



# Clinical Safety & Effectiveness Cohort # 9

## **PEG Tube Patient Returns at the UHS Outpatient Gastroenterology Endoscopy Lab**



**Educating for Quality Improvement & Patient Safety**

# Financial Disclosure

Tisha N. Lunsford, MD, has no relevant financial relationships with commercial interests to disclose.

# The Team

**Division :** Gastroenterology

**Team:** Team Schiavo

**CSE Participant & Physician Champion:** Tisha Lunsford, MD

**Fellows:** Yasmin Alishahi, MD

**Support Staff:** Irene Benavidez-Medina, Senior Analyst – Q&PI

Marie Escamilla, Certified Administrative Assistant – Q&PI

**UHS GI Lab:** Robert Garcia, RN

Lauren Favela, RN

Gail Williams, RN

Shawn Snider, RN

**Facilitator :** Amruta Parekh, MD, MPH

**Sponsor Departments:** UTHSC Gastroenterology & UHS – Quality & Process Improvement

# **What We Are Trying to Accomplish?**

## **OUR AIM STATEMENT**

Decrease the number of unanticipated patient returns following PEG tube placement to the outpatient Gastroenterology Endoscopy Center by 10% by 2/23/12.

# Project Milestones

- Team Created August 2011
- AIM statement created August 2011
- Biweekly Team Meetings 09/11 – 12/2011
- Background Data, Brainstorm Sessions 10/03/2011
- Workflow 10/10/2011
- Fishbone Analyses 10/10/2011
- Interventions Implemented 01/17/2012
- Data Analysis 10/2011-02/2012
- CS&E Presentation 2/24/2011

# Background



**December 3, 1963 - March 31, 2005**



- Desire to improve quality of care and perigastrostomy tube education to patient's and/or caregivers.
- Given current cultural diversity and possible lack of time/educational resources, perigastrostomy tube education regarding implications of placement, alternatives, care and resources for complications is lacking.

# **How Will We Know That a Change is an Improvement?**

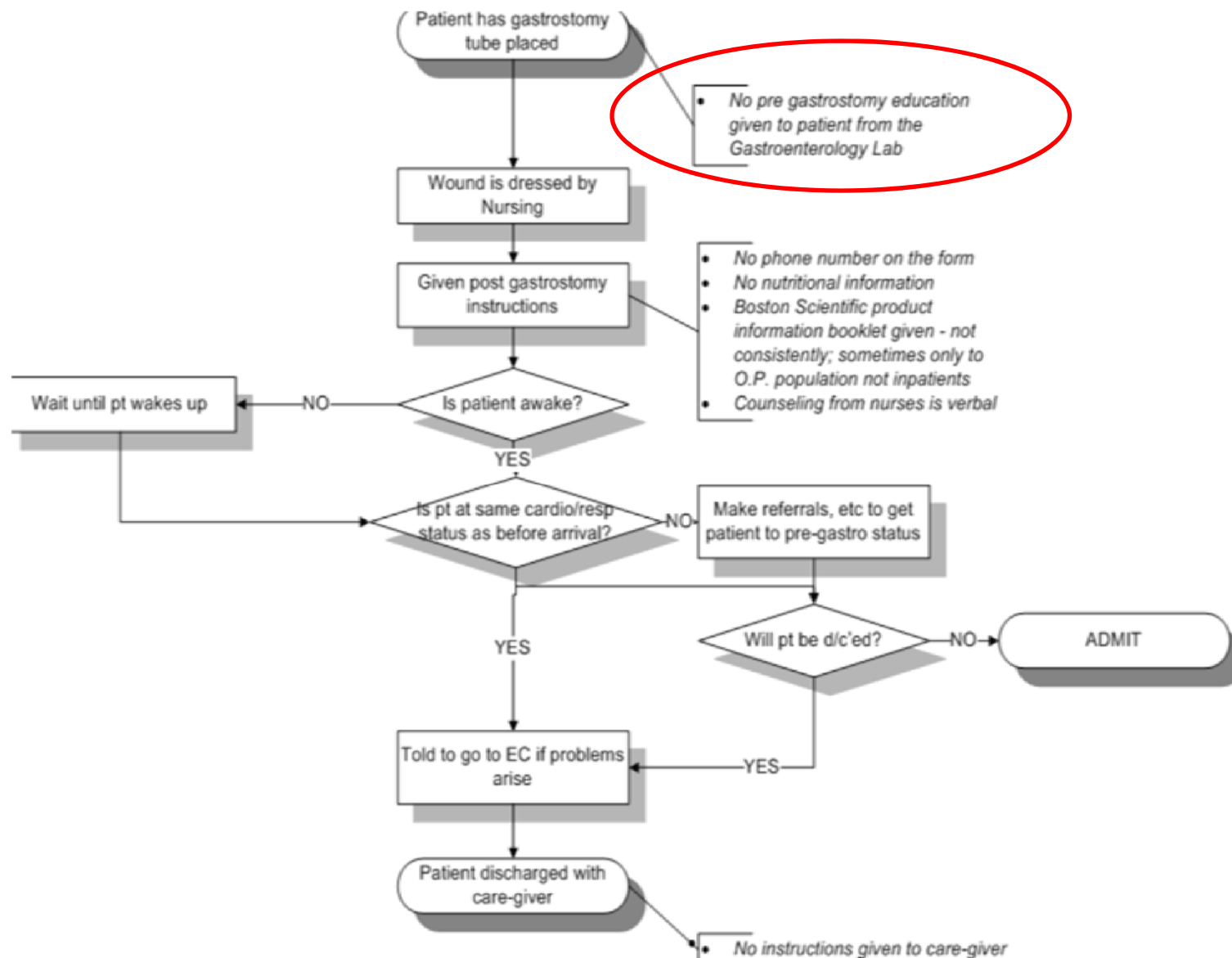
- Improve patient/caregiver understanding of indications, implications, alternatives and resources involving gastrostomy tube placement by implementation of a bilingual pre procedure and post procedural educational patient/caregiver process
- Reduce number of unanticipated post procedural returns to outpatient GI lab by 10%

# Selected Process Analysis Tools

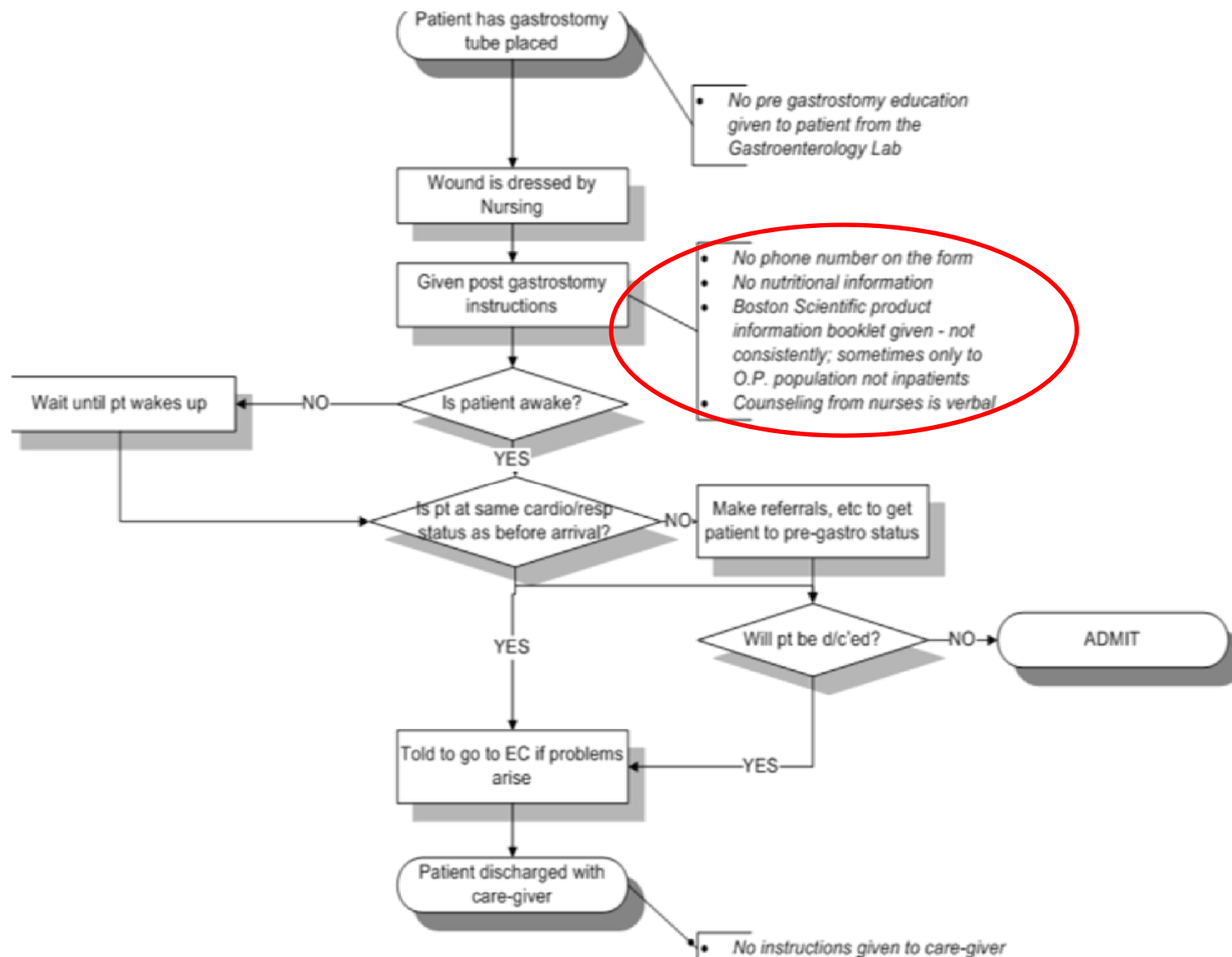
- Brainstorming
- Flowchart
- Fishbone
- Pareto diagram
- Statistical Process Analysis Chart



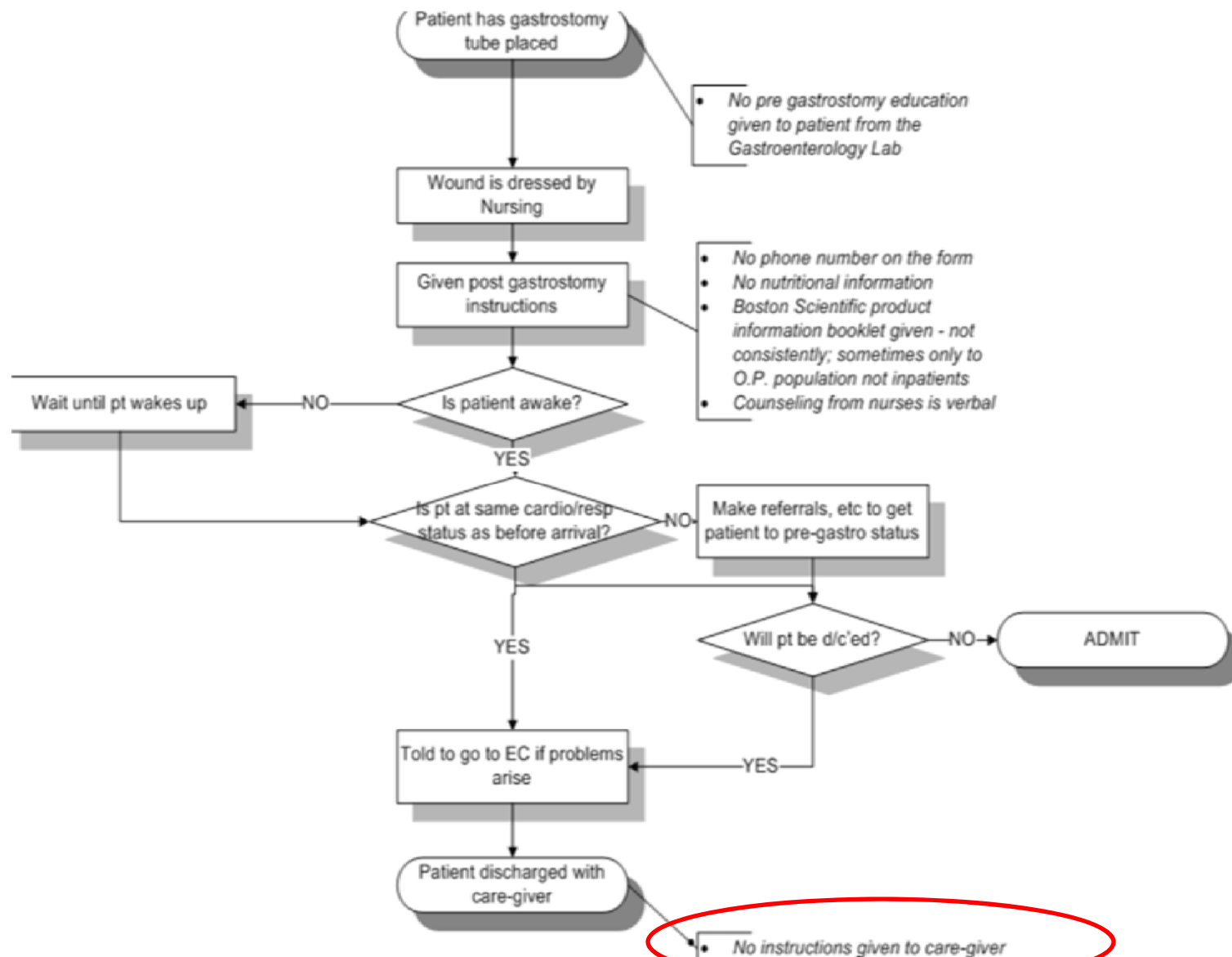
# IMMEDIATE STATUS POST GASTROSTOMY TUBE PLACEMENT PROCESS FLOW



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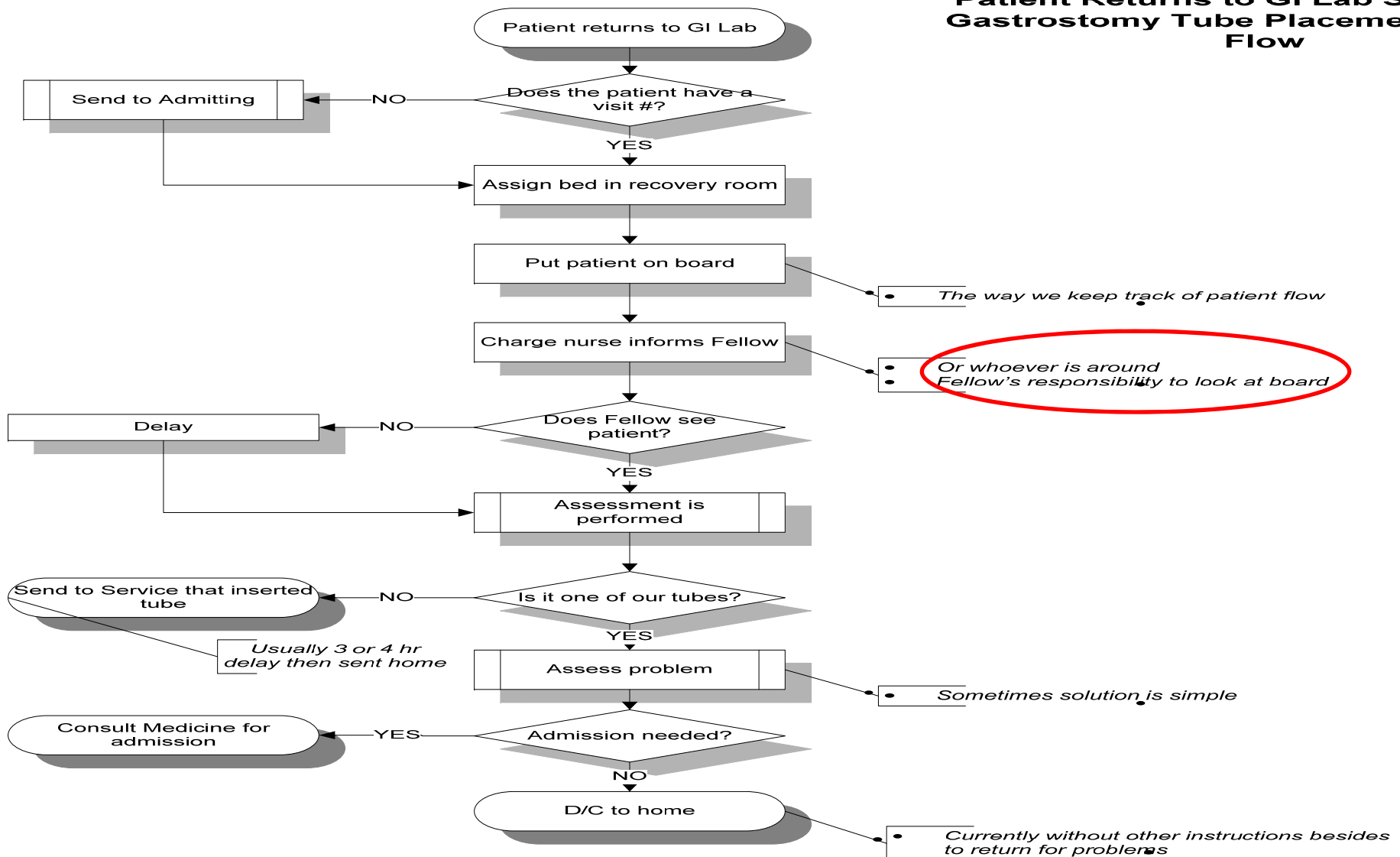


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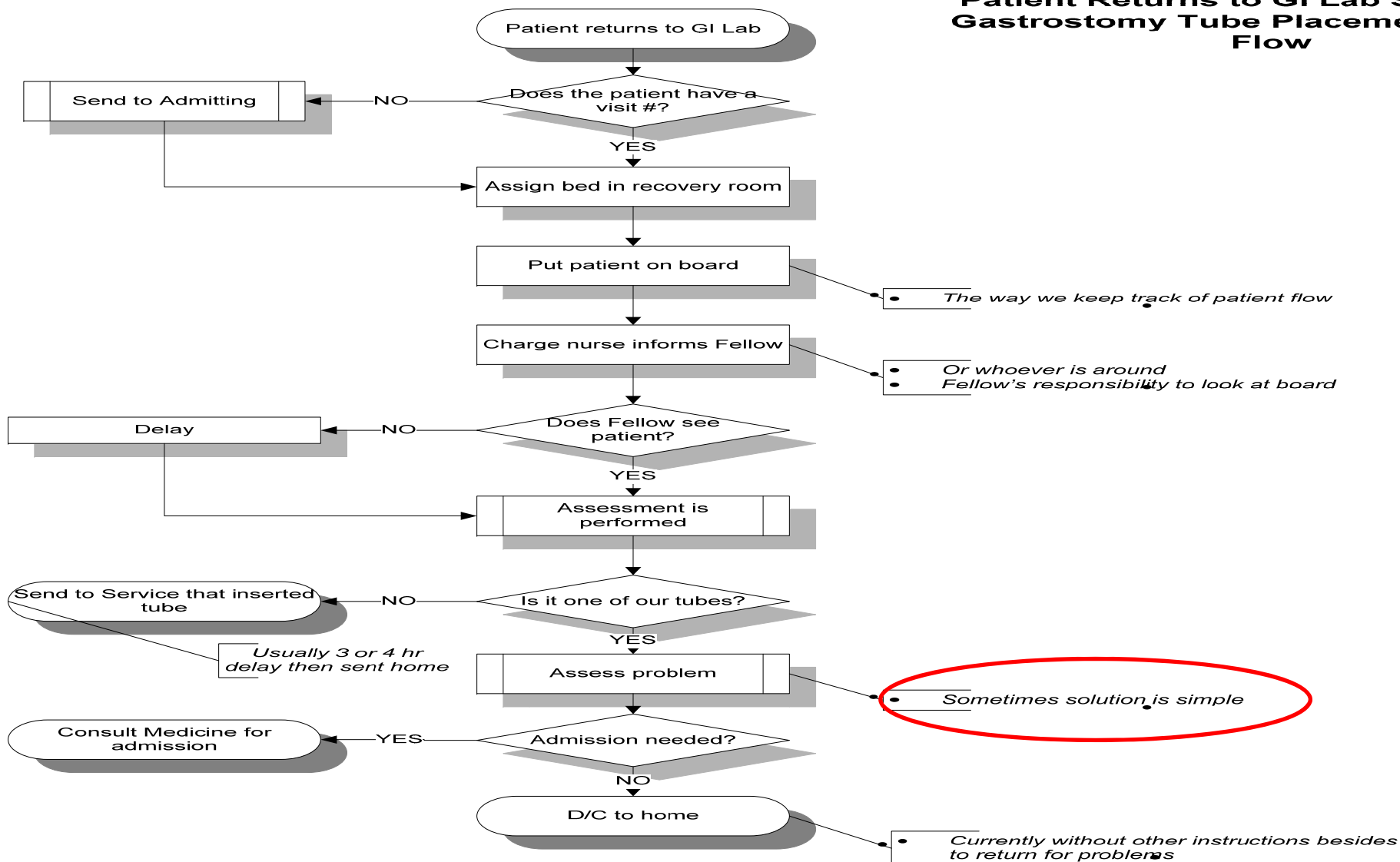
# Patient Returns to GI Lab Status Post Gastrostomy Tube Placement Process Flow

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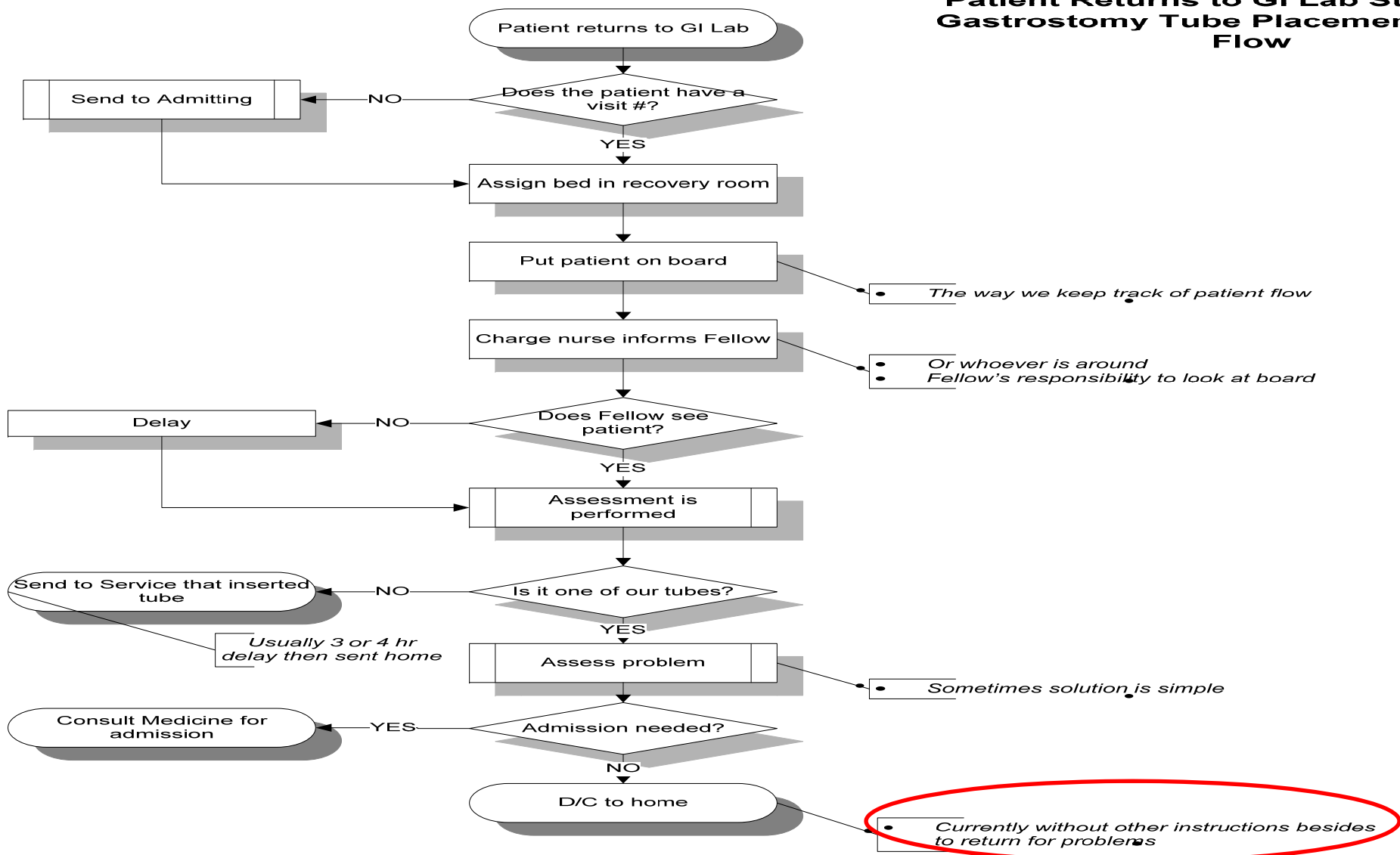
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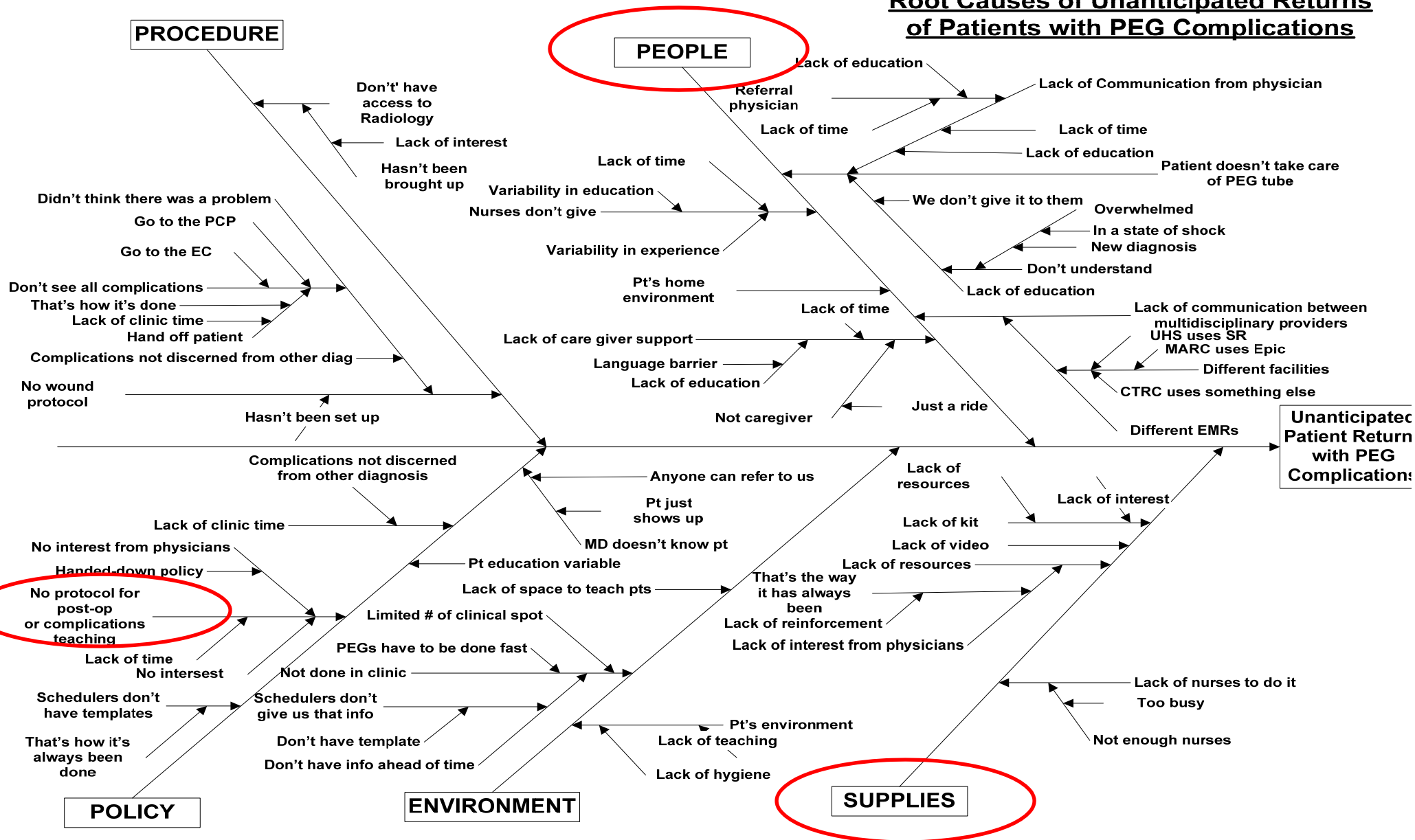


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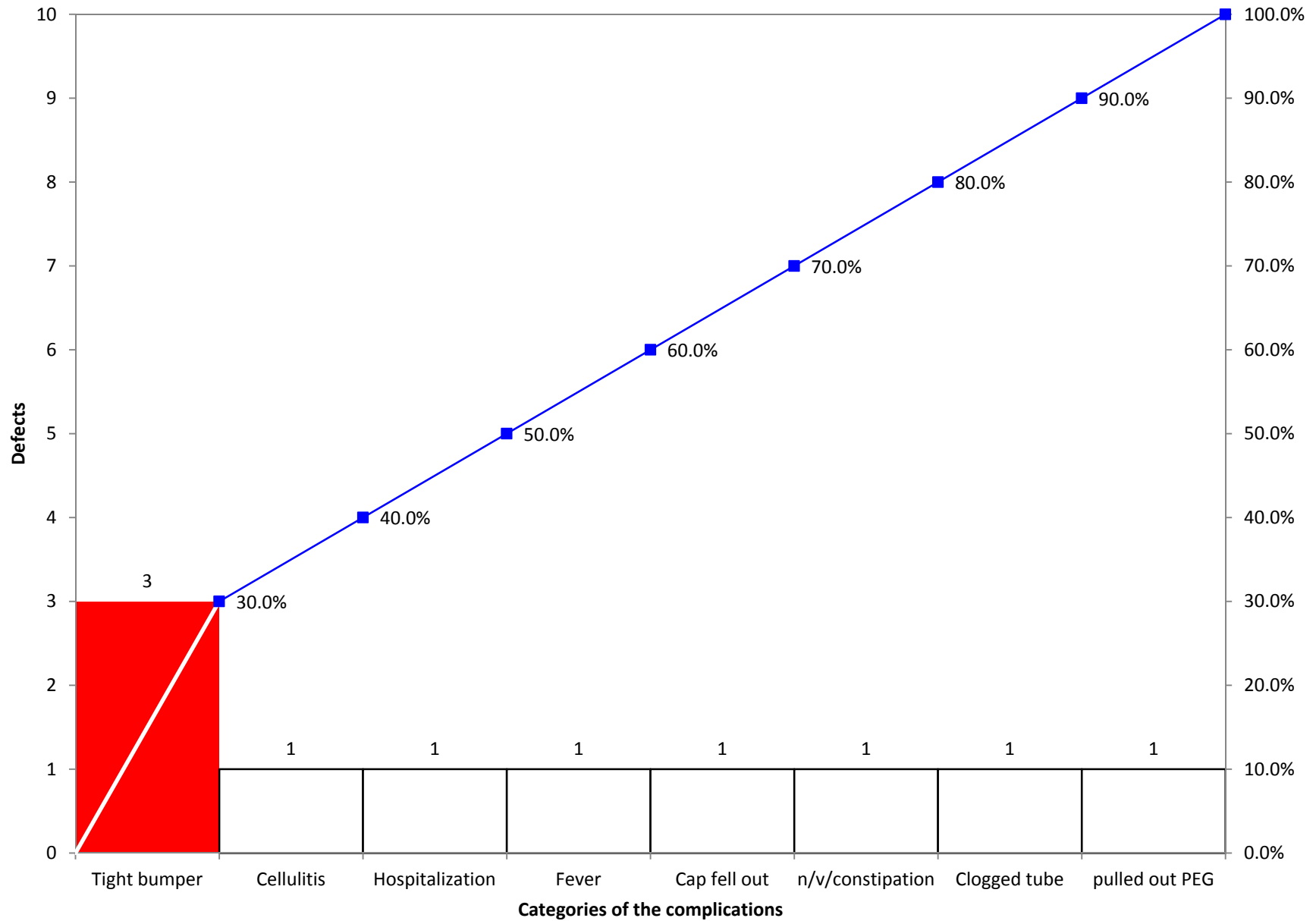
## Patient Returns to GI Lab Status Post Gastrostomy Tube Placement Process Flow



## Root Causes of Unanticipated Returns of Patients with PEG Complications



Pareto Chart showing complications from PEG tube Placement





# Intervention Plan

- Decrease post-PEG return rate
- Implement a pre and post procedural protocol for patients receiving PEG tube placement to increase comprehension to OP GI center
- Provide familiarity and knowledge of point of contact for complications in order to decrease unanticipated returns to OP GI center

# Implementing the Change

## Do

- Develop a bilingual, comprehension appropriate educational brochure and standardization of staff protocol for verbal counsel and documentation of incoming calls/questions regarding care.
- Lessons learned have included drastic variability in coding and documentation of return visits (data collection)
- Difficulty in producing reading material at or under an 5<sup>th</sup> grade level

# Do

# Implementing the Change

## Percutaneous Endoscopic Gastrostomy (PEG)

### Tube Use and Care



#### What is a PEG?

- A PEG is a tube put into your stomach, to give you liquid feedings, fluids, and medicines

#### How is the PEG procedure performed?

- You will receive medicine into your veins to make you relax during the procedure
- A small opening will be made on the skin of your stomach area
- An endoscope (lighted flexible tube) is used to put the PEG tube into your stomach

#### How should I care for the PEG tube?

- Always wash your hands before touching your PEG tube
- Remove the dressing 24 hours after your procedure
- Clean the PEG site every day with soap and water
- Keep the PEG site dry in between cleanings
- Gently twist the tube daily to prevent a scab from forming
- Every day check the skin for redness, swelling, or leakage
- Flush your PEG tube with 60mL (1/4 cup) of warm water daily
- Flush your PEG tube with warm water before and after every tube feed and/or medication
- Do not put dressing (covering) or gauze between the PEG tube bumper and the skin

#### What types of food can I eat?

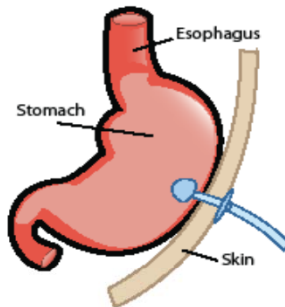
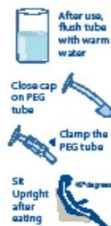
- Your doctor will decide on the type of food you can eat
- Once your doctor has told you to start feeding, use the steps below

#### Using the PEG tube:

- Before using the PEG tube, wash your hands with soap and water
- Clamp your PEG tube for 30 minutes before giving yourself food or medicines
- Sit upright during every feeding (about 45 degrees)
- Flush your tube with at least 60mL (1/4 cup) of warm water
- Pour the liquid/medicine into the PEG tube set or pump



- After each use, flush your tube with at least 60mL (1/4 cup) of warm water
- Close the cap on the PEG tube
- Clamp the PEG tube
- Sit upright or keep the head of your bed raised up (about 45 degrees) for one hour after feeding yourself



## Uso y Cuidados de la Sonda de Gastrostomía Endoscópica Percutánea (PEG)



#### ¿Qué es la gastrostomía endoscópica percutánea (PEG)?

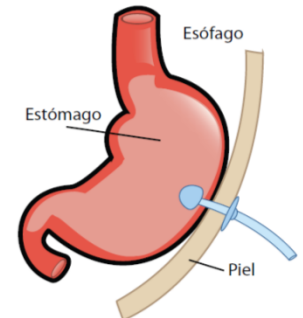
- La gastrostomía endoscópica percutánea es la colocación de una sonda en el estómago para administrarle alimentos líquidos, otros líquidos y medicamentos

#### ¿Cómo se realiza el procedimiento de PEG?

- Se le administrará un medicamento a través de una vena para que esté relajado durante el procedimiento
- Se hará un pequeño orificio en la piel, en el área del estómago
- Se utiliza un endoscopio (tubo flexible con luz) para colocar la sonda PEG en el estómago

#### ¿Cuáles son los cuidados que debo tener con la sonda PEG?

- Siempre lávese las manos antes de tocar la sonda PEG
- Quite el vendaje 24 horas después del procedimiento
- Limpie el sitio de la sonda PEG todos los días con agua y jabón
- Mantenga seco el sitio de la sonda PEG después de cada limpieza
- Gire suavemente la sonda todos los días para evitar la formación de costra
- Revise la piel diariamente en caso de que esté enrojecida, hinchada o haya salida de líquido
- Enjuague diariamente la sonda PEG con 60 ml (1/4 de taza) de agua tibia
- Enjuague la sonda PEG con agua tibia antes y después de cada alimentación y/o medicamento administrado por la sonda
- No coloque el vendaje (cubierta) o gasa entre el extremo redondo llamado "bumper" de la sonda PEG y la piel



#### ¿Qué tipos de alimentos puedo comer?

- Su médico decidirá el tipo de alimentos que puede comer
- Una vez que su médico le haya indicado que empiece con la alimentación, siga los pasos a continuación

#### Uso de la sonda PEG:

- Antes de usar la sonda PEG, lávese las manos con agua y jabón
- Sujete la sonda PEG durante 30 minutos antes de administrarse alimentos o medicamentos
- Siéntese erguido (derecho) durante cada alimentación (unos 45 grados)
- Enjuague la sonda con un mínimo de 60 ml (1/4 de taza) de agua tibia
- Vierta el líquido/medicamento en el equipo o bomba de la sonda PEG



- Después de cada uso, enjuague la sonda con un mínimo de 60 ml (1/4 de taza) de agua tibia
- Cierre la tapa de la sonda PEG
- Sujete la sonda PEG
- Siéntese erguido (derecho) o mantenga levantada la cabecera de la cama (unos 45 grados) durante una hora después de la alimentación

