UPSKILLING GENERAL PRACTICE – DIABETES EDUCATOR AND PRACTICE NURSE PERSPECTIVES

Marion Hawker[1], Michelle Kriss[1], Susan Neuner[1], Christine Seinor[2], Marilyn Reed[3]

1 CNCs Diabetes, Greater Newcastle Sector Diabetes Service, Hunter New England Local Health District, Newcastle NSW Australia
2 Practice Nurse, Tenambit Medical Centre, Tenambit NSW Australia
3 Practice Nurse, Hamilton Doctors, Hamilton NSW Australia

Supporting General Practice in Diabetes Care

General practice staff may not feel confident and/or have the knowledge and skills to manage many aspects of diabetes care, particularly for complex, co-morbid patients with a high risk of diabetes related complications. Often, it falls to Practice Nurses (PN) to educate patients with diabetes to competently monitor their blood glucose levels and safely administer insulin/other injectable therapy.

Hunter Alliance *Diabetes Project*

The Hunter Alliance*, a collaboration between major local health providers, was created to facilitate processes to improve health outcomes across the region. The Alliance's Diabetes Project aims to integrate primary and tertiary care teams to improve the clinical outcomes and experience for patients with type 2 diabetes. This integrated care is provided in the patient's own general practice setting. The upskilling of PNs to better care for their diabetes patients and facilitate completion of the Diabetes Annual Cycle of Care is an important component of the project.

Practice Nurse, Diabetes Educator (DE), Endocrinologist and GP in a case-conference style consultation with a patient.

Benefits to participating general practices

- Upskilling of GPs and PNs
- Upskilling and empowering patients
- Feedback of clinical outcomes to support continued practice improvement

The project team's commitment

- To develop a comprehensive practice-based diabetes registry
- Three 8 hour site visits, to consult with 30 patients overall
- Support and training of PNs to pre-assess patients using the Diabetes Registry tool in preparation for the Specialist review
- Education, support and training provided onsite

The general practice's commitment

- Identify 30 patients at moderate to high risk of complications, who may benefit from intensive multidisciplinary input
- PNs to collate all patient records and relevant reports, including a 3 day food and blood glucose diary and complete both the Diabetes Registry and the Patient Activation Measure™ (PAM™)
- GP and PN to attend the case-conferences, case-reviews and intensive training sessions
- 3 and 6 month patient recall data – checking patient outcomes

The Project Reach

Phase 1: 2014 - June 2016 (completed)
20 GP practices in Newcastle, Lower Mid North Coast and the Hunter Valley.
72 PNs upskilled in 3 Practice Nurse Education days.

Phase 2: July 2016 onwards (planned)
40 GP practices across Hunter and New England areas.

Phase 1 post-intervention analysis for 20 practices (456 patients)

- 65% referred were moderate to high risk – of these 75% improved their diabetes control
- 92% needed medication changes
- 51% of patients lost weight
- Increase from 30% to 70% of patients reporting adequate activity levels (>30mins/day)
- 100% of involved clinicians felt the experience was "satisfying" or "very satisfying"
- Patients reported improved knowledge, confidence and skills in self-management (PAM™)
- Patients reported feeling involved, comfortable and supported
- Patients showed significant improvement in other clinical parameters: Cholesterol and BP

A Typical Day Working on the Project

Prior to the day, the PNs send out invitations to patients identified as having sub-optimal diabetes control. Recent, relevant pathology attended and health measures such as height, weight, BP and waist circumference are recorded on the Diabetes Registry.

· Start 8.30am – DE and Specialist meet with the PN and GP and discuss the day ahead.
· The clinicians review the referral and reports and discuss relevant issues.
· 40 minute consultations for each patient with Endocrinologist, GP, PN and DE. These most often involve lifestyle and medication changes, informed by a review of the patient history, current management, PAM™ score and the patient's 3 day food and blood glucose diary.
· Treatment plans recommended for each patient, to be implemented by the primary care team.
· In-service/case review during lunch break, utilised for GP and PN upskilling.
· Finish remaining consultations, review afternoon cases, debrief, plan future site feedback.
· May have an evening GP/PN dinner presentation for intensive local practice upskilling.

Practice Nurse

- Provides background information and invaluable insights regarding the patients
- Facilitates patient engagement and support
- Arranges follow-up with PN or GP as required

DE supports the PN with any required interventions, either during the consult or at a future planned appointment

Diabetes Educator

- Provides lifestyle management education, medication review and assessment of diabetes self-care competency
- May include starting or changing injectable therapy (type and/or dose)

Practice Nurse feedback:

"The DE demonstrates how the conversion to insulin can be instigated and the patient's confidence in injecting insulin can be instilled in a seamless manner."

"The collaboration between us Practice Nurses and specialists like you is invaluable and there should be more of it!"

"Overall the clinic was a success, as shown by follow-up pathology results: HbA1c levels were reduced, lipids lowered, there was weight loss and the uptake of exercise programs."

"It is a reminder to treat the whole patient and not just the pathology outcomes."

"I have started using the food and BGL diary and the patients are very willing to do it. I think it gives them a sense that they are a part of the process too."

"Most patients were grateful for the opportunity to be actively involved in the controlled management of their own health and treatment of their diabetes."

Registry tool - comprehensive data

Our Alliance HUNTER

Diabetes Register **Clinic Date:**

Name: **Date of Birth:** **ATSI:** Yes ☐ No ☐

Gender: **Year First Diagnosed:** **Country of Birth if outside Australia:**

Diabetes Treatment:
Diet only ☐ Insulin ☐ Oral ☐ Oral & Insulin ☐ Oral & Byetta ☐

Cholesterol Management: (please choose if the patient is taking any of the following)
Statin ☐ Fibrate ☐ Other ☐ _____

Antihypertensive Management: (please choose if the patient is taking any of the following)
Ace Inhibitor ☐ ARB ☐ Other ☐ _____

General Observations:
Height: Weight: Waist Circ: BMI: Blood pressure:

Smoking Habits: Never smoked ☐ Physical Activity: <30mins/day ☐
Current smoker ☐ 30-60 mins/day ☐
Ex-smoker ☐ >60mins/day ☐

Pathology Results:
Cholesterol: Triglycerides: HDL: LDL:
Serum Creatinine: Albuminuria ACR: eGFR: HbA1c

Has the patient received diabetes education with a Diabetes Educator?
☐ In the last 12 months ☐ In the last 2 years ☐ > than 2 years ☐ Never

Has the patient seen a Dietitian?
☐ In the last 12 months ☐ In the last 2 years ☐ > than 2 years ☐ Never

Does the patient have a history of other diabetes related complications?
☐ Peripheral vascular disease ☐ Cerebrovascular disease
☐ Vision impairment ☐ IHD/MI
☐ Cardiovascular disease ☐ CKD
☐ Minor amputation ☐ Major amputation

Has the patient had a hospitalisation for a diabetes related complication?
☐ Yes ☐ No
☐ History of admission for hypoglycaemia related event
☐ History of admission for hyperglycaemia related event

Has the patient had retinal screening attended? *Please print report
☐ In the last 12mths ☐ In the last 2 years ☐ Greater than 2 year ☐ Never

Results of retinal screen:
☐ No evidence of retinopathy ☐ Mild retinopathy ☐ Moderate Retinopathy ☐ Severe retinopathy

Has laser treatment been attended to in the past?
☐ Yes ☐ No

Has the patient had foot screening attended? * Please print report
☐ In the last 12mths ☐ In the last 2 years ☐ Greater than 2 years ☐ Never

Results:
☐ Healthy foot ☐ Neuropathy and/or angiopathy
☐ Previous diabetic foot ulcer ☐ Serious ongoing foot disease

Summary of changes made during case conference:

Referrals made at time of case conference:

PAM™ tool - informs how to tailor the intervention

Activation Measure Items

1. When all is said and done, I am the person who is responsible for taking care of my health	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
2. Taking an active role in my own health care is the most important thing that affects my health	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
3. I know what each of my prescribed medications do	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
4. I am confident that I can tell whether I need to go to the doctor or whether I can take care of a health problem myself.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
5. I am confident that I can tell a doctor concerns I have even when he or she does not ask.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
6. I am confident that I can follow through on medical treatments I may need to do at home	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
7. I have been able to maintain (keep up with) lifestyle changes, like eating right or exercising	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
8. I know how to prevent problems with my health	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
9. I am confident I can figure out solutions when new problems arise with my health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
10. I am confident that I can maintain lifestyle changes, like eating right and exercising, even during times of stress.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A

Case-review

Lunchtime in-service/case-reviews

Diabetes Educator feedback:

"I was able to develop an understanding of the diverse role that is a Practice Nurse - they deal with all aspects of chronic disease and the patient's diabetes is only one component."

"Powerful learning tool for all participants, including the Endocrinologist."

"I was lucky to see how the collaboration between the Diabetes Service and the practice staff achieved great outcomes for the patients, with all involved enjoying the interactive learning experience."

Across Hunter New England, 297 GP practices provide care for most of the 50,000 people with type 2 diabetes.

This innovative model of upskilling primary care clinicians has the potential to enhance access to quality diabetes care and improve diabetes-related outcomes for the patients in their practice.

**Hunter Alliance has representatives from:*

Hunter PRIMARY CARE · phn HUNTER NEW ENGLAND AND CENTRAL COAST An Australian Government Initiative · NSW GOVERNMENT Health Hunter New England Local Health District · Calvary

NSW GOVERNMENT Health Hunter New England Local Health District

Contact: Marion.Hawker@hnehealth.nsw.gov.au