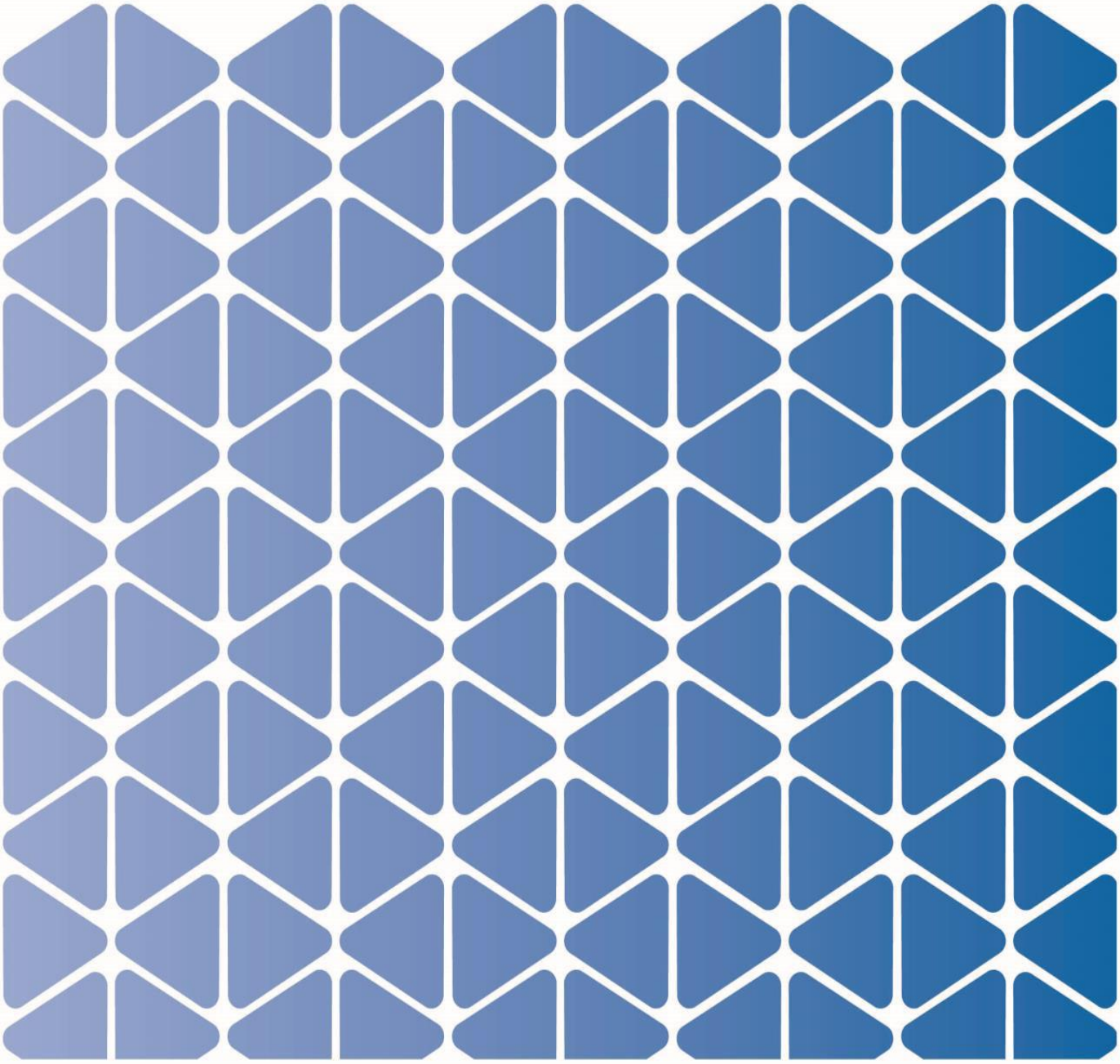
NHS
Worcestershire Acute Hospitals NHS Trust

PATIENT INFORMATION

PAEDIATRIC DIABETES – HbA1c



What is an HbA1c blood test?

The level of HbA1c (Glycated Haemoglobin) depends on the blood glucose levels during the life span of the red blood cells, which live for about 120 days. Glucose (sugar) is attached to the red blood cells. HbA1c reflects the average blood glucose during the last 3 months. It especially tells you what has been happening in the 6-8 weeks in the middle of that 3-month period.

How often should I check my HbA1c?

HbA1c should be checked every 3 months in someone with type 1 diabetes. This is done by a machine in clinic, using a finger-prick blood sample, so that you can discuss the results with your team on the day.

What should my HbA1c be?

In a person without diabetes, a normal HbA1c is 20-42mmol/mol. It is recommended that children and young people living with diabetes target a HbA1c of **48mmol/mol or below** but without experiencing lots of hypoglycaemic episodes. An HbA1c of this level can decrease the risk of long-term complications considerably. We recognise that this can be challenging to achieve, and it may be useful to look at 'The Ormskirk Model' below to think about your current HbA1c and your personal goals.

How can I improve my HbA1c?

- Monitor your blood glucose levels and adjust your insulin doses or pump settings regularly. These can be reviewed in clinic, or you can contact your nurse or dietitian between appointments for advice and support.
- If you are using a Continuous Glucose Monitor (CGM) then aim for a time in range (4-10mmol/L) of 70% or above.
- If you are on a Hybrid Closed Loop system, ensure the time spent in automated mode is >90%.
- Eat a healthy diet and take part in some form of regular physical activity.
- Monitor your injection or pump sites to ensure they remain healthy.

What if I am struggling to improve my HbA1c?

Please speak to your Diabetes Team for support and to discuss what changes can be made. If your HbA1c is 69mmol/mol or above on two or more occasions, you will be placed onto our 'Enhanced Care Pathway' with additional information, support and reviews.

THE ORMSKIRK MODEL

We understand that having the recommended 'HbA1c' or 'Time-In-Range' can be tough to achieve most of the time. To give you support to reach your goal, we have a few questions for you to consider. If you wish, we can discuss these with you in your clinic appointment.

We know there are many factors that contribute to this:

- How have you done this?
- How have you worked this out?
- What would you like to remember going ahead?

We know there are many factors that contribute to this. Do you want things to be different? If so...

- What are you doing well at the moment?
- How can the team be helpful to you and your family?
- How would you *love* things to be in 4 weeks' time?

HbA1c mmol/mol	42	48	53	57	63	68	74	79	84	89
Current HbA1C %	6.0	6.5	7.0	7.4	7.9	8.4	8.9	9.4	9.9	10.3
Approx. Time In Range*	More than 90%	80%	70%	60%	50%	40%	30%	20%	10%	Less than 10%

There are many things you are doing well, what are your thoughts on what better would look like?

- How can the team be helpful to you and your family?
- What's going well? What do you notice being helpful?
- If things were continuing in a good direction for you, what would you notice?

***Range between 3.9-10mmol/mol Battelino et al. Clinical Targets for Continuous Glucose Monitoring Data Interpretation: Recommendations from the International Consensus on Time In Range. Diabetes Care (2019)**

Guyers M, Bray D, Ng SM. The Ormskirk Model, Diabetes Care for Children &Young People (2020)

Figure 2. The new Ormskirk Model

What do we mean by complications?

Complications for young people include delayed puberty and poor growth, as well as long term complications such as eye, kidney and nerve disease. Check out the leaflet ‘all about complications’ for more information.

You can plot your own HbA1c results from clinic here:

Date	HbA1c

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.