

New Zealand Primary Care Research Colloquium Abstracts

Art in the art of medicine

Samantha Murton

My PhD research is on health professionals who use drawing to explain concepts to their patients. The PhD is at the data gathering stage, significantly disrupted by the pandemic, and has some surprising results in its early stages. Video material from the health professionals' drawing and then patient interview, and 're-drawing' of what was drawn for them, will be presented. As an adjunct to the PhD research a recent publication on NZ doctors drawing for patients is in press. One of the outcomes of this survey was that doctors would like more instruction on drawing for explanation. Early in my PhD journey I developed a drawing for explanation workshop for 5th year medical students during their explanation and planning tutorial; the topic being dermatology. I have recently changed this tutorial to be more student directed but have also challenged more of the students to draw. I will present feedback from students on this session and will also demonstrate how the tutorial is run.

The NZ primary care study

Tom Love, Nikki Sheridan, Tim Kenealy

Background At least seven models of primary care have evolved: Traditional, Corporate, Health Care Home, Māori practices, Pacific practices, and practices owned by Primary Health Organisations/District Health Boards and Trust/Non-governmental Organisations. Te Tiriti o Waitangi (1840) guarantees equal outcomes for Māori and non-Māori, but stark differences are longstanding and ongoing.

Methods Cross-sectional study (30 September 2018), data from national datasets and practices at patient level. We sought associations between practice characteristics and patient health outcomes, adjusted for patient characteristics. Practice characteristics included: model of care, size, funding model, rurality; number of consultations and time spent with nurses and doctors; practice and doctor continuity.

Results The study included 924 New Zealand general practices with 4,491,964 enrolled patients. Patient characteristics showed considerable variance in patient health outcomes in fully-adjusted regressions. Patients with high needs disproportionately clustered into Māori, Pacific and Trust/NGO practices. Practice-level variance was highest for emergency department attendances. There were multiple associations between models of care and patient health outcomes. Across models, patients with high health need received more clinical input but this was insufficient to achieve equity of outcomes.

Evaluation of implementing primary care into post-Soviet Azerbaijan

Felicity Goodyear-Smith, and on behalf of Mehmet Akman

Background Post-Soviet Azerbaijan inherited the Russian Semaskho model of health care, which is primarily specialty-focused and super-clinic-based. Doctors graduate as adult or paediatric physicians or surgeons therefore no family physicians possible. Prof Akman is commissioned by the World Health Organization and the European Union to introduce primary care into Azerbaijan. I am assisting with evaluating this initiative. He will submit retrospective PhD by publication to Maastricht University. This presentation will explain the challenges this project faced, the various changes and initiatives introduced, and the different studies conducted to evaluate these.

Initiatives and evaluations Needs assessments were conducted by applying European Primary Care Monitor framework to measure structures and processes of primary care services in Azerbaijan; an assessment of chronic care management and infant care in the Shamakhi region, and focus groups to determine priorities and training needs of primary care workers in this region. Development and implementation of a tailor-made model for primary care service delivery in Shamakhi as pilot case is described. Mixed method process evaluations of transitional training and capacity-building; transformative primary care provider peer learning and supervision, and digital transformation, and an outcome evaluation of equipment and tool training and provision on clinical practice are completed. Process evaluation of the implementation is ongoing.

The moral economy of market-driven versus government funded healthcare

Patrick Bartosch

This qualitative, comparative research project strives to analyse the attitudes, norms, and values ("moral capital") that circulate in the healthcare systems of New Zealand, Germany, and the United States to identify whether the funding mechanism of the systems affect the types of moral capital on the micro and macro levels. The research is based on documentary data, traditional and social media analyses, and the results from 45 interviews with patients and healthcare providers in the three respective countries. The results have the potential to improve our understanding of health inequity and could potentially affect health policy. It might also lead to the establishment of "the moral economy of healthcare" as a new area of scholarship that can be studied further to improve equity in healthcare.

New Zealand Healthcare Reforms 2022: Viable by design?

Adeel Akmal, Tim Stokes, Nataliya Podgorodnichenko, Robin Gauld

Background The New Zealand (NZ) health reforms were announced in 2021 and came into effect on 1 July 2022 with the establishment of Te Whatu Ora – Health New Zealand (replacing the DHBs) and Te Aka Whai Ora – Māori Health Authority.

Study aim To evaluate the health reforms at an early stage using relevant management theory - Beer's Viable Systems Model (VSM).

Design Qualitative exploratory design with semi-structured interviews and documents analysed thematically.

Setting and participants Twelve PHO managers involved in the formation of locality networks were interviewed. Document analysis utilised 245 news articles and 99 government documents.

Results VSM posits that for a system to be viable, all its five sub-systems (operations; co-ordination; operational control; development and governance) need to be strong. Our analysis suggests that the health reforms, despite their strengths, do not satisfy this requirement. There are serious concerns around coordination, operational control and the long-term development and sustainability of the system. Poor communication of the reform implementation and operationalisation was thought likely to result in system failure and inhibit the ability of frontline health organisations to deliver care.

Conclusions The health system reforms may not lead to a viable NZ health system going forward.

Embedding oral health in primary care

Lynn McBain, Moira Smith, Elizabeth Hitchings, Margaret Clarke, Belinda Yang

Background There is a strong relationship between a person's oral health and their general health. General practice is often the first port of call for dental complaints, however knowledge and confidence to address this is lacking. Two approaches to improving this gap are being investigated. One project aims to embed routine questions about oral health in general practice. The objective of the second project was to develop a self-directed oral health education module for undergraduate non-oral health professional students.

Method A small-scale project is underway partnering with high needs practices. Using a participatory, co-design approach questions were developed and added to the expectations when undertaking an annual review with a patient with diabetes. Data are being collected and evaluation will include staff experiences. A self-directed education module was developed and tested with undergraduate non-oral health professional students. This module is now available to undergraduate medical students as an optional activity. Practical clinical examination sessions are planned. Evaluation will be undertaken, and decisions made about expanding the availability.

Results Both initiatives are works in progress. Early indications are that the routine oral health questions are straightforward to ask and can initiate conversations about oral health. The education modules have been available only a short time, there are no findings yet.

Conclusion Oral health is a neglected area in general health care. There is unmet need in practitioner training, knowledge and confidence, and a known lack of funding for services.

Exploring prescription-related communication between community pharmacy and general practice

Chloe Campbell, Caroline Morris, Lynn McBain

Background Electronic tools are being increasingly used in health care (e.g. for medical records, transmission of prescriptions, and communication between health practitioners). While a communication tool is built into the New Zealand electronic prescription service, a recent study conducted by the authors found that both general practitioners and pharmacists considered that it could be improved.

Aim To better understand prescription-related communication in primary care by ascertaining:

- the nature of prescription issues that prompt communication between prescriber and pharmacy
- how the communication is undertaken currently
- practitioners' perspectives on the methods used and how the process could be improved.

Presentation At the time of the Research Colloquium, data will be available from a pilot study conducted in community pharmacy and general practice using a case study/qualitative approach. The presentation will outline key findings from the pilot and seek feedback on a proposal for a national electronic survey with questionnaire development informed by these findings. Ultimately, this work will help inform optimisation of prescription-related communication for the benefit of prescribers, dispensers and patients.

The Longitudinal Interprofessional Study: impact of pre-registration interprofessional education on the attitudes and skills of health professionals during their early careers

Ben Darlow, Melanie Brown, Eileen McKinlay, Lesley Gray, Gordon Purdie, Sue Pullon

A prospective, longitudinal, non-randomised trial assessed whether a pre-registration interprofessional education programme changed attitudes towards teamwork and team skills during health professionals' final year of training and first three years of professional practice.

Students from eight disciplines eligible to attend the 5-week Tairāwhiti Interprofessional education (TIPE) immersion programme were recruited (617/730) prior to their final year of training; 130 participants then attended the TIPE programme. Data were collected via five surveys at 12-month intervals, containing the Attitudes Towards Healthcare

Teams Scale (ATHCTS), Team Skills Scale (TSS) and free-text items. Mixed-model analysis of covariance compared scores between groups at each time point. Template analysis identified themes in free-text data. Mean ATHCTS scores for TIPE participants were 1.4 (95% CI 0.6 to 2.3) points higher than non-TIPE participants ($p=0.002$). Mean TSS scores for TIPE participants were 1.7 (95% CI 0.0 to 3.3) points higher than non-TIPE participants ($p=0.045$). TIPE participants made substantially more free-text comments about benefits of interprofessional collaboration and perceived the TIPE programme had a meaningful influence on their readiness to work in teams and the way in which they performed their healthcare roles. TIPE programme participation significantly improved attitudes towards healthcare teams and these changes were maintained over 4 years.

Mixing it up: Exploring the motivations and experiences of senior hospital clinicians (consultants) in dual practice in New Zealand

Gavin Bishop, Erin Penno, Tim Stokes

Background New Zealand (NZ) operates a dual practice system where senior hospital clinicians (consultants) can work in both public and private health sectors. There is little published research in high income countries on why such clinicians choose to work in both sectors.

Study aim To explore the motivations and experiences of consultants working in dual practice in NZ.

Design Qualitative exploratory design with semi-structured interviews analysed thematically.

Setting and participants Interviews were conducted with 15 consultants purposively sampled from a range of medical and surgical specialities in the southern health region (Otago and Southland).

Results Four preliminary themes have been identified: (1) Structural (e.g., lack of available sessions in the public system); (2) Remuneration (e.g., doing procedures privately pays very well); (3) Job satisfaction (e.g., collegiality of the public system versus clinical, economic and organisational autonomy of the private system) and (4) Obligation to the public system (e.g., giving back to the public as they were speciality trained in the public system).

Conclusions Analysis is in progress. The results will have been finalised and been written up by the Research Colloquium.

Using a Participatory Action Research approach to explore health care workers perceptions of, and aspirations for, kindness in their workplaces

Nicki Macklin, Laura Wilkinson-Meyers, Tony Dowell

Background The importance and value of placing kindness at the heart of health care is increasingly understood to be a key factor in improving patient and staff safety and experiences, and organisational performance measures. However, few examples of healthcare literature exist where kindness is the explicit exploratory focus and fewer still where attempts have been made to define or conceptualise kindness in a way that encourage, sustain, and grow it for the benefit of all people within our healthcare system.

Methods Using a participatory action research approach, an anonymous survey asking two open text questions was designed by members of the research team and a team from the Gathering of Kindness and Hush Foundation. The questions were designed to explore health care professionals' perceptions of, and aspirations for, kindness in their workplaces. The survey was sent to all registered participants (in person and online) of the upcoming Gathering of Kindness in Healthcare conference. The results will be presented to the participants live at the conference in Melbourne (next week!) and discussion facilitated as to practical uses for the data and future directions of research activities.

Results This presentation will present the early results of the theme analysis of data from the surveys returned; and explore some of the delights and challenges involved in this style of research development.

Co-designing interventions with Pasifika communities to improve health outcomes in South Auckland for gout and rheumatic fever

Siobhan Tu'akoi, Samuela 'Ofanoa, Malakai 'Ofanoa, Maryann Heather, Hinamaha Lutui, Felicity Goodyear-Smith

A co-design partnership between the Pacific People's Health Advisory Group, the Pacific Practice-Based Research Network and University of Auckland researchers workshopped priority research areas with the goal of reducing inequities and improve health in South Auckland Pacific communities. Two key research questions emerged: improving uptake of urate-lowering therapy for gout patients and reducing the rheumatic fever burden. Gout and rheumatic fever both disproportionately affect Pacific people, with the highest rates among all ethnic groups in Aotearoa. Two research projects were set up focused on each health issue, both following a three-phase approach: 1. Utilising national and Auckland PHO data to explore the burden of disease, 2. Co-designing and implementing an innovative Pasifika intervention, and 3. Evaluating the implementation of the intervention. The research projects are both in progress and have implications for clinical practice and public health. They aim to co-design an approach that will work for Pacific people, enhance health and wellbeing and empower Pacific communities to lead solutions. Brief updates on the gout and rheumatic fever studies will be given.

Tukutuku: an approach to evaluating and understanding high-quality care coordination in Aotearoa New Zealand?

Mariana Hudson, Emily Gill, Roka Ngarimu-Cameron

Care coordination is a cornerstone of high quality primary care, which is the basis for equitable healthcare systems, and impacts people who contend with complex chronic medical conditions where care transitions occur frequently. The Agency for Healthcare Research and Quality (AHRQ)'s definition of care coordination is the most cited, describes a process that occurs most often during and in response to care transitions, and provides a framework that organizes coordination requirements into nine activities. A review of AHRQ's framework of care coordination activities will be presented through rural NZ primary care anecdotal scenarios. We propose a theory of Tukutuku traditional weaving knowledge that provides interwoven strength and stability to the Te Whare Tapa Whā model. Tukutuku creates purposeful panels through the process of weaving patterns with specific meaning, that may align with care coordination activities. This Aotearoa NZ approach can guide research design to evaluate and understand care coordination in NZ.

Multimorbidity in primary care

Ruth Teh, Dipan Ranchhod, Ngaire Kerse, Lynn McBain

The ageing population will ensure that the health of older people becomes an increasingly important issue in New Zealand and worldwide. Multimorbidity is prevalent in the older population. It is associated with limited physical function and adverse impact on activities of daily living; healthcare costs increased exponentially with the number of chronic conditions. Multimorbidity will be ascertained using primary care practice data Tū Ora COMPASS Health. The overall project aims to examine the impact of patterns of multimorbidity and 5-year health outcomes. This presentation reports the prevalence of multimorbidity in older adults on 1st Jan 2016.

The sample comprises 46,278 adults aged 55+ for Māori (8.2%) and Pasifika (4.7%), and 65+ for non-Maori and non-Pasifika (NZ European, 4.9% Asian, other 1.4%), and not stated 0.2%. More than half were female (54%). The average age for Māori and Pasifika was 65.1 years; non-Maori and non-Pasifika were 74.1 years. Prevalence of the chronic conditions identified: hypertension (45.6%), COPD/asthma (19.9%), IHD (16.2%), diabetes (14.4%), osteoporosis (9.7%), hypothyroid (9.1%), stroke (9.1%), CHF (4.6%), depression (short term 6.0%; long term 5.3%), dementia (3.2%), neurological disease (1.6%), cancer (xx?). More than half of the sample (58.4%, n=27,008) had 0-1 chronic conditions, and 22.5% (n=10,412) had co-morbidity and 19.1% (n=8858) had multimorbidity. During the 5-year follow-up duration, 16.5% (7643) had at least one home care assessment, and 17.2% (7972) died. Association between multimorbidity and health outcomes will be presented at the seminar.

Preventive, non-disease specific primary care interventions to improve health outcomes of older people: A systematic review and meta-analysis

Leah Palapar, Jeanet Blom, Laura Wilkinson-Meyers, Thomas Lumley, Ngaire Kerse

Introduction Many primary care trials have tested the effectiveness of preventive, non-disease specific approaches to older people's care, with systematic reviews often reporting effects according to what is thought to be the intervention's active ingredient.

Objectives To examine the effectiveness of preventive primary care interventions for older people and to identify common components that contribute to intervention success.

Design Systematic review and meta-analysis of 18 studies of preventive primary care interventions

Participants General older primary care population

Outcome measures Use of hospital and aged residential care (ARC); patient-reported outcomes including activities of daily living (ADLs) and self-rated health (SRH)

Results Interventions had no overall benefit to health care use. Compared to controls, intervention participants' hospital stays were longer by 9% (combined ratio of durations 1.09, 95% confidence interval [CI] 1.07 to 1.10). There was no benefit to patient-reported outcomes apart from higher odds of reporting positive SRH (combined odds ratio [OR] 1.18, CI 1.01 to 1.37). In studies that changed the care setting, intervention participants had 21% fewer hospitalisations (combined rate ratio 0.79, CI 0.64 to 0.98). Studies that included educational components for patients tend to report some improvement in basic ADLs (standardised mean difference 0.28, CI 0.09 to 0.48). Higher odds of being sent to hospital or ARC were observed in participants of interventions that provided health professionals with new clinical information (combined OR for hospital admission 1.22, CI 1.02 to 1.46) and education (combined OR for ARC placement 1.34, CI 1.09 to 1.66).

Conclusion Preventive primary care interventions are beneficial to older people's SRH. Future programmes to improve primary care of older people should consider delivering care in alternative settings and providing patient education as these may contribute to positive outcomes. Increased health care use when education or new clinical information is provided to health professionals is an unexpected finding that should be further investigated.

Evaluating adaptations to the new Integrated Primary Mental Health and Addition Services (IPMHA) in smaller practices

Bianca Crichton, Jim Ross, Shyamala Nada-Raja

Background IPMHA is a new mental health and wellbeing service embedded within General Practices, comprising Health Improvement Practitioners (HIPs) working within a brief behaviour-change model alongside Health Coaches and Support Workers. Evaluations have been positive, however these mainly involved larger practices. This study explored roll-out into smaller Otago practices

Methods Case study methodology was used with clusters of practice sites linked by shared IPMHA staff. Interviews and analysis focused on confirming, refuting or adapting these Propositions:

1. Issues of scale mean that smaller practices will receive incomplete implementation of some key components of IPMHA.
2. In smaller practices, adaptations will be made to the model according to contextual factors.
3. These adaptations will be consequential.
4. Patients and staff of practices without IPMHA will be inherently disadvantaged, constituting an equity issue.

Findings Overall, Propositions were confirmed. IPMHA staff were spread between several practices and this affected their engagement with patients and practice personnel, sometimes even threatening sustainability. Staff were inventive in adapting. There was widespread support for IPMHA, however possible equity considerations were identified for Māori and Pasifika. IPMHA was available only intermittently or not at all for some practices, significantly reducing their patients' access to prompt help.

“There is no one way”: what do young people in Aotearoa-NZ think about digital mental health support?

Maria Stubbe, Sue Garrett, Tracey Gardiner, Jo Hilder, Rachel Tester, Abby Dunlop, Tony Dowell, Piki Youth Co-Researcher Group

It is often assumed that young people will be receptive to and even enthusiastic about using virtual modes of mental health support, but our evaluation of the Piki Integrated Therapies pilot (Dowell et al 2021) showed that this assumption needed to be tested. It is important to have robust evidence from a service user perspective on digital strategies, and to provide sound guidance for young people when choosing a mode of support. This paper reports on the findings of a national survey to gather baseline data on attitudes of young people in Aotearoa to navigating digital mental health support, and how best to ‘get the word out’ about what is available. A Qualtrics survey was distributed through Instagram and Facebook targeted to the 15-30 year old age group, with subsequent marketing bursts to Māori, Pasifika and males. Analysis of the 1471 responses (15% Māori; 6% Pasifika; 12% Asian; 50% male) showed an overall preference for in-person IRL (in-real-life) support. However, digital support was seen as helpful as an initial step and because it is relatively accessible and anonymous. Perceived drawbacks include concerns around trust and privacy, technical issues, wait times, poor quality, difficulty finding services, and a need for self-motivation.

XEmoqol 100, an ultra-ultra-brief mood case-finding tool: A diagnostic accuracy study

Nina Dahle, Bruce Arroll

Background Case-finding for low mood in primary care can be time-consuming using current depression inventories.

Aim To assess the diagnostic accuracy, of a single verbally administered question on the emotional quality of life (Emoqol 100).

Design and setting Eligible patients were consecutive patients seen by one of the authors with possible distress/low mood. The index test was the verbally asked Emoqol 100, which is the patient's emotional quality of life now, with 100 being perfect emotional health and 0 being the worst imaginable. The reference standard is the written version of the David Burns depression questionnaire with a cut-point of 6 or more for depression which asks about mood today.

Methods A retrospective audit of consecutive consultations in a single primary care clinic.

Results 148 patients were seen during the study period, for this audit, and there were 532 test results from visits. For a cut point of ≤ 20 on the Emoqol 100 the sensitivity was 15 %, and the specificity was 99.4% (95% CI 86-100). The likelihood ratio for this was 25 which is very high.

Conclusion The Emoqol 100 appears to have a high specificity which means when it is positive it is a good estimate of a high Burns depression score, i.e. a mood issue probably exists.

PHQ-9 versus David Burns Questionnaire for low mood

Bruce Arroll, Nina Dahle

Background Case-finding for low mood in primary care can be time-consuming using current depression inventories.

Aim To assess the diagnostic accuracy PHQ-9 versus David Burns Questionnaire for low mood

Design and setting Eligible patients were consecutive patients seen by one of the authors with possible distress/low mood. The index test was the David Burns depression questionnaire which asks about mood today. The reference standard is the PHQ-9 which asks about mood in the past 2 weeks.

Methods A retrospective audit of consecutive consultations in a single primary care clinic.

Results 148 patients were seen during the study period, for this audit, and there were 532 test results from visits. Data is being analysed now and presented at the meeting.

Conclusion To be presented at the research meeting.

Seeking the mean of two extremes: moderate Confucian familism as a potential avenue for promoting whānau engagement in mental health care in Aotearoa

Denzel Chung, Jing-Bao Nie, Katherine Hall, Chrys Jaye

The importance of whānau engagement in healthcare is well-recognised in Aotearoa New Zealand. However, for mental health patients, various barriers seem to prevent its consistent implementation in practice, resulting in a tendency towards over-individualism. Little is known about how this affects the healthcare experiences of ethnic Chinese, who traditionally have a collectivist, familist culture.

To explore this further, we interviewed health professionals with experience providing care to ethnic Chinese, as well as ethnic Chinese former patients and their family members. We found that over-individualism causes mental health services to be perceived as divisive and ineffective among ethnic Chinese, contributing to a general reluctance to seek help. However, there was also an awareness of the limitations of excessive familism, including its threats to individual autonomy.

As a solution, we propose a moderate Confucian familist framework for delivering mental health services. This would, with patient consent, proactively encourage family members' engagement in patients' mental health care in a manner culturally-grounded in Confucian principles. We hope such a system could balance moderating the current system's over-individualistic focus while still maintaining its protections of individual patient rights. This whānau-centred framework's could be particularly useful for promoting help-seeking in a primary care context.

Research impact in health sciences research: A scoping review

Maria Larcombe, Pauline Norris, Richard Cannon, Tim Stokes

Background Research impact is the difference that research makes in the world, largely outside of academia. Over the course of a research project or research programme's lifetime, research impact may be assessed in order to articulate the 'return on investment'. This scoping review focusses on the empirical evaluation of research impact in the health sciences.

Study aim The overall research question is: What is known about the nature of research impact and the pathway to achieving research impact in health sciences research?

Design We used the Arksey and O'Malley scoping studies framework to conduct this scoping review.

Results A total of 63 eligible studies were identified, covering a wide variety of types of health sciences research. The vast majority of studies (62) either use evaluation or impact assessment to show empirical research impact. The most common framework used is the Payback or Modified Payback Model to evaluate impact (27 studies). Most studies list types of impact achieved, with some describing contextual factors involved. Few studies describe activities undertaken to achieve impact.

Conclusions Analysis is in progress. The results and conclusion will have been finalised and been written up by the Research Colloquium.

An update on the Primary Care Research Network

Sharon Leitch, Abigail Pigden, Carol Atmore, Tim Stokes

Kia whakatōmuri te haere whakamua, 'I walk backwards into the future with my eyes fixed on my past.' Using routinely collected data is a pragmatic cost-effective method to conduct real-life health research, but Aotearoa lacks the infrastructure to readily access and use primary healthcare data. The Primary Care Research Network (PCRN) is being launched to ameliorate this problem. Working with WellSouth and Te Whatu Ora Southern, the PCRN is establishing the infrastructure and data governance processes to facilitate the use of routinely collected PHC data linked to other data such as the Pharmaceutical Collection and the National Minimum Datasets. This work is commencing in Southern Aotearoa, but the intention is that this network will eventually extend to include the whole country. The proposal for the network was presented at this meeting in 2021. The PCRN has now been awarded establishment funding. A progress update on the state of the network and associated research will be presented, including a scoping review (in progress), a proof-of-concept clinical data linkage study (in progress), and research prioritisation exercises with academics, clinicians, a research Kaitiaki group and patients (planned).