

# In the consultation room

## Starting insulin in primary care

Gwen Hall

**Citation:** Hall G (2013) In the consultation room: Starting insulin in primary care. *Diabetes & Primary Care* 15: 104–5

### About this series

The aim of the “In the consultation room” series is to provide readers with brief, practical reviews of key aspects of diabetes care that should be covered in the clinic setting. A brief set of questions at the end allows readers to test their knowledge.

### Author’s introduction

This article is prompted by requests from health professionals, mainly GPs, to outline standards for initiating insulin in primary care. It appears that some are being “encouraged” to start insulin in 20-minute appointments. How can it be done? In my view it cannot, at least not safely. There is so much more to starting insulin than teaching patients how to do an injection (indeed, they may already know this if they have been taking a glucagon-like peptide-1 receptor agonist). Published guidance, which has been based on evidence and expert opinion, is discussed here. The article does not tackle the practicalities of initiating insulin but rather the educational process required to allow the individual with diabetes to understand the positive effects of the therapy, if it is managed effectively.

*The next article in the series will cover the practicalities of insulin initiation.*

Evidence suggests that, although GPs recognise the importance of preventing complications, in some cases they may decide to be more strongly guided by what they think their patients would want (Freeman and Sweeney, 2001). This, combined with many patients’ natural reluctance to convert to injections, may delay the initiation of insulin therapy.

All healthcare professionals initiating and managing insulin need to possess the knowledge, competencies and skills to undertake that procedure confidently. Referral to specialist services may sometimes be preferable. Initiating insulin is not easy. The complexities of the range, regimens and devices available need to be fully understood. Charts illustrating this point are available from Diabetes UK (<http://bit.ly/Yo1zJB> [accessed 11.04.2013]).

NICE (2009) states that when starting insulin therapy, we should use a structured programme employing active insulin dose titration that encompasses:

- Continuing telephone support.
- Frequent self-monitoring.

### Box 1. The new quality standards for diabetes that have been set in England (NICE, 2011).

Quality standards for the NHS will be reflected in the new Clinical Commissioning Group Outcome Indicator Set (CCGOIS) and will inform payment mechanisms and incentive schemes such as the Quality and Outcomes Framework (QOF) and Commissioning for Quality and Innovation (CQUIN) Payment Framework.

- Dose titration to target.
- Dietary understanding.
- Management of hypoglycaemia (see TREND-UK, 2009).
- Management of acute changes in plasma glucose control.
- Support from an appropriately trained and experienced healthcare professional.

To those we can add – from the NICE (2011a) quality standard (see *Box 1*) on insulin therapy (number 6) – the following:

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- Injection technique, including site selection and care (see FIT4Safety, 2012).
- Managing sick days (see TREND-UK, 2013; local guidelines should also be available).

Based on personal experience, I would add these:

- Specific guidance for drivers (see <http://www.dft.gov.uk/dvla/medical/aag.aspx> [accessed 11.04.13]).
- The insulin passport. (It is the responsibility of the prescriber to give out and discuss, as appropriate, the insulin passport, safety card and patient information leaflet. This includes when initiating insulin and giving repeat prescriptions.)
- Agreeing a care plan with shared goals and targets.

So, what constitutes “structured education”? A patient educational programme should meet five key criteria laid down by the Department of Health and the Diabetes UK Patient Education Working Group (NICE, 2011b) and by SIGN (2010):

- Evidence based.
- Quality assured.
- Built around a structured curriculum.
- Delivered by trained educators.
- Audited.

If you can cover all of this in a 20-minute appointment I would be surprised. (In some individuals you may need to incorporate the teaching of a blood glucose meter too.) Specialist nurses I have spoken to recommend between 30 minutes and an hour – depending on the needs of the individual – with frequent follow-up. More time is likely to be needed if this is something you do not do frequently, to ensure you are completely up to date with developments.

An educational module on the safe use of insulin was produced for NHS Diabetes (now rolled into NHS Improving Quality) and is recommended for all health professionals managing people with diabetes on insulin (discussed below).

### Safe use of insulin module

The *Safe Use of Insulin* e-learning module allows users to log on, complete the course, take an on-line test and print a certificate if passed. There is an assessment at the end with a pass rate of 75%

to gain a certificate (available at: <http://bit.ly/SXMoOy> [accessed 11.04.2013]).

This module was developed in response to the 2010 National Patient Safety Agency (NPSA) Rapid Response Report (NPSA, 2010). Over 16 600 patient safety incidents were reported between 2003 and 2009 in England and Wales (NPSA, 2011a).

Insulin safety training is now a requirement for all those who prescribe, prepare, handle or administer insulin (NPSA, 2010). ■

### Author's conclusion

Incorrect insulin treatment has been identified as an important cause of hospital admissions. The National Patient Safety Agency (2011b) highlights a lack of education and access to information about diabetes management including the safe use of insulin, injection technique, hypoglycaemia and hyperglycaemia as causes. Attempting to initiate insulin without adequate time to involve the individual in agreeing targets and understanding the complexities of insulin is likely to have a negative impact on long-term care. All health professionals should adhere to this guidance. Our patients are worth it.

FIT4Safety (2012) *Injection Safety in UK and Ireland; Safety of Sharps in Diabetes Recommendations* (1st Edn). FIT4Safety, UK. Available at: <http://www.fit4diabetes.com/united-kingdom/fit-safety-recommendations/> (accessed 11.04.13)

Freeman AC, Sweeney K (2001) Why general practitioners do not implement evidence: qualitative study. *BMJ* **323**: 1100–2

National Patient Safety Agency (2010) *Rapid Response Report: Safer administration of insulin*. NPSA, London

National Patient Safety Agency (2011a) *News: Passport to safer use of insulin*. Available at: <http://bit.ly/lZj8yX> (accessed 11.04.13) NPSA, London

National Patient Safety Agency (2011b) *The adult patient's passport to safer use of insulin. Supporting information*. NPSA, London

NICE (2009) *Type 2 Diabetes – newer agents (partial update of CG66) (CG87)*. NICE, London. Available at: <http://www.nice.org.uk/CG87> (accessed 11.04.2013)

NICE (2011a) *Quality standards: Insulin therapy*. NICE, London. Available at: <http://bit.ly/155pMar> (accessed 11.04.13)

NICE (2011b) *Quality standards: Structured education*. NICE, London. Available at: <http://bit.ly/11Y8mcl> (accessed 11.04.13)

SIGN (2010) *Management of diabetes: A national clinical guideline*. SIGN, Edinburgh. Available at: <http://bit.ly/9Pes37> (accessed 11.04.13)

TREND-UK (2009) *Recognition, treatment and prevention of hypoglycaemia in the community*. SB Communications Group, London. Available at: <http://bit.ly/14ZlZUm> (accessed 11.04.13)

TREND-UK (2013) *Managing diabetes during intercurrent illness in the community*. SB Communications Group, London

### Questions to test your knowledge

The answers are not necessarily found in this article.

1. NICE and SIGN recommend starting NPH insulin in type 2 diabetes when other agents fail to reach agreed targets. True or false?
2. In type 2 diabetes, insulin should be considered as third-line therapy when HbA<sub>1c</sub> is at or over 53 mmol/mol (7.0%) or another agreed target level. True or false?
3. Analogue insulins should be taken 20–30 minutes before food. True or false?
4. Active dose titration should form part of the individual's education plan. True or false?
5. It is the health professional's duty to provide an insulin passport and patient information. True or false?

Answers: 1 – true; 2 – true; 3 – false; 4 – true; 5 – true.  
It is 58 mmol/mol [7.5%] in NICE guidelines).