

## **Project Title**

SpineCom Programme – Our Experience and Initial Outcomes

## **Project Lead and Members**

Project lead: Adj A/Prof Gamaliel Tan

Project members: Adj A/Prof Li Shuxun, Adj A/Prof Wang Lushun, Fion Gun, Shannon Leong, Wan Tin Hang, Adj A/Prof Fareed Kagda

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

## **Healthcare Family Group Involved in this Project**

Medical

## **Aims**

We aim to develop a Spine Care in the Community (SpineCom) Programme, as a new model of clinical care to right site non-surgical spine patients with their primary healthcare providers. We partner with NUHS Primary Care Network (PCN) General Practitioners (GPs) and leverage Community Healthcare Assist Subsidy (CHAS) to keep healthcare affordable. Through this programme, patients are co-managed with their empowered healthcare provider and continue receiving subsidised spine care, while patients that need specialist spine care have access to it earlier

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

### **Lessons Learnt**

- Right siting of care helps to reduce the Spine SOC FV lead time and allows spine specialists to focus their attention on patients who needed more urgent care
- Shared care with GPs provides greater convenience of patient care closer to home while enabling patients to receive continued subsidised healthcare via CHAS
- Co-management of patient care with NUHS PCN GPs via care plans enables the empowerment and strengthening of the GPs' capabilities.

### **Conclusion**

See poster appended/ below

### **Project Category**

Care Continuum

Intermediate and Long Term Care & Community Care, Right Siting

Care & Process Redesign

Workflow Redesign

### **Keywords**

Spine Care, Community, NUHS Primary Care Network (PCN)

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# SPINECOM PROGRAMME – OUR EXPERIENCE AND INITIAL OUTCOMES

- SAFETY
- QUALITY
- PATIENT EXPERIENCE
- PRODUCTIVITY
- COST

ADJ A/PROF GAMALIEL TAN (PROGRAMME DIRECTOR), ADJ ASST PROF LIN SHUXUN (PROGRAMME CLINICIAN LEAD), ADJ ASST PROF WANG LUSHUN, FIONE GUN, SHANNON LEONG, WAN TIN HANG, ADJ A/PROF FAREED KAGDA (SPONSOR)

## Define Problem, Set Aim

### Problem/Opportunity for Improvement

With a high spine clinical volume, the NTFGH Spine Specialist Outpatient Clinic (SOC) First Visit (FV) wait time is consistently beyond the target of 60 days as set by the Ministry of Health (MOH). Thankfully, after a proper investigation and diagnosis, most patients do not require surgical intervention or long-term specialist follow up. The long wait time to SOC FV results in delay in investigations, diagnosis and treatment. Patients still do get the care they need, but later.

### Aim

We aim to develop a Spine Care in the Community (SpineCom) Programme, as a new model of clinical care to right-site non-surgical spine patients with their primary healthcare providers. We partner with NUHS Primary Care Network (PCN) General Practitioners (GPs) and leverage Community Healthcare Assist Subsidy (CHAS) to keep healthcare affordable. Through this programme, patients are co-managed with their empowered healthcare provider and continue receiving subsidised spine care, while patients that need specialist spine care have access to it earlier.

## Establish Measures

### Key Performance Indicators (KPIs):

- Number of patients enrolled into the programme.
- Appropriateness of referrals from NUHS PCN GPs back to NTFGH Specialists.
- Orthopaedic SOC Subsidised FV Lead Time.

### Baseline Performance

42% of the FY2019 Spine SOC Subsidised FV Lead Time was  $\geq 60$  days.

### Patient Cohort

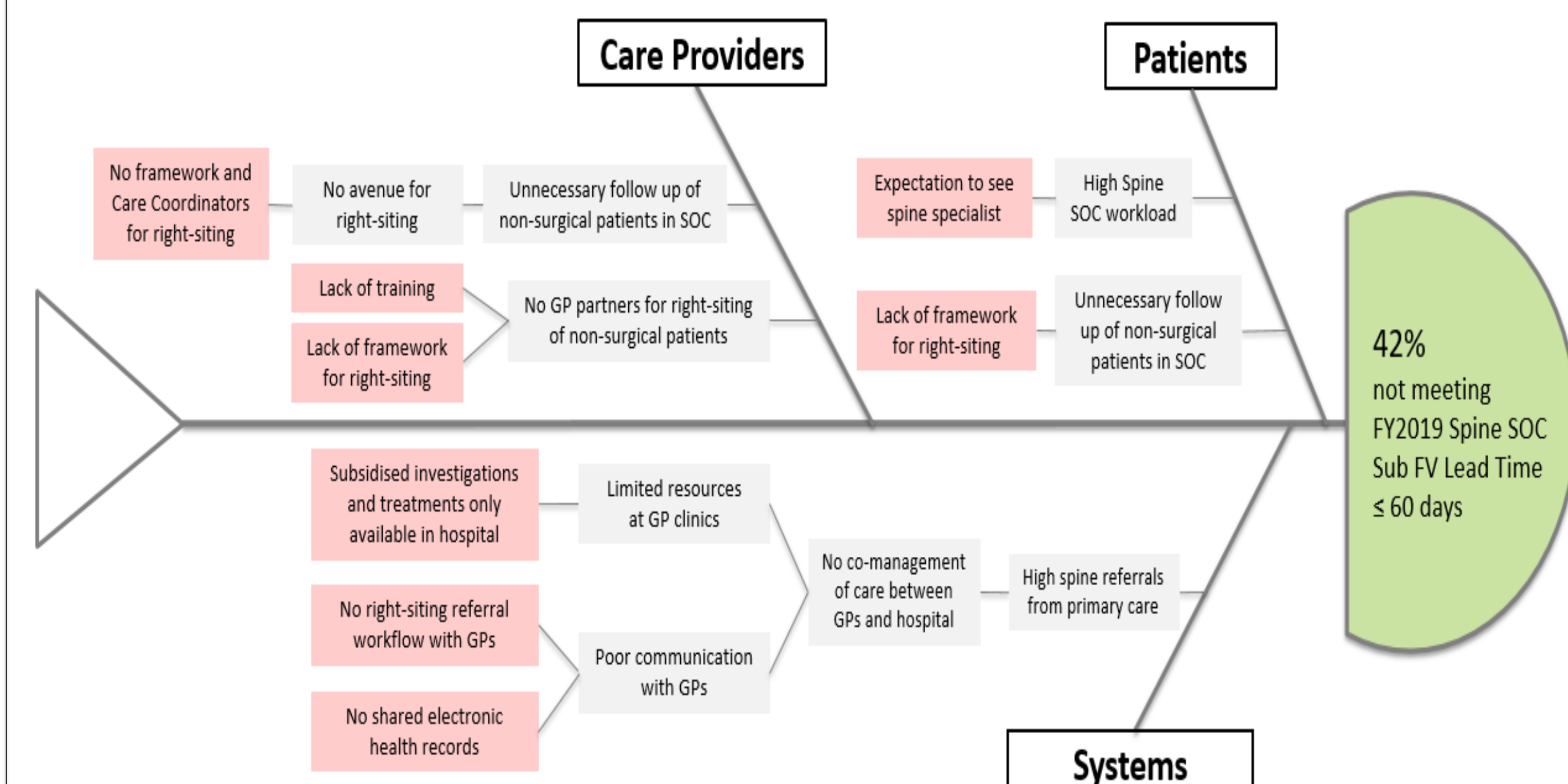
403 patients were recruited into the programme from October 2020 to March 2022.

No. of Patients	403	Gender	Male	187
Age (Mean + SD)	60.5 ± 11.7		Female	216

## Analyse Problem

### Root Cause Analysis

Targeted areas of improvement:



## Acknowledgements

The SpineCom Programme is supported by:



## Test & Implement Changes

### Referrals to NUHS PCN GPs

- Recruitment of non-surgical patients
- 1 year open TCU
- Tailored care plan for management by GP

### Co-management of Care

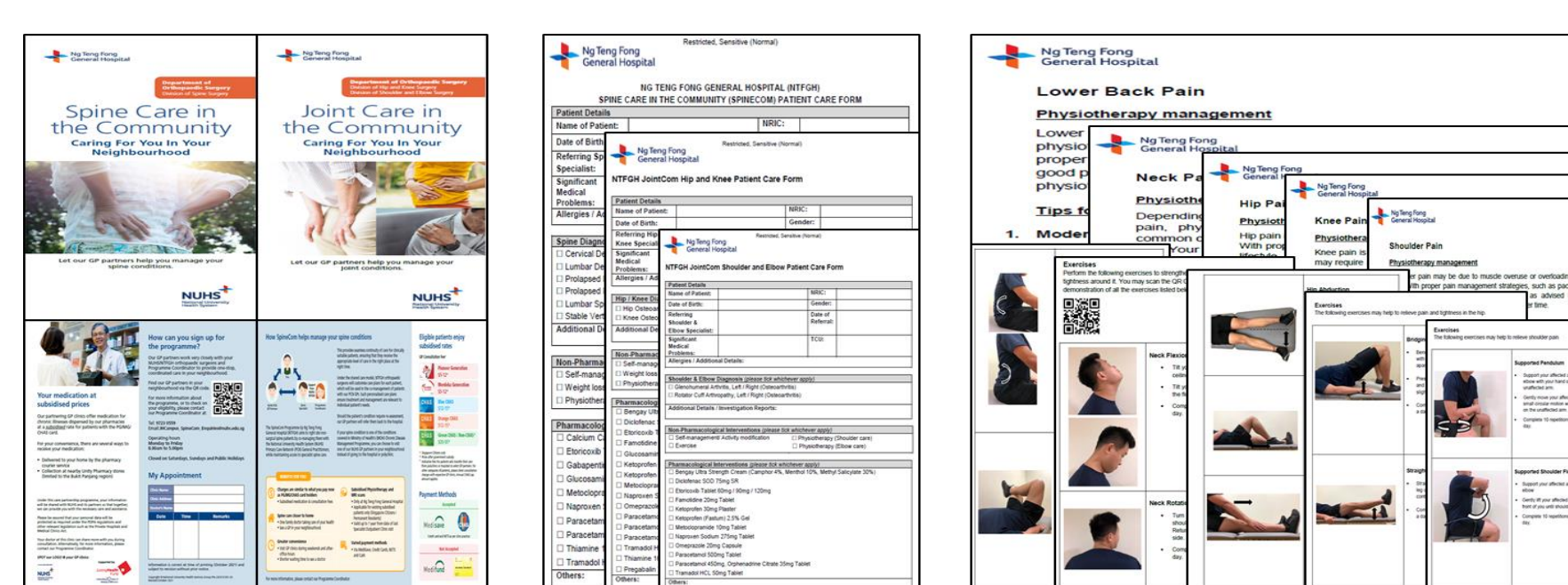
- Follow up visit with GP
- Continued subsidised healthcare via Community Health Assist Scheme (CHAS)

### Coordination of Care

- Referrals back to SOC for patients with worsening symptoms
- Access to subsidised MRI and physiotherapy at NTFGH

CYCLE	PLAN	DO	STUDY	ACT
1.	Pilot implementation of SpineCom Programme (3 months)	<ul style="list-style-type: none"> <li>Engagement and publicity to NUHS PCN GPs</li> <li>Development of patient care forms and patient educational brochures</li> <li>Trial of patient referral workflow</li> <li>Pilot recruitment with patient referrals from 2 spine specialists</li> </ul>	<ul style="list-style-type: none"> <li>Raising GP awareness on programme (e.g. started with 23 GPs onboard)</li> <li>Administrative workflow issues (e.g. clinic staff/ GPs unfamiliar with workflow and care forms)</li> <li>Communication with GPs (e.g. low response for appointment booking)</li> <li>Challenges in initial patient education process</li> </ul>	<ul style="list-style-type: none"> <li>Regular reminders on workflow and guidance on issuing care forms</li> <li>Adopted mixed methods of communication with GPs (e.g. Email/ call/ fax)</li> <li>Feedback sharing with NUHS RHS Office to improve the patient education process and address key concerns</li> </ul>
2.	Continual development of SpineCom Programme (9 months)	<ul style="list-style-type: none"> <li>Ramp up patient referrals from all spine specialists</li> <li>Engagement and publicity to all NUHS PCN GPs</li> <li>GP and patient education (e.g. information leaflets for physiotherapy management)</li> <li>Follow up with patients after GP appointments</li> </ul>	<ul style="list-style-type: none"> <li>Progress of KPIs (e.g. increase in no. of patients recruited)</li> <li>Increase in GP partners (e.g. total of 41 GPs onboard)</li> <li>Positive feedback from GPs and patients on information leaflets</li> <li>Patient feedback on GP visit</li> </ul>	<ul style="list-style-type: none"> <li>Regular engagement with spine specialists to increase patient referrals</li> <li>Continued GP engagement and sharing of educational leaflets</li> <li>Feedback sharing with RHS Office to improve patient experience</li> </ul>
3.	Scope expansion of SpineCom Programme (1 year post-implementation)	<ul style="list-style-type: none"> <li>Scope expansion to Joint Care in the Community (JointCom):                             <ul style="list-style-type: none"> <li>✓ Hip &amp; Knee referrals</li> </ul> </li> <li>Engagement with GPs</li> <li>JHF SpineCom video filming for publicity</li> </ul>	<ul style="list-style-type: none"> <li>Successful KPI achievements for SpineCom and JointCom</li> <li>Increase in GP partners (e.g. total of 47 GPs onboard)</li> <li>Increased patient awareness via SpineCom video playback on hospital TVs</li> </ul>	<ul style="list-style-type: none"> <li>Development of new education materials for JointCom patients and GPs</li> <li>Future plans to increase publicity for JointCom</li> </ul>

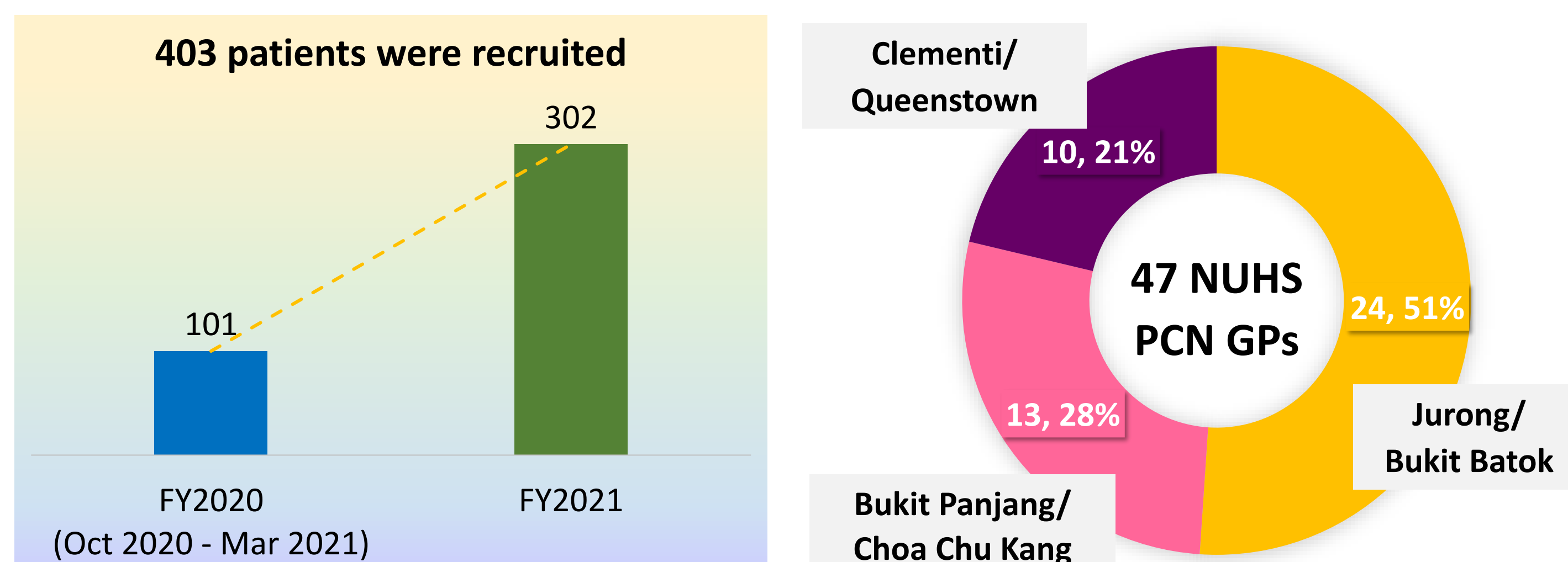
### Education and Publicity Materials



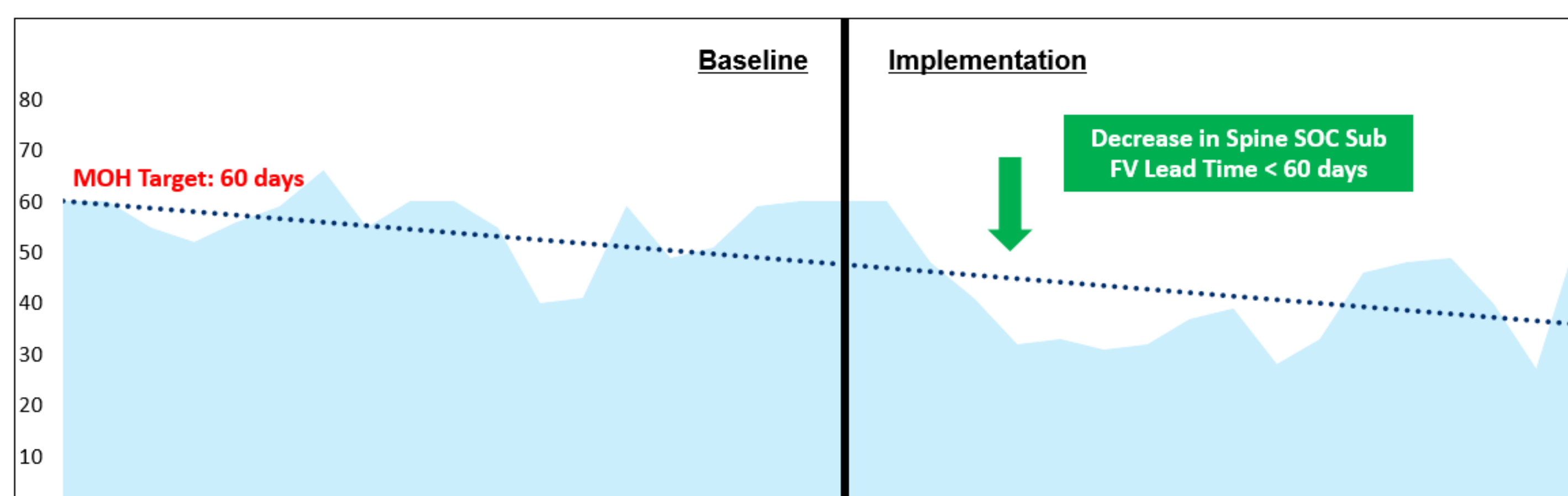
### JHF SpineCom Video



From Oct 2020 to Mar 2022, 403 patients were recruited and referred to their preferred GPs (47 NUHS PCN GPs onboard). Only 5 patients were referred back from the GPs to Spine SOC (100% appropriateness).



Spine SOC Subsidised FV Lead Time had improved with 100% of monthly lead time < 60 days.



## Spread Changes, Learning Points

- Right-siting of care helps to reduce the Spine SOC FV lead time and allows spine specialists to focus their attention on patients who needed more urgent care.
- Shared care with GPs provides greater convenience of patient care closer to home while enabling patients to receive continued subsidised healthcare via CHAS.
- Co-management of patient care with NUHS PCN GPs via care plans enables the empowerment and strengthening of the GPs' capabilities.