### **District Health System: Needs and Framework**

Professor Albert Lee

Professor in Public Health and Primary Care and Director of Centre for Health Education and Health Promotion, CUHK, Honorary Consultant in Family Medicine, Foreign Associate of Academy of Medicine, USA

The concept of District Health System first emerged in the Working Party of Primary Care Report to Hong Kong Government in 1991. Many recommendations have not been implemented probably due to establishment of Hospital Authority at the same time. Now Hospital Authority has been well established with heavy workload demands and limitation of manpower. It is time to strengthening the primary health care system in Hong Kong which has been operated on 'lassie faire' basis. This would only be feasible in the past but would not face the future challenges of triple health burden: resurgence of communicable diseases, early onset of non-communicable diseases, disability caused by mental health illnesses. The 1991 Working Party Report recommended the establishment of Primary Health Care Authority making delivery of primary health care in more structured manner like the Hospital Authority overseeing management of all public hospitals. However nearly 70% of primary medical services is provided in private sector<sup>1</sup> and other services related to primary care are delivered by diverse settings.<sup>2</sup> Moreover long term care needs to move beyond medical model to address the social determinants of health as well as the psycho-social needs, e.g., evidence has been established the link between social capitals and health.<sup>3</sup> The partnership with social services<sup>4</sup> and patient empowerment programmes<sup>5</sup> have shown to achieve better clinical outcomes. Therefore it is more feasible to build up a local primary health care system under the concept of District Health System incorporating and integrating different service providers as well as re-deployment of services and manpower to support the development as outline in Figure 1 with further details in Figure 2.

Another unique feature of District Health System is to introduce case management (Figure 3) so patients would have different levels of management according to their conditions. The introduction of Community Health Practitioners (CHP) working with health and/or social care assistants would also cover the psycho-social needs of patient as well as physical needs. They would also help to minimize the risk of unnecessary hospital and emergency admissions also in the context of social determinants of health leading to a fair society with healthy lives,<sup>6</sup> and building a stronger human and social capitals.<sup>7</sup>

<sup>&</sup>lt;sup>1</sup> Lee A., Siu S., Lam T., Tsang KK., Kung K. Li PKT. The Concepts of Family Doctor and the Factors Affecting choice of Family Doctors among Hong Kong People. *Hong Kong Medical Journal* 2010; 16(2): 106-15

<sup>&</sup>lt;sup>2</sup> Lee A. Family Medicine and Community Health Care. In: Fong K and Tong KW (Eds). *Community Care in Hong Kong: Current Practices, Practice-Research Studies, and Future Directions*. Hong Kong: City University Press, 2014.

<sup>&</sup>lt;sup>3</sup> Lee A. Social Capital and Health. In Sik Hung Ng, Stephen Yan-leung Cheung, and Brahm Prakash (Eds) Social Capital in Hong Kong—Connectivities and Social Enterprise. City University Press, Hong Kong, 2011.

<sup>&</sup>lt;sup>4</sup> Lee A. Siu CF, Leung KT, Chan C, Lau L, Wong KK. General Practice and Social Service Partnership for Better Clinical Outcomes, Patient Self Efficacy and Lifestyle Behaviours of Diabetic Care: Randomised Control Trial of a Chronic Care Model. *Postgraduate Medical Journal* 2011, 87:688-93

<sup>&</sup>lt;sup>5</sup> Mike K.T. Cheung, Sam C.C. Chan, Anchor T.F. Hung, Angela Y.M. Leung, Albert Lee, Frank W.K. Chan, K.L. Chung, Peter K.K. Poon, Chetwyn C.H. Chan. A latent profile analysis on patient empowerment programme in a Hong Kong primary care setting. Patient Education and Counselling 2017 http://dx.doi.org/10.1016/j.pec.2017.05.028

<sup>&</sup>lt;sup>6</sup> Marmot M and Bell R. Fair Society healthy lives. *Public Health* 2012; 126: sS4-10; .

<sup>&</sup>lt;sup>7</sup> Lee A., Kiyu A., Milman HM., Jara J. Improving Health and Building Human Capital through an effective primary care system. *Journal of Urban Health* 2007; 84(supp1): 75-85

The District Health System will be under the governance of a District Committee composing representatives from DH, SWD, HA, District Council, professionals (medical and health, social services) connected to the district, academics, community leaders and patient groups. The Committee will hold the service providers accountable and responsible for monitoring and evaluation.

### The rationale of District Health System

- The current hospital system would not cope with the ever increasing needs and demands with ageing population, early onset of non-communicable diseases, and increasing burden of mental health problems.
- Expansion of hospital services is expansive requiring expansion of professional staff at graduate level and above as well as high operating costs
- Enhancement of primary care would provide more comprehensive and holistic care with first point of contact in community setting and would enhance quality of life of citizens
- Extra resources will be needed to invest in primary health care so the heavy burden of hospital services would be relieved, soothing the manpower issue. This would minimize medical errors
- In long run, primary health care would shoulder substantial portion of health burden so the hospital services will not need further expansion. Therefore the total health care expenditure would be capped under control without compromising the quality care.
- District Health System provides a system of local governance of primary health care tapping in community resources as well as efficient deployment of manpower by engaging health care personnel at all levels not just doctors, nurses and allied health professionals
- Patients with chronic health problems stable to be managed in community setting will be referred back to primary care physicians in private or public sector. The community health care team will provide supporting services for this group of '*shared care*' patients including dispensing medication for their chronic conditions as well as co-ordinating assessment requiring laboratory test or imaging.
- It is proposed to commission appropriate health care organization to operate the existing public General Out-patient clinics (GOPC) on block grant from public funding plus fee paid by users at current government rate (those eligible for subsidy will be reimbursed). The clinics will maintain same quota for different categories of patients and manage the patients as usual. GOPC is still public service but is operated by health care organisations instead of HA and under the governance of District Health System for monitoring and evaluation.
- It is proposed to allow users of Maternal and Child Care and Student Health choosing their own family physicians to provide the services and reimbursed. The family physicians would purchase services from community health team if they cannot provide the services in their own clinics. They need to undergo clinical audit of their performance under the scrutiny of District Health Care System

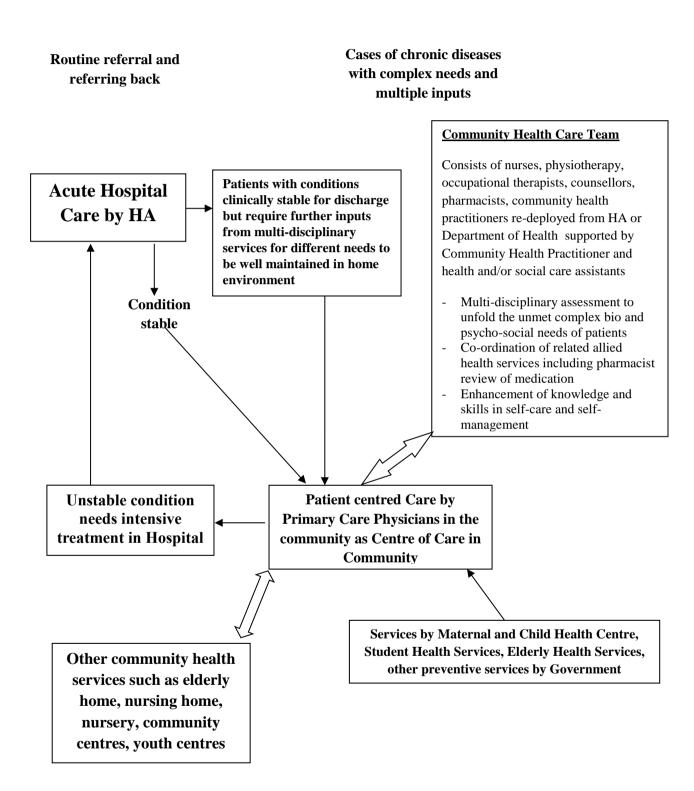
#### Logistic explanation

- Patients with chronic health problems from in-patient or specialist out-patient clinics would be referred to FM Integrated clinic if conditions are stable. After fine tuning of medication and long term care plan, the patients will be discharged to primary care providers either public and private as '*shared care*' patients. They can be referred back

to FMIC only if needed for assessment whether they need to be seen by hospital specialists.

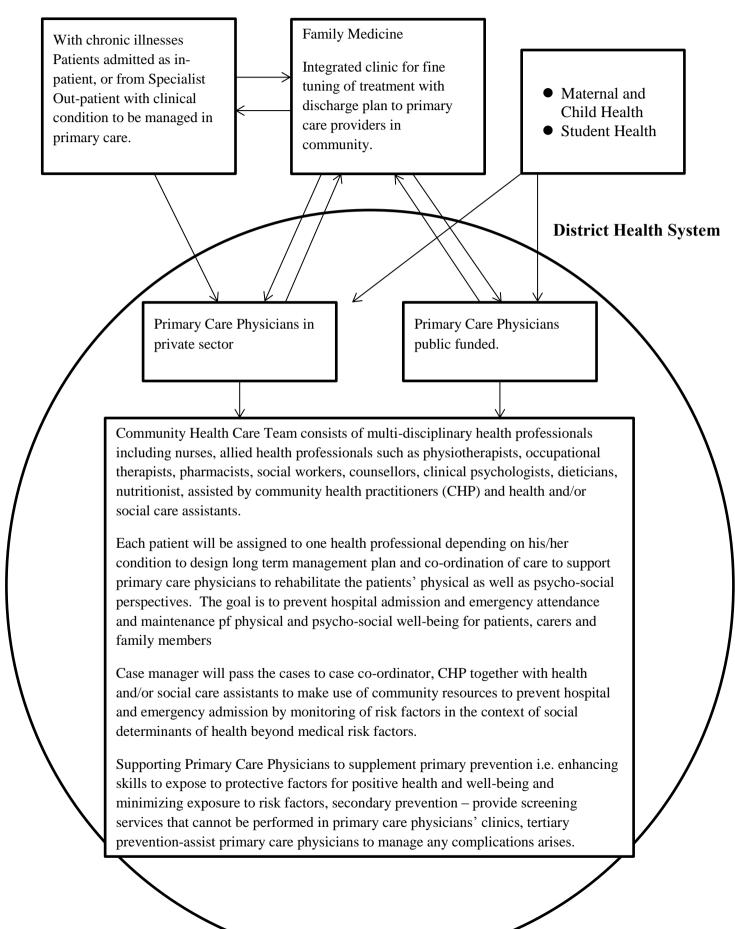
- The '*shared care*' patients will pay usual consultation fee according to the rate stipulated by private primary care physicians and the usual rate of GOPCs if attending public.
- The Community Health Care team will provide intensive co-ordination of other supporting services needed for the patients as well as co-ordinating for supply of medications and arrangement for periodic assessment by laboratory testing and/or imaging.
- The '*shared care*' patients will be better managed in community and hospital admission and/or emergency attendance will be minimized. This would be incentive for primary care physicians in public sector as patients might not need to consult so frequently. For private primary care physicians, this will allow shared care patients with lower health care expenditure so more patients will opt to have continuing care by their usual family doctors. Otherwise this group of patients will stay in public setting.
- One might raise concerns that patients initially managed well by their own private primary care physicians (also in GOPCs) for their chronic health conditions would request to be seen by specialists in hospital so they would become '*shared care*' patients taking advantage of this new system without the actual needs.
- If patients request referral or referral from Accident and Emergency rooms, they will be seen at FMIC. Only those referred to Specialist Out-patient or inpatient will become *'shared care'* if they are referred back to FMIC then back to primary care. If FMIC manages to stablise their conditions, they will be referred back to primary care physicians in private or public and they will continue their care as usual not as *'shared care'* patients.
- The District Health System has 3 key functions:
- To enable more patients with chronic health problems to be managed in primary care with structured and holistic care involving different levels of health care personnel also addressing the social determinants of health and psycho-social perspectives
- To provide greater support to primary care physicians (public and private) so they would manage more patients with chronic health problems effectively and efficiently
- To integrate other preventive care such as student health, maternal and child health into primary care system

## Figure 1. Outline District Health System for the operation of Local Primary Health Care Team



**Simplified version from Figure 6. Model of Local Primary Health Care System.** Lee A. Family Medicine and Community Health Care. In: Fong K and Tong KW (Eds). *Community Care in Hong Kong: Current Practices, Practice-Research Studies, and Future Directions*. Hong Kong: City University Press, 2014.

### Figure 2. District Based Chronic Disease Management and Preventive Care (Expanded) © Professor Albert Lee 2017



# **Figure 3. Flow of Case Management**

### (Source: Professor Albert Lee. Lecture on Community Based Rehabilitation. CHPR 4006 B.Sc in Community Health Practice, CUHK)

