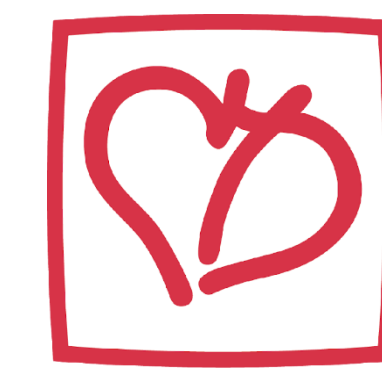




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Inter-Institutional Collaboration for Referral Workflow Optimisation is Mutually Beneficial to Improve Stewardship of Healthcare Resources

Wilbert HH Ho, Nishanth Thiagarajan, Daniel YZ Lim, Wesley TW Loo, Goy Shen, Jonathan YJ Han, Jasmine HC Goh, Paul CY Lim, Huai Yang Lim, Lian Kiat Lim, Daniel TT Chong

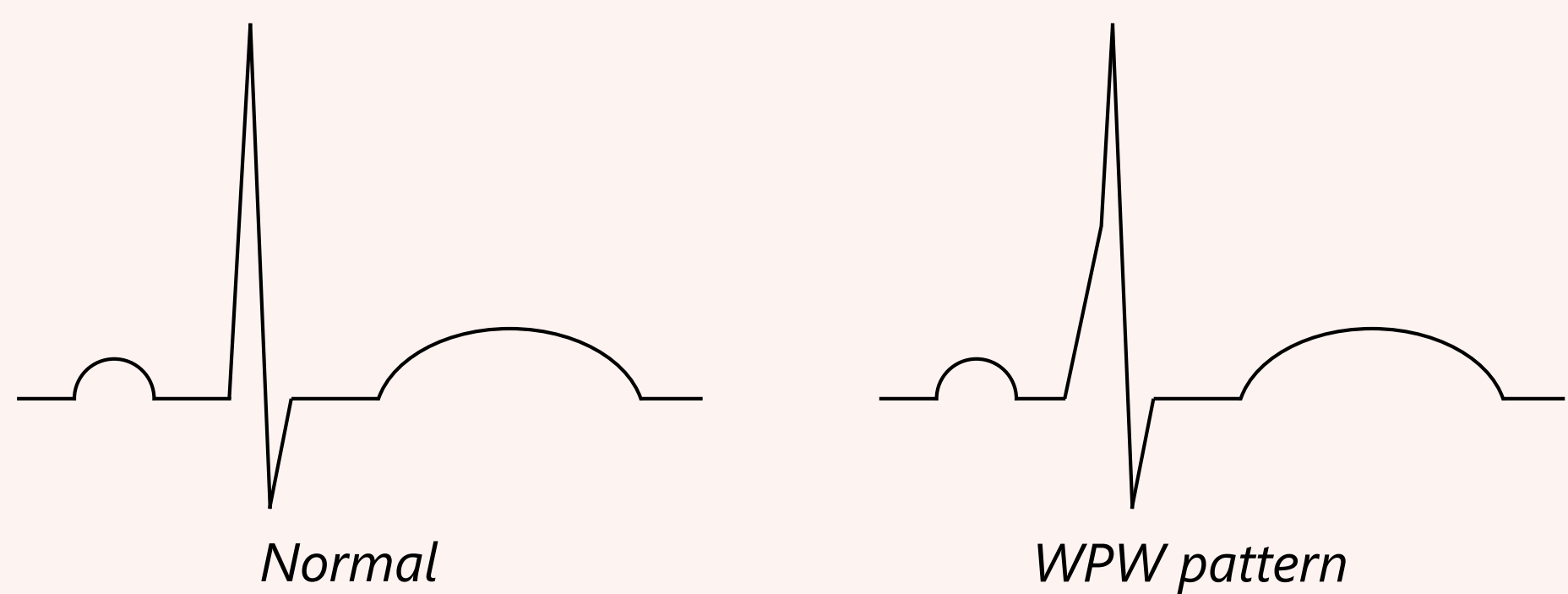


National Heart Centre Singapore
SingHealth



Background

- The **SAF Cardiac Fitness Centre (SCFC)** is a facility in NHCS providing cardiac screening & consultation services for pre-enlistees & in-service military personnel referred by SAF medical officers.
- Pre-enlistees** are commonly referred for ECG abnormalities that may hint at underlying **undiagnosed cardiac conditions** associated with adverse cardiac events during physical training.
- The **Wolff-Parkinson-White (WPW) pattern** is one such abnormality. Pre-enlistees suspected to manifest this pattern on screening ECG comprise about **180-240 referrals annually** to SCFC, to either confirm or refute this concern.



- Frequently, following a review by a specialist cardiologist at SCFC, the suspicion is refuted. This leads to undesired healthcare outcomes such as **patient anxiety, fruitless consumption of finite outpatient resources & higher health expenses.**

Aim

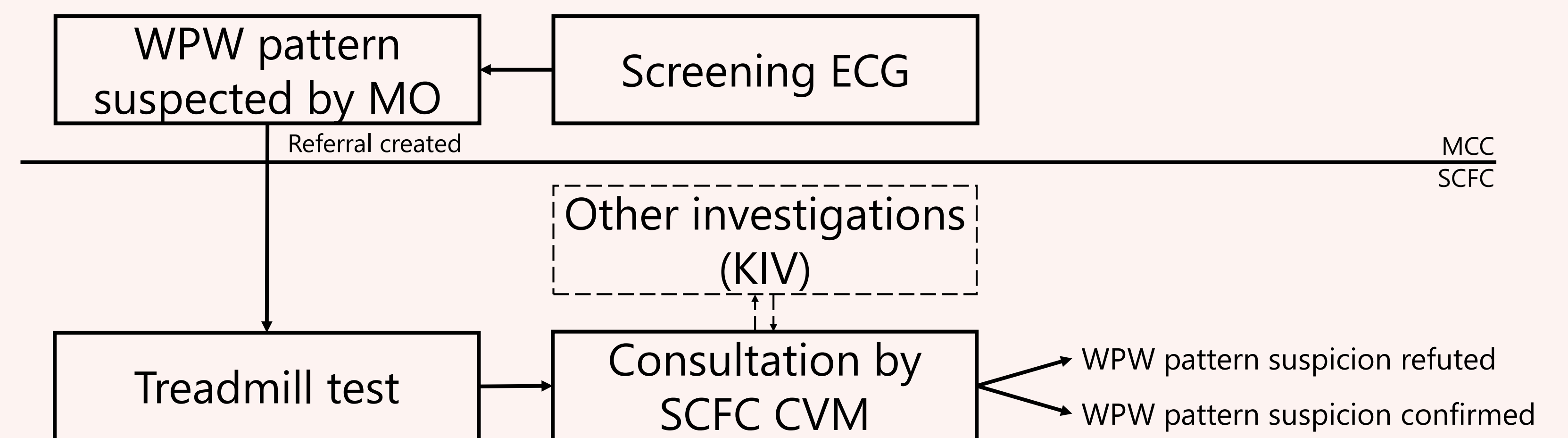
This project was established as a collaboration between SCFC & MCC, to **reduce outpatient visits for suspected WPW pattern by at least 75%**, without compromising on the existing standards of medical diagnosis.

Methods

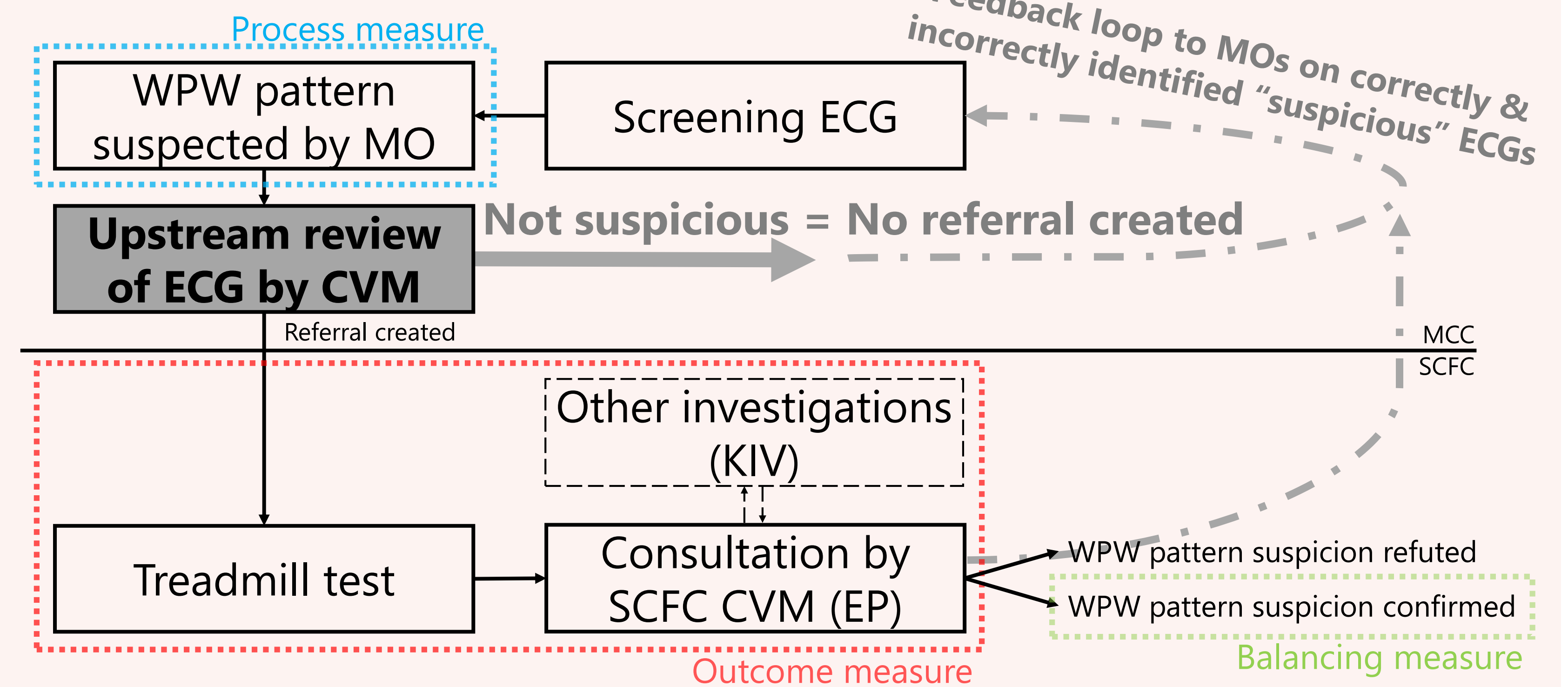
- Stakeholders from both institutions** performed a process & cause analysis. **Two interventions** were selected for implementation in a PDSA cycle:
 - Streamlining of both institutions' workflows** to permit specialist input to be sought upstream; **straightforward cases to be assessed without physical review or investigation**
 - Feedback loop** provided on correctly & incorrectly identified ECGs with aim of modifying referral behaviour.

Intervention

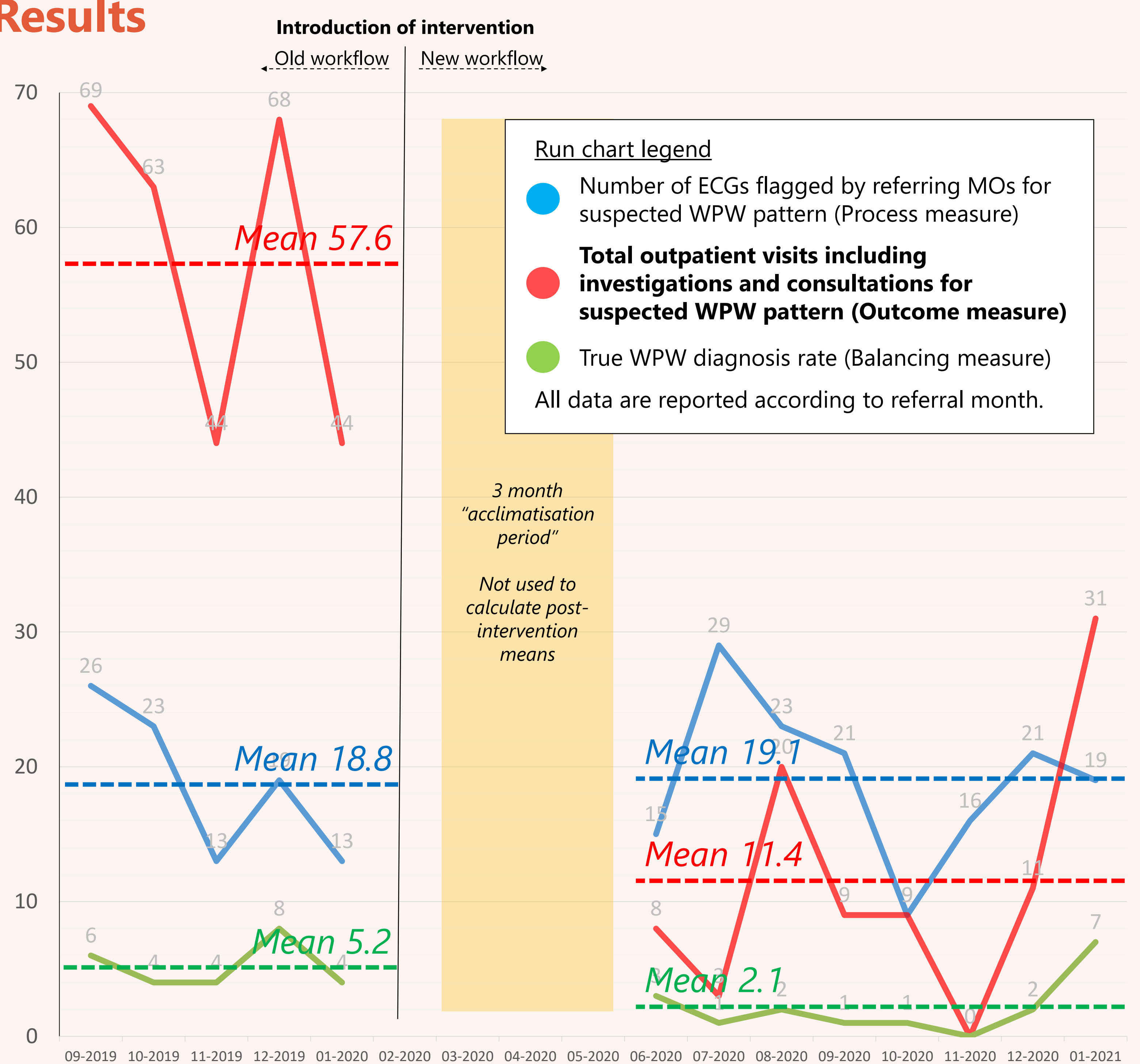
Pre-intervention



Post-intervention



Results



- Estimated annualised **healthcare cost savings of \$101,000** by MCC in reaching diagnoses for this referral pathway.

Conclusion

Inter-institutional collaboration to streamline referral workflow processes was effective in improving efficiency of outpatient healthcare resource utilisation, with benefits accrued to both institutions.