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Increasing the Rate of Diabetes Foot Screening (DFS) in Diabetes Mellitus Patients

Problem Statement

- Local data showed that in 2019, the overall DFS rate in TTSH was only 46.3% compared to NHGP with 86.5%.
- Improving DM foot screening in high-risk patients could prevent major and minor amputations
- The point prevalence of DM patients with ESRF on PD attending Clinic B2B between 8 April to 28 April 2022, with DFS done within 1 year was only 21.6% (21 out of 97 patients).

Abbreviations:

DFS: Diabetes Foot Screening, DM: Diabetes Mellitus, ESRF: End-Stage Renal Failure, PD: Peritoneal Dialysis

Project Aim

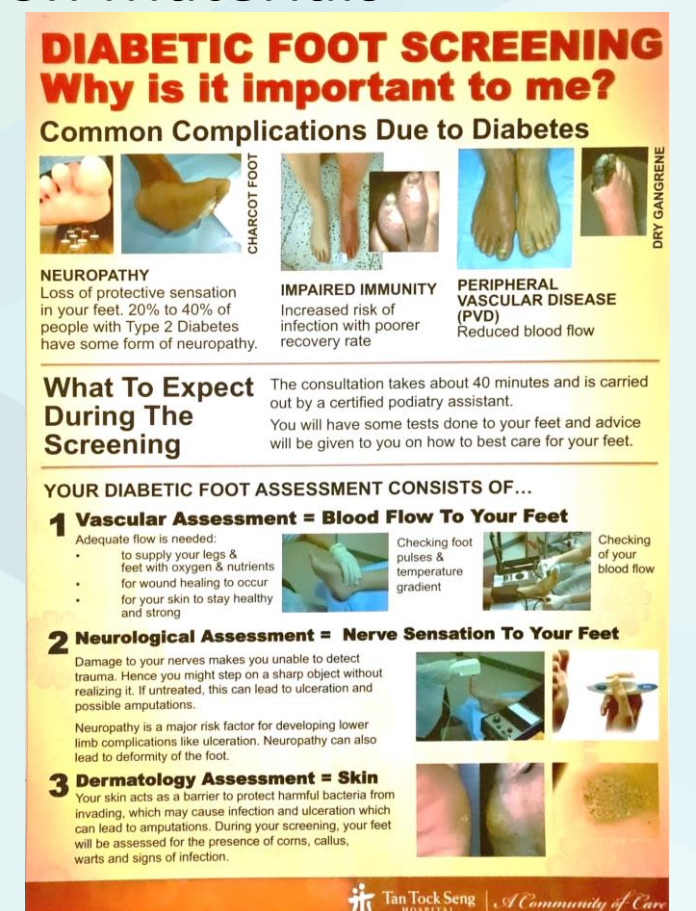
To increase point prevalence of annual DFS completion in DM patients with ESRF on PD (attending TTSH B2B PD clinic) from 22% to 60% (stretch 80%) over 6 months

Lessons Learnt

- CPIP truly demonstrates the value of everyone's unique role in a multi-disciplinary and more importantly trans-disciplinary team
- Everyone in the team is valuable
- When an intervention is being implemented, it is pertinent to go onto the ground to see the process and obtain feedback from ground staff.
- Data collection can be tedious. Collecting only the necessary data critical to instituting change will ensure sustainability.

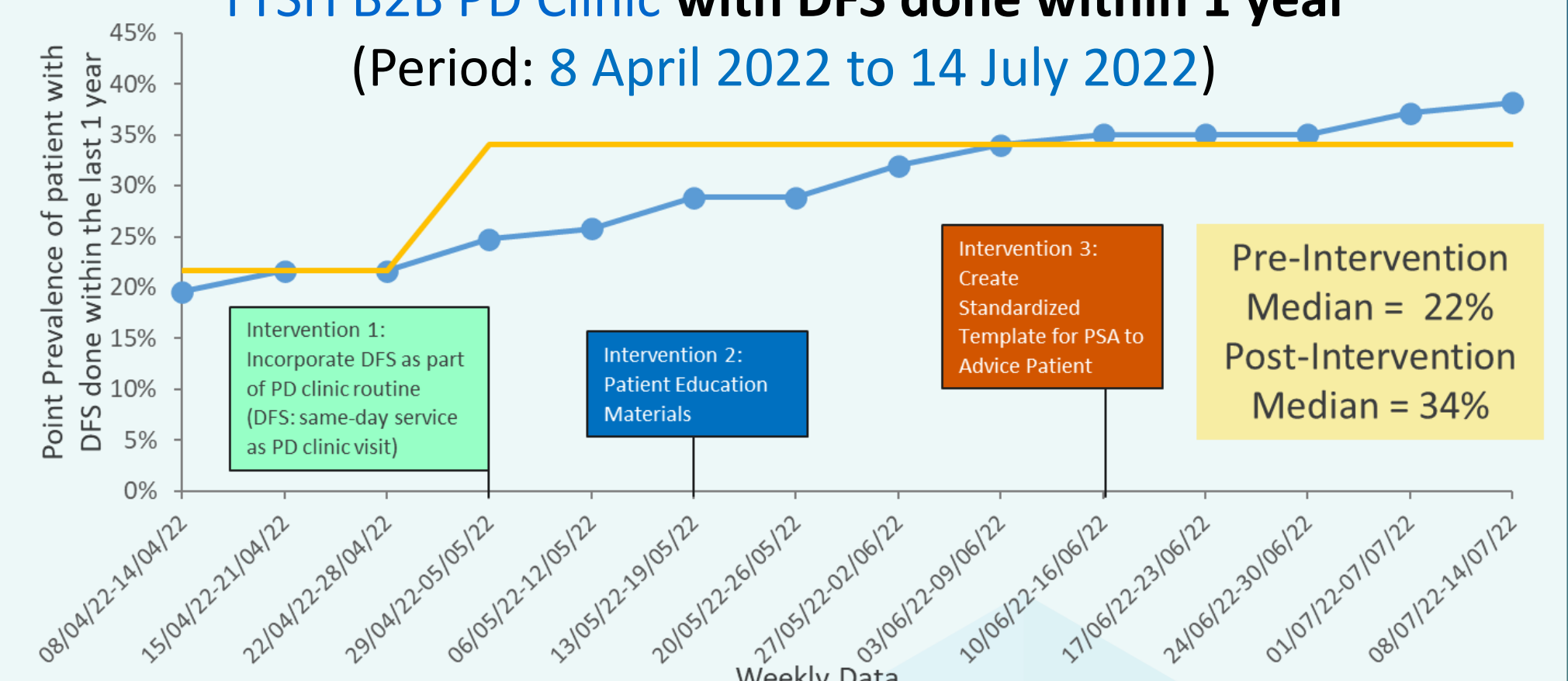
Potential Solutions

Root Cause	Intervention
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) Implementation Date: 29 Apr 2022
Patient lacks knowledge that DFS picks up early disease when patient is asymptomatic	Intervention 2: Patient Education Materials Implementation Date: 13 May 2022
Patient lacks knowledge that he will still need annual DFS	Intervention 3: Create a standardised template for PSA to advise patient, with a list of common FAQs Implementation Date: 10 Jun 2022
Staff booking appointment did not explain DFS	



Outcomes & Impacts

Point Prevalence of DM patients with ESRF on PD attending TTSH B2B PD Clinic with DFS done within 1 year (Period: 8 April 2022 to 14 July 2022)



8-14 Apr '22	15-21 Apr '22	22-28 Apr '22	29 Apr-5 May '22	6-12 May '22	13-19 May '22	20-26 May '22	27 May-2 Jun '22	3-9 Jun '22	10-16 Jun '22	17-23 Jun '22	24-30 Jun '22	1-7 Jul '22	8-14 Jul '22
19	21	21	24	25	28	28	31	33	34	34	34	36	37

GOOD OUTCOME: As of 9 March 2023, 76/101 (75%) DM PD patients who qualify for DFS have a DFS within the prior 1 year.

VALUE: Potential cost avoided per patient (1 LEAPP Clinic First Visit Cost = \$120, 1 LEAPP Clinic Review Visit Cost = \$60-\$80, 1 Major Lower Limb Amputation Cost including hospitalisation = \$45,000)

Cost estimates by NHG National Diabetes Mellitus Collaborative D3V LEAPP: Lower Extremity Amputation Prevention Clinic Service