

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,



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“The NHS Long Term Plan has called for all hospitals to provide diabetes inpatient specialist nurse services and to reduce the existing variation between different hospitals.”

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 retainment 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 DISN 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.

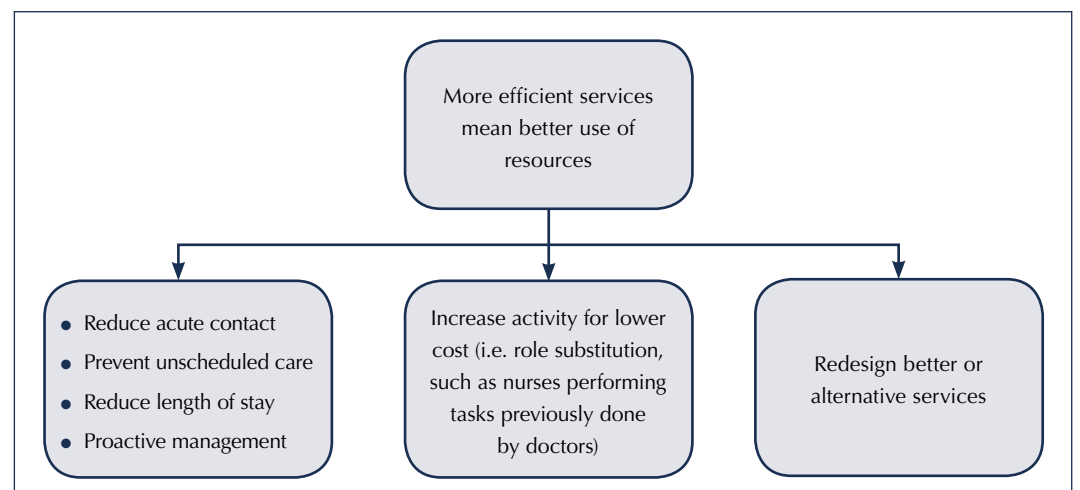


Figure 1. The knock-on effects from better use of resources and a more efficient service (adapted from Leary, 2011).

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. ■

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Human Resources for Health

REVIEW
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Does the Diabetes Specialist Nursing workforce impact the experiences and outcomes of people with diabetes? A hermeneutic review of the evidence

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Abstract

Objectives: The aim of the hermeneutic review was to identify and clarify the mechanisms by which the Diabetes Specialist Nursing workforce affect the outcomes of diabetes patients, with a focus on those in the United Kingdom. A clarification of diabetes specialist nurses' work is necessary in understanding and improving diabetes inpatient care.

Design: The design is a hermeneutic evidence review and was part of a wider evaluation of Diabetes Inpatient Specialist Nurses for which the evidence was sourced. The literature search was limited to specialist nursing workforce caring for adults with diabetes. In order to gain global understanding of the impact of specialist nursing in diabetes, worldwide literature was included.

Methods: A hermeneutic literature review of 45 publications was carried out, which included citation analysis. Relevant literature was identified from 1990 to 2018.

Results: Evidence suggests that Diabetes Specialist Nurses educate patients and other healthcare professionals as well as delivering direct care. The outcomes of these actions include a reduced patient length of stay in hospital, reduced inpatient harms and complications, and improved patient satisfaction. Additionally, they are cost-effective.

Conclusions: The Diabetes Specialist Nursing workforce is essential in diabetes care, particularly in hospital settings. They improve patient experience and outcomes.

Keywords: Clinical Nurse Specialist, Diabetes, Workforce, Inpatient diabetes care, Safety, Medication error, Education, Hermeneutics

Introduction

Diabetes in the United Kingdom is common: almost 3.7 million people are currently diagnosed with diabetes, representing 1 in 15 of the United Kingdom population. Around 90% of those have type 2 diabetes and 10% have type 1. It is on the rise: almost 100,000 people were diagnosed with diabetes from 2016 to 2017 [1]. Diabetes costs the NHS (National Health Service) around £10 billion a year in hospital admissions of people with diabetes (PWD) and its complications [2].

An estimated 1 in 6 United Kingdom hospital inpatients have diabetes [3]. It is not uncommon for PWD admitted to hospital (for diabetes or non-diabetes related reasons) to have reduced overall control of their condition, with insulin treatment, timing of meals and glucose monitoring affected [4]. It is widely understood that inpatients who suffer adverse events and medication errors experience an increased length of stay of between 2 to 8 days [5]. The need for quality improvement in inpatient diabetes care has been highlighted [6].

Diabetes UK (a large UK diabetes charity), Trend UK (working group of diabetes nurses) and the Royal College of Nursing's (RCN) position statement on Diabetes Specialist Nurses (DSNs) state that 'DSNs are cost

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