



IMPROVING THE PROPORTION OF DIABETIC PATIENTS UNDERGOING ANNUAL DIABETIC EYE SCREENING - FINALLY A SUSTAINABLE MODEL

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BACKGROUND

Diabetic retinopathy is the leading cause of blindness in working-age Singaporeans. Screening for diabetic retinopathy in diabetic individuals should be done annually (MOH CPG 2014) to ensure timely treatment.

Prior to the interventions described here, only **74%** of diabetic patients on followup with Bedok Polyclinic had diabetic retinal photography (DRP) done in the past one year.

CRITERION, STANDARD, INDICATOR

Criterion: ALL diabetic patients on active followup at Bedok Polyclinic should have DRP done within the past one year.

Standard: 80% of diabetic patients on active followup at Bedok Polyclinic should have DRP done within the past one year (SHP Standard.)

Mission Statement: To improve the DRP uptake rate to 80% for active diabetic patients in Bedok Polyclinic by August 2016.

METHODOLOGY

1. A multi-disciplinary team consisting of doctors, nurses and administrative staff was set up.
2. Cause and effect analysis was performed.
3. Previous interventions that failed were reviewed.
 - A. Reminder slips stapled on appointment cards
 - B. Nurses escorting patients from BP monitoring stations to the DRP room prior to their doctors' consult – not sustainable.
 - C. Educational brochures and posters.

CAUSE & EFFECT ANALYSIS

A patient survey was conducted. An Ishikawa diagram was created by team members. Pareto voting was done with doctors, nurses and ancillary staff.

TOP REASONS IDENTIFIED FOR LOW DRP UPTAKE

1. Lack of education - feels that DRP not necessary as vision is ok.
2. Healthcare provider has too many tasks to do.
3. Patients have too many stations to go to.
4. High patient workload and turnaround time.
5. Patients have no time due to own busy schedule
6. Patients prefer to see doctor first before moving to other stations.

Decision made to focus on Reasons #2-6 as multiple interventions for Reason #1 had been attempted before.

INTERVENTIONS

#1. POST-CONSULTATION SERVICE

DRP appointment system was available from July 2015 onwards. The use of a communication tool (post-consultation slip) was standardised for booking DRP and other services at the next visit → this encouraged **PLANNED CARE**

PDSAs done to refine post-consult:

- a) Post-consultation appointment slip layout
- b) DRP slot timings adjusted for appointment and walk-in cases

#2. TEAM-BASED CARE

Three integrated care teams were set up by July 2016. Each comprised:

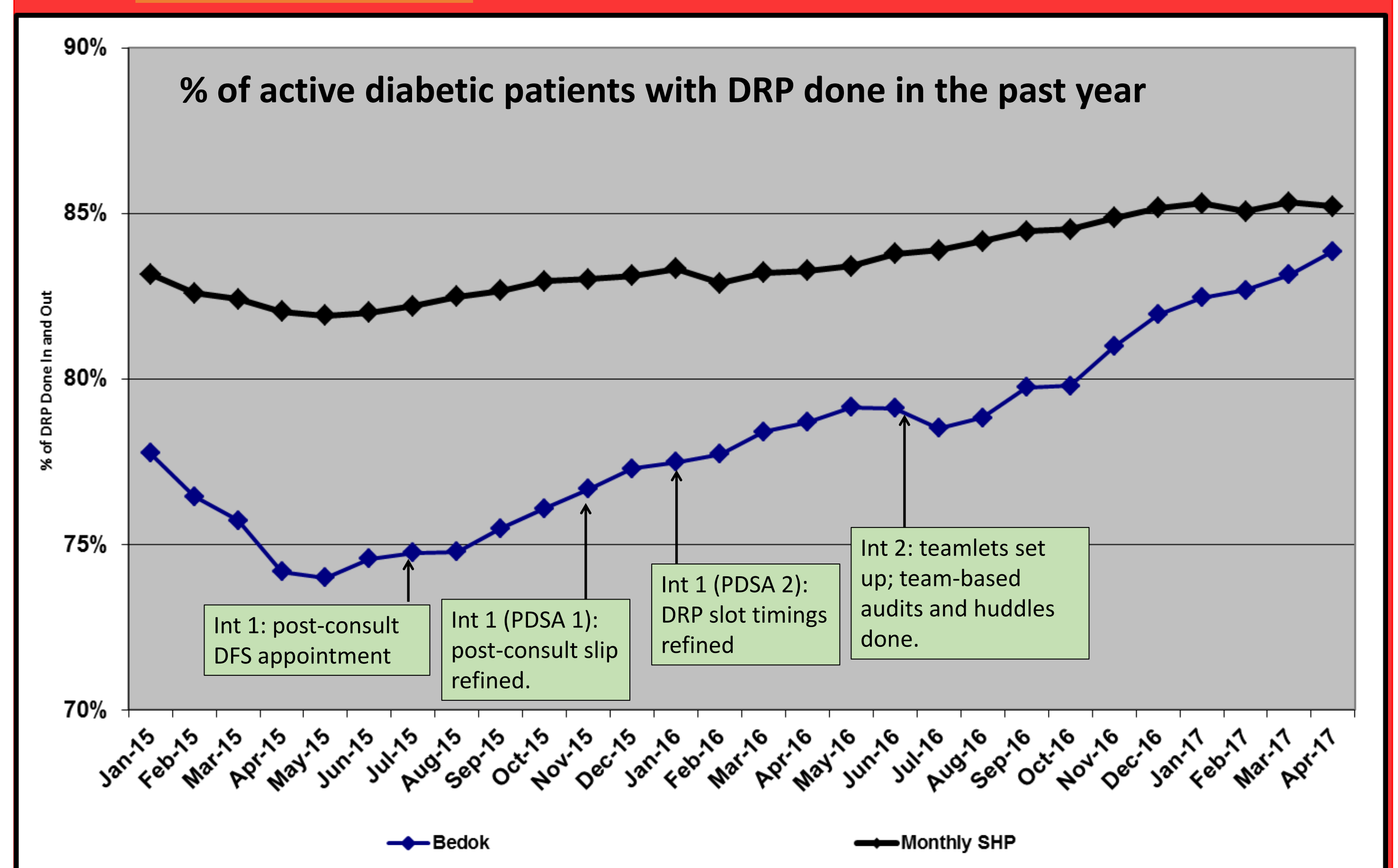
- a) 6-7 doctors of varying seniority
- b) 4-5 nurses (nurse clinicians and care managers)
- c) Pharmacy (shared resource by all teams)
- d) Ancillary staff (shared resource by all teams)

Patients were given appointments back to the same team for continuity of care.

Interventions done in the teamlet:

Principles	Specific methods
1. Accountability	Sharing of team-specific outcome data including DRP uptake
2. Regular huddles	2-weekly team meetings to share outcomes and strategize responses.
3. Standardised workflow	Delineated tasks for doctors, care managers and ancillary staff.

RESULTS



CONCLUSION

Bedok Polyclinic managed to achieve an improvement in DRP uptake from 74% to 83%. This was shown to be sustainable over almost a year after the team-based care concept was introduced.

LEARNING POINTS

1. Systemic change is necessary for real, sustained improvement.
2. In team care, tasks can be allocated to various stations.
3. Sharing of team-specific outcome data encourages individual team accountability and ongoing improvement in efforts.