

# Review and Optimization of Thrombolytic Instillation in Chest Tubes



**Western**  
The Centre for Quality, Innovation and Safety

Cameron Ashe, Mina Ishak, Jana Aljohani, and Abdullah Almazrooa  
Centre for Quality, Innovation, and Safety, Schulich School of Medicine & Dentistry,  
Western University, London, ON, Canada

**AIM Statement:** Understanding and improving the process by which patients of Respiriology receive chest tube lytics, and the impact on patient length of stay and duration of chest tube.

## PROBLEM DEFINITION

In our facility there are delays in the administration of Alteplase and Dornase for chest tube management, and this has impact on patient care

We look to see if a link exists between those who successfully receive their lytic doses and length of stay, and duration of time chest tube remains in versus those who do not

The process of thrombolytic delivery and administration to patients are multifactorial and result in delays in care. This process can be improved by the storage of thrombolytics on the floor and preparation by the Respiriology team. Approval of this idea is currently being discussed at the Drug Therapeutics Committee.

## IMPLEMENTATION

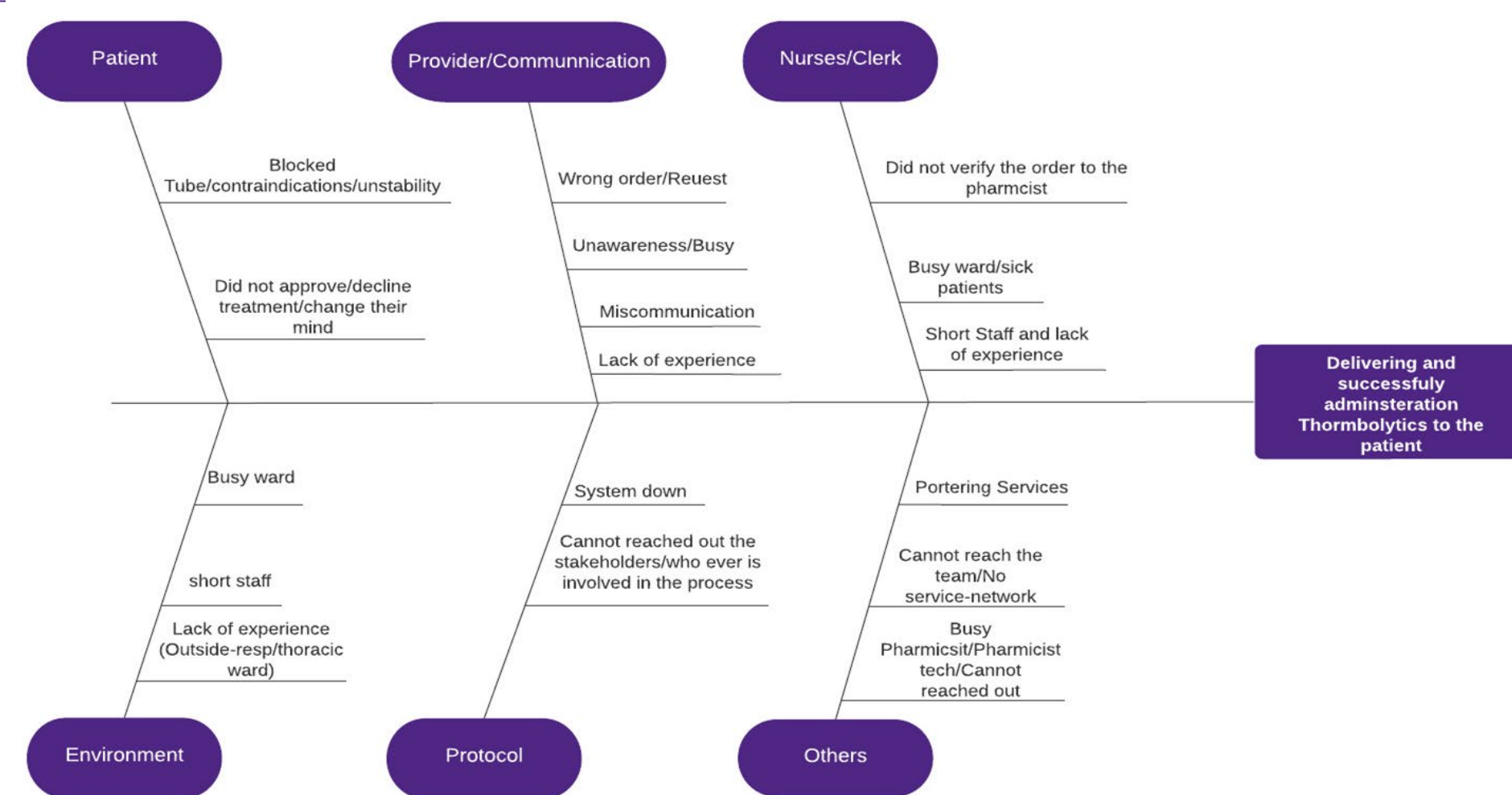
PDSA 1: Called down to pharmacy to communicate lytic order.

- Variability of knowledge by pharmacy technicians of the protocols.

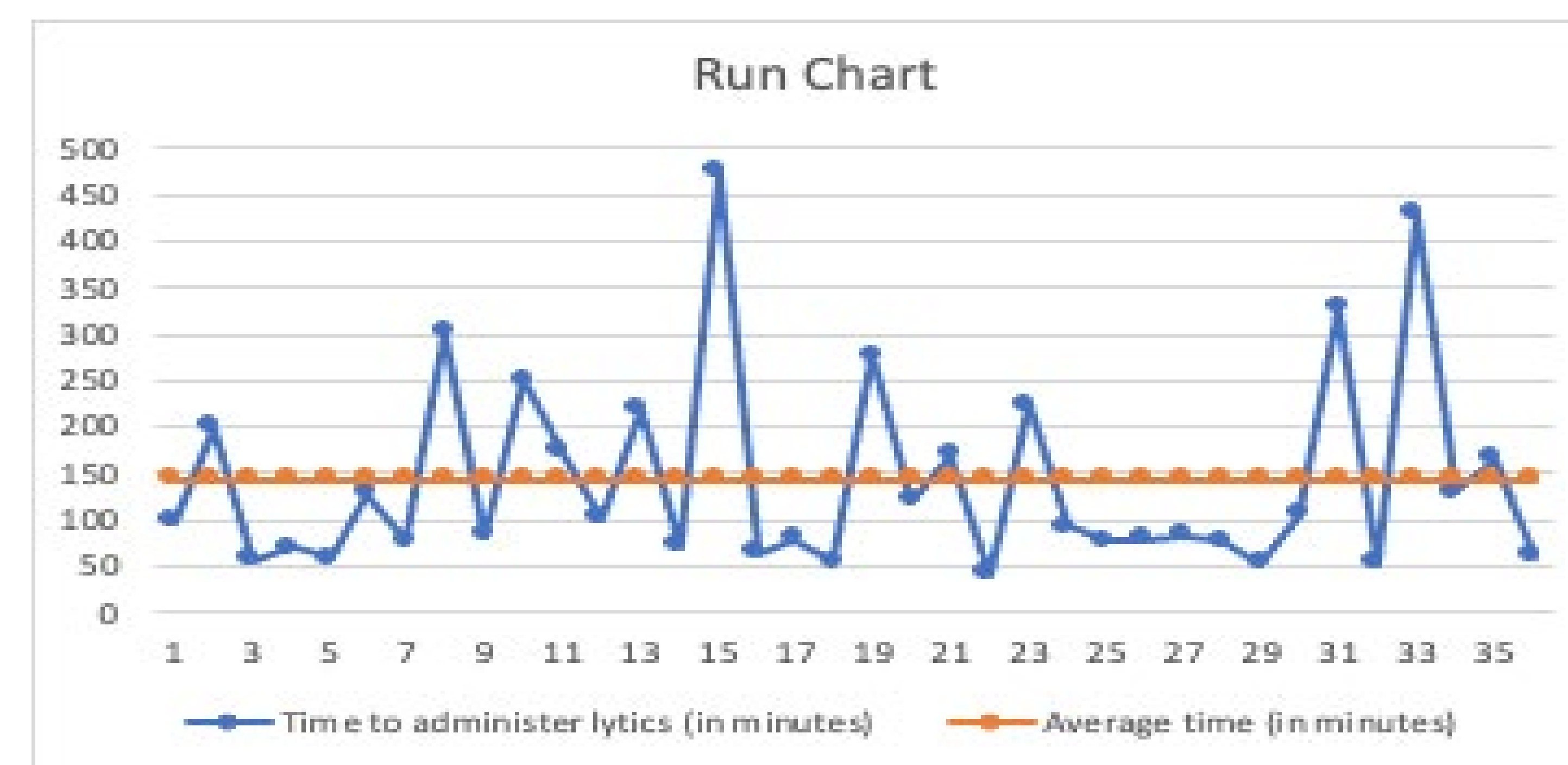
PDSA 2: Called the bedside nurse to communicate lytic order.

- The lytic administers can still get pulled away causing delays
- Excellent nursing engagement/education

## ROOT CAUSE ANALYSIS



- The **process starts** when a patient is identified as needing Intrapleural lytics.
- Main **outcome:** The lytics are successfully administered to the patient.
- Who **involved:** Physicians, Pharmacists/tech, Nurses/clerk and portering services.
- **Steps:** Ordering the lytics in the PC > pharmacist will activate the order after verification > preparation > transportation > administration.



## MEASUREMENT & RESULTS

Thus far, 36 times lytics have been administered that we recorded the length of time from when order was placed to time drugs were given

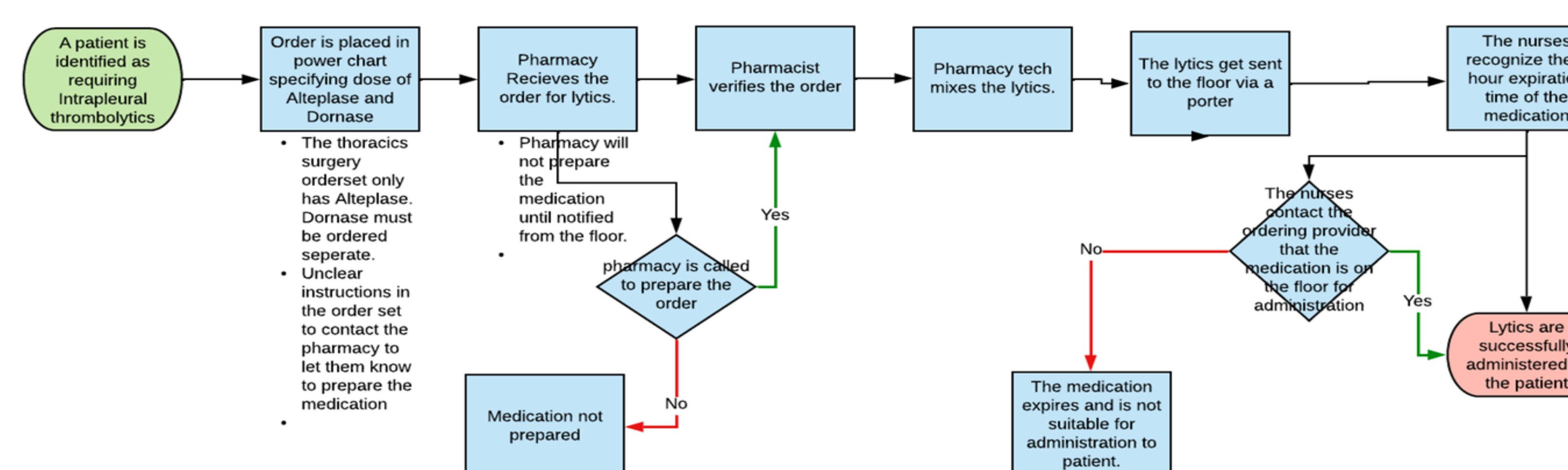
Average time to administer lytics - 142 minutes

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Cameron Ashe | April 24, 2024

### Current State



## SUSTAINABILITY

- There will be meeting with Drug & Therapeutics Committee ~ May/2024