

National Paediatric Diabetes Service Improvement Delivery Plan

2013-2018



Supporting, Improving, Caring

Foreword to the National Paediatric Diabetes Service Improvement Delivery Plan 2013-2018

Dear Colleagues

It gives me great pleasure to write the foreword to the National Paediatric Diabetes Service Improvement Delivery Plan 2013-2018. I would like to thank everyone involved for all their hard work in bringing it to fruition. The plan is designed to improve the quality of planning, commissioning, delivery and regulation of services in order to achieve better outcomes for children and young people with diabetes and their family.

In 2009, 10 regional Paediatric Diabetes Networks were set up across England with support from NHS Diabetes. Together they form the National Paediatric Diabetes Network. The membership of the networks recognised that to achieve good experiences of care and better outcomes for children with diabetes, the services that they provide should be designed around the needs of those children and their families. Any newly designed services could not exist in isolation from the wider political, social and economic environment of the present day. Resources need to be used wisely to create safe and sustainable services for the future. The driving force behind the development of a service improvement plan would be to strive for continuous improvements driven by innovation, evaluation and the desire for continuous life-long learning. Prior to writing the Service Improvement Delivery Plan, the National Paediatric Diabetes Network examined where the current system of diabetes care needed improvements. By considering the journey that the individual child and family made through the services in a life-course, condition specific pathway, we could identify current deficiencies in service provision. We concluded that our focus in the future should be much more on encouraging partnership working and good communication between clinical practitioners, young people and families. We also wanted to ensure that we were involved in getting evidence into practice and bringing together and strengthening the teams that deliver the care.

The National Paediatric Diabetes Service Improvement Delivery Plan has been designed to be in keeping with the three phases of diabetes as a long-term condition - the initial phase (development of the condition), a review phase (living with the condition) and a transition phase (moving on to adult services). There are 13 work streams addressing these phases and collectively they are attempting to reduce unnecessary future morbidity or mortality associated with living with diabetes.

As we all know very well, this is a time of austerity and major systems reform in the NHS. It has never been more important that planners and commissioners of services; providers and their regulators; public, private and community sectors; families, practitioners and any community members, all work together to align services, to improve the health of children and young people.

I sincerely hope that the National Paediatric Diabetes Service Improvement Delivery Plan 2013-2018 helps us do what we know we must do to improve outcomes for our Children and Young People with diabetes and help them live complication free lives with diabetes.

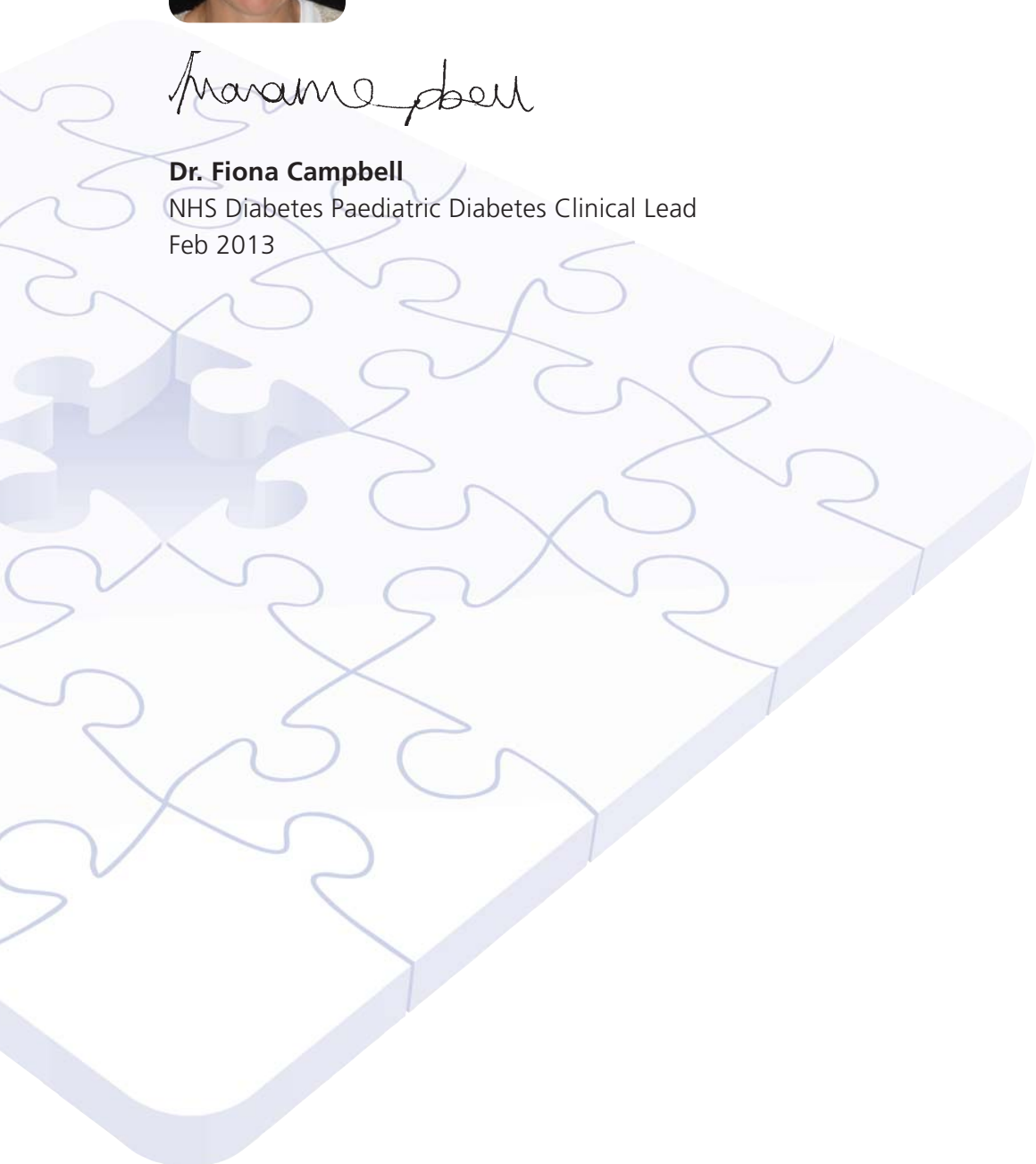


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Introduction

This introduction sets out the context for a Paediatric Diabetes Service Improvement Delivery Plan aimed at improving the care and outcomes of children and young people (CYP) with Type 1 Diabetes (T1DM). It looks at the current situation in the UK and outlines what needs to change in order to make a difference to the quality of care for CYP with T1DM and their families.

Current situation for Children and Young People with T1DM in the UK

The UK has the fifth largest population of CYP with T1DM diabetes in the world (International Diabetes Federation, 2013) and at present there is no comprehensive, standardised approach to care. Over the last decade there have been many publications of UK Standards and Guidelines (Diabetes UK, 2010; DH, 2001; NICE, 2004; DH, 2007; Haines, 2009) specifically focused on CYP with diabetes. Some improvements within the health services for this group of patients have been achieved (Gosden et al, 2010).

However, evidence from the most recent National Paediatric Diabetes Audit report, using the data collected for the 2010/11 data collection period (NDPA, 2012), continues to show that in England and Wales, our CYP with diabetes have exceptionally poor glycaemic control in comparison to some other European Countries (de Beaufort CE et al, 2007; Gerstl EM, 2008; SWEET, 2012). In particular, fewer than 16% of CYP with T1DM achieved the NICE target value of an HbA1c <58 mmol/mol (7.5%). This situation has remained virtually unchanged for the last seven years. Over 30% had an HbA1c >80 mmol/mol (9.5%) and are categorised in the 'at risk' group. In comparison, the 2011 data from the German & Austrian diabetes register (dpv-system) showed that over 50% of the CYP reach the target value of an HbA1c <58 mmol/mol (7.5%) with far fewer in the 'at risk' group (Table 1). In addition, good-to-reasonable glycaemic control is maintained across all age groups in the German & Austrian data (see Table 2). Another recently published and highly relevant publication entitled Atlas of Variation in Healthcare for Children and Young People (Rightcare, 2012), reported not only were there variations in poor glycaemic control in different parts of the country but also alarming differences in Diabetic Ketoacidosis (DKA) admissions.

Furthermore, this report suggested that our standards of healthcare professional training in diabetes along with the diabetes education and the way that it is delivered to CYP and their families could in part be responsible for such poor outcomes.

Table 1 Comparison of HbA1c levels in children and young people with Type 1 diabetes between England, Wales and Germany and Austria

(NICE 2004 HbA1c target)	NPDA (2010/2011 data)*	Germany & Austria 2011 (Median all centres HbA1c 61 mmol/mol, 7.7%; all patients <21 years)
HbA1c of <58 mmol/mol (7.5%)	15.1% females 16.4% males	50-55%
HbA1c	Over 30% (>80 mmol/mol, 9.5%)	10% (>75 mmol/mol, 9.0%)

Table 2 Glycaemic control in children and young people with Type 1 diabetes in Germany and Austria in 2011 by age group

Mean of all German & Austrian centres 2011#	HbA1c mmol/mol, %
Remission phase	52 mmol/mol, 6.9%
Pre-puberty	57 mmol/mol, 7.4%
Puberty	63 mmol/mol, 7.9%
Post-puberty	65 mmol/mol, 8.1%

* National Diabetes Paediatric Audit Report 2010–2011 (RCPCH, 2012)

DPV-Wiss database German & Austrian National data base for children and young people with diabetes

Improving Outcomes – Why is it important?

The ‘Diabetes Control and Complications Trial’ (DCCT) and the ‘Epidemiology of Diabetes Interventions and Complications’ (EDIC) studies provide us with conclusive evidence that intensive management and psychosocial support improves glycaemic control and diabetes outcomes in CYP with T1DM (DCCT, 1994; EDIC, 2001). Intensive management should start from diagnosis with an extensive family-focused education package accompanied by continued support (Skinner and Cameron, 2010). The DCCT supports the phenomenon of ‘tracking of HbA1c’ in the paediatric population, where ‘a good start’, based on intensive diabetes education and on-going support, results in a prompt reduction of HbA1c and maintains optimal glycaemic control. This produces an important tracking effect (Edge et al, 2010; Viswanathan et al, 2011) and reduces the burden of diabetes and maintains optimum quality of life (QOL). An approach such as this emphasises the importance of trying to achieve optimal control of diabetes from the day of diagnosis. This can be achieved by offering each child and young person with diabetes and their families a personalised healthcare package that includes self-management education to allow them to intensively manage their glycaemic control and aspire to a complication free life living with their diabetes.

Improving Outcomes – Initiatives already underway

Over the past decade, UK guidelines with standards (Department of Health, 2001; 2007; National Institute for Health and Clinical Excellence NICE, 2004) have specifically focussed on CYP with diabetes resulting in many improvements in their care (Gosden et al, 2010). However, over the last 3-4 years, national paediatric clinical leads have increasingly recognised that there is a need to re-design paediatric diabetes services to improve the variations in care and diabetes outcomes currently seen across the UK. Some multi-faceted, T1DM service re-design has already been supported with some funding from the Department of Health (NHS Diabetes, 2012). Changes that have already been made however may not always have been properly aligned to key components of care, since glycaemic control in CYP has not changed over the last 7 years (NPDA, 2012). It is now strongly felt, among professionals, CYP and their families, that it is totally unacceptable for us all to simply sit back and observe these continued poor outcomes. A radical change in the way T1DM care is delivered in the UK is urgently required.

The need to re-design services has also been supported by recent research. There have been eight randomised controlled trials (RCTs) (Waldron, 2012) undertaken that deal with different, but essential components of care and education. All eight RCTs will not be completed before 2014, but of those five that have reported outcomes to date, none have shown a change in glycaemic control in CYP with T1DM. However, there is an opportunity to convene the RCT clinical leads in order to examine lessons learned during the course of these studies and to ascertain how they can input into service re-design as part of this proposed service improvement delivery plan. Qualitative research into the lived experience of diabetes within CYP and their families has strengthened the evidence for the urgent need to improve services (Kime and Carling, 2012). In parallel, the SWEET project was initiated in 2008 to improve the standards of care across the EU and to create Centres of Reference (COR). Recommendations



on standards, education for CYP, their families and Health Care Professionals (HCPs) and a toolbox of resources together with a definition of a SWEET COR were delivered to the EU in April 2011. A key element of the SWEET report was to have a written national diabetes plan that includes reference to CYP. This plan would also identify quality standards embedded in a quality assurance programme that included external peer review of diabetes services. Work has already begun in England in partnership with the National Cancer Action Team (NCAT). Quality standards have been produced and extensive work has created a National Paediatric Diabetes Peer Review Programme due to be launched 2013 - 2014.

Further research in EU countries has also highlighted education as a major component of improving care and outcomes. Countries that deliver a family centred, holistic model of care have adopted not only a standardised and accredited approach to the education of CYP and their families but also to the training of HCPs. A cohesive, integrated, highly skilled, paediatric diabetes multi-disciplinary team (MDT) of HCPs that delivers structured diabetes self-management education (DSME) has been identified as a key component of care to deliver optimal outcomes (Lange, 2007; SWEET, 2012; Rosenbauer, 2012). All education programmes to CYP and families need to be quality assured at national level through a recognised academic body and the delivery quality assured by an independent body e.g. the Quality Institute for Self-Management Education (QISMET). After a standard approach to education from diagnosis it is essential that a psychosocial model of care is used to support the CYP and their families to help maintain good glycaemic control and achieve optimum self-care outcomes.

These findings prompted NHS Diabetes to form the NHS Diabetes: Paediatric Diabetes Education Group in 2010. The specific areas for change that have been identified by this group are the necessity to develop a comprehensive, standardised and accredited family-focused approach to diabetes care and the training of HCP's. This needs to be reflected in the clinical care model, education philosophy and care systems, in order to effectively improve the care we offer to our CYP with T1DM and their families and improve their long-term outcomes.

The Department of Health (DH, 2012) has recently acknowledged the need to try to improve children's diabetes services. In line with the above service re-design proposals, a 'Best Practice Tariff' (BPT) reimbursement mechanism was introduced, in England, from April 2012. This is available to all CYP provider services. They will not be paid Best Practice Tariff unless they can evidence to their commissioners that the diabetes services they are delivering fulfil the stringent criteria for providing a high quality service clearly stated in the Payment by Results Guidance 2012 (DH, 2012).

The solution – Development of a 5 year National Paediatric Diabetes Service Improvement Delivery Plan

In 2009, 10 regional CYP Diabetes Networks (CYPDNs) were set up across England with support from NHS Diabetes. Their aim was to provide consistent, high-quality diabetes care to CYP with diabetes and their families. These networks together form the National CYP Diabetes Network. Clinical Networks are currently considered to be a key component for the sharing of good practice and maintaining high quality standards (NHS Commissioning Board, 2012). Working in conjunction with NHS Diabetes and the Department of Health, the National CYP Diabetes Network has recognised the need to develop a National Paediatric Diabetes Service Improvement Delivery Plan. Embedded initiatives within this plan should ensure that

diabetes services are efficient and effective in a sustainable way and will facilitate improvements in health outcomes that matter the most to CYP and their families. The importance of improving outcomes has recently been highlighted in a report prepared for the Secretary of State for Health by the Children and Young People's Health Outcomes Forum (Department of Health, 2012), which was established to respond to the challenges set out in Sir Ian Kennedy's report published in 2010, entitled "Getting it right for children and young people" (Kennedy, 2010). The Government's response to this report is likely to form the basis of the development for the Children and Young People's Outcome Strategy. In addition, one of the roles of the NHS Commissioning Board is to drive improvements in quality and outcomes, as measured at a national level through the NHS Outcomes Framework 2012–13 (Department of Health, 2011). It is clearly important that plans for changes to the care of CYP with diabetes are developed in line with NHS Strategy. To this end this proposed delivery plan has been mapped against the NHS Outcomes Framework and our 13 workstreams correspond to the following Domains: 1a, 1b, 1.1, 1.6, 1.7, 2, 2.1, 2.2, 2.3, 2.4, 3a, 3b, 4ai, 4aii, 4b, 4c, 4.1, 4.2, 4.3, 4.4i, 4.5, 4.8, 4.9, 5a, 5b, 5c, 5.4, 5.5, 5.6.

The Proposed 5 year National Paediatric Diabetes Service Improvement Delivery Plan

The main aim of the National Paediatric Diabetes Service Improvement Delivery Plan is to significantly improve outcomes of care for CYP diabetes over the next 5 years (by 2018).

Primary quantitative outcomes are: -

- a median HbA1c reduction nationally in England and by 11 mmol/mol (1.0%) within 5 years and by 16 mmol/mol (1.5%) within 10 years
- a reduction in the proportion of children in DKA at diagnosis
- a reduction in admissions for diabetes related acute complications (DKA and Hypoglycaemia)

Secondary quantitative outcomes are: –

- to see evidence of listening, communicating and collaborating with CYP, families, carers and HCPs in all disciplines
- to reduce the variation between services and clinical outcomes
- to improve the burden of diabetes and quality of life of the CYP with diabetes & their families
- to improve the CYP with diabetes & their families experience of services
- to develop standardised and accredited training for all HCPs who care for CYP with diabetes and their families
- to educate CYP and their families to self-manage diabetes using nationally standardised and evaluated programmes of education that are age and maturity appropriate and tailored for the individual child and family
- to measure and benchmark clinical and psychosocial outcomes of CYP and their families to facilitate improved outcomes and necessary service re-design

- to reward success by creating an environment that supports individuals and teams working in diabetes services
- to demonstrate clinically led service improvements
- to ensure leadership and management are built into the regional networks to help their local members share best practice and learn from each other
- embrace concepts of innovation and continuous improvement

Partnerships

Working with the Department of Health, NHS Commissioning Board, NHS Diabetes National Cancer Peer Review Team, Professional bodies (RCPCH, BSPED, ACDC, ABCD, RCN, BDA, BPS), Academic Institutions, Deaneries, Corporate Sponsors and all other interested stakeholders e.g. Diabetes UK, JDRF, Diabetes Power, childrenwithdiabetes and NHS Diabetes: Parent Reference Group will be essential for success in implementing this strategy.

Strategy Writing Team

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In Consultation with NHS Diabetes Clinical Leads and Network Coordinators
NHS Diabetes Paediatric Education Group
NHS Diabetes Parent Reference Group

Glossary

ABCD – Association of British Clinical Diabetologists

ACDC – Association of Childrens Diabetes Clinicians

BDA – British Dietetic Association

BPS – British Psychological Society

BPT – Best Practice Tariff

BSPED – British Society of Paediatric Endocrinology and Diabetes

CCGs – Clinical Commissioning Groups

CGM – Continuous Glucose Monitoring

DEN – Diabetes Education Network



DH – Department of Health
DMEG – British Dietetic Association: Diabetes Management & Education Group
GSEU – Getting Sorted Enterprise Unit
JDRF – Juvenile Diabetes Research Foundation
HQIP – Healthcare quality improvement partnership
MCRN – Medicine for Children Research Network
MDT – Multi-disciplinary team
NCAT – National Cancer Action Team
NICE – National Institute for Health & Clinical Excellence
NPDA – National Paediatric Diabetes Audit
OFSTED – Office for Standards in Education, Children’s Services and Skills
RCN – Royal College of Nursing
RCPCH – Royal College of Paediatrics & Child Health
SWEET Project EU, www.sweet-project.eu

This 5 Year Service Improvement Delivery Plan is divided into 13 areas of work which are displayed in the following pages.

Quality & improvement initiatives	Description of Work	Key stakeholders	Timeline
1. Response to all relevant National drivers	<ul style="list-style-type: none"> Ensure alignment of the National Paediatric Diabetes Service Improvement Delivery Plan with the Minister of Health response to the Children's Outcomes Forum Report submitted in Sept 2012 to Dept of Health 	Children's Healthcare Community	2013
2. Sustainability of the Regional CYP Diabetes Networks	<ul style="list-style-type: none"> Development of a 'host' organisation, subscription model to support the sustainability of the 10 regional CYP diabetes networks across England 	NHS Diabetes/National CYP Diabetes Network/ Regional Networks/Local provider units & Clinical Commissioning Groups (CCGs)	2013
3. Service development & improvement	<ul style="list-style-type: none"> Continue to develop and support the National CYP Diabetes Network, alongside the 10 Regional CYP Clinical Networks which exist across England 	NHS Diabetes NHS Diabetes Clinical Lead NHS Diabetes Education Lead Network Clinical Leads Paediatric Network Coordinators	2013-2018
	<ul style="list-style-type: none"> Develop strategies for the national network & regional networks to support local services who do not meet BPT 	NHS Diabetes Paediatric Network Coordinators	2013-2018
	<ul style="list-style-type: none"> Determine how many services are working to BPT in 2012/13 and 2013/14 Identify Paediatric Diabetes units (PDU), using data from NPDA & peer review outcomes, which require additional support Continue all service development & improvement initiatives supported by Paediatric Network Coordinators 	ACDC National & Regional CYP Diabetes Network/s Regional Network Chairs/Clinical Leads/Coordinators	2015
	<ul style="list-style-type: none"> Increase number of services demonstrating compliance with BPT from baseline over next 3 years 	Regional CYP Diabetes Networks Regional Network Chairs/Clinical Leads/Coordinators	2013-2015
	<ul style="list-style-type: none"> Continue to support the further development of the PbR Guidance document around the BPT 	DH PbR Team/National CYP Network	2013-2014
	<ul style="list-style-type: none"> Support & facilitate effective BPT commissioning 	Regional CYP Diabetes Network/CCG's Regional Network Chairs/Clinical Leads/Coordinators	2013-2018
	<ul style="list-style-type: none"> Develop robust lines of communication between services within regions & the national network to support BPT 	Regional CYP networks Regional Network Chairs/Clinical Leads/Coordinators	2013-2018

	<ul style="list-style-type: none"> • Work with the National Cancer Action Team (NCAT) and NHS Diabetes to further develop the diabetes peer review methodology, reviewing the original methodology and refining the measures for use in the self-assessment/external validation/peer review cycle • Develop & roll out of the Peer Review Programme across all 10 Regional CYP Networks • Compare data across regions from the Peer Review Process & produce an annual report with recommendations 	NHS Diabetes NCPR Team NCAT 10 National CYP Networks	2013-2018 2013-2013 2013-2018
	<ul style="list-style-type: none"> • Develop a system to support 24 hour access to advice on emergency management of diabetes for the family and other health professionals e.g. NHS 24 	Prof P Hindmarsh University College London Hospitals	2013 -2014
	<ul style="list-style-type: none"> • Prepare & distribute a 'National Workforce Survey in Children & Young People with Diabetes' to assist with capacity planning for training of HCPs delivering diabetes care 	NPDA at RCPC National CYP Network Regional Network Provider Units Paediatric Network Coordinators	2013
	<ul style="list-style-type: none"> • Continue to work with the SWEET e. V project to: encourage membership; to improve standards of care; facilitate sharing good practice; benchmarking clinical outcomes (HbA1c); compare the UK Peer Review model with that proposed for other European Countries in the SWEET membership; working towards the development of Centres of Reference. 	NHS Diabetes: Clinical Lead/Education Lead NCPR Team	2013-2018
	<ul style="list-style-type: none"> • Support the National and Regional Parent Reference Groups 	NHS Diabetes NHS Diabetes Clinical Network Lead/s and Paediatric Network Coordinators	2013-2018
4. Service Standardisation	<ul style="list-style-type: none"> • Assist with the development of NICE Quality Standards in CYP and Transition Care 	NHS Diabetes	2013-2014
	<ul style="list-style-type: none"> • Development and implementation of a national standardised diabetes service specification including Transition Care 	NHS Diabetes	2013-2014
	<ul style="list-style-type: none"> • All children's diabetes services to be working to the same standards by 2018 (including Transition Care) 	NHS Diabetes/ BSPED/ACDC/ABCD	2014-2018

	<ul style="list-style-type: none"> Standardisation of national protocols for: <ul style="list-style-type: none"> Management at diagnosis DKA Hypoglycaemia Hyperglycaemia/Sick day rules Patients undergoing surgery Patient Reported Experience Measure (PREM) Questionnaire Patient Reported Outcome Measures (PROM) questionnaire BPT – Annual Psychological Assessment Questionnaire for use by MDTs Clinical management targets 	<p>Currently being produced by ACDC BSPED Guideline in use BSPED ACDC RCPCH: NPDA PREM/PROM working groups</p> <p>NHS Diabetes</p>	2013-2014
	<ul style="list-style-type: none"> Development of CYP Diabetes Service Handbook for Diabetes Care for MDTs – a manual of how to manage diabetes for the UK 	NHS Diabetes/ACDC NCAT	2014-2015
	<ul style="list-style-type: none"> Standardisation of In-Patient Care using the new In-Patient standards produced following the HQIP multi-site audit 	Standards to be included in the Peer Review measures for all CYP diabetes units Regional networks	2013-2014
	<ul style="list-style-type: none"> Encourage the development of a National Paediatric Diabetes Register 	NPDA/RCPCH/University Collaboration	2013-2014
	<ul style="list-style-type: none"> Independent Quality Assurance of Diabetes Self-management Education Delivery 	e.g. QISMET Quality Institute for Self-Management Education and Training and NCPR Team	2013-2018
5. Standardised, Accredited and Structured Education for Health Care Professionals	<p>Learning & Development of teams</p> <ul style="list-style-type: none"> Define the effective multi-disciplinary team and interdisciplinary team according to the SWEET project recommendations (Work Package 4; Waldron et al, 2012) Continue to share good practice across the National and Regional Paediatric Diabetes Network/s 	NHS Diabetes NHS Diabetes: Education Lead Regional Networks alongside Network Clinical Leads & Network Coordinators	2013-2018
	<p>Foundation training for Health Care Professionals:</p> <ul style="list-style-type: none"> Establish a core curriculum for the training of all paediatric diabetes HCPs by using the adapted SWEET EU curriculum for use in the UK 	NHS Diabetes NHS Diabetes: Education Lead	2013-2014
	<ul style="list-style-type: none"> Utilise the adapted SWEET curriculum to cross check and standardise the existing accredited CYP diabetes courses for HCPs at York University and Warwick University (Masters level) and Birmingham Children's Hospital (Diploma level) Raise awareness of the adapted SWEET curriculum to all other training bodies and colleges Aim for mandatory training for all doctors, nurses, dietitians and psychologists 	<p>NHS Diabetes: Education Lead York University & Warwick University Birmingham Children's Hospital NHS Diabetes</p> <p>Training bodies for doctors, nurses, dietitians, psychologists (RCPCH/BSPED/RCN/BDA/BPA)</p>	<p>2013</p> <p>2013-2018</p>

	<ul style="list-style-type: none"> Develop an e-learning foundation package based on the first level of the adapted SWEET curriculum. This should be mandatory for all HCPs working with CYP with diabetes 	NHS Diabetes NHS Diabetes: Education Lead Clinical Leads and Network Coordinators	2013-2014
	<ul style="list-style-type: none"> Ensure all courses for the training of HCPs are quality assured and have national accreditation Develop a national multi-disciplinary team advanced clinical practice course 	Universities NHS Diabetes NHS Diabetes: Education Lead Universities	2013-2018
	<p>Competency Framework for the workforce</p> <ul style="list-style-type: none"> Working groups (medical, nursing, dietitians, psychologists), will develop a competency framework for each profession that reflects individual professional career development. 	NHS Diabetes NHS Diabetes: Education Lead Professional Associations/Universities	2013-2018
	<ul style="list-style-type: none"> To continue to work with the UK Diabetes Education Network (DEN) to develop standardised and accredited HCPs in paediatric diabetes 	NHS Diabetes: Education Lead National Diabetes Education Network (DEN)	2013-2018
	<p>Continue to develop national accredited continuing professional development modules (CPD) in keeping with the National Paediatric Diabetes Service Improvement Delivery Plan, proven models of care and current randomised controlled trials.</p> <p>Existing Modules:</p> <ul style="list-style-type: none"> Insulin pump module Psycho-social management course Teaching skills training course for paediatric health care professionals <p>with the potential for new courses to be developed</p> <ul style="list-style-type: none"> - e.g. Training HCPs in the Transition diabetes care - e.g. Certified Diabetes Educators Course - e.g. E-Learning Psycho-social Management Module 	Universities NHS Diabetes York University Warwick University Sheffield Children's Hospital & Sheffield Hallam University NHS Diabetes and Universities	2013-2018 2013-2018
	<ul style="list-style-type: none"> To develop a national CPD framework and progression pathway for all HCPs 	Universities Professional Associations; RCPC, RCN, BDA, BPS	2013-2018
	<ul style="list-style-type: none"> Train HCP to use the Adolescent Diabetes Needs Assessment Tool (ADNAT) after evaluation (Cooper et al. 2010) 	NHS Diabetes NHS Diabetes: Education Lead	2014-2016
	<p>Medical training</p> <ul style="list-style-type: none"> Update 'SPIN' module in line with the European Curriculum obtaining RCPC Endocrine and Diabetes College Speciality Advisory Committee (CSAC) Certification 	RCPC	2013

	<ul style="list-style-type: none"> Develop a standardised national Education Tool kit 	NHS Diabetes NHS Diabetes: Education Lead Diabetes UK Other stakeholders	2013–2018
	<ul style="list-style-type: none"> Continue to develop HCP professional education & Multi-disciplinary Education using models that have been successfully implemented in other European States e.g. German Model of Care 	NHS Diabetes: NHS Diabetes: Education Lead Universities	2013-2018
6. Standardised, Accredited and Structured Diabetes Self-Management Education for Children, Young People and their Families	<ul style="list-style-type: none"> Examine the essential components of care delivery and education identified through the current Randomised Controlled Trials (RCTs) in the UK (CASCADE, CHOICE, DECIDE, DEPICTED, FACTS, KICK-OFF, EPIC, SCIP) (Waldron, 2012) 	NHS Diabetes NHS Diabetes: Education Lead All RCT Leads NHS Diabetes	2013
	<ul style="list-style-type: none"> Examine in more detail the essential components of the education programme delivered in the German Model of Diabetes Self-Management Education (DSME) programme 	NHS Diabetes NHS Diabetes: Education Lead GSEU-Leeds Metropolitan University	2013
	<ul style="list-style-type: none"> Examine other available DSME Programmes for CYP & families that are available in the UK 	NHS Diabetes NHS Diabetes: Education Lead All interested stakeholders	2013-2014
	<ul style="list-style-type: none"> To develop a standardised national DSME programme using components of the RCTs, German Model of Care and others above considering the following age ranges: <ul style="list-style-type: none"> - Below 5 years - Primary level - Teenagers - Transition (16 – 18 years) 	NHS Diabetes NHS Diabetes: Education Lead	2013-2014
	<ul style="list-style-type: none"> To implement the national DSME programme for all age ranges that have been verified through the RCT leads 	NHS Diabetes & other stakeholders	2013-2015
	<ul style="list-style-type: none"> Implement a national quality assurance programme for the national DSME programme 	Universities Independent quality assurance body e.g. QISMET	2013-2015
	<ul style="list-style-type: none"> Develop & implement the 'Pump school online'- basic pump training module for parents/children/MDT/ward staff and schools 	NHS Diabetes York University	2013-2015
	<ul style="list-style-type: none"> E-learning course/face-to-face teaching course for Continuous Glucose Monitoring (CGM) for professionals and families to ensure more effective use of this technology 	NHS Diabetes/York University sponsorship	2013-2015
	<ul style="list-style-type: none"> To standardise patient information leaflets on a wide range of subjects to be made available to MDTs nationally, and incorporated into the Diabetes Training Manual and tool kit 	NHS Diabetes Diabetes UK Other stakeholders	2013-2014

	<ul style="list-style-type: none"> E-learning – ‘Upbete’ web site, continue to develop 	Leeds Teaching Hospital, Children’s Diabetes Service	2013-2018
	<ul style="list-style-type: none"> Research Activity: Evaluation of the German Model of Care (family centred psycho-social model) that includes all components of education in one programme 	GSEU - Leeds Metropolitan University	2013-2014
7. Diabetes in Schools	<ul style="list-style-type: none"> Lobbying Department for Education for the potential to include diabetes management in OFSTED criteria 	NHS Diabetes Other interested stakeholders	2013-2018
	<ul style="list-style-type: none"> Lobbying Members of Parliament to legislate to make appropriate management of diabetes in schools compulsory, including carbohydrate - related insulin dose adjustment via pens or pumps 	NHS Diabetes Other interested stakeholders	2013-2018
	<ul style="list-style-type: none"> Development of on-line modules for training of volunteers/school staff including how to do blood glucose testing, insulin injections/boluses, hypoglycaemia etc 	NHS Diabetes NHS Diabetes: Education Lead RCN paediatric diabetes nurses group York University DEN	2013-2014
	<ul style="list-style-type: none"> Develop on-line downloadable care plans, training manuals etc Establish that all children have a care plan in school 	NHS Diabetes NHS Diabetes: Education Lead RCN group Paediatric Networks	2013
8. Transition to Adult services	<ul style="list-style-type: none"> Collaborate with Quality, Innovation, Productivity and Prevention (QIPP) Team DH Transition Project Work with representatives from ABCD to develop a transition strategy, including closer links between all paediatric services and their adult counterparts GSEU (Leeds Metropolitan University) completion of a systematic review of transition care Production of ‘Principles and Practice of Transitional Diabetes Care’ in which the standards for transitional care will be stated and which could be audited Ensure that HCPs that supply the service to young people with diabetes & their families have standardised & accredited training Develop an education package for MDTs (paediatric and adult) on essential features of transition and how to incorporate advice/education to young people on what to expect in adult services 	NHS Diabetes Clinical & Education Leads ABCD GSEU – Leeds Metropolitan University BSPED ACDC NHS Diabetes Universities NHS Diabetes All interested stakeholders	2013-2015
	<ul style="list-style-type: none"> Lobby DH to extend the BPT to age 25 years 	NHS Diabetes Clinical Leads All interested stakeholders	2013-2018

	<ul style="list-style-type: none"> • Develop a diabetes programme specifically for 16-18 year olds to ensure that they are able to self-manage their diabetes before transfer to adult services – e.g. 'WICKED' Programme, Sheffield University (Pilot, 2012) • Audit the number of young people that undergo the programme in the peer review process 	NHS Diabetes NHS Diabetes: Education Lead Sheffield University National CYP Diabetes Network National Clinical Network Assurance Programme	2013-2018
	<ul style="list-style-type: none"> • Gather together all patient education resources for all teams for inclusion in the Diabetes Manual 	National CYP Diabetes Network	2013-2014
	<ul style="list-style-type: none"> • Ensure that the Education Tool Kit has extensive literature to cover the Transition period 	NHS Diabetes NHS Diabetes: Education Lead NHS Diabetes All interested stakeholders	2013-2014
9. Technologies	<ul style="list-style-type: none"> • Incorporation of diabetes technologies e.g. Insulin Pumps and CGM into all appropriate services meeting the BPT to remove postcode lottery • Centre of Reference/Coordination in each Regional CYP Diabetes Network 	NHS Diabetes Insulin Pump Network and Regional CYP Networks working with commissioners/CCG's NHS Diabetes/JDRF/ Diabetes UK	2013-2018
	<ul style="list-style-type: none"> • Work towards standardised request for funding letters for funding approval 	NHS Diabetes Regional networks and commissioners	2013-2013
	<ul style="list-style-type: none"> • Promote & establish the 'Pump school online'- basic pump training module developed in Section 4, for parents/children/MDT/ward and schools 	NHS Diabetes National CYP Diabetes Network and Regional Networks in conjunction with local provider units and ACDC	2013-2015
	<ul style="list-style-type: none"> • Advanced pump courses, especially for all young people before transfer to adult services (sub-section of the Transition Module 16 – 18 years) 	NHS Diabetes University of York Insulin Pump course CGM companies ACDC	2013-2014
	<ul style="list-style-type: none"> • CGM – campaign to make this more available where appropriate 	All interested parties (Diabetes UK/ ACDC/ ABCD/JDRF)	2013-2018
	<ul style="list-style-type: none"> • Promote & establish the E-learning course for CGM for professionals and families (Section 4) to ensure more effective use of expensive technology 	NHS Diabetes National CYP Diabetes Network, Regional Networks & CGM companies	2013-2014
10. Information technology	<ul style="list-style-type: none"> • Ensure the availability of Information Technology (IT) systems in all provider units to assist with data collection for the NPDA and collection of evidence to justify the payment by commissioners of the BPT • IT is essential to provide local, regional and national data for clinical outcomes & service user collation for national outcomes 	National CYP Diabetes Network/Regional Networks/local provider Trusts/CCGs	2013-2014

11. Communications Strategy	<ul style="list-style-type: none"> NHS Diabetes: Communications Strategy NHS Diabetes: National Parents Reference Group - to develop an effective forum to identify issues that impact on children & young people's lives with diabetes & their families and to work towards solutions to improve care in line with the National Paediatric Diabetes Service Improvement Delivery Plan National journal - 'Diabetes Care for Children and Young People' – the journal for healthcare professionals caring for children and young people with diabetes' (communication, policy, education, research, voice of young people & parents, events) Tie in local professional press releases to DUK activity through their parents groups Diabetes UK Children's Campaign Engagement with key stakeholders - ACDC/BSPED/ABCD/DUK/JDRF/DH/Diabetes Power/childrenwithdiabetes to ensure that CYP and their families are engaged in service redesign 	<p>NHS Diabetes, All stakeholders</p> <p>Supported by Lilly</p> <p>NHS Diabetes All interested stakeholders</p> <p>Diabetes UK</p>	<p>2013-2018</p> <p>Launched in May 2012 and to be published quarterly</p> <p>2013-2017</p> <p>Nov 2012-2018</p>
12. Prevention Strategy	<ul style="list-style-type: none"> Prevention of Diabetes Ketoacidosis by supporting national campaigns 	<p>ACDC audit Diabetes Power Awareness Campaign Diabetes UK Campaign childrenwithdiabetes awareness raising Public health campaign with Health and Wellbeing Boards</p>	<p>2013-2018</p>
13. Research & Development	<ul style="list-style-type: none"> Participation in diabetes research trials including those involved in MCRN research portfolio 	<p>All provider units to consider enrolling patients</p>	<p>2013-2018</p>

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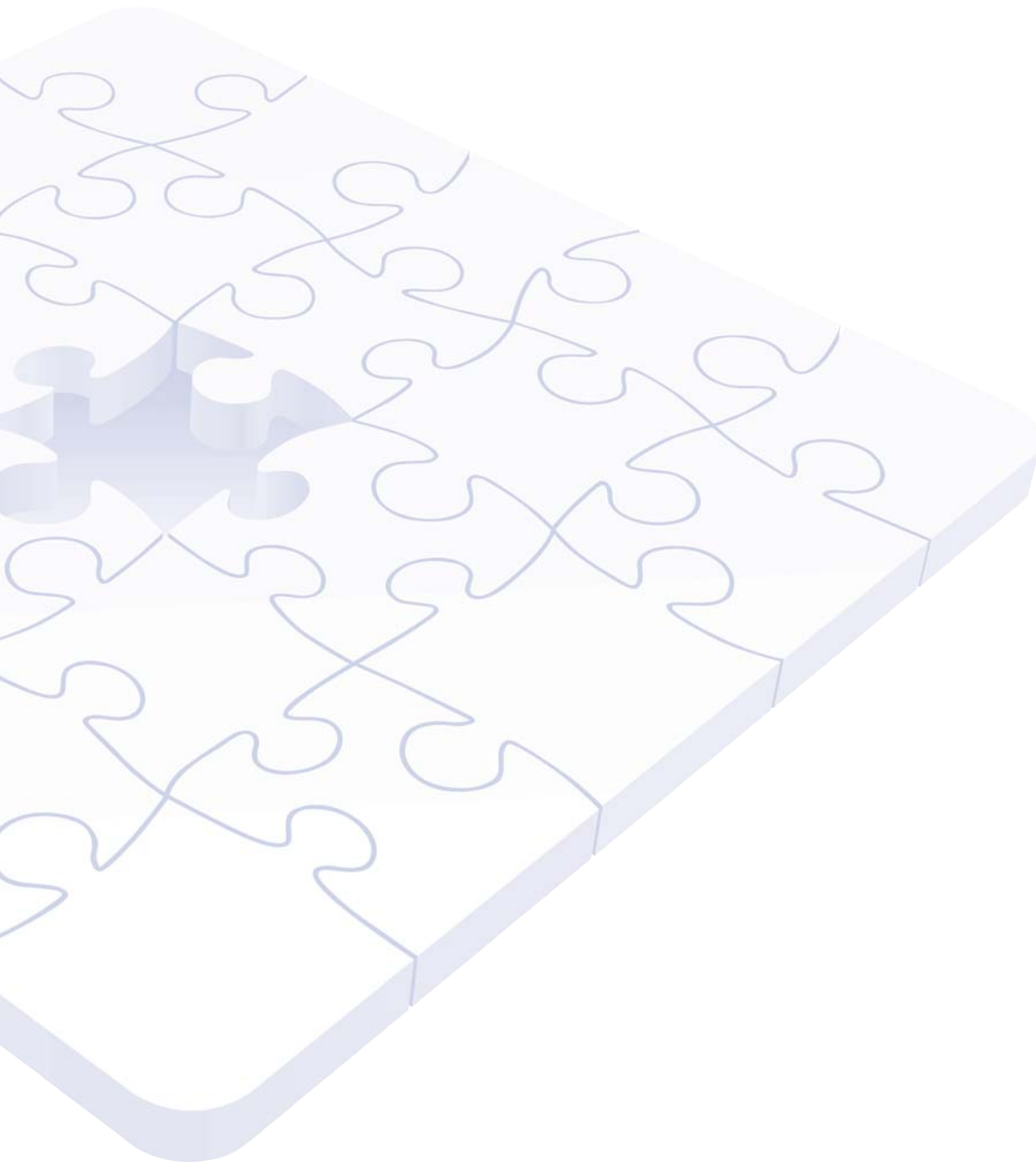
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