

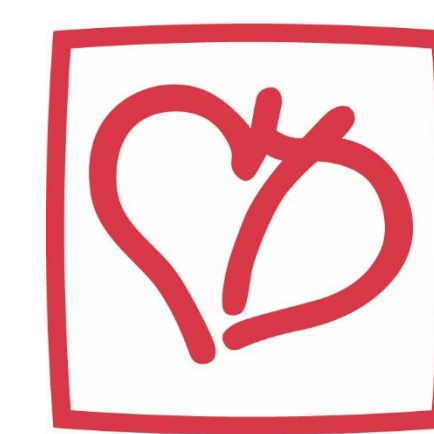


**Singapore Healthcare Management 2019**

# To Improve the Work Process of Nasal Gastric Tube (NGT) Taping on Patient

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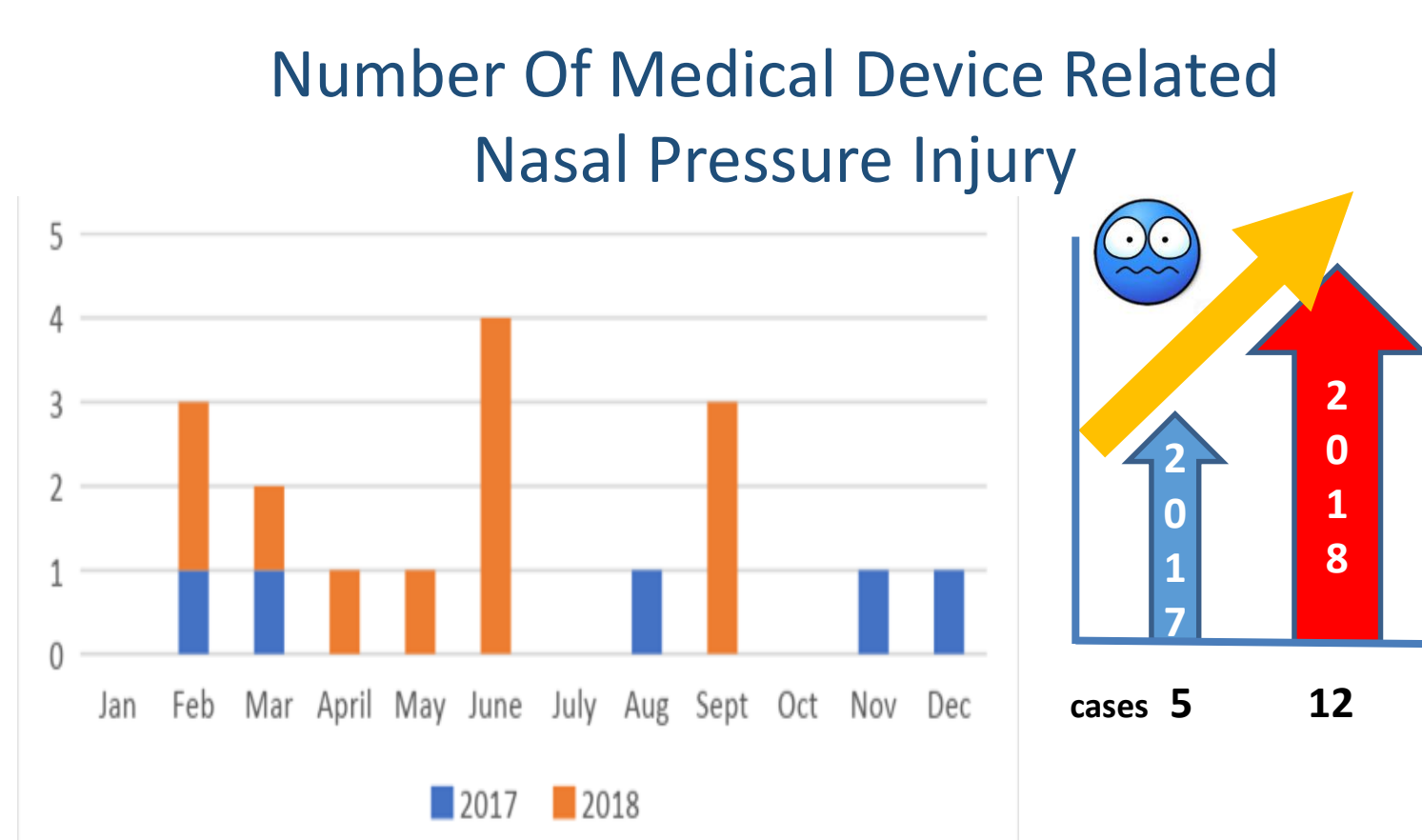
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SingHealth

## BACKGROUND

There had been an increase in the number of medical related device nasal pressure injuries over last two years. Data collected between 2017 and 2018, showed an increased by more than 100%. Hence, This project was initiated to improve patient safety by reducing incidences in medical device related nasal pressure injuries.



**TARGET ZERO HARM**



**ZERO Clinical Incidence in Medical Related Device Nasal Pressure Injury**

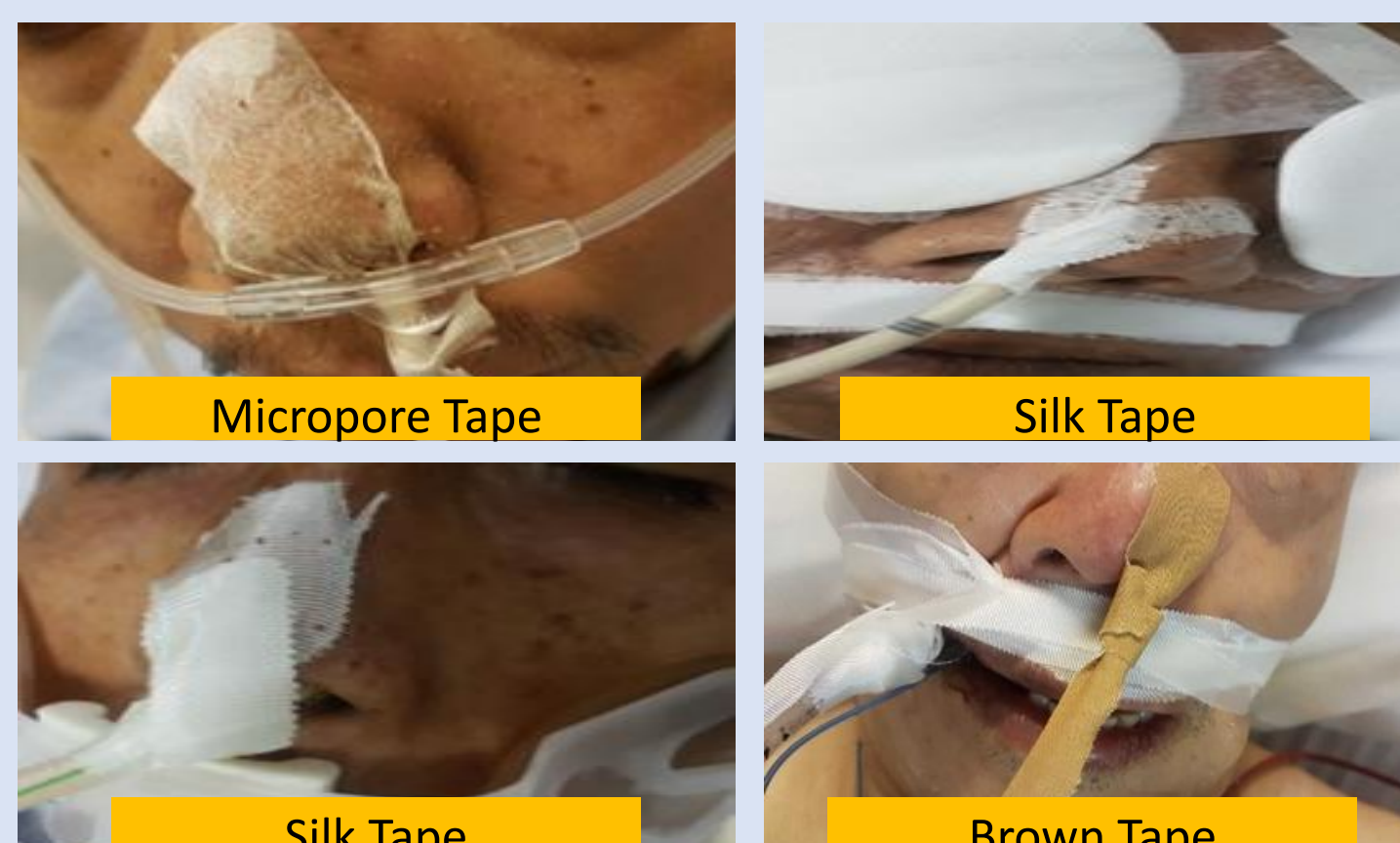
### Previous Situation

#### No Standardised Tape Used



➤ Different types of tapes were used

#### No Standardised Method



➤ Tubes anchored tightly at the nostril  
➤ Tape get twisted and stick together

### Leading to....

#### Medical Device Related Nasal Pressure Injury

- Pain
- Risk of Infection
- Medical Cost

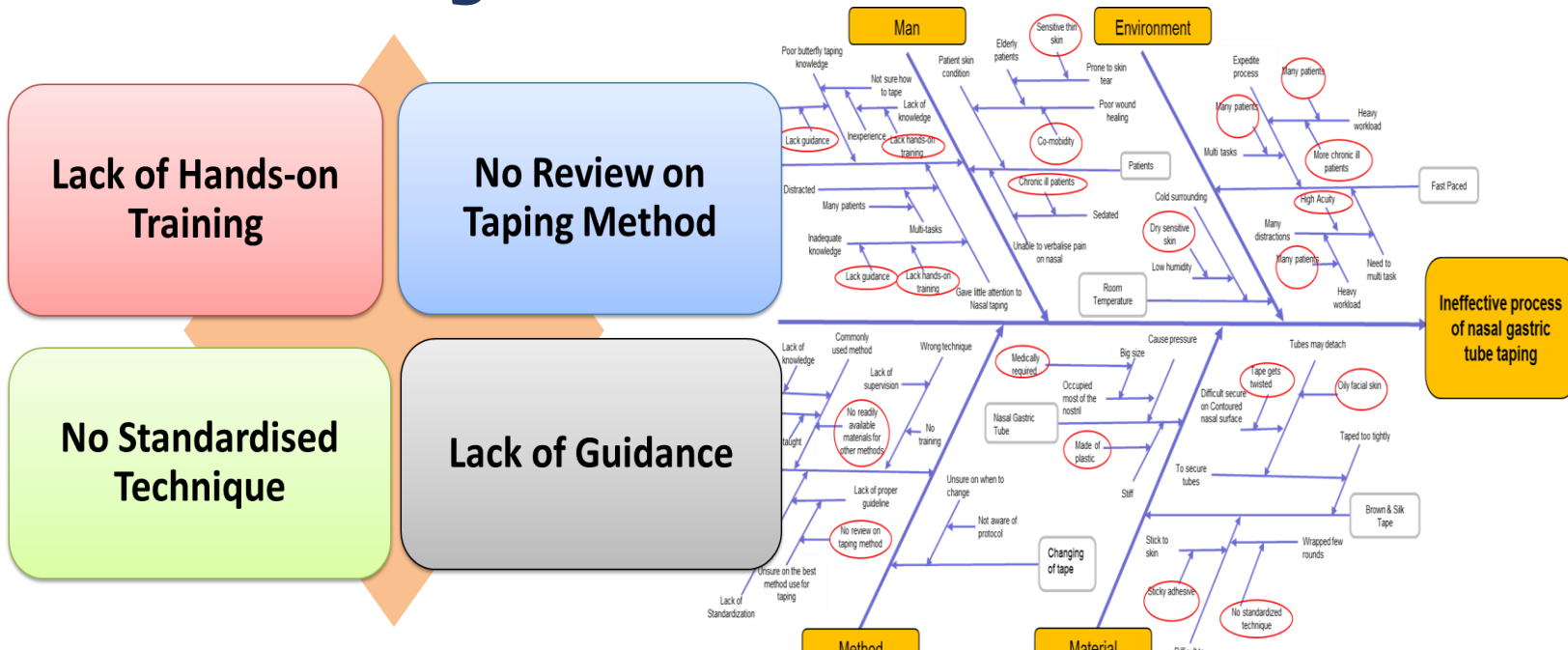
#### Time Taken Daily to Nurse Nasal Pressure Injury



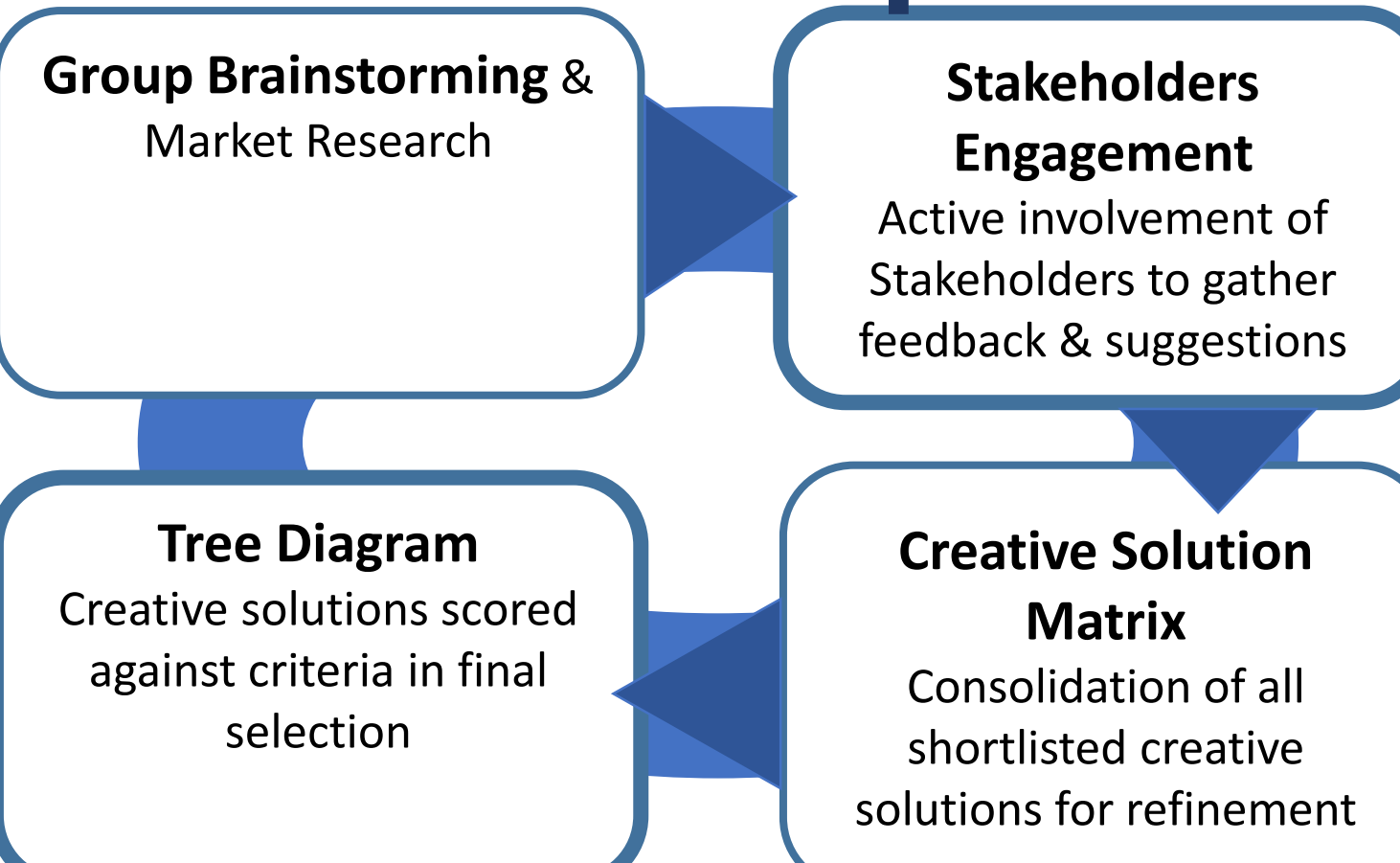
**27 minutes**  
To nurse minor injury  
**72 minutes**  
To nurse serious injury

## METHODOLOGY

### 1. Identify Root Causes



### 2. Solution Development



### 3. Solution Selection: Source & Evaluate Taping Materials

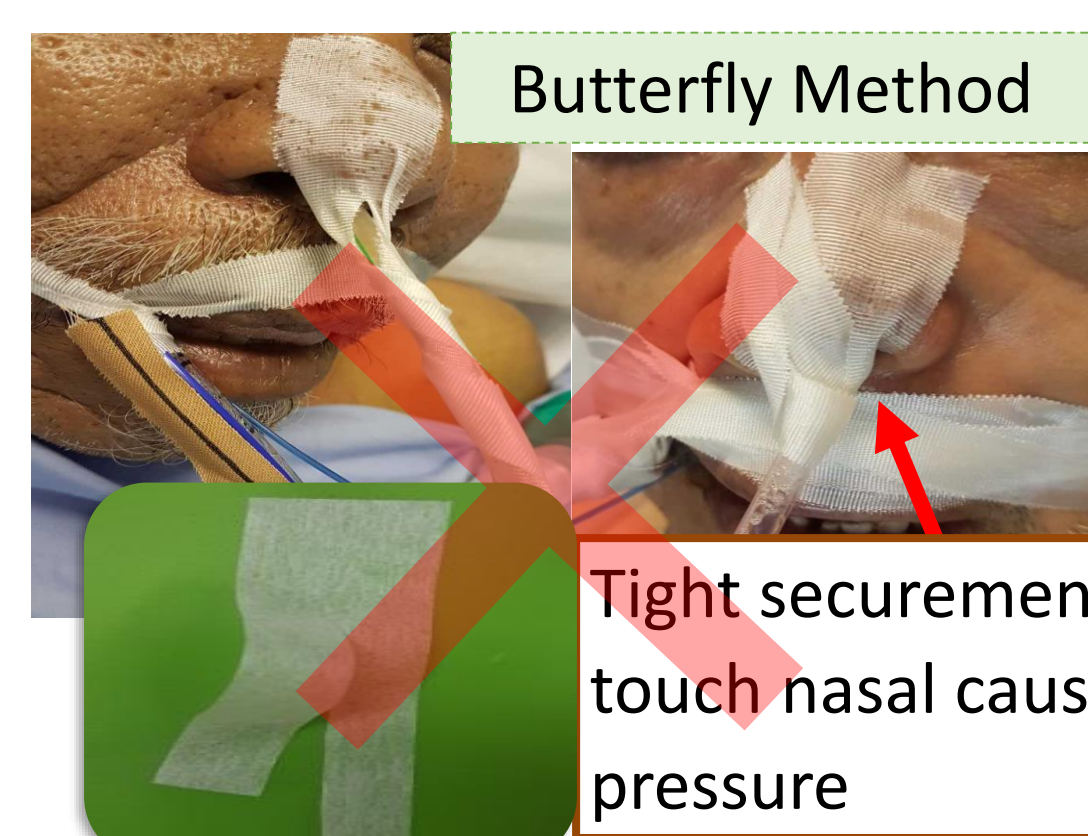
	Price per Use	Cost	Effectiveness	Allergy/Sensitivity	Availability	Total	Rank
Silk Tape	\$ 0.15	4	3	3	5	15	3
Plaster	\$ 0.10	4	2	3	5	14	4
Brown Tape	\$ 0.019	5	3	4	5	17	2
Fabric Tape	\$ 0.035	5	5	5	4	19	1

**Fabric Tape:** Most effective, most value for money, least likely to cause skin sensitivity and is easily available.

#### Other Tapes available in the market:



### 4. Solution Selection: Trial & Evaluate Best Method



Tight securement touch nasal cause pressure

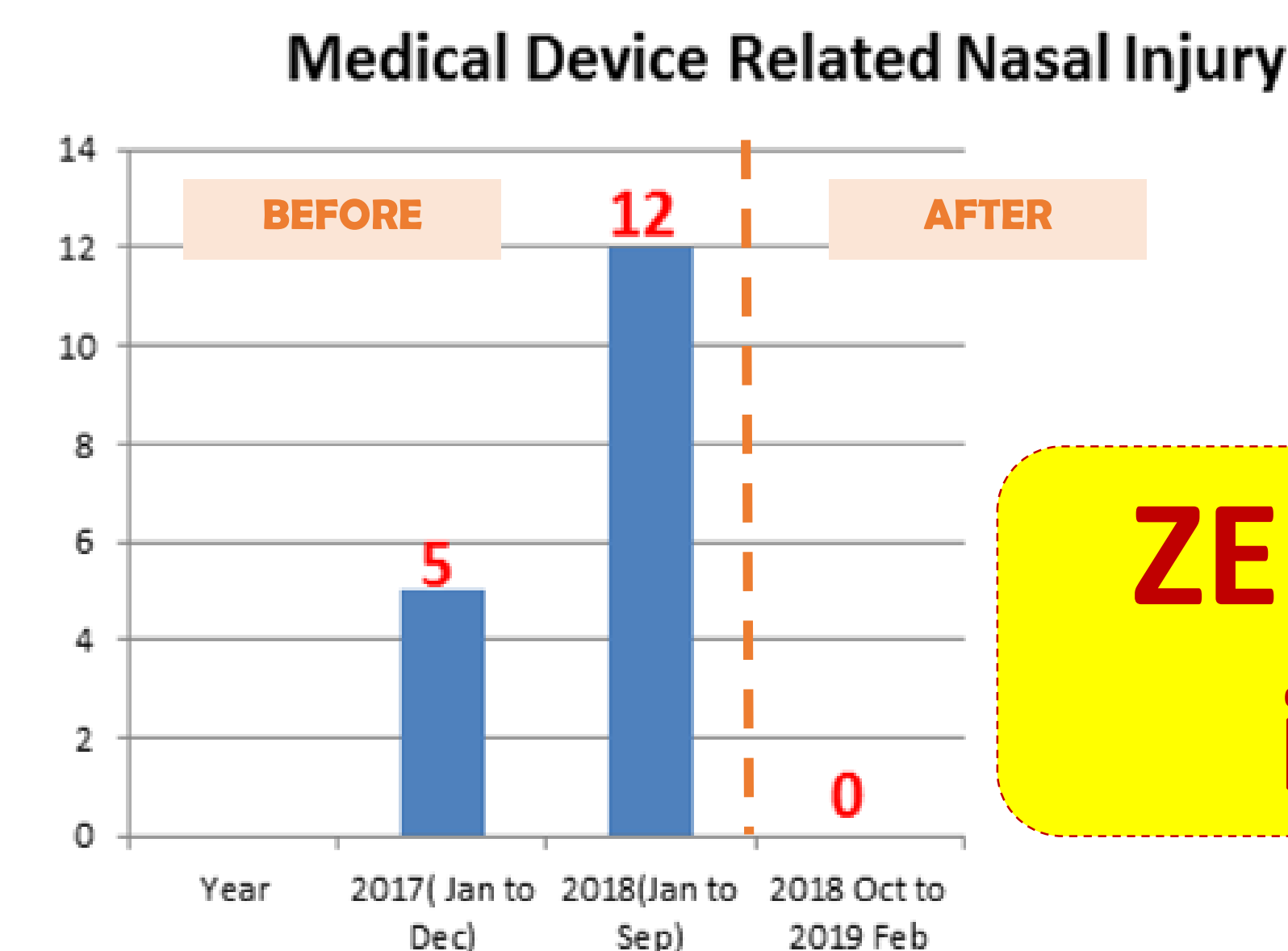


Free allowance between the nares and nasal gastric tube pressure and risk of nasal injury. ✓

A trial on 50 patients from Nov to Dec 2018 received positive feedback that the Fabric tape is effective, skin-friendly, non-sticky and adhesive onto the nasal. Patient felt **“more comfortable”** during NGT taping removal

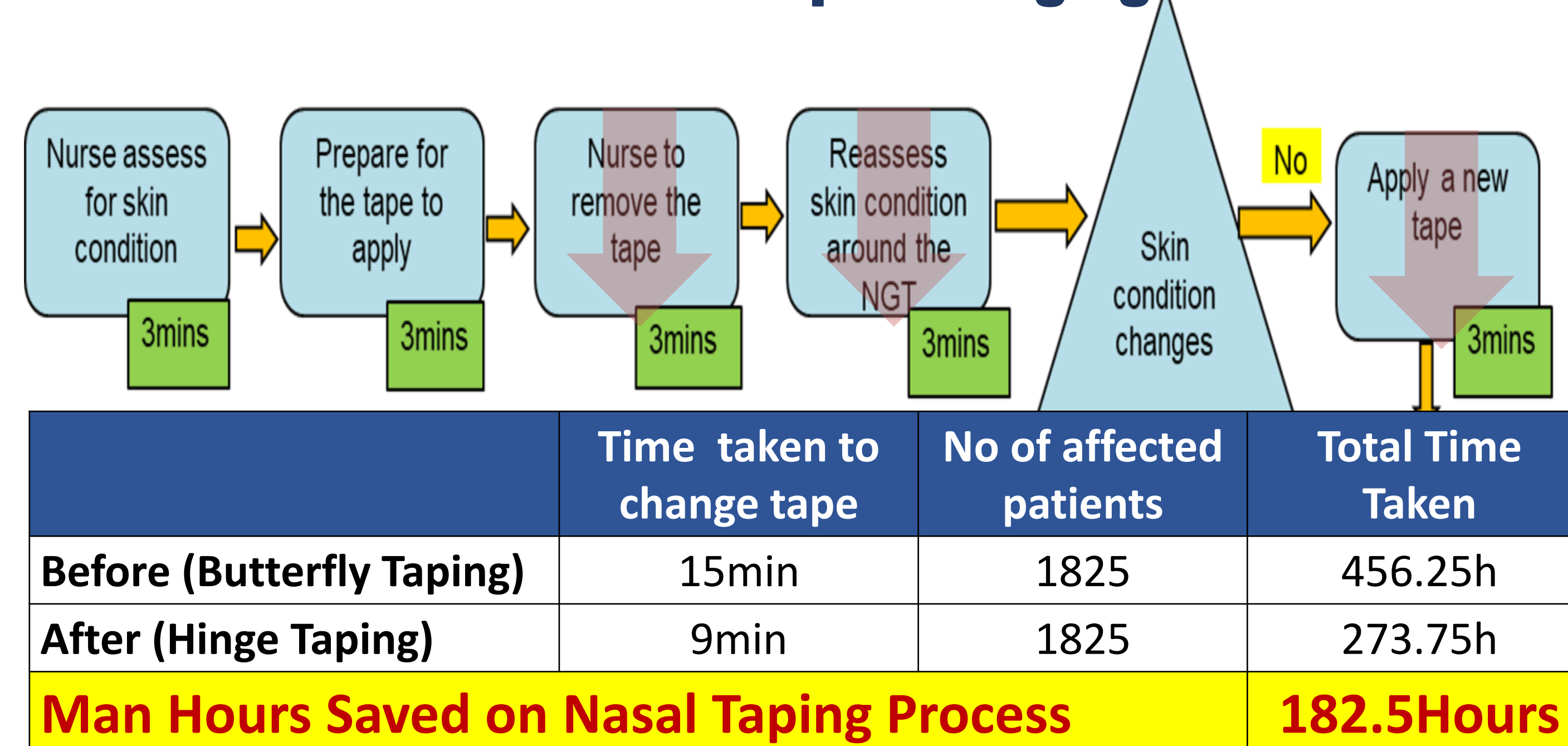
## RESULTS

### 1. ZERO Incidences with New Work Process.



**ZERO Incidences in 6 months**

### 2. Time Saved from Nasal Tape Changing



### 3. Time Saved from Nursing Nasal Pressure Injury

NGT Injury	Time needed to attend 1 patient	No of affected patients	Total Time Saved
Minor	27mins	11	297mins
Serious	72mins	1	72mins
<b>Estimated Time Saving</b>			<b>369mins</b>

**Total Time Saved 189 Hours per Annum**

### Intangible Benefits

- Improved Staff Morale
- Enhanced Teamwork for Holistic Patient Care
- Improved Patient and Care Giver Experience
- Reduced Unnecessary Complaints and Potential Lawsuits
- Maintain Professional Image of Hospital

### Sustainability

- Training for existing and new staff
- Regular audit to ensure compliance of using Hinge Method
- Standardised Practice of NGT taping
- Collaborate with nursing policy council review on NGT
- Work with vendor to customise pre-cut tapes

### Acknowledgement

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