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Community Hospitals of the Future: Opportunities and Limitations

Kim Xie, Master in Public Health^{1,2}, Sean Phang, BSc (Hons) Biological Science and Psychology³, Lin Ming, BSc (Hons) Biomedical Sciences and BioBusiness³, Kho Yong Xiang, BSocSci (Hons) Communications and New Media⁴, Rachel Toh, BSocSci (Hons) Social Work⁴, [Lai Yi Feng](#), Master in Public Health^{1,4}, and Kuah Ting Ting, Masters (English)⁴, (1)MOH Office for Healthcare Transformation, Singapore, (2)Singapore General Hospital, Singapore, (3)Nanyang Technological University, Singapore, (4)National University of Singapore, Singapore

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INTRODUCTION

Community Hospitals (CHs) are a critical part of Singapore's shift towards a community-centric care model as the population ages. Community Hospitals of the Future ("CHoF") represents a series of emerging conversations around approaches to reimagine and redesign care delivery in CH setting in response to changing care needs arising from population shifts.

AIM

This environmental scan aims to understand how CHs would have to shift in terms of (i) care delivery and resourcing, (ii) information flow, and (iii) financing for CHoF to conceptualise and meet the changing care needs in Singapore.

POPULATION STUDIED

Semi-structured interviews were conducted with 26 senior management, management and working level stakeholders from 8 out of 9 Community Hospitals in Singapore.

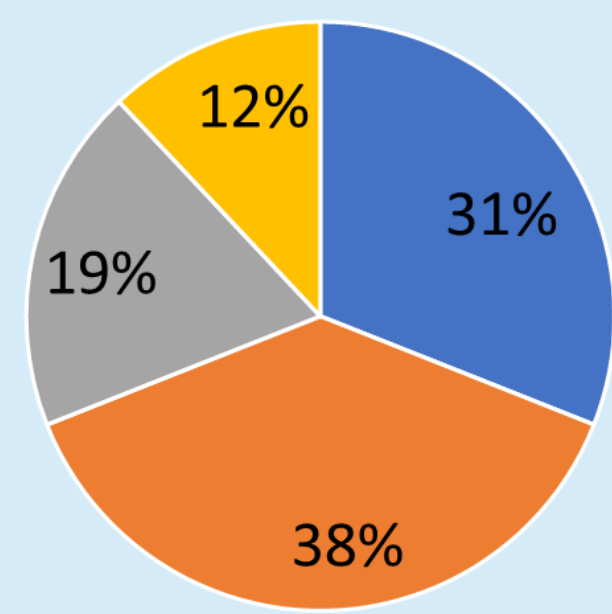


Figure 1a. Profile of interviews

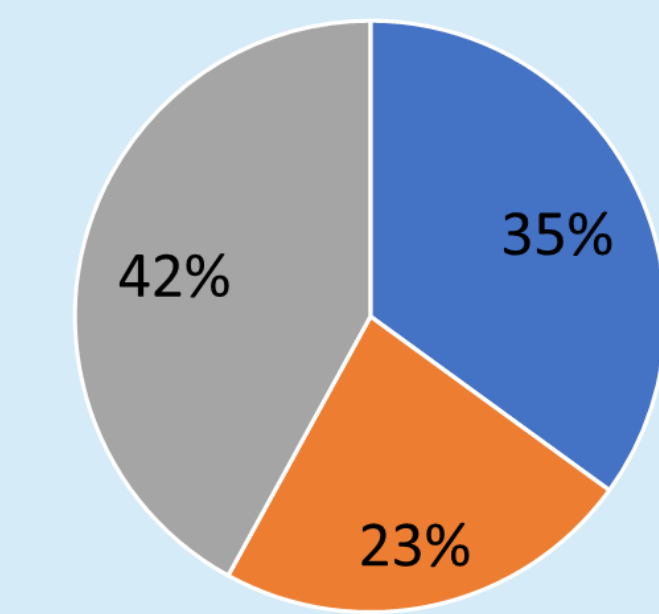


Figure 1b. Profile of interviews

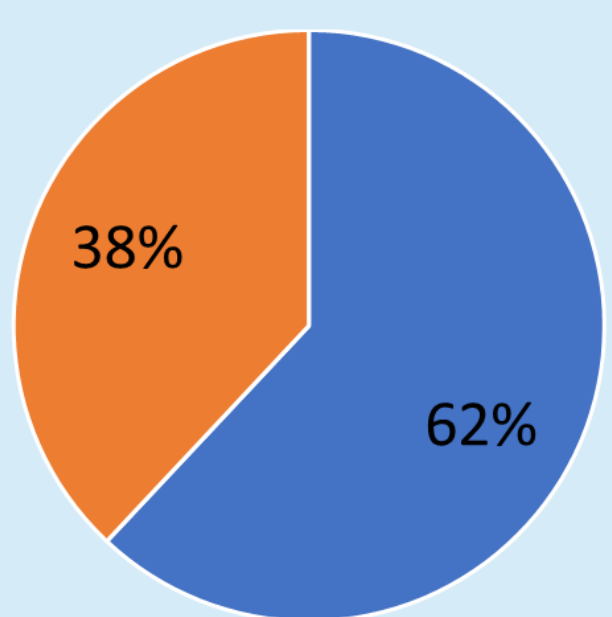


Figure 1c. Profile of interviews

CONCLUSIONS

With the current issues of (i) rapidly ageing population, (ii) specialist-centric healthcare system, and (iii) fragmentation of care eco-system, there is a need to further understand how CHoF can be modelled to better tackle them. Therefore several important questions have been devised to land us in a microscopic view on how to develop CHoF in the right constructs. Demographic changes, patient segmentation, service and regulatory parameters, patient's perspective, care delivery, and financial levers (or lack of) are some of the categories that the interview questions looked into. Therefore, the data gathered would be used to guide and refine the concept of CHoF.

Moving forward, we hope to demonstrate proof of concept (POC) by running pilot programmes at various sites, and eventually implementing it at a larger scale. Considering the changing care needs arising from an ageing population and increasing multi-morbidity, future work would include exploring the factors to enable this concept to be scaled, sustained and mainstreamed

STUDY DESIGN

Table 1. To understand the shifts required and intended purpose of CHoF in the what, why and how domains

Domain	Objectives
What?	- Understand current limitations, barriers and facilitators of current regulatory policies of CHs in Singapore - What are the rules we need to relax? - Understand what are the current diagnostic related groups (DRGs) we need to look at
Why?	To explain "why" CHs play a key role in providing care for an ageing population and increasing multi-morbid patients
How?	To explain "how" future CHs can productively provide holistic care for this emerging group of patients

Figure 2. Domains and objectives of interview guide

A	Views on Community Hospitals in Singapore	- Stakeholder's perception of the current patient profile in Singapore - Hopes for the role of CH in Singapore healthcare system - Perception of barriers faced for CHs
B	Opportunities & Challenges	- Response to current policy - Understand current limitations, barriers and facilitators of current regulatory policies of CHs in Singapore
C	Examples of Envisioned CHoF Models	Views on the different concepts/models developed
D	Looking Ahead	Type of changes you hope to see in the future of CHs

Participants were recruited through snowball sampling, with 26 interviewees done across 8 different CHs. 8 of them were c-suites, 10 were senior management level personnel, 5 were management level and 3 were working level. Of the 8 CHs, 5 were government co-located CHs, 3 were VWO operated CHs.

Semi-structured interviews were conducted virtually, with the aid of an interview guide that had served to probe participants on the topics of the patient profile that current and future CHs would have, the role of CHs, the current and future challenges, collaboration with acute hospital, introduction of MOHT envisioned models for CHs, and opportunities for future CHs. Thematic analysis was conducted to elicit common themes mentioned across the 26 participants.

RESULTS

Summary of Challenges:

- Inefficient use of CH beds as policy encourages longer CH stays to meet subsidy criteria
- Process inefficiencies in CHs due to barriers in information sharing and lack of shared ownership between acute hospitals (AHs) and CHs
- Diverse CH roles and services contributes to the varied services and expertise in different CHs
- Limitations on CH funding model leads to issues with manpower and resources, prevents CHs to expand its scope

Summary of Opportunities

- Closer collaborations with nursing homes and community partners to address social-related health issues to facilitate a seamless transition of care
- Integration between acute hospitals (AHs) and CHs through shared ownership of patient care
- Have a clearer training route for Family Medicine (FM) doctors in CH to better utilise FM doctors in CH settings
- CHs to expand its scope and services by providing more social support and play a larger role in triaging and diagnostics

IMPLICATIONS FOR POLICY AND PRACTICE

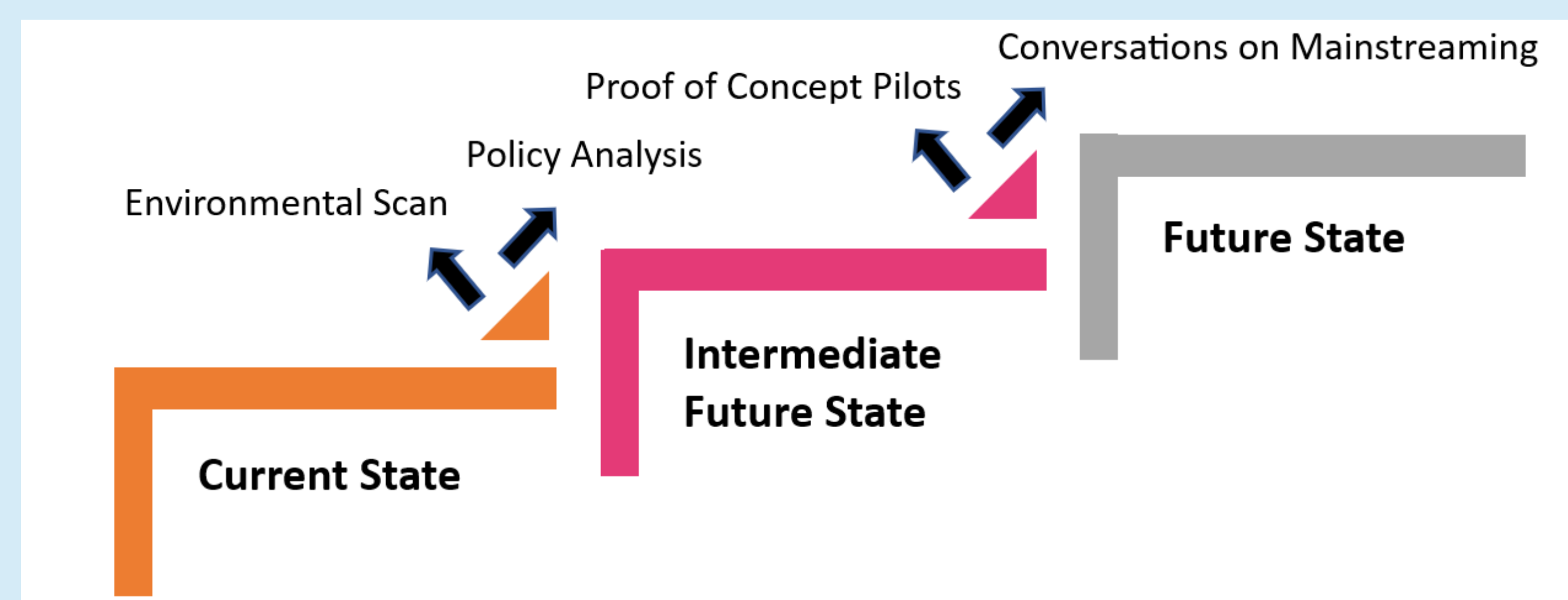


Figure 3. Stepwise evidence-informed consensus-based approach to conceptualise CHoF

In order to better understand the target patient segment, desired clinical service scope, and therefore regulatory and financing policies that need to be reworked, a stepwise evidence-informed consensus-based approach would be most advisable. However, largely relatable to challenges in dissemination and implementation science, evidence generation alone is not sufficient. Apart from evidence generation, implementation of CHoF will look into various other factors required for implementation to be successful.

ACKNOWLEDGEMENT

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REFERENCES

- Tan, C. C., Lam, C. S. P., Matchar, D. B., Zee, Y. K., & Wong, J. E. L. (2021). Singapore's health-care system: Key features, challenges, and shifts. *The Lancet*, 398(10305), 1091-1104.
- Nurjono M, Shrestha P, Ang IYH, Shiraz F, Eh KX, Toh S-AES, et al. Shifting care from hospital to community, a strategy to integrate care in Singapore: process evaluation of implementation fidelity. *BMC Health Services Research*. (2020) 20(1):452.
- Lai YF, Lee SQ, Tan YR, Lau ZY, Phua J, Khoo SM, et al. One-Bed-One-Team-Does an Integrated General Hospital Inpatient Model Improve Care Outcomes and Productivity: An Observational Study. *Front Public Health*. (2022) 10:779910.
- Lai YF, Leow SY, Lee SY-F, Xiong J, Lim CW, Ong BC. General medicine at the frontline of acute care delivery: Comparison with family medicine hospitalist model implementation in Singapore. *Proceedings of Singapore Healthcare*. (2020) 30(1):10-7.

CONTACT INFORMATION

The corresponding author can be reached at yifeng.lai@moht.com.sg

