

Project Title

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

Project Lead and Members

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Organisation(s) Involved

National Heart Centre Singapore

Healthcare Family Group Involved in this Project

Ancillary Care

Applicable Specialty or Discipline

SAF Cardiac Fitness Centre (SCFC), SAF Medical

Project Period

Start date: March 2020

Completed date: Jan 2021

Aims

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

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Project Category

Care Continuum

Outpatient Care, Specialist Outpatient Care

Care & Process Redesign

Access to Care Referral Rate

Quality Improvement, Workflow Redesign

Keywords

Collaborative Workflow Redesign

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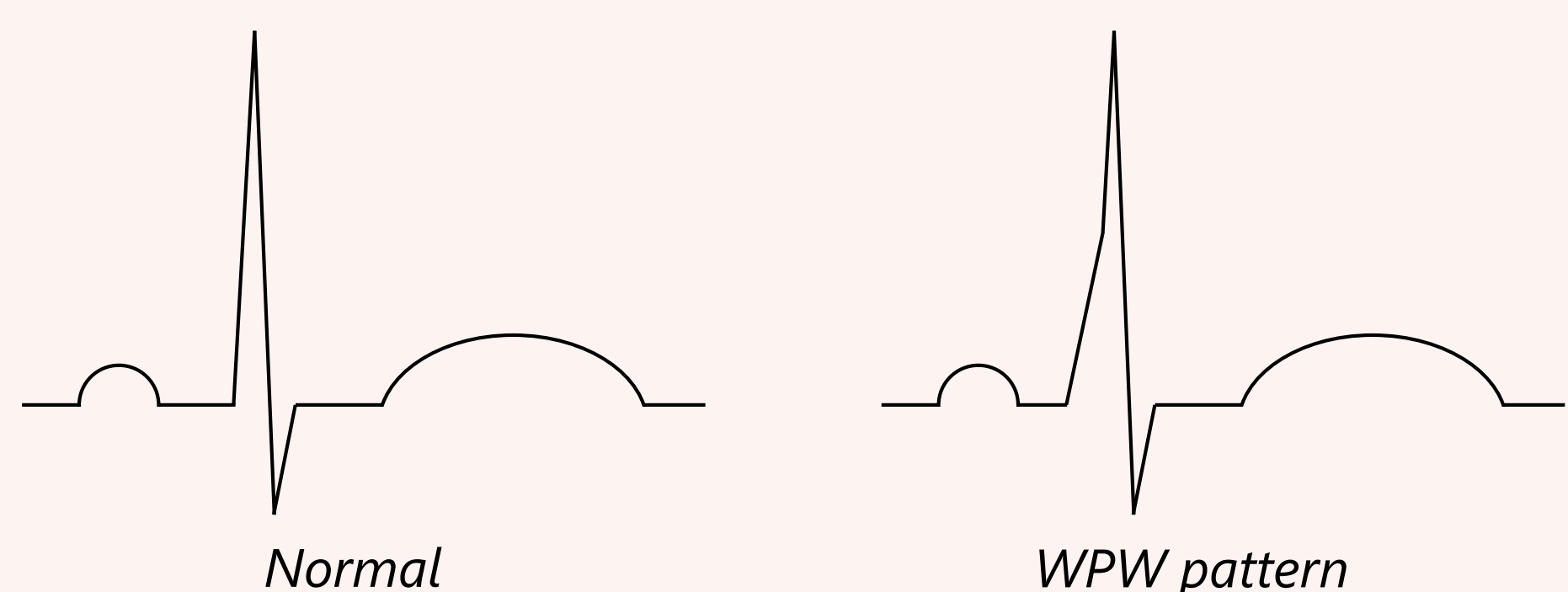


National Heart Centre Singapore
SingHealth



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

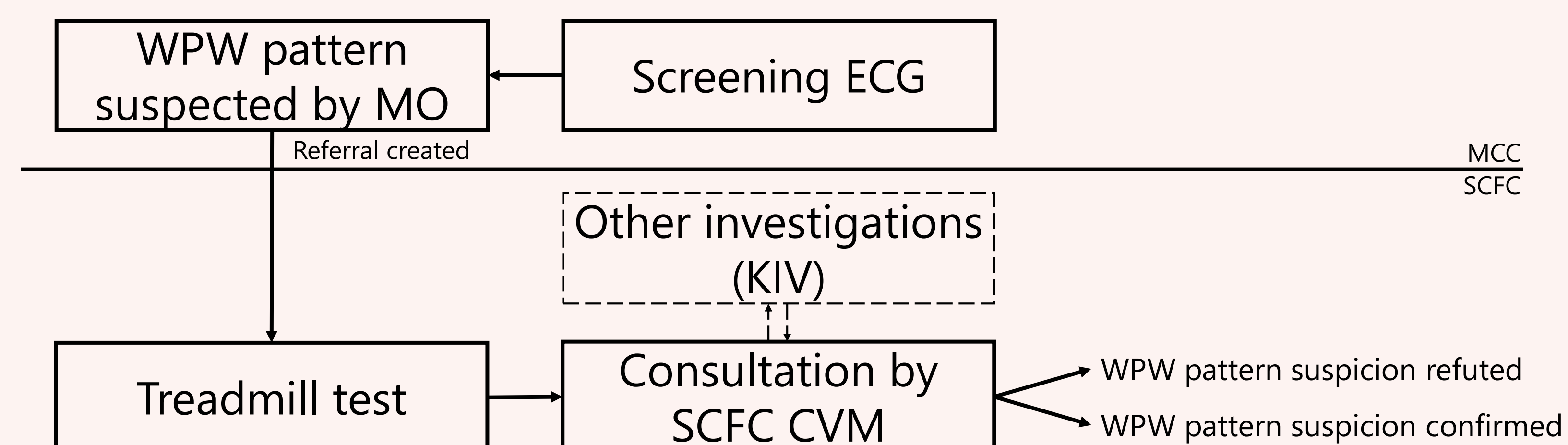
This project was established as a collaboration between SCFC & MCC, to **reduce outpatient visits for suspected WPW pattern by at least 75%**, without compromising on the existing standards of medical diagnosis.

Methods

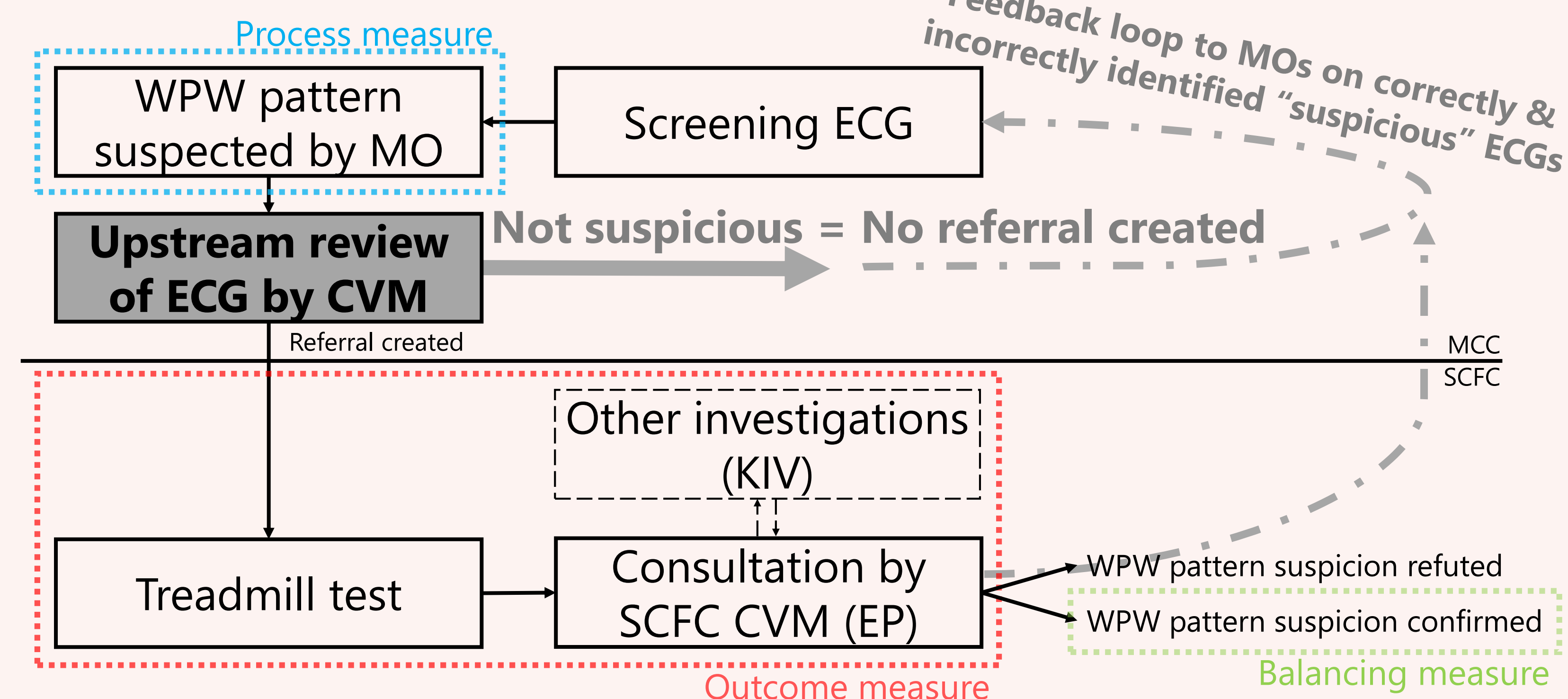
- Stakeholders from both institutions** performed a process & cause analysis. **Two interventions** were selected for implementation in a PDSA cycle:
 - Streamlining of both institutions' workflows** to permit specialist input to be sought upstream; **straightforward cases to be assessed without physical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

Intervention

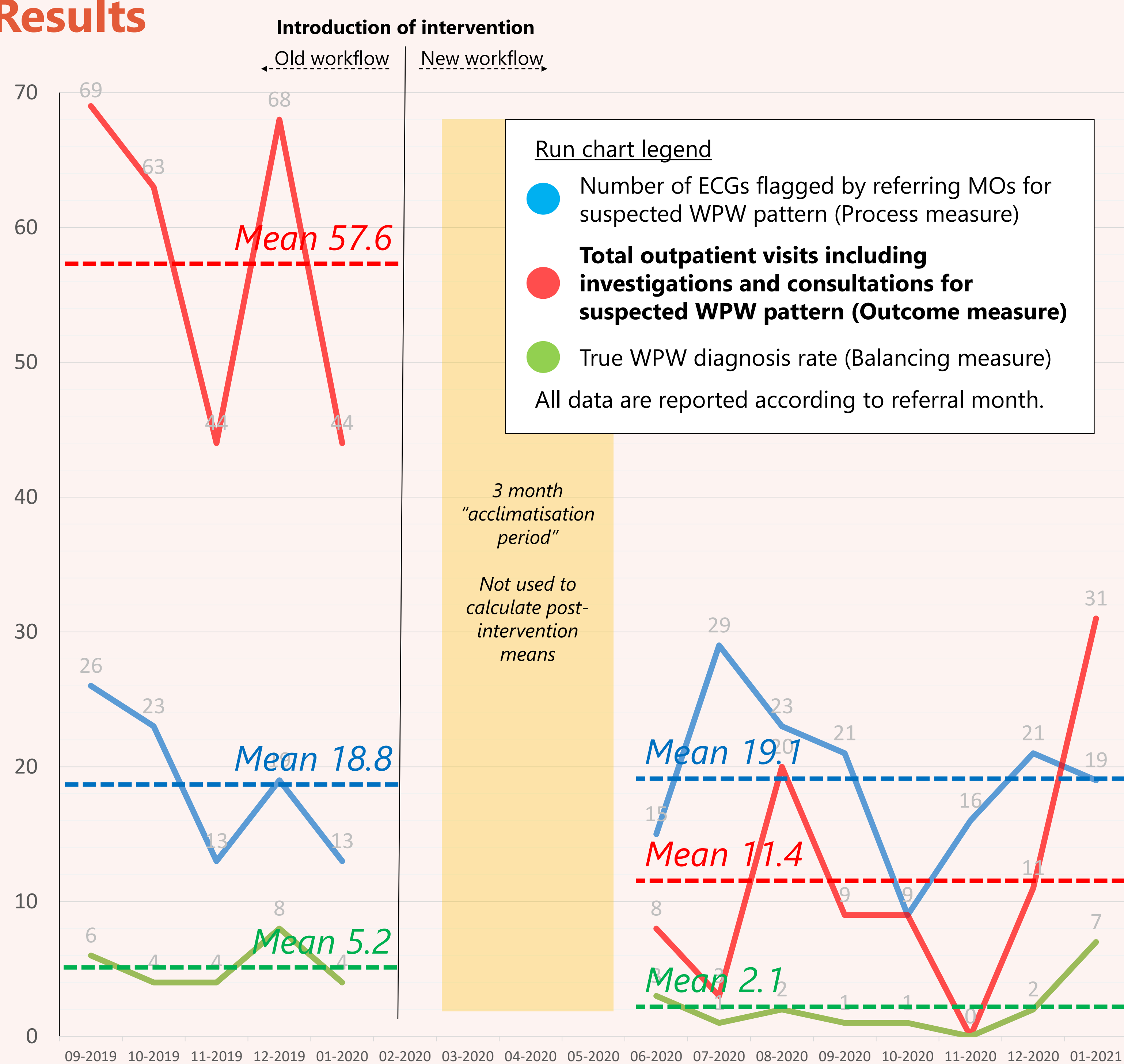
Pre-intervention



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.