

### **Project Title**

The Benefits of Using a Gravity Feeding Set for Bolus Tube Feeding in a Nursing Home

### **Project Lead and Members**

Project lead: Joyce Ng (Nurse Clinician)

Project members: Marsha Tan (Dietician), Thant Naing Win (Assistant Nurse Manager)

### **Organisation(s) Involved**

The Salvation Army Peacehaven Nursing Home

### **Project Period**

Start date: January 2018

Completed date: December 2018

### **Aims**

To reduce the amount of time spent by nursing staff on the preparation, washing up and administration of tube feeding.

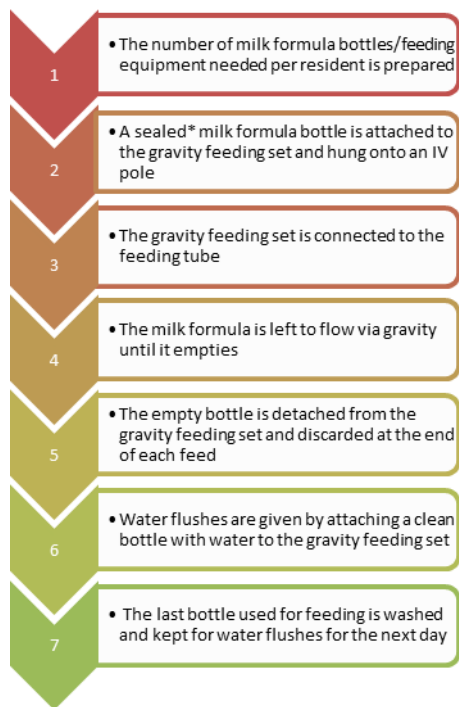
### **Background**

Bolus tube feeding uses a syringe to deliver enteral nutrition through a nasogastric feeding tube to meet a person's nutritional requirement. This method relies heavily on manpower with each resident requiring one nurse per feed and it is also time consuming as a typical feeding takes approximately 15 - 20 minutes. A resident requires 4 - 5 feeds a day, and this amounts to 60 - 100 minutes for a nurse to spend simply on tube feeding of 1 resident.

### **Methods**

A week of data collection allowed us to obtain the data on the time required for preparation, administration and washing up after feeding. We have also observed that 4 care staff at each time are required in to feed all the residents in a 6-bedded room.

- Trainings to nurses on the use of gravity feeding set
- One-month trial
- 40 tube-fed residents from Peacehaven
- Syringes replaced with gravity feeding sets
- Milk formula given in bottle form



## Results

- Reduction of manpower from 4 staff to 1 staff in a 6-bedded room.
- Saved a total of 60 mins per resident per day.
- Reduction of a total of 18 minutes for preparation and cleaning.
- Using a closed feeding system reduces the risk of milk feed contamination during preparation or administration.

## Lessons Learnt

It is important to think out of the box to find a better solution for time consuming nursing task as that will allow nurses more time to spend on engaging residents and on other nursing responsibilities.

## Conclusion Using

Gravity feeding set in bolus feeding, has a positive impact on the reduction of manpower from 4 staff to 1 staff in a 6-bedded room, and reduces a total of 60 mins per resident per day spent on tube feeding and 18 minutes for preparation and cleaning. More research is required to effectively evaluate any potential cost savings with this method of tube feeding.

**Additional Information**

Winner of the AIC Community Care Excellence Awards (CCEA) 2020 Productivity Improvement category

[https://www.youtube.com/watch?v=17p1ehRAR9k&ab\\_channel=AICSingapore](https://www.youtube.com/watch?v=17p1ehRAR9k&ab_channel=AICSingapore)

**Project Category**

Quality Improvement, Process Improvement, Productivity, Safety

**Keywords**

Quality Improvement, Process Improvement, Productivity, Safety, Nutrition, Manpower Savings, Time Savings, Nursing, The Salvation Army Peacehaven Nursing Home, Nasogastric Tube Feeding, Enteral Feeding, Gravity Feeding

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# The Benefits of Using a Gravity Feeding Set for Bolus Tube Feeding in a Nursing Home

[The Salvation Army Peacehaven Nursing Home]

Joyce Ng, Marsha Tan, Thant Naing Win



## What is the project about and why do we need to work on this?

Tube feeding is the provision of enteral nutrition through the gastrointestinal (GI) tract via a tube, delivering part or all of a person's caloric requirements.

This is implemented for people who are unable to obtain nutrition by mouth, are unable to swallow safely, or require additional nutritional supplementation.



### Project Goal

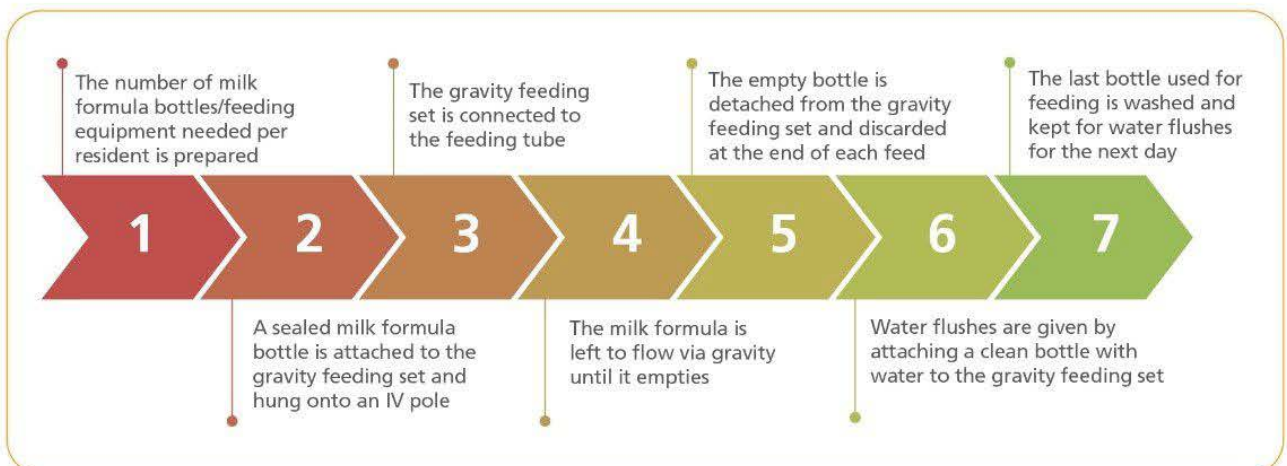
To reduce the amount of time spent by nursing staff on the preparation, washing up and administration of tube feeding.



## What solutions have been implemented?

A week of data collection allowed the project team to obtain the data on the time required for preparation administration and washing up after feeding. The project team have also observed that 4 care staff at each time are required to feed all the residents in a 6-bedded room.

- One-month trial
- 40 tube-fed residents from Peacehaven
- Syringes replaced with gravity feeding sets
- Milk formula given in bottle form



## Result

Reduction of manpower from 4 staff to 1 staff in a 6-bedded room.

Reduction of a total of 18 minutes for preparation and cleaning.

This method of feeding also allows for a closed feeding system, which reduces the risk of milk feed contamination during preparation or administration.



## Next Steps

A workflow was developed and new process was taught to all the care staff.