

The diabetes and CSII specialist nurse



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In response to the evolving requirements and expectations of people with diabetes, as well as new therapies and government directives that have influenced a change in the health economy over the past decade, the role of the DSN has progressed from its original responsibility for general diabetes care. Skills to enable self-management and to support patients' behaviour through motivational approaches are now integral to the role. For many DSNs, this has led to further role diversification into specialist areas of diabetes management such as insulin pump therapy.

Guidance on the use of continuous subcutaneous insulin infusion (CSII) was first published by NICE in 2003, specifically highlighting the need for a specialist team, including a diabetes nurse with specific skills in CSII. This guidance was later updated (NICE, 2008). As the demand for CSII increased, there was a need to develop a service that could accommodate CSII users, and employ a dedicated nurse specialising in diabetes and CSII.

CSII users

NICE (2008) criteria for CSII in adults are catalysts responsible for the migration of people with highly complicated diabetes into insulin pump services. These individuals usually have a history of long-standing diabetes, which is associated with multiple complications and other complex pathology that has a detrimental impact on glycaemic control.

Assessment of prospective candidates for CSII is a contentious area of practice for the specialist nurse. For any individual who does not meet NICE (2008) criteria for CSII, the specialist nurse is required to negotiate an alternative management plan.

It has been estimated that up to 30% of people with diabetes suffer from depression (Katon et al, 2004) compared with approximately 5–10% in the general population (Katon and Schulberg, 1992). A recent in-house audit at the Royal Liverpool University Hospital found that nearly 50% of the people who use insulin pumps have been formally diagnosed with depression,

with approximately 10% requiring formal psychiatric review. For the specialist nurse who is working in partnership with these individuals, the high incidences of mental illness and other psychological issues pose significant challenges.

Scope of clinical practice

Given the complexities associated with CSII users, specialist nurse provision must be delivered at the highest level, paying attention to issues such as the management of the specific complications of diabetes, cardiovascular (CV) risk, pregnancy, inpatient care, transition to CSII, and type 3 diabetes. Therefore, service development must ensure that all such clinical diversity can be adequately accommodated.

Nurse-led review

In Liverpool, regular review for CSII users occurs in a nurse-led clinic format, in which enhanced clinical skills and substantial non-medical prescribing are necessary components of care. Studies have shown that this is associated with a significant reduction in CV risk (Woodward et al, 2005; Morrison and Weston, 2010).

Further support for this model of care has been demonstrated by a group of people with gastroparesis. Rapid intervention by non-medical prescribing of pro-kinetic agents ensured a 1.8% reduction in the HbA_{1c} levels of this group and an absence of inpatient episodes after commencing CSII (Weston and Morrison, 2009).

Service development

As insulin pump therapy is a relatively new concept in diabetes care, a key aspect of the specialist nurse role is to take a lead with the development of policies, protocol and operational issues in respect of the CSII service.

From the conception of the CSII programme, our philosophy has been to involve CSII users in service developments. The specialist nurse takes a lead in the patient-inclusion programme, which involves a patient-led support group and expert CSII users who participate in professional training and provide peer support for those new to CSII.

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Audit and research

The evidence base in relation to CSII is relatively weak, with no national consensus regarding good practice. For a nurse specialising in CSII, audit and research are essential aspects of their role in order to enrich the evidence base in relation to CSII. Presentation and communication skills are essential for disseminating the outcomes of these projects into the professional arena.

Patient education

As indicated by Diabetes UK (2005), effective education for people with diabetes is a key requisite to influence health outcomes and reduce rates of hospital admissions. Given that patient education is a fundamental role of the DSN, the CSII specialist nurse must take a lead in the developing, planning and delivering structured education programmes for CSII users.

In Liverpool, a wide spectrum of education programmes have been developed for our CSII users, which are all in keeping with NICE (2003) recommendations. All patient education sessions are well evaluated by attendees. These educational packages are flexible and have been designed to allow customisation to meet specific needs and circumstances. CSII users are also involved with the development of the education programmes.

Professional education

Many healthcare professionals (HCPs) working in diabetes need to develop management skills in CSII. NICE (2008; 2009) guidelines state that prior to managing CSII users, an HCP should attend accredited education programmes in relation to CSII. Leading the development and delivery of courses that focus on CSII and working with higher education institutions are key tasks for a nurse specialising in CSII. These professional courses are fully operational in Liverpool and have become a platform for sharing best practice in diabetes and CSII.

Conclusion

The Royal College of Nursing (2010) acknowledges that specialist nurses add value to patient care, while generating efficiencies for organisations through new and innovative ways of working. Through audit and research, the evidence base for CSII has been strengthened. Through accredited training for other HCPs, good practice has been disseminated.

The role of a diabetes and CSII specialist nurse is flexible and has developed in line with service demands and best practice. Since the development of this new role, the experiences of people with diabetes who use the diabetes services in Liverpool have been enhanced, with evidence of improvement in quality of life and physical parameters for these individuals.

This role has been pivotal in the development of an effective, holistic service that provides clinical excellence, ongoing support and structured education for a group of highly complex individuals with diabetes and multifaceted pathology. ■