



South West Paediatric Diabetes Regional Network Pathway for

Referral and Ongoing Care for Children with Suspected Diabetes

Dear Colleagues,

On behalf of the South West Paediatric Diabetes Network, I'm delighted to introduce these guidelines for the diagnosis and timely referral of children and young people with diabetes.

May I take this opportunity to remind everyone that the majority of children have Type 1 Diabetes, the diagnosis and treatment of which is a medical emergency in order to prevent children developing Diabetic Ketoacidosis – the principle cause of mortality in children with diabetes. The speed of response required is very different to Type 2 diabetes.

25-30% of children are in DKA at diagnosis in the UK, which is approximately twice the rate in some countries, such as Sweden. A recent BSPED survey identified that 24% of recently diagnosed children had seen multiple health care professionals before the diagnosis was made. It is not uncommon for those of us treating children with diabetes, to see that primary care colleagues are approaching the diagnosis in a way in keeping with an adult with suspected Type 2 diabetes.

I hope these guidelines are clear and easy to implement. Please circulate them widely.

They complement the excellent 4Ts campaign by Diabetes UK, who produce excellent free posters that should be displayed anywhere children and parents go to raise awareness in the general population. Please order some and display them in your place of work.

<http://www.diabetes.org.uk/the4ts>

Kind Regards,

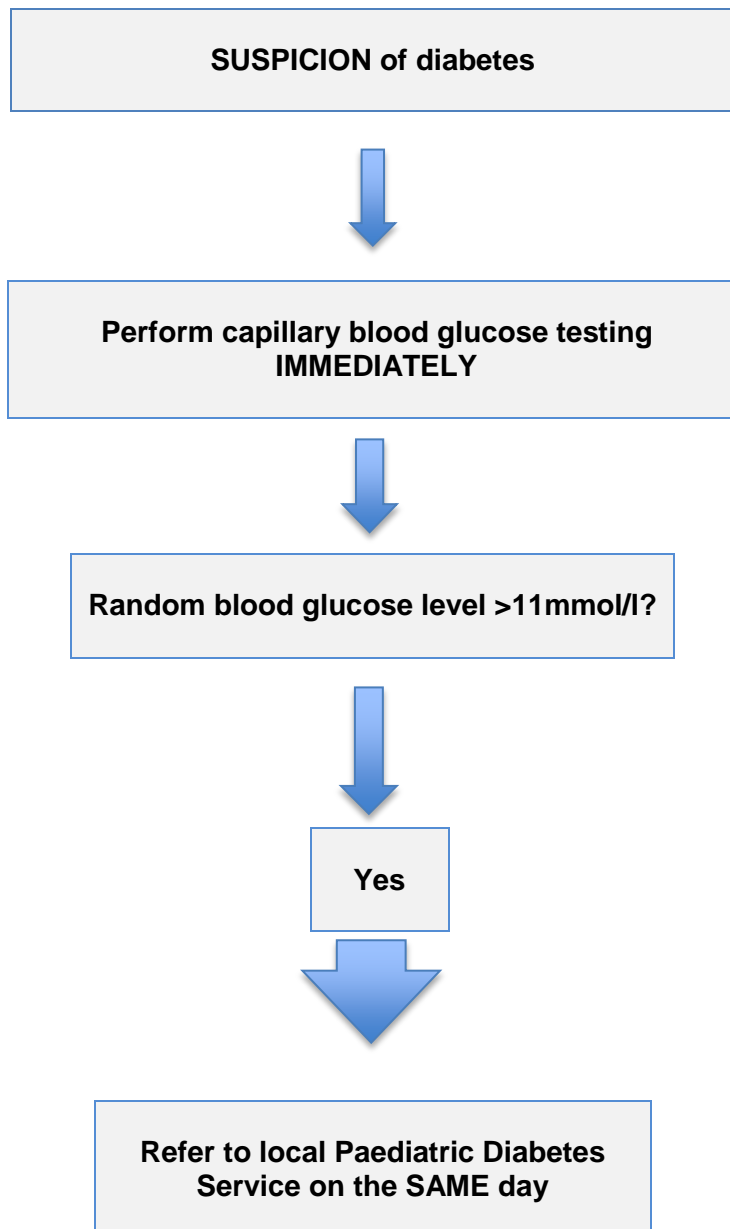
Dr Chris Moudiotis
South West Paediatric Diabetes Network Chair
January 2015



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This pathway is for children and young people below 18 years of age. For young people aged 16-18 years: the use of this pathway may depend on your local paediatric service provision for new referrals within this age-group (see Appendix).



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Background

- There are approximately 25,000 children with diabetes in the England and Wales, of which the vast majority have type 1 diabetes.⁽¹⁾
- Approximately 25% of cases are not diagnosed until the child is in diabetic ketoacidosis (DKA), although this rate is higher (approx. 35%) in the under 5s.⁽²⁾
- DKA requires intensive medical intervention, is traumatising for the child, and may have a long-term adverse effect on their diabetes control.

Symptoms of type 1 diabetes

- Classic symptoms: Polyuria, polydipsia, weight loss, lethargy
- Less classic symptoms: Enuresis / nocturia in a previously toilet-trained child, unusually heavy nappies, vaginal candidiasis (esp. in pre-pubertal girls), failure to gain weight in a growing child, poor school performance, recurrent infections
- Emergency symptoms (suggestive of DKA): Dehydration, vomiting, acetone breath, abdominal pain, hyperventilation, confusion, shock

Be aware:

- 1) Symptoms can progress within days or weeks. Have a high index of suspicion. Think of the Diabetes UK campaign of 4Ts: Toilet, Thirsty, Tired, Thinner.⁽²⁾
- 2) Diagnosis of diabetes can be missed in younger / preschool children due to a more rapid progression of symptoms, failure to consider the diagnosis, and more non-specific symptoms.

Symptoms suggesting type 2 diabetes

- Obesity, age > 10 years, strong family history of T2DM, acanthosis nigricans, high risk racial or ethnic group

References

- (1) National Paediatric Diabetes Audit Report 2012-13
- (2) Diabetes UK

Care pathway for initial management of diabetes in children

SUSPICION OF DIABETES

- Perform capillary blood glucose (BG) testing immediately
- If BG testing is not available then perform urinary dipstick testing
- If BG or urinalysis not available then refer immediately (see below)
- Do not perform fasting BG measurement, HbA1C, or glucose tolerance test
- Do not refer as an outpatient

If BG >11mmol/l or glycosuria (+/- ketonuria)

- Refer immediately to the acute paediatrics on-call team
- Inform child and family of the suspected diagnosis of diabetes

Type 1 diabetes

Local paediatric team to confirm diagnosis and:

- Admit to hospital
- Manage → DKA according to South West regional DKA guideline
→ Local guideline for well children with diabetes
- Stabilise blood glucose levels prior to discharge
- Provide structured education for the child and family (to include a paediatrician with an expertise in diabetes, a paediatric diabetes specialist nurse and dietician)
- Provide initial prescriptions for insulin and equipment for the diabetes management (further prescriptions to be dispensed in primary care)

Other forms of diabetes, including Type 2 diabetes

- Manage according to local expertise with involvement of tertiary specialists as appropriate to case

Ongoing care for children with diabetes

- Care will be provided by a specialist multidisciplinary team (MDT) including a paediatrician with expertise in diabetes, paediatric diabetes specialist nursing, dietetics and clinical psychology.
- Although the MDT will be based in secondary care, support for the child and their family will also be provided in the community both at home and at school.
- High quality care in line with the criteria set out in the Paediatric Diabetes Best Practice Tariff (introduced in 2012)
- A minimum of 4 outpatient appointments per year including one annual review appointment, and an additional appointment with a dietitian.
- Regular contact with the diabetes team, which might include telephone support/advice, home or school visits, and ongoing education.
- A minimum of 4 HbA1C measurements per year
- 24 hour access to advice on diabetes management
- Transition to adult services at a stage appropriate to the young person in accordance with locally agreed pathways
- Annual retinal screening from 12 years of age to be arranged according to local pathway

Appendix: Paediatric diabetes teams in the South West Paediatric Diabetes Network

North Devon Healthcare NHS Trust

Referrals: Paediatric diabetes team: 07884266159 / 07920235237

Email: ndht.cypdiabetes@nhs.net

Out of hours advice: Paediatric Registrar via switchboard - 01271 322577

Lead Paediatrician – Dr John-Paul Smith

Lead PDSN – Richard Todd

Royal United Hospital NHS Foundation Trust

Referrals: Paediatric Diabetes team office - 01225-825331

Out of hours advice: Paediatric Registrar via switchboard – 01225 428331

Lead Paediatrician - Dr Amanda Billson

Lead PDSN - Helen Edwards

Royal Cornwall Hospitals NHS Trust

Referrals: Paediatric diabetes nurse team – Tel: 01872 254567

Out of hours advice: Contact switchboard on 01872 250000 and leave contact number for return call between 08:00 and 20:00. After 20:00 the on-call Paediatric Registrar can be radiopaged through the switchboard.

Lead Paediatrician: Dr Katie Mallam

Lead PDSN: Anita England

South Devon Healthcare NHS Foundation Trust

Referrals: Tel: 07788416019 between 8am to 6pm Monday to Friday

Out of hours advice: Contact Louisa Cary Ward on 01803 655526 or 01803 655 531 and ask for the Paediatric Registrar

Lead Paediatrician: Dr Phil Reilly

Plymouth Hospitals NHS Trust

Referrals: Contact PDSN Mary Jefferies on 01752 439447 or PDSN Alison Webb on 01752 439397

Out of Hours advice: Call 01752 202082 and ask for on-call Paediatric Registrar

Lead Paediatrician: Dr Becky Smith

Royal Devon and Exeter Hospitals NHS Foundation Trust

Referrals: Contact PDSN team daily from 8am to 6pm on their pager via switchboard on 01392 411611 for urgent advice

Out of hours advice: Between 6pm and 8am contact switchboard on 01392 411611 and ask for on-call Paediatric Registrar. Advice is available 24 hours a day.

In emergency dial 999 and ask for ambulance and if you have time contact the Paediatric Registrar to tell them.

Lead Paediatrician: Dr Chris Moudiotis

Lead PDSN: Julie Kitchen

Taunton and Somerset NHS Foundation Trust

Referrals: Contact PDSN team daily on 01823 343666 or email childrensdiabetes@tst.nhs.uk

Out of hours advice: Phone 01823 342016

Lead Paediatrician: Dr Gita Modgil

Lead PDSN: Michelle Gardiner

University Hospitals Bristol NHS Foundation Trust

Referrals: All referrals to be made through Bristol Children's Hospital switchboard on 0117 9230000. During working day ask for the Paediatric Endocrine Registrar on bleep 2383 or 2359. Advice also available from the duty PDSN on either 0117 3428572 or 0117 342 8559.

Out of Hours and weekend advice: Phone 0117 923 0000 and ask for the on-call paediatric team.

For Weston: North Somerset GPs should phone 01934 521 729

Lead Paediatrician: Dr John Barton

Lead PDSN: Helen Cook

Great Western Hospitals NHS Foundation Trust (Swindon)

Referrals: For all enquiries on Mondays to Fridays between 9 – 5pm contact the Diabetes Office on 01793 604969 or email childrensdiabetesteam@gwh.nhs.uk

Out of hours and weekend advice: Call 01793 604095 (Children's Unit)

Lead Paediatrician: Dr Nick West

Lead PDSN: Helen Good

Gloucestershire Hospitals NHS Trust

Referrals: Between 8am and 5pm phone the paediatric diabetes team on 0300 422 8473. Between 8am to 5pm you can also contact the nurses emergency mobile on 07880 794616.

Out of hours advice: Call 0300 422 2222. Ask for the operator and then for the Paediatric Registrar on-call.

Lead Paediatrician: Dr Susan Matthai

Lead PDSN: Kate Dembenski

Yeovil District Hospital NHS Foundation Trust

Referrals: Between 9am and 6pm Monday to Friday contact the diabetes office on 01935 384694.

Out of Hours advice: Between 6pm and 10pm on weekday evenings and between 10am to 8pm during weekends and bank holidays contact the Dillington/Children's Ward at Yeovil District Hospital on 01935 384360 or 01935 384201 who will ask the Diabetes Nurse on call to call you back within 20 minutes. For urgent advice overnight and at all other times contact the Dillington/Children's Ward and you will be able to speak to the Paediatric Registrar on call.

Lead Paediatrician: Dr Tamsyn Nicole

Lead PDSN: Jo Kennington

This guideline has been developed by John-Paul Smith, Consultant Paediatrician at Northern Devon District Hospital and endorsed by the South West Paediatric Diabetes Network in December 2014.



Review Date: December 2016