Medication Error Reporting Programme: strengthening pharmacovigilance in NZ

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New Zealand Pharmacovigilance Centre

30 Oct – 3 Nov 2017
Medication Safety Regional Workshops

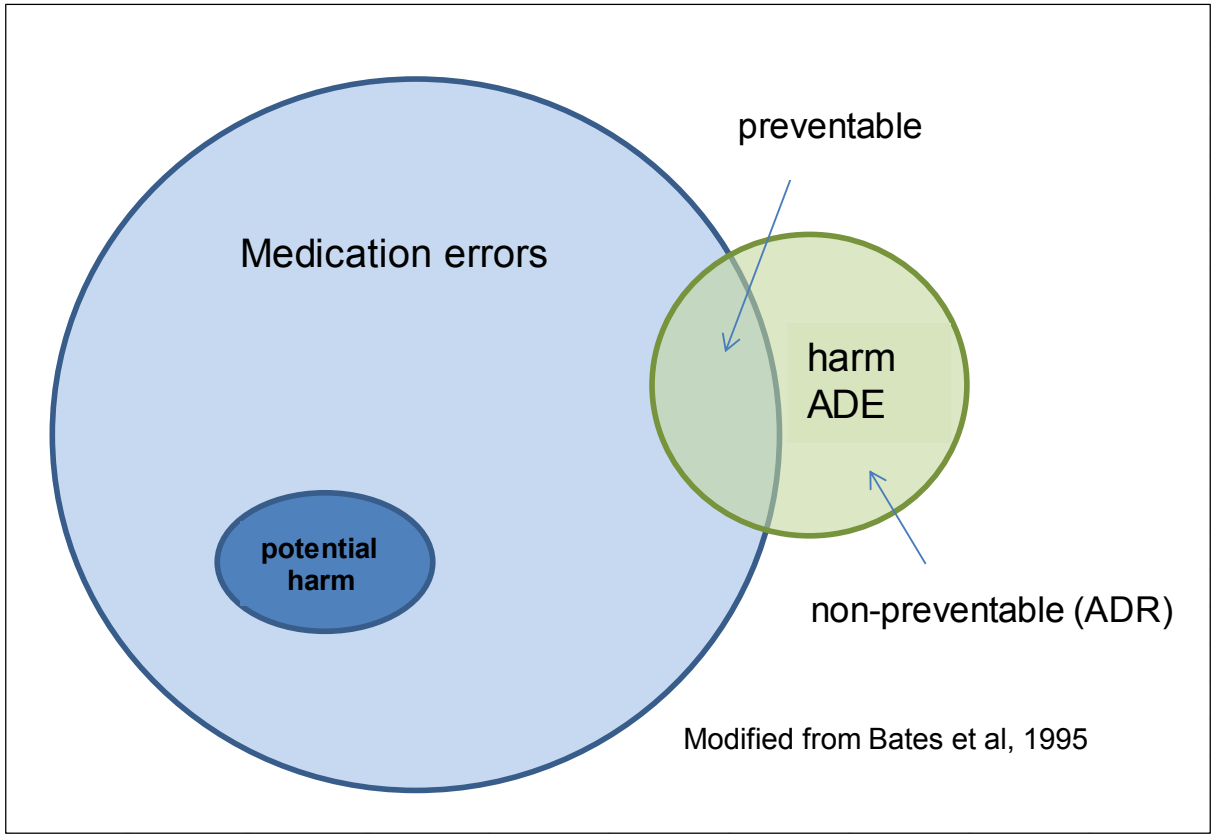
NZPhvC

University of Otago
Te Whare Wānanga o Otāgo

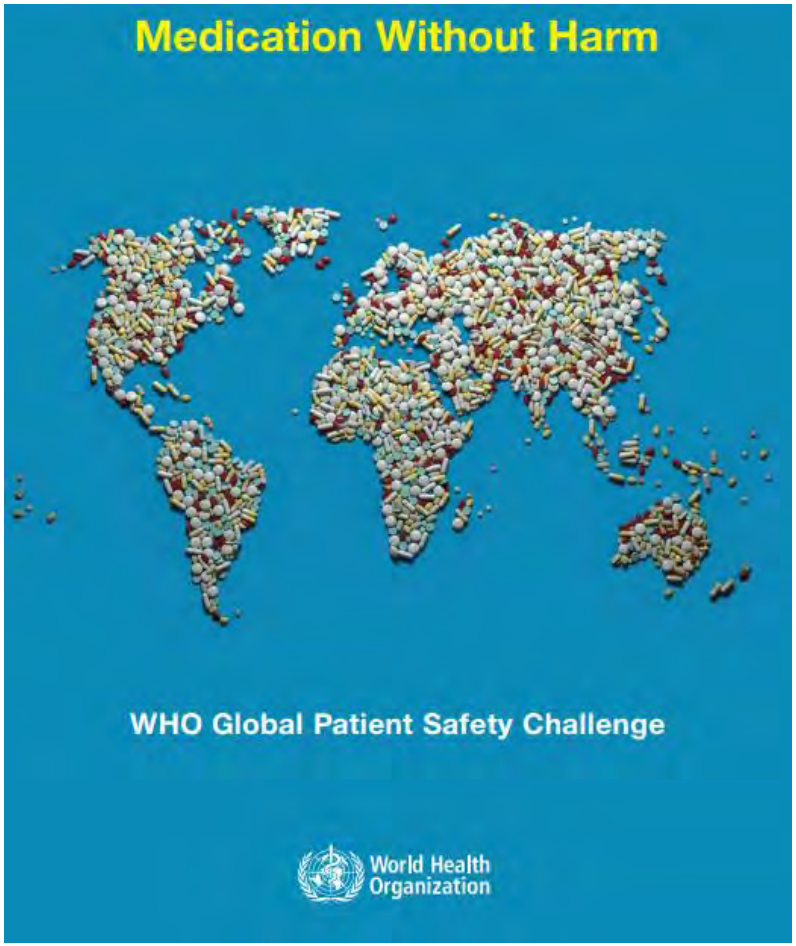
Overview

- Medication Error
  - important component of pharmacovigilance
- About the MERP
  - design features and operation
  - how the MERP helps to inform national medication safety initiatives
- The MERP vision for a sustainable future
  - next steps

Medication-related events



Medication Without Harm:
WHO's 3rd Global Patient Safety Challenge



Launched March 2017

Medication errors

- leading cause of preventable harm across the world
- globally, estimated cost $42 billion USD annually
- can occur at different stages of the medication use process
- **AIM:** to reduce serious preventable medication-related harm by 50%, globally in the next 5 years

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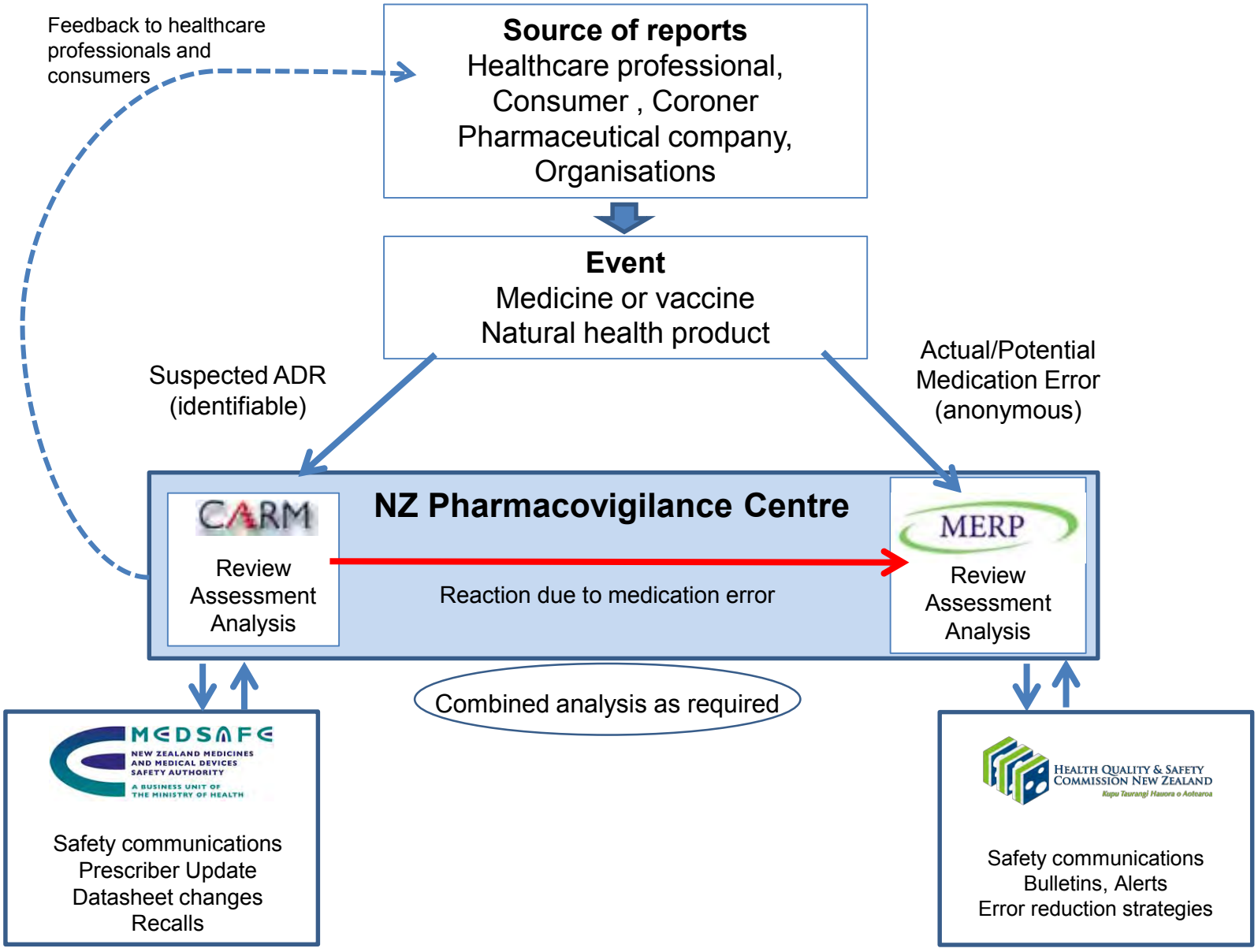
Monitoring in New Zealand

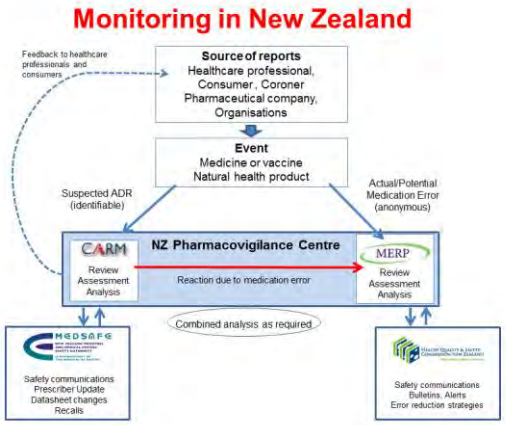


MERP within NZPhvC

- Integrated collaborative approach to managing medicine harms
  - One portal for ADR and Med Error reports
  - Wider (national) perspective of medicine harms
  - Expertise in review and analysis of medicine harms
  - Recognition of different underlying issues behind ADR and Med Error

- Synergy of CARM and MERP
  - Complementary programmes
  - Cross programme awareness

- National Centre for medication “vigilance”
  - National dataset
    - informing national policy
    - valuable resource for research, teaching



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International direction for PV

June 2013

- European Union Directive 2010/84/EU
- Expanded role of pharmacovigilance
- Definition of ADR to include medication error
- Pharmacovigilance Centres and Regulators more involved in management of medication errors
  - Morocco, Denmark, Canada, UK

Medication Error Reporting Programme (MERP)

Purpose

- To coordinate the capture and analysis of medication errors in primary care. Vast majority of medications are prescribed in primary care, but little is known about the extent of errors / harm or their causes

- To identify weaknesses in medication use systems that can be targeted for improvement to reduce the risk of harm to patients

Core principles

- voluntary and anonymous
- confidential
- easy and quick to report (5 mins)
- focus on systems – what happened not who
- near misses and actual errors
- quality data collection
- meaningful and timely analysis
- visible action taken
- integral to a national patient safety programme

NZPhvC MERP Medication Error Reporting Programme

Advantages of the MERP

Quality reports, reliable data

- Able to capture medication near miss and actual errors in primary care
- core dataset critical to learning
- systems based causes of errors – possible contributing factors
- link to NZULM for medicine name
- Structured online report form, easy to use

Standard taxonomy

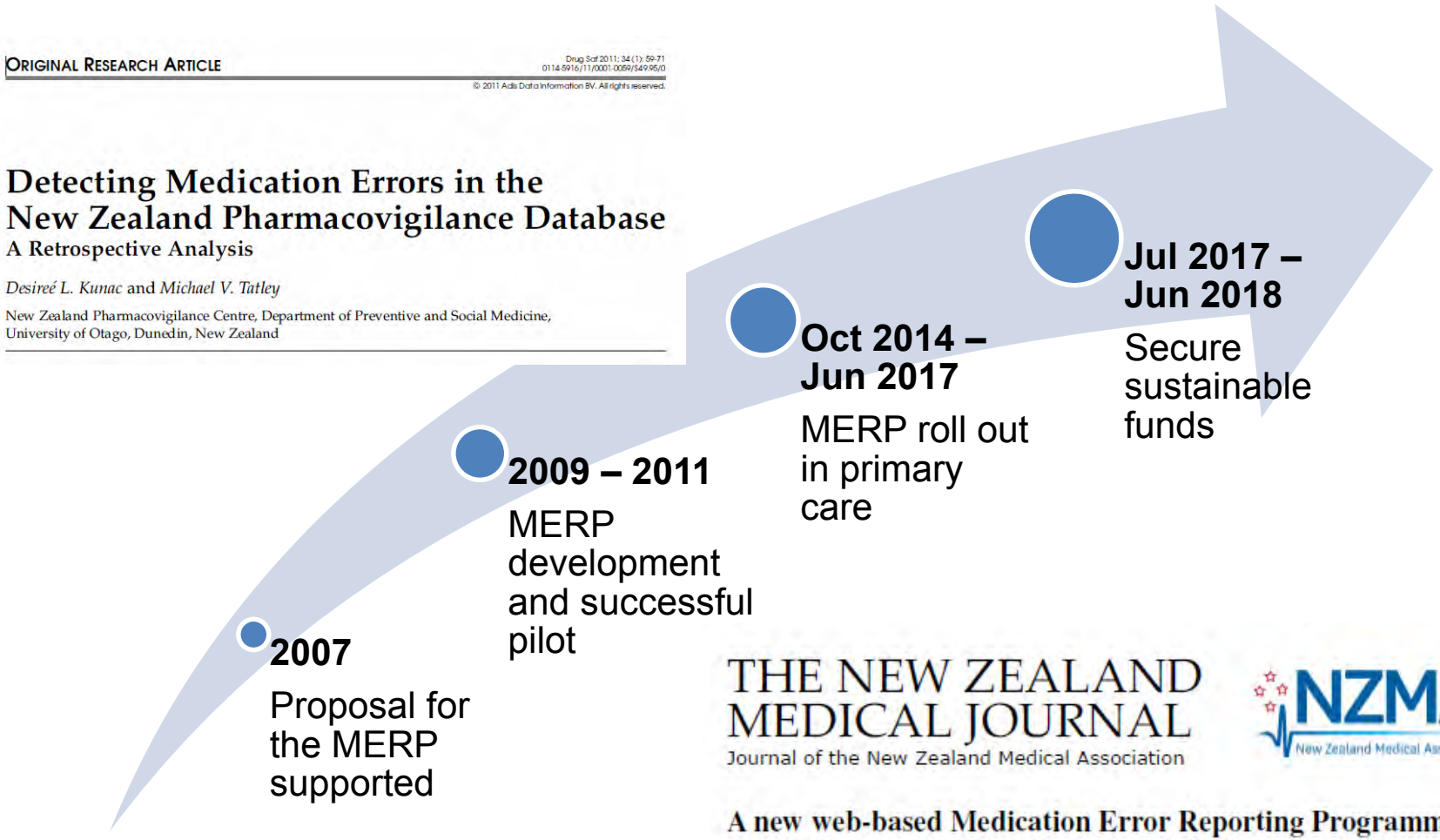
- consistent framework for across sector use
- based on international classifications (WHO Global Challenge)
- common format facilitates timely and meaningful analysis

Capacity to collate data from other organisations

- minimise duplicate reporting
- learning from events that may otherwise be held locally

Growing source of information on primary care events

MERP Milestones



2007

Proposal for the MERP supported

2009 – 2011

MERP development and successful pilot

Oct 2014 – Jun 2017

MERP roll out in primary care

Jul 2017 – Jun 2018

Secure sustainable funds

ORIGINAL RESEARCH ARTICLE

Drug Saf 2011; 34 (1): 59-71
0114-5916/11/0001-0059/$49.95/0

Detecting Medication Errors in the New Zealand Pharmacovigilance Database

A Retrospective Analysis

Desireé L. Kunac and *Michael V. Tatley*

New Zealand Pharmacovigilance Centre, Department of Preventive and Social Medicine, University of Otago, Dunedin, New Zealand

THE NEW ZEALAND MEDICAL JOURNAL

Journal of the New Zealand Medical Association

NZMA New Zealand Medical Association

A new web-based Medication Error Reporting Programme (MERP) to supplement pharmacovigilance in New Zealand—findings from a pilot study in primary care

Desirée L Kunac, Michael V Tatley, Mary E Seddon

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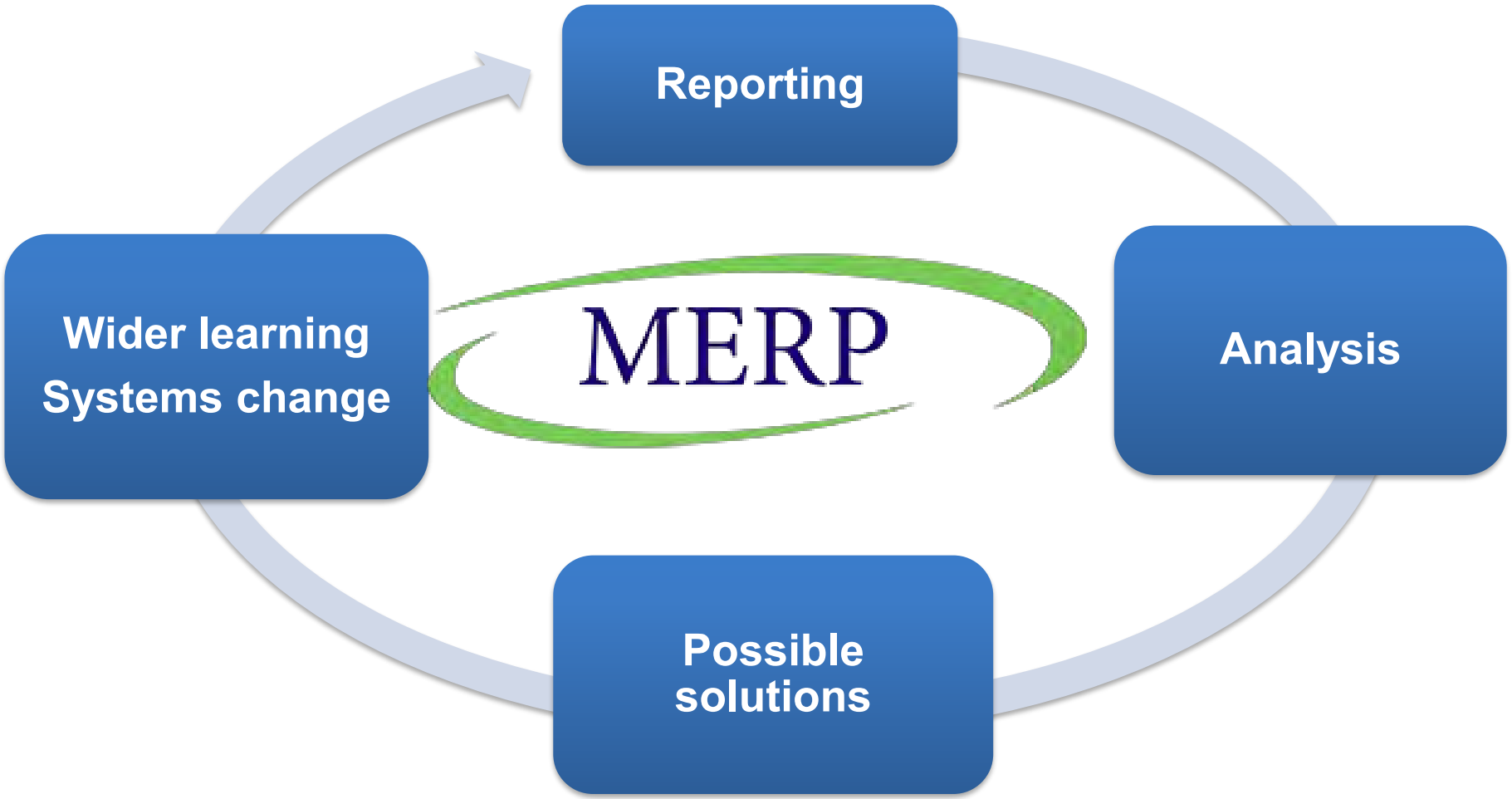
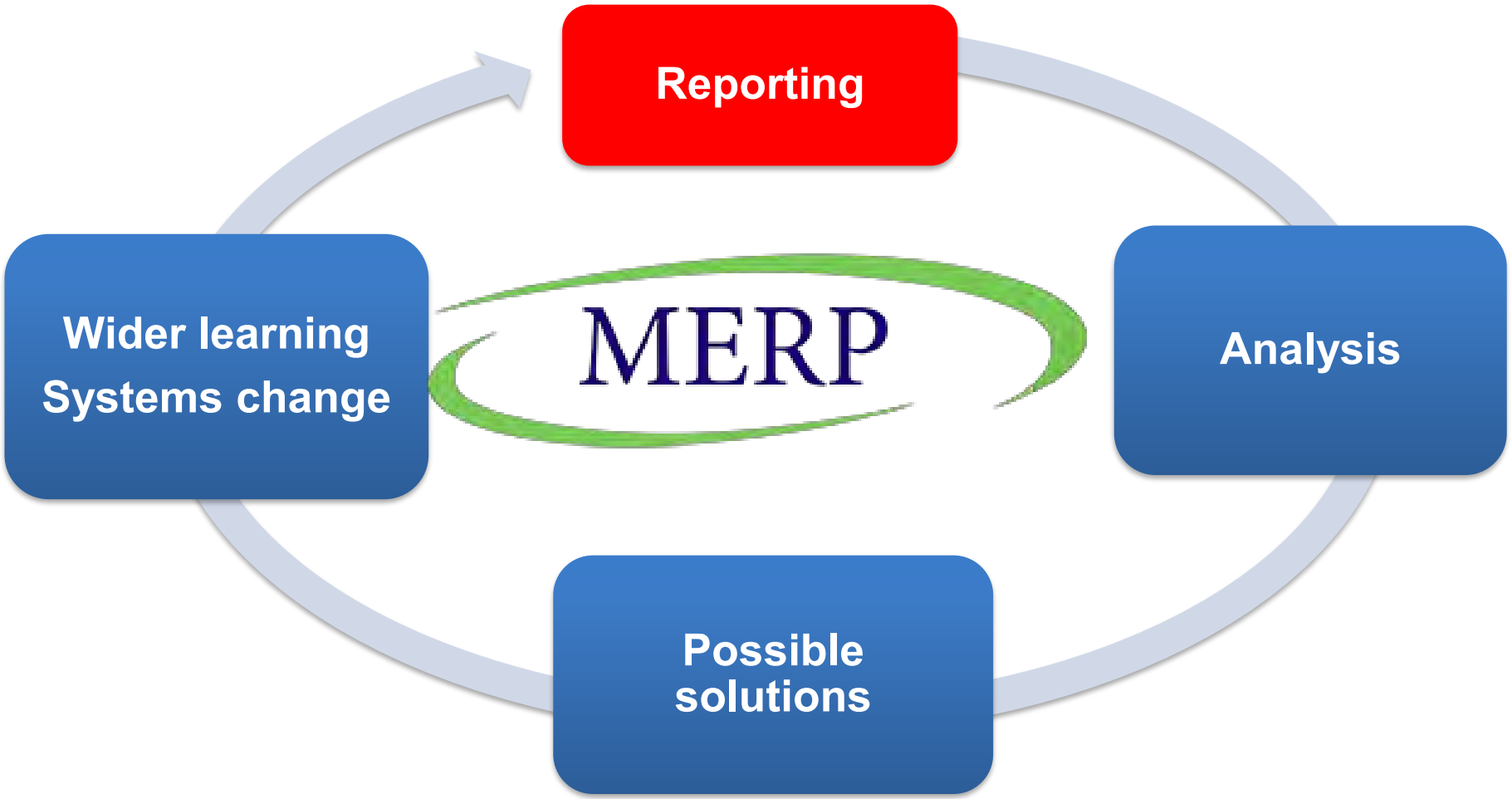
MERP Medication Error Reporting Programme


Reporting
Analysis
Possible solutions
Wider learning
Systems change
MERP



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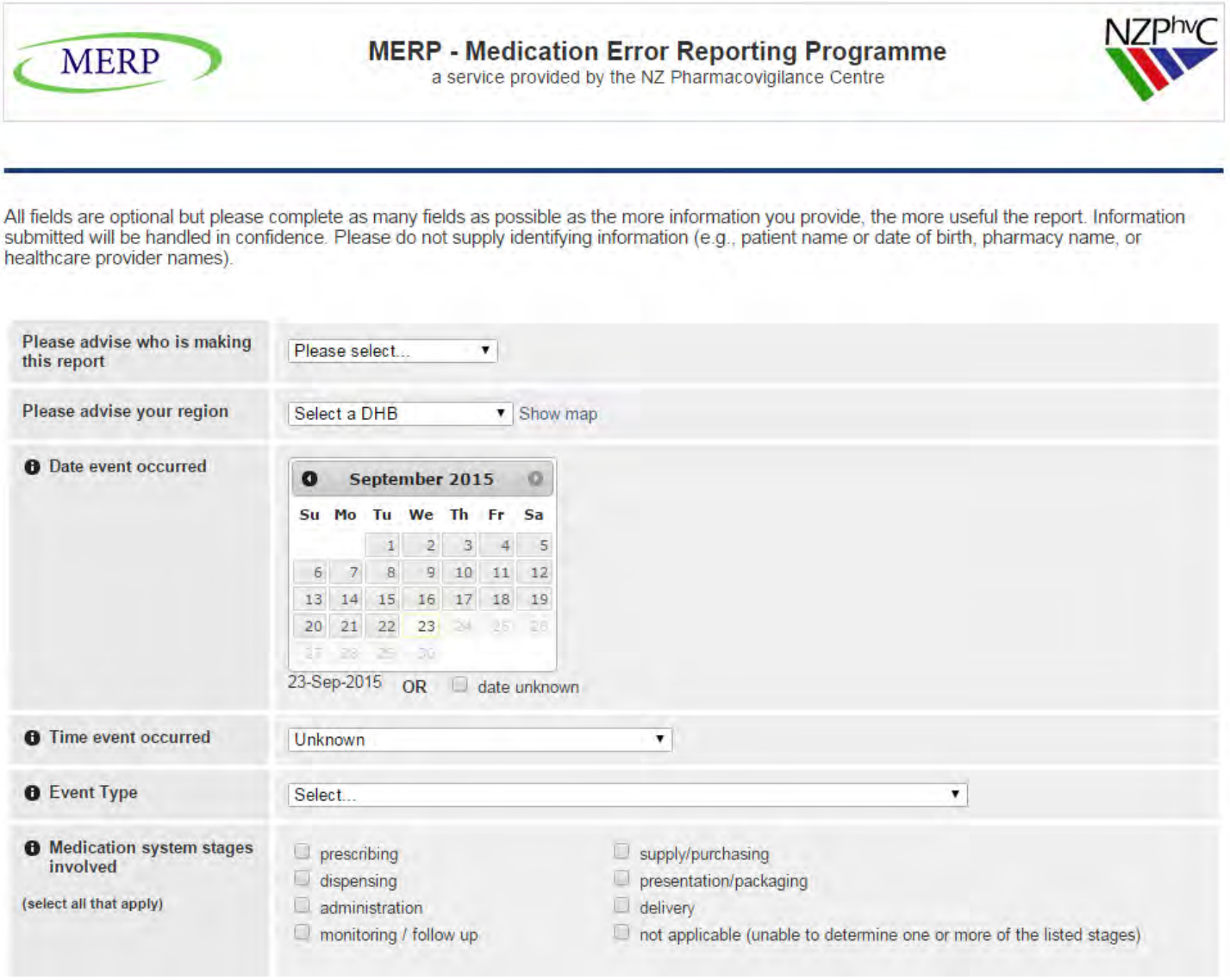
Reporting to MERP - Individual healthcare professionals

https://nzphvc.otago.ac.nz/



MERP

MERP - Medication Error Reporting Programme
a service provided by the NZ Pharmacovigilance Centre

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All fields are optional but please complete as many fields as possible as the more information you provide, the more useful the report. Information submitted will be handled in confidence. Please do not supply identifying information (e.g., patient name or date of birth, pharmacy name, or healthcare provider names).

Please advise who is making this report — Please select...

Please advise your region — Select a DHB — Show map

Date event occurred

September 2015

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

23-Sep-2015 OR date unknown

Time event occurred — Unknown

Event Type — Select...

Medication system stages involved
(select all that apply)

- prescribing
- dispensing
- administration
- monitoring / follow up
- supply/purchasing
- presentation/packaging
- delivery
- not applicable (unable to determine one or more of the listed stages)

MERP: source of reports

Healthcare Professional
individual reports

Organisation
batched reports

- Ambulance services
- Pharmacy Defence Assoc
- CARM, ACC
- HQSC Adverse Events Programme

On-line report

Secure upload

firewall

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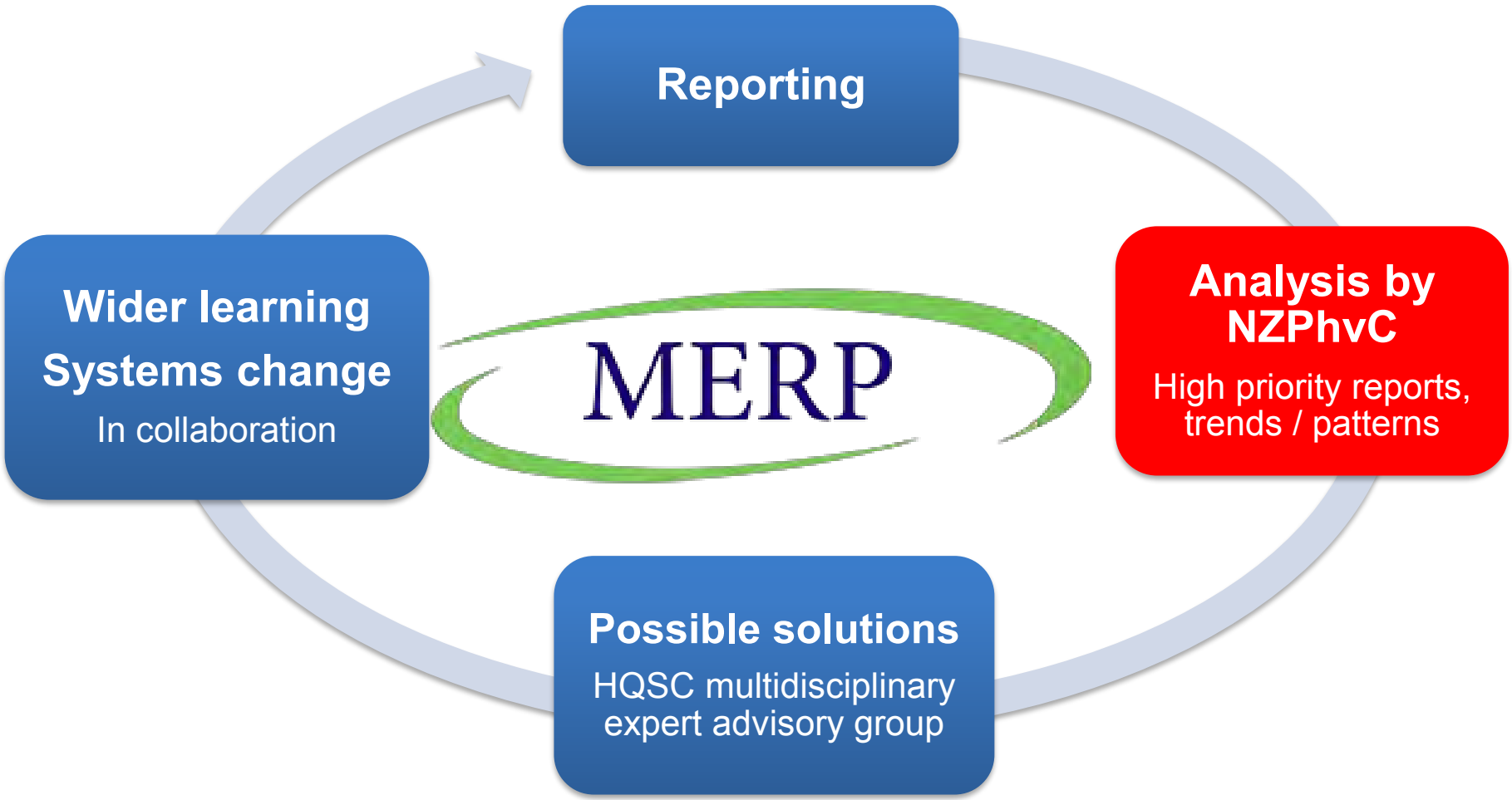
MERP



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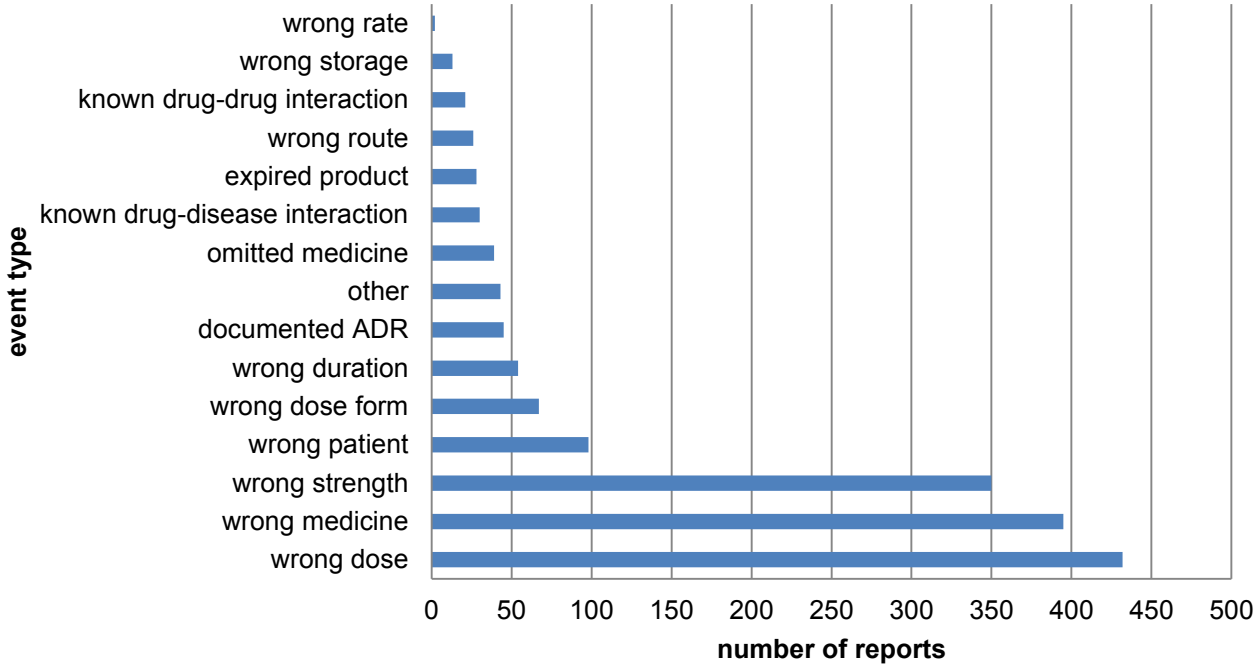
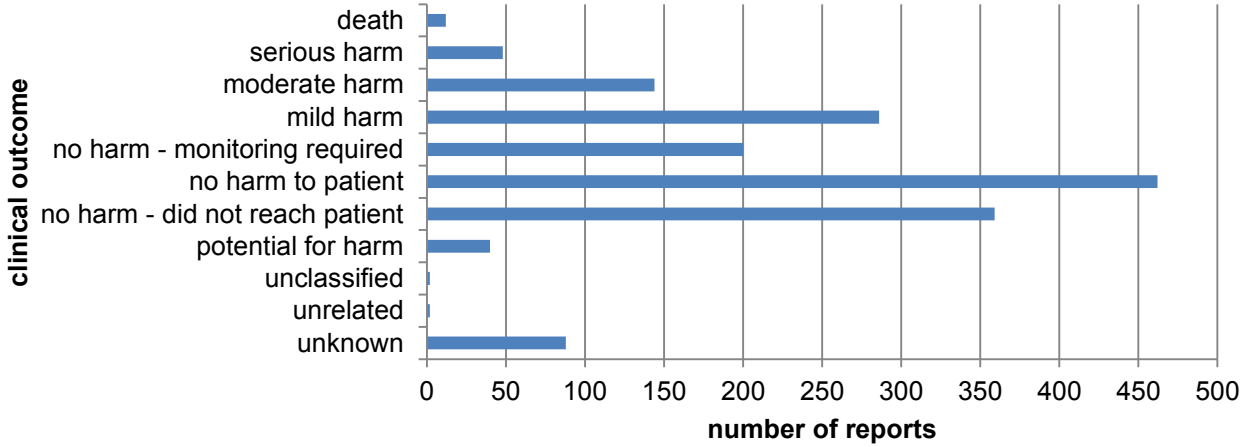
Number of reports by event type



Number of reports by clinical outcome



Reporting

Analysis by NZPhvC

High priority reports, trends / patterns

Possible solutions

HQSC Med Safety Expert Advisory Group

Wider learning
Systems change

In collaboration

MERP


MERP

Report: **Quarterly Report** Medication Error Reporting Programme

Period: 2nd Quarter 2017

Compiled: as at 30 June 2017

Prepared for: HQSC Medication Safety Expert Advisory Group (MSEAG)

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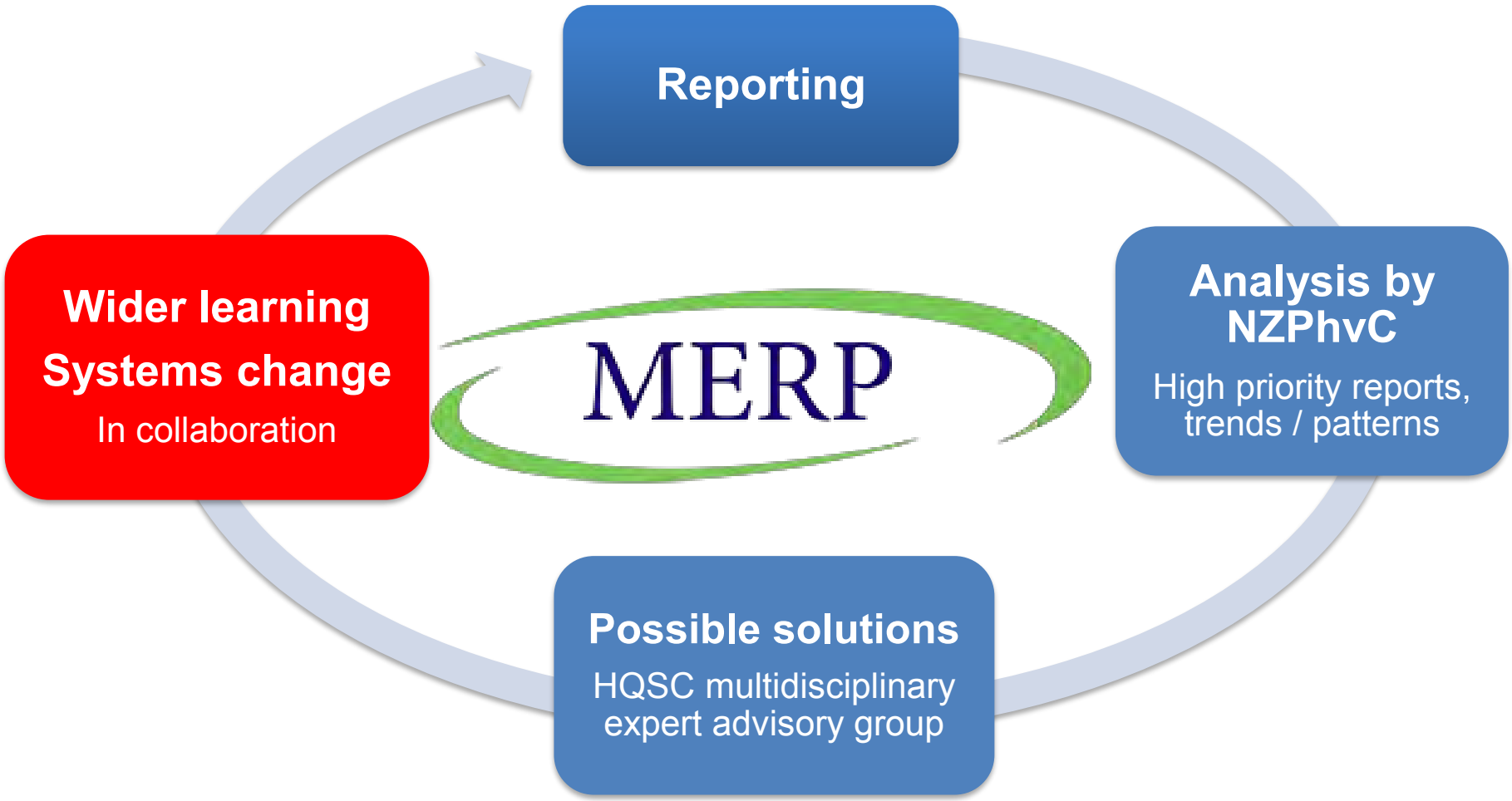
MERP Medication Error Reporting Programme



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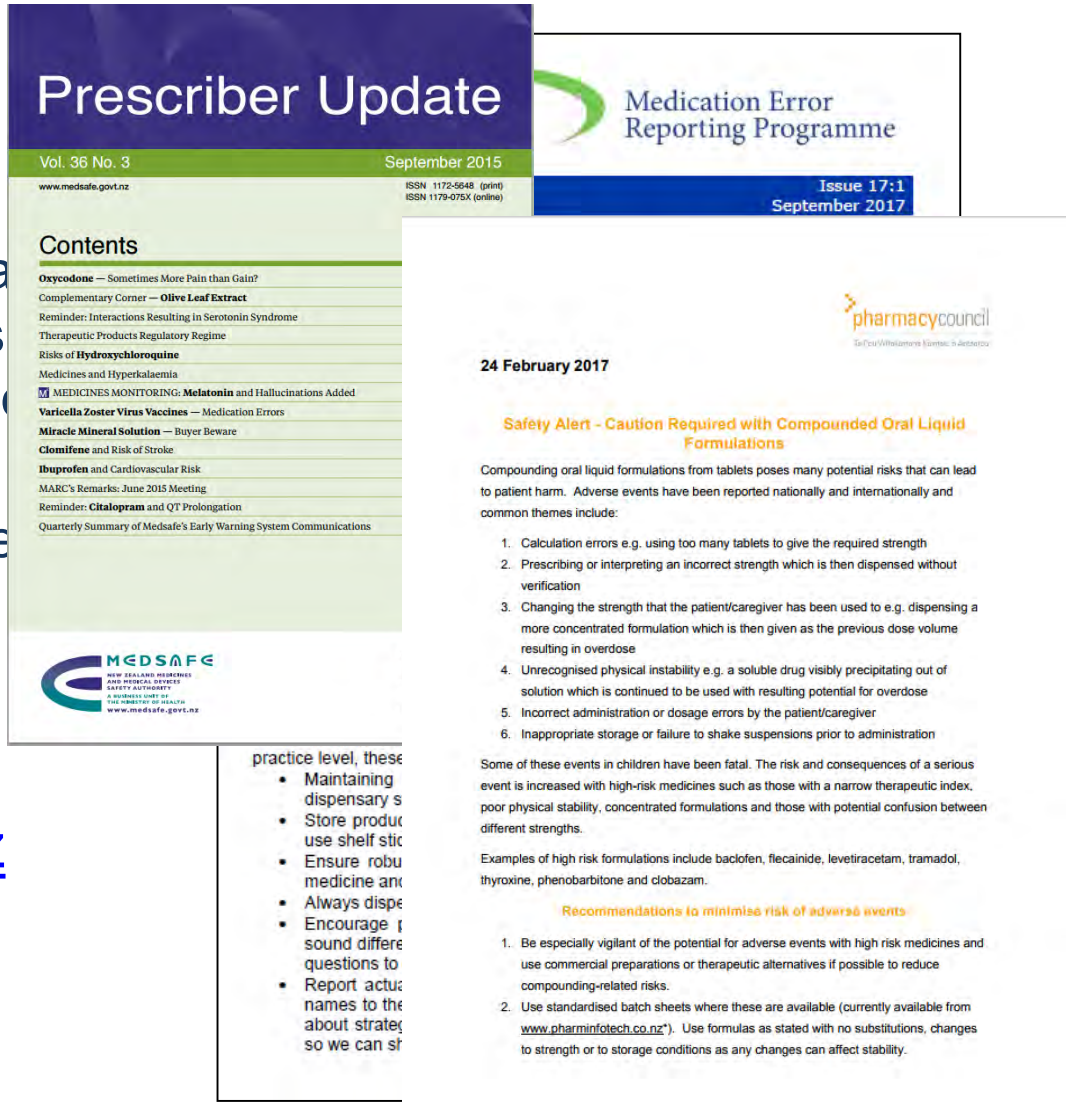
Value to the Sector
MERP information sharing

- Medication Safety Email Network
  - connects medication sa specialists / champions from across primary an secondary care
  - timely exchange of safe issues, challenges, solutions



merpnz@otago.ac.nz

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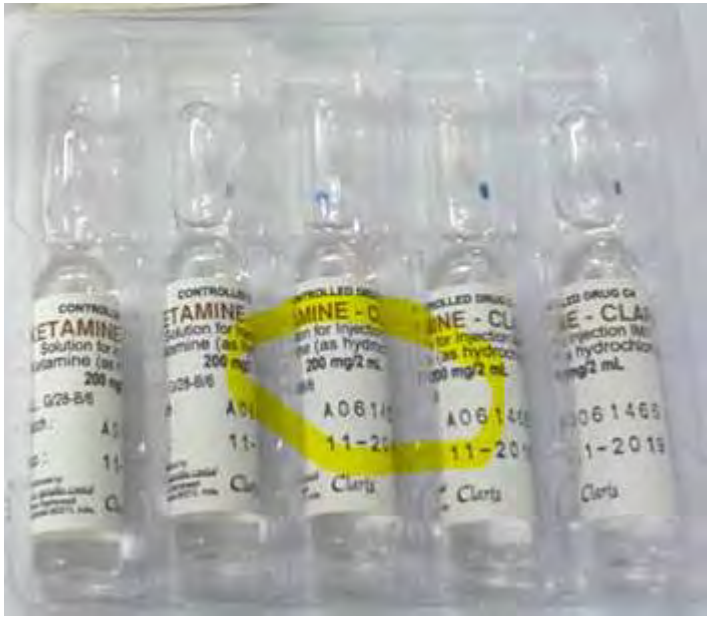
Value to the Sector

safer product packaging / presentation

- collaboration with Medsafe and Pharmaceutical Companies



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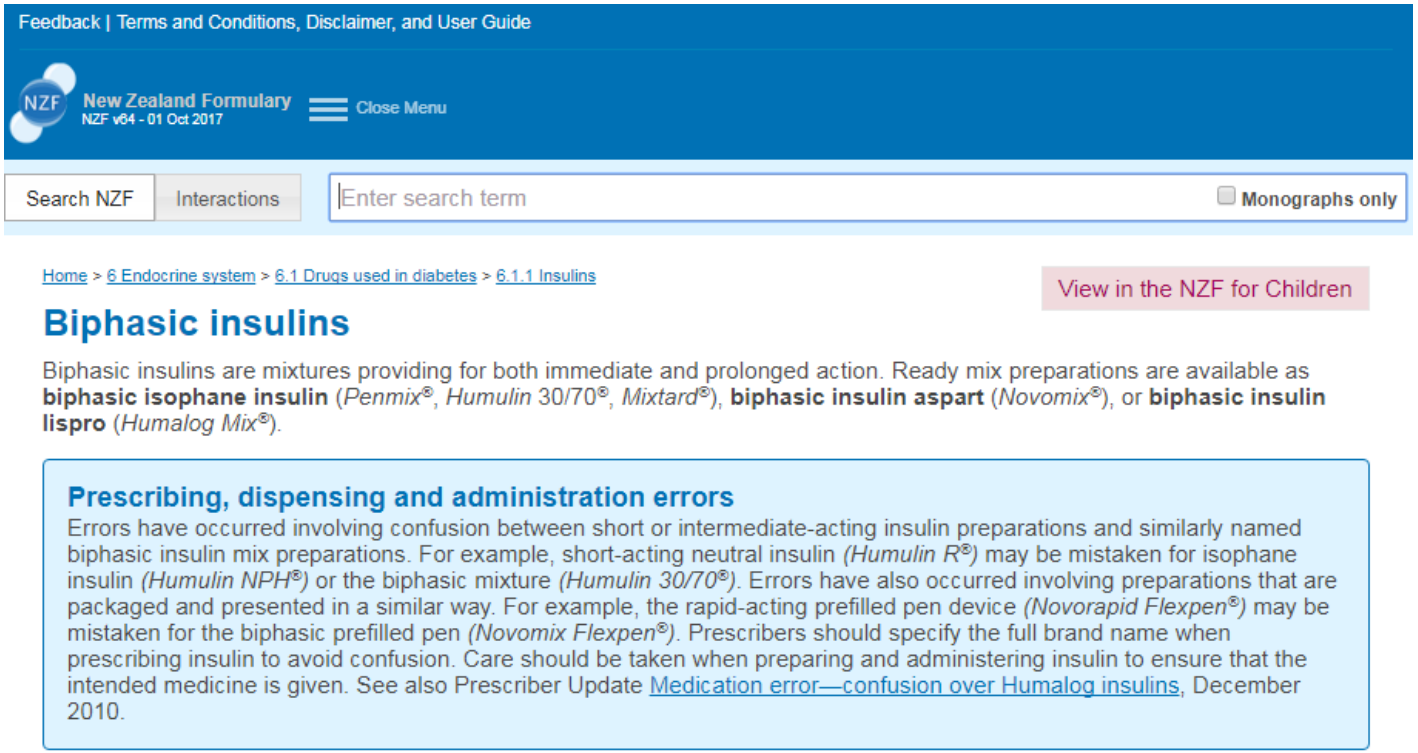
Value to the Sector

- NZ Formulary



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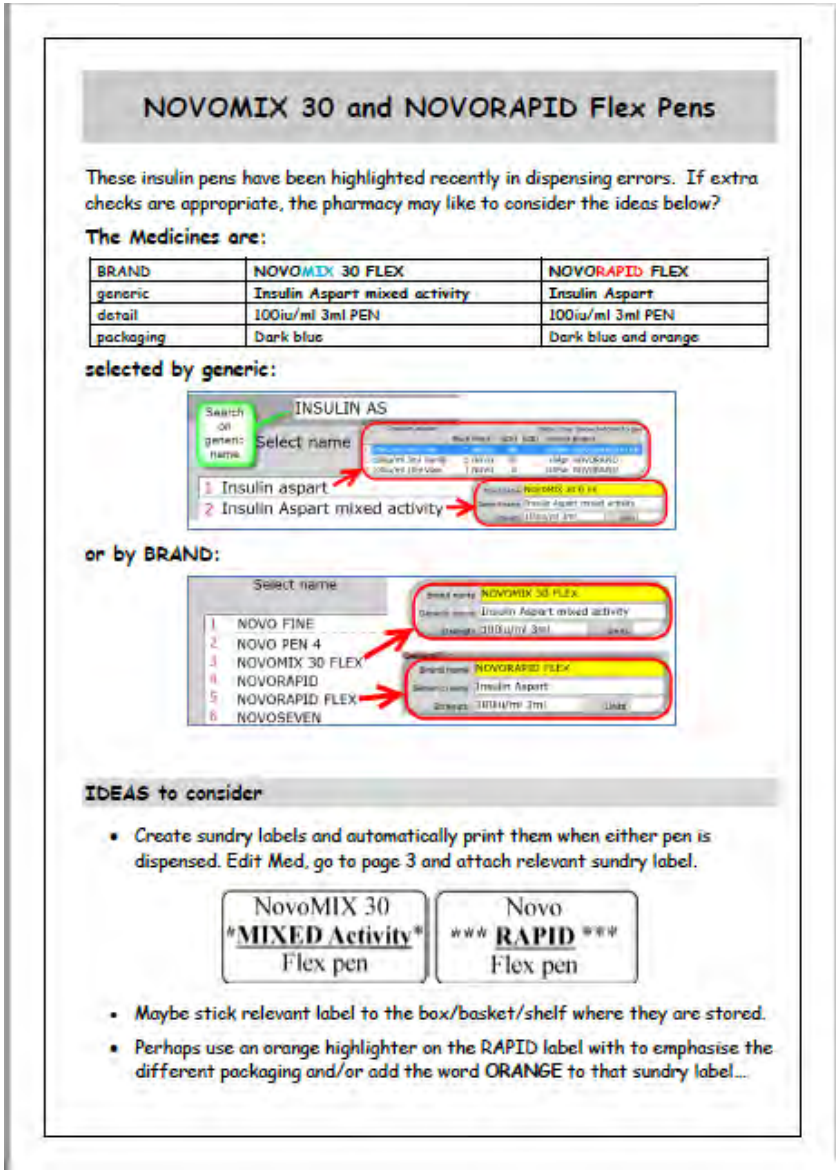
Value to the Sector
software enhancements

- collaboration with software vendors



NOVOMIX 30 and NOVORAPID Flex Pens

These insulin pens have been highlighted recently in dispensing errors. If extra checks are appropriate, the pharmacy may like to consider the ideas below?

The Medicines are:

BRAND	NOVOMIX 30 FLEX	NOVORAPID FLEX
generic	Insulin Aspart mixed activity	Insulin Aspart
detail	100iu/ml 3ml PEN	100iu/ml 3ml PEN
packaging	Dark blue	Dark blue and orange

selected by generic:

or by BRAND:

IDEAS to consider

- Create sundry labels and automatically print them when either pen is dispensed. Edit Med, go to page 3 and attach relevant sundry label.

NovoMIX 30 *MIXED Activity* Flex pen

Novo *** RAPID *** Flex pen

- Maybe stick relevant label to the box/basket/shelf where they are stored.
- Perhaps use an orange highlighter on the RAPID label with to emphasise the different packaging and/or add the word ORANGE to that sundry label...

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Value to the Sector
topics of concern

- **Safer compounded paediatric oral liquids**
  - Multi-incident analysis of reports to the MERP provided evidence to initiate a national “Compounding Advisory Group”
  - chaired by David Woods
  - MERP “compounding adverse event” reports routinely shared with Group

Photograph courtesy of Dave Woods

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MERP: current status

easy to report

useful data

informs national initiatives

- short term funding streams
  - current funding ceases 30 June 2018
- national level
  - low visibility of the MERP
- limited resource to grow the system and add greater value

0.5 FTE

550 reports / yr

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MERP: vision for the future

- Proven effectiveness in small scale, need to actively expand to provide timely information on medication error and adverse drug events.
- Current focus is primary care – need to embed this, and get buy in from clinicians
- Allow organisations to access their own data for risk management and quality improvement
- Spread to other areas of the health sector – e.g. secondary care. (MERP interface is superior to current incident systems)
- Medication error integrated into NZ Pharmacovigilance
  - opportunity to address all harms (med error + ADRs)

Next steps

- Stakeholder meeting late November 2017
  - To explore a sustainable future for the MERP
    - Current value
    - Direction
      - enhancements
      - expansion
    - Funding / Governance models
      - partnership of multiple organisations

- Your feedback is important

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