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DEVELOPING A "LIVE" MAP OF SPATIAL ACCESS TO HEALTH SERVICES IN AOTEAROA NEW ZEALAND

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AIMS

To develop a real-time model that incorporates current road conditions to estimate spatial access to health services daily, at the address level.

METHODS

National highway road-closure data were collected from the New Zealand Transport Agency Application Programming Interface. Data about local road closures were scraped from local council websites. A road network from Open Street Maps was modified by removing any closed highways or local roads. The distance from each address in the Manawataki Health Region, through this new road network, to the nearest hospital was calculated. The programme was automated to run each day in January, using current road conditions for that day to estimate hospital accessibility.

RESULTS

Daily estimates of hospital accessibility were successfully automated, with variations in spatial accessibility over time noted. However, the importance of data quality for the accuracy of this model is paramount. Reporting structures and formats meant that data obtained from some local councils were found to be imprecise or unreliable at times.

CONCLUSIONS

This approach shows potential for quickly estimating access to health services under changing road conditions, such as during and after extreme weather events. NZTA and local councils should be encouraged to work together to improve the reporting of road closures.

"LOOK BELOW THE CROTCH": PROVIDER-PERCEIVED SYSTEMIC BARRIERS TO PODIATRY CARE IN THE WAIKATO REGION, AOTEAROA NEW ZEALAND

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BACKGROUND

Foot and leg problems are more prevalent for people living with chronic disease. Yet, access to podiatry care rarely arises as a significant determinant of health. While barriers to podiatry care at individual, whānau (family) and healthcare provider levels have been described, the core systemic barriers are rarely identified and discussed. Proposed solutions to poor access tend to ask providers to operate differently and/or for health pathways to be simplified, rather than address the main drivers of poor access to podiatry care.

METHOD

Kaupapa Māori and mixed-method approaches were weaved to undertake recorded focus groups with 21 Māori living with chronic disease and semi-structured engagements with 127 healthcare providers between 2021 and 2023. These conversations explored participants' perspectives on the barriers to podiatry care and how to improve the way it is provided.

FINDINGS

While podiatry care was easy to access for some Māori patients, it was the most difficult form of healthcare to access for others. Healthcare providers described a diversity of interconnected barriers that are overarching and across the referral pathways that hindered and delayed access. These barriers all emerge from the way podiatry care is structured

and funded in the Waikato Region, how primary and secondary care operate, and workforce shortages both regionally and nationally.

CONCLUSION

Barriers to podiatry care continue to be significant for Māori patients and can lead to poor outcomes including amputation. The current approach to podiatry care is equity negative and helps to increase inequities between Māori and non-Māori New Zealanders. Podiatry care must be re-designed to make it more accessible for Māori patients and whānau/families and must include stronger connections between secondary and community podiatrists.

IMPLEMENTATION OF STEREOTACTIC ABLATIVE RADIOTHERAPY (SABR) FOR LIVER LESIONS AT WAIKATO REGIONAL CANCER CENTRE (WRCC)

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The Waikato Regional Cancer Centre (WRCC) has recently implemented stereotactic ablative radiotherapy (SABR) as a treatment option for metastatic liver lesions. SABR offers a non-invasive alternative to surgery, delivering high-dose radiation with minimal toxicity. While surgical resection remains the preferred treatment, approximately 25% of patients with liver lesions are eligible. This abstract outlines our implementation process for liver SABR.

A multidisciplinary approach was essential for implementation, involving the development of comprehensive patient management guidelines, including strict inclusion and exclusion criteria to ensure patients could tolerate treatment. Eligible patients underwent a pre-simulation quality assurance (QA) assessment, followed by treatment planning and delivery. Treatment involved up to five sessions over 1 to 2 weeks. Treatment planning was conducted using Varian Eclipse V16, with delivery on the Varian TrueBeam system. Each patient's treatment underwent rigorous quality control (QC) assessments performed by the medical physics team.

To date, four patients have been treated. The average gamma pass rate for quality control tests was 98% (2%, 2mm criteria). Full target coverage (100% of the prescribed dose) was often compromised due to the proximity of the liver to organs at risk (OAR), such as the bowel, heart and remaining liver parenchyma. Accurate targeting was further complicated by respiratory motion. However, advancements in imaging technology, including cone-beam CT (CBCT) and motion management strategies, have helped mitigate these challenges.

The liver SABR protocol is continuously reviewed and refined to optimise patient outcomes, with ongoing monitoring of efficacy and toxicity.

ADDISON'S DISEASE AND ADRENAL CRISIS: A PHENOMENOLOGICAL STUDY OF THE PATIENT EXPERIENCE

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This study aimed to investigate the lived experiences and issues central to patients with Addison's disease when they are hospitalised due to an adrenal crisis. Interpretive phenomenology was used to explore and understand the experiences of six participants with a diagnosis of Addison's disease who had experienced one or more adrenal crises.

Their shared experiences were analysed using Braun and Clarke's thematic analysis.

Three key themes arose from the analysis that explained participants' experiences: responding, adjusting and learning. The "Addison's and adrenal crisis patient experience model" was developed to illustrate how responding, adjusting and learning impact the patient experience.

To support future patients with Addison's disease, this inquiry recommends education for healthcare practitioners in primary care and secondary services, particularly medical practitioners, nurse practitioners and nurses who are likely to aid treatment of adrenal crises.

The development of a support group for people living with Addison's disease to be able to connect and share experiences was suggested by the participants. This in conjunction with education programmes may prevent adrenal crises and hospitalisations.

The development of a clinical guideline is recommended to best support and instil confidence for healthcare practitioners, their patients and families.

AGITG SPAR: A RANDOMISED PLACEBO-CONTROLLED PHASE II TRIAL OF SIMVASTATIN IN ADDITION TO NEOADJUVANT CHEMOTHERAPY AND RADIATION FOR RECTAL CANCER

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BACKGROUND

Retrospective clinical studies and preclinical studies demonstrated that statin use during preoperative (chemo)radiation (pCRT) for rectal cancer is associated with improved survival, response and toxicity. Tumour regression following pCRT has strong prognostic significance and can be assessed using MRI-based tumour regression grading (mrTRG), including with non-operative management. SPAR was designed to prospectively evaluate the benefits of adding simvastatin (SIM) to pCRT on tumour regression and gastrointestinal (GI) adverse events (AE).

METHODS

SPAR is a double-blind randomised phase 2 trial investigating SIM/placebo (PBO) in addition to long-course fluoropyrimidine-based pCRT for rectal adenocarcinoma. Stratification included trial site, clinical T stage (< 4 vs 4), clinical N stage (< 2 vs 2), either mesorectal fascia involvement (MRFI) or extramural venous invasion (EMVI) on MRI (yes vs no) and total neoadjuvant therapy (TNT): induction vs consolidation chemotherapy vs none. Study treatment was SIM 40mg/PBO daily for 90 days, starting 1 week prior to pCRT; recent statin use was excluded. Pelvic MRI was repeated 6–8 weeks after pCRT to determine mrTRG. An amendment in January 2022 allowed TNT with either induction or consolidation chemotherapy; the timing of postpCRT MRI remained unchanged. The design was amended to open-label due to PBO supply issues. Primary objective: rate of centrally assessed grade 1–2 mrTRG. Secondary objectives include centrally assessed favourable pathologic TRG (pathTRG), safety and cancer outcomes. Analysis was by intention-to-treat.

RESULTS

Between April 2018 and November 2023, 135 of 222 planned participants from 17 sites in Australia and New Zealand were randomised (68 SIM; 67 no SIM). Recruitment was hampered by the COVID-19 pandemic and adoption of TNT as standard care before the protocol amendment. Participant characteristics: median age 59 years; 85 (63%) males; 118 (87%) T2–3 disease, 80 (59%) N0–1 disease; 55 (41%) MRFI or EMVI; 25 (19%) had TNT. Rates of grades 1–2 mrTRG with SIM vs no SIM were 38.5% and 29.7% (X2=1.09, p=0.30), respectively. There was no significant difference in rates of grade 2 GI and non-GI AE. Four serious AE were recorded, none related to study treatment. Median follow-up was 3.2 years. Three-year local recurrence rates (LRR) were low: 1 (2.2%) and 3 (5.5%) with SIM vs no SIM, respectively (HR: 0.29, 95% Cl: 0.03–2.67, p=0.26). Three-year disease-free survival (DFS) with SIM vs no SIM was 84% and 72%, respectively (HR: 0.48, 95% Cl: 0.21–1.08, p=0.07).

CONCLUSIONS

The rates of favourable mrTRG, 3-year LRR and DFS were numerically better with the addition of SIM to pCRT, though the differences were not statistically significant. SIM was well tolerated. Interpretation is limited by reduced sample size and statistical power. PathTRG and other key outcomes will be presented at the meeting.

"DO YOU EAT BOIL UPS?": MĀORI PATIENT EXPERIENCES OF DIETETIC CARE AND NUTRITION SUPPORT AT WAIKATO HOSPITAL

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BACKGROUND

People living with chronic disease can experience many challenges around nutrition and malnutrition, which can be complicated by the cost of living and the way food systems operate. Dietitians have a role in supporting patients and whānau/family through these challenges and by providing evidence-based nutrition support about nutrition and food. This presentation describes the experiences of Māori patients in relation to kai/food and when engaging with dietitians at Waikato Hospital.

METHOD

Kaupapa Māori and mixed method approaches were used to undertake 1) recorded focus groups with 21 Māori patients living with chronic disease and 2) semi-structured interviews with four additional Māori patients about their experience of speaking to a dietitian at Waikato Hospital. The former patients were asked about the wider determinants of health affecting their lives, including the experiences of food, nutrition and speaking to a dietitian. The latter patients were asked: How was your experience of speaking to a dietitian? How did they help you?

RESULTS

Participants valued dietetic care and nutrition support that was specific to their health condition and when healthcare providers teamed up to talk through related issues. Some advice was difficult for patients and whānau to connect to for economic, whānau and cultural reasons. Some patients felt their dietitian did not know how to approach kai Māori (Māori food practices) and some kai were targeted as "bad" from a scientific perspective. While support was patient-centred, whānau and/or household members were largely excluded. Economic constraints and high living costs also posed significant challenges for some whānau. These factors made it difficult to learn to cook and eat to a different diet.

CONCLUSION

Many individual, cultural, whānau, economic and societal factors shape everyday experiences of food and nutrition for Māori living with chronic disease. Understanding how these affect nutrition and everyday disease management is important to providing useful dietetic care and nutrition support. Whānau experiences show that dietetic care and nutrition support must be re-designed to make it more accessible and useful to patients and whānau. Increasing the number of Māori dietitians and integrating cultural perspectives at the training levels will help improve patient and whānau experiences.