



The "BEST FOOT FORWARD" Clinic

Enhanced Community Care Conference 2023

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Introduction

- It was clinically observed that a relatively large proportion of patients attending diabetes specialist podiatry, smoked cigarettes and had poor glycaemic control.
- These are two risk factors that lend toward the debilitating and ever-feared diabetic complication, lower-limb amputation.
- To address these modifiable risk factors, (and therefore reduce diabetic amputation), a patient-centred, multidisciplinary clinic was established.
- Smoking cessation, Diabetes nursing and Diabetes Podiatry combined to provide a "one-stop-shop" for the patient, who left our service empowered to tackle their personal healthcare challenges head on, to lead with their "best foot forward".

Solution

We set about creating a service built around the complex continuum of our patients' needs, playing to our teams' practitioners' strengths and geared towards overall desirable health outcomes.

- Smoking cessation services focused on prescription of NRT Therapy, CO2 monitoring, patient empowerment and accountability.
- Diabetes nursing carried out medication reviews and changes as required, Lifestyle advice, BP measurement, Medication review with aim to improve glycemic control, Monitoring of medication change eg insulin titration.
- Diabetes Podiatry carried out a risk evaluation for diabetic foot ulceration, and gave diabetic foot advice Foot Risk Categorization, ABPI, Suitability for "Best Foot Forward".
- In short, the patient attended all three services in one visit, with the treatment goal of reducing hba1c, quitting smoking, and reducing likelihood of severe PVD, Diabetic foot Ulceration, and therefore diabetic amputations

Challenge

- There are approximately 640 lower limb amputations as a result of Diabetes every year in Ireland. The five year mortality for minor and major diabetic amputations are 46.2% and 56.6% respectively. Diabetic Foot Ulcers (DFU's) precede the vast majority of Diabetic Amputations.
- The average time spent in hospital for Diabetic foot ulceration is 14.5 days. In 2015, the combining cost to the HSE to treat ulceration and amputation was €71m (Diabetes Ireland). However, DFU's are preventable by addressing a multitude of risk factors.
- A 10% reduction of diabetes patients requiring inpatient foot ulceration treatment would save the HSE around €7m per annum.
- Peripheral vascular disease (PVD), compromised vascularity of the lower limb is a main contributor to DFU. If the blood flow is reduced to the foot, there will be delayed wound healing.
- Hyperglycaemia, as well as smoking cigarettes, are potentially modifiable risk factors for the development of PVD. The combined harmful effects of cigarette smoking and hyperglycaemia can accelerate vascular damage in patients with diabetes.
- Intervention is needed to achieve our Sláintecare goals, with our patients accessing care at the most appropriate, cost-effective service level with a strong emphasis on patient empowerment, prevention and public health.

Patient Quotes

"I've saved €500 in one month from giving up the cigarettes, I'm going to fly to America to see my son!"

"I don't have that pain (Intermittent claudication) anymore, I can walk again!!!!"

Evaluation

The pilot of this service ran for 6 months beginning Nov '22. The clinics run monthly with approx. 4 patients in each morning clinic, after which a short multidisciplinary meeting with staff involved took place. Data has yet to be collated but the positive outcomes so far are overwhelming. The example of Patient X, who is representative of our typical service user is below:

Measurable	First App (4/1/23)	2nd App (7/3/23)
Hba1c	82	65
Weight	106.5kg	99kg
Number of Cigarettes p/day	30	0
Co2 Monitoring	17pmm	4pmm
ABPI (LEFT)	0.8	0.9

References

Armstrong, D.G., Swerdlow, M.A., Armstrong, A.A. et al. Five year mortality and direct costs of care for diabetic foot complications are comparable to cancer. *J Foot Ankle Res* 13, 16 (2020). <https://doi.org/10.1186/s13047-020-00383-2>

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Further references available on request.

Strategic Impact

Sláintecare (2017)	BFF supported paradigm shift from stratified healthcare towards personalized and individualized medicine Patients attending BFF accessed care at the most appropriate, cost-effective service level with a strong emphasis on prevention.
Enhanced Community Care Program	BFF provided 3 services closer to people's homes in a community setting. The modifiable risk factors addressed in BFF will likely reduce the amount of pts admitted to emergency, freeing up critical acute care resources.
Model of Care of the Diabetic Foot '21	BFF's podiatry stream will reduce the number of diabetic -related amputations, a major goal of the National Clinical program for Diabetes

Future Potential

- Before replication, validation of the intervention is required. A thorough data-review after 12 months will be carried out, as well as qualitative measures including the input of our key stake holders, the patient, using PROM-type questionnaires.
- This clinic took place in DNW's Integrated Care Centre in Phoenix Park, part of the ECC-funded approach to chronic disease management as per Sláintecare. There is funding for 36 Integrated Care centre with the same intended staffing across Ireland. There is potential to execute the "Best Foot Forward" clinic in these hubs.
- There is also room for further discipline involvement. Fear of gaining weight after quitting smoking is often mentioned by the patient. The option to involve the Diabetes Specialist Dietitian has yet to be explored fully.
- The service has the potential to expand to an in-house service within secondary care, which could serve dual function to promote transfer of patients from the hospital to community care, as gateway clinic for patients admitted as a last step before their discharge to community.

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