

Bridging two worlds: the role of the renal transplant diabetes specialist nurse

The interface between diabetes and renal transplantation is one of the most complex areas in nursing practice. Managing diabetes in patients with fluctuating renal function, immunosuppressive therapy and multiple comorbidities requires precision, adaptability and close team collaboration. Thus, the renal transplant diabetes specialist nurse (RT-DSN) occupies a unique position at this intersection. This role ensures continuity of care, safety and holistic management for people whose needs often fall between renal and diabetes services. This article outlines what the role involves, the needs it addresses and how it supports more integrated, patient-centred care.

The role in context

Post-transplant diabetes mellitus (PTDM) is a well-recognised complication of solid organ transplantation, particularly kidney transplant, affecting around 15%–30% of recipients. Despite the well-publicised risks, historically, there was no dedicated role within the transplant pathway to systematically address PTDM. This resulted in fragmented care, inconsistent screening and missed opportunities for early intervention.

Research has shown strong associations between PTDM and increased all-cause mortality, increased cardiovascular mortality (up to 2.5 times higher), increased sepsis-related mortality, higher risk of graft failure, higher frequency of hospital admissions from hypoglycaemia and sepsis (Kanbay et al, 2025).

As one of the major renal transplant centres in the UK, covering a population of over 1.5 million, the University Hospitals Coventry and Warwickshire NHS Trust recognised the urgent need for a dedicated role to address this problem. This role was started in May 2025, and I was lucky to pioneer it at the level of band 7.

The RT-DSN works across inpatient, outpatient and community settings, linking transplant, renal

and diabetes teams. Responsibilities include:

- Outpatient and inpatient diabetes management in renal transplant patients.
- Pre-transplant diabetes screening and education.
- Liaising with multidisciplinary teams and primary care to ensure continuity of care.
- Quality improvement and patient education.
- Managing patients living with diabetes transitioning to transplantation.

The role combines advanced clinical decision-making with education and advocacy. Many patients feel anxious after transplantation, as they adjust to new medications and lifestyle changes. The RT-DSN provides clear, person-centred guidance, reinforcing self-management and reducing avoidable readmissions.

The needs it addresses

PTDM is common in kidney transplant recipients and is associated with poorer graft outcomes and increased cardiovascular risk. Immunosuppressive therapies, such as corticosteroids and tacrolimus, can destabilise glycaemic control, while fluctuating renal function complicates insulin titration and interpretation of glucose metrics.

Managing blood glucose in transplant patients presents unique challenges. HbA_{1c} readings may be less reliable, owing to anaemia, altered erythropoiesis, high-dose steroid use or recent iron/blood transfusions, requiring the RT-DSN to interpret results in clinical context and use complementary measures, such as capillary or continuous glucose monitoring (Chowdhury et al, 2021).

Weight gain post-transplant, driven by improved appetite and steroid therapy, adds another layer of complexity to diabetes management. Most clinical research does not include renal transplant participants, which results in the need for critical and collaborative thinking in decision making



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Chowdhury, 2021). For example, the use of the new GLP-1/GIP analogues and SGLT2 inhibitors requires thought because of the lack of long-term data (KDIGO Diabetes Work Group, 2022).

Beyond physiological factors, service and psychosocial issues also contribute to a complex situation. Patients with diabetes are sometimes lost to follow-up when general practitioners are hesitant to manage transplant recipients, assuming that, because of its complexity, all care must remain within tertiary centres. Newly transplanted patients, particularly within the first 3–6 months, often face multiple hospital appointments and competing health priorities, leading to missed diabetes reviews or disengagement from self-management.

The RT-DSN plays a critical role in reinforcing education, maintaining continuity and supporting motivation during this adjustment period. The transplant diabetes clinics are run concurrently with the post-transplant clinics to avoid multiple hospital appointments. Hitherto, patients were referred to the general diabetes teams, which warranted an appointment on a different day.

By identifying early warning signs, coordinating with nephrologists, endocrinologists and pharmacists, and helping patients balance the interplay between anti-rejection medications and diabetes treatment, the RT-DSN ensures safe, tailored care. Early, integrated intervention improves metabolic stability, preserves graft function and empowers patients to manage their health confidently (Alicic et al, 2017).

Pathways into the role

Many RT-DSNs start as diabetes or renal specialist nurses before developing transplant expertise. A foundation renal course is very important to understand the complexities of the renal-cardio-metabolic interactions. Most centres conduct in-house competency-based training for their DSNs, but there are also numerous CPD and post-graduate courses online to equip one to become an effective DSN.

Mentorship, shadowing within transplant centres and involvement in joint clinics enhance practical knowledge. Leadership training, such as the NHS Edward Jenner or Foundations in Systems Leadership programmes, supports collaboration and

service improvement. Curiosity, critical thinking and patient advocacy are vital attributes.

Maximising the role within teams

Effective transplant diabetes care relies on teamwork. The RT-DSN connects disciplines, translating renal treatment decisions into diabetes implications and vice versa. Joint transplant-diabetes clinics, shared electronic patient records (e.g. EPR, ICR and CRRS) and multidisciplinary ward rounds are examples of good practice. We have been able to add the specialty on our EPR system to enable referrals directly to the RT-DSN.

We have an established a joint renal-diabetes clinic on Thursdays with the endocrine team, while the transplant multidisciplinary team meets on Fridays. This collaborative approach leads to improved glycaemic outcomes, fewer readmissions and higher patient satisfaction. The RT-DSN's contribution also ensures efficient use of specialist time and enables proactive, rather than reactive, care.

Challenging siloed working

Despite serving overlapping patient populations, renal and diabetes services often function separately. This fragmentation risks inconsistent messaging and delayed intervention. The RT-DSN challenges this model by naturally crossing boundaries, ensuring joined-up decision-making and shared accountability. Moving toward integrated pathways and cross-specialty education not only benefits patients, but also enhances professional satisfaction and service efficiency. The RT-DSN role exemplifies how nurses can lead this transformation.

Conclusion

The renal transplant diabetes specialist nurse bridges two complex specialities, ensuring that metabolic and renal care align around the person, not the system. By combining clinical expertise with education, coordination and compassion, the RT-DSN improves both outcomes and experience.

As the burden of diabetes and kidney disease continues to grow, integrated nursing roles such as this will be central in delivering safe, equitable and person-centred care – where collaboration replaces silos and patients thrive beyond transplantation. ■

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