



In 2022, Intermountain Health's Peaks Region, formerly SCL Health, faced high nurse turnover and resource-straining onboarding processes. To address these challenges, a revamped onboarding strategy was implemented, featuring a standardized approach and the integration of Amplifire's adaptive e-learning platform. This overhaul was aimed at enhancing efficiency, reducing training time, and improving patient outcomes.



# **GOALS**

- Reduce nurse turnover
- Decrease onboarding strain
- Improve hospital-acquired conditions (HACs) rate

# **KEY OUTCOMES**

- 50% reduction in training hours amounting to 1,836 hours saved in 2023
- Improved clinical outcomes including 69% reduction in CLABSI rates and 26% reduction in HAPI rates
- Increased employee satisfaction, resulting in 0% first-year turnover for new graduate nurses in 2023

# BACKGROUND

Before 2022, Intermountain Health's Peaks Region (formerly SCL) was seeing large turnover in its nursing staff, and nursing leadership found that onboarding was overwhelming their resources. "It was taking almost two months to get a nurse ready to provide care in a way we knew would be consistent with best practices," said Amanda Feild, Regional Director, Nursing Operations, Intermountain Health. A 2023 study by the American Medical Group Association (AMGA) found that ineffective onboarding practices were a major factor contributing to higher turnover rates in the healthcare industry. "Over 65% of healthcare employers reported that new hires felt overwhelmed by the onboarding process, with the complexity of training and credentialing being a significant barrier to early engagement." (Source: AMGA, 2023)

Intermountain Health's goal was to prevent hospital acquired conditions (HACs) and provide the best patient care possible. Unfortunately, they had problems with several HACs, including central-line associated bloodstream infections (CLABSIs) and hospital-acquired pressure injuries (HAPIs). Feild noted that they're "taking all this time and still not preparing nurses the way [they] knew [they] needed to. It wasn't working." Additionally, Feild expressed concern that "over 60% of our workforce has less than two years of clinical experience." This results in the team having to onboard these novice nurses, upskill them, and empower them to be competent to care for their patients.





# INTERMOUNTAIN HEALTH'S ONBOARDING OVERHAUL

As a result, Intermountain Health implemented sweeping changes to their onboarding program at St. Joseph's Hospital. This process began in 2021 with a two-day event involving unit educators that was held to standardize the onboarding process for new nurses, leading to the creation of a Clinical Welcome Class at St. Joseph Hospital. Spearheaded by the Project Manager for Nursing Professional Development, the educators met monthly to review feedback and refine the content. The comprehensive, evidence-based approach enabled nurses to stay current with patient outcome initiatives, while allowing unit educators more time to support novice nurses directly on the units and engage in creative, hands-on education methods like roaming skills fairs, interactive videos, and escape rooms. It also allowed for dedicated onboarding time. The new approach was rolled out in January, 2022, onboarding 468 people throughout 2022. *What were the immediately observable results?* 

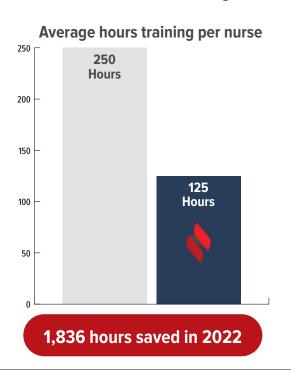
"After just a handful of people had been onboarded under the new procedures, we knew we had created a new process that could be sustained, providing high quality onboarding as well as giving time back to our unit educators. The time savings was so dramatic, and so consistent...it was clear we'd at least made the process much more efficient."

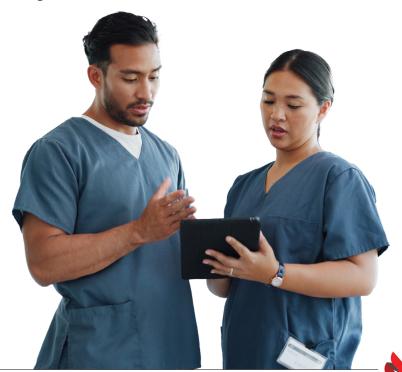
—Amanda Feild.

Regional Director, Nursing Operations,
Intermountain Health

Before the rollout, Intermountain Health's onboarding took approximately 250 hours per nurse. After, it took approximately 125 hours per nurse—a 50% reduction in training time. All those saved hours could be spent treating their patients, instead. Given how many people they onboard, **the savings from orientation totaled 1,836 hours in 2023 alone.** 

Unit educators also benefited from this more efficient onboarding. They became able to run onboarding classes once every five weeks as opposed to several times per week, saving each NPD approximately 24-32 hours of onboarding each month. They were able to then leverage these hours to provide hands-on support and education for nurses—instead of being stuck onboarding.







# CRITICAL COMPONENT: ADAPTIVE E-LEARNING

A key component of the new onboarding protocol was the implementation of our adaptive e-learning platform based on the science of how people actually learn—not how people *think* they learn. Our adaptive learning platform uses patented, cognitive science techniques to enhance retention and unlock the brain's full potential. The adaptive algorithm watches each learner's starting levels of knowledge, uncertainty, and misinformation and adjusts which areas they need to focus on. It cuts learning time in half (sometimes more) by treating each learner as an individual.

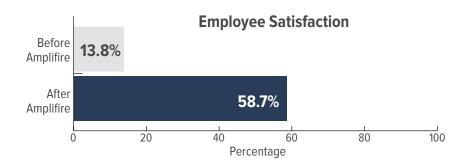
"One of the most important things we learned in interviewing nurses who went through the old onboarding was how they felt their previous knowledge was not considered in the onboarding process," Feild said.

The Amplifire adaptive online learning modules that were incorporated with the new onboarding process included Infusion Pump Competency, CAUTI Prevention, CLABSI Prevention, Fall Prevention, and more. One advantage provided by our system was its ability to provide granular data on each learner's knowledge. Completing an Amplifire training module reveals the initial state of the learner's knowledge along with their struggle and interruptions, ensuring they get to mastery.

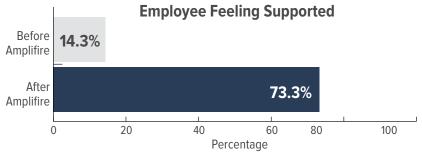
Providing nurses with dedicated training time, rather than requiring them to fit it in around patient care and other duties, enhances their focus and effectiveness. Before the implementation of dedicated training time, nurses were interrupted on 4.39% of their interactions with Amplifire—almost double the typical rate. This makes sense;

training was competing with patients' call-button presses, EHR notifications, calls from other departments, requests from other staff, and more. But with time slots dedicated to training, nurses were interrupted on only 1.75% of their interactions with Amplifire.

Unsurprisingly, this 60% reduction in interruptions was accompanied by an increase in employee satisfaction.



Before the onboarding overhaul, new graduate nurses reported a 13.8% satisfaction rate with their onboarding whereas in 2023, 58.7% satisfaction was reported. The same evaluation showed they felt more supported from 14.3% at the start of the overhaul to 73.3% in 2023." As a result, in 2023, Intermountain saw 0% first-year turnover for 120 new graduate nurses, and the turnover rate has sustained at 22%.







### BROADER ROLLOUT

Because Amplifire courses are designed using brain science, they deliver knowledge quickly and effectively. Given their success with the improved onboarding process by reducing distractions, providing learners' knowledge data, and ultimately improving efficiency, Intermountain Health decided to expand these short, impactful courses for broader use. Two examples of courses implemented in this broader rollout include CLABSI and HAPI, among others, each addressing critical areas of healthcare quality and patient safety.

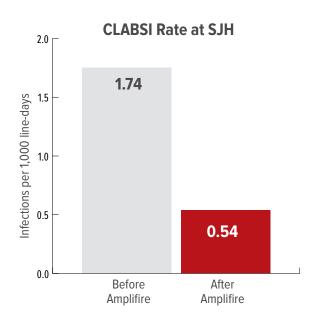
#### **CLABSI**

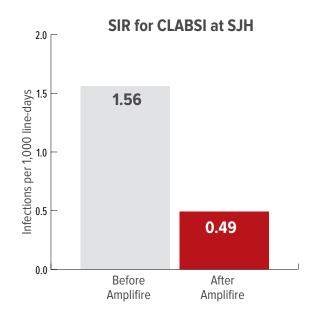
Intermountain Health quickly realized that they couldn't afford to use Amplifire only with new hires. Amplifire training was therefore deployed hospital-wide at SJH. To date the Amplifire CLABSI (central line-associated bloodstream infections) course has been completed by 1,169 SJH nurses.

The need for this training was clear from the data collected by the Amplifire platform during learning. Nurses were only confident and correct on about 56% of the material when they began the modules. They had confidently held misinformation on 22% of the material. In other words, on almost a quarter of the concepts critical to preventing CLABSIs, nurses were wrong...but were sure they were right. (An Amplifire course cannot be completed until all concepts reach a state of mastery, where the nurse is both confident and correct.)

Again, despite only taking under 40 minutes, the CLABSI training in Amplifire helped nurses take better care of patients. The CLABSI rate at SJH dropped from 1.74 to 0.54 infections per 1,000 line-days—a 69% reduction. The SIR (Standardized Infection Ratio) for CLABSI also dropped by 69%, from 1.56 to 0.49. CLABSI training is now being rolled out beyond SJH, and 3,566 learners have completed it to date.

### 40 minutes of CLABSI training in Amplifire completed by 1,169 SJH nurses





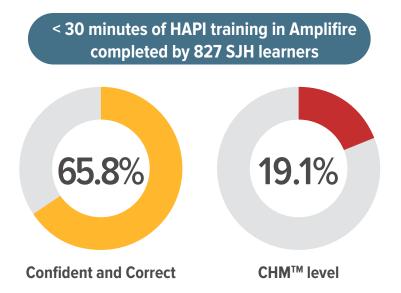


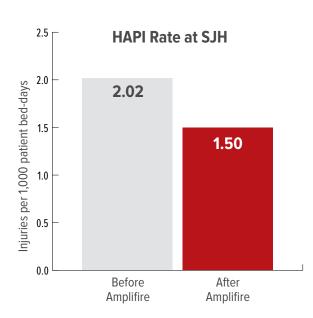


#### HAPI

The success of the CLABSI rollout also convinced Intermountain Health to use other Amplifire courses hospital-wide at SJH. Amplifire's HAPI (hospital acquired pressure injury) course was rolled out in 2023 and has been completed by 827 learners at SJH. In this course, SJH nurses were initially confident and correct on 65.8% of the material. Their Confidently Held Misinformation™ level, on the other hand, was 19.1%. These are both substantially better than the CLABSI numbers but still represent significant knowledge gaps and areas of dangerous overconfidence.

The HAPI course in Amplifire targeted nurses' CHMTM, just as in the CLABSI course. And, as with the CLABSI course, HAPI was substantially reduced. Before Amplifire was rolled out, the HAPI rate at SJH was 2.02 injuries per 1,000 patient bed-days. After most nurses had been trained, the HAPI rate dropped 26% to 1.50. This represents an expected drop in HAPI count by 3.72 annually at just one location, from a course that takes less than half an hour.





# CONCLUSION

Intermountain Health's overhaul of its nursing onboarding process has dramatically improved efficiency and patient outcomes. By adopting a standardized approach and using Amplifire's adaptive e-learning, training time was cut by 50%, freeing up hours for patient care. Nurses now spend less time in orientation and more time delivering quality care, thanks to personalized, gap-focused training that addresses knowledge gaps and misinformation. Additional courses that were incorporated into the new onboarding process included Infusion Pump Competency, CAUTI Prevention, CLABSI Prevention, Fall Prevention, and more.

This streamlined approach has already yielded significant improvements in clinical outcomes. For example, the CLABSI training, completed in under 40 minutes, helped reduce the CLABSI rate at SJH by 69%, from 1.74 to 0.54 infections per 1,000 line-days, with the SIR also decreasing by 69%. The success of this course led to the expansion of other Amplifire training, including the HAPI course, which resulted in a 26% reduction in the HAPI rate, from 2.02 to 1.50 injuries per 1,000 patient bed-days. With over 3,500 learners completing the CLABSI course and 827 nurses trained in HAPI, these results showcase the effectiveness of Amplifire's approach, driving faster onboarding, smarter learning, and better patient outcomes—serving as a model for other healthcare organizations.

