



# Improving Safety & Management of Nurse Call Button At Bedside

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## Introduction

A nurse call button is a button found around a hospital bed that allows patients in health care settings to alert a nurse or other healthcare staff member of their need for help. **Placing call button within patient's reach is critical for patient safety.** Used effectively, call button enables efficient and vital communication between patients and nurses.

Call buttons within reach are critical especially for non ambulating or vulnerable patients such as patients' on tracheostomy or post operative patients who are unable to speak or walk to call for assistance.

The current safety clip attached to the call button does not provide adequate securement. It tends to dislodge easily. Nurses often have to resort to coil the call button wire around the side rails of the bed or having to search for call button that may have dropped behind patients beds or stuck in between mattress.

The team conducted a random walkabout in 5 wards. A total of 8 cases of Call Button misplacement with photographic evidence were discovered (as below). The Call Buttons were either: on the floor, in between bed rails or hanging over bed rails. (Fig A)

### Problem

Fig A : Call Buttons Misplacements



On the Floor Over Side Rails Over Bed Rails In-between Mattress

### Objectives

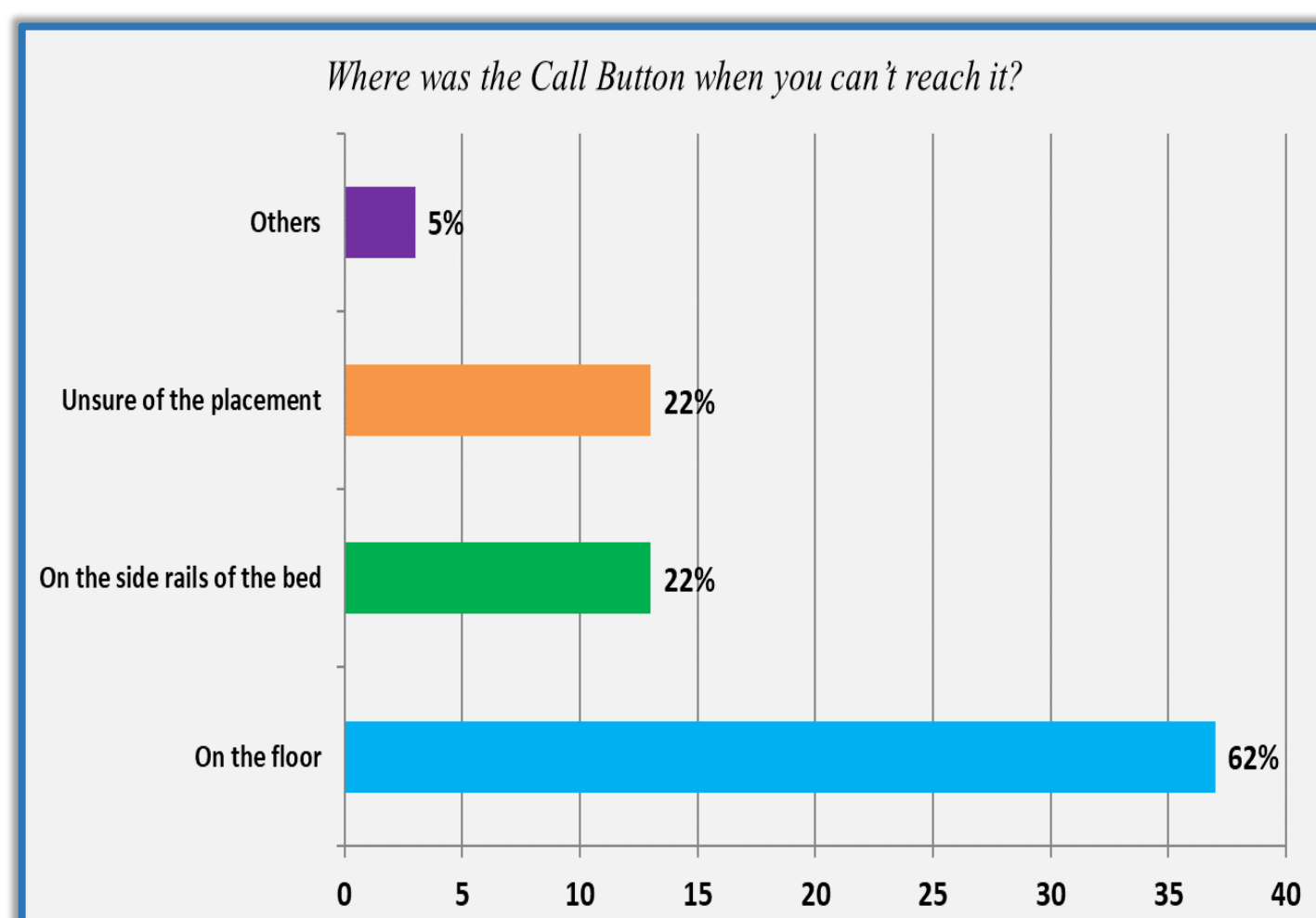
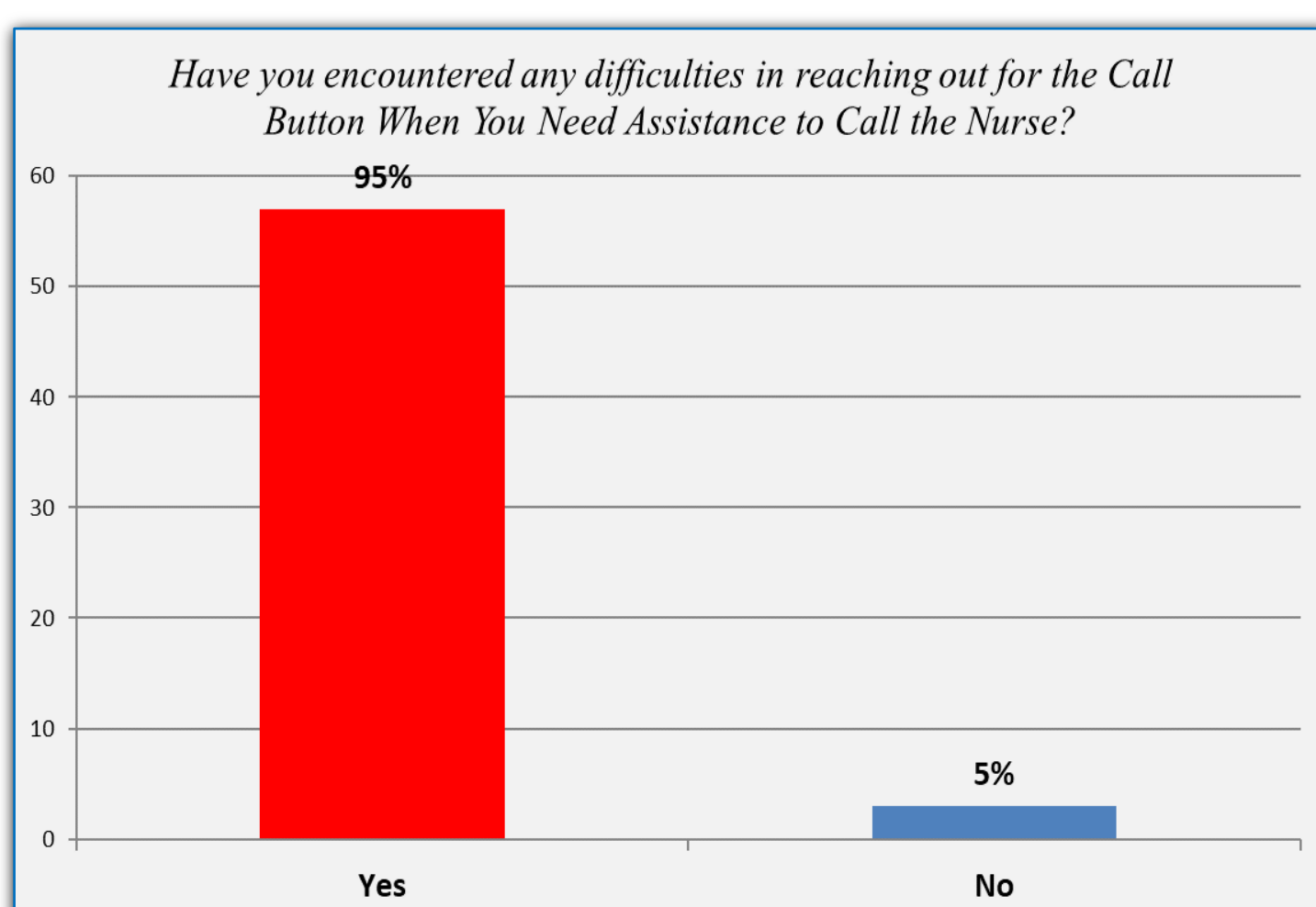
The improvement project was aimed to:

1. Enhance Safe Management of Call Button and within patients reach.
1. Improve Patient Safety.
2. Improve Staff Satisfaction.

## Methodology

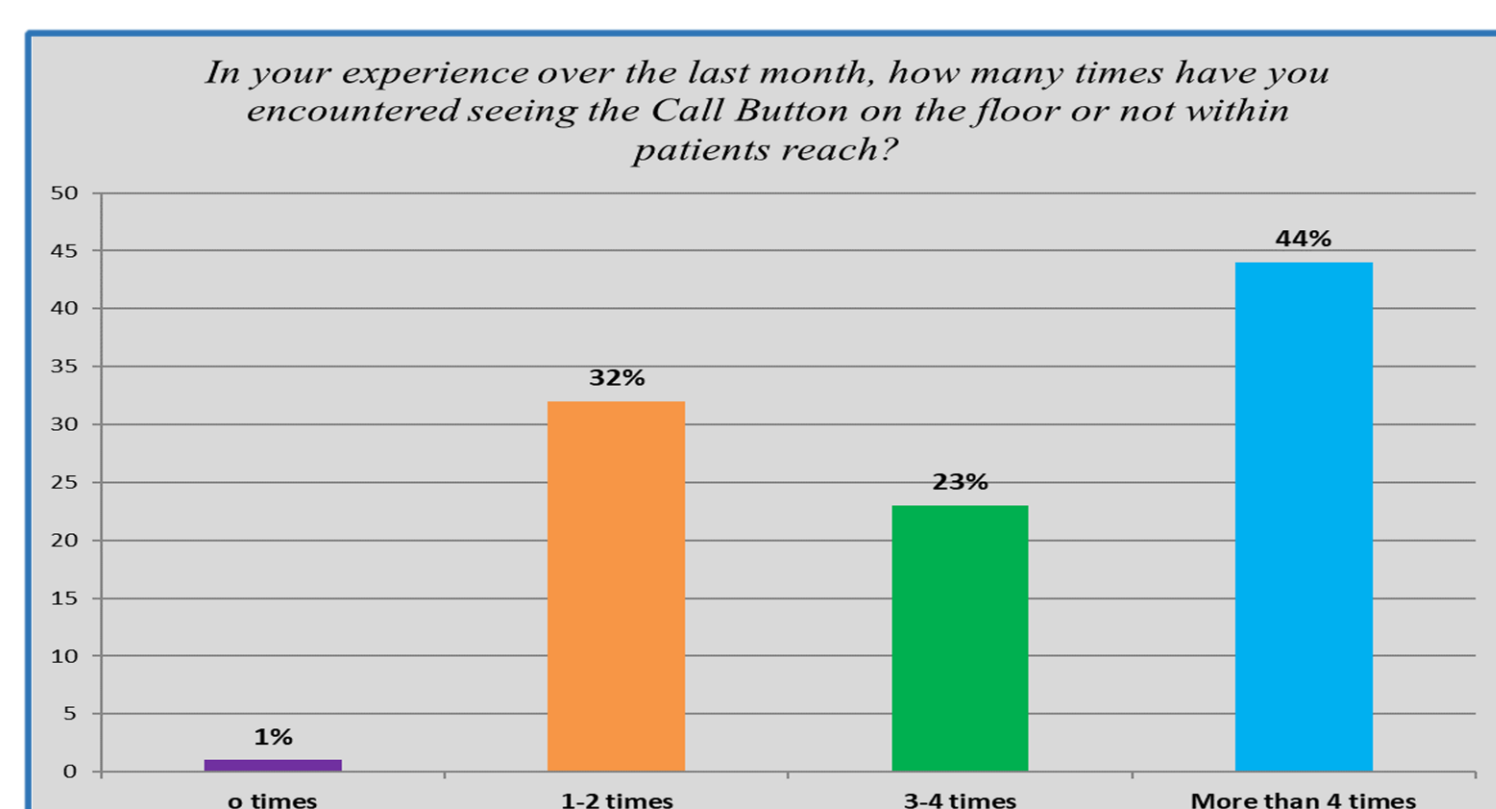
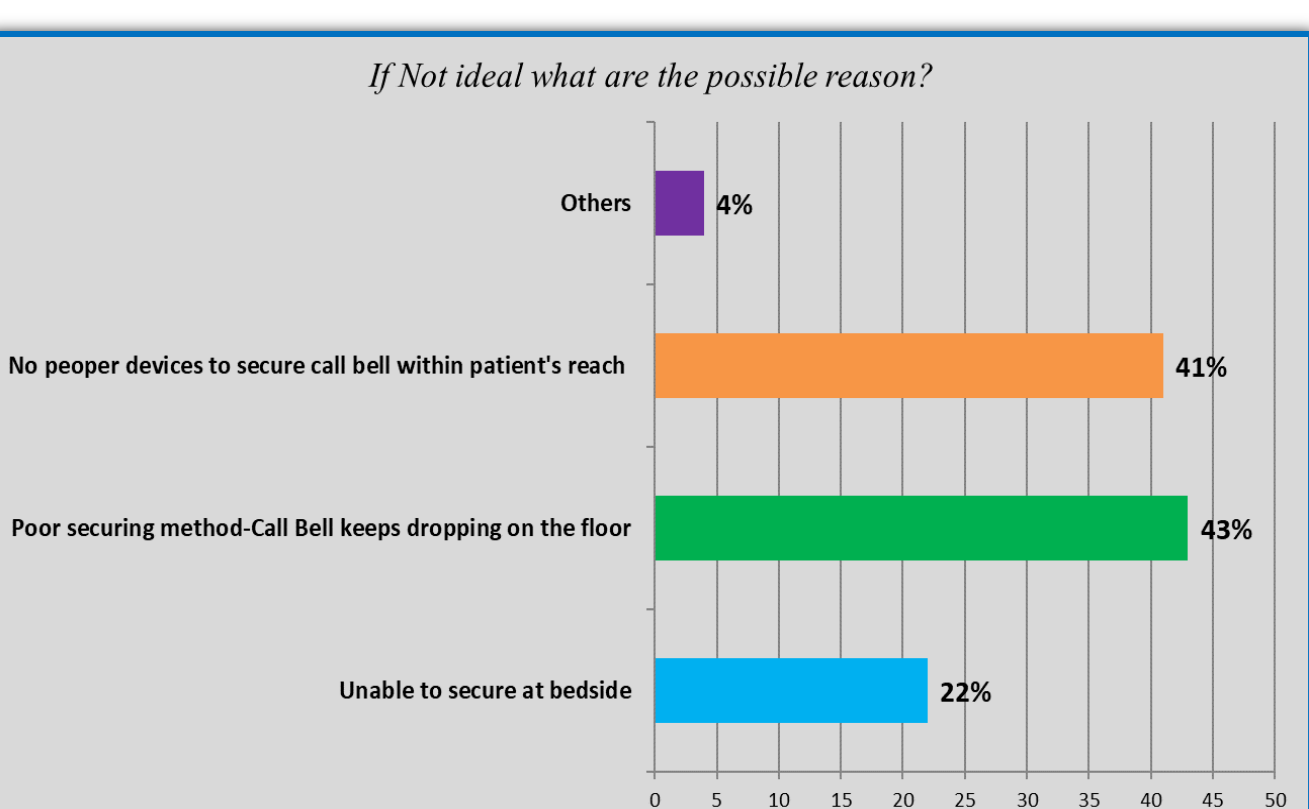
A survey of patients (60 sample size) and nurses (100 sample size) were conducted from 5 randomly selected wards. The survey was to assess the use of the Nurse Call Button and its Current Placement.

- 100% of patients have used the Call Button during their hospitalisation.
- 95% patients were unable to access their call button at any one time. Some patients need to ask help from neighbouring patient to help press their call as they could not locate their Call Button.
- 33% patients encountered difficulties in reaching out for the Call Button more than 3 times



The survey from nurses shows:

- Only 40% of nurses are satisfied with the current placement of the Call Button placement. However, out of this 99% of the nurses have encountered seeing the Call Button on the floor or out of patient's reach.
- 67% of the nurses encountered seeing the Call Button on the floor more than 3 times in a month.



The Team Brainstormed ideas and tried several methods to secure the Call Button at the bedside. (see pictures below)

**Method A:**  
Use of Twist Tie Cable  
**Result:**  
Twist Tie too soft, unable to hold Call Button.

**Method B:**  
Use of Plastic Holder  
**Result:**  
Plastic Holder breaks easily

**Method C:**  
Universal Caddy (on Line purchase)  
**Result:**  
Size too big, hinges breaks easily

Method A to C did not meet our target objective.

We consulted and worked closely with staff from Office of Innovation CGH.

Further refinement to the 3<sup>rd</sup> prototype, due to multiple variations in sizes of the different call button.

## Outcome

### 4<sup>th</sup> PROTOTYPE ( Fits All Sizes)



- ✓ User -friendly and handy
- ✓ Holder Hangs Easily over any bed rails or when bed raised to different positions
- ✓ Holder Fits All Sizes of Call Button
- ✓ Holder is Secure, Call Button does not drop off
- ✓ Seamless Design - allows ease of cleaning & Disinfection

Post-implementation survey was conducted:

- 100% Patients Satisfied, the holder is lightweight, handy and Call Button Assessable.
- 98% Nurses Satisfied with the 3 Printed Designed New Call Button Holder
- Nil Incidence of Call Button on the floors being reported by patients and nurses.

## Conclusion

Using PDSA, the Team worked closely with staff from Innovation Office. We met with several challenges namely finding the *Right Fit* of call Button Holder. After rigorous measurement and fittings, the 4th and Final 3D prototype met our team's objective of ensuring Call Buttons are:

- ✓ The Right Fit
- ✓ Holder is Secure
- ✓ Call Buttons are Within Patient's Reach

The Team will seek approval for the opportunity to embark on this project. We will work closely with staff from Innovation Office for vendor assessment and evaluation for the purchase of the holder based on the Final 3D prototype. We aim to spread this project Hospital Wide.

