Diabetes specialist nurses: Empowering patient self-management, increasing patient safety and satisfaction

One in 15 people in the UK have diabetes (NHS Digital, 2017). The demand for diabetes services in the UK is steadily growing; however, the capacity of the diabetes specialist nurse (DSN) workforce is being pushed to the limit, with specialist nurses having to repeatedly prove their worth. Staff cuts and increasing workloads are affecting the care of people with diabetes. A recent literature review on diabetes specialist nursing has clarified the benefits of diabetes specialist nurses for patients and Trusts (Lawler et al., 2019). In this commentary, I summarise the findings of this review and argue for the value of DSNs in diabetes services.

Background
DSNs provide complex care for people with diabetes, and require high levels of expertise. Within hospitals, national targets are to have one diabetes inpatient specialist nurse (DISN) per 250 beds (NHS Digital, 2016). That being said, one in six hospital beds are occupied by a person with diabetes (NHS Digital, 2017). Currently, DISN numbers are much lower than the recommendations, and 22% of hospitals do not have any DISN services at all (NHS Digital, 2018). Overall, 78% of DSNs themselves are concerned that their workload is impacting on patient care and safety (Diabetes UK, 2016).

Empowering patient self-management
Diabetes, like many long-term health conditions, requires a great deal of self-management and knowledge. Much of the education given by DSNs is with a view to promote confidence and empower patient self-management at home. DSNs provide extensive education on medicine administration, for example in using insulin pumps and measuring blood glucose levels. Diabetes self-management also requires considerable understanding and support from family members and friends. Education given by DSNs can involve both the person with diabetes and their family or carers. Empowerment and increased confidence in people with diabetes has been shown to reduce hospitalisations and prevent readmissions (Ross et al., 2014).

In hospital, disempowerment is commonly reported in people with diabetes due to a lack of control of their meal times and administration of insulin. This has also been associated with increased anxiety and fear in hospital settings, and DSNs provide considerable psychological care for people with diabetes and their families (Eaglesfield et al., 2012).

Patient education by DSNs is of particular importance for people with diabetes in hospital settings, and especially for those who are newly diagnosed.

Increasing patient safety
The complexity of diabetes means that during people’s stay in hospital, medication errors are not unusual. Overall, 31% of people with diabetes have experienced at least one diabetes-related medication error during a hospital stay (NHS Digital, 2017). Furthermore, one in 25 people with type 1 diabetes develop diabetic ketoacidosis, a preventable and potentially fatal complication, during their hospital stay. NHS England (2016) asserts that DISNs reduce medication errors and inpatient harm, and that this is also associated with a reduced length of stay. DSNs have been shown to reduce hospital admissions for preventable diabetes-related causes, and patients under DSN care have a demonstrably lower hospital resource use (Davidson et al., 2007). This reduction in unscheduled care has been linked with significant savings.

Better use of resources and a more efficient service have been shown to have a plethora of beneficial knock-on effects for a Trust (Figure 1; Leary, 2011). As referred to in the NHS Long Term Plan,
common targets for commissioners are a reduced length of stay and reduced costs, which DSNs have been demonstrated to benefit for over a decade. Yet still posts are being cut and DSNs are being asked to prove their worth, despite this clear and undeniable evidence.

**Patient satisfaction**
DSNs’ high-quality care is associated with increased patient satisfaction (Cavan et al, 2001; Courtenay et al, 2015). This may be down to longer consultation time, increased patient confidence in DSNs’ understanding of their needs and increased confidence to self-manage diabetes.

**Professional education**
DSNs bridge gaps in other healthcare professionals’ knowledge and share their expertise via specific diabetes education. This occurs both in one-to-one educative conversations and in larger group sessions. In one study, it was revealed that 94% of hospital DSNs in the UK delivered professional education (James et al, 2009). Increasing staff self-efficacy leads to increased activity and improved delivery of services (Ross et al, 2014). It is also associated with reduced medication errors.

**Challenges faced by DSNs**
Where DSNs are in place, they are often not available to inpatients at all times, particularly at weekends and out of hours. This is due to resource limitations, staff scheduling and staff cuts. There are evident restraints on DSNs’ capacities with high demands and understaffing. DSNs have limited opportunity and time for professional development and research (Diabetes UK, 2016). This could threaten the future of DSNs, with increasing difficulties in recruitment and retention and a lack of long-term job security. Furthermore, there is currently no title protection or national accreditation framework for specialist nurses. This means there is wide variation in credentialing and the role varies considerably across the country. The NHS Long Term Plan has called for all hospitals to provide DSN services and to reduce the existing variation between different hospitals.

**Conclusions**
Specialist nurses have insight into the whole patient pathway, they have high levels of expertise and deliver complex care (Read, 2015). Despite this, they are understaffed and are frequently asked to prove their worth to remain in position. Their specialised care for people with diabetes reduces burdens on healthcare services and improves care and confidence in patients. DSNs are skilled at treating the person, not just the condition, and responding to and solving crises. The mismatch between the demand for diabetes services and DSN capacity is evident.

**Summary**
Our recent review paper consolidates and clarifies the ways in which DSNs improve diabetes care.
This includes:

- Educating people with diabetes with the aim to empower confidence in self-management.
- Educating and advising other staff on diabetes medicine management.
- These actions improve patient satisfaction, increase safety and reduce hospital admissions and length of stay.


“Specialist nurses have insight into the whole patient pathway, they have high levels of expertise and deliver complex care. Despite this, they are understaffed and are frequently asked to prove their worth to remain in position.”