

## Mission Statement

To improve the use of GINA Symptom Control Tool from 41.8% to 100% in patients with asthma who are on regular follow up with Yishun Polyclinic Teamlet C over a 6 month period from August 2023 to January 2024.

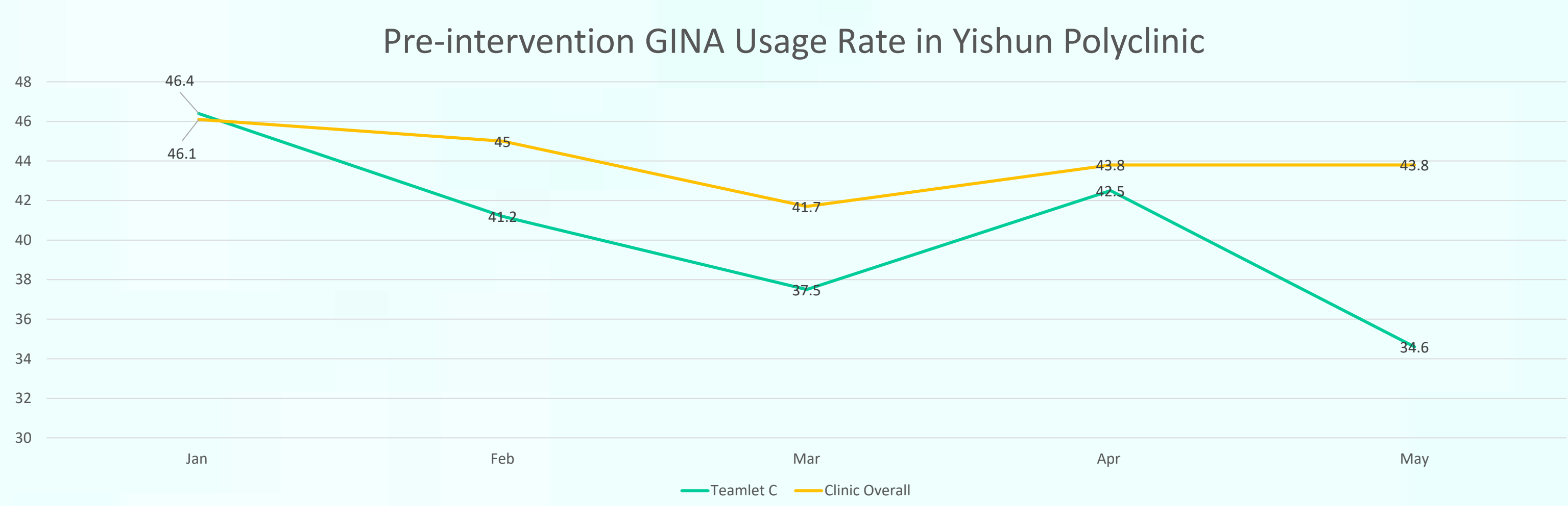
## Team Members

Name	Designation	Department	Project Role
Dr Seow Yi Heng	Resident	Medical	Team Leader
Dr Chen Tongyuan	Family Physician	Medical	Member
Ms Xie Meijiao	Advanced Practice Nurse	Nursing	Member
Ms Carmen Goh	Care Manager	Nursing	Member
Ms Rena Hong	Treatment Room Nurse	Nursing	Member
Ms Pushparani	Patient Care Assistant	Operations	Member
Dr Lawrence Wu	Family Physician	Medical	Supervisor
Dr Tan Dihao Keith	Deputy Clinic Head	Medical	Sponsor

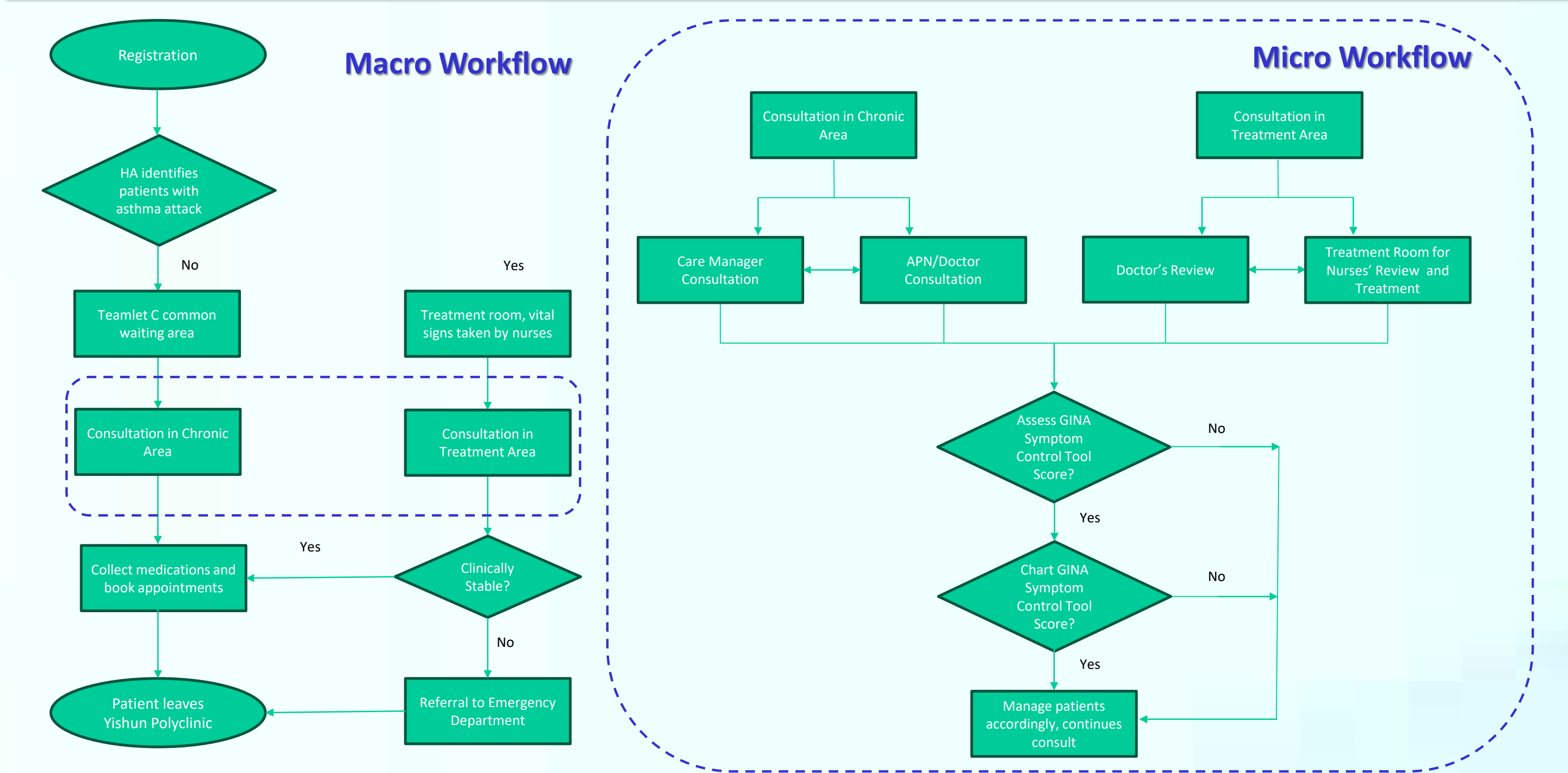
## Evidence for a Problem Worth Solving

- Asthma is a significant issue locally with up to 11.9% of Singaporeans affected. Poor asthma control is strongly associated with an increased risk of asthma exacerbations
- The GINA Symptom Control Tool correlates well with asthma control and is a simple and effective tool that can be used to identify patients with sub-optimally controlled asthma and to guide treatment modification.
- The GINA Guidelines have emphasized that the GINA Symptom Control Tool should be captured at every opportunity, including prescribing, to assist with clinical decision making
- The documentation rate in YIS Teamlet C was below clinic average and could be improved.

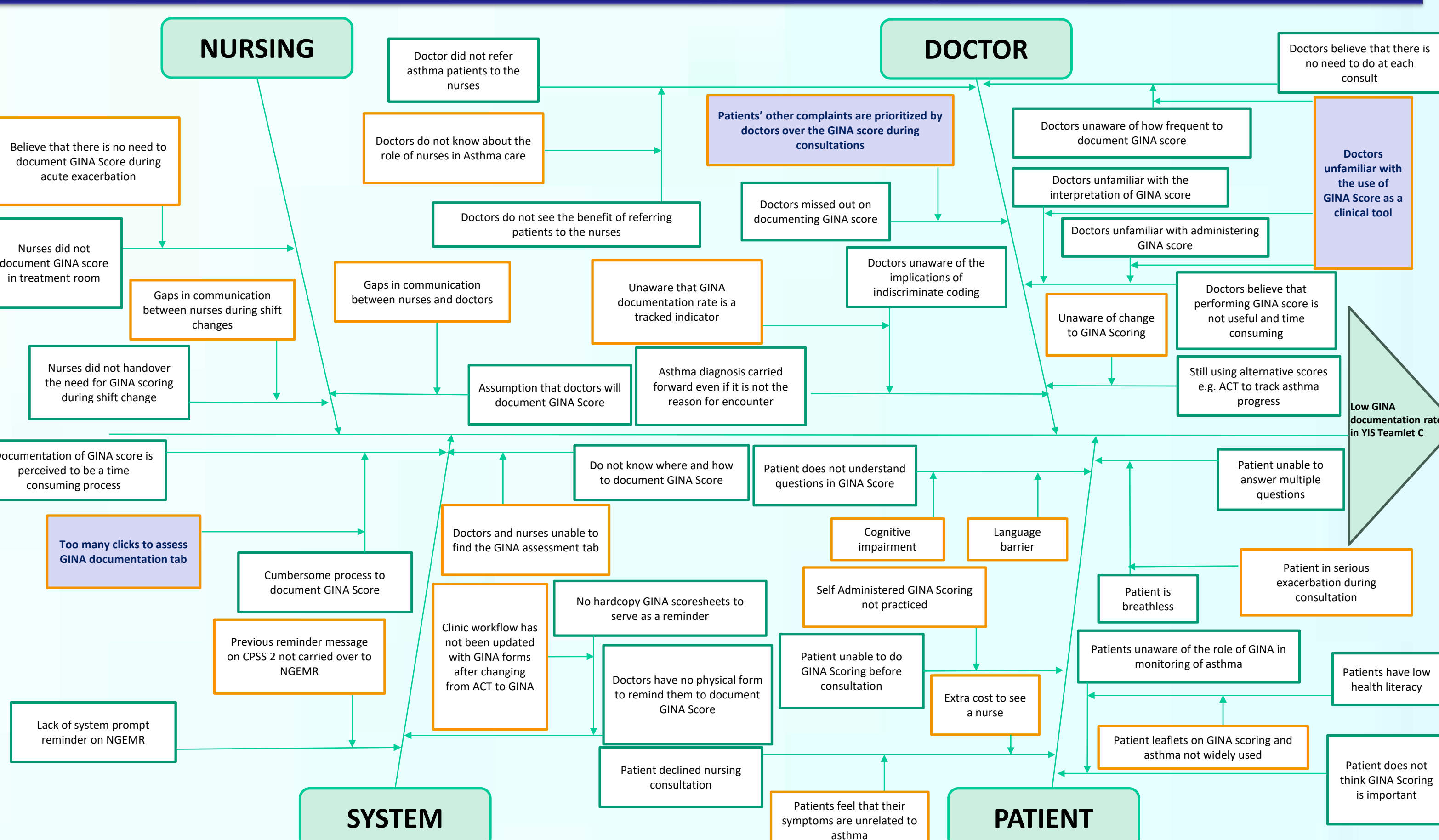
## Current Performance of a Process



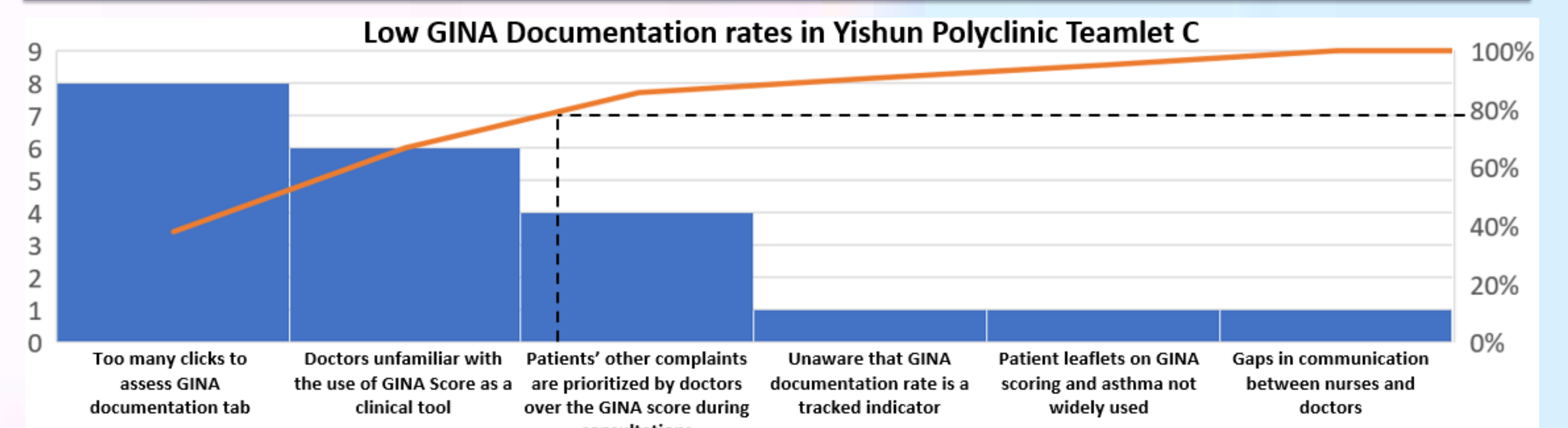
## Flow Chart of Process



## Cause and Effect Diagram



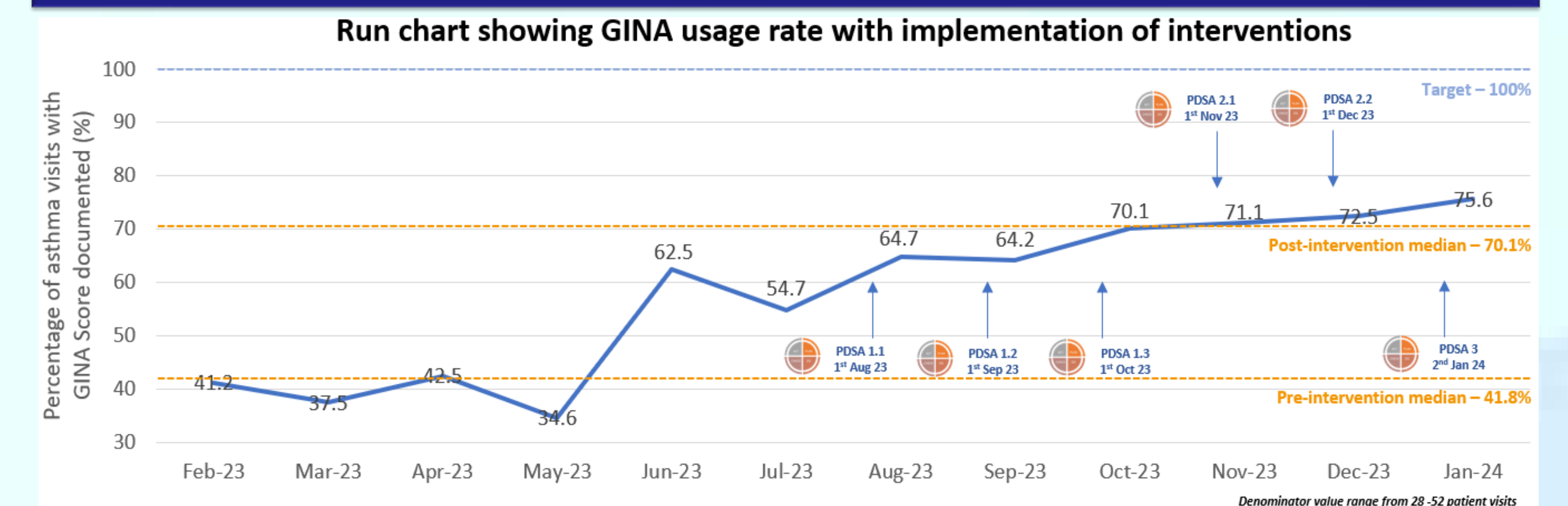
## Pareto Chart



## Implementation

Plan/Act	Do	Study
<b>Root Cause: Too many clicks required to assess GINA documentation tab</b>		
1a	Introduce an acronym expansion with a hyperlink for easy GINA documentation <b>1<sup>st</sup> August 2023</b> • Acronym expansion with a hyperlink to GINA documentation pop-up was introduced • Team members received biweekly reminders on the expansion	Post intervention survey revealed that all members of Teamlet C found the expansion useful. However, many Teamlet C patients with no GINA Tool documented were seen by non-Teamlet C doctors.
1b	Use of acronym expansion was encouraged amongst all doctors in YIS <b>1<sup>st</sup> September 2023</b> • Infographic on the acronym expansion was broadcasted to clinic doctors	Most doctors (90%) felt that the expansion was useful and saves them time during consultations. However, some were unable to recall the shorthand for the expansion during consultations.
1c	To introduce a note that is easily seen during consults to remind doctors about the acronym expansion. <b>1<sup>st</sup> October 2023</b> • Reminder notes for the expansion were attached on PC monitors in YIS	85% of patients with their GINA score documented had it done using the expansion.
<b>Root cause: Doctors unfamiliar with the use of GINA Symptom Control Tool as a clinical tool</b>		
2a	Education session given to doctors to address knowledge gaps. <b>1<sup>st</sup> November 2023</b> • Infographic with essential learning points about the who, what, when, why and how of using the GINA Symptom Control Tool was created • Doctors participated in a pre and post session quiz on the topic	There was an improvement in documentation rates amongst Teamlet C doctors. Most patients without their GINA score documented were (64%) seen outside Teamlet C.
2b	Need to expand the intervention to include doctors outside Teamlet C <b>1<sup>st</sup> December 2023</b> • Doctors who took part in the education session also participated in a pre and post survey	100% of respondents strongly agreed or agreed that they better understood the GINA Symptom Control Tool and will apply it more frequently during asthma consultations
<b>Root Cause: Patients' other complaints are prioritised by doctors over the GINA Symptom Control Tool during consultations</b>		
3	To remind doctors about documenting the GINA Symptom Control Tool when a patient with asthma comes for review <b>2<sup>nd</sup> January 2024</b> • Our team collaborated with the Singapore National Asthma Programme (SNAP) coordinator stationed in our clinic. • The SNAP coordinator identified and located patients with asthma coming for review. • A pink reminder slip was stapled onto their queue chit by the SNAP coordinator to remind doctors to document the GINA score.	All chronic asthma patients with the pink reminder slips had their GINA Score documented by the doctor seeing them (100%). Teamlet C doctors surveyed felt that the slip served as a timely reminder regarding the need to document GINA Score.

## Results



## Cost Savings

- Direct cost saving was not applicable for this project as it was primarily looking at improving GINA documentation rates which is a clinical indicator.
- However, improved GINA documentation rates can result in improved asthma control which leads to reduced overall healthcare costs.

## Problems Encountered

- Limitations in data collection: the GINA Symptom Control Tool documentation rate could have been underestimated because data was only captured if the provider entered it into the flowsheet section of EPIC.
- A clinic wide approach is crucial as we work as a team: because of the nature of asthma and the high patient to doctor ratio, asthma patients are often seen outside their own Teamlet during unscheduled visits. This makes it essential to include other providers in the clinic to achieve robust and sustainable change.

## Strategies to Sustain

- Following our successful and well received pilot, we can consider working with EPIC coders and other stakeholders to come up with an even easier method to document GINA Symptom Control Tool through software optimization or even the use of QuikPad toggle to the GINA tab.
- Regular CME sessions for doctors on asthma and the application of GINA Symptom Control Tool can be provided to maintain doctors' knowledge.
- EPIC-based reminders can also be built into our electronic medical records to remind providers on the need to use the GINA Symptom Control Tool.
- Further PDSA cycles could also be implemented on intervention 3 to further optimize the identification and location of patients, making it a more sustainable and effective intervention in the long term.