

# Transform Infection Prevention and Control competency with evidence-based VR simulation

"practice makes perfect" is no less true in healthcare than any other human activity\*

\*Inspired by bibliography of academic research behind RQI approach



### Hospital Associated Infections: A global challenge

Healthcare-associated infections (HAIs) are a major cause of death and financial burden worldwide. They impact patient care and cost hospitals billions in fines, penalties, extended stays, and readmissions.

The CDC has initiated Project FirstLine to provide innovative and accessible infection control education for all frontline healthcare workers. As part of the project Emory University, Relias and InceptionXR have partnered to develop cutting edge Infection Prevention and Control (IPC) VR education programs, leveraging immersive learning to reinforce and retain IPC competency.

### Continuous assessment and reinforcement of IPC practices

Specific skills become natural, when repeated until mastery is built. Therefore, there is a clear need for frequent assessment and reinforcement of IPC protocols and knowledge. As such, this unique IPC VR program is implementing knowledge retention best practices and adult learning principles: Assessing, training, applying, and reassessing skills.

## Achieving high IPC competency levels with VR

Ensuring IPC competency given current nurse workforce issues remains one of healthcare's biggest challenges.

VR simulation can help drive consistency in IPC approaches across units, hospitals, and states, enabling the frequent practice of protocol-based scenarios combined with real-time feedback.

This creates an efficient, scalable and highly effective training program that can help hospitals' better meet regulatory and compliance requirements.



#### A fresh approach to driving consistent IPC practices over time – adopting learnings from RQI approach

#### **Best-practice methodologies**

- Applies adult learning principles with highly relevant "hands-on" scenarios that are applicable to nurses' real-world environments
- Objective scoring more reliable than human observers or student self-assessment

#### **Designed for nurses**

- Convenience a convenient VR training cart that can move from unit to unit, enabling time efficiencies and short sessions
- Preference for on-going vs one-off instructor led learning

#### Low dose, high-frequency

- Literature demonstrates improved learning from frequent low dose vs comprehensive all at once
- Quarterly training cycles with 15-30 minutes sessions, maximizing retention and competency levels

#### One off training is not enough

 Competency levels more than doubled (26-65%) when nurses were retrained 3 times over 6 months

## Use VR simulation to safely practice 8 scenarios with growing complexity around IPC practices

- Each scenario involves two common medical procedures
- Scenarios for both adult patients and pediatrics
- Deep analytics and integration with 3rd party LMS

- Training, assessment and analytics
- ✓ Realistic interruptions resulting in cognitive burden
- Additional scenarios are added regularly
- Scoring and a personalized feedback around levels of cross contamination and IPC protocols

## Better IPC training and measurement can deliver tangible benefits across the board



Reduced HAIs implications and deaths



Improved hospital star rating and performance measures



Reduced HAIs related fines, penalties and readmissions



Reduced cost of nurse turnover





A world leader in immersive learning technologies For more information go to: <u>www.ipcxr.com</u>