Empowering people living with Diabetes by Introducing TeleHealth (EDITH)

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Background
As part of the Diabetes Support Nurse project staff were asked to monitor telephone calls being received by the team. The nurses involved identified a number of common themes for the calls: -
- Insulin dose adjustment
- Hypoglycaemia
- Hyperglycaemia with no Ketones
- General lifestyle enquiries

This process led to the development of EDITH, a structured telehealth intervention designed to support people living with diabetes by encouraging them to improve their self management skills by increasing their confidence in managing diabetes.

Aims
The primary aim of the project was to make EDITH a sustainable mechanism to support people with diabetes and improve their outcomes. The secondary aim of the project was to reduce the number of patients requiring 1:1 appointments and the number of unscheduled calls coming into the diabetes specialist nursing teams.

Methods
- Review nurse led service without any telehealth input
- Develop structured telehealth process
- Communicate the project aim, referral criteria and telehealth process to other members of diabetes specialist team
- PDSA/Small test of change/Review and refine process
- Implement final referral criteria and telehealth process

Results/Outcomes
EDITH has been introduced in the Diabetes Day Centres at University Hospitals Ayr and Crosshouse (UHA, UHC) and is an integral part of the management of diabetes that is accessible to anyone with diabetes who attends secondary care services. The DNA rate for telehealth versus 1:1 appointments is favourable due to the person centred nature of the service; as it is at a time and via a communication method that suits the person’s lifestyle, as illustrated in Graph 1:-

Graph 2 Change in HbA1c for people supported by EDITH

The introduction of EDITH has led to a reduction in HbA1c (long term control) for a number of people (as illustrated in Graph 2 – small patient selection). An unexpected benefit of EDITH has been that the intervention has identified people requiring face to face self management support programmes at an earlier stage. The programmes support individuals to enhance their self management skills and will impact on the number of unscheduled calls coming into the Diabetes Day Centres.

Feedback from people who have used EDITH:
- “The range of communication methods available has been invaluable to me, especially in recent months during my second pregnancy. I am encouraged by the team to upload the data from my pump and handset regularly at home. They then access the data and email me with any changes to insulin ratios that will help to keep my blood glucose levels within target range.”
- “Great to be able to communicate directly with Diabetic Specialist Team by phone or email.”
- “Having an answer in writing is a huge advantage for reference when adjusting insulin pump or meter settings.”
- “Using the internet to send in test and pump results keeps the clinic records up to date and allows adjustments to treatment to be made without taking up valuable clinic appointments.”
- “The telephone/email service allows monitoring of test results and advice to be given without the need to travel to the clinic. This is very helpful for those with restricted travel ability.”
- “E-mail allows the nurses to plan their day and set aside time to answer questions before, during or after other essential work. Excellent addition to the services for people with diabetes in Ayrshire and Arran. I can’t thank the nurses who answer my emails enough for their advice and answers to complicated questions.”

Next Steps
EDITH will be reviewed as part of the Technology Enabled Care Programme which is currently underway and other telehealth opportunities will be explored to further enhance the way in which the diabetes specialist services can support people with diabetes to self manage.

References
2. SIGN 116
5. Paget et al, 2010
6. Amiel et al, 2002