



# Hong Kong East Cluster Symposium on Community Engagement XII 2017: Integrated Medical & Social Model in Primary Care

## 香港東區社區參與研討會XII 2017: 基層醫療綜合性醫學-社會模式



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# Mrs. Yip 葉太

**78 years old woman 78歲女性**

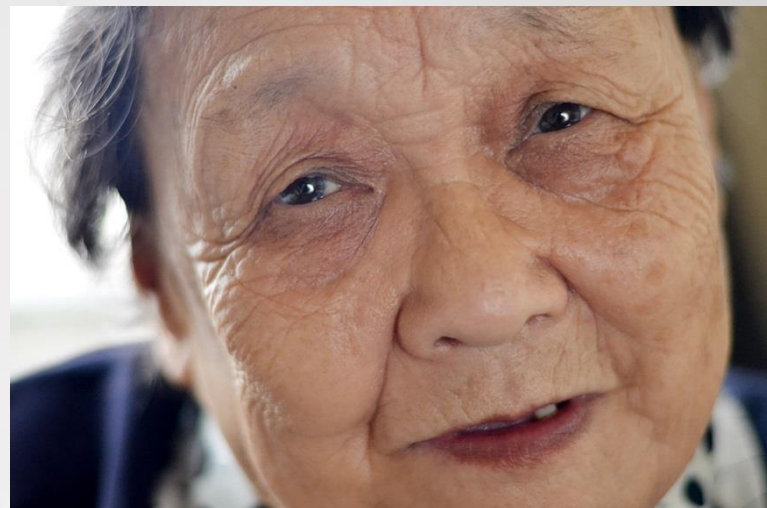
**Three children: 1 son and 2 daughters**

**三個孩子：一個兒子兩個女兒**

## **Medical Problems:**

### **所患疾病:**

- Diabetes Mellitus 糖尿病
- Hypertension 高血壓
- Depression 抑鬱症
- Chronic back and knee pain 慢性背痛／膝蓋痛
- Fibroid 子宮肌瘤
- Allergic rhinitis 過敏性鼻炎





## • Medications 醫藥:

- Simvastatin 辛伐他汀
- Lisinopril 賴諾普利
- Metformin 二甲雙胍
- Norvasc 活絡喜
- Citalopram 西酞普蘭
- Panadol 撲熱息痛
- Eye drops 滴眼液
- Piriton prn 氯苯那敏（必要時）
- Beconase 鼻可靈



- **Socially 社交上:**

- lives with an Indonesian maid
- 同一名印尼傭人生活
- Both daughters live overseas
- 兩個女兒長年在海外
- Son with wife (not in good relationship)
- 兒子同其妻子生活（關係不好）
- Goes to elderly centre a few times a week
- 每週去幾次老人中心

- **Medically 醫療上:**

- Seen multiple specialties in the past including psychiatrists, geriatrics, gynecology, ENT, and recently multiple AED visits for her chronic pain
- 看過很多專科醫生，包括精神病，老年病，婦科及耳鼻喉科醫生。近來多次在急診看慢性疼痛。
- See in GOPC once every 3 months
- 每3個月看一次普通科門診



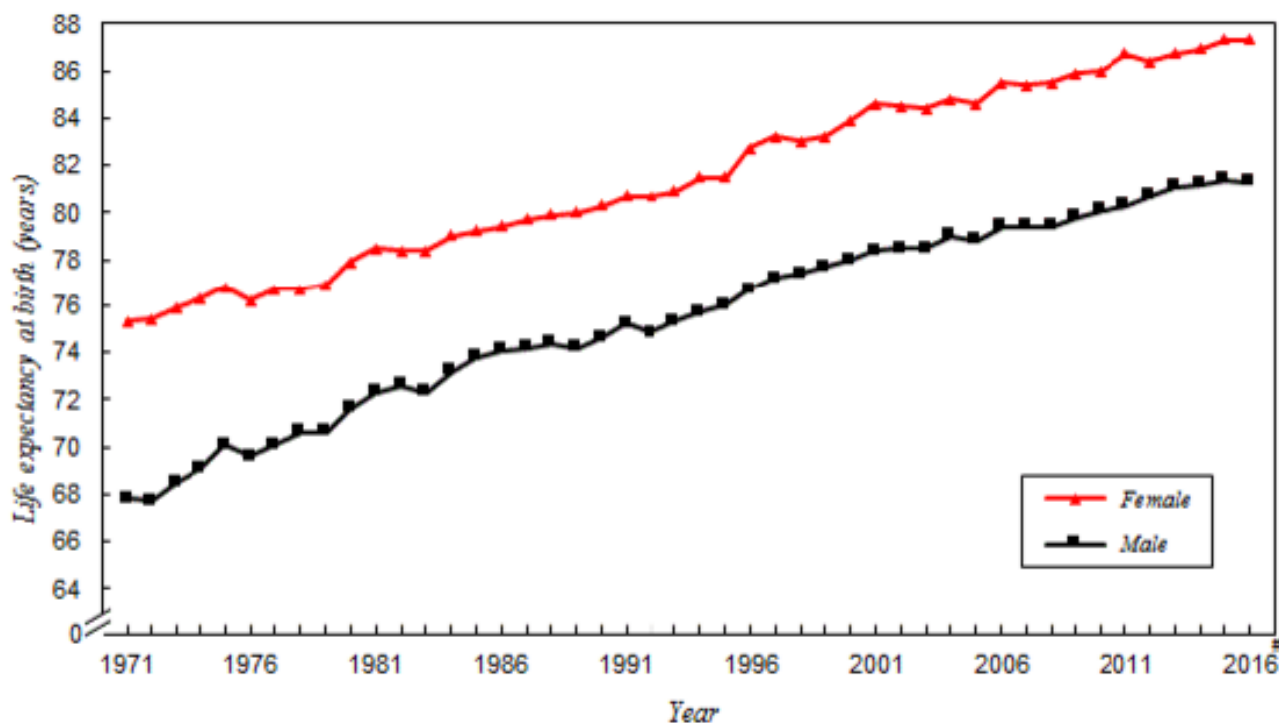
- For the past one year, every time being seen
- 過去一年，每次看醫生
- “I wish I were dead...life is full of suffering....why all these pain....”
- “我都希望我死了...生活充滿了折磨...為什麼這些病痛...”
- Her main problem with recurrent back pain and insomnia from pain.....
- 佢主要的問題是背痛和疼痛所導致的失眠



## 出生人口預期壽命

### Life Expectancy at Birth (Male and Female), 1971 - 2016

The life expectancies at birth for both sexes have steadily increased during the past 46 years, from 67.8 years for males and 75.3 years for females in 1971 to 81.3<sup>#</sup> years and 87.3<sup>#</sup> years respectively in 2016.



過去46年，男女的預期壽命都穩定的上升，從1971年到2016年，男性從67.8上升到81.3，女性從75.3上升到87.3

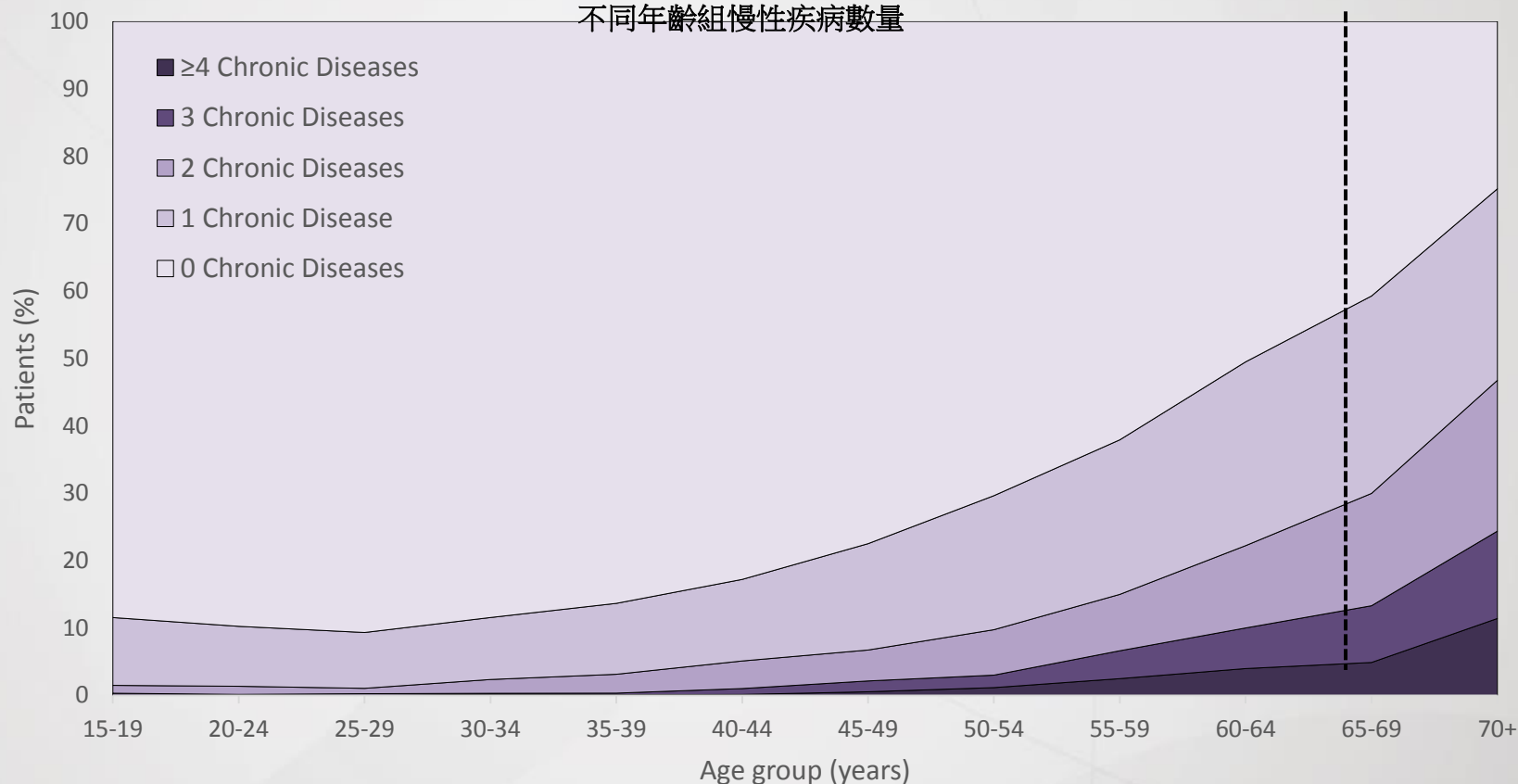
# Prevalence of multi-morbidity by age in Hong Kong

## 香港多種病患年齡患病率



Number of chronic diseases by age group

不同年齡組慢性疾病數量



Data source: Thematic household survey, HKSAR Government, 2011

數據來源: 主題性住戶統計調查, 香港, 2011



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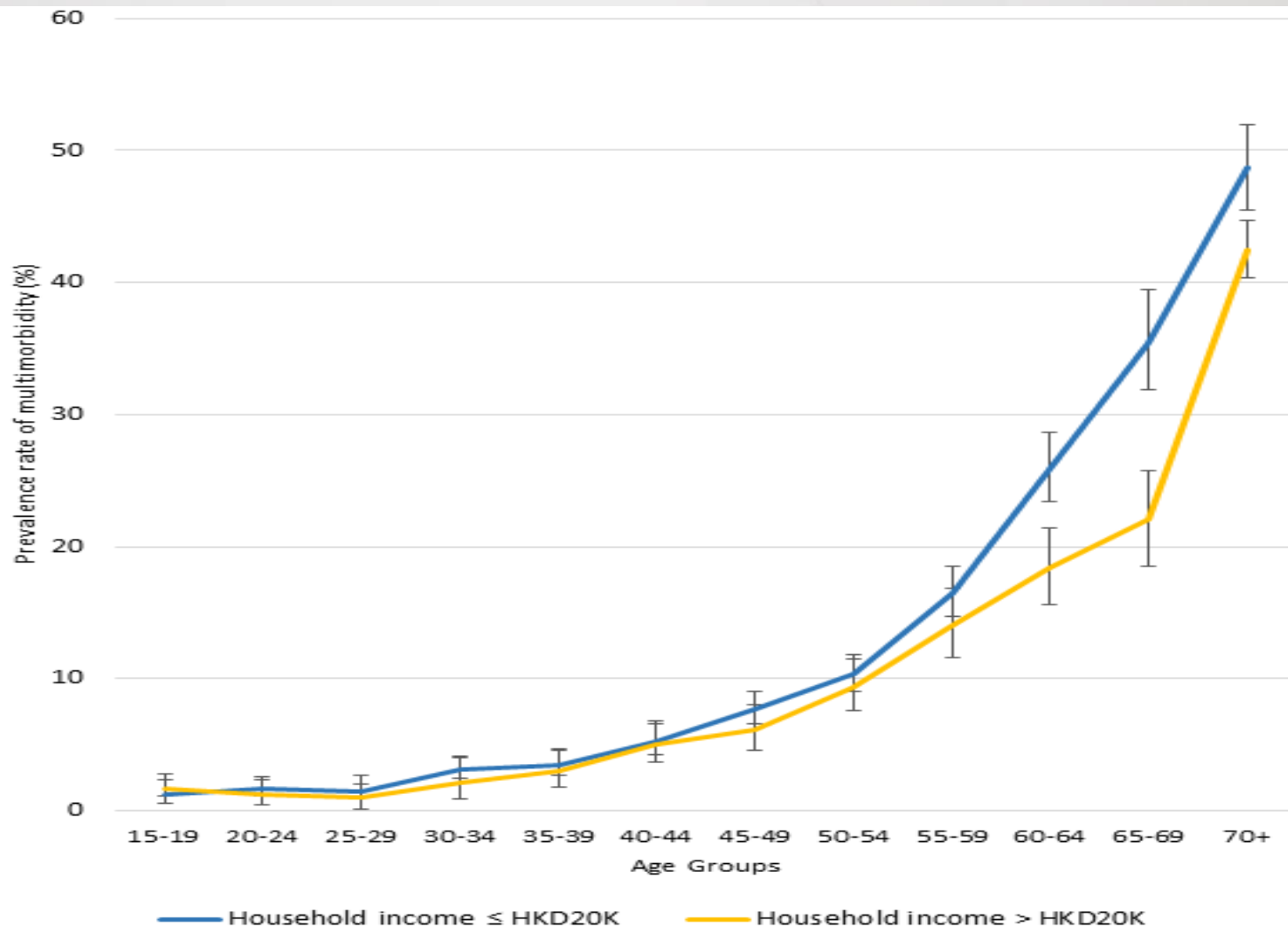






# Multimorbidity with respect to *age* and *household income* in Hong Kong

香港多種病患相對於年齡和家庭收入的關係

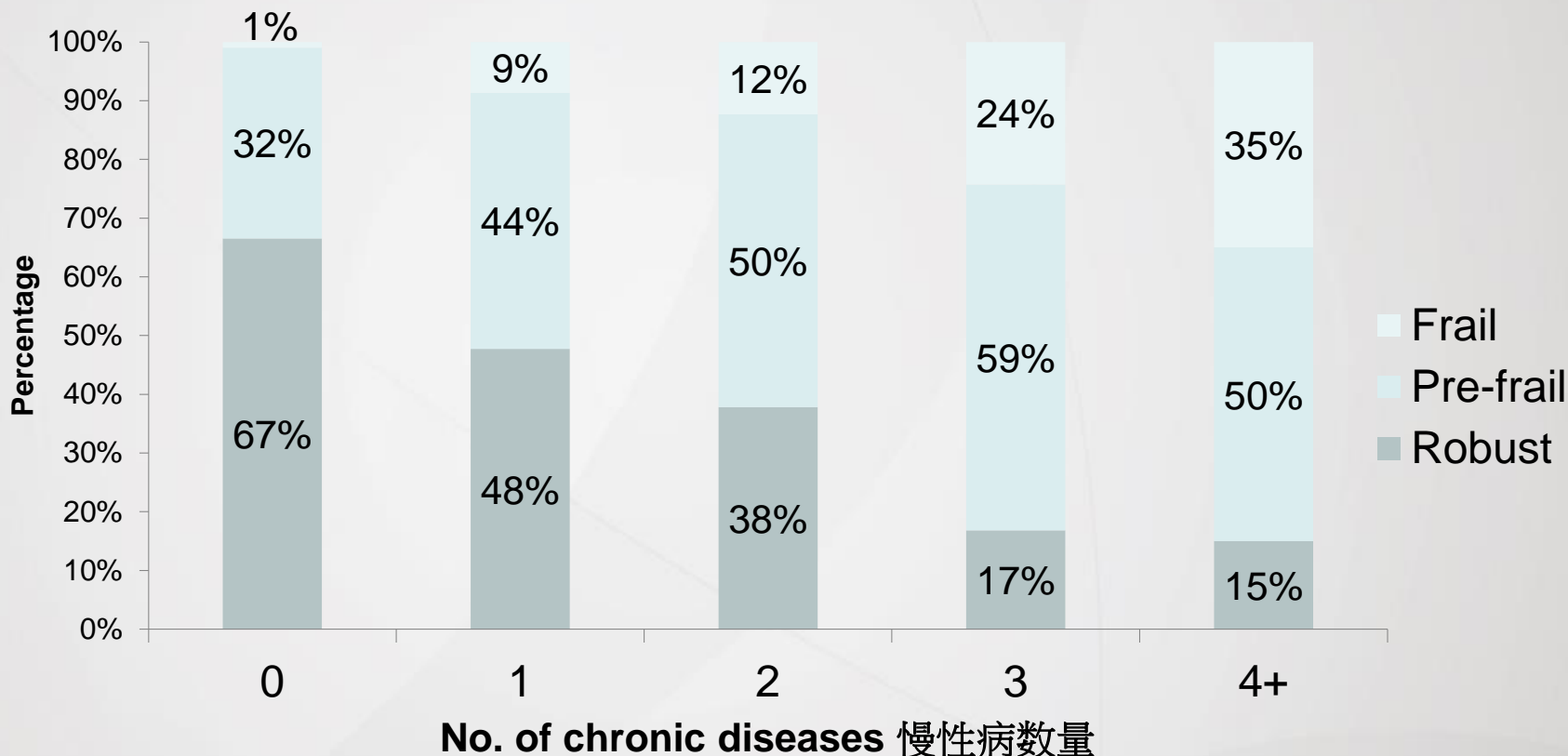






# Multimorbidity and Frailty in older adults

## 長者的多種病患與虛弱情況



Source: Hong Kong International Health Survey 2016



# Physical conditions, social deprivation and mental health problems with unplanned and preventable unplanned conditions

身體狀況，社會剝奪和精神健康問題與計劃外／可預防的計劃外狀況關係

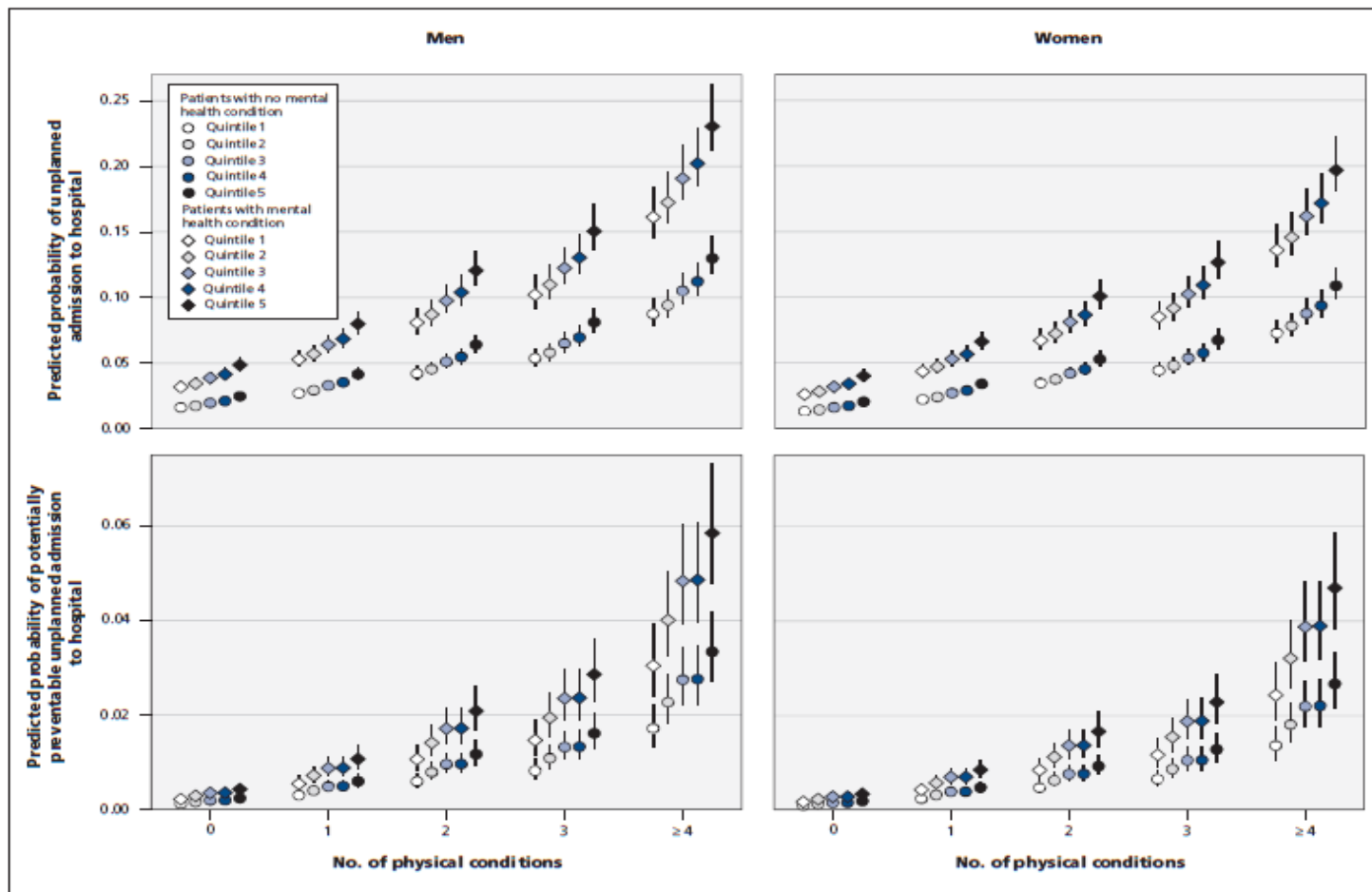


Figure 1: Predicted probability of unplanned admissions to hospital and potentially preventable unplanned admissions to hospital by deprivation quintile (1 = least deprived, 5 = most deprived), physical multimorbidity and presence of mental health conditions among male and female patients aged 45-54 years. Error bars indicate 95% confidence intervals.

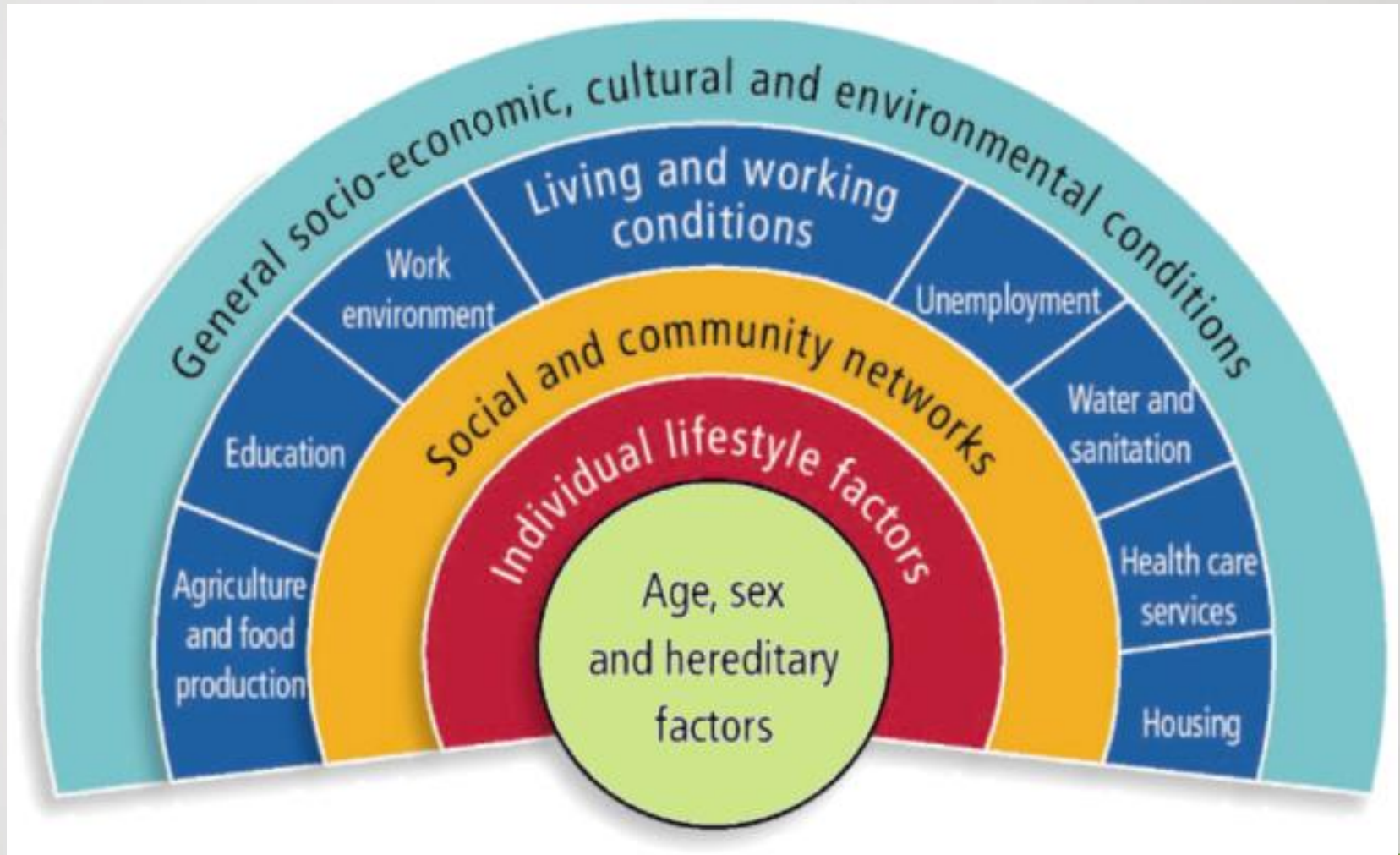
Payne et al, CMAJ 2013

# Problem.... 難題...

- People are living longer (for sure) and are more likely to suffer from multiple chronic conditions 隨著人們的壽命增加，他們更容易被多種慢性疾病困擾
- They **may or may not** be *suffering/enjoying* their existence depending on their **unique circumstances**....consisting of a combination/interactions of
- 根據每個人不同的情況，他們可能會或者不會受到疾病的影響，這些因素包括：
  - 1. their personalities and their socio-economic status; 個人性格和社會經濟狀況;
  - 2. family, relatives, friends and other personal **support**; 來自於家庭，親屬，朋友的人際支援;
  - 3. community **support** and where they live; 社會支援和生活地區;
  - 4. **medical** and **social services** in the community; 醫療和社區服務;
  - 5. Government **policy** and law 政府政策和法律

# Social Determinants of Health

## 健康的社會決定因素





## Challenge for HK and other health care systems in developed countries 香港與其他已發展國家醫療系統的挑戰

- Reorient of care to **support** people with **chronic conditions to stay in the community**
- 重新調整護理，支持慢性病患者留在社區
- Integration of **medical and social care services**
- 整合醫療和社會照顧服務
- Higher priority on the **prevention** of disease
- 高度重視疾病預防





# Shifting investments (historical) in delivery systems

## 輸送系統的投資轉移(歷史)

- In the past: health care systems in the world have strengthened the role of **acute hospitals** because the principal challenge back then
- Provide specialist care to patients suffer from **life--threatening acute conditions**
- 过去：世界上的医疗体系都着重于提高急症医院的水平，因为那时候的主要挑战是-  
为受到生命威胁／患有急性疾病的人士提供专科服务
- Now: decline premature deaths and effective medical interventions put emphasis on
  - **Enabling** people diagnosed with these conditions to experience a **high quality life**, at the same time, improving care for people with life threatening conditions
- 现在：随着早逝减少和有效的医疗干预，现在的重点是-  
帮助这些患者过上高质量的生活，同时提高对威胁生命疾病的治療



# Investment to deal with chronic conditions includes:

## 處理慢性病的投資包括：

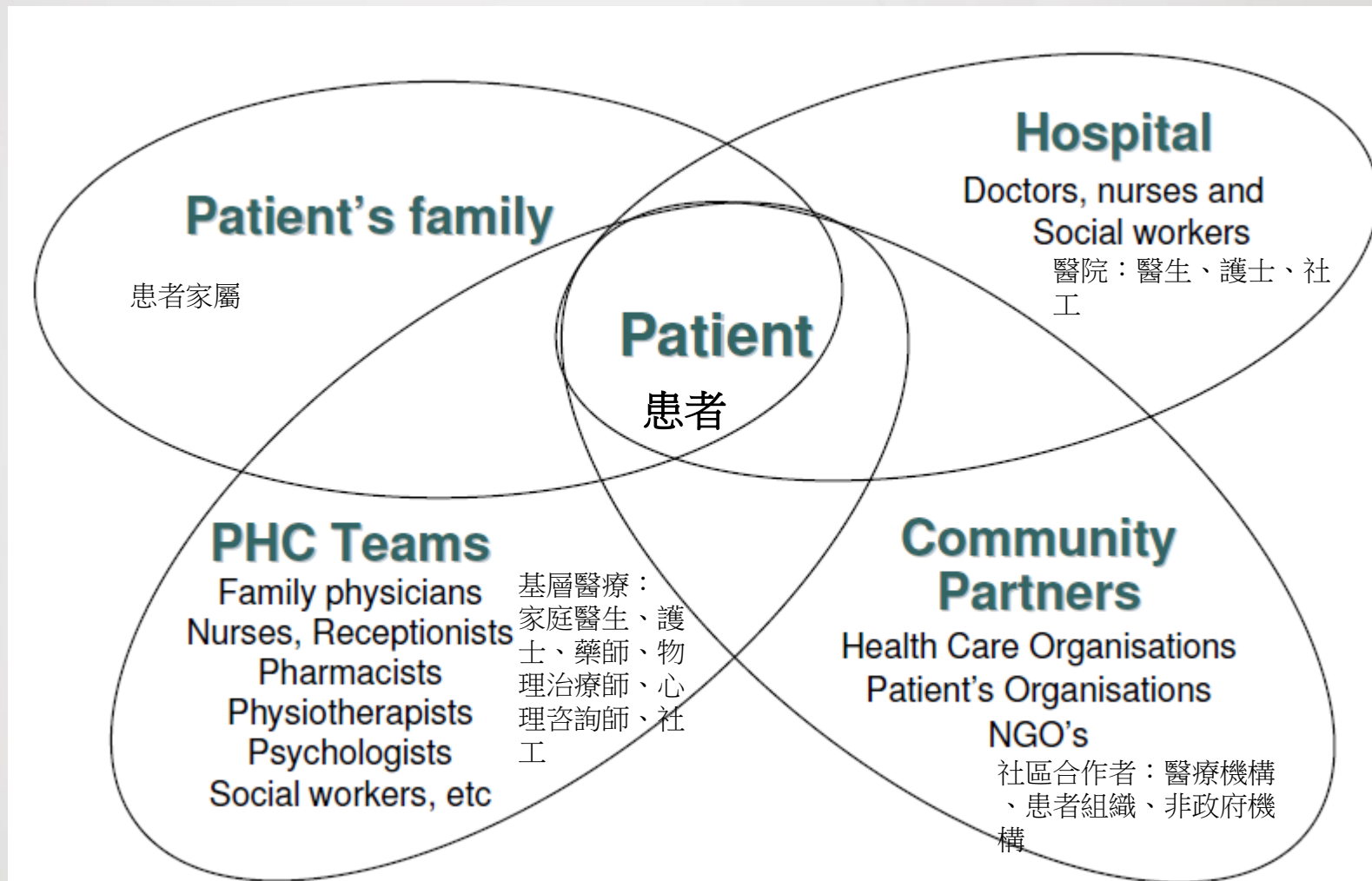
- Strengthen **primary care**, where much chronic disease management is located
- 提高基層醫療服務，因為多數慢性疾病在基層醫療診治
- Ensure effective coordination of primary care and specialist care
- 保證有效的基層醫療和專科服務的合作協調
- Especially for people with multiple morbidities (more than 1 chronic condition)
- 特別是為患有多重慢性疾病的人士（多於一種）
- Need to **support**:
  - 1) **patients and carers/families** in the management of chronic conditions
  - 2) health care professionals to **change their practices** in line with the management of chronic conditions
- 誰需要支援：
  - 1) 需要慢性病管理的病人和其照顧者／家人
  - 2) 需要改變行醫方式以適應慢性病管理的醫療從業者

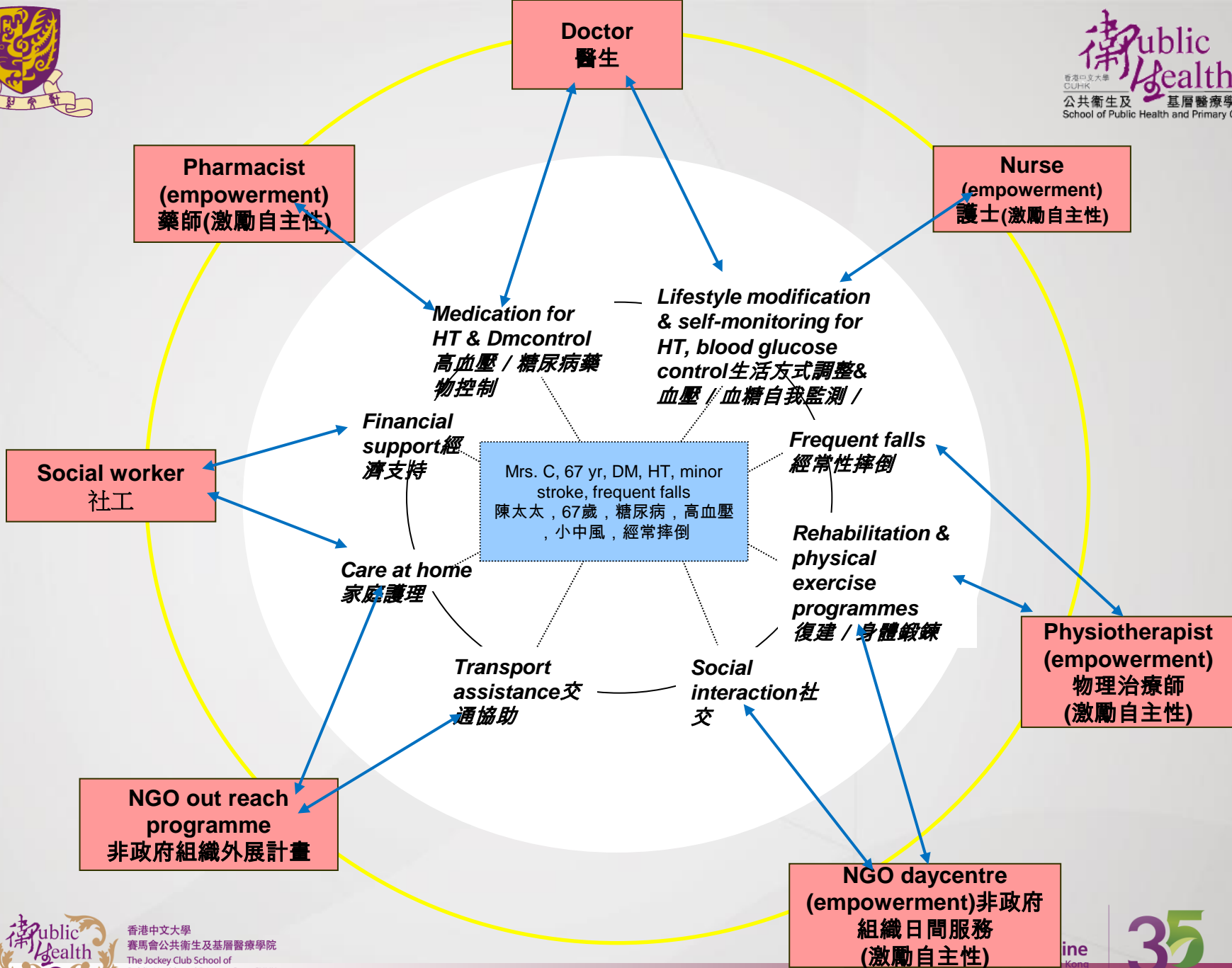




# Who should be involved in care?

## 誰應該參與護理？







# Concerns / problems

## 憂慮與難題

- **Physical:** recurrent back/knee pain needing pain control, sometimes on wheelchair, lack of mobility due to pain
- 身體：需要疼痛控制的複發性/膝關節疼痛，有時只能坐輪椅，由於疼痛而缺乏行動能力
- **Psychological:** feeling depressed and hopeless and helpless
- 心理：感到沮喪，無望無助
- **Doctor shopping:** unnecessary exposure to duplicating tests / investigations from AED, private investigations
- 选择医生行为：不必要地接受急診的重複測試/調查，私人調查
- **Lack of continuity:** Different providers each keeping their own records, no information sharing
- 缺乏醫療連續性：不同的服務提供者都保留自己的記錄，沒有信息共享
- **Multiple medications:** prescribed by different doctors > potential problem of iatrogenic reactions
- 多種藥物：由不同醫生處方>潛在的醫源性藥物反應問題



# Future 展望

- **Integrated record:** sharing of medical information > continuity of care
- 綜合記錄：醫療信息共享>護理連續性
- **Ongoing care** from a **multi-disciplinary team** at the primary care practice, which would review the progress together with Mr. A and discuss his concerns
- 在初級保健實踐中，由多學科團隊進行持續的護理，同時和A先生一起關注進展情況，並討論他的擔憂
- **Pharmacist:** regularly reviews the pharmacy records and discuss with the doctor and Mr. A for medication adjustment
- 藥師：定期檢查藥房記錄，並與醫生和A先生進行藥物調整
- Mr. A attends the “**community primary care programme**” at the practice which offers support on behavioral modification (e.g. postures, weight reduction, muscle strengthening exercise), as well as information on services/ facilities available
- 健康生活計畫：A先生參加了提供支持和行為矯正的計畫，包括姿勢矯正，體重減輕，肌肉強化鍛煉，並可以從計畫獲取可用的服務/設施的信息
- The **practice nurse** coordinates with the **social worker** to arrange for counseling services with **interpersonal continuity of care**
- 人際關係連續性的諮詢服務：實習護士與社會工作者協調安排



# What is good for chronic care?

## 慢性病護理的好處

- Comprehensive care
- 綜合護理
- Continuing care with patient empowerment
- 持續性的護理&激勵患者自主性
- Patient centred care: addresses patient's healthcare needs in the context of the **patients' values, preferences and beliefs**
- 以患者為中心的護理：在患者的價值觀，偏好和信念的背景下解決患者的醫療保健需求
- Coordinated care with all who provide care for the patient including both healthcare and social care workers and community based agencies
- 協調所有醫療服務提供者，包括醫護人員和社會保健工作者以及社區機構
- Facilitation of patient access to community resources
- 幫助患者使用社區資源





# Realigning health policy 重組醫療政策





# Elements of Effective Care for Chronic Conditions

## 有效的慢性病護理的元素

### Outdated Care 過時的醫療

- Disease centred 疾病為中心
- Hospital/specialty based 醫院／專科為基礎
- Reactive, symptom driven care 反應性，對症
- Care organized around professionals' needs 圍繞專業人士的需求進行護理
- Disease education 疾病教育

### Effective Care 有效的醫療

- **Person centred** 病人為中心
- Primary care based 基層醫療為基礎
- Both reactive & proactive (comprehensive) 反應性，主動性（綜合性）
- Care organized around patients' needs 圍繞病人的需求進行護理
- **Self management support** 自我管理支持

Epping-Jordan J, Health Care for Chronic Conditions, WHO 2004 with modifications





# From patients' words:

## 病人的話：

“係好似你地話食藥個D呀，我一粒都唔知係邊D打邊D架，全部都係佢執比我....難度就係呢度，要分開D藥呀，點樣食呀，朝頭早食咩藥呀，夜晚食咩藥呀，拿我上過呢度有個糖尿科丫，佢都話喇，糖尿藥係要幾時食，點樣食先係最正確，而家我地都係照足個醫生”

“like you say about taking medications, I do not know anything about which one is for which, I got them all from the dr. The difficulty lies in how to take them properly, when to take which one.....”

“我都講我好多種病啦，又中風啦，心臟啦，糖尿啦...唉總之好多，百病纏身。好似之前呢...我仲可以離開呢張輪椅行下都得，但係而家唔得喇，自從入完呢個醫院之後呢，出黎就唔得喇，企都唔得喇，企兩個字度呢我就腰骨痛架喇”

“I have many medical problems, stroke, heart disease, diabetes, so many. Before, I could leave the wheelchair and walk, now, since I have been discharged from the hospital, I cannot even stand, my back hurts so much since.”

# Focused group findings on people with multimorbidity (preliminary) – 1

多種病患者焦點小組的調查結果

## Limitations in managing multiple chronic conditions:

(18 people with 3 groups)

多種慢性病管理的侷限:

(3組，一共18人)

- Side effects of medicine 藥物副作用
- Medicine prescription & change 藥物開具和更改
- **Lack of assistance** 缺乏援助
- **Resource limit** 資源不足
- **Psychological burden** 心理負擔

Wong et al (under review)



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# Potential integrated models...for medical & social services

## 可能的綜合醫療模式-社會醫學模式

- Social prescribing
- 社區開具處方
- Case management/collaborative care across sectors in **teams** 病例管理／不同團隊間的合作醫療
- Placement (e.g. placing a nurse in a social service centre)
- 安置（例如在社區安置一名護士）

# Jockey Club Community Programme (愛康會): 1000 elderly 1000名長者

| Older People 長者                    | Caregiver 照顧者  |
|------------------------------------|--|
| Male or Female 男性或女性               | Male or Female 男性或女性   |
| > 60 years old > 60歲               | Above 18 years old > 18歲   |
| > 2 chronic conditions<br>> 2 慢性疾病 | Caring older people:<br>需要照顧長者: <ul style="list-style-type: none"> <li>➤ &gt;60 years old &amp; &gt; 60歲</li> <li>➤ &gt; 2 chronic conditions &gt; 2 慢性疾病</li> </ul> |
| Hong Kong residence 香港居民           | Hong Kong residence 香港居民   |

主要贊助 Major Sponsor



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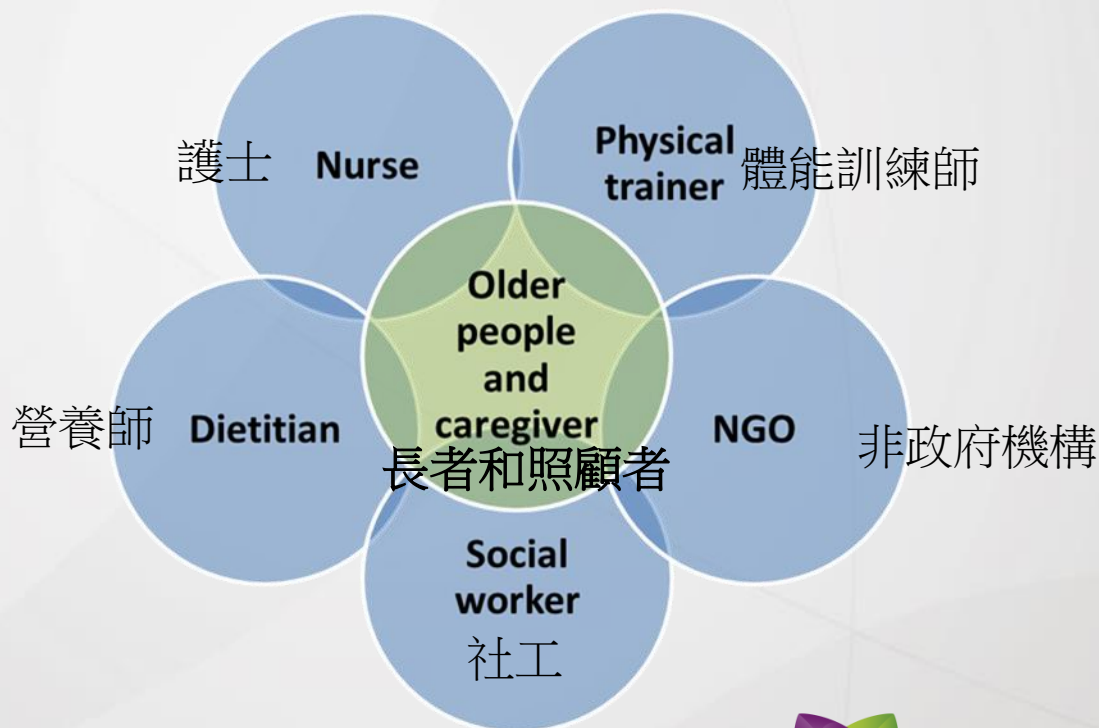
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# JC Community Primary Care Programme (愛康會)



Integrated primary care programme 綜合性基層醫療服務  
(Multidisciplinary Team) (多專業團隊)



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# JC Primary Care Programme (愛康會)

## Service Operation服務流程

Client Recruitment (Fulfill criteria) 病患招募（須滿足條件）

Initial Assessment Session (Identify Needs) 初步評估（識別需求）

Case Management : Community Nurse Clinic (Identify Needs & prioritize care plan) 病例管理：社區護士診所（識別需求，優化服務計畫）

+/- Social Worker/ Home Visit/ Workshop (providing service to improve health) +/- 社工／家訪／工作坊（提供服務以提高健康狀況）

+/- referral to NGOs (Providing service to improve health) +/- 轉介到非政府組織（提供服務以提高健康狀況）

# Characteristics of JC patients

|  | % of (N=714) :               |
|--|------------------------------|
| <b>BMI 身高體重指數</b>                                |                              |
| Underweight 過輕(<18.5)                            | 26 (3.6%)                    |
| Normal 正常(18.5-22.9)                             | 261 (36.6%)                  |
| Overweight 超重(23-24.9)                           | 152 (21.3%)                  |
| Obese 肥胖(≥25)                                    | 275 (38.5%)                  |
| <b>MMSE簡易精神狀態檢查(n=130)</b>                       |                              |
| <b>MCI輕度認知障礙(MMSE = 15-26)</b>                   | <b>41(13.85% of N=332)</b>   |
| <del>SEVERE MCI重度認知障礙 (MMSE = 0-14)</del>        | <del>1(0.34% of N=332)</del> |
| <b>HK-MoCA香港-MoCA量表 (n=368)</b>                  |                              |
| Normal正常(>=22)                                   | 287 (78% of 368)             |
| <b>Cognitive impairment認知損害(&lt;22)</b>          | <b>81 (22% of 368)</b>       |
| <b>DEPRESSION抑鬱症(n=136)</b>                      |                              |
| <b>PHQ-9 MILD輕度5-9</b>                           | <b>59 (8.26%)</b>            |
| <b>PHQ-9 MODERATE中度10-14</b>                     | <b>43 (6%)</b>               |
| PHQ-9 MODERATELY SEVERE中到重度15-19                 | 20(2.8%)                     |
| PHQ-9 SEVERE嚴重20                                 | 10 (1.4%)                    |
| <b>ANXIETY焦慮症(n=126)</b>                         |                              |
| <b>GAD-7 MILD 輕度5-9</b>                          | <b>58 (8.22%)</b>            |
| <b>GAD-7 MODERATE 中度10-14</b>                    | <b>46 (6.54%)</b>            |
| GAD-7 SEVERE 重度≥15                               | 13 (1.98%)                   |
| <b>INSOMNIA 失眠(n=388)</b>                        |                              |
| <b>SUBTHRESHOLD INSOMNIA- ISI亞臨床失眠 8-14</b>      | <b>179 (25.1%)</b>           |
| <b>CLINICAL INSOMNIA, MODERATE SEVERITY- ISI</b> | <b>120 (16.81%)</b>          |
| <b>臨床失眠，中到重度15-21</b>                            |                              |
|  | 9 (1.26%)                    |
| CLINICAL INSOMNIA, SEVERE- ISI                   |                              |
| 臨床失眠，重度 22-28                                    |                              |



# Characteristics of JC patients

|   | % of (N=714) :     |
|---|--------------------|
| <b>PAIN 痛症(n=657)</b>                           |                    |
| ONE PAIN AREA 一個疼痛區域                            | 135 (21.59%)       |
| TWO+ PAIN AREAS 兩個或兩個以上疼痛區域                     | 365 (52.98%)       |
| <b>SOCIAL MEDIA USAGE 社交媒體使用(n=657)</b>         |                    |
| No 無  | 480 (72.59%)       |
| Yes 有   | 177 (27.41%)       |
| <b>ALCOHOL 酗酒(n=657)</b>                        |                    |
| No 無  | 577 (87.22%)       |
| Yes 有   | 80 (12.78%)        |
| <b>SMOKING 吸煙(n=657)</b>                        |                    |
| CURRENT SMOKER 現正吸煙                             | 69 (10.65%)        |
| <b>**Frailty Scale 衰弱量表(n=628)</b>              |                    |
| 前期衰弱 Pre-frail 1-2                              | 292 (46.5% of 628) |
| 衰弱 Frail 3-5                                    | 99 (15.76% of 628) |
| <b>***EDMONTON FRAILITY SCALE 情緒衰弱量表(n=628)</b> |                    |
| Apparently Vulnerable 明顯受影響 6 – 7               | 76 (12.1% of 628)  |
| Mild Frailty 輕度衰弱 8 – 9                         | 26 (4.14% of 628)  |
| Moderate Frailty 中度衰弱 10 – 11                   | 8 (1.27% of 628)   |
| Severe Frailty 重度衰弱 12 - 18                     | 1 (0.002% of 628)  |
| <b>CAREGIVERS OF MULTICHRONIC ELDERLY</b>       | 166 (23.25%)       |
| 多重疾病長者的照顧者                                      |                    |

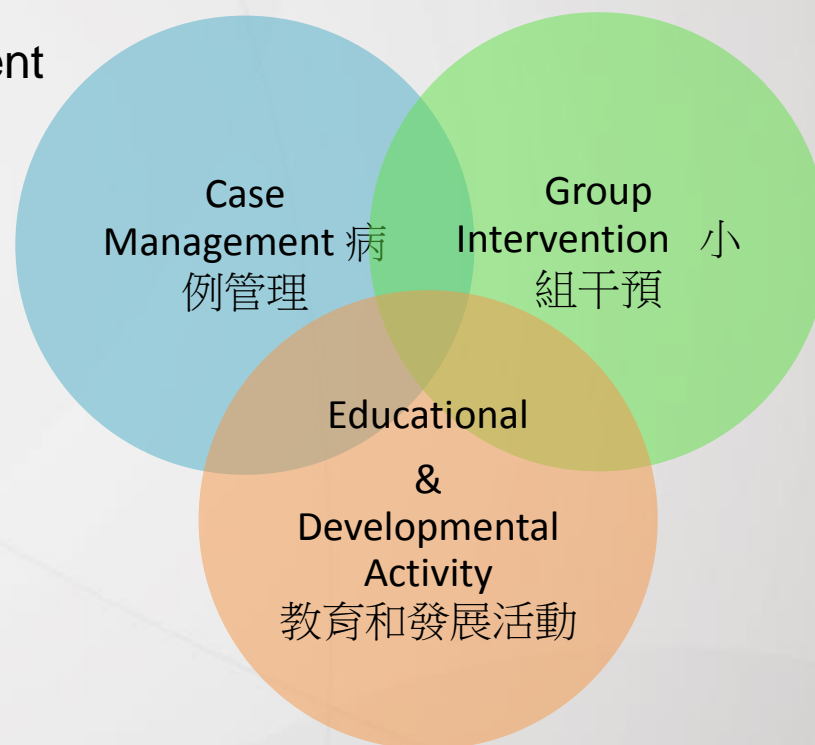
\*\* (Full Scale Since= July 25, 2016); \*\*\* (Full Scale Since= July 25, 2016)

# Initial Assessment & Case Management Clinic

## 初步評估 & 病例管理診所

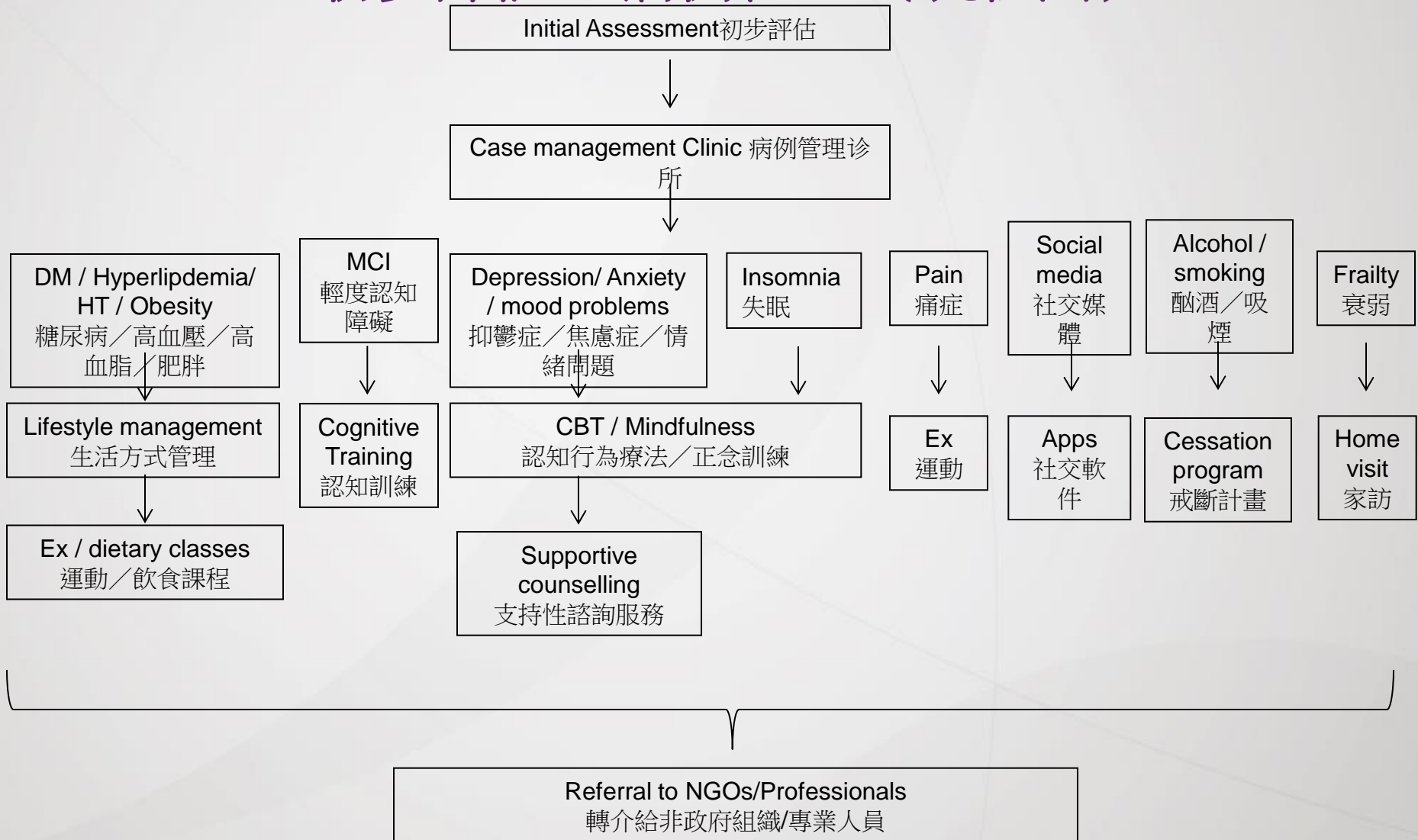


- Individual counseling 個案資訊
  - Drug management 藥物管理
  - Knowledge on disease management 疾病知識管理
  - Supportive counseling 支援性諮詢
- Group intervention 小組干預
  - Workshops 工作坊
  - Health talks 健康講座
- Refer to community social service / appropriate professionals 轉介到社區服務／對應的專業人員



# Initial assessment & Case management (pathway of care)

## 初步評估 & 病例管理（流程圖）





# Outcomes

- Quantitative pre-post outcomes & pilot RCT
- Qualitative (Focused groups)
- Health Service outcomes





# Tasks of Medicine

## 醫學的任務: Complex Patients

“Principle purpose (of medicine) should be the care of people with (health) problems. For too many practitioners, has become instead subsidiary purpose of the management of diseases which are attached coincidentally to suffering people.

醫學主要的目的應該是對人的照顧。然而對於太多的從業人員，對人的照顧已經變成了次要目的，主要目的變成了對“偶然發生在痛苦的人身上的”疾病的治療。

People are untidy. They are nuisance. They do not sit neatly into pigeon holes... Diseases, on the other hand, is impartial. It is tidy, and the textbook descriptions are clear –seldom seen.”

人不都一樣，他們很麻煩，他們所患的疾病也形形色色。但是，疾病是公正的，很整齊劃一，教科書的描述也很清楚——然而像教科書所描述的，簡潔明瞭的情況，卻極少見。

——皮特 鮑姆 *Peter Baume*





# Thank you!

