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STAYING, GOING, GONE

A survey of Māori (Indigenous) pharmacists' career plans in Aotearoa New Zealand

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Abstract

Māori pharmacists are under-represented within the pharmacist community at 2.1%. This figure is substantially lower than the approximately 18% representation of Māori within the total population of Aotearoa New Zealand. The purpose of this research was to determine why Māori stay in the pharmacy profession, consider leaving or leave the profession, and what roles they move into if they leave. Those who had ever been a Māori pharmacist were invited to complete an anonymous online questionnaire. The responses of the 28 participants, representing approximately 26% (n = 23) of registered Māori pharmacists (n = 89), plus five who had left the profession, are presented here. The main finding from this research is that the majority (61%) of the Māori pharmacist participants were dissatisfied with the pharmacy sector and had left, were considering leaving or were unsure whether they were going to stay. If Māori pharmacists are not able to use their skills and knowledge to make an impact on health equity, with a clear path for career growth, there is intention that they will leave the profession. This is especially pertinent for Māori pharmacists within the first five years of registration.

Keywords

healthcare provider, Indigenous, Māori, pharmacist, workforce

Introduction

Within Aotearoa New Zealand, Māori have unmet health needs, and this enduring underserving has manifested in alarming inequities in health outcomes between Māori and Pākehā (Curtis et al., 2023). These inequities can be linked to the

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ongoing effects of colonisation, systemic racism and the health system privileging Pākehā (Curtis et al., 2023; Reid et al., 2019). Furthermore, health outcomes are linked with social determinants of health: education, healthcare accessibility, income, employment, housing quality and racism. The social determinants of health all influence Māori life expectancy, resulting in Māori males living 6.6 years less than Pākehā or other and Māori females living 6.4 years less than Pākehā or other (Curtis et al., 2023; Reid et al., 2000; Stats NZ, 2022). There are inequities between rural and urban Māori health outcomes: all-cause (standardised incident rate ratio [SIRR] 1.07) and amenable mortality (SIRR 1.13) rates for rural Māori are higher than for those of urban Māori, suggesting that rural Māori experience additional health challenges (Crengle et al., 2022). A conservative estimate of the cost to the Aotearoa health system by not providing equitable healthcare between Māori and non-Māori is NZ$863.3 million per year. Most of this cost is associated with years of life lost, totalling $823.4 million per year (Reid et al., 2022). According to te Tiriti o Waitangi, Māori and non-Māori are entitled to the same standard of healthcare (Clark, 2019). Recent inquiries undertaken by the Waitangi Tribunal, a commission dedicated to investigating Crown breaches of te Tiriti o Waitangi, confirmed Tiriti breaches and the need to address health inequities experienced by Māori (Clark, 2019).

Establishing a diverse health workforce that is representative of the population it serves by "holding a mirror to society" (Crampton et al., 2018, pp. 59, 68) likely contributes to both achieving health equity and preventing the perpetuation of inequity (Marrast et al., 2014). A workforce representative of the unique and complex characteristics of those whom they serve are likely, through connection with those communities, to possess an understanding of how to best meet the health needs of their community (Hunter & Cook, 2020; Thomson et al., 2021).

According to Te Whatu Ora—Health New Zealand's (2023) 2023/24 workforce development plan, there is an estimated shortage of 170 full-time equivalent pharmacists needed today, increasing to an estimated 570 more needed by 2032. Although a number is not specified for Māori pharmacists, Te Whatu Ora intend to retain, invest and recruit Māori (Te Whatu Ora—Health New Zealand, 2023). What is known is that there is an under-representation of Māori pharmacists within the pharmacist community in that only 2.1% of the total pharmacist population identify as Māori. When "holding a mirror to society", this indicates a significant shortfall of more than 15% (the total Māori population in Aotearoa is approximately 18%) (Pharmacy Council of New Zealand [PCNZ], 2022; Stats NZ, 2019). The current under-representation of Māori pharmacists in the workforce poses a significant barrier to them effectively playing a key role in uplifting Māori health across the country.

The purpose of this research was to investigate Māori perspectives of continuing or leaving a career as a pharmacist in Aotearoa. We aimed to determine why Māori stay in the pharmacy profession, consider leaving or leave the profession, and what roles they move into if they leave. Understanding these factors will inform the development of support mechanisms, fostering recruitment and retention, and how to strategically invest in a Māori pharmacist workforce to assist Māori pharmacists remaining within the pharmacist workforce in Aotearoa.

Methods

Study design

This is a prospective cross-sectional study using an online survey, seeking participants' voices through quantitative data. Kaupapa Māori principles (by Māori, for Māori, with Māori, in which Māori beliefs and values are central) were applied throughout the research process and researchers followed Te Ara Tika (framework for Māori research ethics) developed by the Health Research Council of New Zealand (Hudson et al., 2019; Rolleston et al., 2016). This research was given ethical approval by the University of Otago Human Ethics Committee (reference D23/310, 20 November 2023).

Instrument design

The survey comprised a combination of multiple choice and free text options. The questions were informed by research carried out by Aspden et al. (2021) and Hutchings et al. (2023), and the *Pharmacy Workforce Demographic 2022* report (PCNZ, 2022). The survey was piloted with four Māori pharmacists, which informed the final survey questions. The survey began with a screening question confirming the consent and eligibility of potential participants. The survey was stratified according to participants, who were practising or non-practising pharmacists (the survey questionnaire is available online as Supplementary Material). Most questions were closed questions with the opportunity for free text input if the given choices did not suit participants.

The survey was sent out using the Qualtrics online platform. Participants could choose to enter the draw to win one of two $100 supermarket vouchers; their contact details were kept separate from the study data to uphold their privacy and kept confidential to the research team. The survey was completed anonymously, and no identifying data was collected.

Participant recruitment and data collection

The survey was open between November 2023 and January 2024. Subjects were deemed eligible for participation if they self-identified as Māori and had completed a BPharm (or equivalent) or were currently or previously registered as a pharmacist affiliated with any global pharmacy organisation, regardless of career stage. This included those who were not yet registered as a pharmacist (i.e., were intern pharmacists). Participant recruitment was done through emailing members of Ngā Kaitiaki o Te Puna Rongoā o Aotearoa (The Māori Pharmacists' Association [MPA]), social media posts and local networks. A second method used for recruitment was snowballing sampling, whereby participants were asked to forward the invitation to participate to other potential participants.

Analysis

Participant data was exported from Qualtrics to Microsoft Excel for simple descriptive statistical analysis from the multiple-choice questions. For age range comparisons, the population used was registered Māori pharmacist data from the Pharmacy Council workforce demographic report as this was a more accurate representation than using data on all registered pharmacists in Aotearoa. The free text responses in the survey questionnaire were coded and categorised through manifest content analysis and used to add further context to reasons why pharmacists would or would not want to stay in the profession, and their view on how their role could be improved. However, due to the limited number of free text responses, counting coding categories was not necessary (Graneheim & Lundman, 2004).

Results

A total of 28 participants were included in the analysis. Five participants were excluded because they had not completed at least 90% of the survey. Those who had ever been a Māori pharmacist were invited to complete an anonymous online questionnaire. The responses of 28 participants, representing approximately 26% ($n = 23$) of registered Māori pharmacists ($n = 89$), plus five who had left the profession, are shown in Table 1. There is no readily available dataset on the prevalence of Māori pharmacist attrition, so this could not be considered. Most participants were aged 25–34 ($n = 18$, 65%), two (7%) were younger than 25 years old, and four (14%) each were in the 35–44 years and 45–53 years age categories. According to the PCNZ (2023) workforce report, we reached between 19% and 51% representation for each demographic; however, none of the nine potential participants aged over 55 participated. Due to the small sample size, regions where pharmacists practised were not reported in order to maintain confidentiality.

When participants were asked if they were considering changing to a career outside of pharmacy within the next one to two years, 11 (39%) responded that they were not considering changing (definitely not: $n = 3$, probably not: $n = 8$). A quarter of participants ($n = 7$) responded that they were considering changing (definitely yes: $n = 1$, probably yes: $n = 6$), and five participants responded that they might or might not change. Five participants (18%) had already left pharmacy.

Combined groups: Staying, going, and unsure

All participants who were still practising pharmacists in the staying, going and unsure group ($n = 23$, 100%) believed that their level of satisfaction would improve if there were more staff, more time for continuing professional development, and a wider range of pharmacist roles and responsibilities. Most participants said that they liked being a pharmacist because they liked helping people ($n = 17$, 74%) and were a valued member of the community ($n = 16$, 70%). Most participants said that they did not like being a pharmacist because their pharmacist skills and knowledge were underutilised ($n = 15$, 65%) and the salary was too low ($n = 14$, 61%).

Staying: Registered pharmacist participants who wanted to stay in pharmacy

Most of the participants who wanted to stay in pharmacy ($n = 11$, 39%) stated that their main place of work was community pharmacy ($n = 5$, 45%); the remaining participants were in pharmacies in a hospital, a general practice (GP) or other. The majority had been working in pharmacy for more than five years ($n = 6$, 55%). Participants often had secondary roles, including pharmacy management, intern preceptor, teaching, clinical research, or government or professional body

work. Most thought their level of satisfaction could be improved with more staff (n = 7, 64%).

Most participants who wanted to stay selected that they liked being a pharmacist because they liked helping people (n = 8, 73%) and being a valued member of the community (n = 8, 73%). In free text responses, one participant commented on the restrictive nature of the pharmacy profession and workplace-based racism:

> I don't like that pharmacists must be attached to an organisation or employer in order to work, versus the ability to provide individual service provision. I also don't like talking about the same problems in the healthcare system that have been spoken about for decades. And I don't like knowing that racism is blatantly vocalised amongst some pharmacists. Intentionally or not. (Participant 7)

Participants in this group were also asked what factors were influencing them to leave the profession, and while some did not select any factors, some participants selected that they felt that their pharmacist skills and knowledge were underutilised (n = 4, 36%), there was not enough staff in their organisation (n = 3, 27%), they were working in a stressful environment (n = 3, 27%), they did not feel valued by their employer (n = 3, 27%) or they were not getting paid enough (n = 3, 27%). The factors that participants selected as influencing their desire to stay in the profession were feeling like they were making a difference to health outcomes (n = 10, 91%), liking the people they worked with (n=10, 91%), enjoying their role (n = 9, 82%) and being connected with their community (n = 9, 82%). In the free text responses, participants expressed optimism for the profession, including the ability to support the health of Māori communities and the widespread support they experienced with Māori colleagues; for example, "I feel like we are more likely to be able to positively influence the health of other Māori" (Participant 4). Another stated:

> I am fortunate to belong to an organisation who started as colleagues and friends, but who I now call whānau. MPA has given me the confidence to stand proud as a Māori pharmacist and not be afraid to challenge the system. We all have each other and keep each other safe, and support and lift each other all the time. (Participant 7)

Participants also described reasons for wanting to leave the profession. One participant described high workload, possibly signalling burnout:

> Due to the high workload that a lot of pharmacies are experiencing patients aren't receiving the full potential of care that a pharmacist can offer. I often find that I cannot take the necessary time required to fully assess a patient's needs or concerns because I have a lot of work that needs to be completed in the dispensary. There is a lot of pressure to complete a lot of tasks in a short amount of time. (Participant 16)

Another participant was grateful for the cultural support the MPA offered. They felt there was a lack of cultural safety among the leaders in the organisation:

> I feel culturally safe but that's because of my own learnings and support from MPA. I can see my other non-Māori colleagues making an effort but some of the leaders in the organisation are a bit tokenistic. (Participant 21)

Going: Registered pharmacist participants who wanted to leave pharmacy

Most of the participants who wanted to leave pharmacy (n = 7, 25%) stated that their main place of work was within a community pharmacy (n = 6, 86%), and some had secondary roles, including pharmacy management or clinical research (n = 2, 29%). Most of the participants had been working as a pharmacist for less than five years (n = 4, 57%).

Most participants who wanted to leave liked being a pharmacist because they liked helping people (n = 6, 86%) and being a valued member of the community (n = 6, 86%), and most participants disliked that pharmacist skills and knowledge were underutilised (n = 5, 71%). Being a valued member of the community was emphasised in a free text response from Participant 10, who stated, "Being a Māori pharmacist is so important in NZ. You're highly valued and sought after because of how easy it is to connect with people."

When asked what could be improved about their current role, almost all participants selected having more time for continuing professional development (n = 5, 71%). When asked what else could be improved, participants thought that increased awareness of pharmacists' roles and skillset was needed. One participant stated:

> On weekends people are more desperate for medical advice as GP surgeries are closed, Urgent Doctors

> is expensive and the wait at A and E [accident and emergency] is very long. I find because of these factors people are approaching pharmacists about their health needs more. They are typically things we are capable of doing but people seem to be unaware of. (Participant 3)

One participant who wanted to leave expressed concern about the current right-wing coalition government:

> This last year with the election has caused me concern with the rhetoric and beliefs that some staff have towards Māori and Pacific communities. It's the first time I've felt that the profession as a whole is lacking cultural safety towards staff and patients ... It becomes your role to try and educate staff in the workplace but it's unpaid and exhausting at times. (Participant 18)

Another participant who wanted to leave indicated the "double shift" they were experiencing: "What Māori pharmacists do in addition to pharmacy jobs, i.e., ensuring culturally safe environment, lobbying for Māori patients, karakia, etc." (Participant 24).

When asked about influencing factors for leaving pharmacy, all participants selected that they felt like their pharmacist skills and knowledge were underutilised (n = 7, 100%) and that they were bored in their job, with no opportunity for career growth (n = 4, 57%). When asked about reasons for staying in pharmacy, participants selected that they were working in a good team (n = 6, 86%) and that they were making a difference to health outcomes (n = 4, 57%).

Gone: Pharmacists who had left pharmacy

Five participants (18%) who had left the profession had completed a Bachelor of Pharmacy degree and all bar one had left the profession within five years of working as a pharmacist. No participants regretted completing their degree. Most selected being somewhat unhappy being a pharmacist (n = 4, 80%), and the majority were extremely happy with their new career (n = 4, 80%). These careers were within a healthcare setting, for example, medicine, public health or clinical research.

When asked why they left pharmacy, most participants selected the option of feeling bored in their pharmacist role and having no opportunity for career growth (n = 3, 60%). Other reasons included not being paid enough, not being valued by their employer, being in a stressful work environment, underutilisation of their pharmacist skills and knowledge, and being bullied in the pharmacy workplace.

When asked what could have changed their mind to stay in the profession, the free text responses varied, ranging from nothing to better pay and further opportunities:

> I need to explore other opportunities rather than staying in the profession. Pharmacy is a great platform to venture into other related field where there is more influence to make changes. Pharmacy can be both narrow and limited by others. (Participant 28)

Participants also emphasised their frustration about the understanding of a pharmacist's role. One participant stated in the free text response, "Pharmacy in health [is] still not fully understood by others to expand its sphere of influence for communities" (Participant 28).

Unsure: Registered pharmacist participants who were unsure about pharmacy

Five participants (18%) currently working as pharmacists selected that they might or might not leave pharmacy. Most of these participants stated that their main place of work was within a community pharmacy (n = 3, 60%), and that they often had secondary roles, including hospital pharmacy, teaching, clinical research, or government or professional body work (n = 2, 40%). Just under half had worked in pharmacy for less than five years (n = 2, 40%).

When asked what could be improved in their current role, most participants selected a wider range of pharmacist roles and responsibilities (n = 4, 80%) and increased scope of practice (n = 4, 80%). Most participants selected that they liked their current role because they liked helping people (n = 3, 60%) and disliked their current role because there was a lack of career progression (n = 5, 100%).

When asked about influencing factors for leaving pharmacy, most participants selected underutilisation of their pharmacist skills and knowledge (n = 4, 80%), inability to work at top of scope (n = 4, 80%) and not getting paid enough (n = 4, 80%). The influencing factors for staying in pharmacy that were selected the most were feeling connected with the community they were working in (n = 3, 60%), making a difference to health outcomes (n = 3, 60%) and working in a good team (n = 3, 60%) with people they liked (n = 3, 60%). In free text responses, one participant indicated a

feeling of obligation to the community to improve health outcomes for Māori, stating, "There aren't enough of us [Māori pharmacists]. With this new coalition govt [government], we will need many more to ensure the health of our whānau doesn't continue to decline" (Participant 13).

Another participant indicated the value of the MPA, stating, "Your community is key, maintaining contact with the MPA can be so inspiring and encouraging to see where your career could go" (Participant 14).

Discussion

The main finding from this research is that the majority (n = 17, 61%) of Māori pharmacist participants were dissatisfied with the pharmacy sector and had left, were considering leaving or were unsure whether they were going to stay. Our results suggest that if Māori pharmacists are going to leave the profession, they often do so within the first five years of registration. This is in keeping with recently published research in which the authors found that Aotearoa-based pharmacists (any ethnicity) who are unsatisfied with the pharmacy profession are likely to leave the profession within the first five years of registration (Aspden et al., 2021). For a representative Māori pharmacist workforce to contribute to health equity, we need to retain all the pharmacist workforce or the predicted estimate of 15% pharmacist shortfall in 2032 will be much higher (Te Whatu Ora—Health New Zealand, 2023).

In our study, the top three influencing factors for leaving the profession were pharmacist skills and knowledge being underutilised, not working at top of scope and being bored in their pharmacist role with no opportunity for career growth. This is supported by Aspden et al. (2021), who identified similar reasons for pharmacists wanting to leave the profession, including dissatisfaction with the pharmacy professional environment, lack of career pathways and opportunities, and underutilisation of pharmacists' skills and knowledge. Although Māori were included in this previous research, the numbers were not sufficient to evaluate workforce attrition rates based on ethnicity and reasons why Māori leave or want to leave the pharmacy profession. These findings are further supported by Australian data published just over 10 years ago with an almost identical story: early career pharmacists felt their skills and knowledge were underutilised, and they experienced job dissatisfaction associated with technical activities, such as dispensing, and minimal or no time to perform patient-facing clinical activities (Mak et al., 2013). Findings from British research published almost 15 years ago tell a similar story of lack of remuneration and underutilisation of skills and knowledge (Seston et al., 2009). Recently published United States data highlights the impact of the pandemic and burnout as key factors for pharmacists leaving the profession, in addition to funding, practice models and limited career advancement that aligned with skills and knowledge (Rech et al., 2022). Aotearoa, Australia, the United States and Great Britain data signals an international trend in pharmacists exiting the profession. Research is required on global Indigenous pharmacist workforce trends.

We found that when asked about what they liked about their work, only six (26%) participants selected "feel culturally safe". Reid et al. (2019) described the ongoing effects of colonisation, which are woven into society as racism and white privilege, within a system that unequally distributes resources and opportunities, and these could be influencing factors for the low number of participants who selected "I feel culturally safe". Additionally, Deroy and Schutze (2019) found that the lack of consideration for depth of cultural knowledge and discrimination in the workplace is a key influencing factor for Aboriginal and Torres Strait Islander health worker retention in Australia. These concepts require further investigation with Māori pharmacists.

Influencing factors for staying in the profession differed among the three (stay, going, unsure) groups. Participants who wanted to stay felt like they were making a difference to health outcomes (n = 10, 91%), whereas participants who wanted to leave and who were unsure selected this choice at a lower rate, 57% (n = 4) and 60% (n = 3) respectively. Previous research has shown that one of the main reasons for choosing to become a pharmacist is to improve people's health and wellbeing (Hanna et al., 2016). However, if pharmacists are not able to do this, it becomes a reason for wanting to leave the profession. Our results show that feeling connected with the community and working in a good team would positively influence those who want to leave and those who are unsure about staying in pharmacy. Additionally, participants who had multiple pharmacy sector roles, such as community pharmacy, advocacy or academic, through which they could maximise their application of skills and knowledge, were often the ones who selected to stay in pharmacy, and a lack of career progression was selected as a reason for participants to leave. Overall, our findings are similar to those in research published over 20 years ago, in

which pharmacist participants indicated that they had the least satisfying career compared with other healthcare professionals such as GPs, physicians or surgeons (Dowell et al., 2001). A strategy to retain Māori pharmacists in the profession is enabling pharmacists to work at the top of their scope, in roles that they find rewarding, and utilising their skill set to make a meaningful difference in the communities they work alongside. This is supported by a recent publication that found that some of the main ways to retain community pharmacists based in Ireland were improved opportunities for career progression, and better acknowledgement and resourcing of pharmacist professional activities (Lynch & O'Leary, 2023). Findings from Zambas et al. (2020) suggest that to recruit and retain Māori nursing students, it is important to create environments that welcome and respect te ao Māori values and strengths. Key findings from a report on how Māori medical doctors experience cultural loading highlights workplace expectations, such as expertise on tikanga, te reo Māori, te ao Māori, Māori representation, advocacy and support for Māori patients, Māori health, and equity issues (Tipene-Leach et al., 2024). This cultural load can cause stress and affect mental health and wellbeing with limited professional or financial recognition; furthermore, advice is often dismissed or not implemented (Tipene-Leach et al., 2024). To care for the wellbeing of Māori medical doctors, the report signals for action on support systems for the individual, organisation, workforce and health ecosystem, and also supported whānau, hapū, iwi and community roles (Tipene-Leach et al., 2024). It is likely that Māori pharmacist recruitment and retention would increase if workplaces also welcomed, respected and upheld Māori values to increase the feeling of cultural safety, and limited cultural loading.

Participants in this research signalled that work–life balance was an area to improve on. Many participants across the staying, leaving and unsure groups stated their workplace did not have enough staff, they worked in a stressful environment and their workload was too high. All these factors can contribute to burnout, which, according to a recent systematic review, affected 51% of surveyed pharmacists (Dee et al., 2023). Within this review, COVID-19 was identified as a contributing factor for worsening rates of burnout (Dee et al., 2023). Additionally, research with Māori doctors has described the double shift of having to carry additional workloads, for example, being the go-to person for knowledge of te ao Māori, interactions with Māori patients, as well as the challenge of poor work–life balance and cultural expression within the workplace (Lucas et al., 2014). It is likely that Māori pharmacists also experience this double shift; however, this requires further research. Future research including interviews would also increase understanding of workforce needs.

To retain Māori pharmacists within the profession, the health sector needs to "plug the pipeline". Three actionable findings from this research in this regard are (a) flexible employment settings that enable pharmacists to use their skills and knowledge, (b) increased scope of practice and (c) adequate remuneration. Three findings from this research on what is working well for retention and should continue are (a) providing opportunities for community connection that lead to meaningful professional relationships, (b) engaging in pharmacist activities that contribute to equitable health outcomes and (c) ensuring Māori pharmacists are flourishing within a team that they feel safe in.

A limitation of this research is that participants were not asked whether their pharmacist role was full-time or part-time. Hours of employment mean that some people may have a varied week, which may influence their decision to remain practising as a pharmacist. Pharmacists were not asked specifically about finding solutions to reduce day-to-day workloads to enable them to use their skills and knowledge, such as the role of Pharmacy Accuracy Checking Technicians on workflow. Pharmacists were also not asked about their intention to practise pharmacy overseas and the influence this has on retention within Aotearoa. Although the sample size of this study is small, it represents approximately a quarter of the Māori pharmacist population at the time of the survey.

Conclusion

The first five years post-registration for Māori pharmacists are formative years for retention within pharmacy. They require adequate remuneration and the ability to use the skills and knowledge that they possess within a community that they feel connected to and to which they can contribute to their achieving health equity. Early career Māori pharmacists need to have a clear pathway for career growth and work within a team that they both enjoy working with and feel culturally safe with.

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Glossary

Disclaimer: Many of the descriptions used in this glossary are specific interpretations for this publication, and do not denote the fullness of meaning normally associated with the word or term. All efforts have been made to uphold the taonga of each kupu within the writing of this publication.

Aotearoa	the North Island of New Zealand, now commonly referred to as New Zealand
hapū	subtribe
iwi	tribe
karakia	incantation or prayer
Kaupapa Māori	research using Māori knowledge by Māori researchers
kupu	words, vocabulary
Māori	Indigenous peoples of Aotearoa
Pākehā	Non-Indigenous people of Aotearoa with a European descent; New Zealand European
taonga	treasure
te ao Māori	Māori worldview
te reo Māori	Māori language
te Tiriti o Waitangi (te reo Māori version)	the Treaty of Waitangi (English version)
tikanga	protocols or correct way or doing things
whānau	family, collective

Data access statement

Full dataset from participants will not be made available under Māori data governance protocol Te Mana Rauranga. All material that can be shared is included in the manuscript. A copy of the full survey can be obtained by emailing the corresponding author.

Supplemental material

Supplemental material for this article is available online.

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