



# WatchCare™ Incontinence Management System

Information that elevates care.

# The WatchCare™ Incontinence Management System provides caregivers with real-time incontinence detection and is designed to:



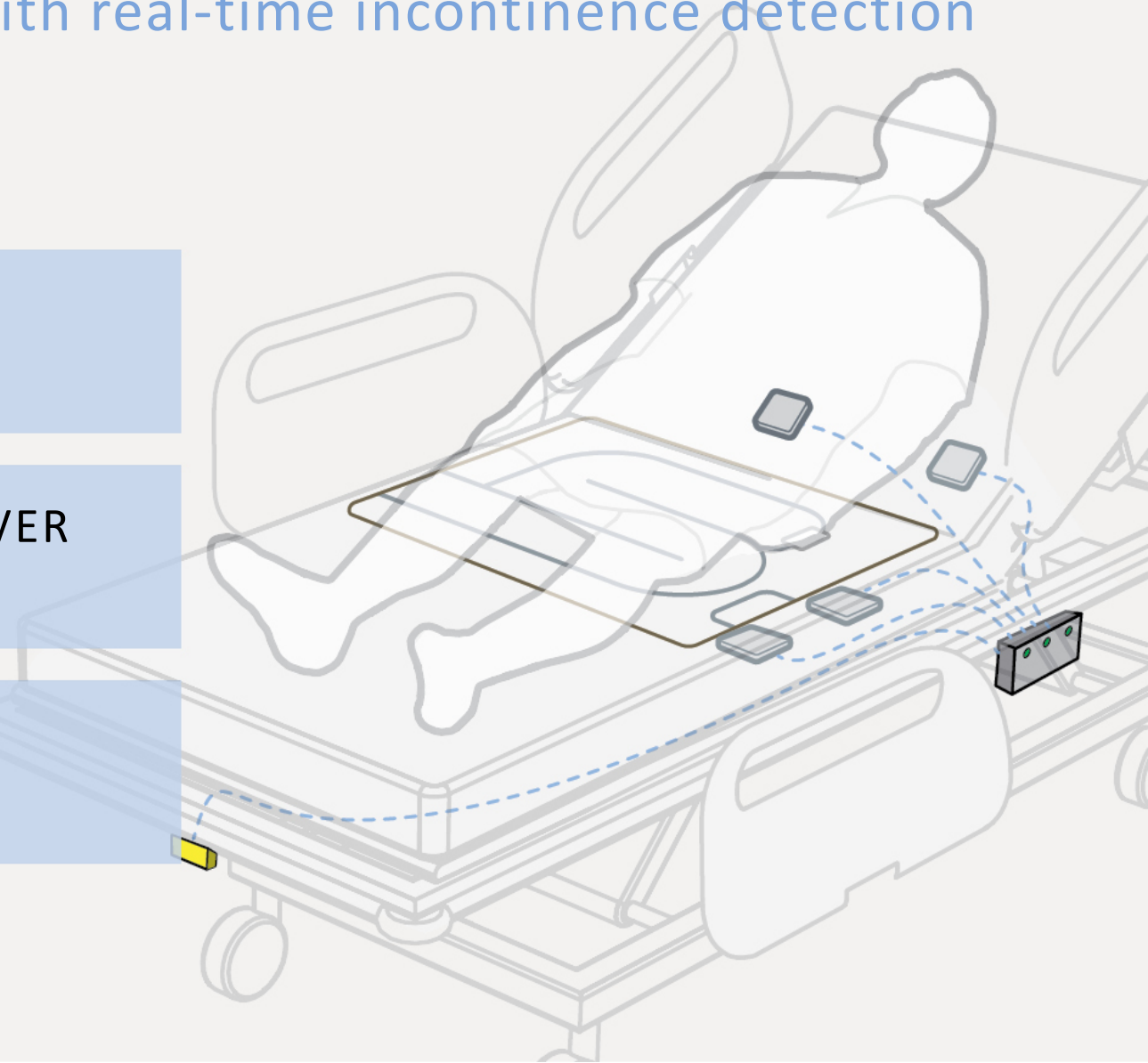
**PROTECT  
PATIENT'S SKIN**



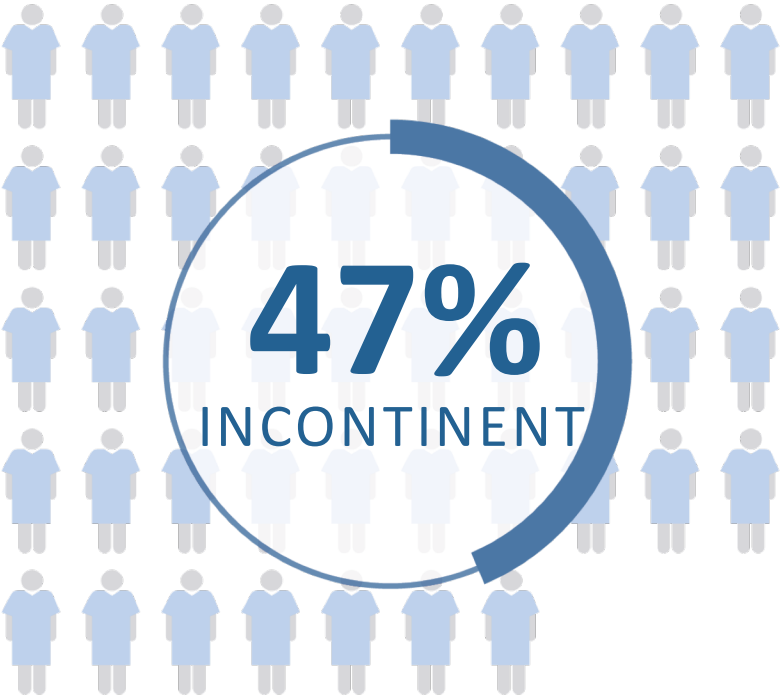
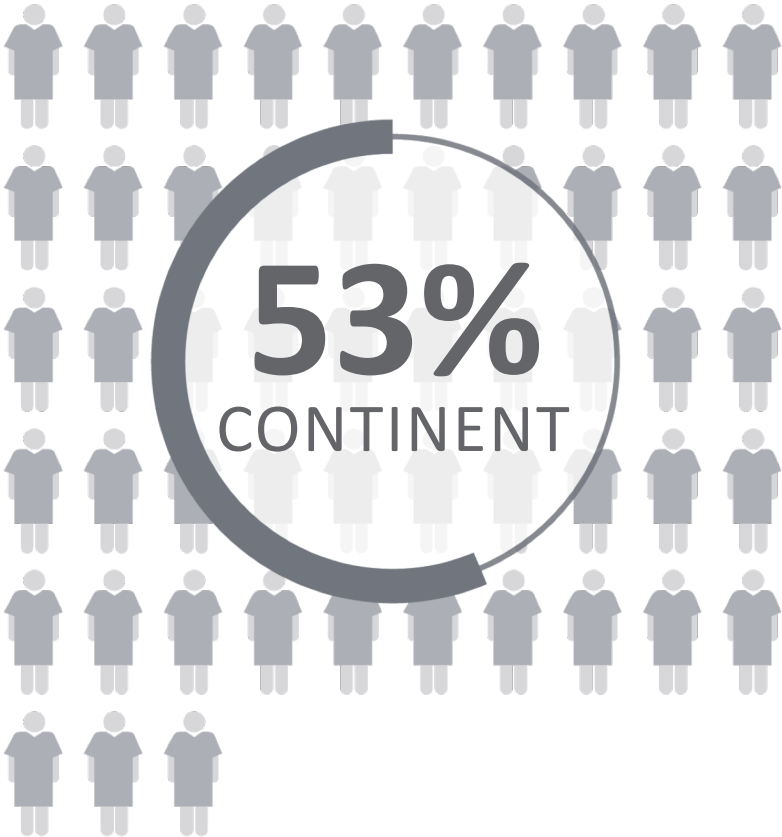
**OPTIMIZE CAREGIVER  
EFFECTIVENESS**



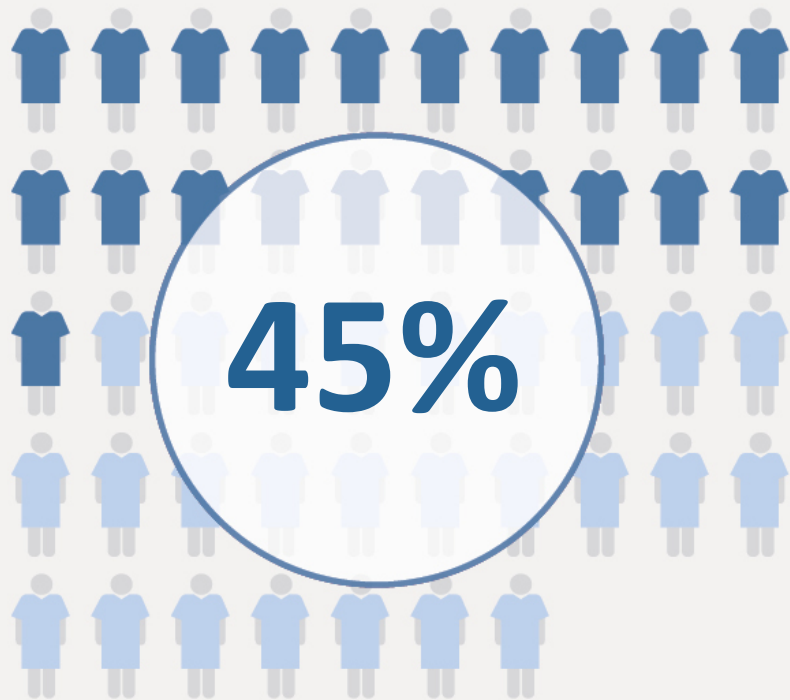
**IMPROVE PATIENT  
EXPERIENCE**



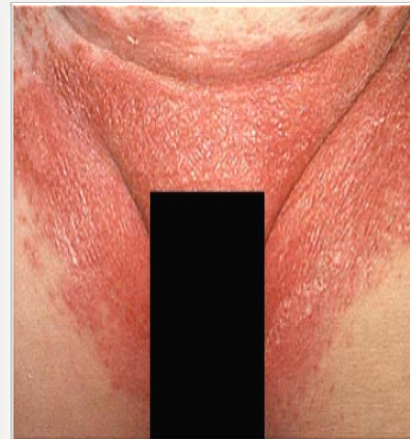
# Incontinence is common in the hospital setting.<sup>1</sup>



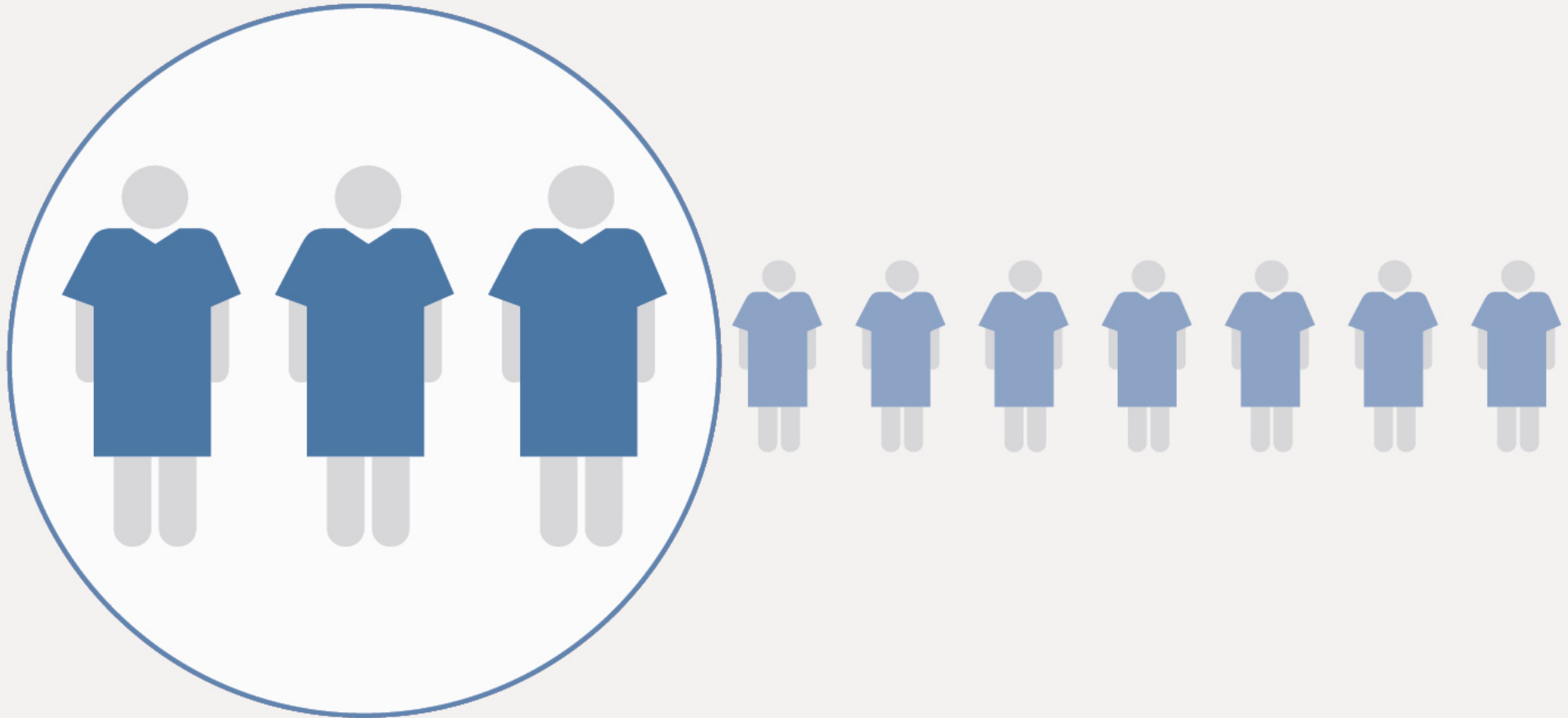
45% of incontinent patients have IAD during their hospital stay:<sup>1</sup>



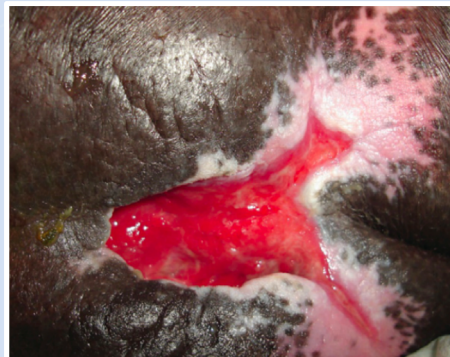
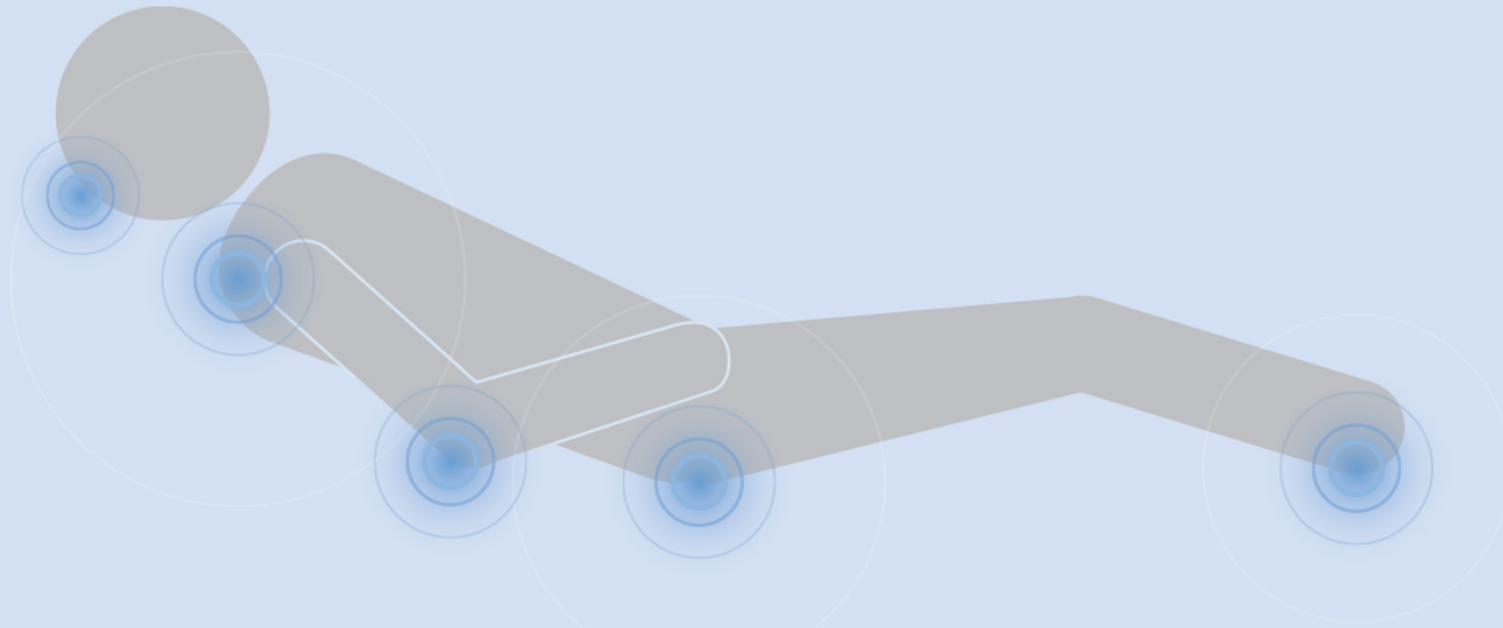
IAD: INCONTINENCE ASSOCIATED  
DERMATITIS



29.7% of patients with IAD have urinary incontinence alone:<sup>1</sup>



# IAD functions as an independent risk factor for pressure injuries:



# Incontinence Detection and Hourly Rounding

Rounding does **NOT** appropriately address incontinence and incontinence interferes with hourly rounding.

**Staff begin to worry about patient experience and skin health 10 minutes after an incontinence event.<sup>2</sup>**

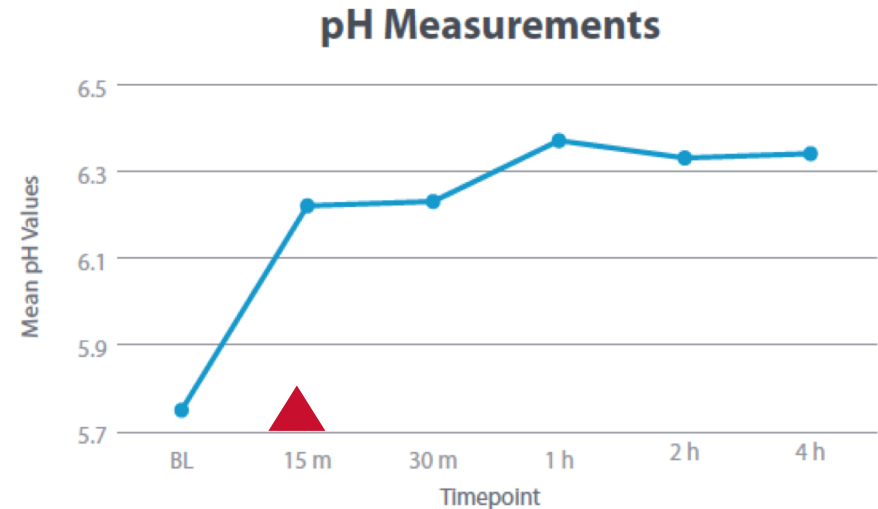
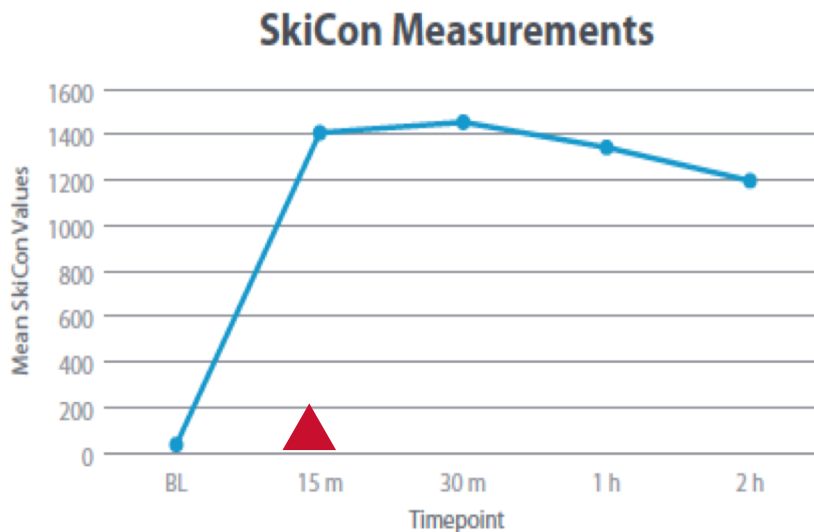
“ WOULD YOU WANT TO LAY IN YOUR OWN EXCREMENT?<sup>3</sup>

HOURLY ROUNDING IS NOT ENOUGH.<sup>4</sup> ”



# Single Exposure to Clinically Relevant Levels of Moisture Contained by an Incontinence Pad Compromises Skin Health

Studies have shown that *skin is compromised within 15 minutes* of exposure to a single event.<sup>5</sup>



**70%** experienced skin irritation **WITHIN 1 HOUR.**



# Evaluation of an Incontinence Management System in the Critical Care Environment: A Case Series



## Evaluation of an Incontinence Management System in the Critical Care Environment: A Case Series

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### ABSTRACT

Exposure to urinary and/or fecal incontinence is high risk for patient skin breakdown. This study evaluated an incontinence management system (IMS) that detects urine and liquid fecal events which are used to notify hospital care team (Nurses). After using the incontinence management system over 10 patients, the research team conducted FIM and patient surveys. This case study demonstrates that the incontinence management system was effective in detecting patient incontinence events, reducing exposure time, and reduced staff and family satisfaction. Staff felt the system improved workflow for patient care and reduced the time spent on IAD. The system developed on patients using the system demonstrating the incontinence management system when used in conjunction with existing incontinence standard of care practices, can be used as a tool to help prevent incontinence associated skin breakdowns in critically ill patients.

### BACKGROUND

Prevalence of urinary and/or fecal incontinence is 55% in the hospital environment.<sup>1</sup> Exposed to incontinence puts patients at high risk for painful and costly skin breakdown events (e.g. IAD and ICL).<sup>2</sup> To promote skin health and preserve patient dignity, incontinence events should be recognized and reduced exposure. However, this is a significant challenge since staff do not know when incontinence events do occur. Our facility is a Magnet Level II and used a new incontinence management system that employs FIM technology to provide real-time notification of patient incontinence events (urine and liquid events).

### SIGNIFICANCE AND PURPOSE

The purpose of this presentation is to share our preparation and implementation of the incontinence management system and provide specific patient outcomes. We explored how real-time notification of incontinence events allowing timely action to be taken helps improve patient health in the acute and gastrointestinal through collection of IAD and ICL incidence surveys.

### METHODS

Following IRB approval (CHI Health Institutional Review Board Approval # 20190412), ten (10) incontinence management systems (IMS) were implemented in the study. The incontinence management system was used for at least 48 hours (minimum length of stay for Neuro-ICU). Staff notified of patient ICL through nurse call and display lights at foot of the bed, responded per standard hospital guidelines. Staff provided product feedback and members of the research team conducted FIM (Functional Independence Measure) incontinence event exposure time (the time taken from when a pad is wet or soiled to when the pad is replaced) and collection. Specific patient outcomes are described (Exposure time data and IAD and ICL incidence data are summarized).

### CASE SERIES OUTCOMES

In 10 patient cases:  
 - 79 incontinence events detected  
 - Average incontinence event exposure time 9 minutes, 16 seconds  
 - Baseline score on satisfaction:  
 High Risk: 4 subjects  
 Moderate: 2 subjects  
 Mid: 3 subjects  
 Low Risk: 1 subject  
 - No new cases of IAD  
 - 15 episodes of ICL resolved while utilizing the system  
 - 15 episodes of ICL with skin tears identified at the time of enrollment

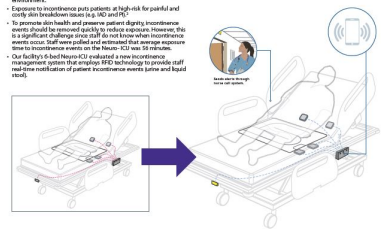
### CONCLUSIONS

The incontinence management system demonstrated clear improved staff workflow and preserved patient dignity for overall higher quality of care for patients with urinary and/or fecal incontinence. Decreased exposure time has been suggested as the most important factor for development of incontinence associated skin damage.<sup>3</sup> Average incontinence event exposure time with the system was 9 minutes 16 seconds, compared to the estimated 15 minutes standard of care prior to system implementation.  
 - No new cases of IAD developed demonstrating that the system was an effective tool when used with existing incontinence standard of care practices. The high prevention of incontinence associated skin breakdown in the patient. Continue education and support continue to be provided to the patient. Continue education and support continue to be provided to the patient.  
 - In our patient, the system provided a less invasive option in comparison to a Foley catheter because staff could respond more quickly.  
 - The incontinence management system provided a voice for these patients when they could not have had one otherwise. To assist the patients were unable to voice the need for a Foley due to the system.  
 - Patients' family members expressed appreciation that the system allowed for patient needs to be addressed in a timely manner.

### REFERENCES

1. Linderbach S, Nelson, Evensen S, VanDalen C. Prevalence of urinary and fecal incontinence in the hospital. J Wound Ostomy Continence Nurs. 2016;43(1):1-7.
2. Gray M, Bechtel D, Blum DC, et al. Incontinence-associated dermatitis: a comprehensive review and update. J Wound Ostomy Continence Nurs. 2012;29(10):74-78.
3. Gray M, Black M, Bechtel D, et al. Malnutrition associated skin damage: overview and pathophysiology. J Wound Ostomy Continence Nurs. 2013;30(2):131-41.

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Presented at 2019 NPUAP Annual Conference

## Case Study Highlights:

- Neuro-ICU
- Measured 10 patients, 79 incontinence events
- Decreased Exposure Time: 54 minutes → 9 minutes
- No new/worsening cases of IAD

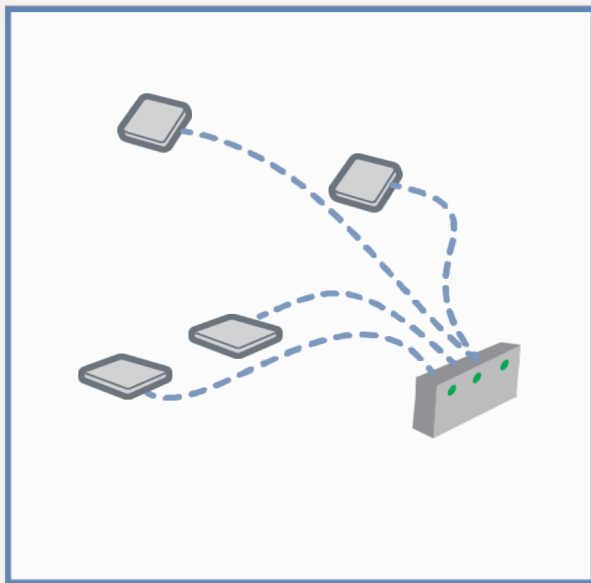
The incontinence management system **prioritized care**, improved staff workflow and **preserved patient dignity** for overall higher quality of care for patients with urinary and/or liquid fecal incontinence.

- Provided a less invasive option in comparison to a Foley catheter
- Provided a voice for the patient
- Patients' family members expressed appreciation

# WatchCare™ Incontinence Management System:

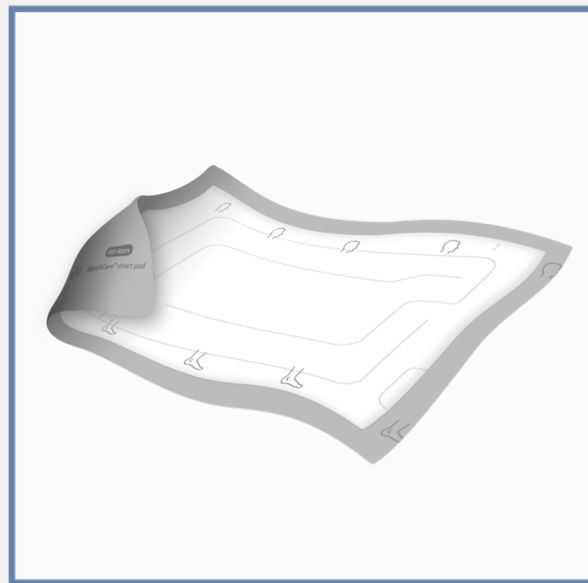
## HOW IT WORKS

### MONITOR



Monitoring system installs under the mattress on VersaCare® and Progressa® beds.

### DETECT



Absorbent smart pads detect moisture and alert the system.

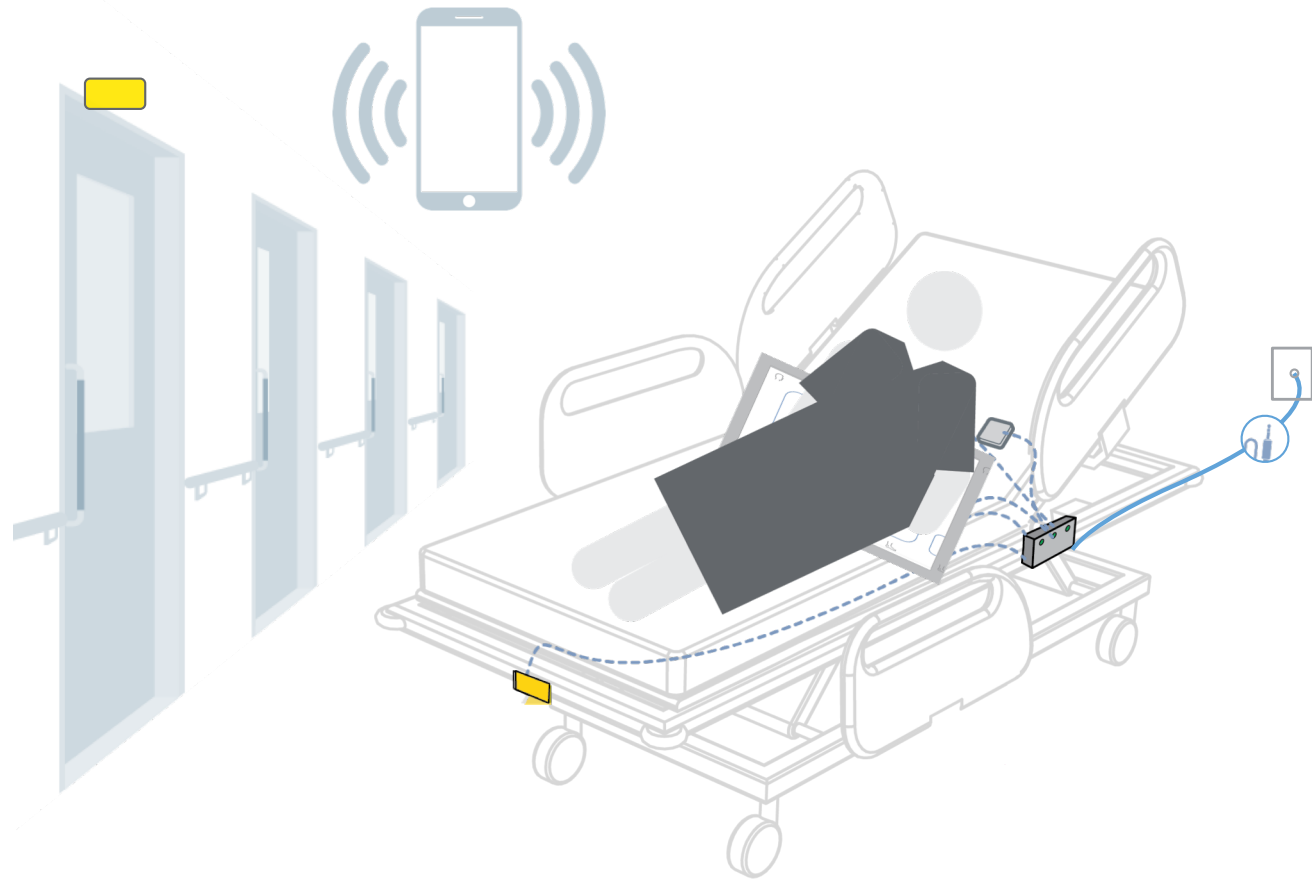
### INFORM



Customizable notifications enable prompt, individualized care.

# WatchCare™ Incontinence Management System:

## HOW IT WORKS



Information that Elevates Care.

# References

1. Gray M and Giuliano K. J Wound Ostomy Continence Nurs. 2017;00(0):1-5.
2. Hill-Rom Market Research, Jan 2016, n=202.
3. Product Concept Confirmation, June 2014.
4. Early Concept Feasibility 2015.
5. Phipps L, Gray M, Call E. Single Exposure to Clinically Relevant Levels of Moisture Contained by an Incontinence Pad Compromises Skin Health.