Minutes of the meeting of
Medication safety expert advisory group (EAG)
22 May 2019

Location	Bunker Lounge, Miramar Links Conference Centre, Wellington
EAG Members	Sandra Fielding (Acting Chair), John Barnard, Gareth Frew, Lucy McLaren, Rob Ticehurst, Sharon Kletchko, Matt Doogue (Zoom from 1:30pm)
Ex officio	Charlie Charters (MMDS), Sunita Goyal (ACC), Janet Mackay (PHARMAC), Bryan Simpson (NZF), Michael Tatley (NZPhvC), Chris James (Medsafe), Andi Shirtcliffe (MoH), Joanne Beachman (NZPSHA)
Commission staff in attendance	Billy Allan, Caroline Tilah, Susan Melvin, Jane Lester (minutes), Karen Orsborn (for item 6)
Apologies	Beryl Wilkinson, Taimi Allan, Bev Nicolls, Peter Jansen (ACC)

The meeting commenced at 9:35am.

Introduction and matters arising from previous meeting

1 Welcome, apologies

Sandra welcomed everyone with a karakia. Apologies were noted. Joanne Beachman joins the EAG as NZPSHA representative. For the benefit of new members, the group introduced themselves.

2 Declarations of interest

The group were reminded to raise any conflicts during today's meeting or let Billy or Sandra know of any new relevant conflicts of interest to be recorded.

3 Minutes from previous meeting February 2019

The minutes were confirmed as an accurate record.

4 Review of actions list

Actions not discussed will be updated in the actions list document and circulated with the minutes (190201, 190204, 190206, 180501).

190207 and 190208 Anticoagulants – inappropriate use
Conflicts were noted from Sharon and Andi.

The literature review paper by Philip Zhang (pharmacy undergraduate) was tabled. The paper discusses anticoagulation adverse incidents and potential solutions or

recommendations for reducing the risk of harm from anticoagulants. It was generally agreed that the paper was useful and the EAG discussed the recommendations.

Sharon provided an update from Lakes District Health Board (DHB) and other members reiterated their concerns of the risks and errors occurring with anticoagulants. Improvement through standardisation and consistency in practice and prescribing could be achieved via a suite of interventions which could include:

- an electronic prescribing system with standardised alert systems, terminology, and decision support tools / access to information at point of care
- national level management and monitoring, guidelines and standards
- national agreement on charting and alerts
- clinical pharmacist management or oversight at provider level
- events involving anticoagulants being an 'always report and review event', including near misses
- higher SAC ratings for events involving high-risk drugs
- education and/or accreditation via e-modules or resources, targeted for different levels of prescribers
- enhanced transfer of information between community and secondary care.

There are challenges with each of these interventions and translating them across different practice settings and environments. The EAG agreed that further discussion about a combined approach was warranted.

Following informal discussion and indications of interest during the lunch hour, the Chair asked for further expressions of interest to establish a working group to liaise with other groups who have equal interest in some of the risks and lack of guidance around anticoagulant use. Matt offered the name of a colleague, Paul Chin, who has expertise in this area. Caroline noted her interest in being involved in discussions on identifying the issues; the Chair asked members to send to Caroline any data or experiences that would inform those discussions. Further expressions of interest to be sent to Billy.

Action: To establish an anticoagulant working group to address the high rate of anticoagulant related events.

Addit: Janet asked whether members were aware of the use of a pop-up alert in MedTech that alerted prescribers to fill in their case notes and consider INR ≥3, eGFR and age when first prescribing dabigatran. The alert is causing the latest version of MedTech to glitch, so PHARMAC need to decide whether they should fund a fix for the error. Janet sought opinion on the value of continuing the alert. Awareness was limited among the members and the Chair suggested that the value seemed limited in today's context given the pop-up was created when dabigatran was first available. Ultimately, the decision lies with PHARMAC, and the Chair suggested that Janet speak with Charlie about where else this functionality could be added.

190215 Wrong patient medication errors – always report and review list

Billy attended the Expert Advisory Group meeting for the Adverse Events Learning Programme (AELP) to discuss whether wrong patient intravitreal injections should be included as an 'invasive procedure' under the Always Report and Review (ARR) 'wrong patient' reporting criteria. This was in the context of other wrong patient 'invasive procedures' apparently not being included.

The feedback from the AELP was that medication errors (including intravitreal injections) involving the wrong site or the wrong patient are not required to be reported under the ARR criteria. Reporting of these events remains at the discretion of an organisation.

190212 HDC report on medication errors – summary of key messages

A high-level summary of the key messages from the Health and Disability Commissioner report was tabled. The chair thanked Billy for his work on this. The EAG discussed how the summary can be used to support the full report.

The key message is 'do the basics well' (taking a good history, making good documentation), a message the EAG supports and endorses. It was agreed that the summary is useful as a signpost, identifying key messages and motivating reference to the full report.

The EAG would like the summary to be distributed to colleges, DHB chief nurses, chief pharmacists, chief medical officers etc.

Action: Sharon to take the key messages summary to the DHB quality managers for dissemination through primary and secondary care

180803 National Medication Chart review

The review of change requests is underway. There were 98 replies from 5 DHBs, 2 hospices and 2 private surgical hospitals. A working group will consider the feedback in scope and work out what's feasible to adapt. Billy will provide an update at our next meeting.

Action: Billy to provide an update at the next EAG meeting

5. Shayne Hunter, Deputy Director General of Data & Digital, Ministry of Health

Sandra welcomed Shayne Hunter. Shayne was invited to attend this meeting to address questions from by the EAG.

Question 1: IT systems

a. The potential for a Health IT plan, is there progress in this area?

The Ministry is working on a strategic framework for digital and data; a draft will be available for feedback shortly. The framework includes components on capabilities, enablers, digital environment, and principles. Shayne's team are driving the work on the enablers component, focusing on encouraging and supporting innovation and connection in the sector, and getting more value out of it.

The Ministry are keen to provide some leadership around a commercial framework: looking at data specifics, data access and security in cloud-based storage, details of ownership that need to be specified in vendor agreements.

There isn't enough investment in data and digital – the Ministry hopes to be able to find the money to invest in transformation. There is frustration across the sector as the main suppliers operate in a way that limits integration with other systems. There is limited expenditure and there are challenges for suppliers in the way that their funding is structured. This means that systems are built, but there is no sustainable funding for updates, integrations, enhancements or continuation of delivery.

There are foundation services the Ministry could take a national lead on, in partnership with government and the sector:

- Procurement – the government rules on sourcing are challenging.
- Identity – the need to get a single digital identity that is transferrable around the whole government and health system.
- Consent – giving the power to consumers to have a simple way for them to provide consent as that would free up access to information.
- Medicine reconciliation and medication adherence – leveraging the increasing connection of pharmacies to the NZePS to promote usage of the data set and support process improvements.
- Security – sharing information across complex interconnected systems environments increases exposure to security issues. Clinical information is held in clinical data repositories but is duplicated in other systems like SharePoint that have entirely difference security models.
- Trust / privacy – monitoring and enabling access to information, understanding people's rights, profiles and the systems and applications they can access, while being careful not to compromise trust in the systems.
- Architecture and standards – changing the way data are captured, stored, and used. The standards are set around that and lead into the interoperability model: consolidation of information and access provision.

The Ministry is targeting to have a business case to Cabinet on 17 June 2019 detailing the National Health Information Platform which is a follow on from the indicative business case for a single electronic health record. It is a combination of technical platforms and work on standards. MyMeds is a proof of concept that is actively underway and goes into pilot in June. Following identity verification, consumers will be able to access their medication information in the NZePS, and link through to the NZ Formulary and information leaflets. The Ministry wants to build the technical interface and make it available so others with

innovative ideas using the same information can link to the underlying infrastructure – subject to privacy, security and appropriate checks and balances.

There is a group within the Ministry that meets regularly and discusses medicines, access to medication data, and priorities. One of the changes that will happen as part of their organisational move is that ownership for the NZ formulary and NZULM will be with the Ministry's Data and Digital business unit.

Question 2: Reporting / data systems

New Zealand had a national medication error reporting programme (the MERP) which was run out of the pharmacovigilance centre (NZPhvC) in Dunedin. This folded June 2018 as there was no funding or governance structure. New Zealand now has no visibility of medication error and its associated patient harm.

a. How can New Zealand make a measurable reduction in harm associated with medicines if we have no visibility of medication events? How can New Zealand re-establish a national reporting and learning system for medication error?

Shayne asked what the EAG would like to see from the Ministry in this space. The EAG commented that, while MERP was useful and provided insight into where there might be improvement opportunities, any future similarly modelled programme needs to be enhanced and have confirmed sustainable custodianship, governance, and funding, so that it is not only developed but also maintained and updated. An ideal system would involve:

- measurement for improvement
- capture actual harm, including near misses and narrative experience
- software algorithms to show early warnings or 'smoke signals'
- capture the successes from interventions
- simple to interface and integrate
- frequent real time data capture not extraneous from day to day tasks
- links and support from the Health Information National Platform
- access to existing DHB data.

It was agreed that the clinical governance function is particularly important when multiple data sources are accessed, and questions may arise from the use of algorithms that analyse data in clinical data repositories. Clinical leadership was also necessary to own and drive this at local levels. Currently, there is no national governance or guidance on information once it is in a clinical decision support system.

Shayne will take the discussion back to the Ministry and review the role they play and what they are doing in the strategic framework that enables and supports this work on gathering, surfacing and presenting data in an accessible way. He will report back to this EAG at a future meeting.

Shayne was asked about SNOMED CT and READ code decommissioning. Shayne noted that he will find out what the plans are in terms of mapping to READ code.

Question 3: Medicines management

a. How do we achieve national solutions for medicines management – prescribing, administration, medicine reconciliation – rather than the approach to date that has resulted in fragmentation and inequities between DHBs?
b. How do we get traction on achieving electronic standards in the medicines space (eg, HISO standards for screen display; requiring the integration of the NZULM with the clinical systems used in primary care and our hospitals)?

Shayne agreed that first and foremost the data needs to be available electronically; the data source is available, and a variety of technical interfaces are starting to be used by DHBs. MedChart is a proven system but funding and prioritisation of funding is limiting uptake. The EAG suggested central or national funding could be the impetus for adoption; a national enabler and indication of support of electronic prescribing.

Funding and resources for IT at a national level are limited. Past national initiatives have also not proven successful. Clinically lead and clinically owned initiatives have been more successful. The Ministry could assist with finding a way to find the money, set the standards and expectations but funding, prioritisation and clinical ownership and leadership at DHB level would be necessary.

The Chair acknowledged that the limited time did not allow for all the questions to be answered. The Chair closed the discussion by asking how the EAG can best partner with the Ministry to improve medicines safety. Shayne agreed that this EAG is valuable in providing guidance on priority areas, drawing attention to critical issues, supporting and enabling the Ministry's point of view, and endorsing promotions by the Ministry. The Chair noted that for this EAG to be able to 'shine a light' it needs support and provision of information from the Ministry. The tools, capability and data the Ministry has could aid in identifying where issues lie. Shayne agreed that a partnership and strategic alliance and mutual focus would be valuable. He will discuss this with the Digital Oversight Group, and more broadly, at the Ministry and provide feedback to the EAG at a future meeting.

Action: Billy / Susan to follow up scheduling of regular interaction between Shayne and the EAG to continue discussion.

6. Role of the EAG

The Chair provided a slideshow summary of history, positives, challenges, membership, and current and future role of the EAG as discussed at a governance group meeting on 6 May 2019. The EAG generally agreed with the summary and added their own views and expectations, their understanding of their role and whether they were there representing themselves, their interests, or the interests of their organisations. Of note was the perception of a lack of direction and purpose. The EAG discussed how to remain relevant and make and maintain partnerships, keeping in mind their purpose is to provide advice to the Commission:

- recognise the EAG mandate as coming from the Commission's mandate
- refine the purpose of the EAG and define roles

- recognise the value of the time and input of all members
- strengthen Māori, consumer, primary care and aged residential care sector representation
- establish relationships with the Commission's other improvement programmes (eg, ARC and Mental Health & Addiction)
- align with the Commission's strategic priorities, including the newest priority around advancing Māori health outcomes
- carry on work already started – continue with the working group model on ongoing projects
- we need to provide clarity for the sector on strategic direction and leadership, what it looks like, and how it functions in medicines generally.

The ex-officio members agreed that they:

- represent the intelligence that comes from their organisations
- inform priority areas to focus on and support identification of possible quality improvement initiatives
- bring forward significant issues for advice and guidance, particularly in the current progression in the emergent IT space across the health sector
- provide advice or context about the operating environment and capabilities or limitations on the role of their organisation
- find it useful to be able to advise on issues and how they interact with the regulatory environment
- transactional formalities are minimised by their attendance
- have responsibility for reporting back but, in terms of experiential knowledge and capacity and capability to progress things, being a representative is difficult.

The members agreed that clarity is needed on:

- role and purpose – particularly with the Clinical Lead role being vacant currently
- how the agenda is decided and structured
- priorities and goals of the EAG versus the priorities and goals of the programme plan, and the Commission, and how that's progressed
- the limitations due to lack of representation of other key organisations (eg, general practice, ARC and MH&A participation)
- governance structure
- connectivity and networking across / with community practice.

The members suggested focusing on:

- transformational pieces of work, in an advisory capacity
- the primary care sector – a strategically prime area (the primary care consumer experience survey could highlight areas where improvement could be made and the survey itself could be used to measure improvement)
- a Safety II approach.

The Chair called the discussion to a close and noted that a framework discussion paper / Terms of Reference would be drafted.

Action: Commission staff to draft a framework discussion paper / Terms of Reference for the EAG.

Technology to support safe medicines practice

7. HISO – an update on medicines-related information standards initiatives

Alastair Kenworthy, Director Health Information Standards, Ministry of Health and John Fountain, HISO Clinical Lead, bpac^{nz}.

Alastair started by inviting the EAG to provide expertise as HISO work on medicine related standards initiatives. He gave a summary of the work that HISO has underway, and future work, and welcomed comment and feedback on what the EAG might see as a priority:

- publication of the HISO statement around the absolute requirement to use the New Zealand medicines terminology, working with SNOMED CT New Zealand edition, these are expected to be used in both public and private sector systems
- guidance on how to integrate software with the NZULM
- work on a standard to underpin further work with the NZ Formulary to include more coded information
- development of a modern API for opening up the NZULM and NZ Formulary
- development of device terminology
- review of the identification of medicines and devices in the supply chain and product catalogues that all DHBs would purchase from, aligning with GS1 standards
- a common finance procurement and supply chain system: Finance Procurement Information Management (FPIM)
- joint publications of HQSC and HISO of two standards: MedRec and medication charting – these need to be refreshed to make them more principally about digital
- onscreen display guidelines for medicines information: HISO will adapt some material out of the Australian guidelines and use it to enhance standards we already have or create new ones
- investigation of opportunities to be more prescriptive about data requirements in the regulations under the Therapeutic Products Regulatory Scheme; how to represent and code medicines, devices and their use to improve machine readability
- prescribing data standards are slowly progressing and will include medicines and other data that legally must go alongside the transmission of an order or prescription for medicine; HISO are keen to seek guidance from the EAG on their draft and proposed a working group to assist with development of this
- work with the Ministry on NZULM terminology in the pharmaceutical data collection
- an adverse reaction reporting standard: a working group includes members of the EAG and they have achieved some interim deliverables.

John spoke more specifically about the slow progress of standards in the medicines area. The HDC report and the current climate in the sector indicates the need for national

standards for prescribing, dispensing, and administration. Within this, they want to code important elements in prescriptions or general medicine. A standard for coding would lead to a whole range of benefits and would likely be promulgated via the NZ Formulary. The EAG will be given an opportunity to participate in the development of these, as has been done with previous standards.

HISO and the Ministry are interfacing with various international organisations, including HL7 and SNOMED CT International, to inform and integrate with international standards, codes, and medicines terminology. The aim is seamless integration and data collection that informs national pharmacovigilance work and also improves healthcare for individual patients. Some of the standards, particularly around medication, are quite aspirational. The elements are optional but the standards provide a clear direction for vendors, consumers and the sector. They will have regular review and updates, this is particularly important in medicines as this is a critical area.

The standards are about how to collect the data elements in a uniform way. Standards around clinical practice would work alongside a data standard. Standards are published with an adoption and revision plan. Guidance on implementation is also provided in some cases. Review timeframes differ from as soon as 12 months after publication to two years.

Andi noted that there could be significant levers at their disposal to facilitate the adoption of the standards that she would be keen to see explore. There are large contracts across the sector, for example, the community pharmacy contract, whereby there is potential to incentivise public funding with an expectation that tools comply with standards expectations.

8 Medicines management digital services update

Charlie provided an update from Data and Digital:

- Capital and Coast, Hutt Valley and Wairarapa are using NZePS community data and the Midland region goes live tomorrow
- all clinicians will have access to community medication information via a published API that's freely available subject to checks on legitimate usage. Orion are developing it for their new MedsMan software and Toniq are looking at incorporating the data into 1Chart
- the Ministry are working on anonymising clinical data so that it is searchable and available for audit or research purposes
- the bpac^{nz} prescribing module will be launched at the GP conference at the end of June. It is fully integrated with the NZULM, NZePS and NZ Formulary
- three pilots are currently in progress:
    - MediMap methadone opioid substitution treatment pilot (CCDHB)
    - an ARC pilot for removing the requirement for a physical script for residents in residential care – prescribing and dispensing will be off the medication chart (Canterbury)
    - unsigned prescriptions through NZePS (initially at Zoom Pharmacy for remote delivery of medicines; the patient has to sign up to the service through an app)

- Digital and Data are in discussions with two vendors about electronic controlled drug registers (for community pharmacy initially).

Programme management and projects

8. Specify brand advice (SBA) – levothyroxine (paper x 2)

Two papers relating to guidelines for the application of Specify Brand Advice within Electronic Systems were tabled. A briefing paper provided a background and recommended the EAG approve:

- The inclusion of levothyroxine in the narrow therapeutic index criterion in the SBA
- The reinstatement of the statement 'The decision to apply SBA may be directed by Medsafe' for the narrow therapeutic index criterion in the SBA guidance.

The EAG approve both recommendations.

9. Prescribing Safety Assessment (PSA) (paper x 2)

Matt tabled a paper on the Prescribing Safety Assessment with the recommendation that the Commission endorse the PSA test for use in New Zealand. The PSA for Australasia is based on the UK programme. A similar system is used in Canada, but for post-graduate CME. For Australasia it is proposed to run the PSA at the end of medical school rather than through the Colleges. The PSA has been well validated. It was noted that not all the sample questions were relevant to non-medical prescribers and that targeted testing may be needed for non-medical prescribers. Using the PSA will raise the importance and profile of medication safety during medical training. Jo noted that when introduced into the UK the PSA RMO prescribing improved significantly.

The EAG supports the localised adoption of the PSA for medical prescribers transitioning into practice, and the development of test questions suitable for non-medical prescribers.

10. National medical warnings (paper)

Matt tabled a briefing paper relating to National Medical Warnings. The paper recommended the EAG discuss the governance arrangements for the Medical Warning System (MWS), the inconsistent use of the MWS and the implications for medication safety, and what, if anything the EAG should do about the situation.

The EAG agreed that they are concerned that the MWS system is compromised due to the inconsistency in the way warnings are managed between DHBs. We need to understand what is happening across DHBs, with a baseline measure of the extent of the issue. Lack of Governance or national oversight appears to be an issue. Should the medical warning system be a fundamental Ministry service? Should the governance sit with the Ministry?

Action: Andi to discuss the most appropriate place for governance of the MWS to sit with Shayne Hunter

11. Patient transfers to aged residential care facilities (paper)

Matt tabled a briefing paper highlighting issues with transferring patients back to ARC facilities, with medicine management at transfer sometimes being chaotic. The paper recommended that the medication safety programme survey DHBs to ascertain current practices for medicines management when residents are discharged from hospital back to their ARC facility.

Various local solutions to facilitated patient transfer were discussed. A survey of the challenges and examples of solutions that addressed these was considered desirable. The survey could be distributed to facilities, general practitioners and community pharmacies with an ARC contract.

Action: Matt to draft questions
Action: Billy to raise the issue with the Commission's ARC leadership group

12. Meeting dates 2019

The meeting scheduled for 28 August 2019 will be postponed to 4 September. The last meeting for 2019 is scheduled for 27 November 2019. The meetings will be held in Wellington.

Meeting closed at 3:15pm with a karakia from Caroline.