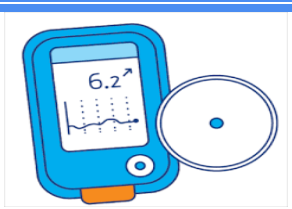
The GeriJournal



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Bloodless Glucose Levels

You've seen them advertised on TV. They are all the rage and are beginning to find their way into LTC and retirement facilities. Small plastic devices housing sensors, "installed" on the upper arm… that transmit glucose levels to an external reader. What a great idea!

The device we are seeing most often is called the Freestyle Libre®. The sensor portion is slightly larger than a toonie, and is applied to the arm using a spring-loaded applicator. The sensor has a single micro-fine 5mm needle and the product is held securely in place by an adhesive layer. Application to the back of the arm is virtually painless (very few people notice the needle prick) and the housing is waterproof so it usually remains in place without issue for its two-week usage life.

After application, the reader is held over the sensor to sync the two devices. The calibration process takes 60 minutes, then glucose levels are determined by holding the reader (scanner) over the sensor. The scanner works through heavy clothing, so readings can be taken discretely. No pricking or preparation is required and the reading appears on the screen one second after the scan. This is a huge time saver and a far more comfortable approach to measuring glucose levels. The reader also shows the glucose trend over the past 8 hours and stores all readings for 90 days.

These systems are not perfect, however. They measure glucose levels in interstitial fluid, rather than the bloodstream. It typically takes 5 – 10 minutes for levels to equilibrate between the blood and interstitial space. At times where blood glucose is changing rapidly or where hypoglycemia is expected, a blood (finger prick) reading is required. Demented residents may pick at the device and remove it, although the sensor is quite comfortable and our experience suggests this will not be a problem.

The biggest barrier to use is cost. The sensors cost roughly $100 and deactivate after two weeks. The scanner costs just over $50 and does not require replacement. An iPhone app can replace the scanner. Some third-party plans cover the device and there is a possibility that ODB may cover it one day. Facilities considering using this product will have to revise current glucose monitoring policies. This is a tremendous advance in diabetes care.

Cannabis Monitoring

Medical cannabis has become quite popular in our homes, but the monitoring process, especially at the onset of treatment, is still evolving. To ensure we are arriving at the correct dose, recognizing possible adverse effects and watching key vitals, we have created a *Cannabis Monitoring Assessment*, that can be added to PCC or MED e-care.

The form is broken up into four sections: *Indications, Therapeutic Response, Adverse Effects, and Monitoring.* Each section has several check boxes which focus on the specific reason cannabis is being used, and progress, or lack thereof, of treatment. The tool can be completed quickly, but provides invaluable information to subsequent nursing shifts as well as the prescriber. If used properly, it will prevent "overshooting" the ideal dosage early in therapy, quickly identify significant side effects and direct the nurses to perform essential monitoring.

To ensure the assessment is completed, GeriatRx can enter an assessment alert in eMAR at the appropriate frequency. We recommend daily monitoring for the first two weeks of treatment, followed by weekly then monthly for maintenance. Thanks to my nurse advisors for helping to put this together! Please contact me if you would like to begin using this tool.

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