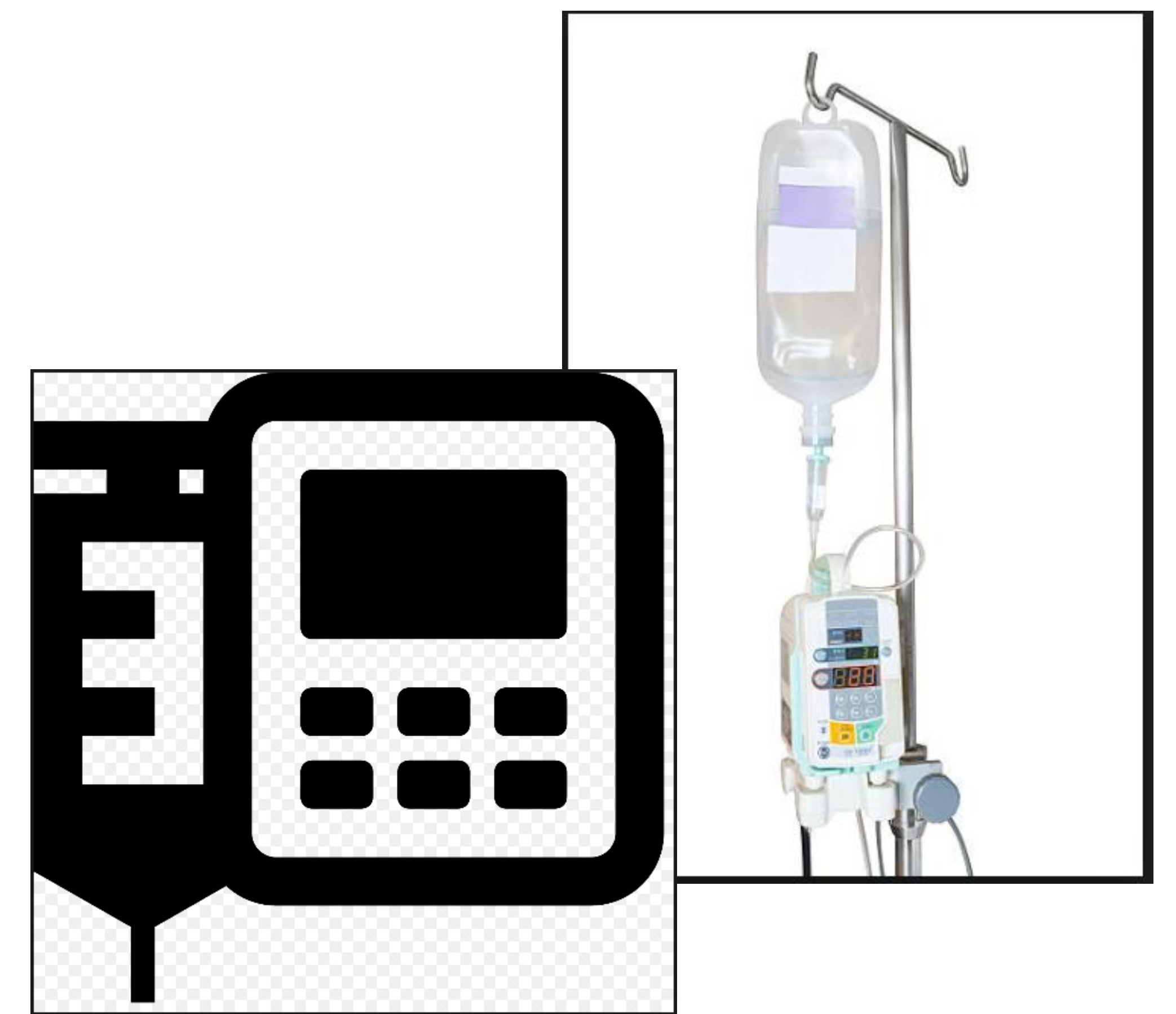


Background

Studies have shown that Smart Pump technology in infusion pumps is an effective strategy if used appropriately to prevent serious medication infusion related errors. However these Smart pumps reduce but do not eliminate programming errors. Studies showed that there are a number of limitations of current smart pumps, including lower compliance rates of using smart pumps, overriding soft alerts, non-intercepted errors, and the possibility of using the wrong drug library.

A team of nurses reviewed the process of operating the infusion pumps using Enterprise Risk Management (ERM). With ERM, the team will be able to mitigate any risk involved in employing the Smart Infusion Pumps into the inpatient wards



Methodology

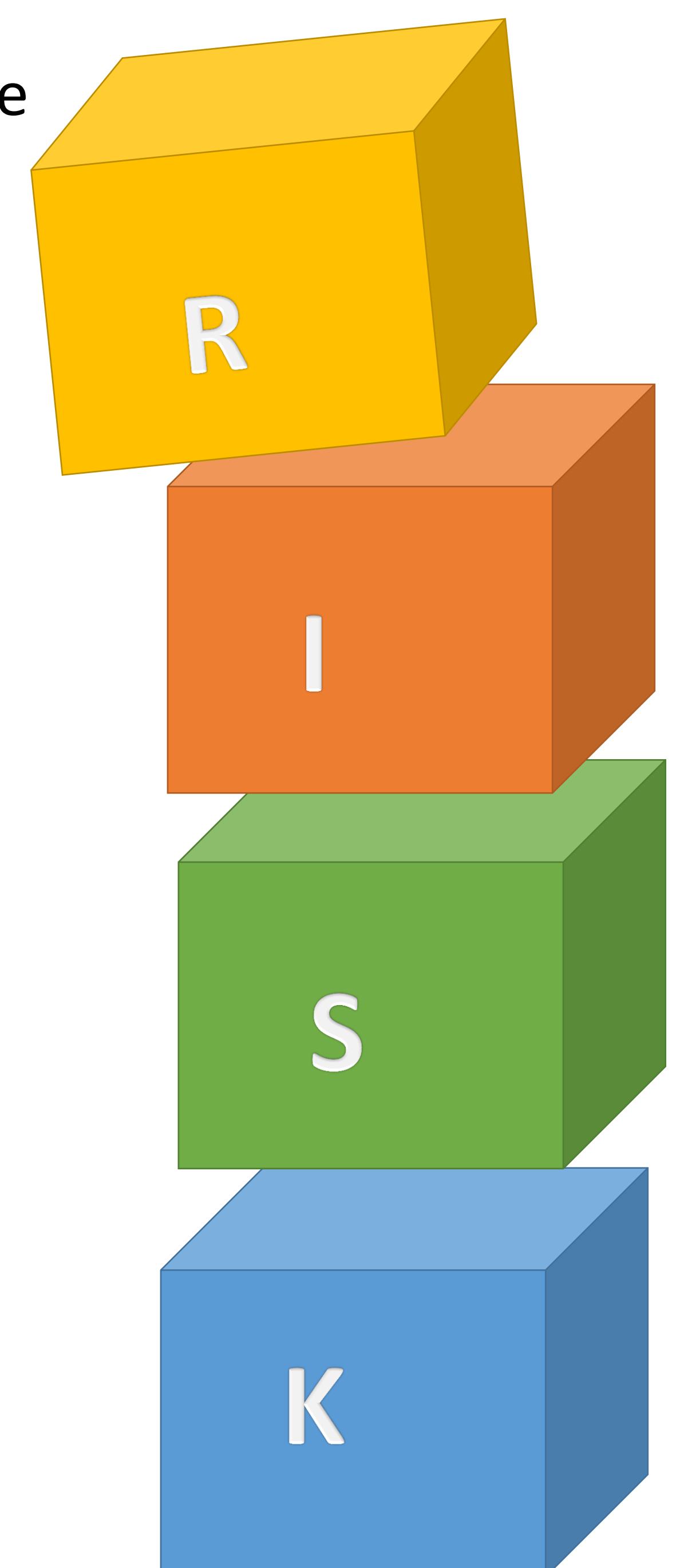
ERM was performed based on the current situation and workflow in the inpatient wards. Stakeholders identified risk involved when operating the Smart Pump based on their expertise and experiences.

Risks that were identified were rated based on their impact, likelihood of occurrence and consequences if risk was not controlled. Current management to mitigate the risk was also listed and evaluated for its effectiveness.

Results

Risks that were identified was addressed with controls such as:

- Set up a centralized control of smart pumps record for the management of smart pump's status in terms of drug library, maintenance, service etc. This helps to reduce the potential risk of patient safety due to smart pump drug library not updated or malfunction during a procedure
- Competency training with knowledge and skill based by scenarios and by citing examples of errors that has happened. It improves the confidence of the nurses to handle the pumps and to prevent an adverse event
- Step by step guide on handling smart pumps



Conclusion

The step by step guidelines gave clear instructions on the work process and patient safety is assured. The initiative can be transferred to other institutes or hospital when conducting any Nursing Competency