

Jaclyn Tan Ee Chen, Physiotherapy Department

Mission Statement

To reduce the number of communication attempts a patient takes to get *intent understood by HCWs from 5 to 2 in SICU **intubated patients in 6 months.

*intent: Basic needs (eg. Change diapers, suction, breathlessness)
**intubated: Endotracheal tube/Tracheostomy tube

Team Members

Name	Designation	Department
Leader	Jaclyn Tan Ee Chen	Senior Physiotherapist Physiotherapy
Members	Yang Xue Lian	Nurse Clinician Nursing
	Dr Shirley Goh	Consultant Anaesthesiology, Intensive Care and Pain Medicine
	Dr Jasmine Yang Yun Rui	Consultant Anaesthesiology, Intensive Care and Pain Medicine
	Zenne Tng Kuan Chen	Principal Speech Therapist Speech and Language Therapy
	Tan Xin Yi	Senior Medical Social Worker Care and Counselling
	Cheryl Pan	Staff Nurse Nursing
	Lay Phwe Phwe	Staff Nurse Nursing
Sponsor	Adj A/Prof Tan Hui Ling	Director (Neurosurgical ICU) & Senior Consultant, Chairman, Hospital ICU Committee Anaesthesiology and Intensive Care

Evidence for a Problem Worth Solving

HCWs are challenged to meet the ICU patients' communication needs as these patients have artificial airways and cannot communicate verbally.

TTSH SICU:

Patient's inability to communicate verbally

Abbreviations
HCW: Healthcare worker, TTSH: Tan Tock Seng Hospital, SICU: Surgical Intensive Care Unit

HCWs are markedly dissatisfied with their ability to communicate effectively

Patient experiences high levels of anxiety and frustration.

Current Performance of a Process

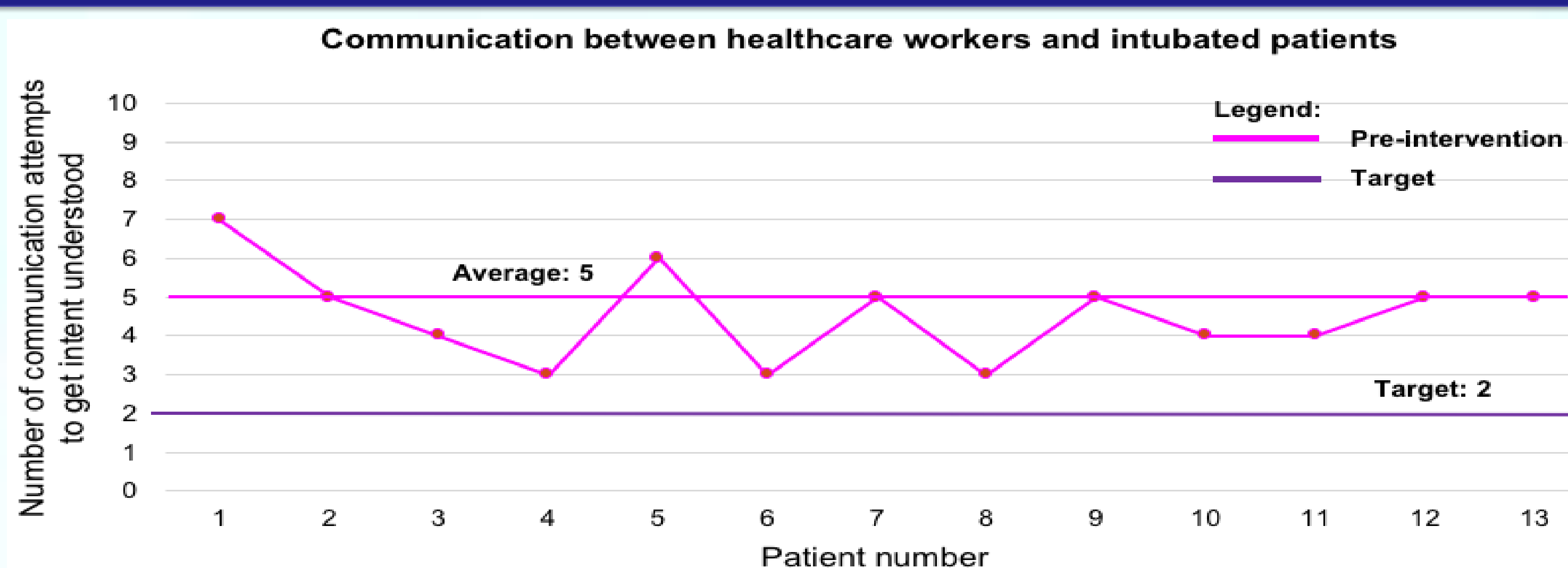


Figure 1. Number of communication attempts a patient takes to get intent understood by healthcare workers (Pre-intervention)

Flow Chart of Process

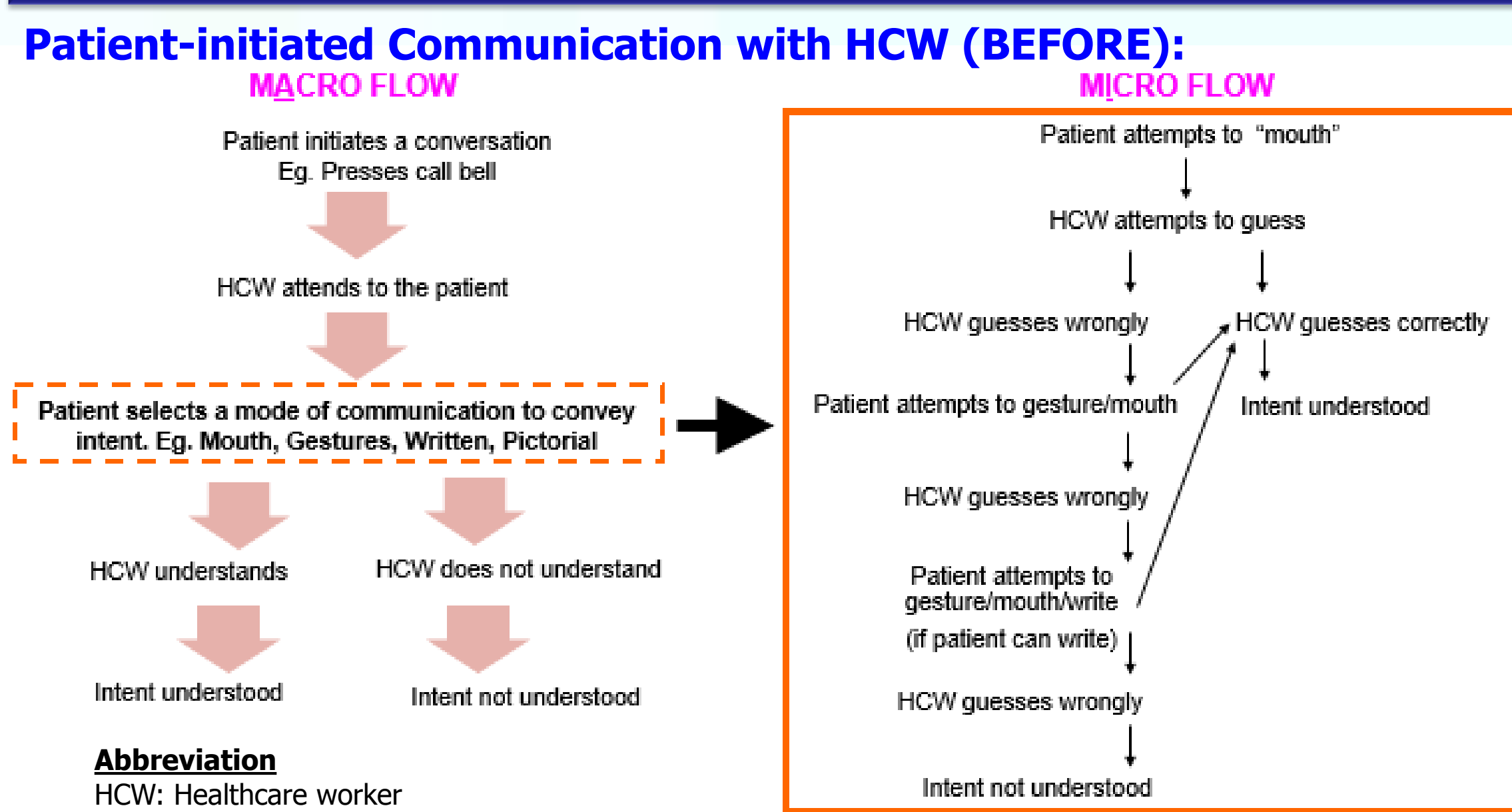


Figure 2. The macro flowchart (left) describes the major steps of patient-initiated communication pre-intervention. The micro flowchart (right) describes the details of the major step that was critical to address.

Cause and Effect Diagram

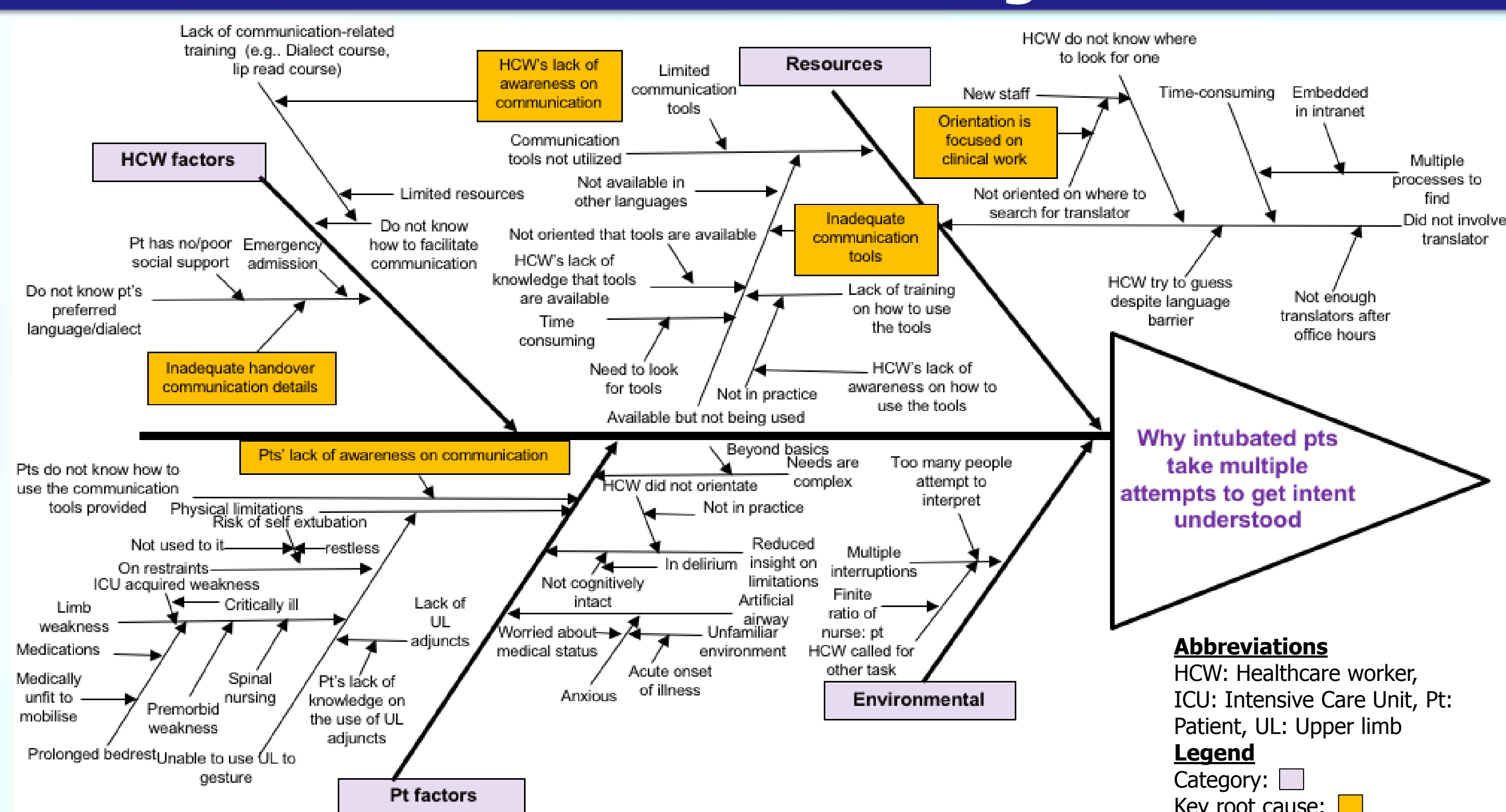


Figure 3. Cause and effect diagram for intubated patients taking multiple attempts to get intent understood by healthcare workers.

Pareto Chart

Root causes for intubated patients taking multiple attempts to get intent understood

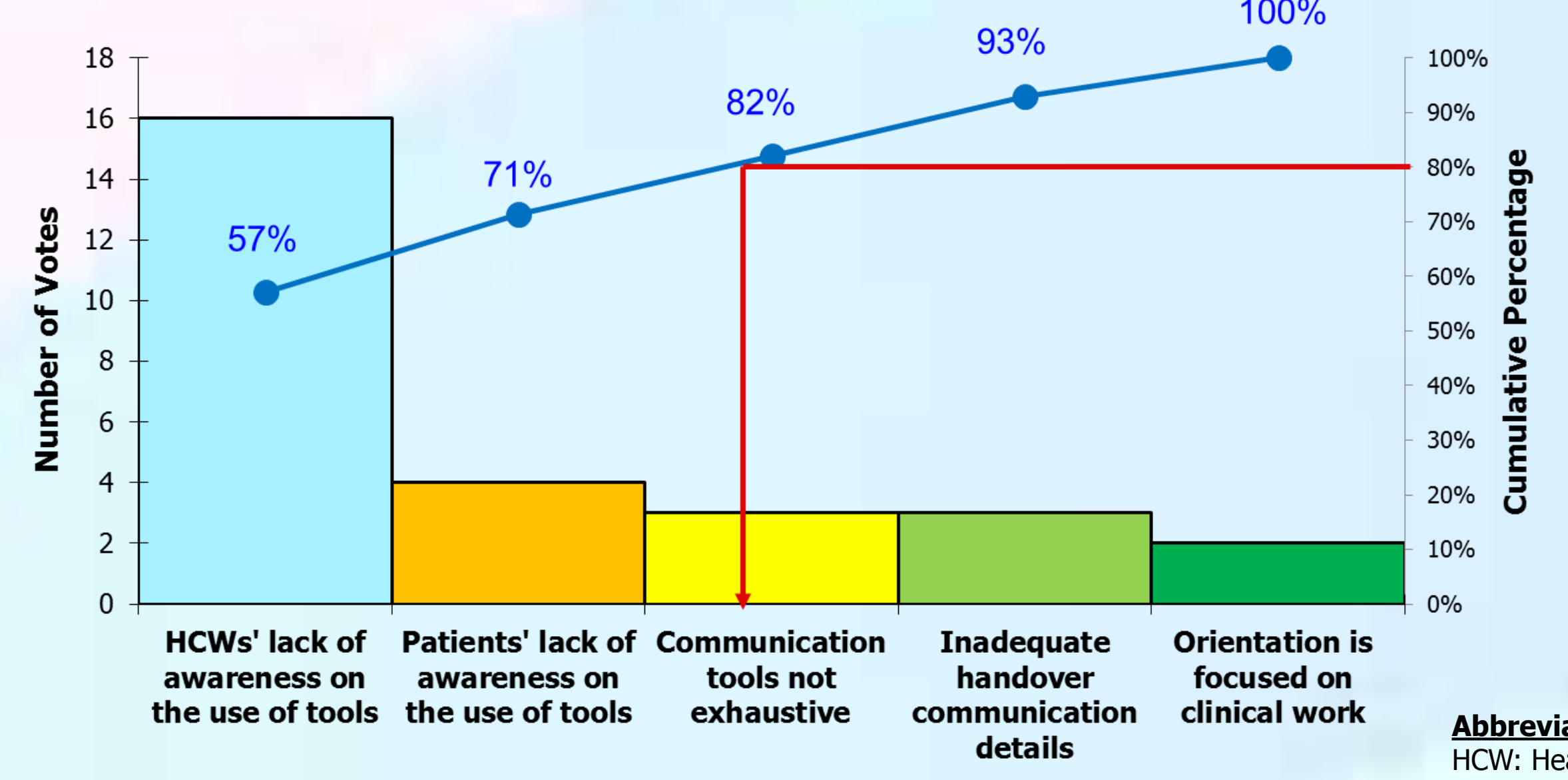


Figure 4. Pareto Chart illustrates the key root causes for patients taking multiple attempts to get intent understood by healthcare workers.

Implementation

ROOT CAUSE	INTERVENTION (PDSA)	IMPLEMENTATION DATE
Healthcare workers' lack of awareness on communication	Communication training session and introduction of communication kit	19th July 2016
Patient's lack of awareness on communication		
Inadequate communication tools	Develop a communication kit Revise the communication kit	29th June 2016 29th July 2016

Results

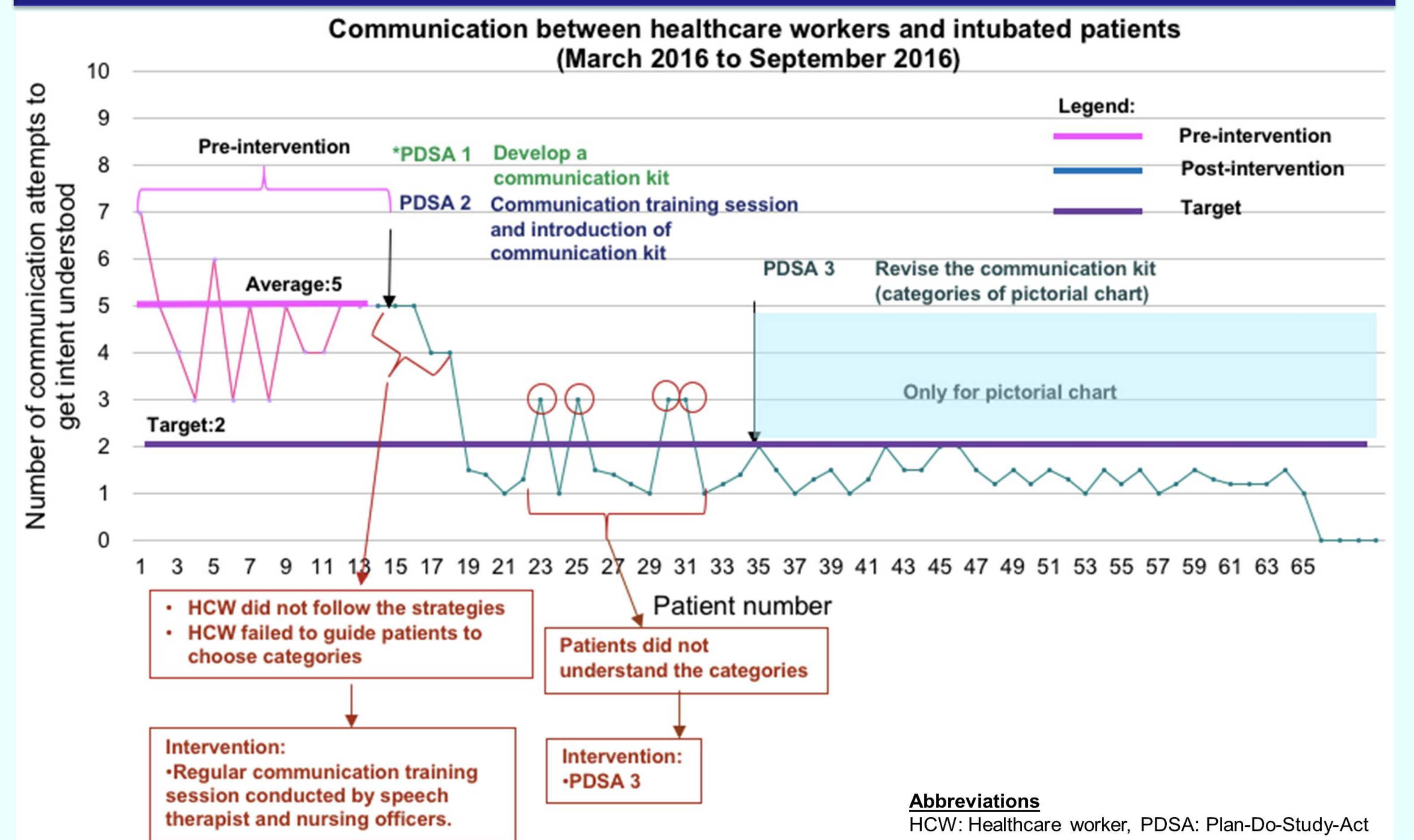


Figure 5. Number of communication attempts a patient takes to get intent understood by healthcare workers pre- and post-intervention in SICU (March to September 2016)

Patients rated the usefulness of the communication kit as 2-Good on a 5-point scale (1-Excellent, 5-Very Poor).

Patient-initiated communication with HCW (AFTER):

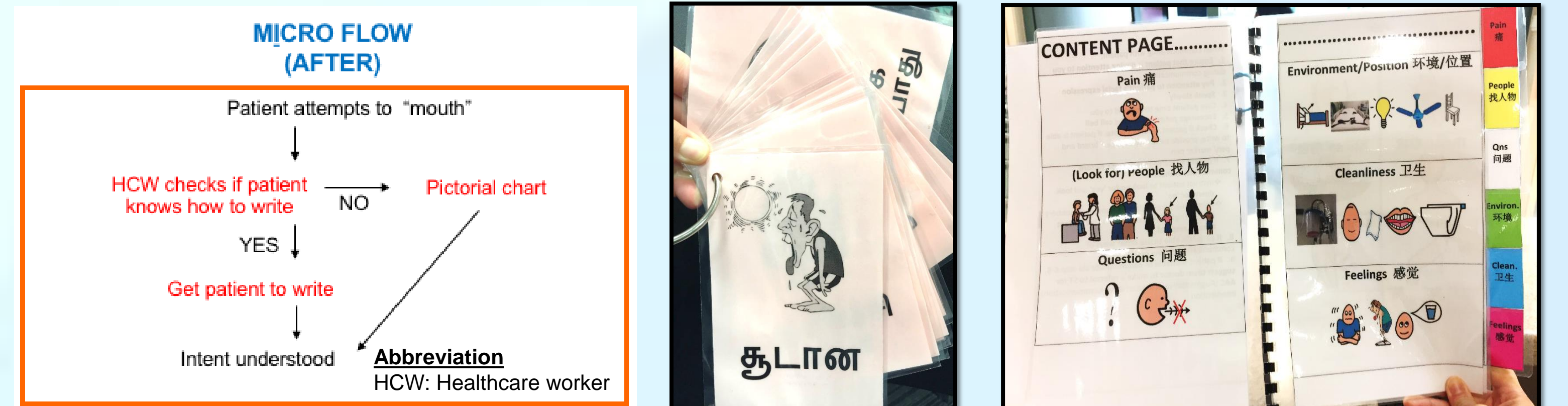
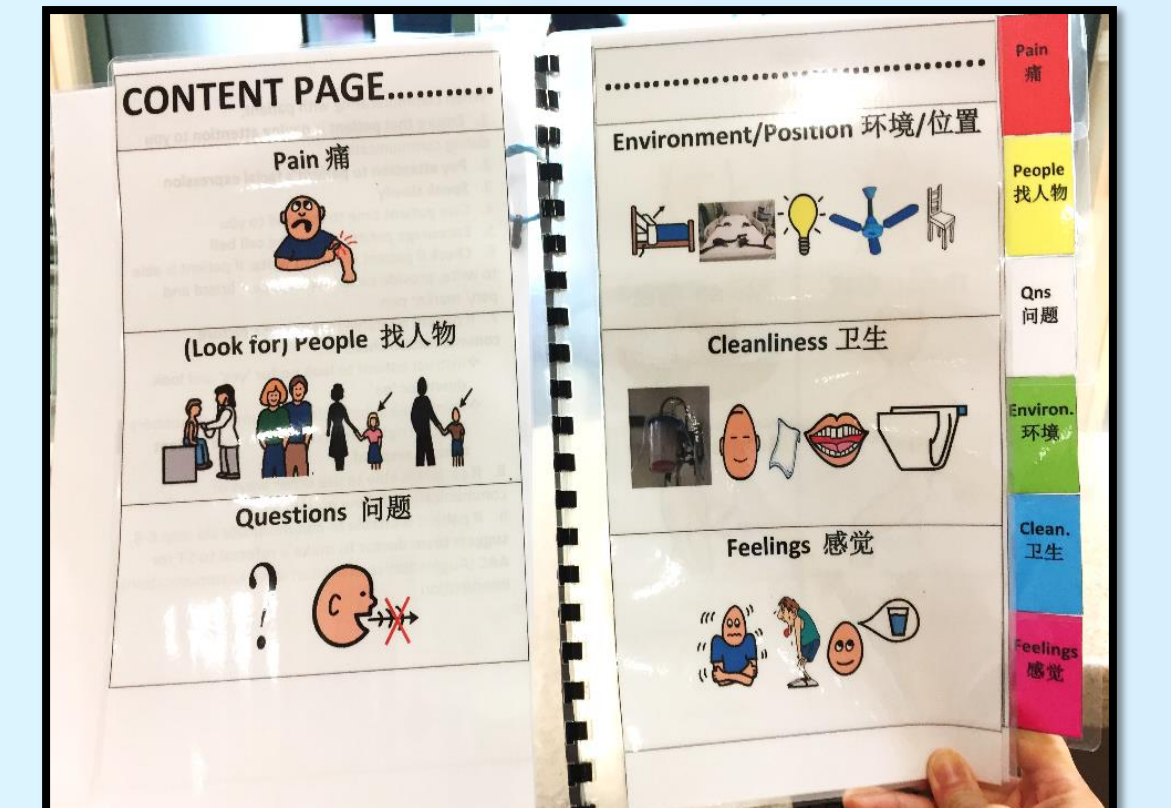


Figure 6. The micro flowchart describes the changes in the aforementioned major step



Conclusion: Adequate communication tools and providing tips to guide HCWs in identifying appropriate communication strategies are essential for achieving effective HCW-patient communication.

Cost Savings

It would cost \$50SGD to get a communication kit from a speech therapist. With an average of 13 ICU patients per month, the total cost savings will be \$7800SGD per year.

Problems Encountered

Getting data collection and monitoring systems right were tough. Regular discussions, detailed planning and constant engagement of the team members and ground staff were keys to the success of the project.

Strategies to Sustain

A video showing the correct usage of the communication kit will be included into the SICU orientation programme. Monthly results will be shared with the HCWs. Regular communication audits will be carried out to monitor performance. If there is a slip, an analysis will be conducted.