## Diabetes transition: A time to act

iabetes transition refers to a time when a young person moves from one diabetes service to another (NHS England, 2016). Transition to adult services from paediatric services is a major milestone for children and young people (CYP) and the transition phase is a critical period. Most adolescents with diabetes are transitioned when they are 16–18 years. The National Diabetes Transition Audit found that about 65% of transitions occur at ages 17 and 18 years old (NHS Digital, 2017).

The National Service Framework for Children and Young People highlights the importance of effective transition care for people with chronic conditions, such as diabetes. During transition, adolescents may experience a lack of motivation to stay on top of their health.

Adolescents going through the transition are at significant risk of disruptions in care. Many young people have variable experience of transition, which may result in failure to engage with services. There is a risk of both short- and long-term morbidity and mortality from ineffective transfer of care from paediatric services to adult services.

## Why is it important to address diabetes transition?

The national survey undertaken by the Association of Children's Diabetes Clinicians in 2020 reported wide variations in diabetes transition care services (Ng et al, 2020). Only 58% of units provided written information about the transition process and just 53% had a structured transition education programme. There was significant variability across diabetes services regarding how transition is planned. Following transition to adult services, the non-attendance rate significantly deteriorated in every network.

Studies report a 2.5 times increased risk of poorer glucose control between the last paediatric and the first adult appointment (Lotstein et al, 2013). Young adults aged 18 years are 7 times more likely to be

hospitalised for diabetic ketoacidosis (DKA) than children aged 12 (NHS digital, 2017)

Post transition, 10% fewer young people achieved their target HbA<sub>1c</sub> compared to pre-transition and DKA rates were higher during transition year and post transition (NHS Digital, 2017). There continues to be a significant cost implication for the NHS from the poor outcomes post transition. This is very important as approximately 80% of NHS diabetes spending goes on to managing complications that could be prevented (Hex et al, 2014).

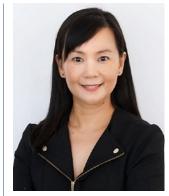
# What are the current opportunities to address the transition gap and to provide effective services?

Continuity of care with collaborative working between paediatric and adult services is essential to support the needs of young people. Planning, preparedness and the emotional support during transition is important (Nasrabadi and Dehkordi, 2021). We need to address local service variations to achieve improvements in outcomes during transition.

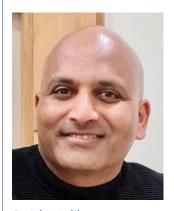
The Best Practice Tariff for paediatric diabetes introduced in 2011/2012 has incentivised the delivery of high-quality paediatric care to all children with diabetes. Currently, the Best Practice Tariff supports paediatric services to provide 24-hour support to CYP with diabetes, multidisciplinary team (MDT) clinics with access to psychology and dietitian professionals, as well as regular appointments (minimum of four).

The National Diabetes Quality Programme requires the diabetes team to hold MDT meetings to discuss people with diabetes who are not attending clinics and to reflect on the individuals that have had recent hospital admissions. This, along with National Diabetes Quality Programme peer review, has been instrumental in raising standards and driving improvements and outcomes in paediatric diabetes care in England and Wales (National Paediatric Diabetes Audits).

Failure to provide seamless transition in diabetes



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"This transition period needs a collaborative and consistent approach from paediatric to adult services to provide a seamless transition." care may result in poor engagement of young people with adverse outcomes. Higher rates of engagement with clinic attendance two years after transition were recorded in regions where young people were given the opportunity to meet the adult diabetes consultants beforehand (Kipps et al, 2002).

Transition services should have young people at its centre, be supportive to their needs and be supported by expert health care professionals (Diabetes UK, 2018). The three key stages of transition are paediatric preparation, planned transfers and supported integration to adult services (NHS England, 2016)

A strengthened transition pathway between paediatric services and adult services supports joint working, facilitating smooth and effective transition. Mirroring of this holistic approach provided by the paediatric services pre-transition may help to improve confidence and engagement of young people with the adult services. Intervention with young adult diabetes clinics involving both paediatric and adolescent healthcare professionals mitigates negative outcomes during transition (Daneman and Nakhla, 2011).

The experience of a transition service in Liverpool between two tertiary care hospitals (Alderhey Children's Hospital and Royal Liverpool University Hospital) demonstrated that a "team approach" with aligning care supports the delivery of improved outcomes (Zaidi, 2021).

### Online learning programmes

The Seamless Transition Programme sponsored by the North West Coast Clinical Network was a practical programme of online learning offering comprehensive training events that ran from March until June in 2021. The programme provided coaching to support the diabetes units to review their current service, determining what needs to change and implement action plans. The programme facilitated regular meetings, communication and team planning. The teams in the phase 1 programme felt that paediatric and adult team coming together as one team supported a structured method of working and focused on delivering care to young adults. Key challenges were identified, however, around the lack of resources (both time and personnel), especially within the adult team. A phase 2 programme, involving eight diabetes teams has commenced and is likely to finish in November 2022.

In 2021, the NHS Diabetes Programme and the Children and Young People's (CYP) Transformation programme established a joint programme of work to improve outcomes and a key area of focus was improving care for those transitioning from paediatric to adult services. A total of £350,000 funding per region is available for Transition and Young Adult Care Diabetes Pilots. It is anticipated that there will be 15–20 pilot sites selected nationally (average 2–3 per region) with plans of commencement in September 2022. The funding is recurrent and is available until 2024/25 for the successful pilot sites. It is anticipated that outcomes from these pilots will identify key themes to inform future national policy on seamless transition.

#### **Conclusion**

During transition, adolescents and young people may experience barriers to the self-management their diabetes. Studies have shown transition has been associated with a deterioration of glycaemic control in young people, as well as increased access to hospital requiring non-elective admissions. The NHS long-term plan aims to reduce the variation in the quality of diabetes care services delivered, but unfortunately inequalities and regional variations in care still exist for CYP with type 1 diabetes in the UK (Ng et al, 2020).

Young adults need better transition services to improve their engagement and experience during transition. This transition period needs a collaborative and consistent approach from paediatric to adult services to provide a seamless transition, which should be person-centred. Diabetes teams should be supported with adequate resources, skill-mix and training to deliver a high-quality seamless care to achieve better outcomes.

Daneman D, Nakhla M (2011) Diabetes Spectr 24: 1

Diabetes UK (2018) Transition of young people from paediatric to adult care. . Available at: https://bit.ly/3nttrLT (accessed 28.06.22)

Hex N, Bartlett C, Wright D et al (2012) Diabet Med 29: 855-62

Kipps S, Bahu T, Ong K et al (2002). Diabet Med 19: 649–54

Lotstein DS, Seid M, Klingensmith G et al (2013) *Pediatrics* **131**: e1062–70

Nasrabadi AN, Dehkordi LM (2022) J Nurs 30: 3-8

Ng SM, Lay JT, Regan F et al (2020) Diabet Med  ${\bf 37}$ : 1407–9

NHS Digital (2017) Available at: https://bit.ly/3OwsYEM (accessed 28.06.22)

NHS England (2016) Available at: https://bit.ly/3HXaPNM (accessed 28.06.22)

Zaidi R (2021) Transitional care in diabetes: a quest for the Holy Grail. *Practical Diabetes* **38**: 31–35