

Achieving health equity in Aotearoa New Zealand: the contribution of medicines optimisation

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ABSTRACT

This paper aims to consider the various parts of what is required to achieve the best possible health outcomes from medicines in partnership with the person for whom they are prescribed. Specifically, it looks to highlight the process from an Indigenous view with respect to Māori in Aotearoa New Zealand, and claims a multi-dimensional approach is imperative. Attaining optimal use of medicines is necessary to help achieve health equity. There is an urgent need to understand and investigate models of care that achieve this optimal state.

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Indigenous health

Throughout the world, Indigenous health outcomes are poorer than for non-Indigenous people, with increased rates of mortality, morbidity and disability.^{1,2} The word 'Indigenous' is often used synonymously with words like 'native', 'Aboriginal' or 'first'. In 1972, the United Nations accepted a definition of Indigenous that encompasses the concept of colonisation.³ International law has since defined Indigenous people as '*living descendants of pre-invasion inhabitants of lands now dominated by others. They are culturally distinct groups that find themselves engulfed by other settler societies born of forces of empire and conquest.*'⁴ This is an important distinction in terms of health outcomes which are influenced by loss of culture and traditional societal construct.

Māori (the Indigenous people) have the poorest health outcomes and shortest life expectancy of all ethnicities residing in New Zealand.⁵ The major health conditions causing death for Māori are long-term conditions, namely ischaemic heart disease, lung disease, stroke and diabetes.⁶ In children, infectious and respiratory disease are more prevalent for Māori than for non-Māori.⁶

Medicines as a health intervention

Medicines are the most common tools used in health care. Medicines can decrease morbidity and mortality by both preventing and treating illness. All medicines can cause adverse effects. The aim therefore is to ensure *optimal* use of medicines whereby decreased morbidity or mortality from illness is achieved and drug-related morbidity or mortality is mitigated, under an umbrella of person-owned care.

Medicines management is often assessed against adherence to evidence-based therapy for medical conditions, as recommended in population-based guidelines. This assessment may be ideal for standard populations without co-morbidities, but it may not necessarily be optimal for individuals with individual biological responses, other co-morbidities and the person's perspective, priorities, values, past experiences and health beliefs. Evidence-based ideal therapy from a population perspective may not necessarily constitute optimal therapy for individuals. Considering the many steps along the pathway to achieve this optimal state, it is perhaps unsurprising that there is potential for it to go awry. In a cross-cultural setting, that potential is further compromised.

J PRIM HEALTH CARE
2018;10(1):11–15.
doi:10.1071/HC17067
Published online 29 March 2018

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The journey to the best possible outcomes from medicines

In the first instance, for a person to engage in a health system, they must recognise a need, then feel safe to approach it, including feeling that the service will satisfactorily respond to their individual beliefs, experiences and values. They must also be able to access the system and to interact and navigate their way through.

For the interaction to be respectful and effective, the clinician should be culturally safe and competent. A clinician must ensure the person in front of them feels understood and able to share personal information. In turn, the clinician must impart understandable information. This principle applies to all health practitioners, including doctors, pharmacists and nurses, and should be at the core of any interaction. Legislation in New Zealand demands regulatory authorities of health professions to set standards for clinical and cultural competence alongside ethical conduct.⁷ A mechanism to robustly monitor and assess the cultural competence of health practitioners and the wider health team (eg receptionists, health-care assistants, etc) does not currently exist.

Whether prescribers choose to prescribe a medicine is influenced by multiple person and whānau attributes, in addition to prescribers' own personal attributes. For example, studies have demonstrated a difference in the treatment of patients according to the gender of clinicians and patients.^{8,9} If medicines are prescribed, clinicians must draw on up-to-date clinical knowledge and apply this, alongside experience, to individual situations. Whether prescribing is according to 'best practice' is not always definitive, but regardless should ideally be approached as a 'partnership'.¹⁰ This should incorporate an individual's perspective and the concept of shared decision making, ensuring that people are provided with understandable information on risks and benefits of medicines administration to make a fully informed decision and to enable self-management.¹¹

Expert opinion on the process of prescribing describes it as '... a complex task that requires diagnostic skills, knowledge of medicines, communication skills, an understanding of the principles

of clinical pharmacology, appreciation of risk and uncertainty and, ideally, experience.'¹² While recognising the complexity of prescribing, this definition appears to overlook patients' contributions. The aim could be considered as a meeting of clinical expertise and the best available clinical evidence alongside patient preference, priorities, values, experiences, culture and beliefs.

Of course, as medicines knowledge increases and more medicines become available and are delivered, prescribing is an ever-changing 'art.' There are numerous examples of how prescribing practice has changed with new evidence (eg calcium supplements are no longer prescribed widely for prevention of osteoporosis, as calcium is associated with potential harm¹³).

Prescribers in any setting must be confident they have a fully reconciled list of medicines and that patients feel able to disclose use of any other pharmacological agents, legal or otherwise, therapeutic products and any traditional Indigenous medicines. It is not uncommon for users of 'alternative' medicines, including traditional practices premised on intergenerational knowledge transfer, to feel reticent about sharing this information.¹⁴ Additionally, prescribing is but one component of overall medicines optimisation.

The provision of medicines in primary care most commonly occurs through a community pharmacy. The government's national Pharmaceutical Management Agency (PHARMAC) has a duty to 'secure for eligible people in need of pharmaceuticals, the best health outcomes that are reasonably achievable from pharmaceutical treatment and from within the amount of funding provided'.¹⁵ Medicines subsidised by PHARMAC mean prescription charges are generally NZ\$5 per item for people aged >13 years if their prescription comes from a public service. The intent is to cap the charge at 20 items in a calendar year for an individual or family unit, after which there should be no co-payment charge. Evidence exists, however, that there is inconsistency in the application of this regulation, and some people may be asked to pay co-payments for more than 20 items.¹⁶ Even though these charges may be relatively low compared to other Western countries,

New Zealanders are not exempt from issues of affordability and therefore access to medicines. Specifically, Māori report struggling to prioritise medicines acquisition over daily living expenses.^{17,18} Medication co-payments therefore add to the complexity of medicines optimisation as they influence access and adherence.

In public hospitals, receiving medicines as an inpatient is generally without direct involvement from patients and can happen through a variety of mechanisms. A prescription can happen at discharge from hospital, and tertiary clinic appointments can also result in prescriptions. Medicines may be provided directly from a health professional, but this is relatively infrequent.

When prescriptions are provided, people then have a choice about whether to present it for dispensing. Interactions at the pharmacy can influence whether the medicine is administered as prescribed. When a person returns home with dispensed medicine, how it is stored, used, and, or continued, is without direct oversight. Continued administration or administration as intended by the prescriber is influenced by health provider interactions in addition to patient factors, like perceived need and ability to access.

Monitoring of medicines use and continual reassessment of appropriateness is further integral to the whole process of optimisation. Achieving the collective parts required to ensure 'optimal use of medicines' clearly requires a collaborative approach, with the end-user of the medicines being at the centre of decision-making at all levels. Where ethnic congruence does not exist between providers and the end-user, an extra layer of complexity may be added.

Medicines optimisation for Māori

Inequity in access to medicines exists for Māori,^{18,19} as does provision of prescription medicines at both primary^{17,20} and secondary care levels.²¹ Metcalfe *et al.* collated evidence of prescription medicines for Māori across all medicine groups and found the inequity was so substantive, it became known as the 'missing million prescriptions paper'.²² Providing detailed evidence that Māori were much less likely to receive

medicines according to burden of illness, this paper also demonstrated that there are instances where Māori are more likely than non-Māori to receive some medicines. These medicines used more often by Maori include the non-steroidal anti-inflammatory agents, which may cause substantial side-effects and generally do not 'treat' the cause of illness or prevent illness; rather, they may provide symptomatic resolution. Māori were less likely to receive medicines for cardiovascular disease, which is the most common cause of death, yet they are more likely to receive medicines that can cause cardiovascular events, gastric ulceration, renal damage or even death.^{23,24}

In describing the many facets of medicines optimisation and inequity, potential solutions must be considered. For Māori, engagement with a medicines optimisation process is more than the provision of 'understandable' information, founded on clinical competence. Instead, Māori require genuine relationships that are connected to culture and underpinned by trust and collaboration.²⁵ Therefore, a person or whānau may have negotiated the health process to the point of having an evidence-based medicine prescribed and dispensed for them, but they may still be without the final tools necessary to administer the medicine correctly, or they may feel a lack of trust and collaboration in the process such that they choose not to take the medicine.

Anecdotes within the health profession are plentiful of people not using or administering medicines correctly. Often the blame is laid with patients, rather than the failure of the system to ensure transfer of knowledge and to tailor the process for individuals. Personal experience of the lead author, premised on decades of working alongside whānau, reveals a long history of mistrust towards Western medicines and one of simply wanting to understand things like: medication mechanism of action, origin of medicine, aim of its use, likely side-effects and length of treatment.

Māori are less likely than non-Māori to receive this information in an understandable manner,²⁶ despite evidence showing that increased adherence and resultant improvements in clinical outcomes will occur for Māori if this is in place.²⁷

Further, there is a perceived misalignment of Western-based health services.²⁸ Cultural differences in perceptions of health and preferences in communication styles may also contribute to inequities in medicine optimisation between Māori and non-Māori.^{29,30} Counterintuitively, evidence from the National Primary Care survey (2001–02) demonstrated that Māori had shorter consultations than non-Māori.³¹ This is despite knowing Māori were more likely to be ‘sicker’ with greater need for more doctor time. Although that study has not been repeated in the last decade, there is no new evidence to suggest the situation is different today. Some evidence demonstrating the status quo remains.³²

Consequently, Māori have expressed the need for culturally competent and congruent medication information to be provided in health-care interactions.³³ In addition, there has been a call for the focus to be on health outcomes rather than outputs as a lens for Indigenous health-care delivery.³⁴ For example, funding for cardiovascular risk assessment targets means more assessments occur but does not necessarily mean that optimal medicines management is undertaken. Examples of collaborative, multidisciplinary, culturally appropriate models do exist,^{35,36} and dedicated policy to address inequalities has been proposed.³⁷ Equity, however, is not currently the lens that is used consistently in policy or outcome measures.^{38,39} This is unreasonable given the body of evidence demonstrating that an equity approach benefits all people.⁴⁰

Medicines optimisation with an equity approach as a priority

Equity in medicines optimisation for Indigenous peoples will occur only when the right approach is taken. The Ministry of Health, in developing *Equity of Health Care for Māori: A framework*,⁴¹ has been explicit in expectation of health practitioners, organisations and systems to achieve health equity for Māori. The framework’s application as it relates to medicines optimisation requires urgent action. Despite the overwhelming evidence of health disparity, co-creation and co-understanding between health professionals and end-users of medicines is largely unseen. Reframing medicines optimisation to focus on

the desired outcome and the necessary input to achieve these needs to be considered. Further, applying an equity lens enables planning to consider how such an approach could be prioritised to eliminate disparity.

In summary, overall medicines optimisation involves multiple cogs in synchrony. There is a clear and urgent need to understand how medicines management can be improved for Indigenous peoples to eliminate health inequity. Research should be supported to qualify, quantify and support ‘medicines optimisation’ both in a general sense and also for the Indigenous people of Aotearoa, New Zealand Māori, because if we get it right for people who are currently missing out, the whole nation will benefit.

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COMPETING INTERESTS

None.