

# Care of Elderly – Medical Social Collaboration

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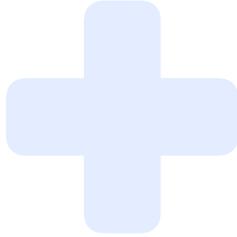
International Forum on Quality and Safety in Healthcare Hong Kong 2024

27 August 2024

Hong Kong Special Administrative Region, China

# Declaration

- I have no conflict of interest to declare





# Outline



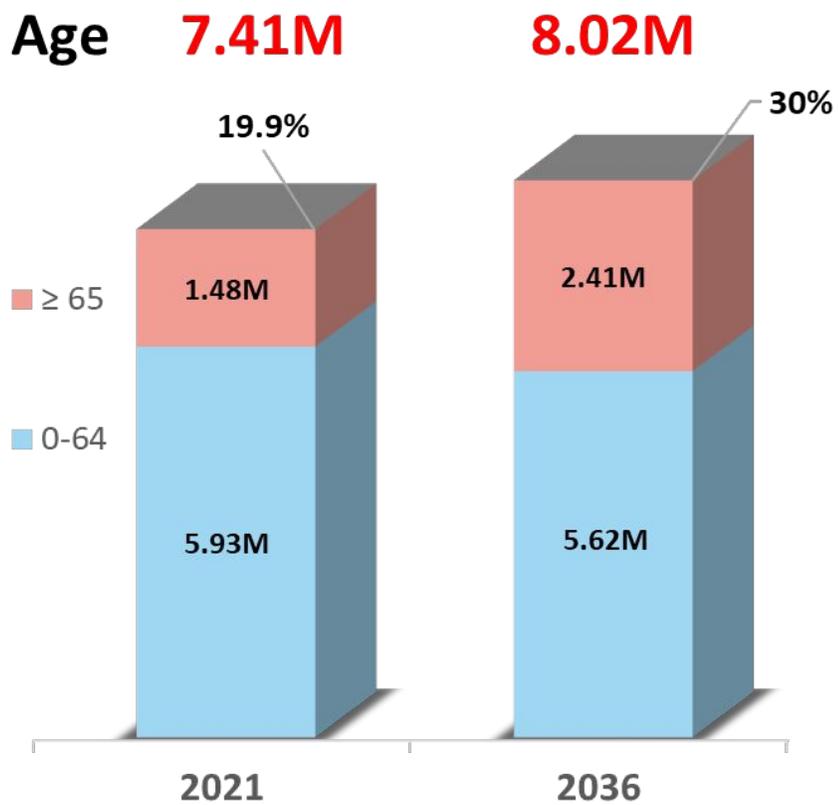
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- Medical Social Collaboration (MSC) and Care of Elderly
  - MSC Services in Hospital Authority
  - Key Elements and Enablers in MSC
  - Challenges and Opportunities of MSC Development



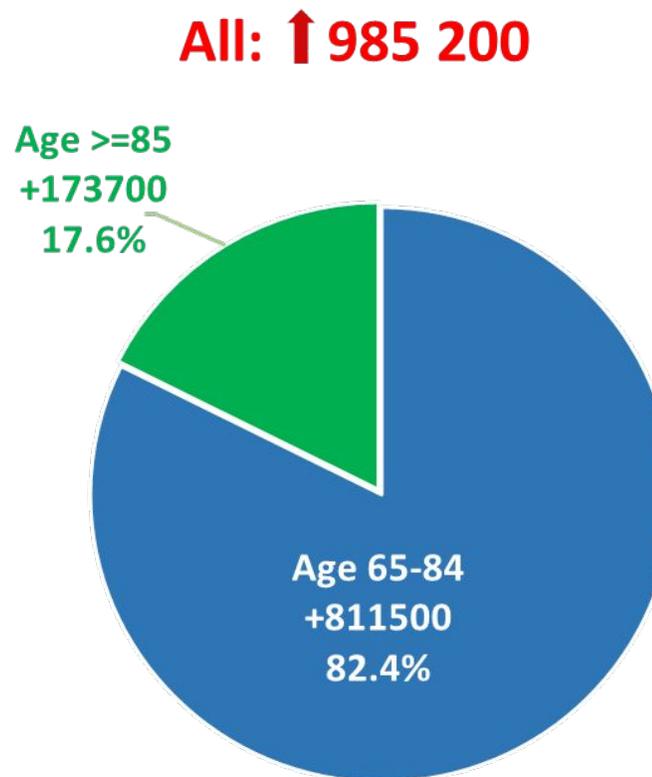
# Hong Kong Demographic Change, 2021 to 2036

Elderly population ↑ 67 %, overall population ↑ 8%

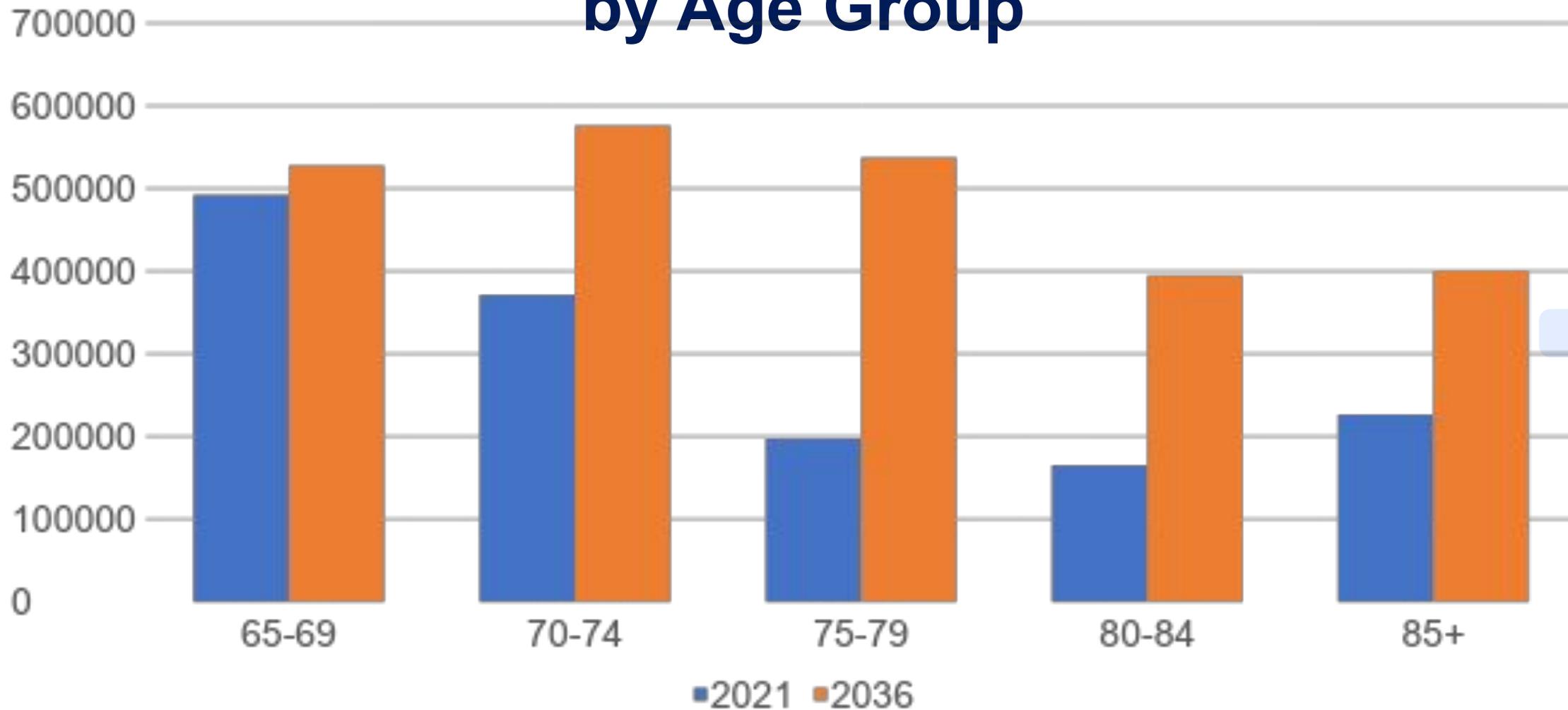
## Projected Population



## Elderly Population Increase



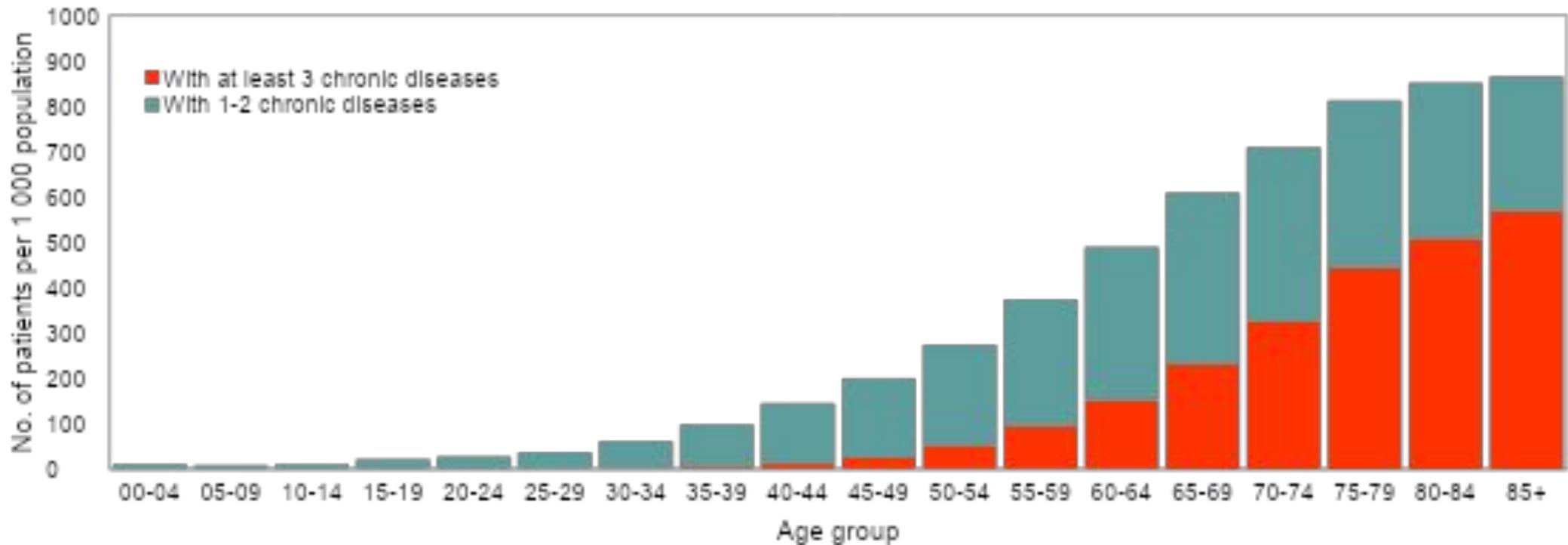
# Projected Elderly Population in Hong Kong by Age Group



# Background

- Ageing: Increasing Complexity

No. of HA Patients with Chronic Diseases<sup>1</sup> per 1 000 Population  
(As at 2019-end)

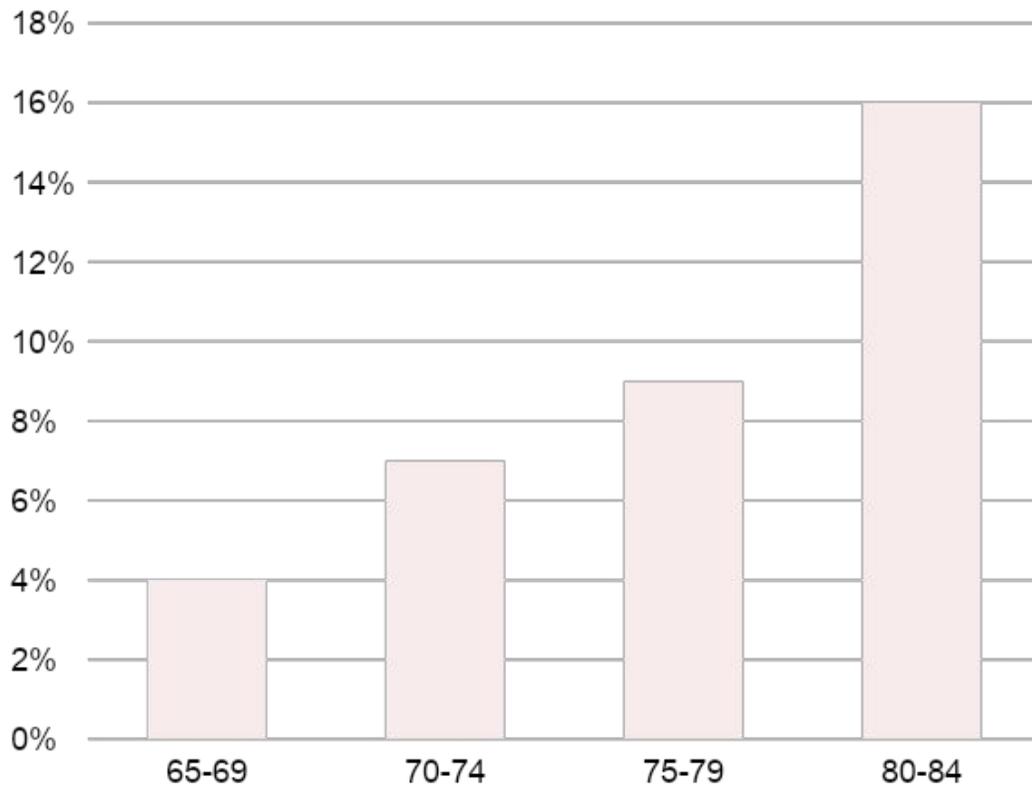


<sup>1</sup> Refer to [25](#) selected diseases including Diabetes, Hypertension, Hip Fracture, Stroke, Coronary Heart Disease, Chronic Heart Failure, COPD, Glaucoma, Chronic Kidney Disease (stage 3A, 3B, 4 & 5), Dementia, Hepatitis B, Hyperlipidemia, Parkinsonism, Depression, Lymphoma, Cancer of breast, colorectum, liver, lung, prostate, nasopharynx, stomach, corpus, ovary and cervix.

Data source: Statistics & Data Science Department, HAHO (Feb 2023)

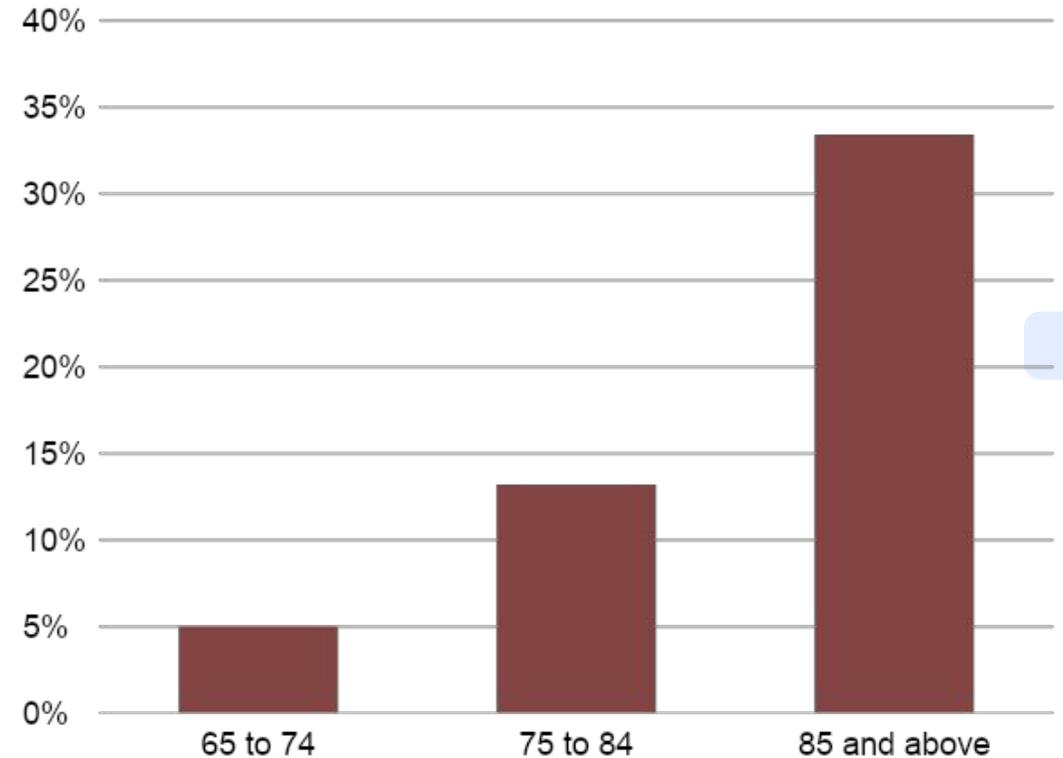
# Prevalence of Frailty and Dementia

Prevalence of frailty with age



Andrew Clegg et al. Lancet 2013; 381: 752

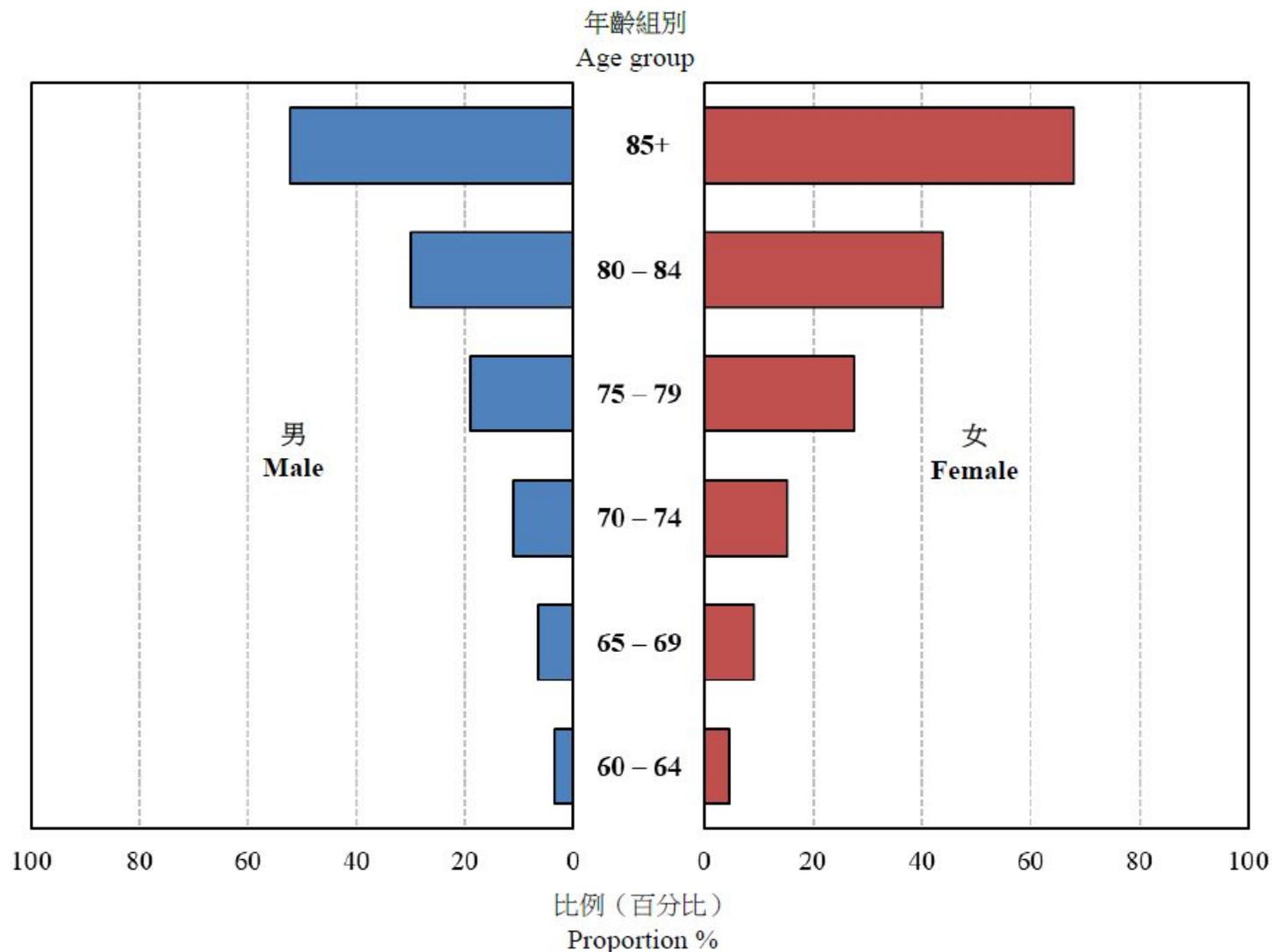
Percentage of people with Alzheimer's Disease (AD) in US



Alzheimer Dementia 2024 20(5) 3708-3821



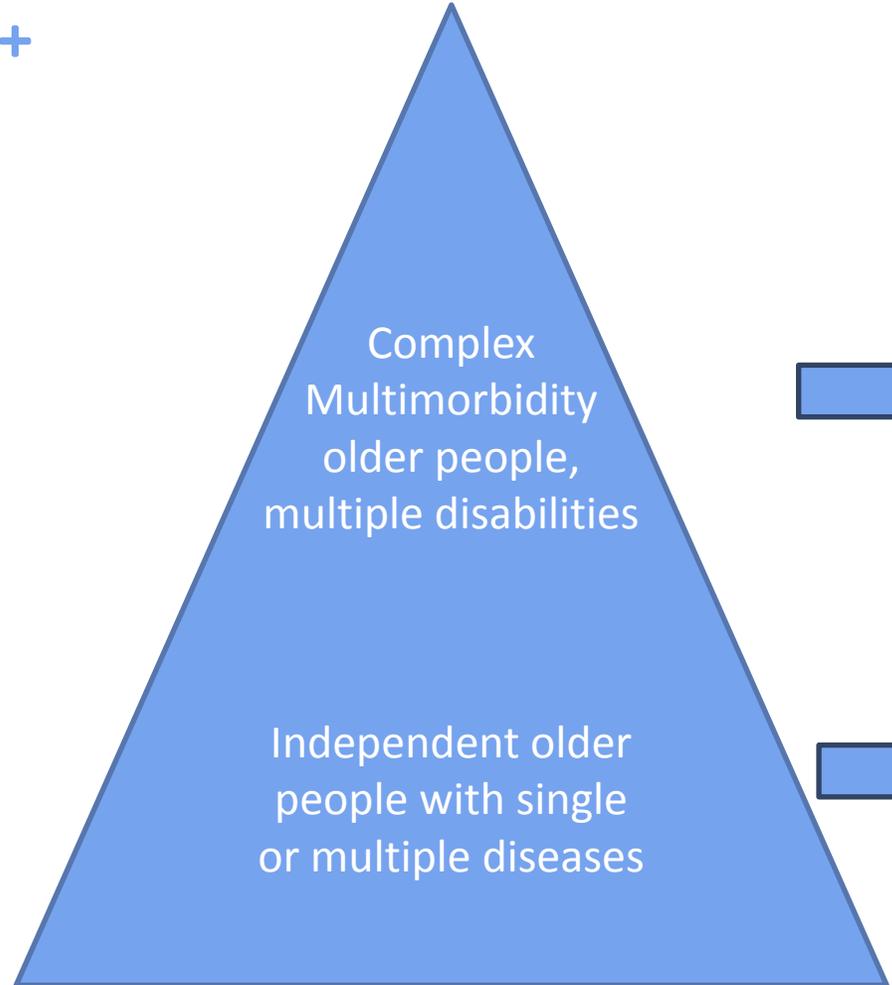
圖 9.1 2021 年按性別及年齡組別劃分的居於家庭住戶而需要長期照顧的 60 歲及以上人士比例  
 Chart 9.1 Proportion of persons aged 60 and over who had long-term care needs and were living in domestic households by sex and age group, 2021



Thematic Report  
 Older Persons  
 2021 Census  
 Census Statistics Department

LTC needs: Persons who currently need relative(s) or other person(s) to take care of their day-to-day living on a long-term basis

# Heterogeneous older population and their health care needs



## Health care needs

- Geriatric syndrome
- Complex multidimensional needs (social care)
- Patient-centered intervention
- Geriatric specialist
- Rehabilitation
- Community model of case manager

- Primary to secondary prevention of risk factors and disease
- Good control of chronic disease
- General practitioner
- Community based care, chronic care model





# Best practices for dementia care



- 
- Managing medical conditions
    - HT, DM, COPD, infection
  - Medication management
    - Deprescribing
  - Treatment of symptoms with behavioral intervention
  - Environmental accommodation
    - Safety
    - Preventing falls
    - Maintaining functions
  - Use of supportive and social engagements
    - Assistance with ADL
    - Physical activities
    - Meaningful activities
    - Social engagement
    - Healthy nutrition and hydration
    - Addressing family carers needs
- 

# MSC in Hospital Authority (HA)

## Background

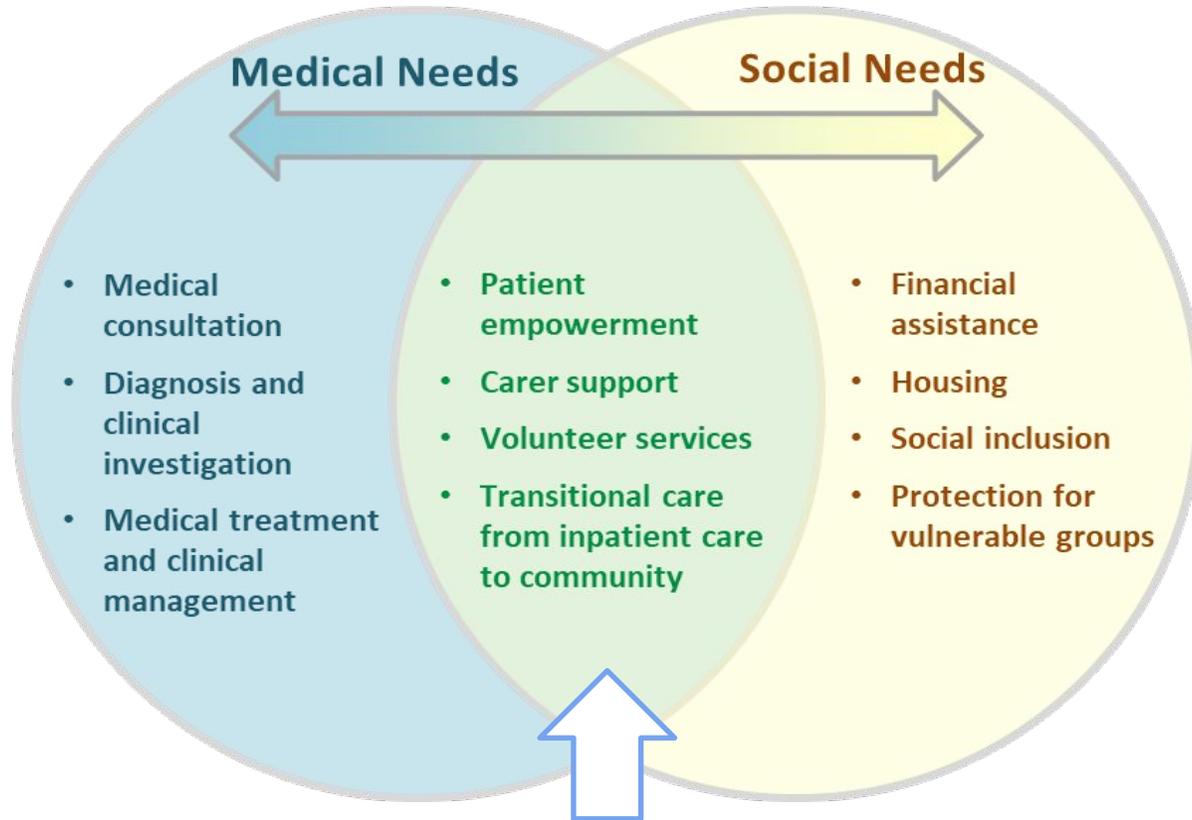
- Enhancing **MSC with community partners** is one of the directions in HA Strategic Plan 2017-22 to:
  - Optimise **demand management**
  - Attain better **leverage on community resources**
  - Facilitate **patient integration into the community**
- An **overall MSC Framework** was developed in 2021 to strengthen community-based transitional care



- **Vision** of MSC development in HA

“HA patients and their carers receive **timely, coordinated and patient-centred** care and support through a structured **collaborative network with community partners** along the patient journey”

# Key Themes on MSC



Strategic focus of MSC with more emphasis on **transitional care for enhancing post-discharge support**

## Key themes:

1. **Community rehabilitation** programmes
2. Home care and support service for **palliative and end-of-life care**
3. Support service for **dementia** patients and their carers
4. Patient empowerment and self-monitoring scheme for **chronic disease patients**
5. Community and psychosocial support for **cancer survivors**

# What is Medical Social Collaboration (MSC)?

- **No unifying definition** or common conceptual understanding of integrated care<sup>1,2</sup>
- The integration of health and social care (*or MSC in Hospital Authority's context*) is **strongly contextually-bound** and **shaped by perspectives and expectations** of the stakeholders in the system<sup>2</sup>

- Collaboration activities between distinct organisations working together to achieve health goals
- Healthcare and non-healthcare organisations
- Formal and informal partnership arrangement
- Multidisciplinary team ≠ MSC
- Collaboration > cooperation

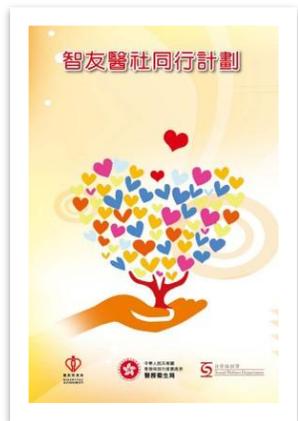
BMC Public Health 2021:21:753

1. WHO. Integrated care models: an overview (2016).

Available at: <https://www.euro.who.int/en/health-topics/Health-systems/health-services-delivery/publications/2016/integrated-care-models-an-overview-2016>

2. Framework for the Development of Medical Social Collaboration in Hospital Authority (2021)

# Examples of Elderly Care-related MSC Projects



Dementia Community Support Scheme



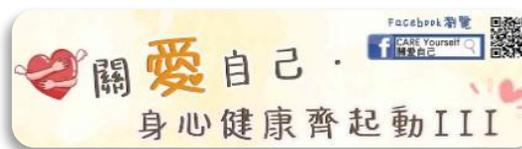
Integrated Care & Discharge Support

HKWC- Community Volunteer Service



NTWC- Patient Support Services for Patients with Dementia and their Caregivers

KEC- Care Yourself



Jockey Club End-of-Life Community Care Project



JC JoyAge: Jockey Club Holistic Support Project for Elderly Mental Wellness



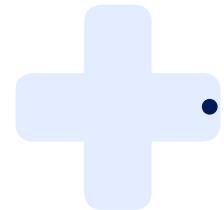
HKWC- Carer and Elder Patient Support Service



HKEC- "Stand by You" Dementia Patients & Carers Support Project

# Integrated Care and Discharge Support (ICDS)

- Geriatrician-led multi-disciplinary team
- Integrated medical, rehabilitation and social services
- Targets patients: readmission risk and needs basis
- Time-limited (8-12 weeks), average 8 visits per patient
- Diversity of interventions
  - Case manager (nurse, physiotherapist [PT], occupational therapist [OT])
  - Fast track clinic
  - Day hospital rehabilitation
  - Social support
  - Transitional residential care (care home)





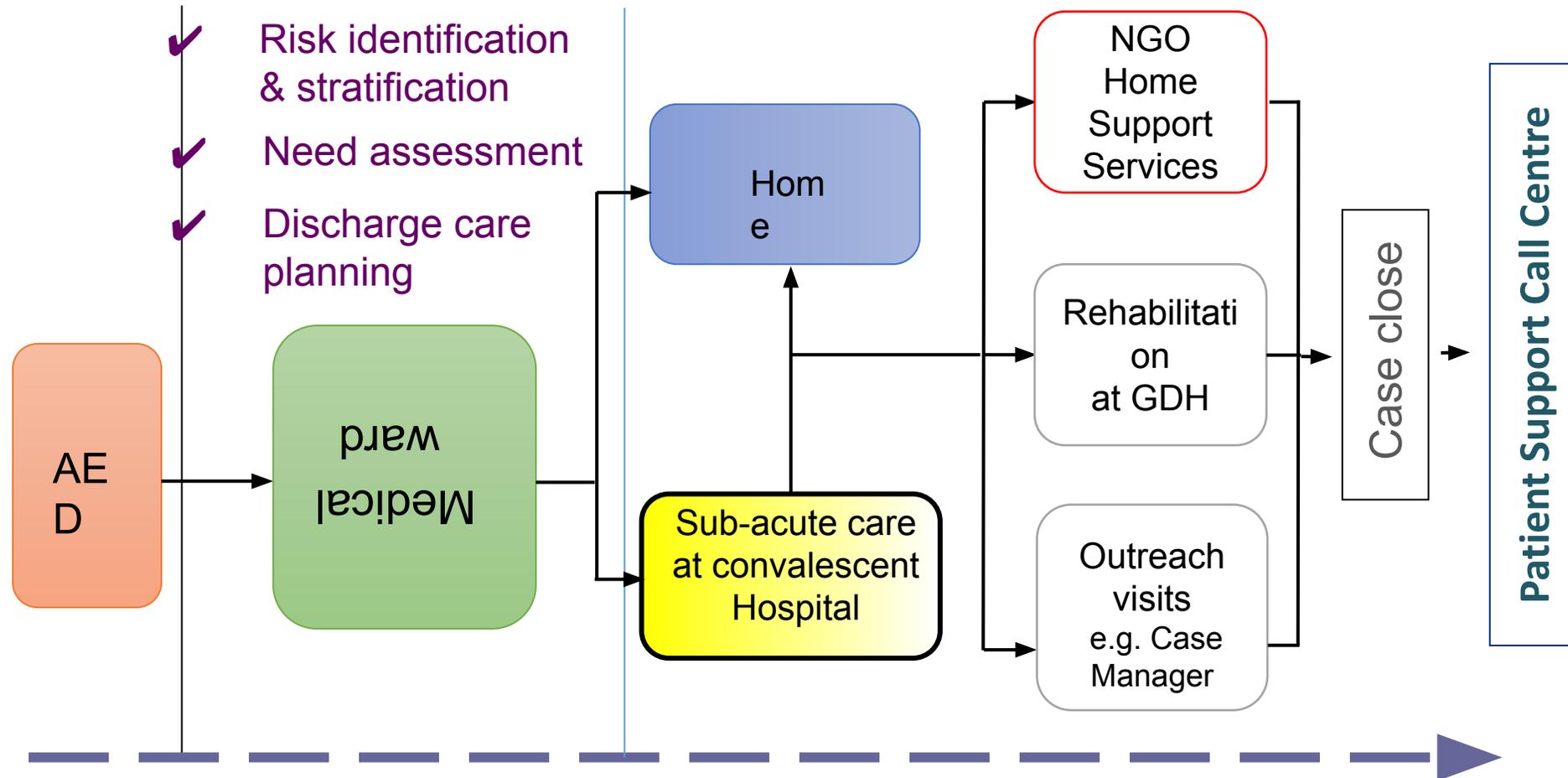
# Developing Models of ICDS



- Other referrals: surgical patients for social support
  - Proactive screening: living alone
  - Acute stroke patients
  - Patients with hip fracture
  - Emergency attendances (e.g. falls)
- 
- 



# Integrated Care and Discharge Support for High-Risk Elderly Patients: Patient Journey



**Led by geriatricians and care by Multidisciplinary Team**

AED: Accident & Emergency Department, NGO: Non-Governmental Organisation, GDH: Geriatric Day Hospital

# Discharge Support

## Case Managers

- Disease management & education
- Medication & use of devices
- Follow up care coordination
- Direct patient care
- Physiotherapy, aids
- Functional training
- Home modification

## Non-Governmental Organisation (NGO) (Social Support)

- Meals
- Personal hygiene
- Household task
- Laundry
- Escort
- Sitter
- Nurse/ PT/OT/Medical Social Worker (MSW)
- Temporary residential care



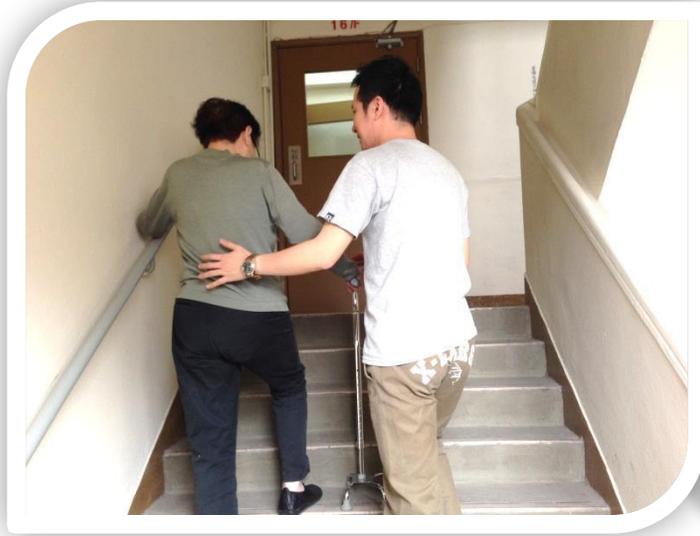
# Multi-Disciplinary Team (MDT) Case Conference

- Weekly multi-disciplinary team meeting
- Combined health and social care teams



**Greatest benefit in coordinated early supported discharge (ESD) from hospital to community with regular MDT meeting**

Services for reducing duration of hospital care for acute stroke patients (Review)  
Fearon P, Langhorne P, ESDT.  
2012 The Cochrane Collaboration



# Effectiveness of a discharge planning and community support programme in preventing readmission of high-risk older patients

Francis OY Lin, James KH Luk \*, TC Chan, Winnie WY Mok, Felix HW Chan

- Subjects: 1090, aged > 60, HARRPE > 0.2, clinical referral, proactive screening
- Study: pre and post intervention
- Intervention: Link person, post discharge case manager, GDH and rapid response clinic, NGO (social support)

TABLE 3. Number of AED attendances, unplanned acute hospital admissions, and hospital bed days (acute and convalescence) 6 months before and after joining the ICDS programme

	Mean ± SD		% Reduction	P value
	6-Month pre-ICDS	6-Month post-ICDS		
AED attendance	2.0 ± 1.4	1.2 ± 1.8	40%	<0.001
Unplanned acute hospital admission	1.7 ± 1.1	0.9 ± 1.4	47%	<0.001
Hospital bed days	16.1 ± 17.9	11.1 ± 20.2	31%	<0.001

Abbreviations: AED = Accident and Emergency Department; ICDS = Integrated Care and Discharge Support for elderly patients; SD = standard deviation



# Dementia Community Support Scheme (DCSS)

- 
- A 2-year pilot programme from Feb 2017 to Jan 2019, the scheme was regularized in 2019
  - Supported by Community Care Fund (CCF)
  - Establish a medical social collaboration platform in 41 District Elderly Care Centre (DECC) to enhance support to elderly with mild to moderate dementia
  - Two specialties (i.e. Geriatrics and Psychogeriatrics)
  - Staff: nurse (HA), nurse, social worker and occupational therapist (NGO)
- 



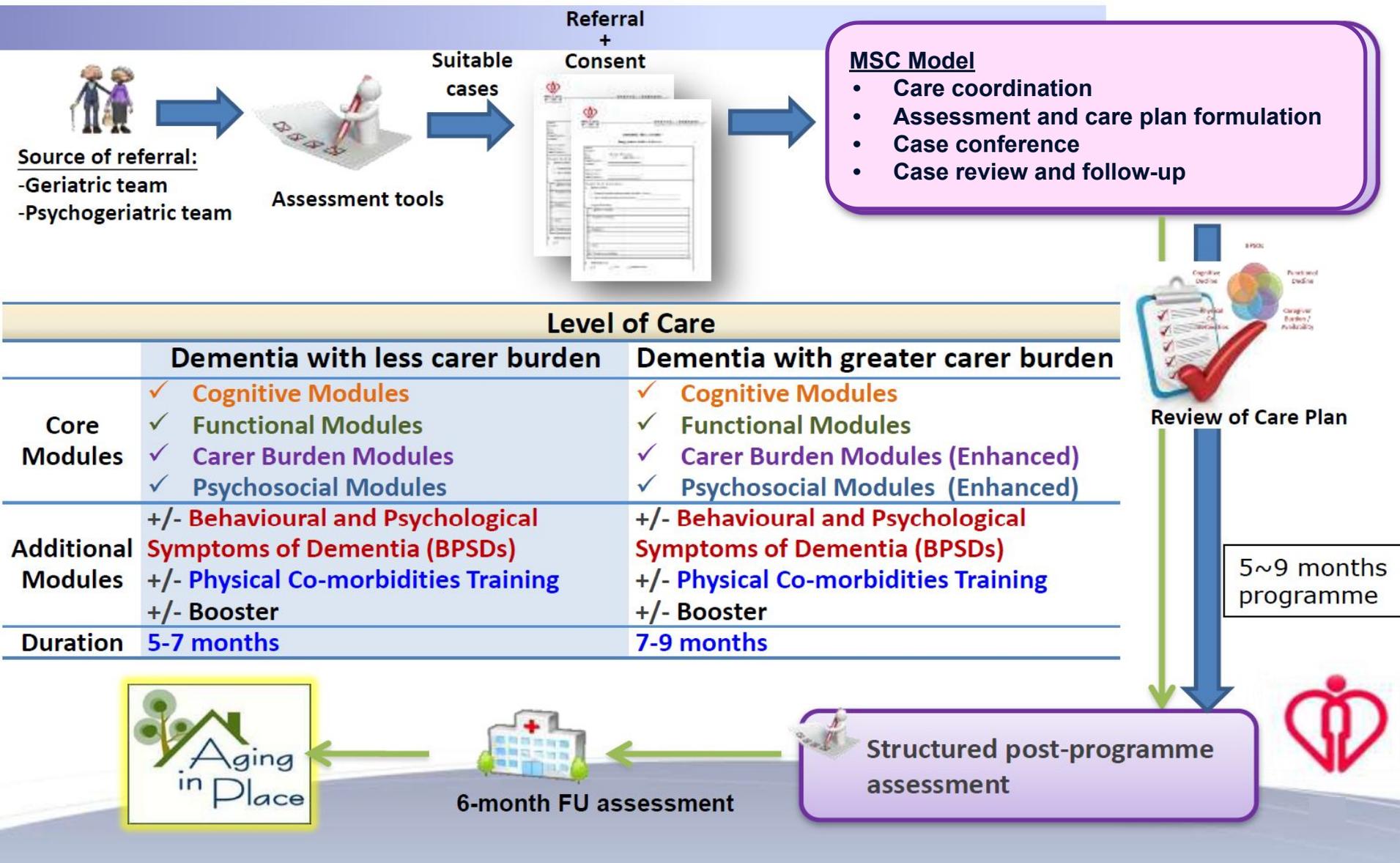


# DCSS Programme Objectives



- To develop a **medical social collaboration model** in providing community support services to elderly persons (aged 60 or above) with mild to moderate dementia
  - To enhance the **capacity and expertise of the staff of non-governmental organisations (NGOs)** at the community level in the provision of dementia support services to the elderly persons
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# DCSS Medical Social Collaboration Model





# Aromatherapy Workshop



# Horticultural Therapy



# Music Therapy



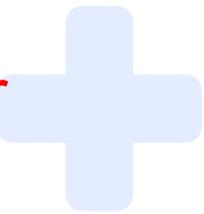
# Group Training





# Appreciation Letter from the Patient's Spouse



- 
- The program helped him a lot. He was **unhappy at the beginning** to finally **smiling**
  - After attending the classes, he **started to do housework, make his bed and clothes, take his clothes for bathing**
  - During **home visit**, staff of center has provided many professional suggestions, which we were happy to accept and **making the home safer** for elderly
  - Thanks to the center for organizing outings, which **allowed the caregivers to relax, reduce stress and gain knowledge**
- 

**.....you allow the elderly to still maintain cognition and lead a happy life and relieve the pressure of care-giver.....**





# Outcomes of Patients



- Qualitative
  - Focus group and individual interviews
  - Baseline and after one year of service commencement
- Quantitative
  - Prospective, naturalistic follow up
  - Using service and administrative data
- Study period: 7/2017 to 8/2018
- Subjects: 1385

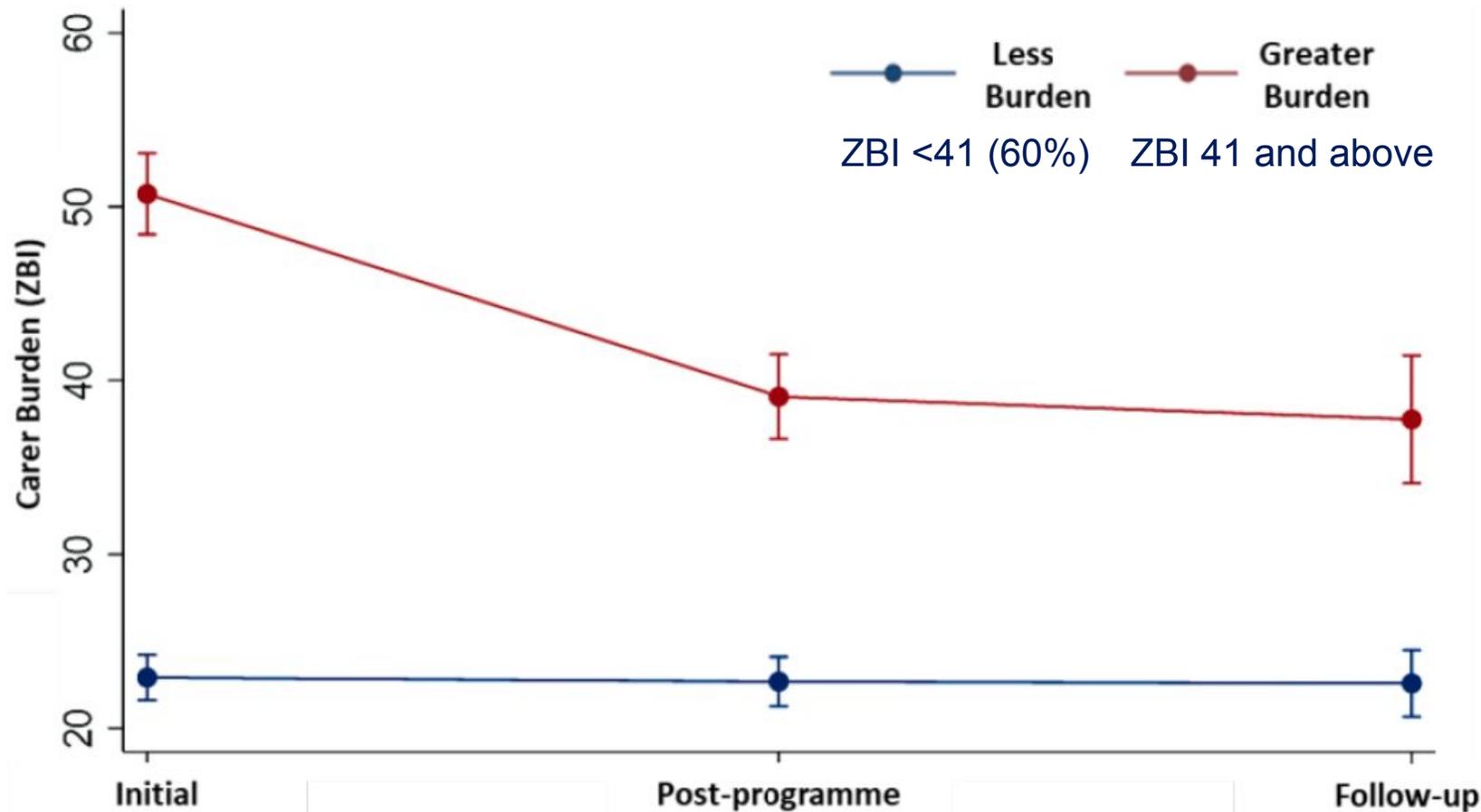


**Table 5.9** Descriptives of outcome measurements across assessment time points.<sup>a</sup>

Mean (SD)	(a) Initial (n=1,385)	(b) Post- programme (n=691)	(c) Follow- up (n=234)	Paired sample t		
				(a)-(b) (n=615)	(b)-(c) (n=215)	(a)-(c) (n=232)
<b>ZBI</b>	31.2 (16.7)	29.3 (16.9)	27.3 (17.5)	3.6**	0.4	1.9
Spouse	32.5 (18.5)	30.3 (18.8)	25.6 (18.0)	2.7**	1.3	1.6
Adult child	31.0 (15.6)	29.2 (15.3)	28.0 (17.1)	2.4*	-0.4	1.3
<b>CDAD</b>	73.8 (17.8)	69.0 (20.9)	61.9 (23.8)	8.9**	7.7**	8.9**
Initiation	78.1 (18.1)	73.1 (22.2)	65.9 (25.9)	8.2**	7.1**	8.4**
Planning	73.6 (19.4)	67.9 (22.8)	61.6 (25.4)	8.7**	6.4**	7.7**
Performance	70.7 (20.0)	66.4 (22.2)	58.9 (24.5)	7.8**	6.5**	8.2**
<b>NPI-Q</b>						
Severity	5.0 (5.7)	5.5 (5.2)	7.5 (6.1)	-2.6**	-4.1**	-4.5**
Distress	6.5 (8.1)	7.22 (7.7)	9.5 (8.9)	-1.9	-3.9**	-3.9**
<b>QoL-AD</b>	26.8 (5.5)	-	26.9 (5.6)	-	-	-0.2
<b>CSE-R</b>						
SE-OR	62.2 (30.2)	64.0 (29.5)	62.4 (28.1)	-0.8	0.04	1.16
SE-DB	64.2 (22.1)	66.3 (21.4)	66.2 (20.0)	-1.7	-1.0	-0.3
SE-CU	67.7 (21.4)	65.9 (22.1)	67.4 (21.3)	-1.7	-1.0	-0.5
<b>EUROHIS-QOL</b>	27.0 (4.5)	-	27.8 (4.6)	-	-	-0.8
<b>AIP</b>						
Current	83.1 (20.1)	-	78.5 (22.6)	-	-	2.4*
If deteriorates	56.6 (28.0)	-	54.5 (31.5)	-	-	0.9

<sup>a</sup>Actual sample size varied across measurements due to missing data. \*p<0.05; \*\*p<0.01

GDS=Global Deterioration Scale; CDAD=Chinese version of the Disability Assessment for Dementia; NPI-Q=Neuropsychiatric Inventory Questionnaire; QoL-AD=Quality of Life in Alzheimer's Disease; ZBI=Zarit Burden Interview; CSE-R=Revised Scale for Caregiving Self-Efficacy; SE-OR=self-efficacy for obtaining respite; SE-DB=self-efficacy for responding to PwD disruptive behaviour; SE-CU=self-efficacy for controlling upsetting thoughts about caregiving; AIP=ageing-in-place



<sup>a</sup>Controlled for PwD characteristics of age, gender, GDS score, whether carer attended 100% of carer sessions, and duration of service received.

ZBI=Zarit Burden Interview

**Figure 5.1** Carers in the Greater Burden group showed significantly greater reduction in ZBI score.<sup>a</sup>



# Impacts of Collaboration



Outcomes	Findings
Health outcome	Negative
Health service use and quality	Mixed (access to service and patient satisfaction improved)
Resources uses and spending	Limited and mixed





# Enablers and Key Elements in MSC



- **Resources and funding**
- **Governance**
- **Infrastructure**
  - Shared process and systems
  - Agreement for sharing information, joint meeting, planning process
  - Co-location of office and proximity of teams
  - Shared training





- **Care Process**

- Target clients
- Shared process
- Evidenced-based intervention

- **Role delineation, clarity on roles and responsibilities**

- Clarity in decision making and accountability
- Flexibility on roles

- **Communication**

- Open, frequent
- Regular scheduled meeting, protocol and information sharing

- **Leadership**

- **Outcome monitoring**



# Jockey Club End-of-Life Community Care Project (JCECC)

- Multi-disciplinary, multi-institutional and cross-sectoral collaboration to enhance EoL care interfacing between medical and social systems
- District and community-based EoL care support
- Professional capacity building
- Public education
- Systematic assessment and analysis

策劃及捐助 Initiated and Funded by:



香港賽馬會慈善信託基金  
The Hong Kong Jockey Club Charities Trust  
同心同步同進 RIDING HIGH TOGETHER

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# Conclusions

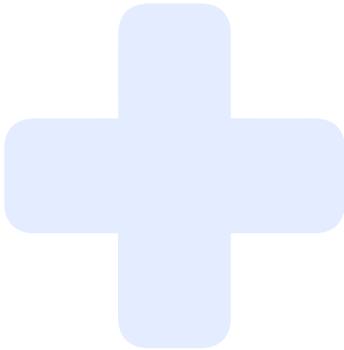


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- Ageing population presents challenges to capacity and sustainability of healthcare system
  - Social care need increases among vulnerable older adults and patients with multi-morbidity and dementia
  - Medical social collaboration provides opportunities to alleviate healthcare demand and improve outcomes in elderly people
  - No unified model for MSC, essential components and enablers in MSC should be recognized
- 



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**Thank you**

