

Case Study

UCSF Benioff Children's Hospital sees 70% reduction in nurse training cost with Elemeno Health

Introduction

UCSF Benioff Children's Hospitals constitute the largest network of pediatric care providers in Northern California, with two main campuses in Oakland and San Francisco, as well as satellite locations throughout the region. Serving tens of thousands of infants, children, teens, and young adults from all over the world, UCSF Benioff Children's Hospitals are consistently ranked among the nation's best. They deliver care covering all pediatric conditions, including rare and serious illnesses.

Challenge

- Hospital opening a new PICU required proper staff training.
- Deliver education and orientation in a dramatically shorter time period than initially anticipated, while maintaining high quality of information, retention, and engagement.

Solutions

- Provide pre-training for PICU nurses in advance of drastically shortened in-person orientation.
- Partner educators with vendors and virtual consultation to create highest quality content, reducing variation in practice.
- Provide ongoing post-training support.

Results

- 70% reduction in nurse training cost.
- 66% reduction in training time.
- No overtime or backfilled positions.

UCSF Benioff Children's Oakland PICU Required High Quality, Efficient Nurse Orientation

In September 2021, the hospital campus in Oakland (“BCH-OAK”) opened a new 23-bed pediatric intensive care unit (PICU). This required that the hospital provide training to orient 75 nurses to the new unit. In 2015, when the hospital opened a 20-bed PICU at their San Francisco campus, this involved a four-day staff training period. This type of mass orientation presents several challenges to the hospital. Training staff is costly: nurses receive full pay and benefits during the orientation period but are not able to simultaneously perform typical work duties. This means that the hospital must additionally backfill for those positions, finding temporary replacements using travel nurses or paying staff overtime, which involves logistical overhead to reorganize staffing and ensure coverage, as well as more budget.

If this process is not performed correctly, this can result in under-trained nurses, staffing shortages, and overworked employees, ultimately resulting in a lower standard of care for patients. Furthermore, inadequate training reduces staff morale, and promotes inconsistencies between nurses, which is amplified by transitioning to a new unit. Learning something new while also confronting an unfamiliar environment means that under-trained staff are not confident in their new setting which can lead to negative patient experience and safety issues.

BCH-OAK was initially allotted time and budget for three days of training to orient their 75 nurses to the new PICU. However, due to budget cuts, a reduction in in-person classes as a result of COVID, and a national shortage of traveling nurses for replacement needs, this was shortened to just one day allotted to training. BCH-OAK needed to deliver education and orientation in a drastically shorter amount of time than originally anticipated, while maintaining high quality of information, retention, and engagement.

Flexible Training Modules Consumed Conveniently and Asynchronously

BCH-OAK already successfully used the Elemeno Health solution for other types of hospital training, such as in-service trainings, updates to new workflows, and Skills Day annual updates. For these trainings, Elemeno had helped decrease time, cost, and inconvenience involved in their delivery, while increasing effectiveness of learning. It was logical to apply the same process to the new PICU training requirement.

Elemeno Health implemented a solution aimed at delivering material that was **easily consumable** by staff, **reduced time required** by nurse educators to distribute the information, and **eliminated backfill** and overtime needs.

Elemeno's mobile-friendly solution allowed nurses to complete and process the information in small bites at times that were convenient for them, instead of requiring the hospital to take a large group of nurses off the floor at once to conduct an extended in-person meeting. This also did away with burdensome classroom hours, which would need to be conducted more than once to accommodate multiple groups of nurses. Elemeno provided on-demand bite-sized pre-work in anticipation of a radically shortened on-site training.

Elemeno and BCH-OAK "Elemenoized" as much of the training material as possible, breaking it down into smaller pieces delivered asynchronously to users and incorporating short video tutorials. The material was customized to the specific needs and requirements of the BCH-OAK PICU. Educators often consulted vendor reps on-site as they created educational content in collaboration with Elemeno's virtual support team. This assured that the information was delivered correctly and consistently to all, removing possible variation caused by multiple classroom deliveries, as well as reducing future support requests to the vendors.

Elemenoized training topics included:

- Patient care equipment: in-ceiling patient lift; multi-functional patient booms; IV poles and stands
- Monitors: infant abduction alarm system; cardiorespiratory monitors
- Communications: intercom system; call light system
- Workflows: patient movement throughout the unit

The PICU nurse training did include a 4-hour in-person component. First, the nurses completed the resources over 4 hours at their own pace, and then came better prepared for the in-person portion. This meant that the nurse educators could focus on competency verifications and address specific questions arising from in-person review. This made the in-person class time more efficient.

The materials created for the new PICU training remain on the Elemeno platform for future reference and refresher training, accessible at any time by current and future employees.

The Elemeno app supplies a reliable ongoing source of information, updateable as needed, to provide ongoing support for the PICU nurses and educators. This way, staff can get contextual support whenever they need it.

Efficient, High Engagement Education Saves \$136K with No Backfill Required

Relying on the Elemeno solution, BCH-OAK was able to successfully train its PICU nursing staff over eight total hours, only four of which were in-person. The cost savings were dramatic. The initial anticipated cost of training these 75 nurses in person was \$176,400 plus an additional \$18,816 plus in backfill or overtime cost, for a total of at least \$195,216. Using Elemeno to provide four hours worth of asynchronously consumed pre-work, followed by four hours of focused in-person training, BCH-OAK spent \$58,800 total, and there was no need for backfilled labor or overtime costs.

This was a **70%** reduction in cost compared to the initial estimate
or **\$136,416** saved.

Moreover, Elemeno facilitated a **66% faster training completion time**, as staff was trained in one day instead of three. For the hospital, this also meant that the PICU could open quickly and begin providing much-needed care to its patients.

Providing the training in this way allowed nurse educators and managers to focus their time where it's most needed, increasing quality and efficiency of work. Removing the need to backfill positions reduced managerial complexity, and the shortened classroom hours meant that educators could be focused on high-impact activities.

Additionally, staff reported feeling more involved in the training and transition process as a result of more engaging, independent learning. The hospital and staff assessed the training to be at least as high in quality and retention as the more traditional method, delivered at a fraction of the cost from employing the Elemeno solution.

Educators noted that the quality of questions from staff were more in-depth and well thought-out when staff used Elemeno orientation materials before their in-person training, and there were fewer follow up questions than expected after the completion of training. Providing the orientation training using Elemeno was also valuable for subsequent new hires and for any staff who were on leave at the time of the unit move. Because of Elemeno Health, the orientation information was high quality and remains reusable, able to be delivered and repeated in the exact same manner when needed to current and future staff.

“ Elemeno Health helped us significantly save on costs, but it also had a deep impact by improving the morale and stress levels of our nursing staff. The educator was better able to invest her energy on high impact activities. This allowed us to better support the staff in feeling competent in moving to the new space, which ultimately provided a safe transition for our patients. ”



Bridget Canty, Interim Director of Critical Care/Nurse Practice @ UCSF Benioff Children's Hospitals - Oakland