Using audit to address variation in outcomes

Over the last 6 years, the National Children & Young People's Diabetes Network has been a resounding success in improving the structure and processes required for clinical teams to deliver high-quality care. The successful introduction and evaluation of the Best Practice Tariff (Department of Health, 2013) and the Peer Review Quality Assurance Programme (DQuINS, 2015) in paediatric diabetes units (PDUs) have been the facilitators for change.

The National Paediatric Diabetes Audit (NPDA), run by the Royal College of Paediatrics and Child Health (RCPCH), is also invaluable to us, providing year-on-year data from all PDUs in England and Wales to measure the success of our quality improvement strategies. The NPDA is a robust, high-quality audit designed around the key quality indicators that are most likely to support local and national improvement. The Healthcare Quality Improvement Partnership (HQIP) commissions this audit on behalf of NHS England and all the other health departments of the UK devolved nations who wish to participate. It has been running for 12 years. The NPDA is part of the National Clinical Audit and Patient Outcomes Programme, and it needs to show effective delivery of both quality assurance and quality improvement functions at local and national levels.

NPDA results

In 2015, 176 diabetes clinics in England and Wales were audited, and information was gathered on more than 27 600 children and young people (CYP) under the age of 25 years. The report was published in May 2016, and this year's findings revealed a marked improvement in diabetes control across England and Wales compared with the previous year (RCPCH, 2016). Overall, 23.5% of CYP with diabetes had a good HbA_{1c} level (<58 mmol/mol [7.5%]), but 21.3% had a very high HbA_{1c} level (>80 mmol/mol [9.5%]). Furthermore, there remain significant differences between PDUs and regions in the HbA_{1c} values of their CYP and the proportion of those who complete and record all key healthcare checks.

Quality improvement collaboratives

The number of CYP with excessive HbA_{1c} levels, putting them at increased risk of complications, remains too high. Variation in measured outcomes has been consistently highlighted in the NPDA year on year, and there is now a national focus on how this can be best addressed. It is likely that the most efficient and effective way of doing this is for each regional network to become a "quality improvement collaborative". The evidence in favour of adopting this approach was published by The Health Foundation (2014). In essence, quality improvement collaboratives have been used as an approach to improve healthcare for the past 20 years. They involve groups of professionals coming together, either from within an organisation or across multiple organisations, to learn from and motivate each other to improve the quality of health services. Collaboratives often use a structured approach, such as setting targets, undertaking rapid cycles of change and undergoing peer review.

Having read about these collaboratives extensively, we believe this approach would indeed be ideal for our future work plans in the paediatric diabetes networks. All our collaboratives would have to abide by certain key principles for commissioning and delivering better health outcomes and experiences for CYP, so that they are comparable with the best in the world. The most important principles are that services should be child- and family-focussed, and that the voices of CYP with diabetes and their families are heard throughout the healthcare system. CYP and families should be invited to be active participants in the review and future design of services, and

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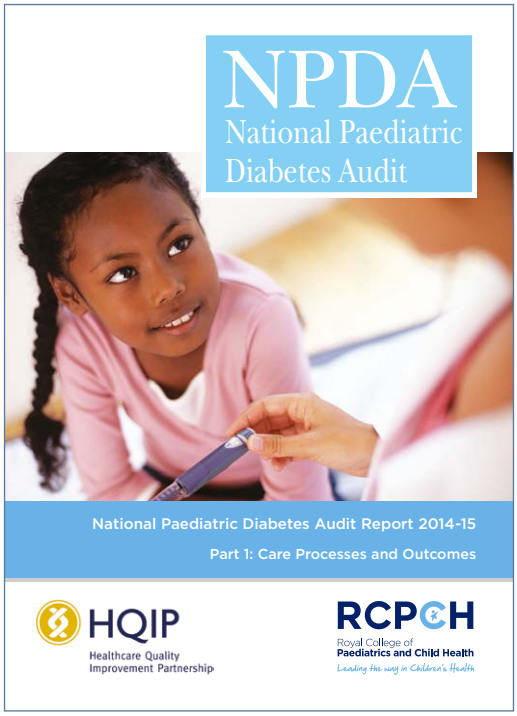
their needs should drive planning and delivery of care by healthcare professionals with clinical expertise, working in settings where the families feel welcome, comfortable and safe. The diabetes services offered should be commissioned and delivered to consistent standards, informed by best practice and all available evidence, and all CYP with diabetes should have equitable access to these services to meet their needs.

Looking ahead

The evidence is clear that successful collaboratives must demonstrate robust clinical leadership and managerial support, and we already have this successfully embedded in our networks. Our regional network clinical leads and managers have expressed a willingness to be involved in this approach, but they have articulated the need for support and training in the use of audit and its role in quality improvement. The RCPCH's Quality Improvement department is currently setting up a comprehensive programme for quality improvement needs assessment, training and support. This will enable the regional clinical leads and network managers to work with the PDUs in their regions and help them identify areas for improvement, drive improvement activities, monitor progress and share good practice with the rest of the regional and national networks.



The latest results of the National Paediatric Diabetes Audit can be read in full at: **http://bit.ly/1UTMlDK**

The RCPCH also intends to work in partnership with the regional clinical networks in the collection and accurate interpretation of the national dataset. They are planning to enhance their data analytics and statistical functions and include health economic evaluation in their audits. By doing so, they will be able to deliver more data analysis and interpretation of "outliers", allowing robust quality improvement recommendations for use by commissioners and providers in every region. There are also plans for the development of an online reporting tool and for this to be linked to the benchmarking tools and dashboards currently being developed by the Care Quality Commission, HQIP and NHS England. All data will be in the public domain.

Current opinion highlights the need to communicate the important role of audits and how best to use audit data to drive up standards of care. A national NPDA stakeholders' event has been organised at the beginning of 2017 to achieve these aims and will be followed by a series of regional network events. These meetings would serve to bring together the key stakeholders in paediatric diabetes, including PDUs within Trusts, third-sector health organisations, CYP with diabetes, and their parents and carers, to showcase good practice and facilitate the development of a much more unified, multilateral approach to service improvement, both locally and nationally.

It is likely that adopting this structured approach to quality improvement will allow us to build on the impressive gains that have been demonstrated in the NPDA over the last 5 years, and we sincerely hope we will continue to see these improvements when the 2015/16 NPDA report is published in early Spring 2017. ■

Department of Health (2013) *Payment by Results Guidance for 2013–14*. DH, Leeds. Available at: http://bit.ly/Ne19BP (accessed 12.10.16)

DQuINS (2015) *National Paediatric Diabetes Peer Review Programme*. NHS England. Available at: http://bit.ly/1SMii4B (accessed 28.01.16)

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The Health Foundation (2014) *Improvement collaboratives in health care: Evidence scan*. THF, London. Available at: http://bit.ly/2dcfCuV (accessed 12.10.16)