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OVERCOMING OBSTACLES AND PATIENT RESISTANCE TO GLUCOSE MONITORING

Controlling blood glucose is critical to managing diabetes, a disease that affects nearly 29 million Americans. When used properly, regular blood glucose monitoring can help patients and their healthcare professionals detect high and low blood sugar and make therapy and lifestyle adjustments to keep blood glucose in a healthy range and to help prevent or delay long-term complications.

"Unfortunately, many people with diabetes don't test their blood sugar as recommended by their healthcare professional because of psychological or emotional reasons," says Dr. William Polonsky, Associate Clinical Professor in Psychiatry at the University of California, San Diego, and President and Co-Founder of the Behavioral Diabetes Institute (http://www.behavioraldiabetes.org). "In addition, in a survey of more than 18,000 diabetes patients in the US who tested their blood glucose, nearly a third said they can't make sense of their blood sugar results.[1]"

Obstacles To Self-Monitoring

Research sheds light on the reasons why some patients are reluctant to self-monitor. Dr. Polonsky and his colleagues have asked the question: *What is so tough about self-monitoring of blood glucose?* In the first large study to investigate patient-reported obstacles to self-monitoring of blood glucose, data collected from more than 800 patients revealed three primary barriers.[2]

1. The desire to avoid thinking about blood glucose values, and more broadly, diabetes itself (**Avoidance**).
2. The belief that self-monitoring is unlikely to be of value (**Pointlessness**).
3. The sense that self-monitoring of blood glucose is an unpleasant, costly task (**Burden**).

Furthermore, Dr. Polonsky and his colleagues suggested that patients with Type 2 diabetes might be more likely to follow healthcare professional recommendations if these obstacles, particularly those of Avoidance and Pointlessness, could be addressed. A testing method that provides solutions to these issues could represent hope for improved adherence to regular self-monitoring of blood glucose.

Overcoming The Obstacles

Dr. Polonsky has found compliance can be improved by helping patients to see that self-monitoring is worthwhile. He advises healthcare professionals to personalize blood glucose monitoring to address a perceived patient need, such as the patient's concern about an elevated A1C level or to provide reassurance that the patient is making progress in controlling diabetes. In addition, he suggests structuring SMBG so

that actionable data patterns can be observed, such as testing before and after a patient's daily walk for seven consecutive days to demonstrate to the patient how exercise can have a potentially positive impact on blood glucose levels. He has found that helping patients see how testing provides useful feedback that can affect their health in a positive way can encourage regular self-monitoring of blood glucose.

Technology Can Make It Easier

The new OneTouch Verio® Blood Glucose Monitoring System from LifeScan, Inc. is an example of how new, easy-to-use tools can help people with diabetes better understand their results without any extra effort. The meter features a color-coded range indicator with high and low range limits that can be customized for each patient based on their healthcare professional's recommendations. With each test result a color is also displayed to show whether the result is within (Green), below (Blue) or above (Red) the range limits set in the meter, without the need to scroll or push buttons. When the meter displays a low result, it prompts the user to treat the low glucose result and retest in 15 minutes.

"Many people may feel overwhelmed by too much information, information that isn't clear, or simply by the day-to-day effort required to manage diabetes," explains Dr. Polonsky. "The OneTouch Verio® Meter can help patients feel more confident about managing their blood sugar by providing helpful feedback about their results and opportunities for improvement."

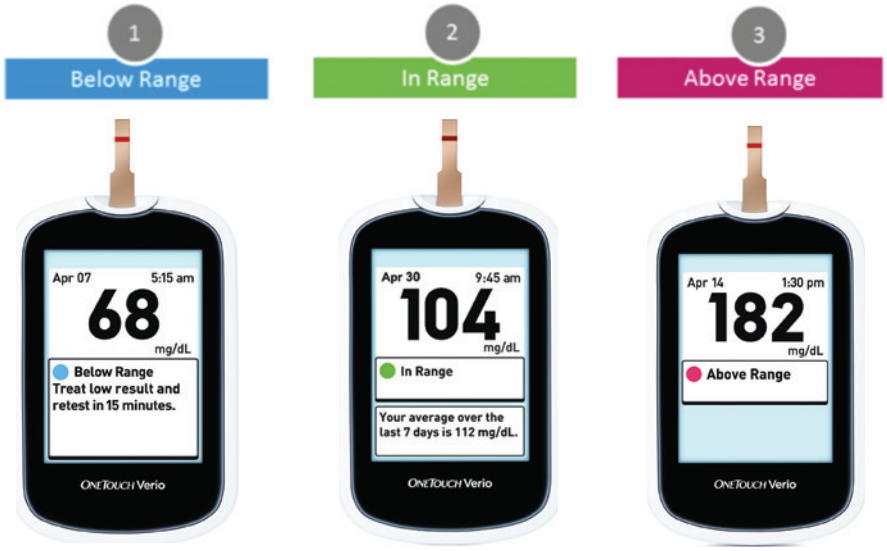
The meter also looks for signs of progress and provides positive reinforcement in the form of automatic messages that let patients know when their results are consistently in range or back in range. An "achievement" message is displayed when the current result is in range following three consecutive above range results. A "consistency" message appears when 70 percent of results in the past seven days are in range.

After using the OneTouch Verio® Blood Glucose Meter for a week, 94 percent of patients with diabetes said it made their results simple to understand.[3]

In addition, of a group of 64 healthcare professionals surveyed, 84% said they believe that the positive Progress Notes feature of the meter may encourage patients to test according to their recommendations.[4]

Conclusion

The obstacles to blood glucose self-monitoring are real, but not insurmountable. Addressing patients' personally meaningful concerns, structuring SMBG frequency so that actionable data patterns can be observed and helping patients see how that data is actionable by doing something useful with it can make regular self-monitoring worthwhile to patients with diabetes. Fortunately, new tools and technology can help remove the obstacles to self-monitoring by patients and help provide the insight and motivation to make SMBG a habit.



Default range is 70 - 180 mg/dL but it can be customized

The OneTouch Verio® features a color-coded range indicator that shows whether a result is within (Green), below (Blue) or above (Red) the customizable range limits set in the meter.

For more information about the OneTouch Verio Meter, visit www.OneTouch.com

References:

1. Survey of 18,457 U.S. diabetes patients who self-test their blood glucose, US Roper. 2011.
2. Polonsky et al, 2014.
3. Study conducted in the UK and US with 102 patients with diabetes. 2013.
4. Clinical study conducted in 2012 in the U.S. with 64 Health Care Professionals.