

**CONTINUOUSLY MONITORED PERIPHERAL IVs:  
A NEW ALTERNATIVE IN VASCULAR ACCESS  
A SMARTER WAY TO MANAGE COSTS & RISKS**



## THE NEW OPTION

In recent years, peripherally inserted central catheter (PICC) lines have been the preferred option for delivering irritant or vesicant infusions safely. Peripheral IVs (PIVs) were used less often due to their risk of undetected extravasations. Now, there is a new option that allows the use of PIVs for the delivery of vesicant and irritant drugs more often. An around-the-clock monitored peripheral IV can be an appropriate alternative to PICC lines for many patients. When clinically indicated, a continuously monitored PIV can provide a less intrusive and less costly means of vascular access, potentially reducing the harm and costs associated with catheter-related blood stream infections (CRBSIs), a well-documented risk for PICC patients. Controlling this hospital-acquired condition is also important in helping hospitals avoid reimbursement penalties.



## PICC LINES ARE BEING OVERUSED

### 2 IN 5

The approximate number of PICC line uses that are rated “inappropriate” compared with that of other venous access devices.<sup>1</sup>

### 1 IN 4

PICCs are removed within five days of insertion, even though PICCs are intended for longer term use.<sup>1</sup> Studies have found that PIVs can last longer than four days without an increase in complications.<sup>2</sup>

## BLOODSTREAM INFECTIONS INCREASE COST, DECREASE REIMBURSEMENT

A single case of CRBSI, such as a central line associated blood stream infection (CLABSI), can:



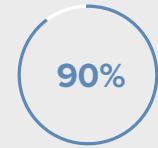
Extend hospital stays by **7-20** days<sup>3</sup>



Add up to **\$56K** in additional costs<sup>3</sup>

**CLABSIs** and other hospital-acquired infections, such as surgical site infections, **can reduce reimbursement** by the Centers for Medicare and Medicaid Services (CMS) **by as much as 1%**.<sup>4</sup> Medicare estimates that an upcoming 1% payment cut for a group of 758 hospitals will cost the hospitals a total of **\$364 million**.<sup>5</sup>

## INTRUSIVE DEVICES CAN CAUSE PREVENTABLE HARM



of catheter-related bloodstream infections are caused by central venous catheters (CVCs), including PICCs<sup>6</sup>



of patients who acquire CRBSIs die<sup>7</sup>

## BE PICKY WITH PICC LINES

Examples of patients where a continuously monitored PIV could be an option:\*



80-year-old requiring immediate anticonvulsant medication due to seizure



50-year-old having knee replacement, requires intraoperative anesthesia and post-operative pain medication and hydration



25-year-old with autoimmune disease, requires monthly infusions

## BENEFITS OF USING A CONTINUOUSLY MONITORED PIV



### Reduces Patient Risk:

Since many vesicants and irritants continue to be administered through PIVs, around-the-clock monitoring provides an aid in the early detection of infiltrations. Plus, PIVs have a 40-fold lower risk of bloodstream infection than more invasive, longer dwelling vascular access devices (VADs).<sup>8</sup>



### Reduces Staff Hours:

A continuous monitoring device for peripheral IVs can aid clinicians in the early detection of infiltrations compared to the tactile and visual inspections that are the current standard of care.<sup>9</sup> Early detection can help reduce the time associated with managing infiltration injuries.



### Improves Patient Experience:

A continuous monitoring device for peripheral IVs gives providers more therapy options. Including patients in the decision to avoid a port or PICC when medically appropriate could enhance the patient's experience and satisfaction.

# IS YOUR HOSPITAL EFFECTIVELY MANAGING COST AND RISK?

**\$690**

PICC cost/case<sup>10</sup>



**984**

The average number of PICC lines placed in a 300-bed hospital each year<sup>11</sup>

**\$24/day**

cost of PIV with continuous monitoring per 24 hour dwell time

**\$61-\$69**

cost/case of PIV without continuous monitoring<sup>2</sup>

If 43% of PICC lines are deemed "inappropriate" compared to other venous access devices,<sup>1</sup> that represents over **\$291,000** spent unnecessarily each year. This does not include cost savings from avoided CLABSI risks.



ivWATCH  
MODEL 400

## The Solution: Around-The-Clock Continuous Monitoring

- A medical device that uses an optical sensor to continuously monitor fluid delivery near the IV site
- Capable of detection in under 3ccs<sup>9</sup>
- Visual and auditory notifications through a monitor attached to the IV pole
- Technology identifies patient motion to minimize alarm fatigue
- 96% accuracy in detecting infiltrations<sup>9</sup>



[www.ivWatch.com](http://www.ivWatch.com)

[sales@ivwatch.com](mailto:sales@ivwatch.com)

1-855-489-2824

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