

## CONFERENCE ABSTRACT

# Delivering Person-Centric, Seamless Care through the Patient Appointment Consolidation (PAC) Programme

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**Introduction:** The prevalence of patients with multiple chronic diseases is rising both globally and in Singapore. Our healthcare systems, currently centred around acute hospitals, are largely configured to manage individual diseases rather than multimorbidity, resulting in such patients seeking care from multiple specialists. This can result in care fragmentation, duplication of efforts, increased healthcare cost, long waiting times, and delayed treatment for those in need of specialist services. Furthermore, patients may seek care from both tertiary and primary care settings, which may not be well integrated. The National University Health System Regional Health System (NUHS RHS) thus started the Patient Appointment Consolidation (PAC) programme in 2014 to deliver more seamless, person-centric care to patients with multiple co-morbidities through consolidation under a primary physician.

**Care Model:** Primary care coordinators (PCCs) assist clinicians to identify suitable patients with multiple specialist outpatient appointments for consolidation of care under a primary physician within the hospital or a dedicated family physician in the community. The PCCs counsel patients on the available options, schedule appointments and also provide patient and caregiver education on disease management. Once enrolled on the programme, each patient is well-supported by a multi-disciplinary team comprising hospital specialists, primary care physicians, nurses and allied health professionals. This programme has garnered support from various stakeholders and fostered collaboration between the public healthcare sector, i.e. acute hospital and private sector, i.e. primary care partners to develop shared care protocols for holistic patient management. This partnership has been facilitated by a common EMR platform, allowing family physicians in the community to access clinical notes from hospital specialists and vice versa for the specialists to continue monitoring their patients' conditions as they are being cared for in the community. Family physicians and specialists could discuss patient cases and treatment plans directly through the common EMR platform, phone calls or

meetings. Duplications of tests are also avoided, as test results are recorded in the shared platform.

**Outcomes:** Analysis of 107 patients with propensity matched controls showed that there were statistically significant reductions ( $p < 0.01$ ) in number of specialties attending to each patient by 0.53 and per patient SOC visits by 1.78 per year. Reductions in Length of Stay (LOS), visit to Emergency Department and admission of each patient were 3.19, 0.24 and 0.07 respectively in a year, but were not statistically significant. Net system cost savings were estimated to be S\$492 (~USD\$342) per patient in a year. For successful programme implementation, dedicated PCCs, clinicians' buy-in, patients' mindset change on care model, availability of subsidies to increase patients' willingness to be managed in the community, and shared EMR system are identified as crucial factors. To ensure programme sustainability, programme team would continue to facilitate regular communication between the SOC and primary care to enable deeper engagement, enhance mutual confidence and build rapport and trust between the stakeholders. Escalation workflows have also been established to ensure that patients are well-supported with specialist care when needed. To allow for further programme refinement, NUHS RHS has embarked on a comprehensive mixed methods research study to better understand outcomes at the patient, programme and healthcare system levels. Learnings from such a model could potentially be tailored and adopted by other health systems.

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**Keywords:** multiple co-morbidities; care consolidation; person-centric and seamless care; common it platform; mixed methods research

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