# Advertorial: The role of teaching and practice care management within diabetes care

n the world of diabetes care there is so much we know, but also a lot we take for granted. We need to look for ways to improve our knowledge, our practices, and our patients' outcomes.

A recent joint study, "Diabetes HCP knowledge assessment market research", has been published by research group Aequus and BD's Diabetes Care team. In order to educate people with diabetes effectively, healthcare professionals (HCPs) must themselves possess the appropriate knowledge and skills. This research was carried out to assess the current level of knowledge among HCPs.

## Who was consulted and what were the findings?

There were 113 HCPs who agreed to take part in the survey. This group was broken down into 31 GPs and 30 primary care nurses. Diabetes specialist nurses and diabetes nurse educators made up 52 of the respondents.

The survey looked at core topics including needle length; technique; the re-use of needles and lipohypertrophy.

The results showed that while there is general understanding, a lot more work and support is needed for those on the frontline of diabetes care.

#### **Key highlights**

- Across all respondents 43% of answers given were incorrect, even after using available hints.
- Knowledge levels were generally poor among GPs and Practice Nurses (PNs), especially on the consequences of sub-optimal injection technique.
- More than 60% of respondents lowered their estimation of their confidence in their knowledge of the subject after completing the survey.

Following the survey, there were very high levels of interest for additional training, and access to support tools for both HCPs and directly to individuals with diabetes. 76% of DSNs, 77% of

GPs and 81% of PNs were interested in training for HCPs on injection technique. 84% of GPs, 89% of DSNs and 92% of PNs were interested in online educations tools for those individuals with diabetes.

Healthcare professionals can help direct education where it is best placed. It is not reasonable to expect a GP to be an expert in every medical area, when they are the ones at the frontline of patient experience. We should not expect a GP to have detailed knowledge of lipohypertrophy, in the same way a neurosurgeon would not be an expert on diabetes. However, all HCPs working directly with any diabetes case load should be best placed to spot the signs of diabetes and recommend appropriate care, working with other HCPs.

The results showed that diabetes specialist nurses and diabetes nurse educators knew more about lipohypertrophy than the other two groups. They also scored highly when questioned about re-use of needles and were top in terms of technique.

Highlighting knowledge gaps is crucial in preventing complications around diabetes. Encouraging appropriate lifestyle choices, alongside proper technique, will help people with diabetes minimise the debilitating side of their condition. DSNs scored 94% in terms of knowing to educate one-use only for needles.

#### **Key highlights**

- GPs were much less likely to answer correctly than nurses, with almost four in 10 GPs thinking the optimal needle length is 6mm.
- All respondent groups were likely to overestimate the risk of an injection with 6mm needle with one in seven DSNs underestimating the risk.
- DSNs were just as likely to use a lifeline as the GPs, however most of the DSNs still answered incorrectly.

#### **Key findings – site rotation**

This is a vital part of diabetes care. In terms of



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where individuals living with diabetes should inject insulin into, almost 40% of GPs and 50% of PNs answered incorrectly, as did 30% of DSNs.

All three groups knew roughly the same when questioned on sites and rotation. When asked about site rotation, and how often individuals injecting should use the exact same injection spot, the correct answer is that the exact same injection spot should be used once every four weeks. Around a third of GPs and PNs think it is OK to re-use the same injection site each week, and more than half of the DSNs would advise to use the same site either every week or every two weeks.

Most respondents believe unsuitable needle length could be a cause of lipohypertrophy. It isn't, but incorrect rotation, wrong needle length and re-use of needles are all causes, which they understood.

### Focus and target the education at the specialists

All three groups reported a dip in their confidence on key areas following the survey and learning the correct answers, but this is important. The use of such a survey is not to criticise, it is to gain knowledge and direct learning in the right areas.

High levels of interest were expressed by all three groups in exploring online education tools and specific training from a company like BD on injection technique.

In order to educate people with diabetes effectively, healthcare professionals must themselves

possess the appropriate knowledge and skills. This research has helped identify the level of knowledge among HCPs.

All individuals with diabetes need to manage their condition but a healthcare professional, primary care provider or diabetes nurse educator can all help them learn the basics of diabetes care and offer support along the way.

However, a specialist can give the right training on needle use, and other aspects of the condition.

#### **Conclusion**

We need to support our diabetes care nurses and specialists. By increasing their knowledge, we manage all aspects of the diabetes care spectrum. Fewer complications from needle misuse and a reduction in those with lipohypertrophy means less time in a clinical setting, and reduced cost to the NHS<sup>1</sup>. The benefits will be tremendous.

BD's Diabetes Care team has a solid understanding of the patient's perspective regarding support needs, training and information required. It is also clear that there is a direct correlation between technique and health outcomes in diabetes<sup>2</sup>.

We would recommend working with injection technique trainers to help increase understanding around injecting insulin within diabetes care.

- 1. https://www.fit4diabetes.com/files/5014/0724/7845/Injection\_technique\_flier\_v7.pdf
- Smith M, Clapham L, Strauss K. UK Lipohypertrophy Interventional Study. Diabetes Research and Clinical Practice 2017;126:248–53

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