



## **White Paper: Capturing Accurate Data at the Point-of-Care**

Long-term care facilities remain critically understaffed and overburdened with documentation requirements for reimbursement. Clinical software solutions can help manage ADL information and assist with the translation of the data to MDS documentation. However, recent advancements in point-of-care hardware systems now guarantee the accuracy of the documentation at the point of capture. These hardware solutions also reduce the time caregivers spend on repetitive tasks and give nursing staff more time to care for residents.

### **Time Is Care**

Medicare and Medicaid standards require a facility to record a full set of vital signs every shift, depending on the needs of the resident. In a typical facility, this could mean as many as 90 sets of vitals per day\* equating to 53 hours per week of staff time, using an average of 5 minutes per caregiver to record blood pressure, temperature, pulse rate and SpO<sup>2</sup>. This time investment quickly escalates for a facility with a higher census of residents with more frequent monitoring needs.

Advancements in automated vital signs (AVS) technology allow all vitals to be captured in as little as 45 seconds per patient, saving almost 45 hours per week in the example noted previously. Developments in technology allow the monitors to be fully configured, meaning the blood pressure pump, thermometer and pulse oximeter reside in one unit and can operate simultaneously.

### **Accuracy Counts**

With the industry's driving need for electronic data transfer, these AVS systems are equipped to attach a resident identification number to the data, complete with date and time of the testing and electronically pass this information to clinical software. This gives the facility not only the vital signs documentation, per federal requirements, but increases quality of care by monitoring a resident's readings over time and with the consistency AVS systems provide.

In a situation where interval or continuous monitoring is prescribed by a physician, AVS systems allow the caregiver to set alarm limits - either manually or the monitor can set patient specific limits automatically. When the monitor is in continuous monitoring mode, the caregiver is alerted if a change in the resident's BP requires attention.

More sophisticated AVS systems include inflation technology to monitor the blood pressure during inflation and ceasing to inflate at the moment of arterial occlusion rather than the standard 180 mmHg. This significantly decreases pain for frail residents, ensuring the resident stays comfortable and does not result in a false reading due to agitation.

In oscillometric blood pressure measurements, the inflated cuff detects the pulsation of the artery as a pressure oscillation. Early BP technology employed step-down deflation, which detected two matching oscillations before it deflated to the next lower pressure step. The sequence of reading was "inflate – hold to look for pressure signals –step to the next lower pressure level – hold again." Linear deflation uses a smooth continuous deflation cycle, and the oscillations are identified as the cuff deflates.

AVS monitors with linear deflation allow detection of all pressure oscillations while step deflation may "step over" the oscillations at true systole or diastole. This results in greater confidence in readings, particularly when monitoring blood pressure during hypo-or hypertension, arrhythmia, and patient movement.

## **Profit Matters**

Advanced AVS monitoring systems significantly reduce the time required to take and document vital signs, allowing caregivers more time for other tasks. The fully configured rolling carts reduce out of pocket expense for broken or lost manual equipment and most importantly, they enhance patient documentation to meet regulatory requirements and increase Medicaid reimbursement.

\* Assumes 20 Medicare residents and 10 residents with ABT requirements.