

## BACKGROUND

Intravenous (IV) medication compatibility errors are a problem among critical care patients. The plan is based on equipping each room with a medication compatibility chart that nurses can access when dealing with critical patients. The goal of this project is to decrease medication errors through the use of IV compatibility charts.

- Increasing accessibility to resources will significantly reduce IV medication compatibility errors (1).
- Nurses need to understand the importance of preventing IV medication errors and strategies to do so.
- Charts will consist of commonly used IV medications and their compatibility with each other.
- This project is vital because the literature review showed that several possible causes lead to IV medication errors.

## METHODS

The framework model used for implementing this project is the Iowa Model. Initial evidence exploration was directed toward the statistics surrounding IV medication compatibility errors, such as frequency, contributing factors, and available resources. After each step is implemented, receiving feedback is crucial to ensure that the proposed change is effective. The steps are as follows:

- Research the problem (IV compatibility errors)
- Create a plan of action (compatibility charts)
- Achieve buy-in from the staff for the intended plan (brochure)
- Implement the plan
- Receive feedback from staff and adjust plan accordingly

## REFERENCES

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- Figure 1: Michelle. (n.d). <https://sassyanaesthesia.com/being-new-in-the-icu/>

## EVALUATION

Feedback from nurses about the implemented interventions will be used to make continual improvements to the project. Staff will have several opportunities to provide their opinions.

- Pre-survey before implementation occurs for nurses to suggest medications and opinions
- Post-survey after implementation to make further recommendations
- Meetings with management every three months for additional feedback

## DISCUSSION

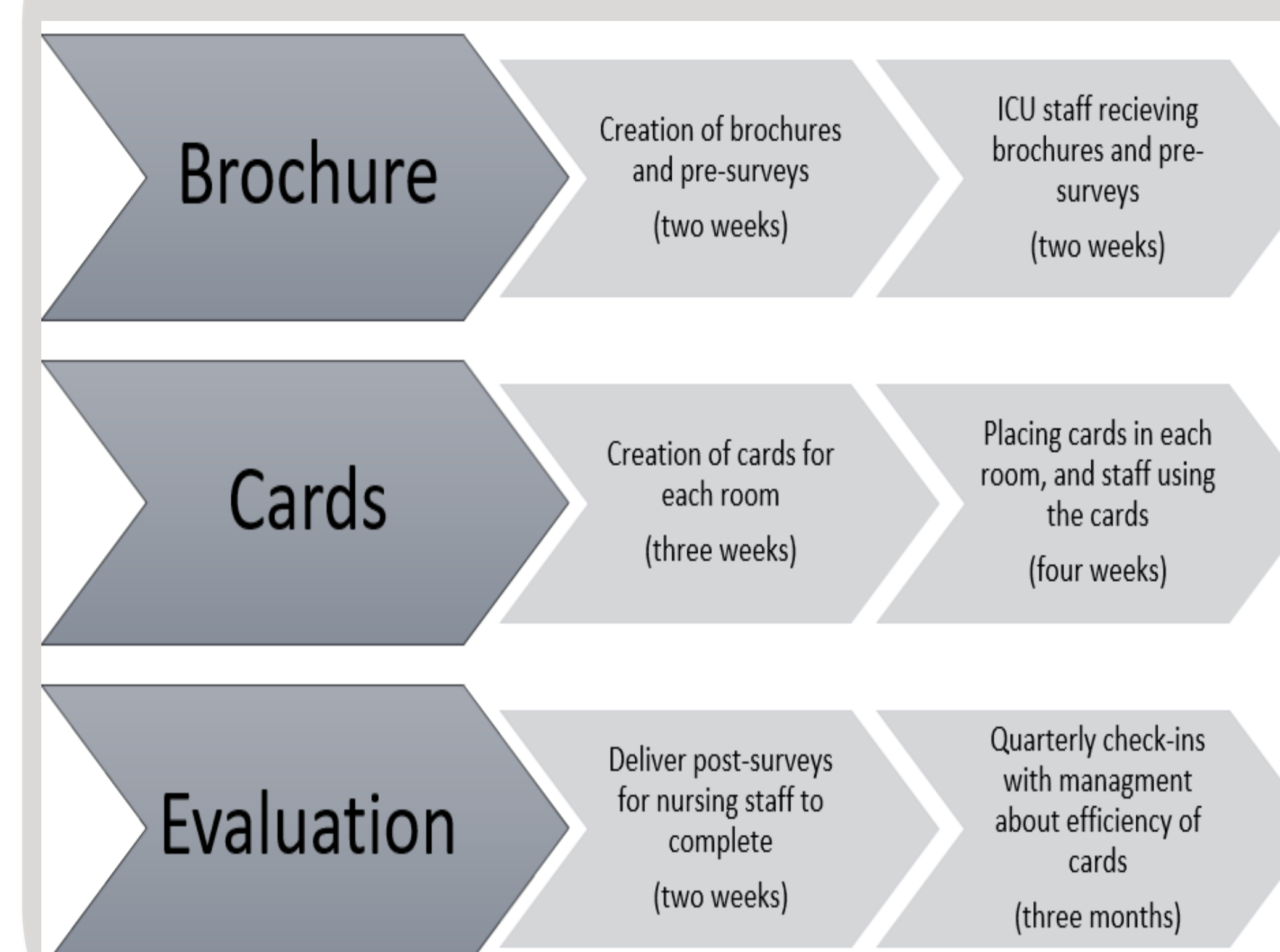
Nurses are responsible for being educated on preventing medication errors and what to do in the event of a compatibility error.

- Three types of incompatibility errors are possible when administering IV medications simultaneously. These three errors are chemical, physical, and therapeutic (2).
- ICU patients are likely to receive twice as many IV medications as non-critical patients within the hospital (4).
- 62.7% of medication combinations have no data on compatibility (5).
- As IV medication incompatibility errors account for up to 25% of ICU medication errors (3)
- IV medication compatibility errors may be due to staffing shortages, lack of resources, IV accessibility, and knowledge (1).



Figure 1

### Timeline



## CONCLUSIONS

Overall, this project will increase patient safety by giving nurses resources to decrease IV medication errors in the ICU. The literature review showed several vital factors that may cause nurses to make an IV medication error, such as lack of knowledge, resources, and overworked and short-staffed nurses. Putting an accessible resource that is legible in an area near patient care will allow nurses to administer IV medications with the assurance that they are compatible. This is especially important for patients with limited IV access or in an emergency.