

Health Ecosystem: The role of Public Health Practitioners

Taste Lecture for Secondary School Students 23 March 2019

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What is Public Health 何謂公共衛生?

- “The science and art of **preventing diseases, prolonging life and promoting health** through the **organized efforts of society.**”

「透過社會各界的力量，以預防疾病、延長壽命和促進健康的一門科學與藝術。」

by Sir Donald Acheson (United Kingdom)

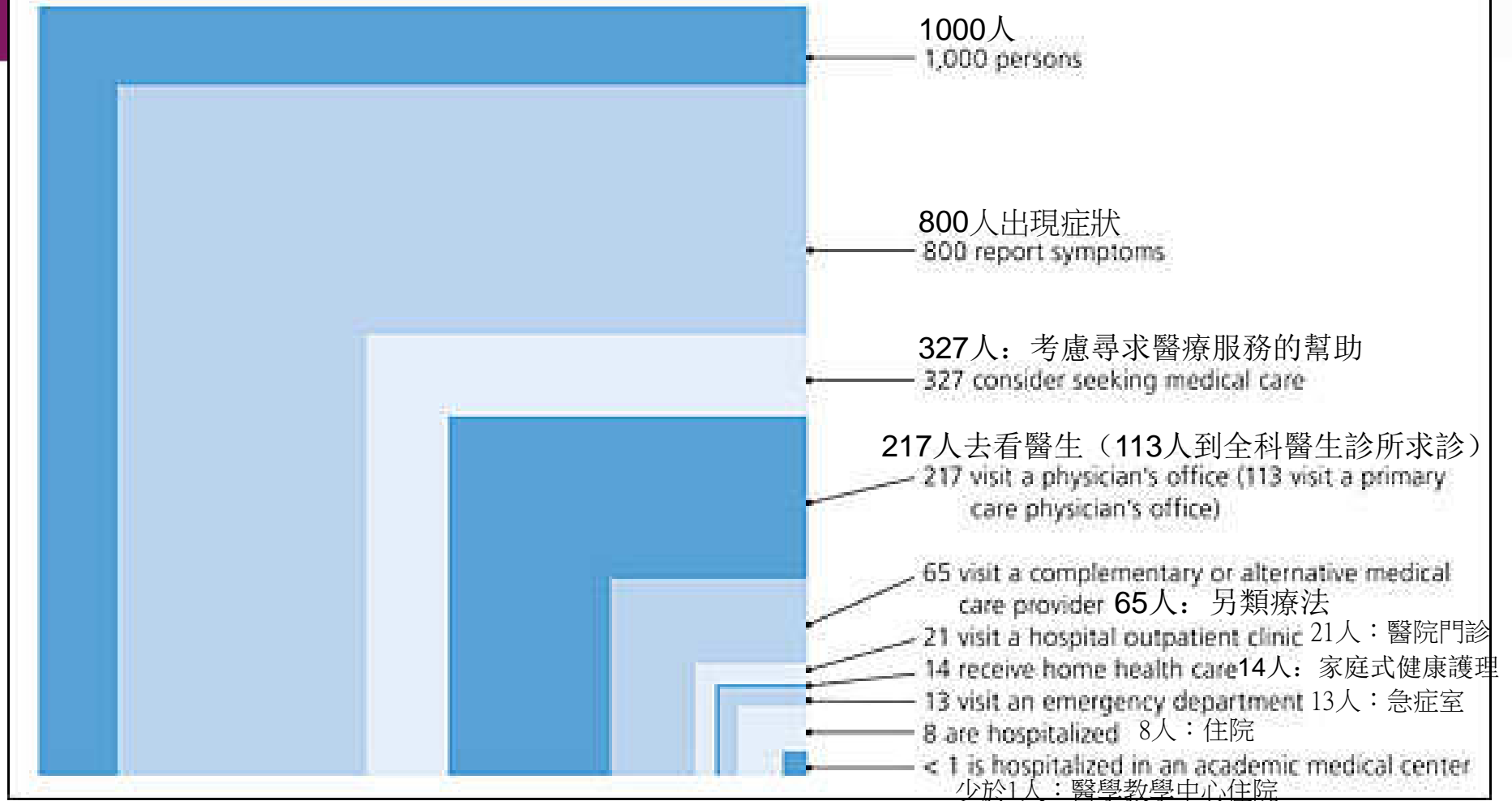
- “What we as a **society do collectively** to assure the conditions in which **people can be healthy**”

「社會大眾為確保享有活得健康的條件所作的共同努力」

by Institute of Medicine



The Ecology of Health Care 衛生醫療的生態環境



The Ecology of health care

Note: The group in each box is not necessarily a subset of the preceding box. Some persons may be counted in more than one box.

Source : Green LA, Fryer GE Jr, Yawn BP, Lanier D, Dovey Sm. The ecology of medical care revisited. N Engl J med 2001;344:2022.

Health Care Reform initiatives over last 3 decades



- Mid 80s Scott Report → Establishment of Hospital Authority 1990
- 1988 Primary Working Party Report → Tender for establishing first District Health Centre in 2018
- 1993 Towards Better Health: Rainbow Report (no body should be denied of adequate treatment because of lack of means)
- 1997-98 Harvard Report- current health system ought to be reformed (*competitive prepaid integrative healthcare system with hospital or GP-based integrated healthcare system with money following patient*)
- 2000 Lifelong Investment in Health: Revamp fee structure, Health Protection Account
- 2004- Report on Health Care Financing and Feasibility of a Medical Saving Scheme
- 2008: "Your Health, Your Life" (enhance primary care, PPP,.. 6 proposals of reforming health financing including Voluntary Private Insurance scheme)
- 2014: Consultation paper on Voluntary Insurance Scheme

香港家書：自願醫保無助解決公營醫療壓力10-12-2016

- 愛因斯坦曾說：「如果我只有一小時解決影響生命的問題，我會用55分鐘來先決定問題所在。」既然這計劃影響數百萬人，我們是否先要釐清問題所在？可悲的是，政策制定者只認為這是關乎醫院床位分配的問題，這實在大錯特錯！其實，最迫切的是將資源轉移至基層醫療；其次，就是因為現有公營醫療系統的官僚架構而負擔過重及低效，影響尤深。
- 根據我們多年的學術研究，醫院只是醫治危重病之地；醫院需要醫療人員24小時服務，及專業醫療設備和一支大型的支持人員和技術人員以及輔助人員。這些是固定成本。但年老所患的心臟病、糖尿病等慢性病如能及早發現有入院風險，可及早在基層醫療治理，根本毋須入院。現時制度鼓勵市民去醫院為治病主要的途徑，必然增加醫療開支；.....。其實.....加強教育市民預防疾病才是關鍵。市民大多在其居住的社區接收健康資訊，例如社區中心、非政府機構等所舉辦的活動，這正是「地區醫療系統」的重要一環。在社區層面，市民視健康生活為切實可行的目標，鄰舍的影響力往往比醫療巨塔為大。
- 我們應該建立「地區醫療系統」，負責監管社區護理的工作。區內基層醫生負責診斷和治療，社區保健團隊在家庭環境負責支病人的長期護理。
- 醫療資源的分配必須考慮到地區人口的特點和健康狀況，「地區醫療系統」因了解地區人口而滿足到他們的需要，更不會遺忘弱勢的一群。所以，為何我們只側重冰山一角的醫院服務？

The main driving force is a between the role of citizen, advancement of biomedical science and expansion of private health market.

主要推動力源於公民角色、醫療生物科技的進展及私營醫療市場的擴張

The main areas of health concerns in modern 21st Century are:

21世紀健康關注重點：

- Ageing population
- Increase of health care expenditure
- Flowing of health information, health products and health services
- Increasing debate on rights and responsibilities
- Importance of health as major goal in life and a key component as right of citizen
- 人口老化
- 醫療支出增加
- 健康資訊、健康產品及健康服務流動迅速
- 權利與責任爭議增加
- 公民權利以健康的重要性作為主要生活目標及關鍵條件

香港家書：改革醫療券

https://podcast.rthk.hk/podcast/item_all.php?pid=42&lang=zh-CN

Triple burden of Health 醫療上的三重負擔



- ‘Second wave’ epidemic of cardiovascular disease is flowing through developing countries as result of changing lifestyles. 隨著發展中國家生活模式的轉變，湧現了「第二浪」心血管疾病。因心血管疾病和腦中風的死亡傷殘個案分別排行第一和第四。
- **In 2020, Non-communicable disease (NCDs) will account for 80% of the global burden disease and even in developing countries, causing 7 out of 10 deaths (Boutayed A and Boutayed S) *International J for Equity in Health* 2005: 4** 到2020年，非傳染性疾病將佔全球負擔疾病的80%，甚至在發展中國家，造成10人中有7人死亡
- **Emerging new and old communicable diseases (SARS, Avian Flu, food poisoning) as result of ecological change, urbanization, globalization, population movement, changing living environment, changes of farming**由於生態變化，城市化，全球化，人口流動，生活環境的變化，農業的變化，出現過去和現在傳染病（SARS，禽流感，食物中毒）
- **Rapid economic growth and urbanization, knowledge based economy, advancement of technology, changes of family structure, loss of neighbourhood relationship, lack of time for communication and inter-personal interaction would put individual vulnerable to mental distress as resources for emotional support are depriving.** 經濟快速增長和城市化，知識經濟，技術進步，家庭結構變化，鄰里關係喪失，缺乏交流和人際交往時間，情感支持資源被剝奪，會使個人容易受到精神壓抑。
- **5 of the top 10 contributors to years lived with disability.** 全球一半的殘疾與精神障礙有關

Cancer

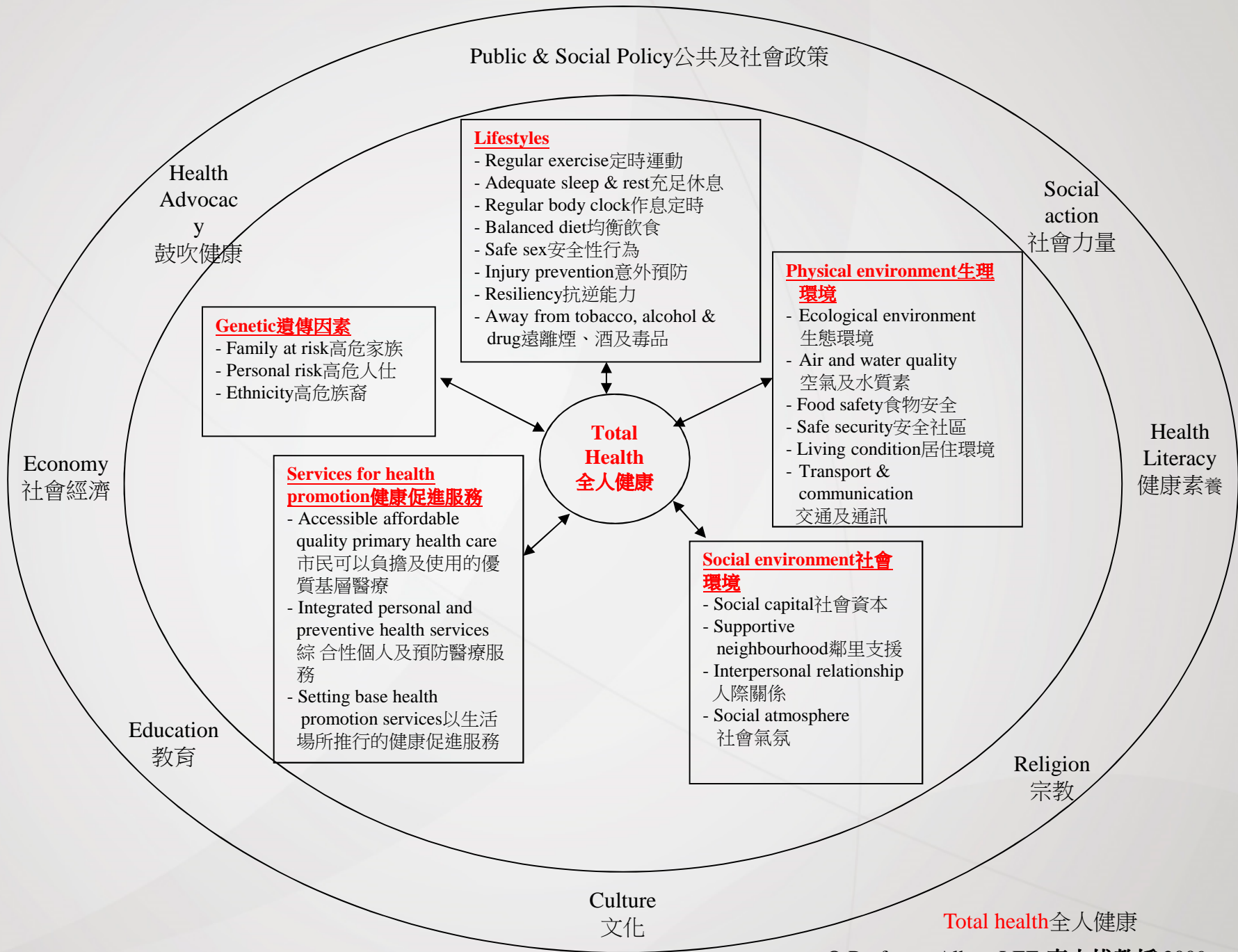
- In 2012, an estimated 8.2 million people died from cancer worldwide.
- More than half of cancer deaths worldwide occurred in countries at a low or medium level of the Human Development Index (HDI).
- Lung, liver, stomach, and bowel are the most common causes of cancer death worldwide, accounting for nearly half of all cancer deaths.
- Lung cancer causes the most cancer deaths worldwide. Almost a fifth of all cancer deaths worldwide are lung cancers.

Dietary factors account for over 30% of all cancers in Western Countries, and approximately up to 20% in developing countries. Diet is second to tobacco as preventable cause.

Number of new cases is estimated to increase from 10 million annually to 15 million by 2020.

在西方國家，30%癌症病患者是由不良飲食習慣而導致發病。然而，發展中國家則約有20%癌症病患者是由不良飲食習慣而導致發病。改善飲食習慣是次於戒煙的防癌方法。

至2020年，估計癌症病患的新症將由每年1,000萬增至1,500萬。



Total health 全人健康

Primary Prevention 第一線預防

1. Enhance community action and capacity to avoid exposing to health risks. 強化社區能力及行動遠離高危健康風險
2. Enhance community action and capacity to positive health. 強化社區能力及行動促進社區人仕正向健康
3. Well-trained health promotion practitioners to empower and monitor health behaviours of citizens and actions of community. 專業健康促進人員去監察市民健康行為及社區促進健康行動

Secondary Prevention 第二線預防

1. Screening 普查及早發現早期病況如 Pap Smear 柏氏子宮頸檢查
2. Identify those with chronic illnesses at risk of hospital admission. 監察慢性病人及早發現有潛伏程度至入院的危機

Tertiary Prevention 第三線預防

Rehabilitation – To prevent further deterioration of condition and restore usual functional capacity as far as possible.

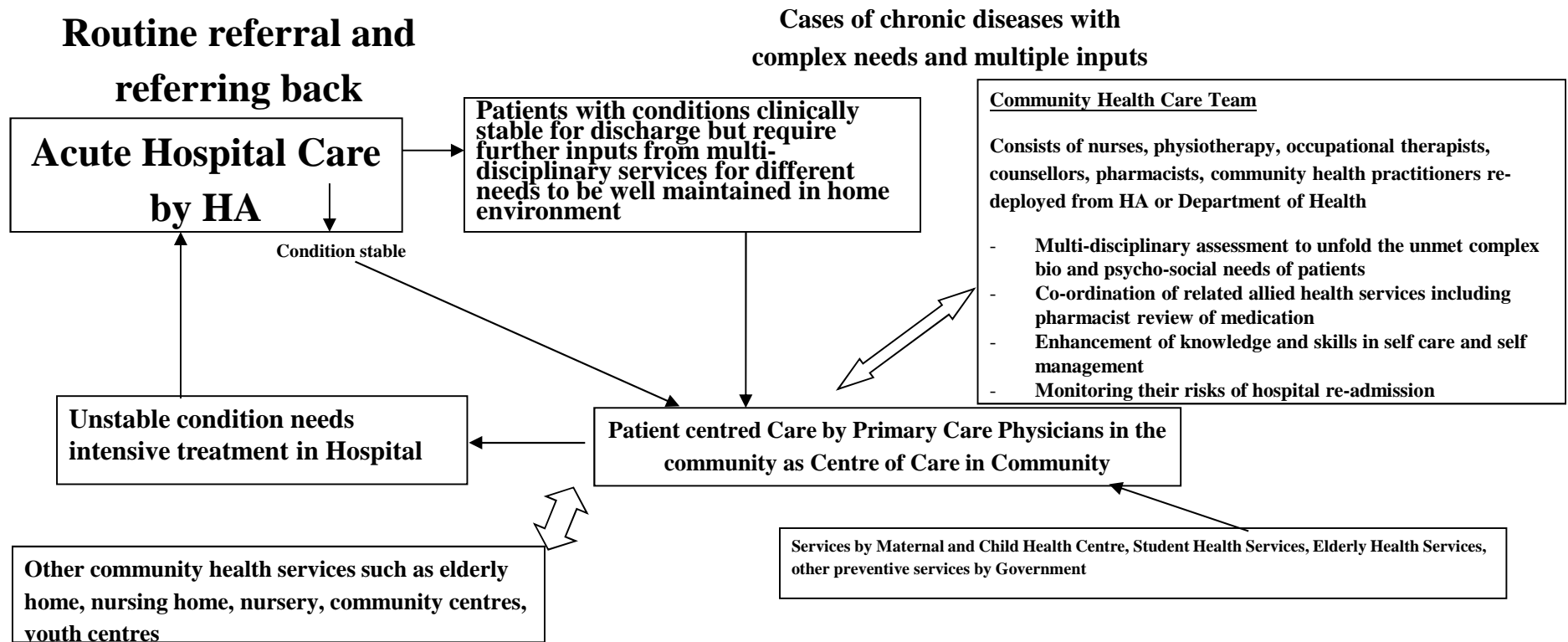
康復 - 防止病情進一步惡化，並儘可能恢復正常的功能。

Quandary Prevention 第四線預防

Prevention of side effects of medical intervention. 預防醫療過程中的副作用

District Health Committee to monitor the operation of Local Primary Health Care Team

<http://www.cuhk.edu.hk/med/hep/hchsc/District%20Health%20System.pdf>



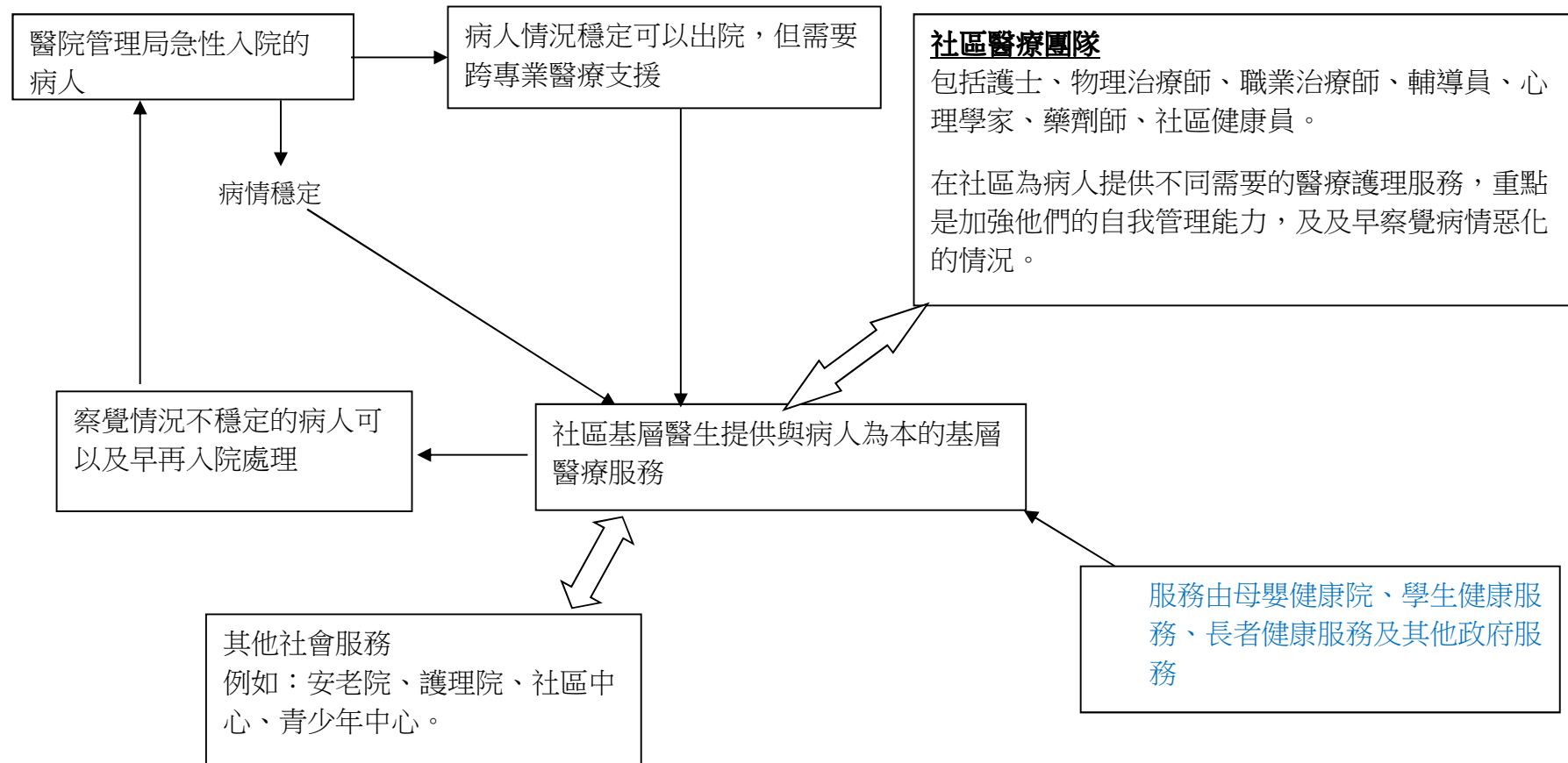
Simplified version from Figure 6. Model of Local Primary Health Care System. Lee A. Family Medicine and Community Health Care. In: Fong K and Tong KW (Eds). *Community Care in Hong Kong: Current Practices, Practice-Research Studies, and Future Directions*. Hong Kong: City University Press, 2014.

地區醫療系統提供基層醫療護理服務

<http://www.cuhk.edu.hk/med/hep/hchsc/District%20Health%20System.pdf>

恆常轉介及覆診

較複雜的健康需求及需要多重護理的長期病患者



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.

葵青區 Kwai Tsing District

First District Health Centre (Oct 2019)



**District
Population**
人口總數
510,700 (7.0% HK)

Citation: Lee A and Wei R. District-level Primary Care in Hong Kong: "Current Practice and Future Development in Kwai Tsing. Community Care Conference organised by Cartias Institute of Higher Education and Open University, 2018, Hong Kong

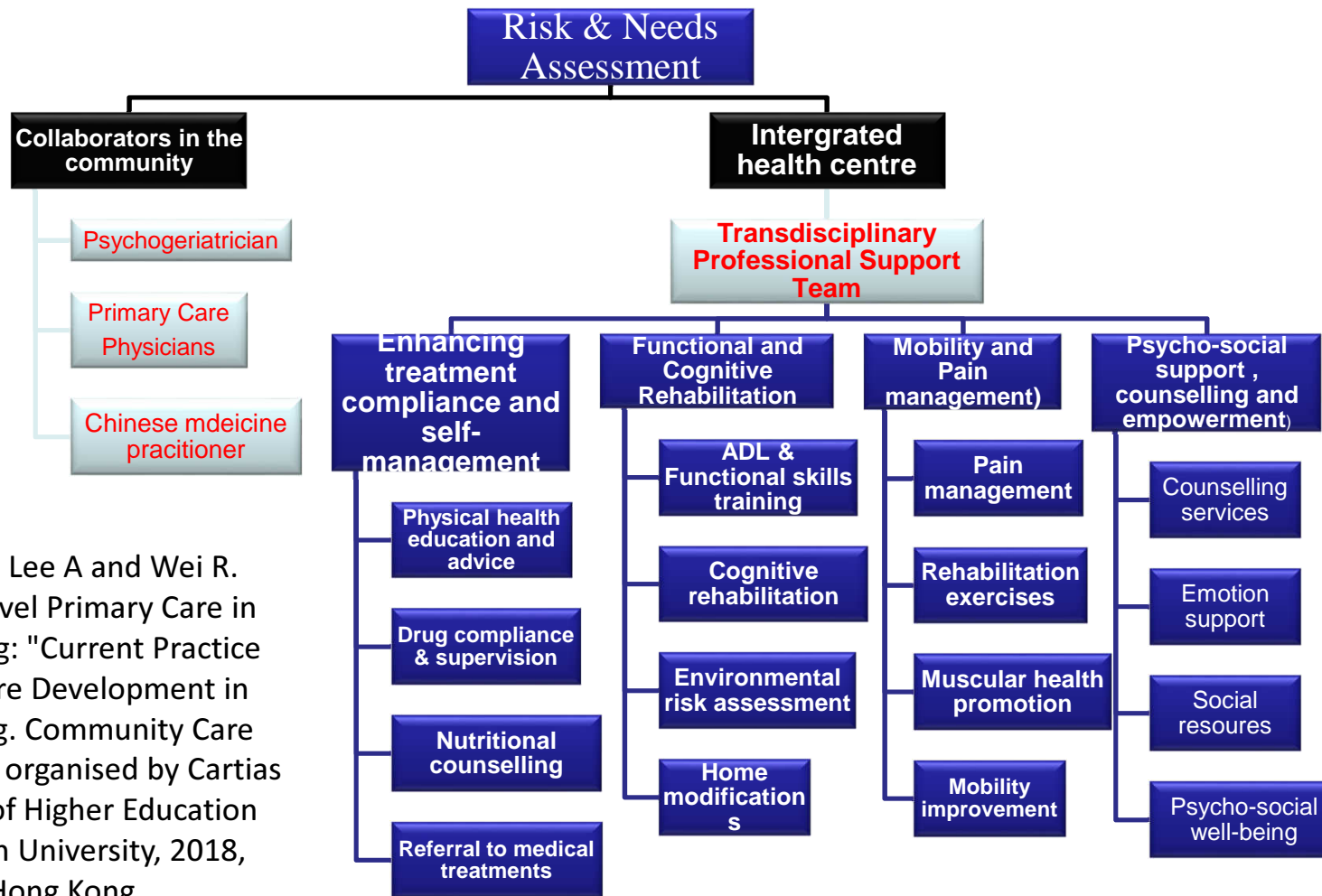


The Signature Project

2013 Policy Address: 1 hundred million dollars for every district

Since 2015 a series of health services were implemented for the benefits of Kwai Tsing citizens

Building an Accountable Community for Health and Safety in Kwai Tsing

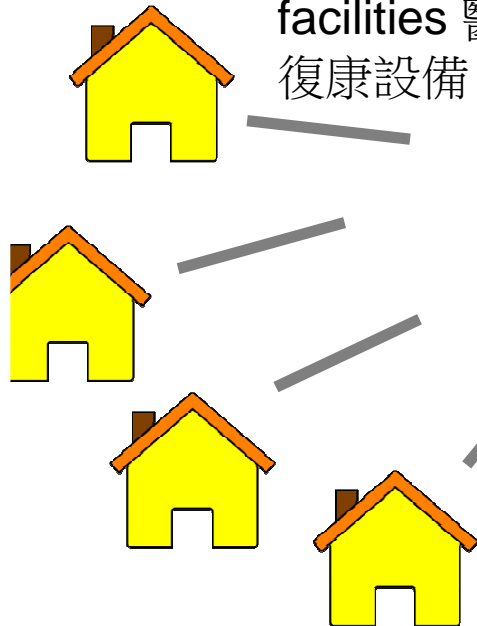


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1 Core official centre

主中心

Office 辦公室
Resources centre
資訊源中心
Healthcare &
rehabilitation
facilities 醫療護理、
復康設備



5 official satellites

附屬中心

Kwai Chung (west)
葵涌 (西)
Kwai Chung
(Northeast)
葵涌 (東北)
Kwai Chung
(Central & South)
葵涌 (中南)
Tsing Yi
(Northeast)
青衣 (東北)
Tsing Yi
(Southwest)
青衣 (西南)

Local network 地區網絡

Private practitioners 私家醫生
TCM practitioners 中醫
Nurses 護士
Allied health professionals 專
業醫療人員 (e.g OT 職業治療師、
OPT 視光師、SW 社工)

Citation: Lee A and Wei R. District-level Primary Care in Hong Kong: "Current Practice and Future Development in Kwai Tsing. Community Care Conference organised by Cartias Institute of Higher Education and Open University, 2018, Hong Kong



Be the One to Make a Difference

高瞻·遠矚 為人類健康帶來改變



Q&A

問答環節