

Mission Statement

To increase percentage of comprehensive* nutritional intervention for older adults aged ≥ 65 years, BMI $< 20\text{kg/m}^2$ from 15% to 90% in Woodlands Polyclinic Teamlet C within 6 months.

*receiving handout on high energy high protein and/or see a dietitian for individualized diet advices

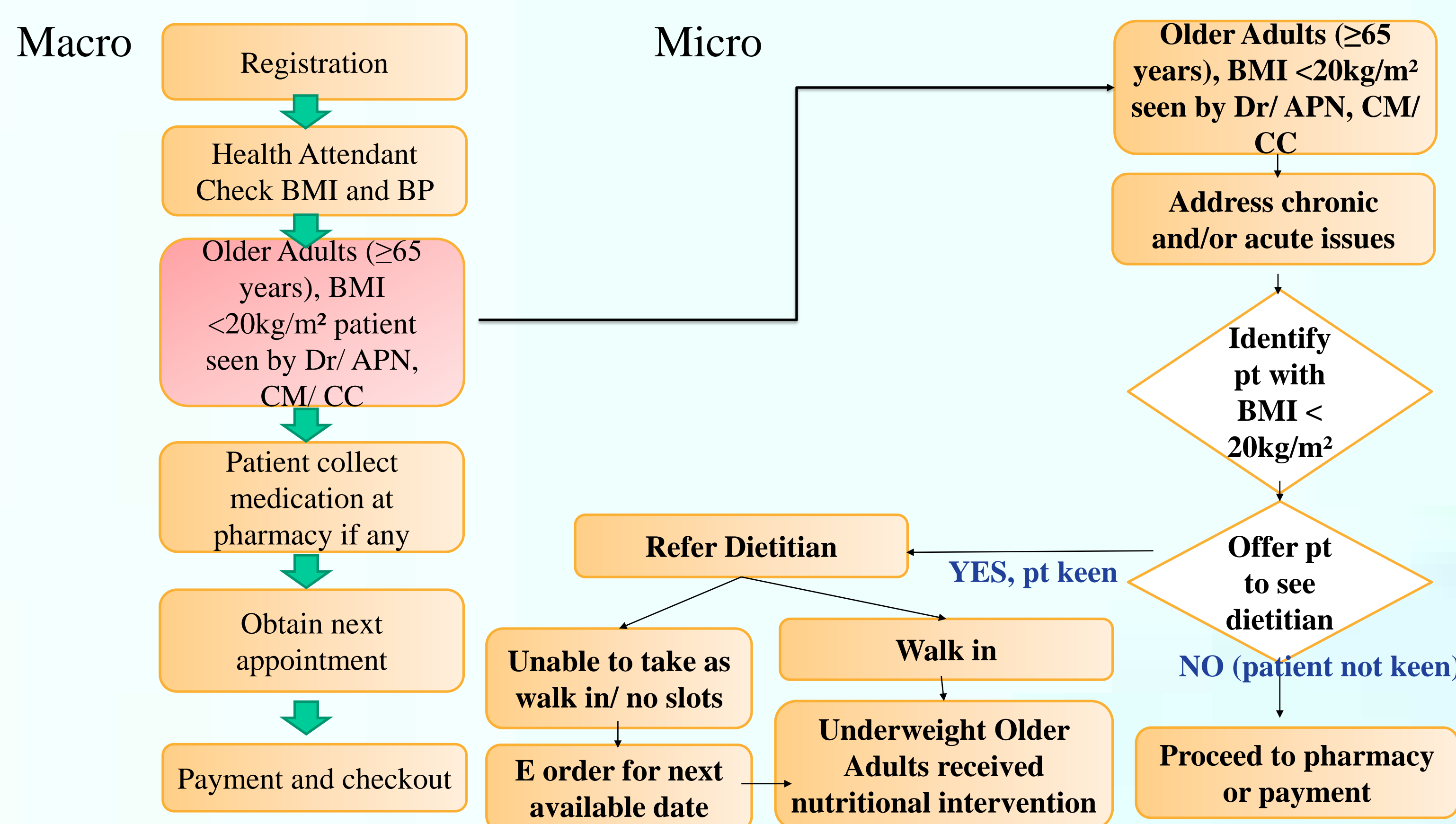
Team Members

	Name	Designation	Department
Team Leader	Liow Hui Shi	Senior Dietitian	Clinical Services
Team Members	Dr Teo Wei Shan	Associate Consultant Family Physician	Medical
	Nur Haziqah	Care Manager (CM)	Nursing
	Teo Yen Keow	Care Coordinator (CC)	Nursing
	Liaw De Sheng	Operation Manager	Operations
	Rosidah Binti Basri	Patient Service Associate	Operations
Sponsor	Dr Donna Tan	Deputy Director	Clinical Services
Facilitator	Dr Rufus Daniel	Family Physician	Medical

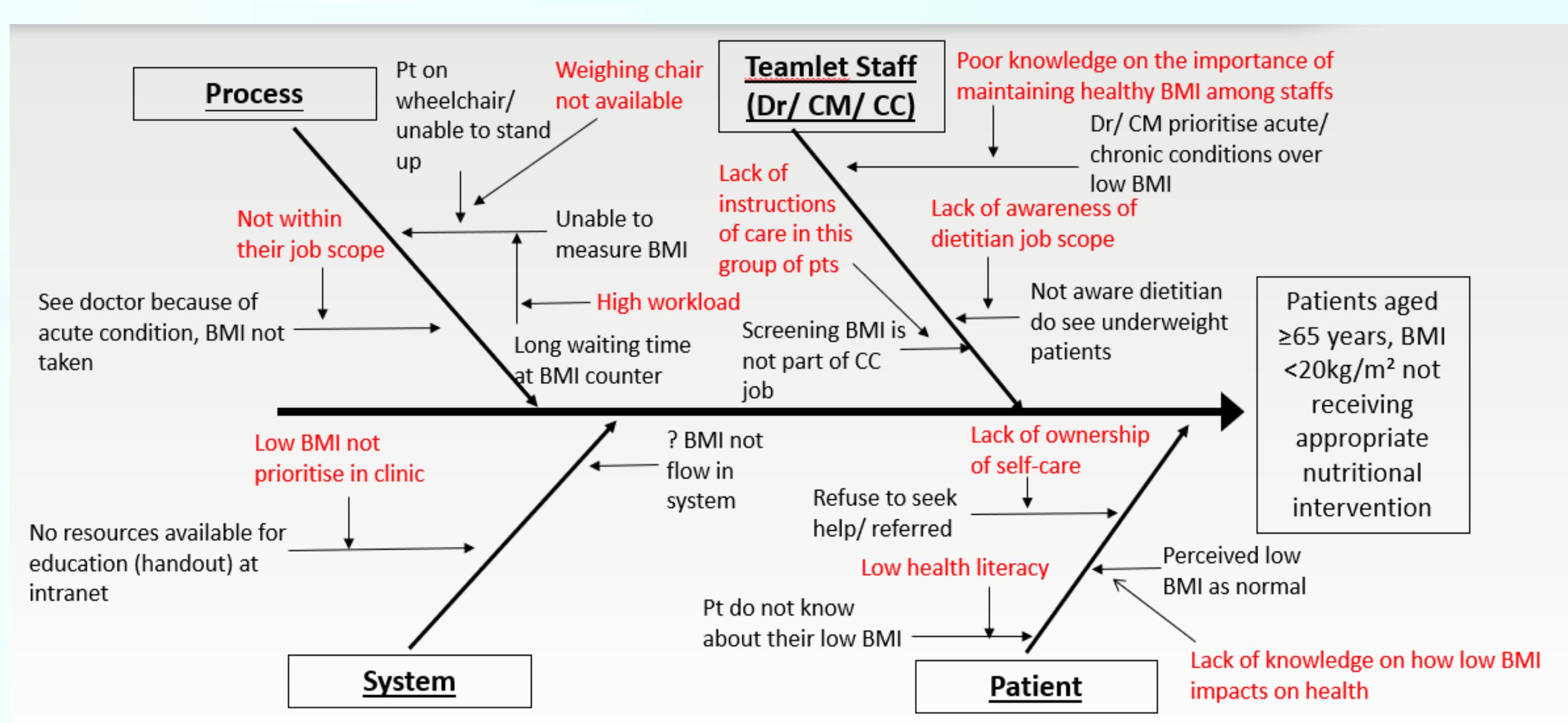
Evidence for a Problem Worth Solving

- According to European Society of Clinical Nutrition and Metabolism (ESPEN) guidelines, clinical malnutrition was defined as the presence of low body mass index (BMI) of less than 20kg/m^2 in older adults which represents depleted physiological stores.
- Mortality rate is higher in the lower BMI range show low immunity, poor resistance, decreased quality of life, prolonged hospital stay, increased hospital costs, poor treatment effect, poor prognosis, and high incidence of complications.
- Baseline sample information obtained from May 2022 to October 2022 showed only an average of 14.8% of underweight older adults in Woodlands Polyclinic received comprehensive nutrition intervention (either seen a dietitian or received related resources).

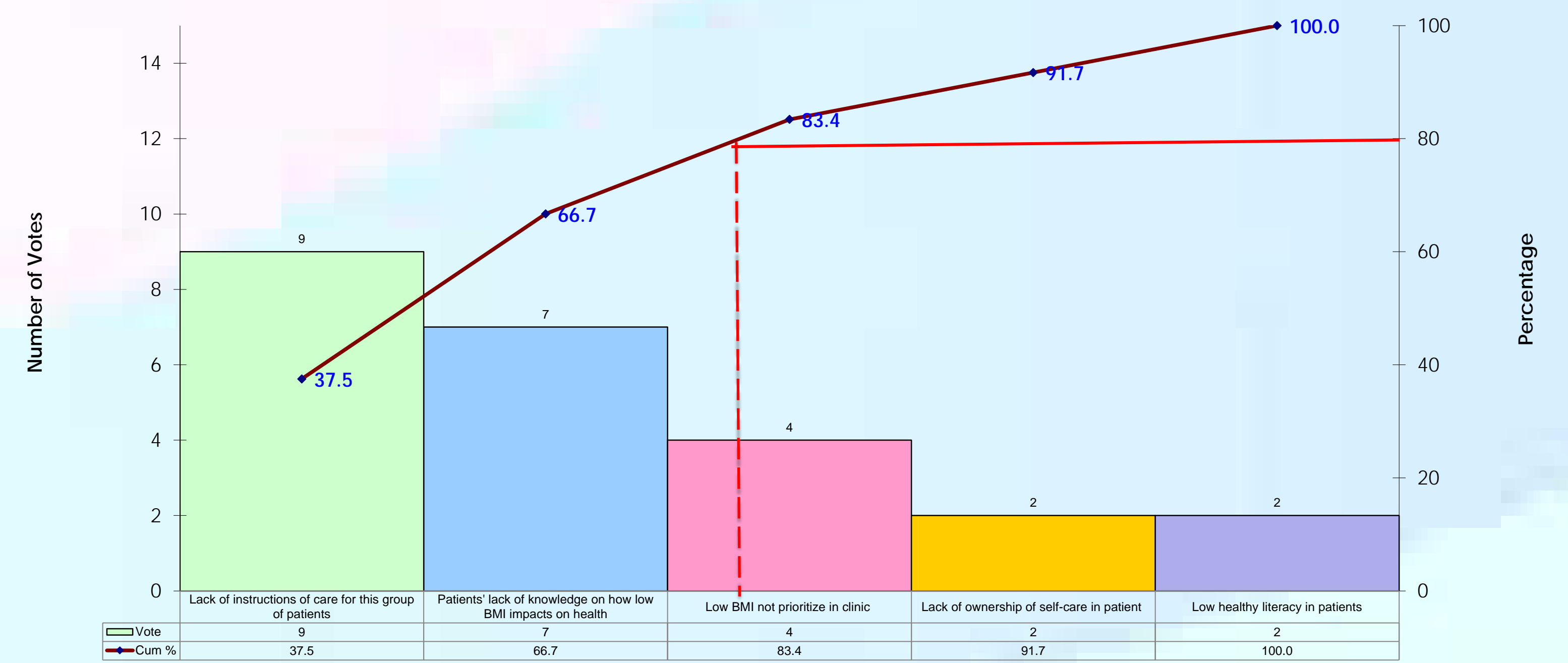
Flow Chart of Process



Cause and Effect Diagram



Pareto Chart

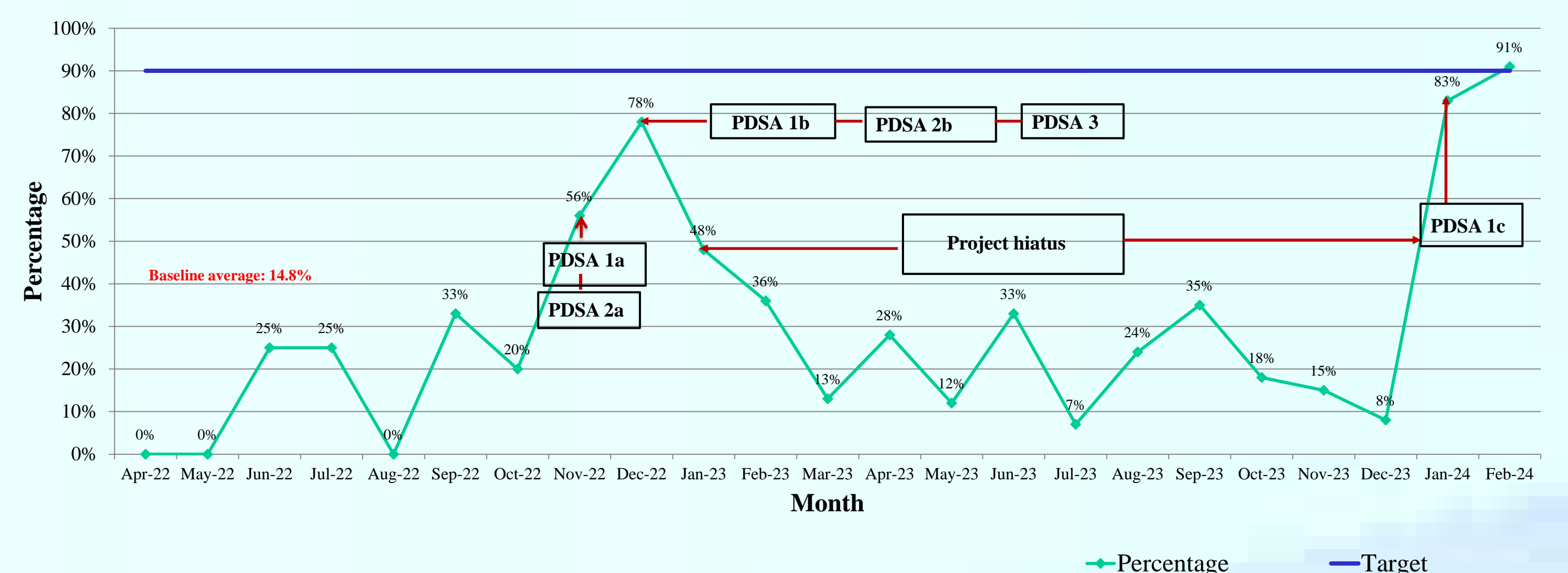


Implementation

Root cause	Intervention	Date of implementation
Lack of instructions of care for this group of patients	PDSA 1a: Created workflow on the care for this group of patients	21 st November 2022
	PDSA 1b: Revised the workflow based on feedbacks	28 th November 2022
	PDSA 1c: Revisited and revised the workflow after 1 year of hiatus of project	2 nd January 2024
Patients' lack of knowledge on how low BMI impacts on health	PDSA 2a: Provide nutritional education material or referral to dietitian for individualized diet advice	21 st November 2022
	PDSA 2b: Provide pictorial guide of the handout for older adults who are illiterate	12 th December 2022
Low BMI not prioritize in clinic	PDSA 3: Sharing with healthcare professionals	20 th December 2022

Results

% of patients who aged ≥ 65 years, BMI $< 20\text{kg/m}^2$ received appropriate nutritional intervention in Teamlet C



Cost Savings

- Cost of avoidance savings and reduction of overall healthcare cost - with an increase of BMI in older adults, it reduces risk of falls and frailty. Frailty was positively associated with the number of specialised outpatient clinic visits, emergency department visits, day surgeries and hospitalisations. From a research study, there was a reduction of average visit of primary care service for frail older adults from 13.2 to non-frail older adults of 4.9 visits per year.
- Time savings - it reduces number of doctor visits and thus shorter waiting time in the clinic. For patients who were technology savvy, tele-consultation was given to reduce waiting time.

Problems Encountered

- Difficult to scope down on the mission statement at the start
- Patient Service Associate do not station at one place, might miss out underweight older adults
- Documentation system not able to easily screen through older adults' BMI prior doctor's visit

Strategies to Sustain

- Continue to monitor uptake of receiving appropriate nutritional intervention for this group of patients
- Share clinical results and highlight improvements with other team members in the organization