

# Increasing the Rate of Diabetes Foot Screening in High-Risk Diabetes Mellitus Patients (Sustainability Phase)

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## Mission Statement

To increase point prevalence of annual DFS completion in DM patients with End-Stage Renal Failure on Peritoneal Dialysis (PD) (attending TTSH B2B PD clinic) from 22% to 60% (stretch goal 80%) over a sustained period

## Team Members

	Name	Designation	Department
Team Leaders	Dr Ryan Choo Rui-En	Consultant	Renal Medicine
	Dr Yeo Pei Shan	Consultant	Endocrinology
Team Members	Ms Saw Bee Ching (Elaine)	Senior Staff Nurse	Renal Medicine
	Ms Chua Jia Xian (Daphne)	Senior Staff Nurse	Endocrinology
	Ms Soh Si Lin	Executive	Ops Medicine (Clinic B2B)

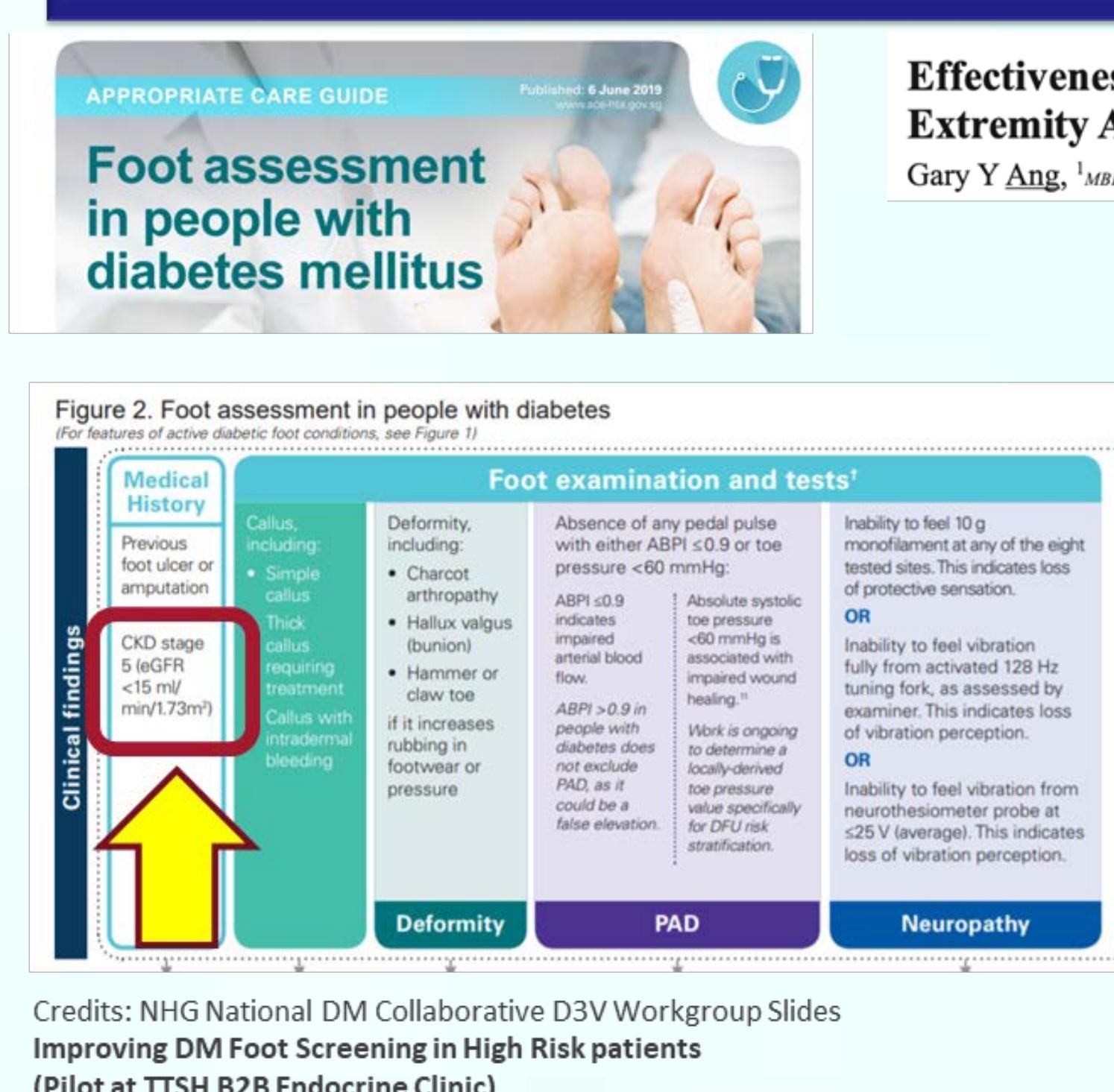
**Sponsors:**

- Adj Asst Prof Yeo See Cheng (Renal Medicine HOD)
- Dr Timothy Quek Peng Lim (Endocrinology HOD)
- Ms Wendy Ho Yoke Ping (Nurse Clinician, Clinic B2B)

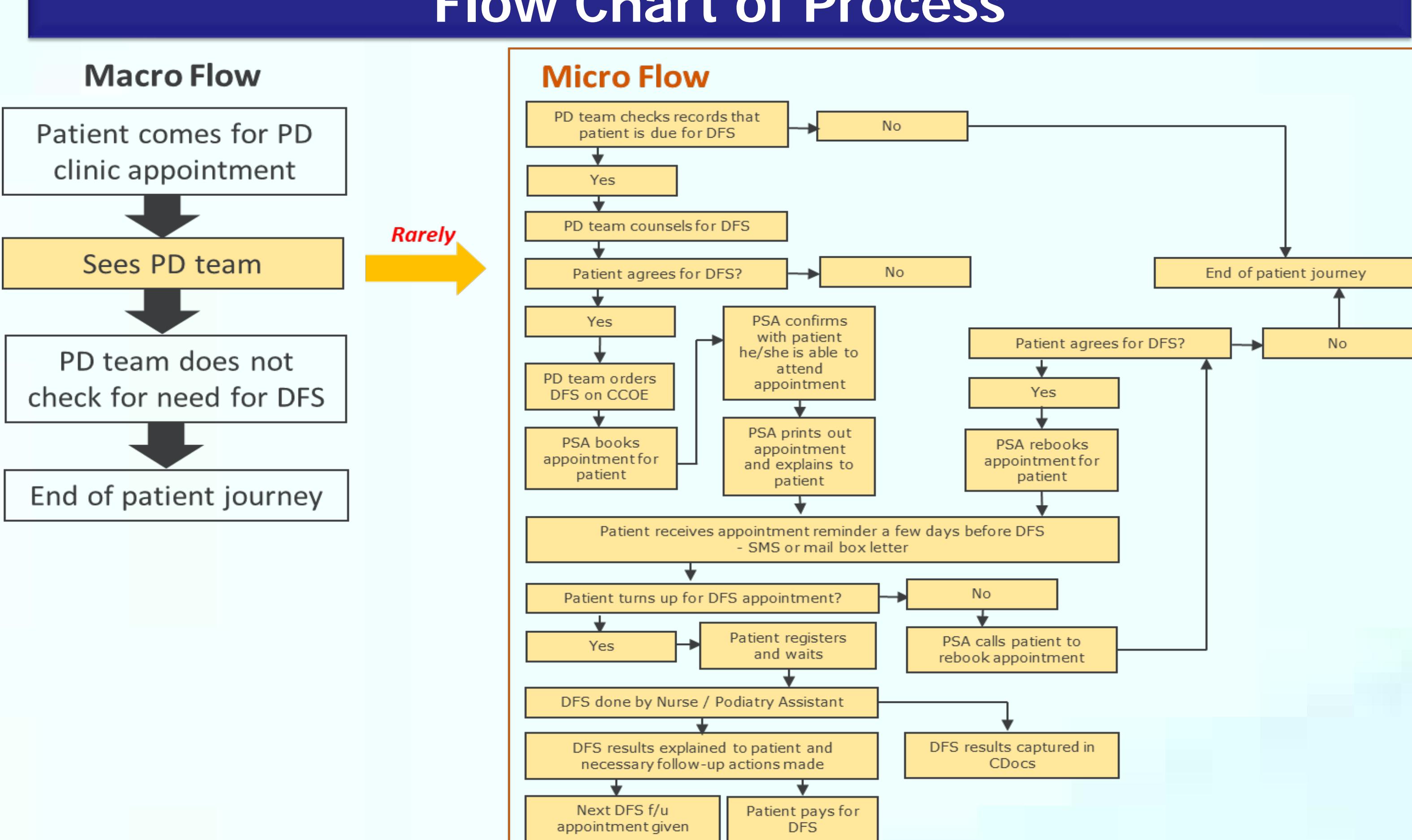
**Subject Matter Experts:** Ms Tiffany Chew Wen Ying (Principal Podiatrist, Foot Care & Limb Design Centre), Dr Liew Huiling (Endocrinology Diabetes Foot Champion) and Patients

**Mentor:** Dr Chiu Li Qi

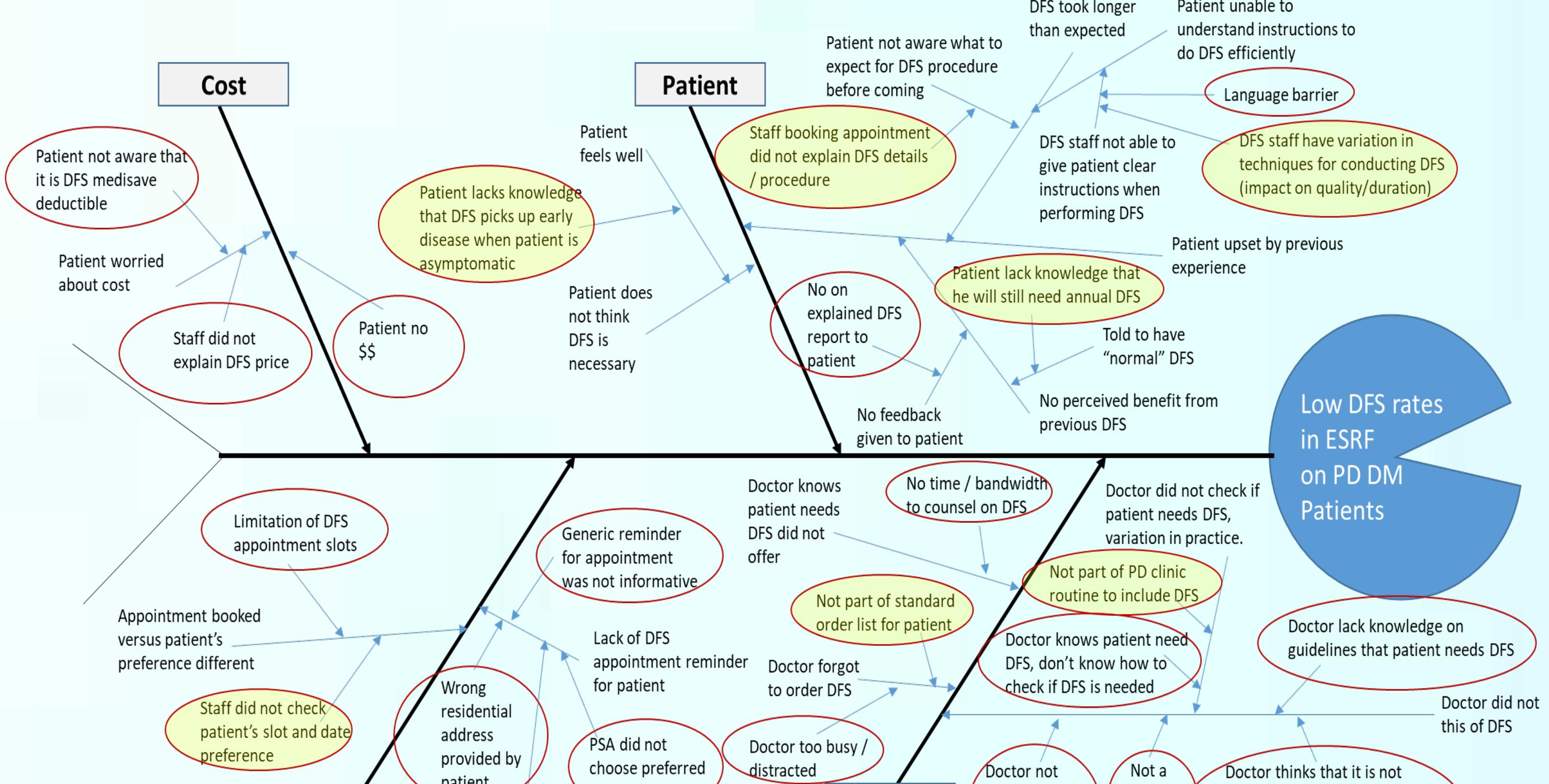
## Evidence for a Problem Worth Solving



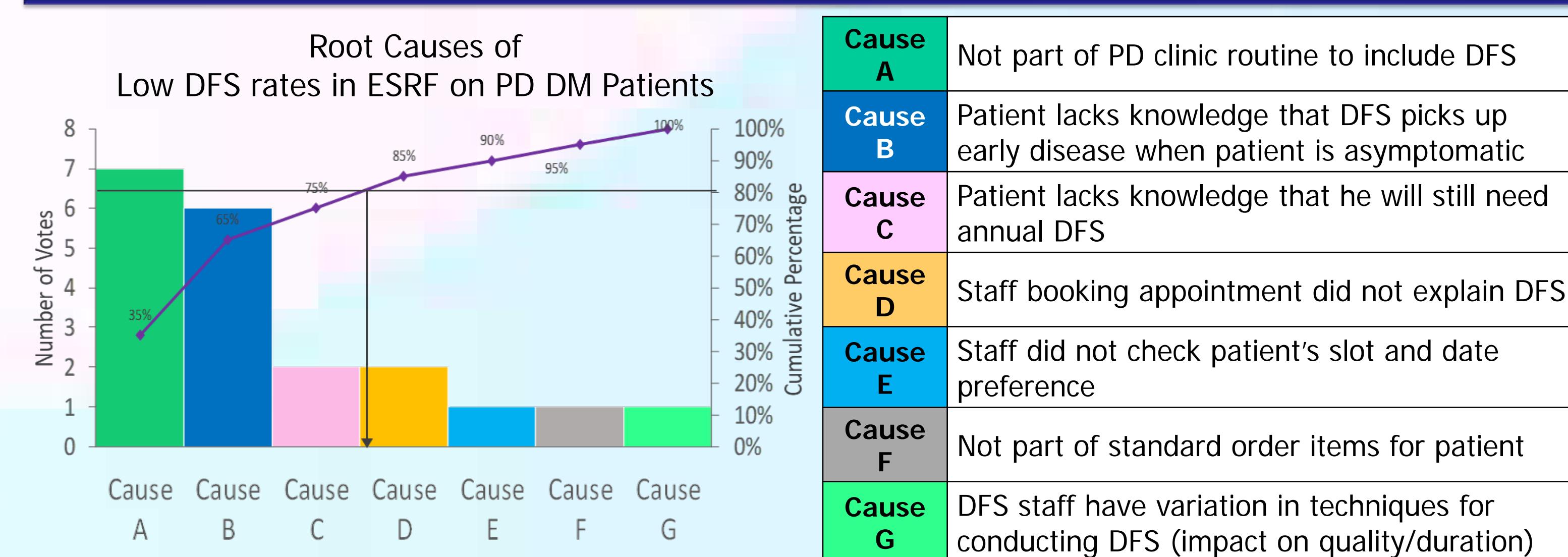
## Flow Chart of Process



## Cause and Effect Diagram



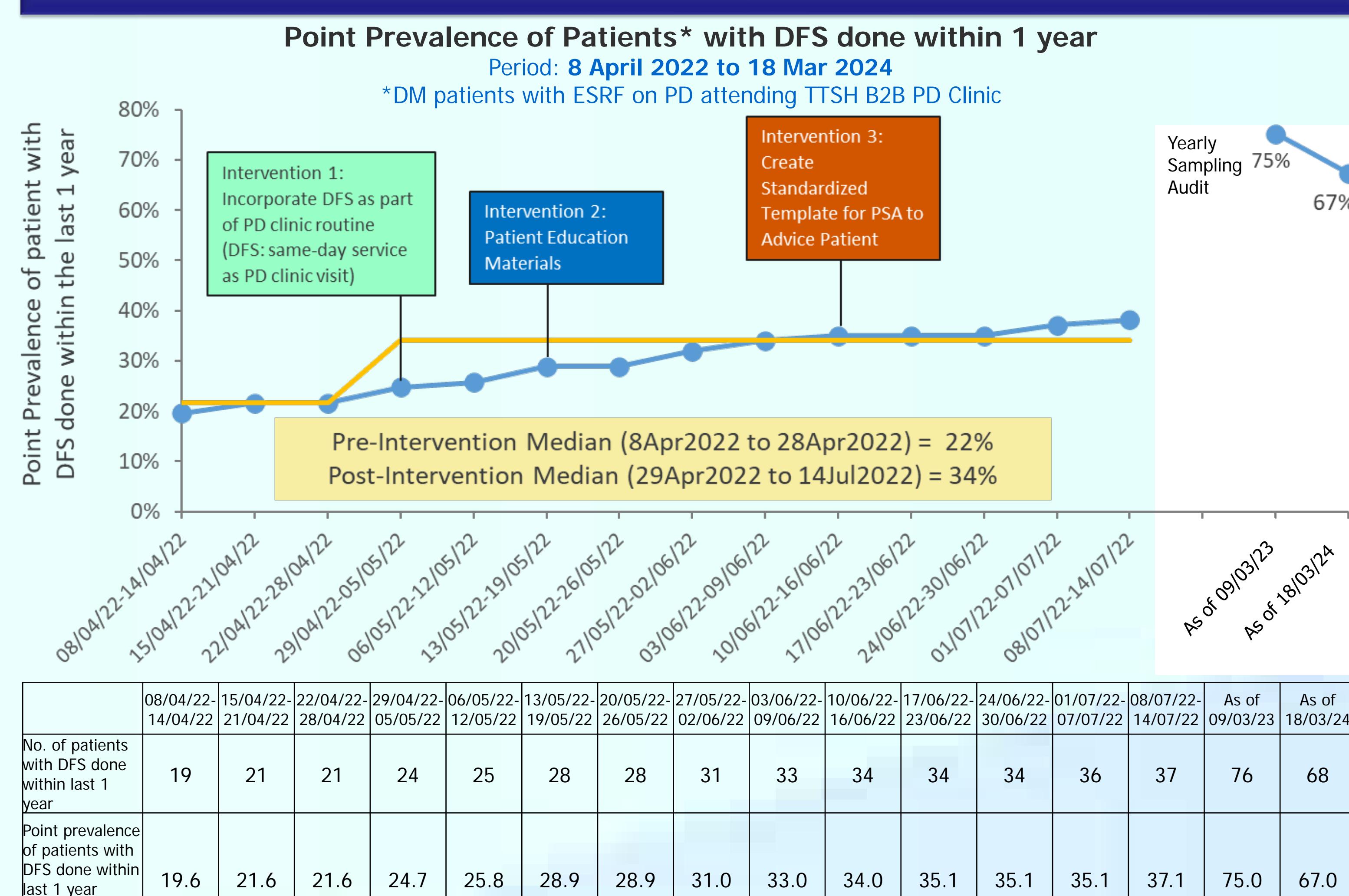
## Pareto Chart



## Implementation

Root Cause	Intervention	Implementation Date
<b>Cause A:</b> Not part of PD clinic routine to include DFS	Intervention 1: Incorporate DFS as part of PD clinic routine (DFS: same-day service as PD clinic visit)	29 Apr 2022
<b>Cause B:</b> Patient lacks knowledge that DFS picks up early disease when patient is asymptomatic	Intervention 2: Patient Education Materials	13 May 2022
<b>Cause C:</b> Patient lacks knowledge that he will still need annual DFS		
<b>Cause D:</b> Staff booking appointment did not explain DFS	Intervention 3: Create a standardized template for patient service associates (PSAs) to advise patient, with a list of common FAQs.	10 Jun 2022

## Results



## Cost Savings

Estimated number of patients at LEAPP clinic = 120 patients Out of which, there is an estimate of 1/3 of the LEAPP patients have ESRF = 120 x 1/3 = 40 patients (22% of these patients = 9 patients)														
Improving DFS rates will reduce need for (i) LEAPP clinic review as a result of (ii) lower limb tissue loss as well as (iii) potential amputation														
													Pre-Intervention	Post-Intervention
DFS Rate													22%	34%
Number of patients had undergone DFS in the last 1 year													9	14
(An estimation), if we are able to avoid major amputation in 1 patient														
<b>Potential Cost Avoided (Per Patient)</b>														
• 1 LEAPP Clinic First Visit Cost (\$120)														
• 1 LEAPP Clinic Review Visit Cost (\$60-\$80)														
• 1 Major LL Amputation Cost including hospitalization (\$45000)														
* Cost estimates by NHG National DM Collaborative D3V														

## Problems Encountered

- Balancing of DFS appointment resource to ensure sufficient DFS slots ring-fenced for these patients seeing PD clinic on the same day versus minimizing slots wastage if not taken up by these patients
- New workflows and additional responsibility for the PD clinic members (especially patient service associate (PSA))

## Strategies to Sustain

- Incorporate pre-screening of DFS into routine PD clinic workflow
- Continue current interventions
- May want to reduce data measurement frequency and collation of point prevalence data to a monthly or 2 monthly timeline