The Association for Clinical Biochemistry & Laboratory Medicine

Better Science, Better Testing, Better Care

Summary of NICE Guidelines

Title	Diabetes (type 1 and type 2) in children and young people: diagnosis and management
NICE Reference	NG18
Date of Review:	November 2017
Date of Publication	August 2015
Summary of Guidance (Max 250 words)	This guideline updates and replaces the sections for children and young people in type 1 diabetes (NICE guideline CG15). **Diagnosis** • Confirm using the current WHO diagnostic criteria for diabetes mellitus: fasting plasma glucose ≥7.0mmol/L or 2h plasma glucose ≥11.1mmol/L. • Do not measure C-peptide and/or diabetes specific autoantibody titres at initial presentation. Consider measuring later if there is difficulty distinguishing type 1 from other forms of diabetes. • Perform genetic testing if atypical disease behaviour, clinical characteristics or family history suggest monogenic diabetes. **Monitoring common to type 1 diabetes (T1DM) and type 2 diabetes (T2DM)** • Target HbA1c level at 48 mmol/mol or lower. • Use methods to measure HbA1c that have been calibrated according to International Federation of Clinical Chemistry (IFCC) standardisation. • Offer annual monitoring for moderately increased albuminuria (ACR 3-30 mg/mmol) from 12 years, for T1DM, or from diagnosis in T2DM. Early morning urine (EMU) is preferred. A random sample can be used but carries greater risk of false positives. If moderately elevated albuminuria is detected repeat on 2 further occasions using EMU. **Monitoring specific to T1DM** • Offer HbA1c measurements 4 times a year, more if indicated. • Offer monitoring for thyroid disease on diagnosis and annually thereafter. **Monitoring specific to T2DM** • Offer HbA1c measurements every 3 months. • Annual monitoring for dylipidaemia starting at diagnosis (total cholesterol, HDL, non-HDL and triglycerides). Confirm dyslipidaemia with repeat. **Diabetic ketoacidosis (DKA)** Recommendations are made for which tests should be performed and when, for diagnosis and management.
Impact on Lab (See below)	☐ Moderate
Lab professionals to be made aware	☑ Laboratory Manager

	☑ Chemical Pathologist ☑ Clinical Scientist ☐ Biomedical Scientist

Please detail the impact of this guideline (Max 150 words)	***Changes form CG15***
	• HbA1c target of 48 mmol/mol recommended for children and young people for the first time
	• Potential for increase in HbA1c requests
	  ○ Increase recommended HbA1c measurements in T1DM without poor glycaemic control from 2 to 4 per year, to 4 times per year.
	  ○ Measure HbA1c every 3 months in T2DM.
	• Children and young people with T1DM should be offered blood ketone strips and a meter.
	• Laboratories should be aware that the management of patients is reviewed in children and young people with DKA if potassium falls below 3 mmol/L.

Impact on Lab

- **None**: This NICE guideline has no impact on the provision of laboratory services
- **Moderate**: This NICE guideline has information that is of relevance to our pathology service and may require review of our current service provision.
- **Important:** This NICE guideline is of direct relevance to our pathology service and will have a direct impact on one or more of the services that we currently offer.

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