Diabetes, Primary Care, & High-needs Communities:

An integrated approach to diabetes care

Overview…

This case study outlines the findings of a series of interviews with staff from Capital and Coast DHB (CCDHB), Newtown Union and Porirua Union Community Health Services. The article highlights some of the innovative approaches that have been implemented by health professionals charged with helping meet the needs of two communities near the top of New Zealand's high-needs, high-deprivation rankings. It also highlights a more integrated, locally-oriented approach to providing primary care practitioners with access to specialist secondary care support.

The case study explores some of the funding and structural challenges faced by health professionals in these practices. As well as highlighting the outcomes, from both a patient and practitioner perspective, that have been achieved as a result of the innovative approaches to providing integrated specialist support to primary care teams. Ultimately, the article highlights the importance of building effective relationships with patients and some of the challenges that we often need to navigate to do so.

The Challenge…

About 20 minutes drive from Wellington City and 40 minutes from Wellington Hospital, Porirua Union is located in Cannons Creek, Porirua. Unlike the rest of the population served by CCDHB, the Cannons Creek community sit much lower than the national averages for deprivation and other socio-economic factors.

"We identified this sense of isolation several years ago as creating a range of challenges for both ourselves and our patients," Dr Bryan Betty of Porirua Union and Community Health Centre explains.

"The only way we could access secondary support was to refer our patients over to the hospital, but for a number of reasons – such as the cost of travel – they just didn't go," he explains.

"Our practice sits in the heart of one of Wellington's lowest-income areas, where the number of people with diabetes is four times the national average – and because of the link with other social factors our population not only have a higher incidence of diabetes, they also have much greater complexity in their conditions…It can be challenging," adds Dr Betty,

Having identified the challenge, Dr Betty and the team at Porirua Union got in touch with Dr Jeremy Krebs, an endocrinologist and diabetes specialist with CCDHB.

The Innovation…

Dr Krebs had been trialling a range of innovative approaches to integrating specialist secondary support within the primary care environment, working closely with Newtown Union – a community health practice that serves a population with an almost identical socio-economic profile to Porirua Union's population.

"It all began when Dr Ben Gray gave me a call and asked if I would consider going out there," Dr Krebs recalls.

"Newtown Union's population is very high-deprivation with a strong immigrant community that, from a cultural perspective, can be very uncertain of hospitals. Although the team often referred patients to us, they were seldom turning up."

"Finally, Ben said: 'Well they come to us, but they won't come to you. How about you consider coming out here?' And so we did," Dr Krebs explains.

But rather than simply offering mobile outpatient clinics, the team devised a more radical approach.

There were two key elements to the final approach that was taken: monthly case conferences and joint consultations with patients.

For the multidisciplinary case conferences, all of the practice GPs and nurses involved in diabetes care were invited to join Dr Krebs and a specialist diabetes nurse to discuss complex patient cases and collectively agree the most appropriate management plan for those patients.

This approach proved to be a great success.

The Benefits…

"For every case we discussed, each of the GPs in the room would have several others with similar issues and challenges. They were able to transfer the principles and strategies from our discussion across similar patients – it was incredibly effective."

"We also learned that you didn't need the patient to be there to begin to develop an effective management plan for them. This meant that even if you had a patient you had to record as Did-Not-Attend (DNA), you could still develop a plan for the next time they did come in," Dr Krebs adds.

"It was incredibly efficient – it provided a collaborative environment that proved an extremely effective approach to upskilling practice staff together, while at the same time identifying successful management plans that could be applied across patients with similar complexities."

For the second part of the model – the joint consultations - patients would see their usual GP and Dr Krebs together. This proved equally effective.

This approach proved a great complement for both patients and the practitioners – by pairing the expertise of a hospital specialist with the local GP's in-depth knowledge of individual patients and their surrounding circumstances and family life.

"When we first started the idea was just for Jeremy to come out and run outpatient clinics at our place," Dr Ben Gray recalls.

"There were some advantages to that – with the immediate benefit being that people we referred to the clinics actually turned up and our DNA rate went down!"

"But the other thing was that, as we sat in with Jeremy, we found we needed to refer fewer patients to him as we were learning from what he was doing. Our capability was growing and we realised the real value was in the upskilling that was taking place, and that's where we began to focus on the case conferences together," Dr Gray explains.

After becoming successfully embedded in business as usual with Newtown Union, this approach was later introduced by Dr Betty and the team over at Porirua where it was met with similar enthusiasm.

"It's become an integral part of our practice. The relationships with Jeremy and the specialist team over at Capital and Coast are really well developed. Now if one of the team here have a problem or are unsure how to progress with a case we can just ring and discuss what's going on. The confidence of the GPs and the nurses treating people with diabetes has gone up exponentially as well," Dr Betty observes.

"The case conferences are an incredibly efficient use of everyone's time. We've been doing this for two years now. When we first started, we'd cover just two or three patients. Now we cover six to eight cases in an hour and although most of these patients don't contact secondary services directly, except in acute situations, we're actually managing to bring specialist advice to them by using this mechanism. It's been hugely beneficial," Dr Betty reflects.

"If we discuss eight cases in an hour together, that also flows on to other patients we see because we just start to manage them differently or we're building capacity within the practice to address these complexities."

Similarly, from Newtown Union's perspective, Dr Gray points out that one of the things they have learnt about chronic care management is that it really does need a multidisciplinary team approach. Given the complex factors and interrelationships between conditions, the specialist support and input that might be required for any given patient can range from practice GPs and nurses through to podiatrists, retinal screeners, dietitians and various other social services.

"It's not something that can be dealt with in isolation and patients need a much greater integration between services or it can all just seem too hard, too much to cope with," Dr Gray adds.

"Health practitioners need to play a broader role than they have before and it centres heavily on fostering a relationship of trust with patients and understanding the broader context of their lives. To really tackle this, we need a broad team approach - and everyone in that team needs relationship skills."

The Relationships…

Dr Gray describes a collaborative model in which patients have a primary point of contact, such as their GP or community nurse, but that person then has immediate access to the specialist skills of the other health professionals across a team.

"We have some patients that I see rarely but the nurse is their main contact. The nurse will seek my advice when needed and, occasionally may refer the patient to me – but even then, I don't need to go back and take a whole history because that's already been done. You work out what your complementary role is and focus on that – it's very efficient," Dr Gray explains.

Dr Gray is quick to highlight the central importance of establishing effective relationships and trust with patients: *"It's all about relationships. Understanding where they're coming from, what their values and priorities are and how they differ from yours in that given moment is critical. The issue might be because of a lack of information, risk aversion, cultural background or a myriad of other factors - without understanding that you risk approaching the issue in the wrong way and reinforcing their resistance. That insight is only gained through effective relationships and communication with patients."*

Dr Gray also highlights the differences in Māori and Pacific concepts of relationship in contrast to the more instrumental Western approach: *"In Māori terms, if you haven't shared your mihi or exchanged whakawhanaungatanga, you can't do the kaupapa. How can you do the work together until you've established an adequate relationship? We could learn a lot understanding patient interviewing processes from this perspective."*

"In a Māori or Pacific society, trust is based on knowing the person, their whānau, their place. The Western model tends to be more cognitive – based on qualifications, credentials and formal role titles. We need to become more skilled in engaging from other perspectives – as a clinician, you're not going to get the information you need unless they trust you," Dr Gray adds.

The challenge is that building relationships and gaining trust takes time. As Dr Betty points out, having the right funding and support structure in place is critical for providing GPs and other practice staff with the flexibility to collaboratively implement some of these innovations and invest the time in building those relationships with high-needs patients.

As Dr Betty observes, *"What a lot of people don't understand about General Practice is that it's about efficiency. People present a lot of different models for how we can meet the increasing demand, but many of the models would just consume huge amounts of time – that's why so many never get off the ground. What I've appreciated about the joint initiatives we've put in place with the secondary specialist team here is that they are really time efficient. That's been of immense value and I think the patients get a better deal as a result."*

"I believe this approach is now being rolled out across 13 practices around the Capital & Coast region, to help meet the needs of other high priority populations," Dr Betty adds.

The Funding…

Walking into a community practice like Porirua Union or Newtown Union is a striking experience. There is a vibrant sense of mission and clarity of purpose among the staff that is as tangible as the very real needs in the communities they serve.

Talk to some of the people there – staff or patients – and remarkable stories immediately emerge of health practitioners going the extra mile, frequently at their own expense, to ensure people are given every opportunity to access the help and support they need to manage their health and wellbeing. Those in the greatest need often do not proactively seek the assistance they need. If patients don't seek the assistance they need, the health professionals in these two communities will often seek out the patients.

It's an inspiring and extremely vivid reminder of why the health system exists. Yet, despite the passion and the commitment to service, those who choose to work in these environments face very real barriers and numerous disincentives.

Newtown Union and Porirua Union approach this in slightly different ways. Newtown Union charge patients for a GP consultation but offer nurse-consultations for free. Porirua Union invite patients to pay what they can afford and rely on a series of funding and grants to make ends meet. Both practices are happy to receive fees but neither service turns away those who cannot pay.

"Cost is one of the issues," Dr Betty, of Porirua Union, explains. *"We're able to provide patients with low-or-no-cost access based on the various grants and funding we receive but you don't see a lot of core funding to support these sorts of primary care models."*

"Overall, community health centres like these cater to around 15 per cent of the population but they represent much more than 15 per cent of the need. They're incredibly important to the health system yet they get by on a wing and a prayer, depending on what sort of funding happens to be available. It's very inconsistent."

Dr Gray, of Newtown Union, describes the same challenges from a similar perspective: *"Practices like these are often disadvantaged by the way funding models are set up. As a capitated practice, our funding is determined by ratios based on the average number of visits a year across New Zealand nationally. In a high-need, high-deprivation community with the level of complexity we see, our experience is far from average but the funding models don't account for this very easily."*

There is a strong argument that increasing the capability of primary care to manage more aspects of diabetes care really is the only sustainable option given the expected ongoing increase in demand for diabetes support. It is not an issue that secondary care can sustainably manage alone. However, as general practices become more active in diabetes, it also creates funding complications.

"In Newtown, the number of patients who are benefitting from secondary care is enormous, but it's all happening out in a primary care setting. The most obvious example is insulin initiation - when we first began this process we were referring everyone who needed insulin to the hospital. Now, we do 100 per cent of that here in the practice. In a sense, what we've done is shift the burden and cost out into the practice and away from the hospital but the funding hasn't come with it. How do you account for that in a funding model? It's challenging," Dr Gray adds.

"And we have no ability whatsoever to recoup costs from patients through co-payments," adds Dr Betty, reflecting on the income levels of Porirua Union's patients. "We're totally reliant on the funding we receive. In a traditional practice you might adjust fees to compensate for different things but in a low-to-no-cost practice you don't have that option. This is something we need to wrestle with – in the communities where they are needed, how do we sustainably fund these sorts of practices for the future?"

As both Dr Gray and Dr Betty have observed, it is a complex challenge. Even if you moved away from national capitation models and took a more regionalised approach there are challenges. In an area such as Newtown, you have some of New Zealand's poorest households existing right alongside some of our wealthiest. It is not easy to build that complexity into funding models and both Newtown and Cannon's Creek have a much higher representation of high-needs, high-deprivation characteristics in their communities.

Newtown Union and Porirua Union both operate on a salaried model, rather than a fee-for-service model. This has enormous benefit for patients but creates some challenges for the practices.

From a patient point of view, it means the time they have with their doctor or nurse is based more on need rather than short windows of time that are designed to increase patient volumes (and therefore revenue). The service patients receive is tailored to the level of complexity or care required, rather than constrained to a universal 15 minute window.

This is perhaps the single greatest enabling factor in terms of the structure and funding of Newtown Union and Porirua Union. It's hard to see how the practices could operate within the communities they serve in any other way; it's a model that appears to be perfectly suited to high-need, high-deprivation communities.

For, Dianne Theobald, a Primary Care Nurse at Newtown Union, this has made all the difference: *"I'm 100 per cent certain that I wouldn't be able to do what I do here if people had to pay full fees. I'm all for people paying what they can and there will be those who 'over access,' but it's meant a whole community of people who were not engaged with health services at all, now have access to the care they need right where they live. It's made all the difference."*

However, for the practices and staff, it's not straight-forward. This approach means that these practices are entirely reliant on the

funding they receive. In an environment of ongoing financial pressure with increasing cuts and reductions, it can be hard to provide a sustainable service. Any changes in funding directly and immediately alter the ability of these practices to deliver services. Recent changes in funding for Newtown Union meant they were no longer able to offer maternity services in the community.

Navigating all of these circumstances hasn't been without its challenges. The secret, for all of the health practitioners we spoke to for this case study, in many ways comes down to good old fashioned teamwork.

The Outcomes…
"Everything we do here is a team approach," Ms Theobald reflects. "I spent many years wondering if I was really cut out to be a nurse and then I came to work here and I knew this is exactly what I wanted to do!"

For Ms Theobald, the focus on achieving better health outcomes by building better relationships with patients is what makes Newtown Union's approach so effective.

"I just can't imagine how you can properly treat someone without having more of a relationship with them – as well as the fact that they're more likely to talk to you and trust your advice, you also have a much more accurate picture about how they're really managing," Ms Theobald explains.

Ms Theobald goes on to describe her own previous experience, one that was commonly shared by many of her peers, in which the only time they saw many of their diabetes patients was when they came in for their free annual review.

"They'd come in and we'd go through the tick sheet and we might even arrange some blood tests, but in most cases we wouldn't see them for another 12 months – there was no relationship and it didn't really give you any idea whether they really are managing their condition effectively. Here, it's very different – and as a result our knowledge of diabetes has skyrocketed."

Ms Theobald cites the example of one family she is working with where one parent has already passed away as a result of diabetes-related complications. The remaining parent, in their fifties, and their son, in his thirties, have both been diagnosed with diabetes.

As in many cases, diabetes is not the only issue. There are mental health and obesity issues to manage as well. Over time, Ms Theobald and the team have built a very open, transparent relationship with the family.

"Neither of them have had good diabetes control but we kept working with them. He'd come in very honestly and tell us he wasn't taken his tablets but he also had an aversion to needles – he'd seen his father taking insulin and, tragically, he'd died."

"It was a significant, and very sensitive, barrier. We just kept bringing it up gently – the first time I tried, they got really upset and we didn't see them for a while – but eventually, she came in one day and said, 'OK, I think I need to give it a try,'" Ms Theobald recalls.

"She improved dramatically. He eventually agreed to go on to insulin as well and they've both had significant changes in their diabetes. Over three months, his HbA1c reading has dropped from just over 120 down to the high 60s, and stayed there."

"There are still risks and we have a way to go but it's a great improvement. Getting this family onto insulin was the best thing we could do for them – but without the relationship we would never have gotten there," Ms Theobald explains.

Ultimately for each of the practitioners and specialists interviewed, it is about reducing barriers and increasing access.

Speaking from Porirua Union, Dr Betty highlights these realities from a patient's point of view: "We're a low-cost practice, so we charge between zero and ten dollars. A lot of patients don't pay and we don't turn people away. We're supported entirely by the funding we receive and essentially all our money goes into the frontline."

"Access really is the key issue, so we've also located ourselves right in the middle of the neighbourhood. Our patients have come to consider it their place and their practice. For a number of our patients, even getting to the local Kenepuru Hospital two kilometres up the road can be quite a task – let alone finding the money for petrol or public transport to Wellington Hospital. For many people it's just too hard and they don't end up accessing the support they need. We're helping change that," Dr Betty adds.

Porirua Union also undertake a number of initiatives to increase access. This includes a local weekly outreach service onsite at Maraeroa Marae, integrating other community services such as midwives, physiotherapists, paediatric nurses, health navigators for Pacific and Whānau Ora services, and a variety of services for refugees.

As Ms Theobald reflects, *"You can never just look at diabetes. There are always social and financial factors involved. Nothing is isolated; nothing is ever 'just' diabetes."*

Similarly, the local PHO has introduced a number of support options under its 'Well Health' initiative that reflect the needs of their specific community – such as additional subsidies for medication and taxis, home visits and neighbourhood outreach services – in order to increase access to services.

"All of this is important, but the critical thing is to develop the relationship with the patient. If you have that, they will come back and you can address unresolved issues or things they weren't ready to face at the next time. If it wasn't for the way we are funded there's no way we'd be able to achieve that in a community like this. Our role is to reduce the barriers and improve access without taking ownership off the individual," Ms Theobald adds.

But Dr Gray gives a note of warning:

"The viability of both practices is tenuous, and the complexity of the work continues to increase. This programme has significantly increased access of the most vulnerable people to specialist diabetes input, and improved the quality of their diabetes care by up skilling the primary care staff, without the funding to recognise this. In essence we are being asked to provide more care for people with diabetes without matching funding."

Closing Comments…

Caring for New Zealand's highest needs and most resource-deprived communities is a unique challenge. It's a challenge that is being met by unique individuals operating out of unique practices in unique ways.

They are achieving some astonishing results and dramatically changing long-standing trends among communities who have had a long history of not engaging with primary healthcare – or only engaging once a situation has reached an acute crisis state.

Spend time in these practices or with these practitioners and you can't help but be captured by their sense of mission and the patient stories and outcomes you witness. However they also face unique funding challenges and are frequently underserved by centralised or standardised national funding models.

Practices that serve these communities operate in a complex setting that needs to be given careful thought in relation to future funding and policy models. However, based on the engagement and outcomes they are achieving, it is well worth our attention.