



KEY POINT SUMMARY

OBJECTIVES

Healthcare providers are often sleep deprived during long work shifts. It is believed that providing healthcare providers with a room where they can nap for 30-40 minutes will result in a reduced number of medical errors that compromise both patient and caregiver safety.

Conveniently located “napping rooms” provide opportunity for night- and extended-shift providers to rest, leading to less fatigue and better performance.

US Department of Health and Human Services, 2008 | *AHRQ (Agency for Healthcare Research and Quality) website.*

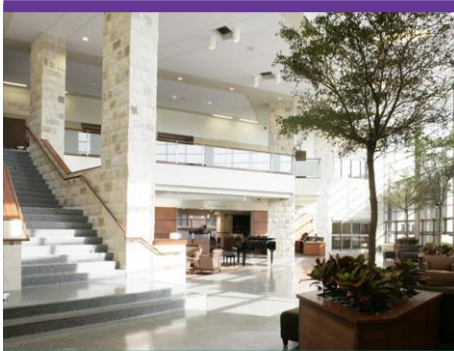
Key Concepts/Context

Healthcare providers are known for working unacceptably long hours and being chronically sleep deprived. Often, physicians and nurses work 24+ hour shifts, leading to fatigue and avoidable errors that put both caregivers and patients at risk of serious injury or death. Acute and chronic sleep deprivation can mimic the effects of drunkenness. Employees working a shift of more than 13 consecutive hours are 1.9 to 3.3 times more likely to commit errors.

This “strategic nap program” was developed to improve healthcare provider alertness and performance while also reducing medical errors. Naps have shown to reduce fatigue and improve attention, memory, mood, and performance. Some other benefits that are expected from rested healthcare providers are reductions in near-misses, needle sticks, and car accidents.

This write-up walks through the steps and resources needed to make this project possible and sustainable. The initial steps start with documenting the problem, gaining buy-in from all levels of the organization, placing the rooms in strategic locations, and creating operational protocol. Once in place, it is important to obtain staff input, make sure to keep the program voluntary (due to hospital culture), do trainings in small groups, and possibly pilot test in high-priority units. There are two things to keep in consideration: (1) a program like this may have a long rollout period, and (2) it is important that this program is cost neutral to facilitate implementation and not cause financial burden on the institution.

Pre- and post-implementation surveys were administered to the ICU staff to assess both the nap room and the educational material. The survey results showed that the staff found the educational material and the nap rooms helpful, and made them



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feel “safer.”

This is a joint initiative of the VA Palo Alto’s Patient Safety Center of Inquiry, Alertness Solutions Inc., Stanford University medical researchers, and the VA National Center for Patient Safety.

Methods

This study took place at the VA Palo Alto with the ICU medical-surgical and ICU intermediate staffs. The program had several parts: the program guidelines, personal use tool (describing how to implement the program), a facilities checklist for the nap room, online resources, and evaluation materials for the ICU staff before and after program implementation.

Dr. Steven Howard provided material on protocols for handoffs between shifts and reintegrating the napping individual into the working environment. Fifteen-minute educational sessions were provided right before and after shift changes to train the staff in how to prepare and use the nap room appropriately. The staff was required to follow protocol in order to use the rooms. The protocol included using the schedule/signup sheet to control access to the room, proper handoffs, emergency callbacks, and cross-checks to prevent sleep-inertia-induced errors. The staff were required to sign paperwork saying they acknowledged and accepted the terms of using the nap rooms.

The nap rooms were furnished with a residential bed, a closet for linens, window panels that blocked out light, carpeted floors, and a restful color palette. The nap room was located a 45-second walking distance from the units, between the ICU and operating room, for easy return in case of emergencies.

Seventy pre- and post-implementation survey packets were administered to the staff during morning rounds. The packets consisted of consent forms, the pre-implementation questionnaire, and a sleep diary. A total of 37 staff members completed the pre-questionnaire, 31 completed the post-questionnaire, 31 attended the educational session, and 10 completed the sleep diaries.

Findings

On a Likert scale of (1 = not useful, 5 = very useful), the questionnaires had the following findings:

The educational sessions (4.5 score) had positive responses from the staff, stating that the sessions were informative and useful.

The program guidelines (3.8 score) were useful for supervisors and administrative staff.



The overall effectiveness of the strategic nap program received a 4.6 score.

Perceived value of the strategic nap program received a 4.5 score.

Limitations

Sample size included only one nap room at one site.

The study suggested that a nap room will decrease error-related outcomes, but does not quantify this hypothesis in the study.

Design Implications

Including a nap room in health facilities can help staff alertness, resulting in fewer errors

