMIDe
doTHIEpin	doXEpin
fluARlx	fluVAX



8. Event reporting (hospitals)

Learning from events and the literature

- Alerts, Safety Signals, Open Books
- Working with PHARMAC and Medsafe
- Working with professional bodies
- Newsletter alerts

Medication Alert

Transdermal Patches

Safety signal

Oral metoprolol administration

Open Book

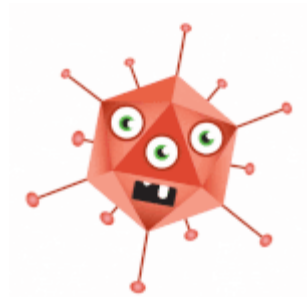
Learning from close calls and adverse events

**ALERT: Prescribing error –
dabigatran and enoxaparin**

Patient Safety Week



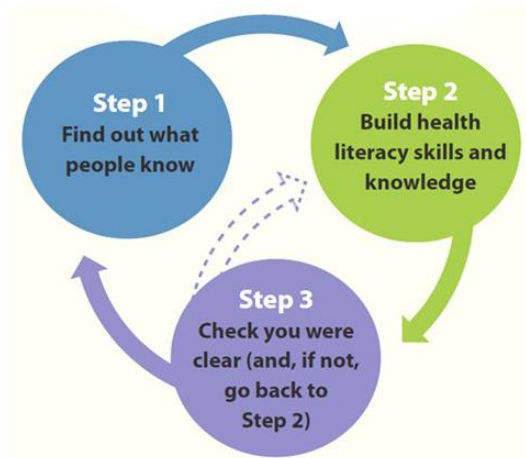
- 2017 Medication safety
- 2018 Infection prevention and control with a focus on good hand hygiene
+ antibiotic stewardship



Other resources

*Ask me about
your medicines*

*Pātai mai
mō ō rongoā*



Preparing to leave hospital

Hospital staff want you to leave feeling well informed and with answers to any questions you may have. This sheet will help. Some things may have already been discussed with you and won't be relevant. There is space over the page if you or your family/whānau want to make notes.

Preparing to leave

- If you have any concerns or unanswered questions about your health care, talk to your doctor or nurse.
- Note down names and contact details for anyone you may want to get in touch with about your health care after you leave hospital.

Medication

- List any medicines you should take, when to take them, if they are for and if they have possible side effects.
- Make sure you understand changes that may have been made to your normal medicine (if you had any).
- If you've been prescribed new medicine/s, be aware they may be costly.

Appointments

- Check with your doctor or nurse if you need to attend any follow-up appointments or have further tests, and if so where (eg. at hospital or with your GP).
- If you need to see your GP after you leave hospital, make sure you know when and remember to make an appointment.
- If you're expecting test results, find out how you will get them (eg. someone will phone you or you will need to make the call).

Looking after you after you leave

- If you need to, make note of anything you should watch for after you leave (eg. worrying symptoms, temperature, increased bleeding).
- Any special instructions given (eg. about work, drive or what you can do to stay healthy as possible exercise or rest).
- When you can resume normal activities.
- Anything you need to do differently.

open
FOR BETTER CARE



**Are you taking
medicines for epilepsy,
mood or pain?**

Information for females,
their family and whānau



New resources

- Patient engagement is widely acknowledged as a cornerstone of patient safety
- Active partners



5 QUESTIONS TO ASK ABOUT YOUR MEDICATIONS
when you see your doctor, nurse, or pharmacist.

- 1. CHANGES?**
Have any medications been added, stopped or changed, and why?
- 2. CONTINUE?**
What medications do I need to keep taking, and why?
- 3. PROPER USE?**
How do I take my medications, and for how long?
- 4. MONITOR?**
How will I know if my medication is working, and what side effects do I watch for?
- 5. FOLLOW-UP?**
Do I need any tests and when do I book my next visit?

NGĀ PĀTAI E 5 E PĀ ANA KI Ō RONGOĀ HEI TUKU MĀU
i a koe ka kite atu i tō tākuta, nēhi, kaituku rongoā rānei.

- 1. HE PANONI?**
Kua tāpīrihia, kua mutu, kua panonihia rānei ētahi rongoā, ā, he aha ai?
- 2. HAERE TONU?**
He aha ngā rongoā me kai tonu ahau, ā, he aha ai?
- 3. WHAKAMAHI TIKA?**
Ka pēhea taku kai i aku rongoā, ā, kia hia te roa?
- 4. AROTURUKI?**
Ka pēhea taku mōhio mēnā rānei e whai hua ana taku rongoā, ā, me mataara ahau ki ēhea tūpono raruraru?
- 5. TURUKITANGA?**
Me whakamahi au i ētahi whakamātautau, ā, āhea au whakarite ai i taku toronga whai ake?

Kia kaha kia hou tonu tō mauhanga rongoā.

Me maumahara ki te tuhi:

- ☒ ngā mate pāwera rongoā
- ☒ ngā huaora me ngā manawa whenua
- ☒ ngā hua otaota/māori
- ☒ ngā rongoā katoa tae atu ki ngā hua kore whakahau rongoā

Uiuia tō tākuta, nēhi, kaituku rongoā rānei hei arotake i te katoa o ō rongoā kia kite ai mēnā rānei ka taea te whakamutu, te whakaheke rānei i ētahi.

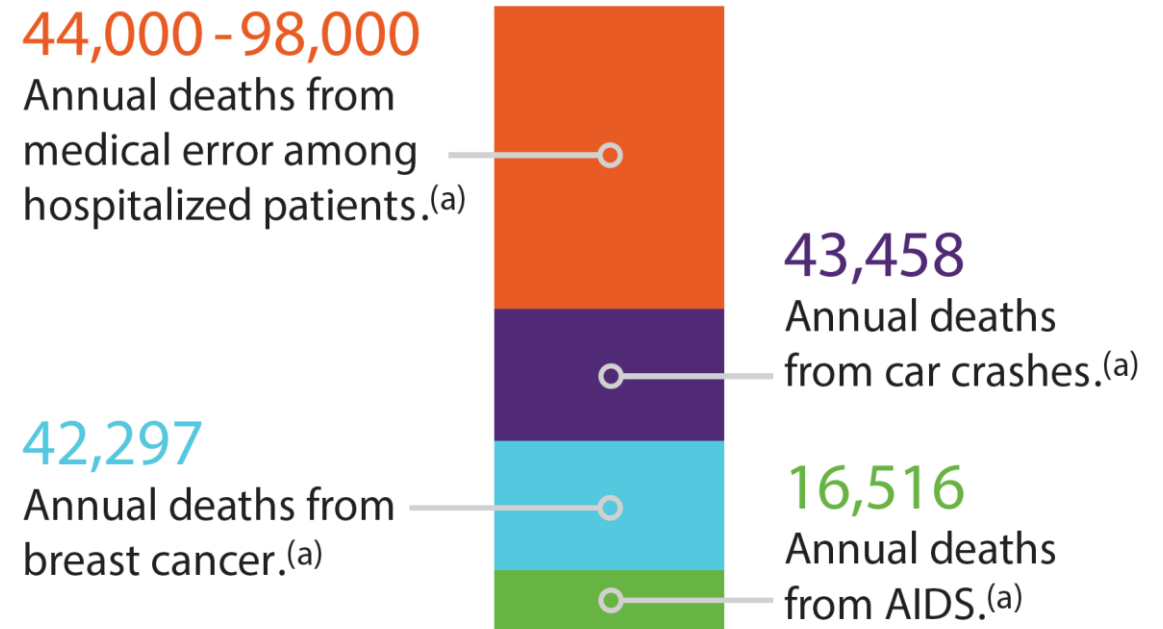
Logos: iHMP, CPSI-ICSP, Health Quality & Safety Commission New Zealand, Canadian Society of Hospital Pharmacists, Société canadienne des pharmaciens d'hôpitaux, Canadian Pharmacists Association, Association des pharmaciens du Canada, SafeMedicationUse.ca

Why medication safety?

What do the data tell us?

USA data – medical error

- To Err is Human framed patient safety as a serious public safety issue
- 1999 estimates



New Zealand data

- Trigger tool methodology
- Across 6 DHBs
- 2,659 reviews (small sample size)
- Medication-related harm quite common
- 30 adverse drug events per 100 admissions

Effect	Extent
Minor	61%
Hospital admission or ↑ LOS	35%
Permanent harm or death	1.6%
Opioids (32%) anticoagulant or antiplatelet (9%)	40%

Effect	Extent
As inpatient	65%
In community setting	29%
Resulted in readmission	5.5%

The extent of harm

Every year in NZ as a result of adverse medicine events:

44,954 people are
severely harmed²

2,247
people die²

Preventable adverse drug events cost
\$222.5 million to the health system³

- Data based on hospital events
- Values you get are dependent on which study and the assumptions used in your calculations

2. Robb et al. 2017. NZMJ 130 (1460): 21-32

3. Brown et al. 2002. J Health Serv Res Policy 7 (Suppl 1): S29-S34

Sytem-level context ⁽²⁾

2013	Injuries	Deaths
Roads ¹	11,219	293
Mental Health ²	7,267 Self harm hospitalisations	508
Medicines ³	44,954 Severe harm (permanent harm and /or, intervention required to sustain life)	2,247

2018
379

- <http://www.transport.govt.nz/research/roadtoll/annualroadtollhistoricalinformation/>
- <http://www.health.govt.nz/publication/suicide-facts-2013-data>
- Robb et al. Medication-related patient harm in New Zealand hospitals, NZMJ. 2017; 130(1460): 21-32
- Figures quoted extrapolated using hospital discharge figure: <http://www.health.govt.nz/publication/publicly-funded-hospital-discharges-1-july-2012-30-june-2013>

Common types of medication error

- Administration of an error against a known allergy
- Look-alike sound-alike medicines (LASA)
- mg versus mL dosing
- Tenfold dose error
- Variation in strength of liquid medicine

[link](#)



- **Medicine confusion:**
- **look-alike sound-alike medicines (LASA)**

Disopyramide vs Dipyridamole

Clonazepam vs Clozapine

- **mg versus mL dosing**

The patient was prescribed clozapine 25 mg.

The patient was administered 25 mL of clozapine 50 mg/mL liquid, a 50x overdose.

The patient subsequently aspirated and was transferred to ICU for intubation and mechanical ventilation.

- **Tenfold dose error - anagrelide**

Patient charted 5 mg anagrelide. Dose should have 0.5 mg (usual dose). 3 doses administered.

The prescription was incorrect.

5 mg required 10 capsules.

Usual dose range 1-3 mg daily in divided doses

maximum single dose 2.5 mg

maximum 10 mg daily

- **Dose error - gentamicin**

Patient charted gentamicin 2 g
(typical adult dose is ~350 mg or so)

Nurse questioned / challenged the dose,
but the prescriber insisted.

Required 25 x ampoules to prepare the dose
(gentamicin 80 mg/2 mL)

MORE THAN TWO COULD BE A CLUE

It is uncommon to need more than two or three tablets, capsules, vials, ampules, etc., to prepare a single dose of medication.

Before using more than two or three of anything to prepare a medication dose, verify with a pharmacist.



A medication error occurred in the home
for a patient with a chronic condition. The
patient's condition was not monitored closely
and the patient was not taking the medication
as prescribed.

- **Tenfold dose error - metoprolol**

11.875 mg prescribed; 118.75 mg administered.

Patient became hypotensive, severely bradycardic. Transferred to ICU, administered glucagon, intravenous fluids, but died 16 hours later.

- **Tenfold dose error - metoprolol**

$$\begin{array}{rcl} 95 \text{ mg} & & \\ \frac{23.75 \text{ mg}}{118.75 \text{ mg}} & \text{or} & \frac{2.5 \times 47.5 \text{ mg}}{118.75 \text{ mg}} \end{array}$$

- **Variation in strength of liquid medicine**

A 7-year-old with cerebral palsy was prescribed baclofen.

The pharmacy inadvertently gave them 10 times the intended amount.

The child had three hospital visits that involved increased seizures, shortness of breath and deep breathing.

- **Variation in strength of liquid medicine**
- A compounded product resulting in the incorrect strength being made
- Commercial product = 10 mg/10 mL
 - an non-funded, unapproved medicine in New Zealand
- Prescribed as 10 mg/10 mL
- New Zealand standard formulation = 10 mg/mL
- Pharmacist compounded 10 mg/mL – but did not provide a corresponding reduction in the dose volume

- **Misinterpretation of labelled strength**

Ciclosporin 100mg IV BD prescribed.

Ampoules are 50 mg/mL in 5mL = 250mg per ampoule.

Patient received 2x amps (500mg) instead of 2mL.

Elevated ciclosporin levels, patient pancytopenic, acute kidney injury and dialysis commenced.



No one goes to work intending to
harm someone

Insulin pens

- How do insulin pens work?
- What could go wrong?
- We will come back to this later
- Please – I need the syringes back

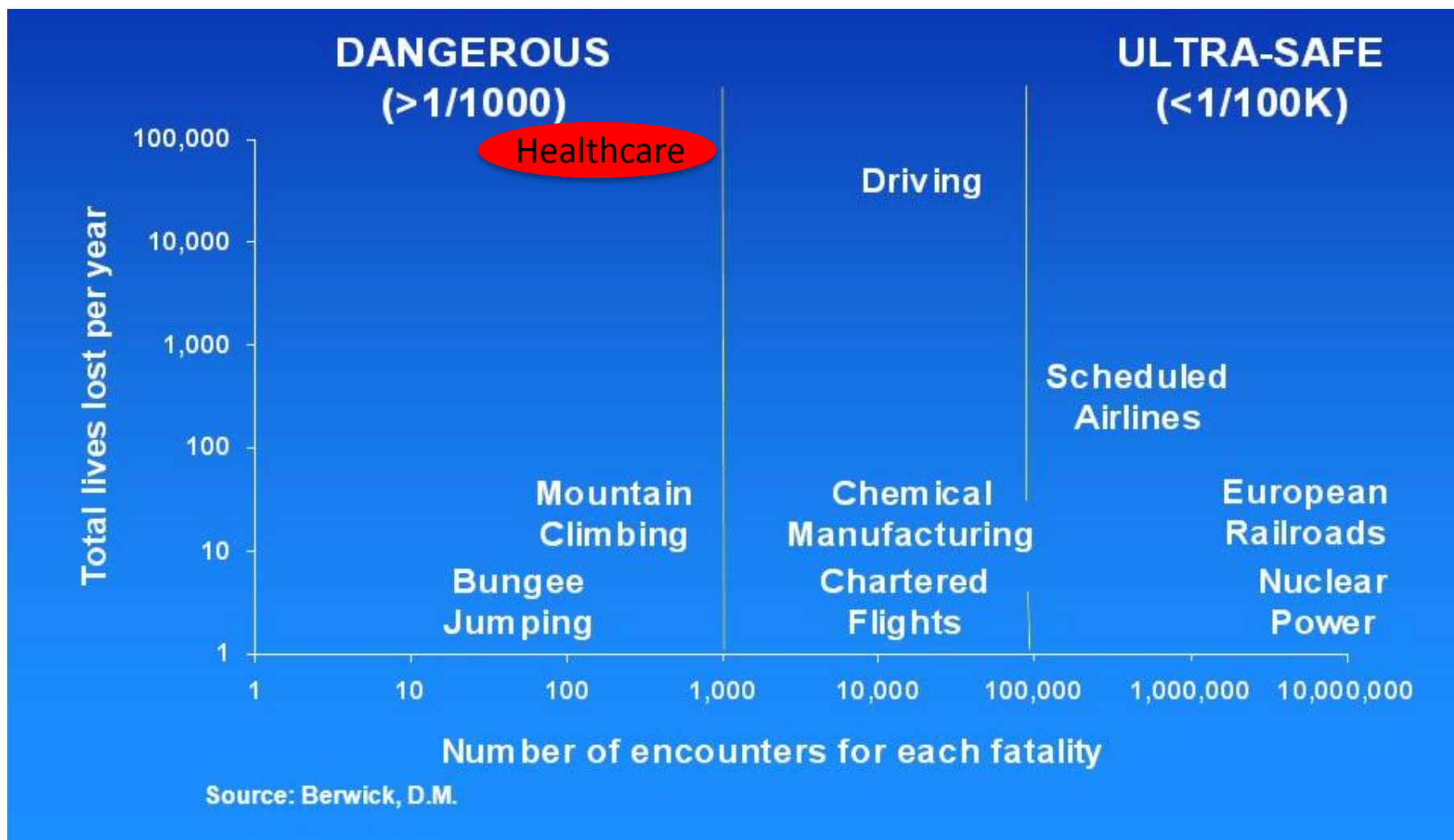


With thanks to: Novo Nordisk & Lilly for providing the pens for teaching purposes

Healthcare is highly complex
and variable

An interconnection between people,
systems, environment and cultures

Healthcare is a risky activity



Well....

- In part, the risks in healthcare are due to the illness or injury that brings the patient to healthcare and the lifesaving interventions provided

The risk of death from hospitalisation is small compared with the (close to certain) risk of death with untreated bacterial meningitis or a ruptured viscus

Nurses, doctors and pharmacists are
expected to function perfectly 100% of the
time ...

... but.... we work in an imperfect system
... and ... we are all fallible

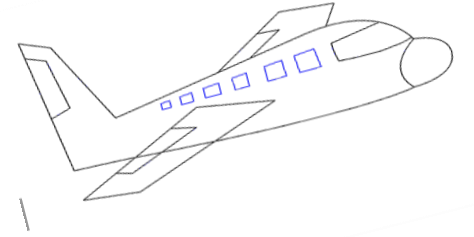
Accident Investigations

- Human error is listed often as a contributing factor
- Most of the time, accidents are the result of multiple events
- Contributing factors could be personal, environmental, mechanical, organisational, or any combination of these

Accident Investigations

- FAA 'dirty dozen' preconditions for unsafe acts
 - Fatigue
 - Stress
 - Complacency
 - Communication
 - Awareness
 - Distraction
 - Lack of knowledge
 - Teamwork
 - Lack of resources
 - Pressure
 - Lack of assertiveness
 - Norms

Airlines



If a crew member is sick and can't be replaced the flight is cancelled



In healthcare

We can't close a ward if a staff member is sick

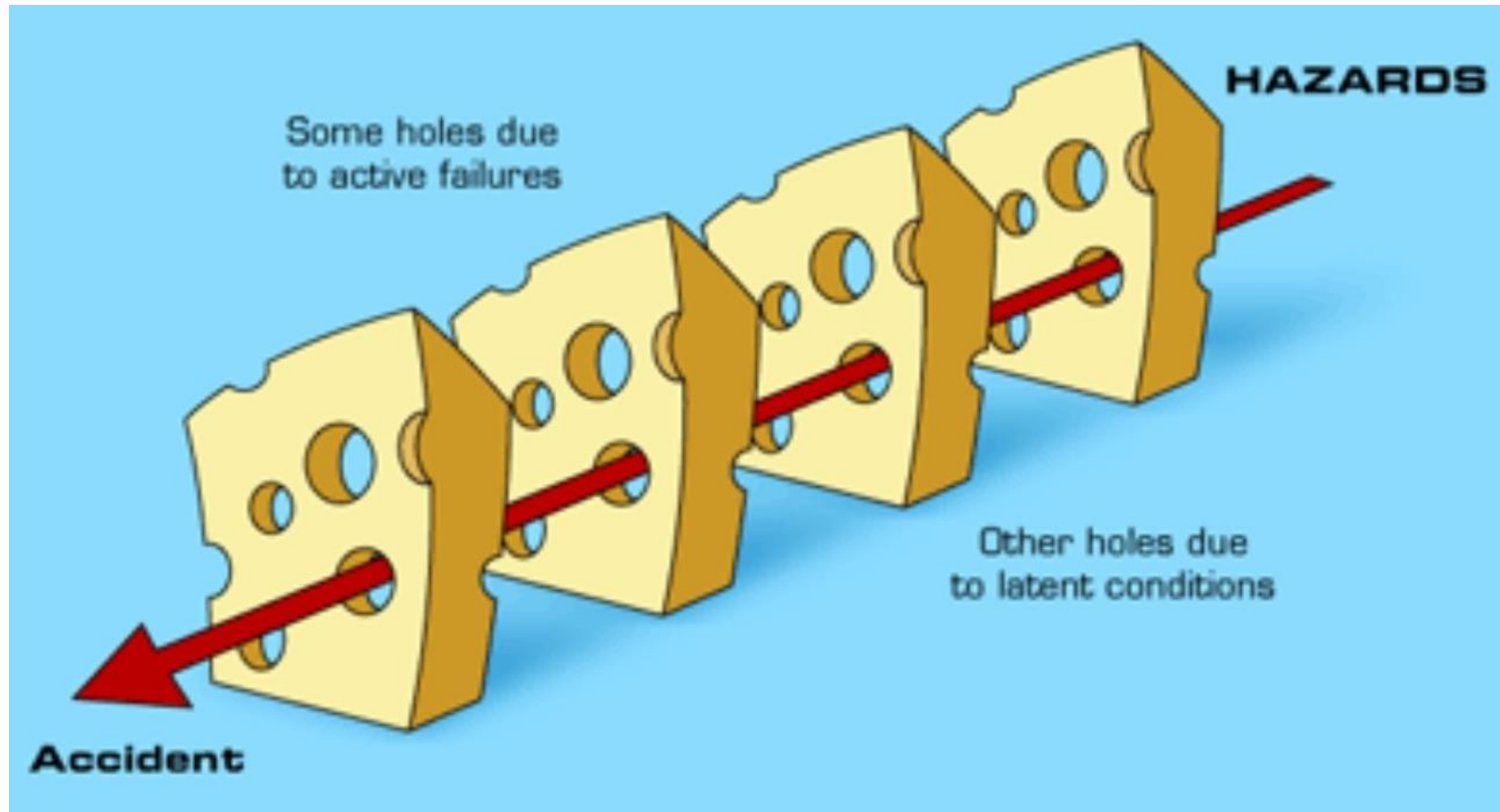
‘Human error happens so it is important that organisations have systems with defences built into them to prevent those errors from reaching a patient’

We know that mistakes will happen

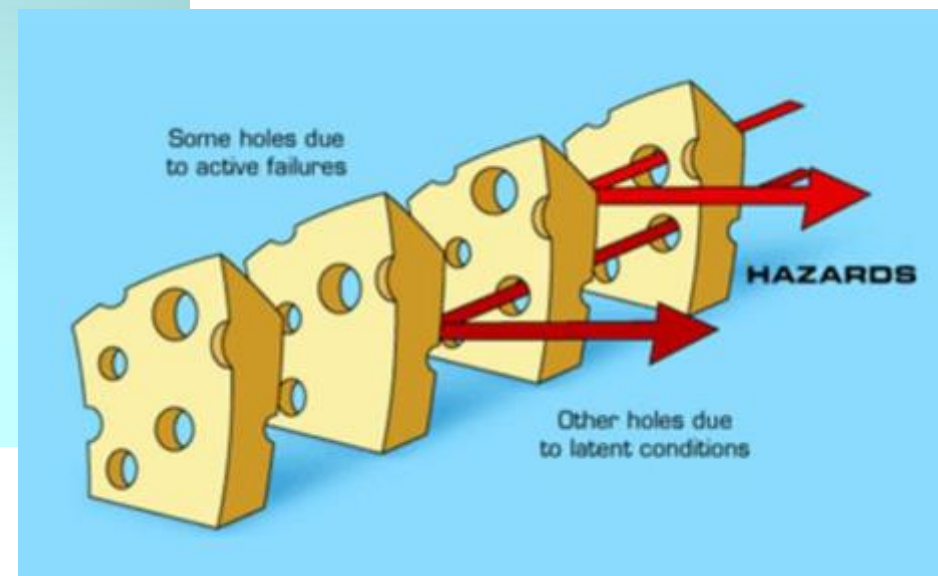
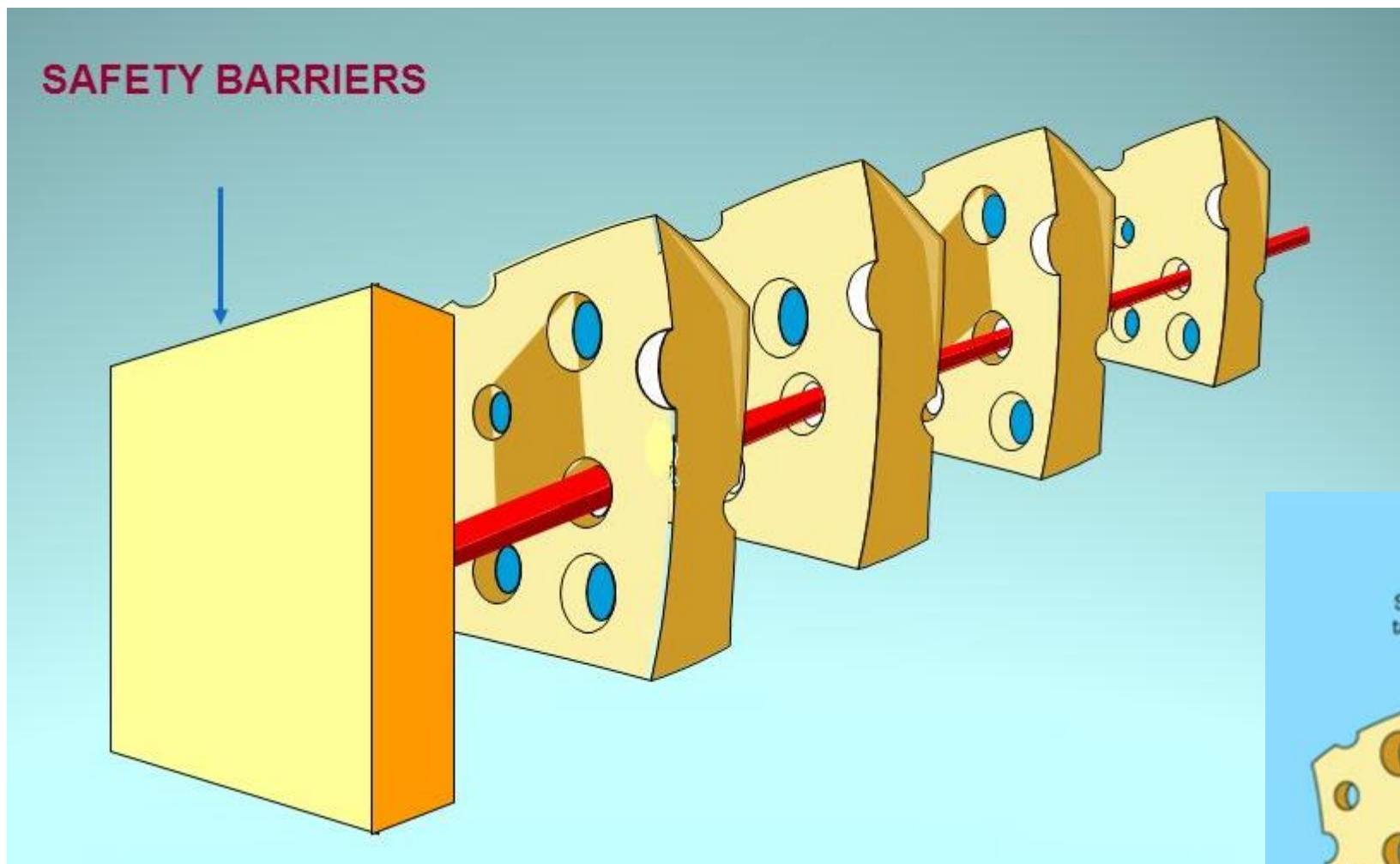
So ... we need to get better at preventing
them

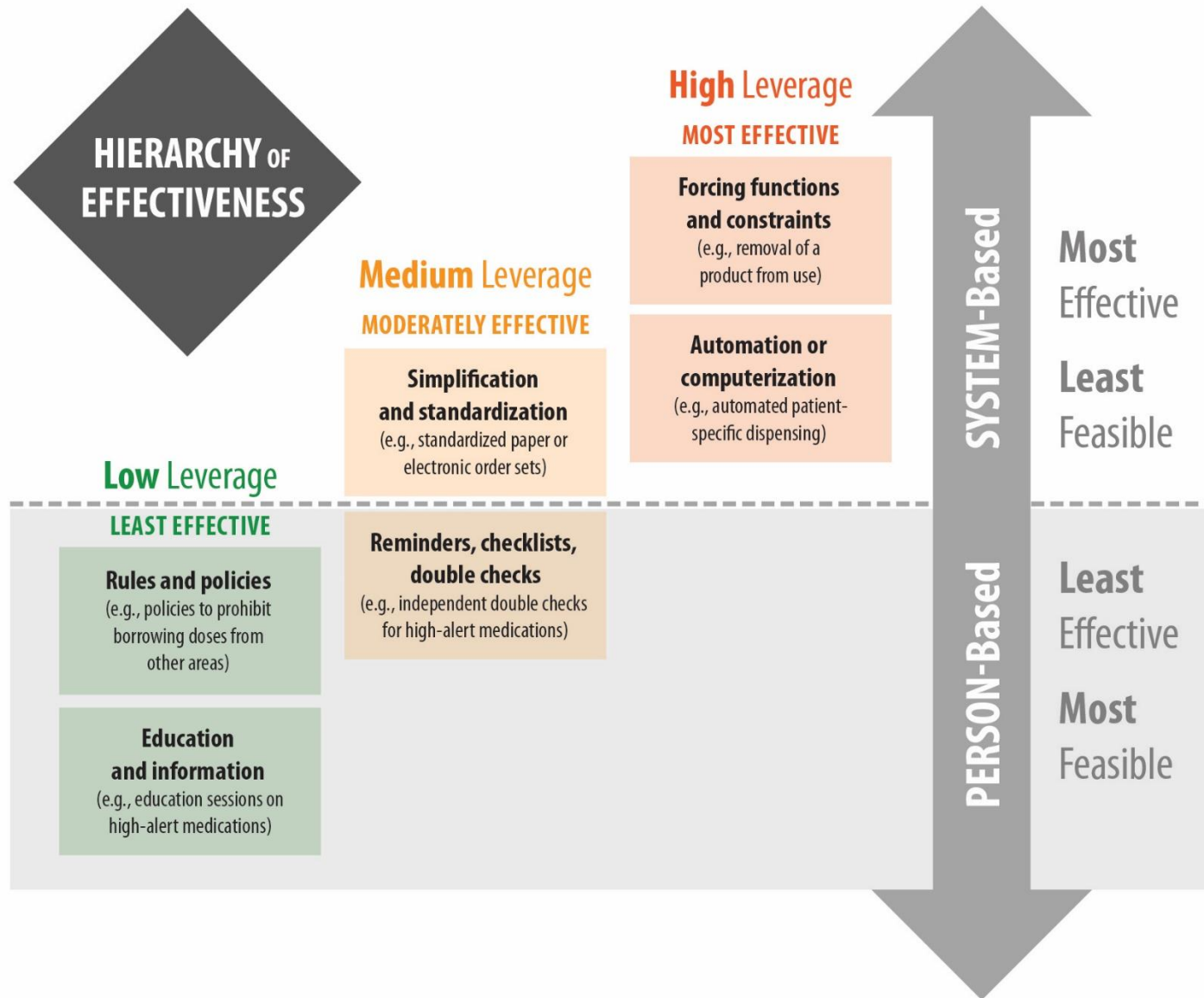
No single intervention will prevent error

James Reason's Swiss Cheese Model



SAFETY BARRIERS





System orientated changes produce longstanding results

Information, education, rules, policies, alerts:
Whilst important these do not typically result in longstanding change

**Hard
High impact**

**Soft
Low impact**



Forcing

- Removal
- ENFit, NREFit connectors

**Automation
computerisation**

- Bedside verification
- Integrated SMART pumps
- ePrescribing & administration
- SMART pumps WIFI communication
- Bar code scanning
- SMART pump stand alone

**Standardisation
Simplification**

- National medication chart
- ISBAR
- Tall man lettering

**Reminders and
double checks**

- Independent double checks
- Education
- Audits
- Posters / alerts / reminders

Rules and policies

- Rules / standards / policies

Forcing functions



Low impact interventions

- Education
- Information
- Reflective exemplar
- Rule, policies and protocols
- Posters
- Signs
- Reminders



Back to the insulin pen

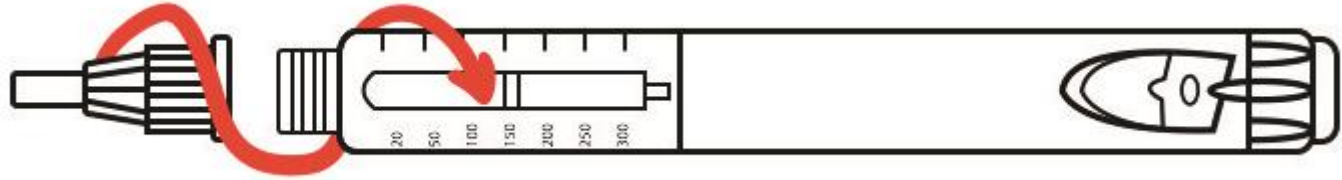
- Failure Mode Effects Analysis

Failure Mode Effects Analysis

- FMEA
- Prospective risk assessment
- How could it go wrong and what is the resultant effect?
- Anticipating and reducing potential risks
 - Risk-reduction strategies before implementation



Failure Modes and Effects of insulin pen



- Incorrect storage
- Using expired product
- Needlestick injury
- LASA presentations – mix-up of pens / insulin types
- Not removing the pen cap
- Not removing the needle outer cap
- Not removing the needle inner cap
- Not priming the needle
- Not removing the needle post dose (air /bugs)
- Not disposing of the needle correctly
- Not replacing the needle
- Using cartridge like an multidose vial (bubbles)
- Sharing insulin pens (bugs ~ 50%)
- Inserting the wrong cartridge
- Empty cartridge
- Not mixing cloudy insulin (clumping; blockage; dose)
- Wrong / no dose dialled up
- Withdrawing the needle too quickly (\neq 10 seconds)
- Dialling down the dose – not pushing the button
- Using the demonstration devices ‘therapeutically’

Design failures



Look-alike sound-alike



But ... sometimes it matters

stuff ≡

dominion post

Chemist gives cancer patient wrong meds

TRACEY CHATTERTON • 15:20, Aug 07 2014



A Napier pharmacy gave a breast cancer patient the wrong medication which she unknowingly took for three months.

In March last year, the woman went to Napier Balmoral Pharmacy for a three month supply of tamoxifen, a Health and Disability Commission report says.

The woman, known as Ms A, was prescribed a five-year course of the drug following a bilateral mastectomy and chemotherapy in 2012.

A staff member correctly typed out a prescription label for 20mg tamoxifen but it was put on the wrong bottle, an investigation by the pharmacy found.

A similarly named drug, tenoxicam 20mg was mistakenly taken from the shelf and given to Ms A.





- Pindolol vs Prednisone



- Levomepromazine vs
Levetiracetam
- Disopyramide vs
Dipyridamole
- Clonazepam vs
Clozapine

Tall man lettering

- To reduce the risk of LASA name errors
- A combination of upper and lower case letters
- Highlight differences
- More easily distinguished

Medicine 1	Medicine 2
fluOXETine	fluVOXAMine
cLARITHROMYcin	cIPROFLOXAcin
diSOPYRAMIDe	diPYRIDAMOLe
CLONazepam	cLOZAPine

The NZ list tall man lettering list:

www.hqsc.govt.nz/assets/Medication-Safety/Tall-Man-lettering/Tall-Man-poster-Dec-2013.PDF

Medicines storage considerations

- Sufficient space
- Separate bin per medicine
- Label bins not shelves
- Use tall man lettering for high risk
- Segregation by route
- Stock vs patient's own
- Alphabetically
- But separate look-alike sound-alike
- Different salt forms
 - hyoscine BUTYLbromide
 - hyoscine HYDRObromide
- Different strengths
- Noise levels / interruptions
- Lighting
- Temperature



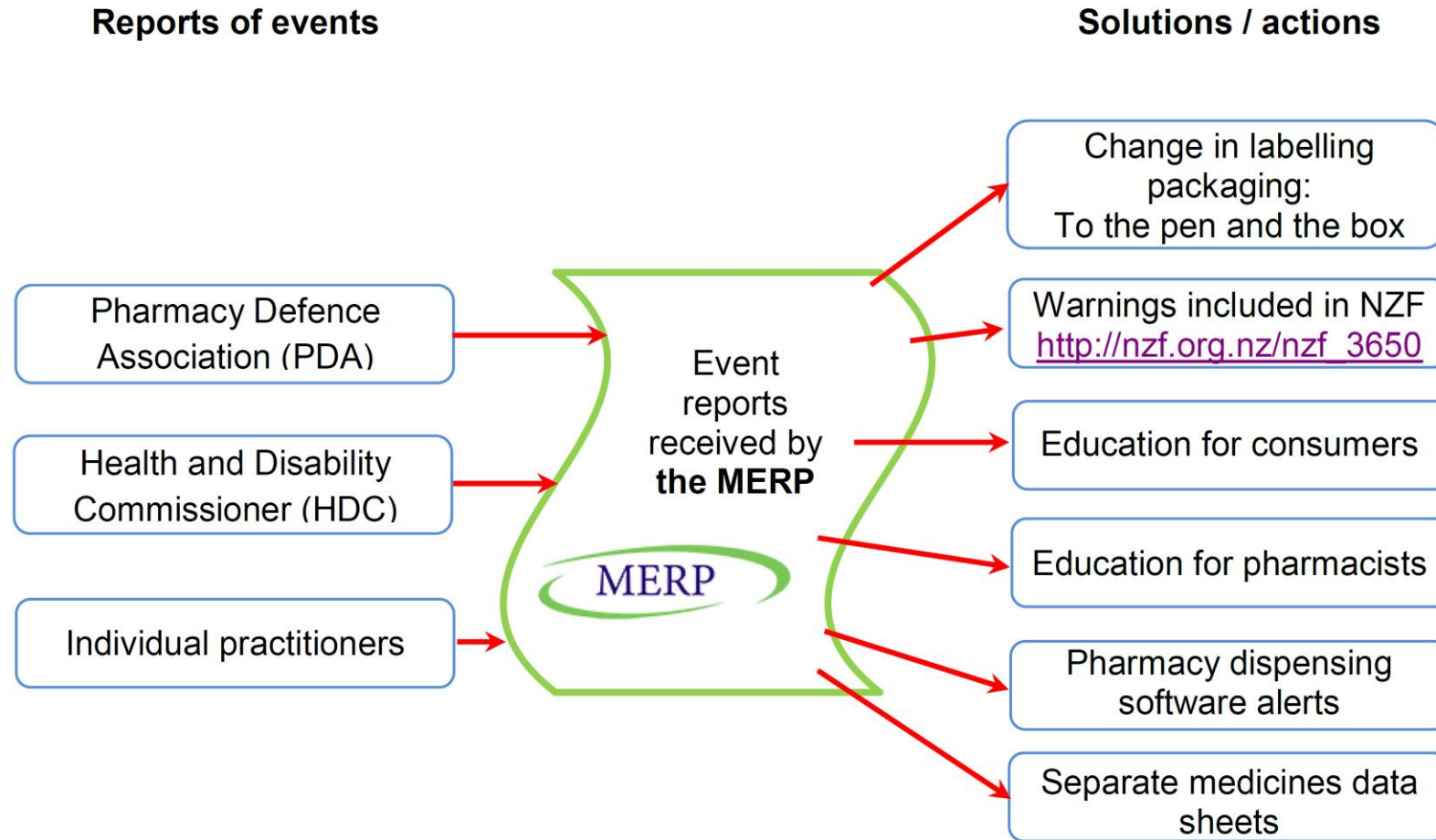
Look-alike sound-alike (summary)

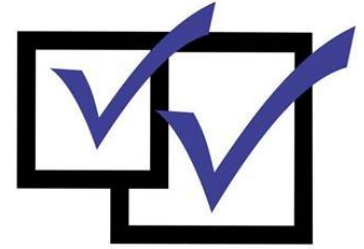
1. Tall man lettering
2. Separate storage
3. State the indication of the prescription
4. Computer listing of both brand and generic names (less impact in NZ as low brand prescribing)
5. Electronic alerts for LASA medicines
6. Report near-misses and events nationally
 - National action eg, FlexPen

NovoMix 30 Flexpen / Novo Rapid Flexpen



NovoMix 30 Flexpen / Novo Rapid Flexpen





Independent double check⁽¹⁾

A procedure in which two health care professionals

- separately check
(alone and apart from each other, then compare results)
- each component of a medicine
(the prescription, calculation, components and preparation)
- before administering it to the patient.

Independent double check ⁽²⁾

- Independent
 - separately check each element of the work process
 - without interference, discussion or prompting
 - the first person must not talk the second person through the preparation and checking of the medication
 - calculations must to completed before comparing the results from the first person
- Performed correctly - intercept and prevent errors
- Use selectively



Comparison to prescriber's order:

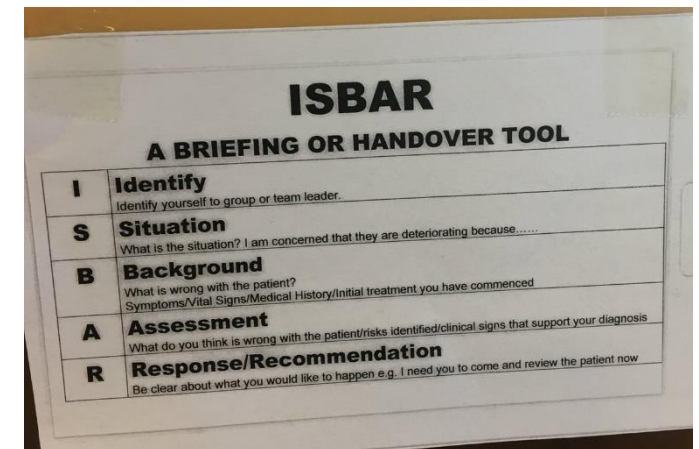
- ▶ Is this the prescribed drug?
- ▶ Is this the prescribed dose/strength/rate of infusion?
- ▶ Is this the prescribed route of administration?
- ▶ Is this the right patient?
- ▶ Is this the prescribed frequency/time for drug administration?

Additional cognitive checks:

- ▶ Does the drug's indication match the patient's diagnoses or conditions?
- ▶ Is this the right formulation of the drug?
- ▶ Are dose calculations correct?
- ▶ Is the dosing formula used to derive the dose correct (mg/kg)?
- ▶ Is the prescribed dose appropriate for this patient?
- ▶ Is the dosing frequency/timing appropriate for this patient?
- ▶ Is the route of administration safe and proper for this patient?
- ▶ Are pump settings correct (if applicable)?
- ▶ Is the infusion line attached to the correct port (if applicable)?
- ▶ Have appropriate monitoring tests been ordered?
- ▶ Are the test results upon which a dose has been based verified as belonging to this patient?

Standardisation

- Checklists
 - Surgical safety checklist
- Common format documentation
 - National medication charts
 - Deteriorating patient / adult vital signs chart
- Template forms (with standard layout of fields required)
- Communication
 - ISBAR
- Resus trolley layout



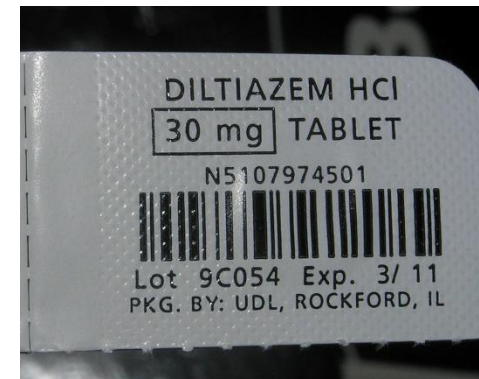
ISBAR	
A BRIEFING OR HANDOVER TOOL	
I	Identify Identify yourself to group or team leader.
S	Situation What is the situation? I am concerned that they are deteriorating because.....
B	Background What is wrong with the patient? Symptoms/Vital Signs/Medical History/Initial treatment you have commenced
A	Assessment What do you think is wrong with the patient/risks identified/clinical signs that support your diagnosis
R	Response/Recommendation Be clear about what you would like to happen e.g. I need you to come and review the patient now

IT support

- Automated dispensing cabinets
- ePA (prescribing and administration)
- NZePS (NZ electronic prescription service)
- eMedRec (eMedicine reconciliation)
- My list of medicines
- Bar coding

Bedside verification

- Barcode at Point of Care (BPOC)



SECOND OPINION

BY ROB ROGERS



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The Second Opinion cartoon featured this month is a classic Rob Rogers from 1998.

Forcing functions ⁽¹⁾

- Medical gases



Forcing functions (2)

- ENFit connectors



ENFit Syringe

Reverse luer



Catheter Tip Syringe



Luer Lock Syringe



Luer Slip Syringe



Oral Syringe

Forcing functions ⁽³⁾

- NRFit connectors

Luer
(Small Bore)



NRFit™
(Non-Luer)



Slip

Lock



Just culture ⁽¹⁾

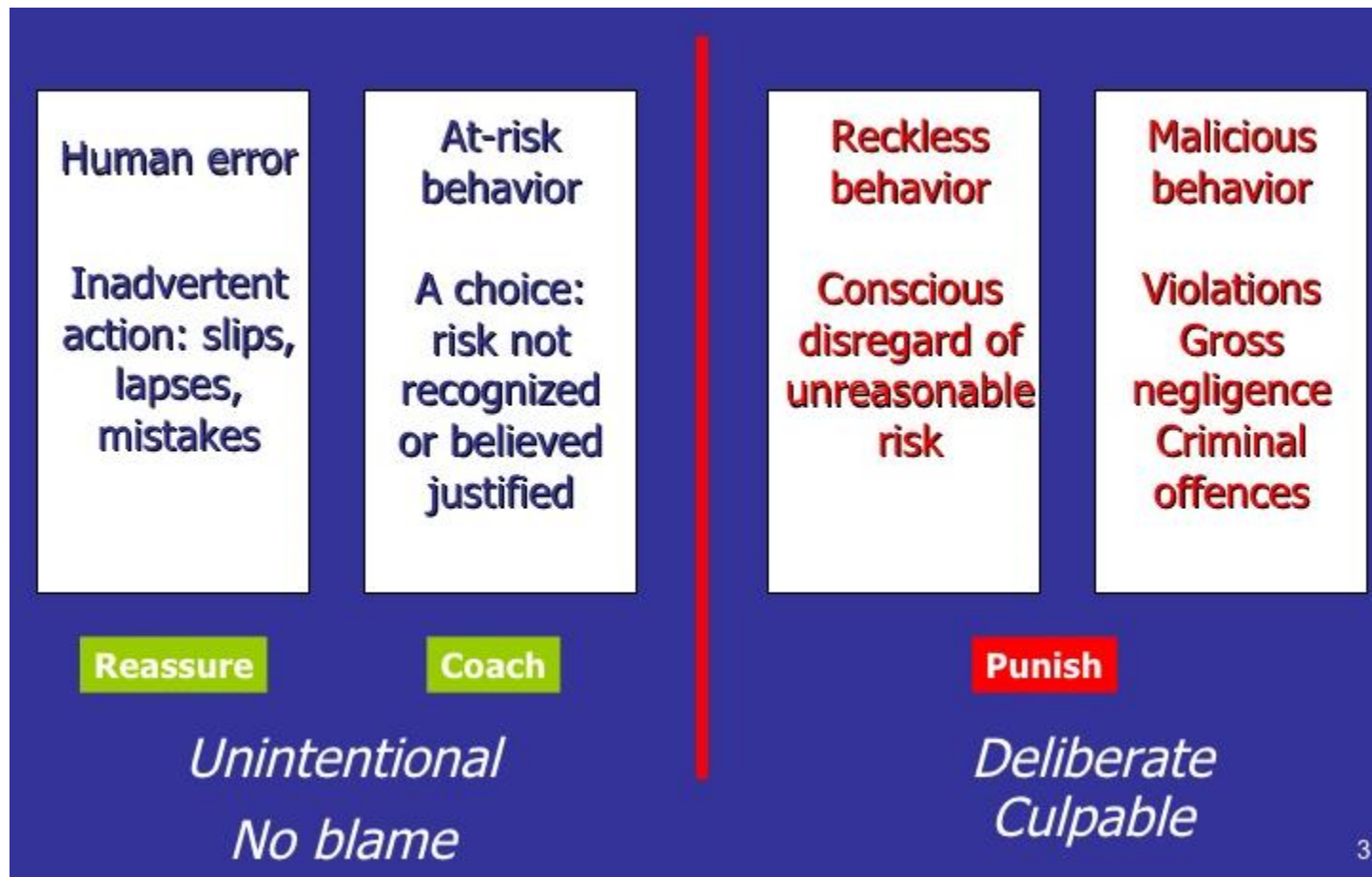
- A culture of trust, learning and accountability
- Asks:
 - ‘who are hurt, what do they need, and whose obligation is it to meet that need?’
- It doesn't dwell on questions about rules, violations and consequences



Just culture ⁽²⁾

- Gathers those affected by an incident
 - collaborates on collectively addressing the harms and needs created by it
 - in a way that is respectful to all parties
- It holds people accountable by looking forward to what must be done to repair, to heal and to prevent

Just culture (3)





This video is for training purposes only

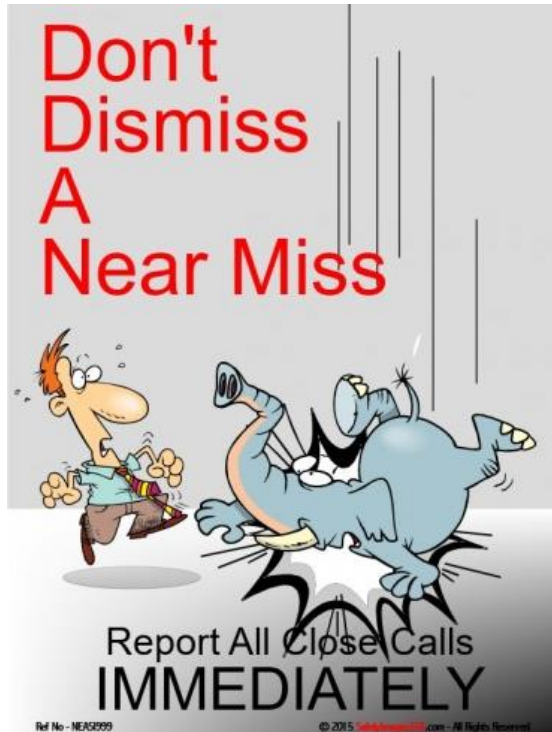
Medication error vs adverse drug reaction



Near miss

or a

Good catch



An event that could have resulted in unwanted consequences, but did not because, either by chance or through timely intervention, the event did not reach the patient.

take &
tell

Reflection

- Do you report all events?
- Including near-miss medication events?
- Or do you 'fix and forget'?
- If not ... why not?



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**“If we learn from our mistakes, shouldn’t
I try to make as many mistakes as possible?”**

Learning for events - principles

1. Open communication
2. Consumer participation
3. Culturally appropriate review practice
4. System change
5. Accountability
6. Safe reporting

Medication error / adverse event review

- Things go right 99% of the time
- What is different about now?
- What particular circumstances are different this time?
 - Environment
 - Patient
 - Medicine
 - Yourself



Learning from events

- Select system-based recommendations
- A small number of higher-leverage interventions are likely to be more effective than less effective strategies
- Ensure that recommendations are SMART
(specific, measurable, attainable, relevant, time based)
- Continuously monitor and assess the effectiveness of any interventions
- Let each other know what is working and what is not

Rules - legislation

- Designed to protect patients from harm
- Eg, Misuse of Drugs Act & Regulation
 - To protect against harm caused by abuse, diversion, dependence
- Standing orders
- Controlled Drugs

Specific traps

- Verbal orders
- Labelling
- Abbreviations

Verbal orders

- Write the order down
- Read it back to the prescriber
- Second check
 - to hear the order from the prescriber
 - write it down
 - Read it back to the prescriber
- Local policy
- NZNO guidelines



Always label


- Unless drawn up at the bedside and administered immediately
- Oral and IV (and topical) - chlorhexidine
- And ... Check the label

POSITIVE IDENTIFICATION:
IT'S NOT JUST FOR PATIENTS

PROBLEM
Unlabeled syringes, basins, bowls, and cups are dangerous. They can be confused, and misidentification can result in patient harm.

PRACTICE IMPROVEMENT
Label all syringes and sterile containers in patient care areas with the drug name, strength, and amount.

Never use a product that is not labeled.



A poster with a QR code in the bottom left corner that links to further information on safe medication practices. The text on the poster is in English and Māori.

Bothersome abbreviations

You Can't Abbreviate Safety



DO NOT USE	USE
abbreviated chemical names (eg, HCL)	full name
abbreviated medicine names (eg, MTX, HCT)	full name
µg or mcg	microgram
U or IU	unit or international unit
ng	nanogram
OD, od, or O.D.	daily or intended time of administration
SC	subcut or subcutaneous
SL	subling or sublingual
mEq or milliequivalent	millimole or mmol
Q.D, q.d, qd, QD	daily
decimal points without a leading zero (eg, .5mg)	smaller units (eg, 500 micrograms) or a leading zero eg, 0.5mg
a trailing zero (eg, 1.0mg, 100.0g)	without a trailing zero eg, 1mg, 100g

A collective responsibility

- Safety is everyone's job
- Look after each other
 - Not to catch them out
 - To care for your colleague, to protect them and their patients

Listen for the voice
in the back of your mind

Medication safety

WE NEED YOU!
TO MAKE IT HAPPEN



thank you!