



Singapore Healthcare  
Management 2016

# Implementation of Chest Tube Drainage System Stabilizer Board aims to prevent accidental drainage system toppling

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## Aim(s)

To improve patient's safety by reducing the incidence of toppled chest tube bottle, this can cause excessive air to enter the pleural space.

## Methodology

A stabilizer board is created to counter the height of the chest tube bottle. We used the "plan, do, study, act (PDSA)" cycles to test the idea by temporarily trialling a change and assessing its impact. The post implementation survey was carried out to assess its usefulness and sustainability.

## Result

After the implementation of chest tube stabilizer board, a survey involving 53 respondents (1 nurse manager, 3 nurse clinicians, 4 senior staff nurses, 43 staff nurses and 2 enrolled nurses) was conducted in Changi General Hospital Medical Intensive Care Unit. By using the stabilizer board, 90% of respondents agreed that the chest tube bottle is more stable.

Additionally, 86% of them feedback that patient's safety is improved. With regards to user friendliness and maintenance, 92% voted for the former and 85% voted for the latter. Majority of them also concluded that they would use the chest tube stabilizer board if their patient has a chest tube.

## Conclusion

The chest tube stabilizer board is easy to use and patient safety is improved as there is no occurrence of chest tube bottle toppling.

