

Background

Enteral nutrition (EN) is a vital component of positive patient outcomes in the critical care setting. Literature has shown improved outcomes when patients received 60-70% of the target EN goal within the first week of admission to a critical care unit. Outcomes included fewer infections, shorter length of stay, and shorter duration of mechanical ventilation (Wanik et al., 2019). There is variation in practice with the initiation, management, and rate adjustments of enteral nutrition. Salinas Valley Health Medical Center prioritizes the use of 12F gastric tubes and the nasal bridge retention device to decrease hospital-acquired pressure injuries (HAPI) related to enteral feedings. Thus, the purpose of this evidence-based practice (EBP) project is to develop a mnemonic that incorporates all components of EBP guidelines regarding enteral nutrition in hospitalized patients, and to standardize the use of 12F gastric tubes and the nasal bridge retention device throughout the medical center to decrease HAPI incidence related to device injury.

Methods

Guided by the John Hopkins Evidence-Based Practice (JHEBP) Model for Nurses and Healthcare Providers, our practice question was “What are evidence-based strategies to improve clinical outcomes for hospitalized patients who require enteral feedings?” We searched the literature using the following databases: The Cochrane Library, CINAHL® PubMed®, and MEDLINE. The following key search terms were selected using Boolean operators “AND,” “OR,” and “NOT”: “enteral feedings,” “hospitalized patients,” “gastric tube feeding,” “postpyloric feedings,” “pneumonia,” “aspiration,” “gastric volume residuals,” “bowel regimen,” and “outcomes.” The medical librarian aided our search for professional journals. Ten articles were selected and appraised using the JHEBP research appraisal questions. The level and quality of each source was identified. Because of the appraisal process, we eliminated six sources for low quality evidence.

Results

Sources selected included practice guidelines from the Society of Critical Care Medicine and the American Society for Parenteral and Enteral Nutrition (ASPEN) (Boullata et al., 2016; McClave et al., 2016), as well as a review summary (Cooper, 2018) and a research study (Nogueira et al., 2020). Research supports early enteral feeds and no gastric residual checks; however, provider practice varies. Informed by the evidence, we developed the mnemonic “FEED ME” which incorporates best practice guidelines regarding enteral nutrition for hospitalized patients (see Figure 1). The mnemonic was revised, after multiple discussions among leaders and stakeholders (e.g., physicians, dietitians, ICU/CCU leaders, and clinical nurses), to serve as a procedural guide that reflects EBP surrounding enteral feeding. ICU/CCU leadership approved the mnemonic. A pending referral to the Education Department was submitted to design a PowerPoint that will be disseminated via HealthStream® to educate staff throughout the medical center with a target date of December 1, 2024.

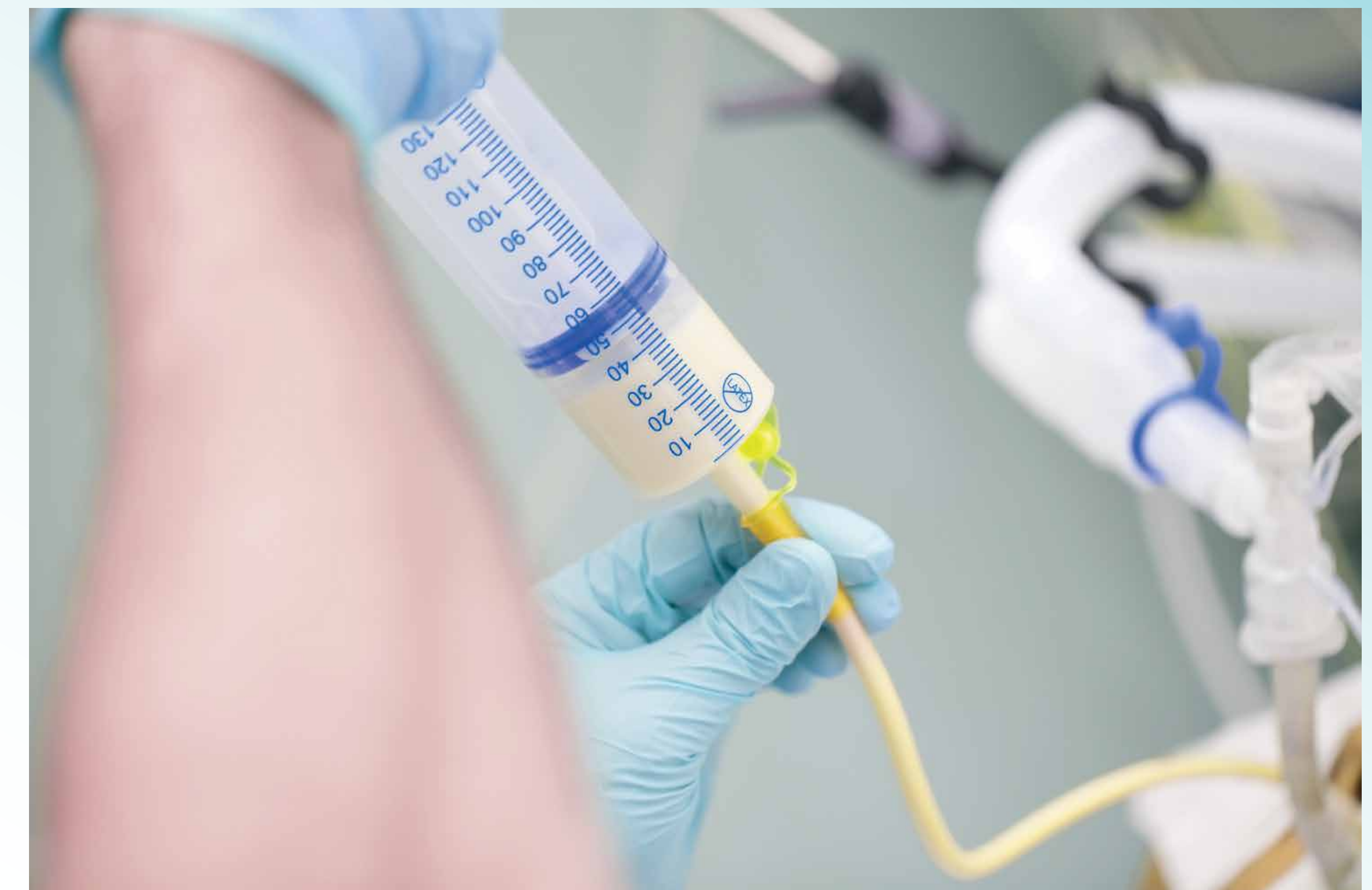
Figure 1



We plan to work with the clinical informatics team to develop the mnemonic into a computer icon incorporated into the electronic health record. It will be activated within the worklist to serve as a guide to EBP, policy, and procedure for enteral feedings with a target date of December 1, 2024. The mnemonic will be an icon that appears when enteral feedings are ordered to prompt the use of 12F gastric tubes and the nasal bridge retention system, as well as other key points according to EBP guidelines. Representatives from the nasal bridge manufacturer will be utilized to train nurses on the correct use of the device. Data will be collected quarterly after December 1, 2024, to track ventilator days, length of stays, infection rates, and HAPI incidences.

Conclusions

Research supports that the early initiation and minimizing interruptions of enteral tube feedings improve hospitalized patients outcomes. The FEED ME mnemonic aims to bring awareness to EBP practices related to enteral feedings and empower nurses and clinicians to improve patient outcomes.



References

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