

NUHCS & Jurong Polyclinic RIE (16-20 Feb 09):

Improve referral processes between Jurong polyclinic and NUHCS
Reduce Cardiac referrals from Jurong Polyclinic

Leader: Dr Raymond Wong



Research

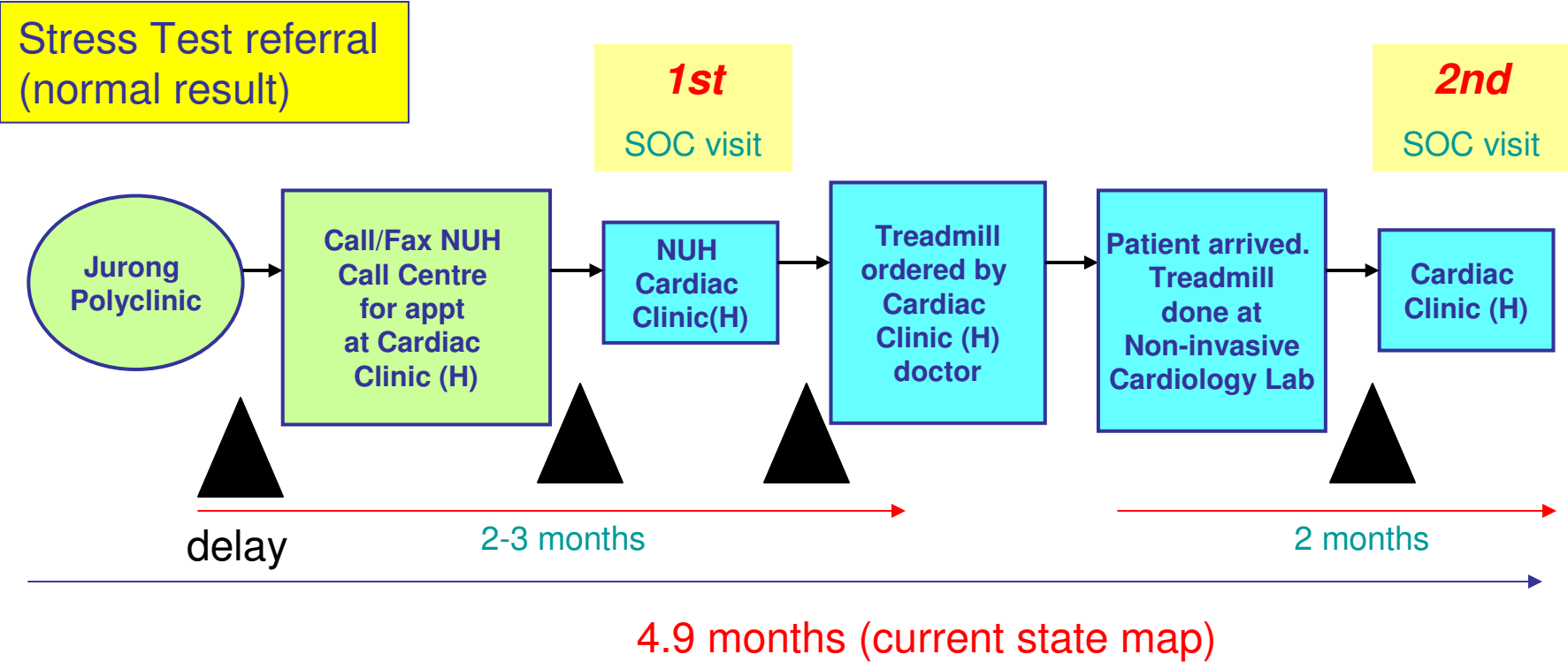
Clinical Care

Education

Background

- High # of referrals from Jurong (29 %) & Bukit Batok polyclinic (39 %):
 - Brief survey May-Jun 08 revealed 70% of referrals were for exclusion of ischaemic heart disease.
 - Patients were referred with history of angina, chest pain, SOB or ? IHD and dyspnoea.
 - 70% had stress test done with normal results
- Cardiac SOC had an average of 313 new subsidized attendances with 119 referred from NHG polyclinics monthly.
- Jurong Polyclinic's (JP) wait time to obtain an appointment from Cardiac SOC took ≥ 60 mins (80%)
- Treadmill test is scheduled near the TCU, usually 2 months after first visit. From initial SOC referral at JP until patient informed of treadmill results took > 4 months.

Before RIE

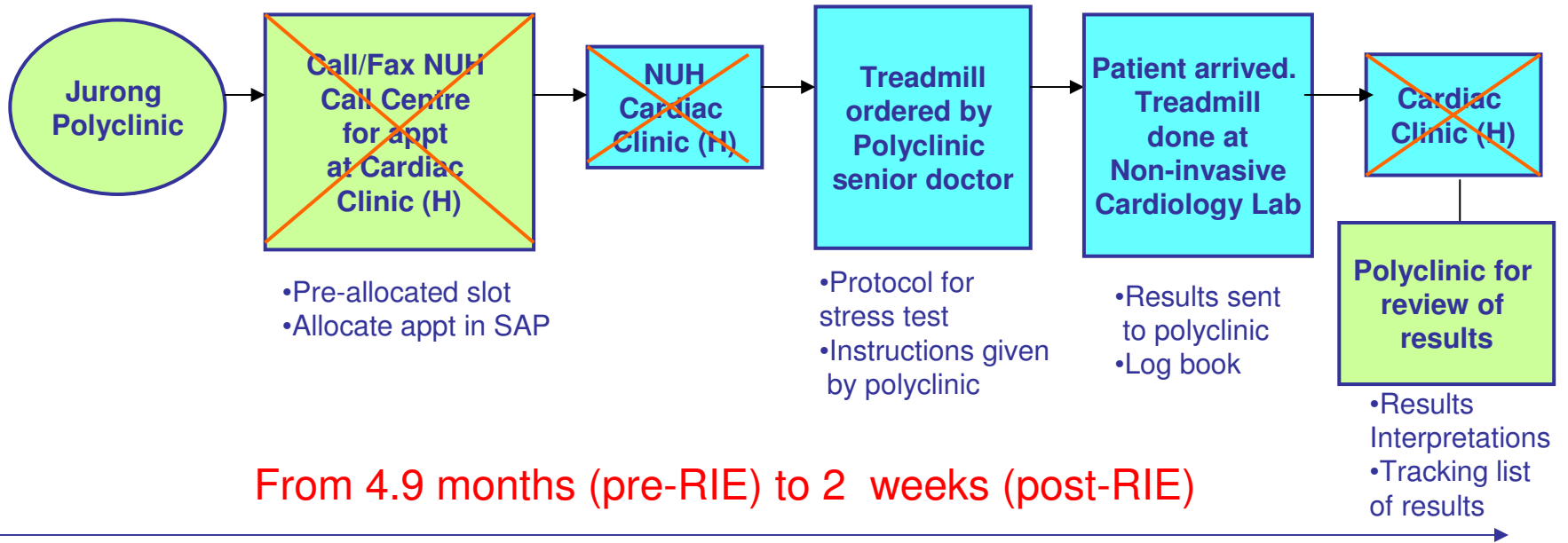


Key Changes (2 Mar 09)

- Empower JP doctor to order exercise stress test.
- Provide pre-allocated treadmill slots to JP (5 slots per week).
- Send treadmill report (email) to JP within 72 hrs of stress test.
- JP to review patient 1 week after the stress test.
- Fast-track into the Direct Access Clinic after evaluation if needed.

After RIE (2 SOC to 0 SOC)

Normal Treadmill



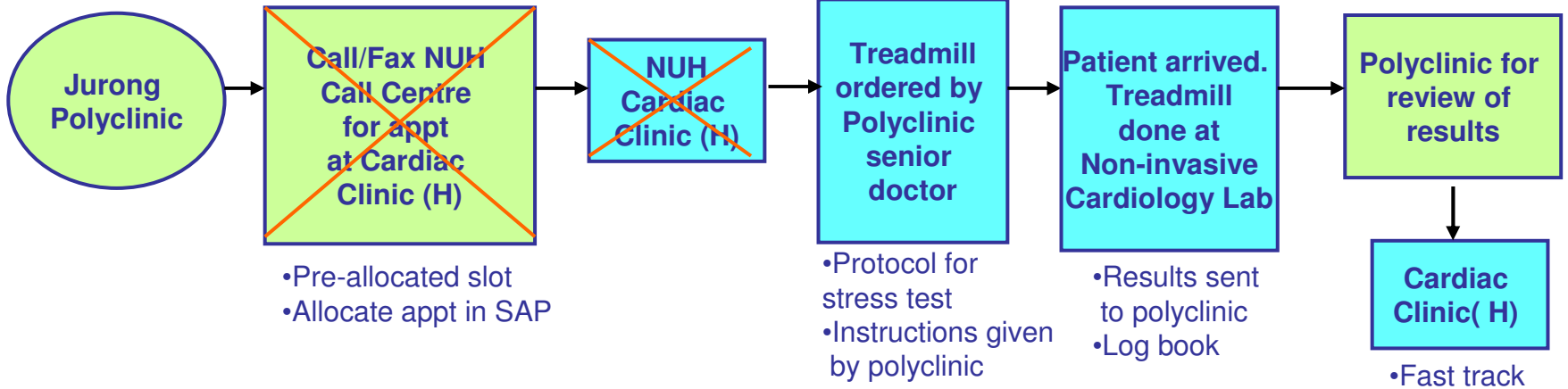
Roll-out: 2/3/09

After RIE (2 SOC to 1 SOC)

~~Cardiac Clinic (H)~~

- Results Interpretations
- Tracking list of results

Inconclusive, mildly abnormal Treadmill



Grossly abnormal Treadmill

- MO supervising the treadmill to inform Registrar.
 - Feedback loop to polyclinic: Follow up at NUH on treadmill report.
- 5/68 taken over by NUHCS (data up till Jul 09)

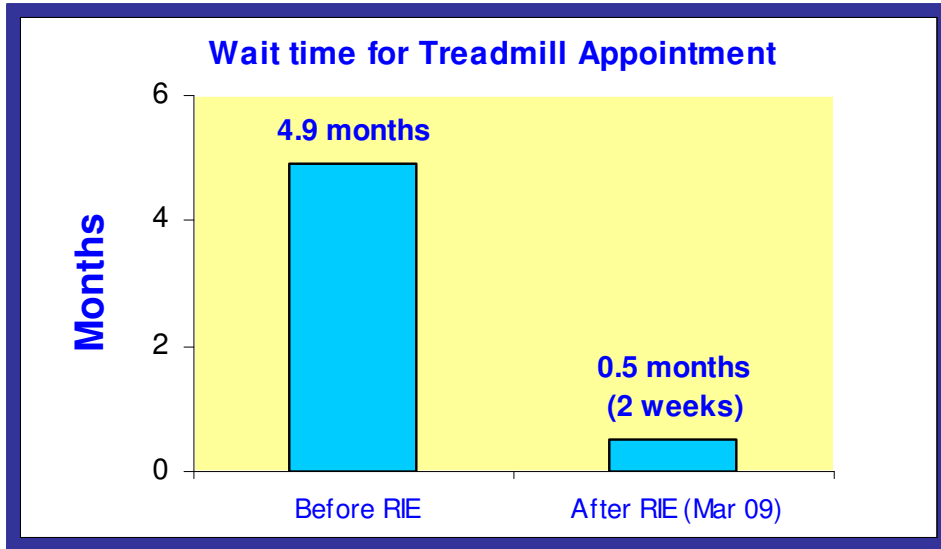
1st
SOC visit
When needed

Results: Cardiac SOC saved

Month 09	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Total
Normal treadmill (2 SOC visits saved)	9	11	10	7	10	7	9	2	65
Abnormal treadmill (1 SOC visit saved)	1	4	0	9	6	2	2	2	26
Total saving of SOC visits (Cardiac Clinic)	19	26	20	23	26	16	20	6	156

Results:

Wait time for Treadmill appointment



Month 09	Mar	April	May	Jun	Jul
Treadmill appointment given within 1-2 weeks	100%	100%	100%	100%	100%

Wait time for Treadmill report

Month 09	Mar	April	May	Jun	Jul
Treadmill reported/sent to Jurong Polyclinic within 72 hrs	100%	100%	100%	94%	100%

Benefits

Patients

- Reduce long waits: for SOC appointments & results at TCU.
- Reduce anxiety of waiting... for tests and tests results
- Reduce need for medication while waiting for SOC TCU.
- Less trips to Cardiac SOC (save \$\$ & time).

NUHCS

- Freeing up SOC slots for other patients.
- Reduce wait time for subsidized FV appointment.

Jurong Polyclinic

- Remove the hassle of faxing for appointment and informing patient of treadmill appt.
- Patients were informed earlier of treadmill report (1 week after test).
- Ill patients received prompt treatment (NUHCS took over)

Next steps...

- **NUHCS to review the pre-allocated slots periodically.**
- **Spread initiatives to other polyclinics:**
- **Communicate project**
 - Other Clinics/Centres to adopt similar workflows?**
 - **Saving visits to SOC**
 - **Benefiting patient care**

Thank you
for your attention