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“Fit-for-purpose” – A Community-centric Health System in Ageing Population

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Structure of Paper

- Ageing Population
- Health Systems Transformation to be “Fit-for-purpose”
- Community-centric Health System





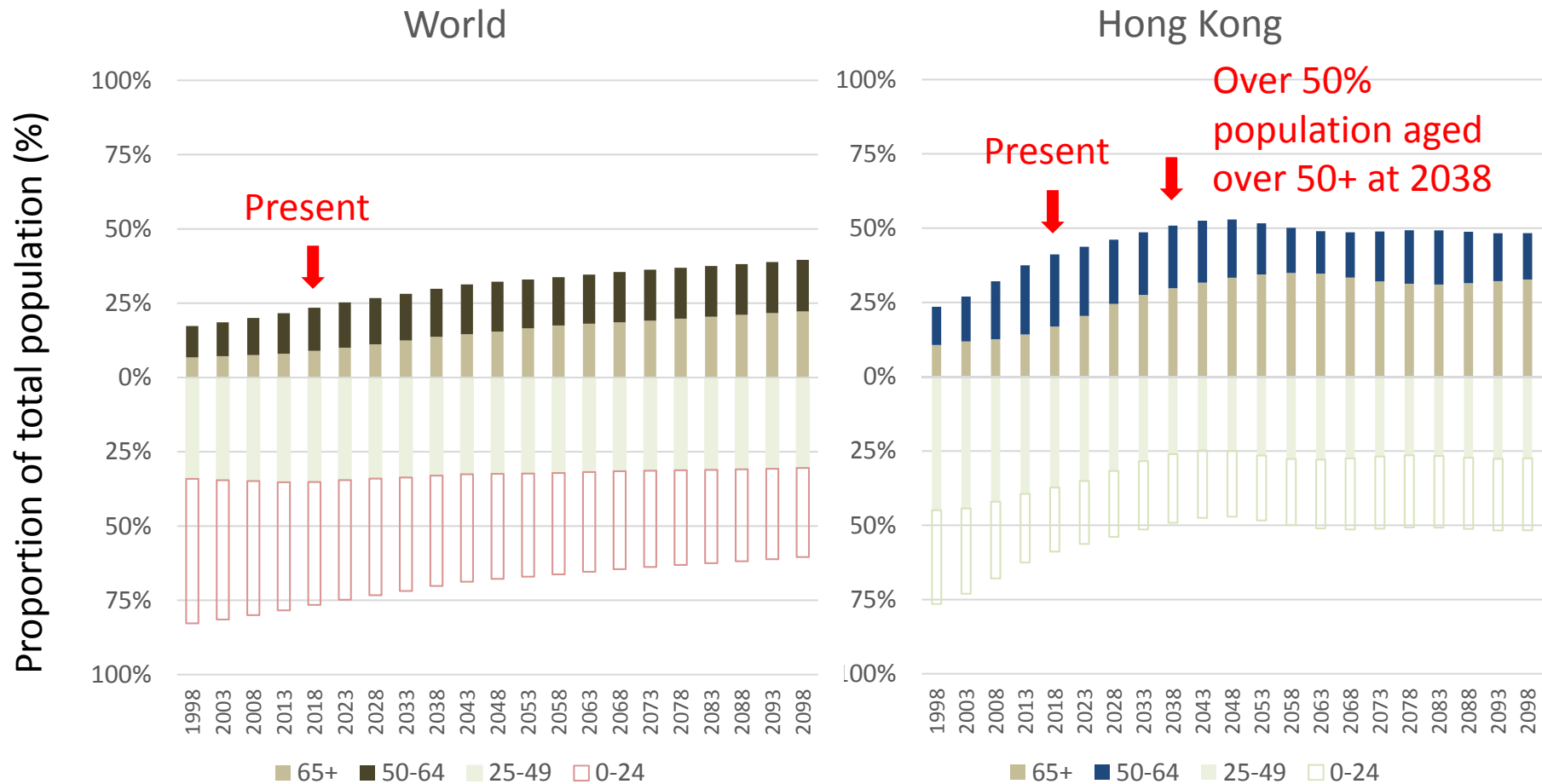
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Ageing population

Demographic Shift



Source: United Nations, Department of Economic and Social Affairs, Population Division (2017).
World Population Prospects: The 2017 Revision, custom data acquired via website.

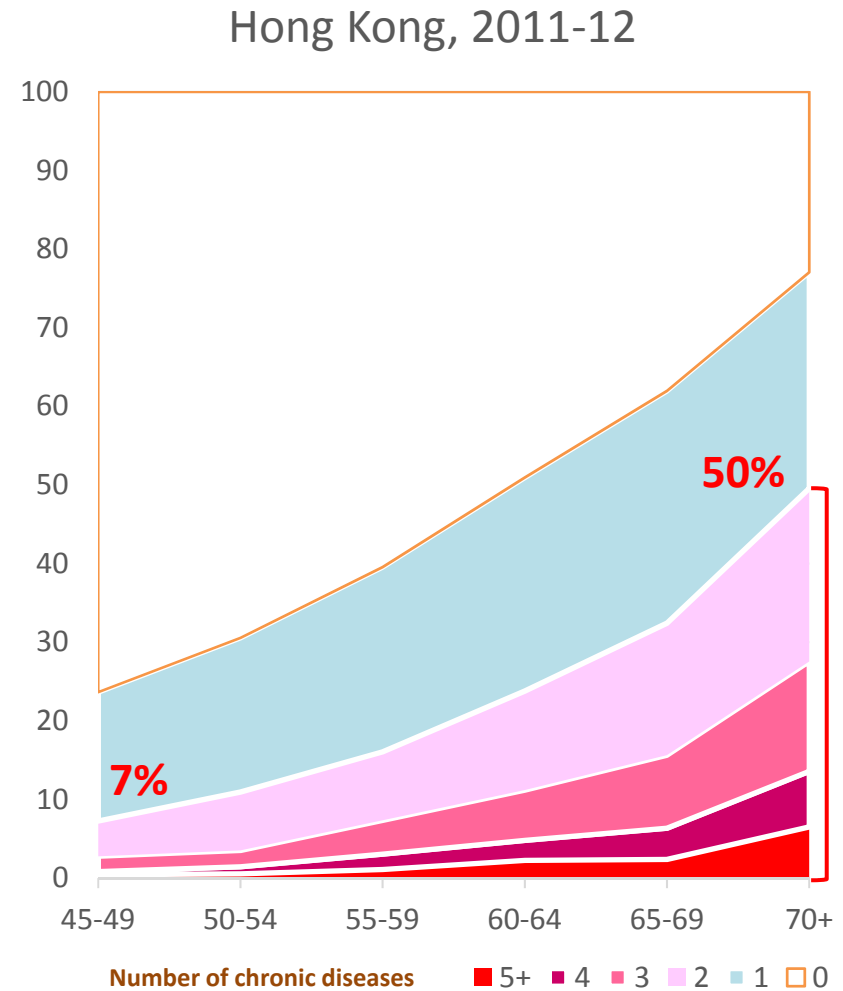
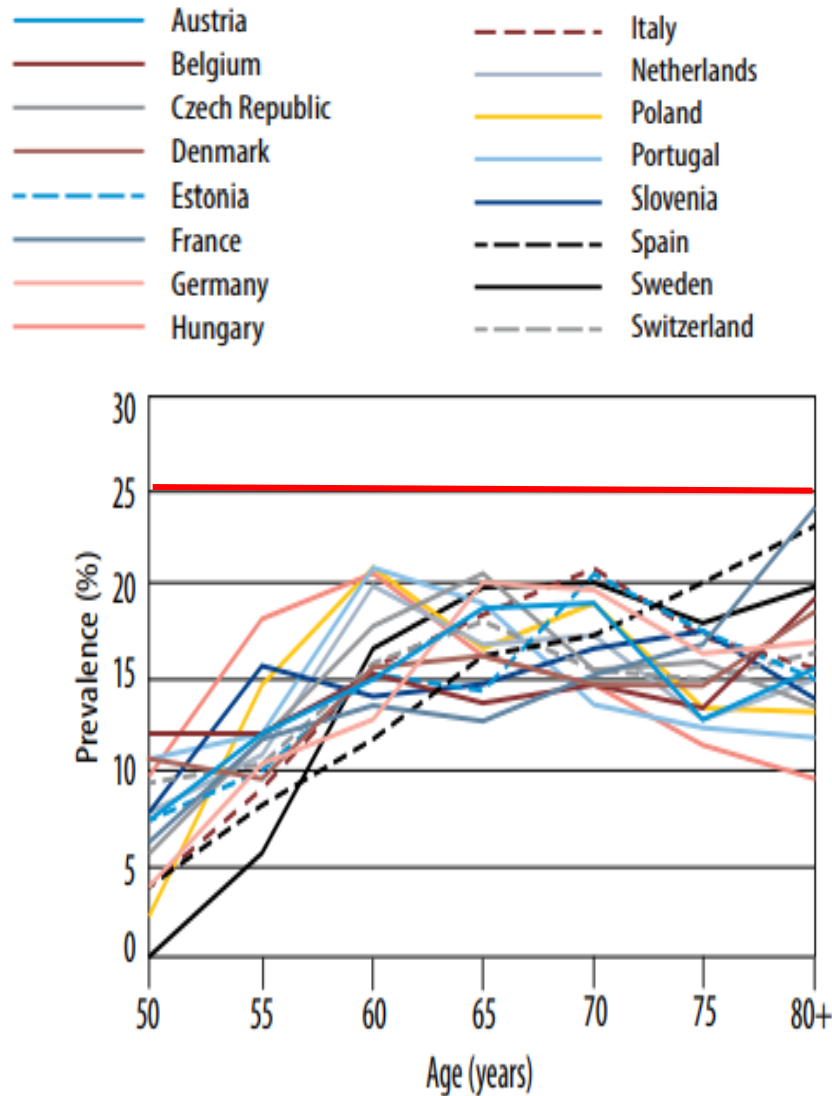


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Prevalence of Multi-morbidity Across Age

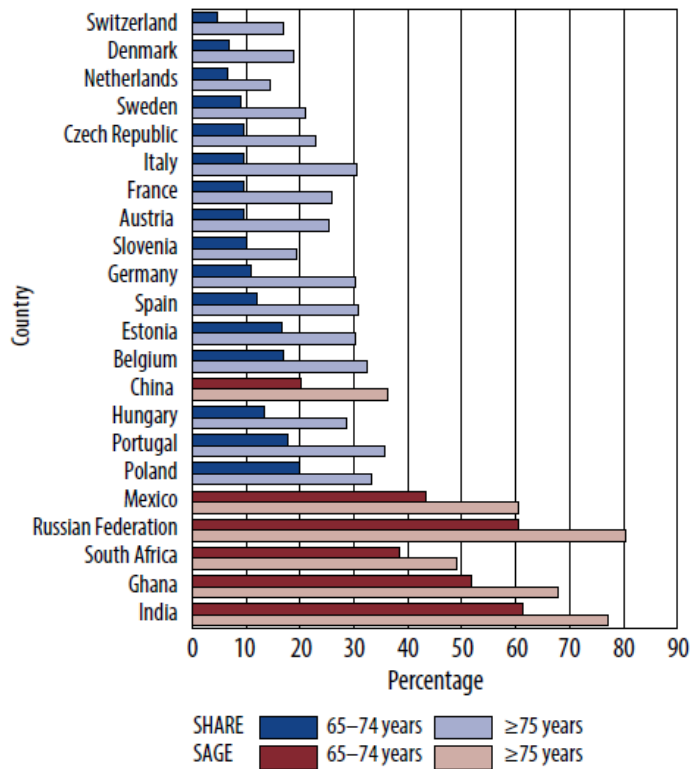


Source: (1) World Health Organization. 2015. World Report on Ageing and Health. (2) Thematic Household Survey, 2011-2012.



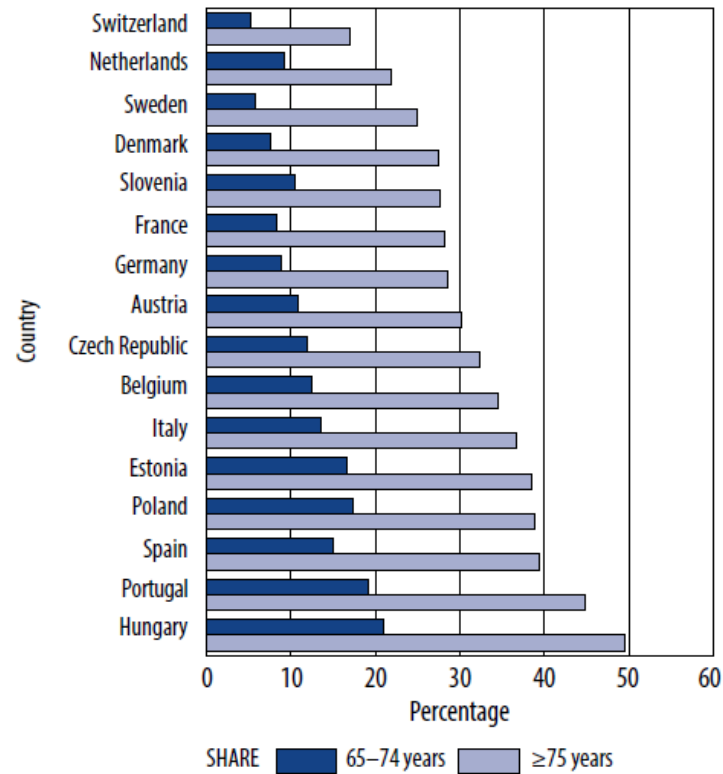
Functional Abilities

Percentage of the population aged 64-74 years and aged 75 years or older with a limitation in one or more of five basic activities of daily living (ADL), by country



Five basic ADL: Eating, bathing, dressing, getting in/out of bed, using the toilet

Percentage of the population aged 64-74 years and aged 75 years or older with a limitation in one or more instrumental activities of daily living, by country



IADL: Difficulties using the telephone, taking medications, managing money, shopping for groceries, preparing meals and using a map

Source: World Health Organization. 2015. World Report on Ageing and Health.

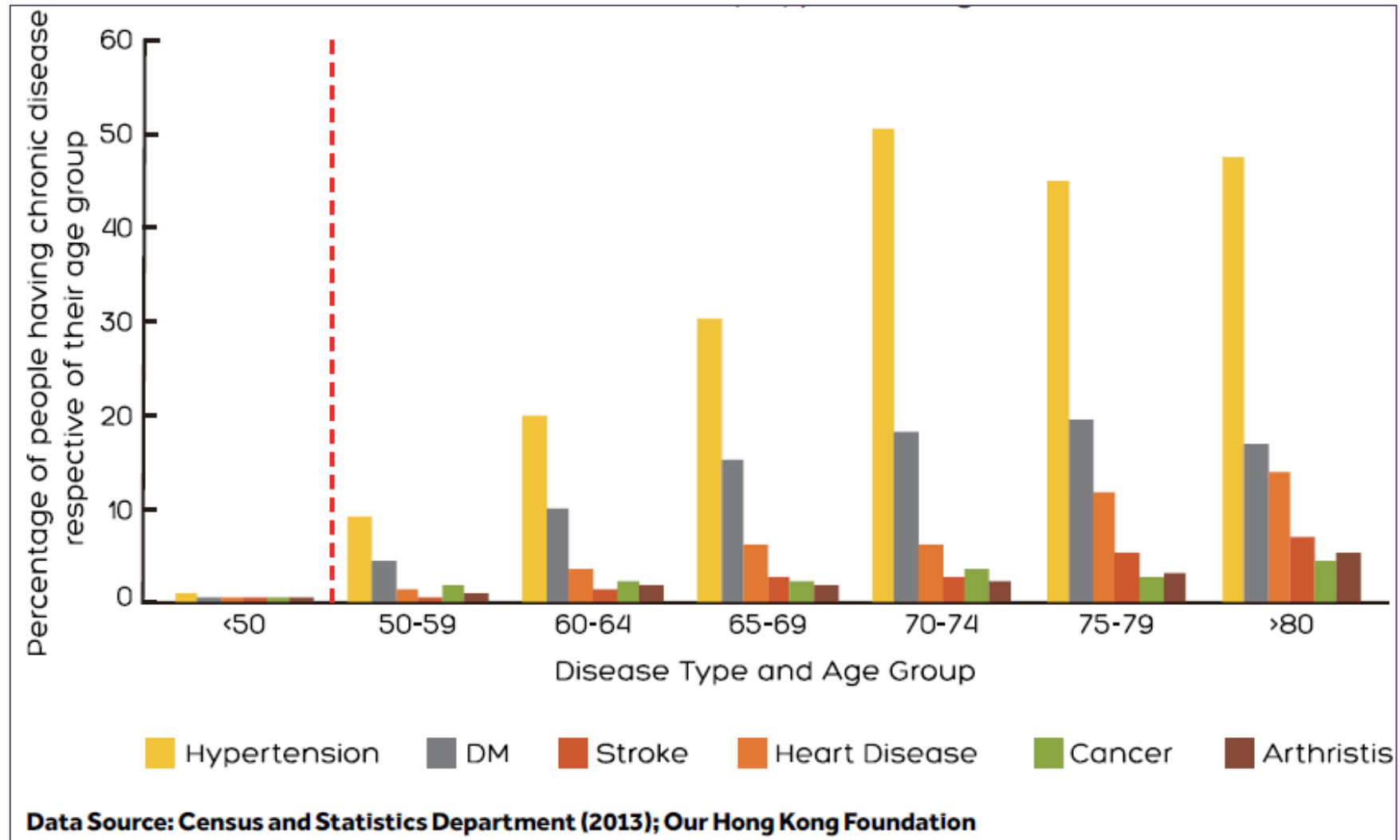


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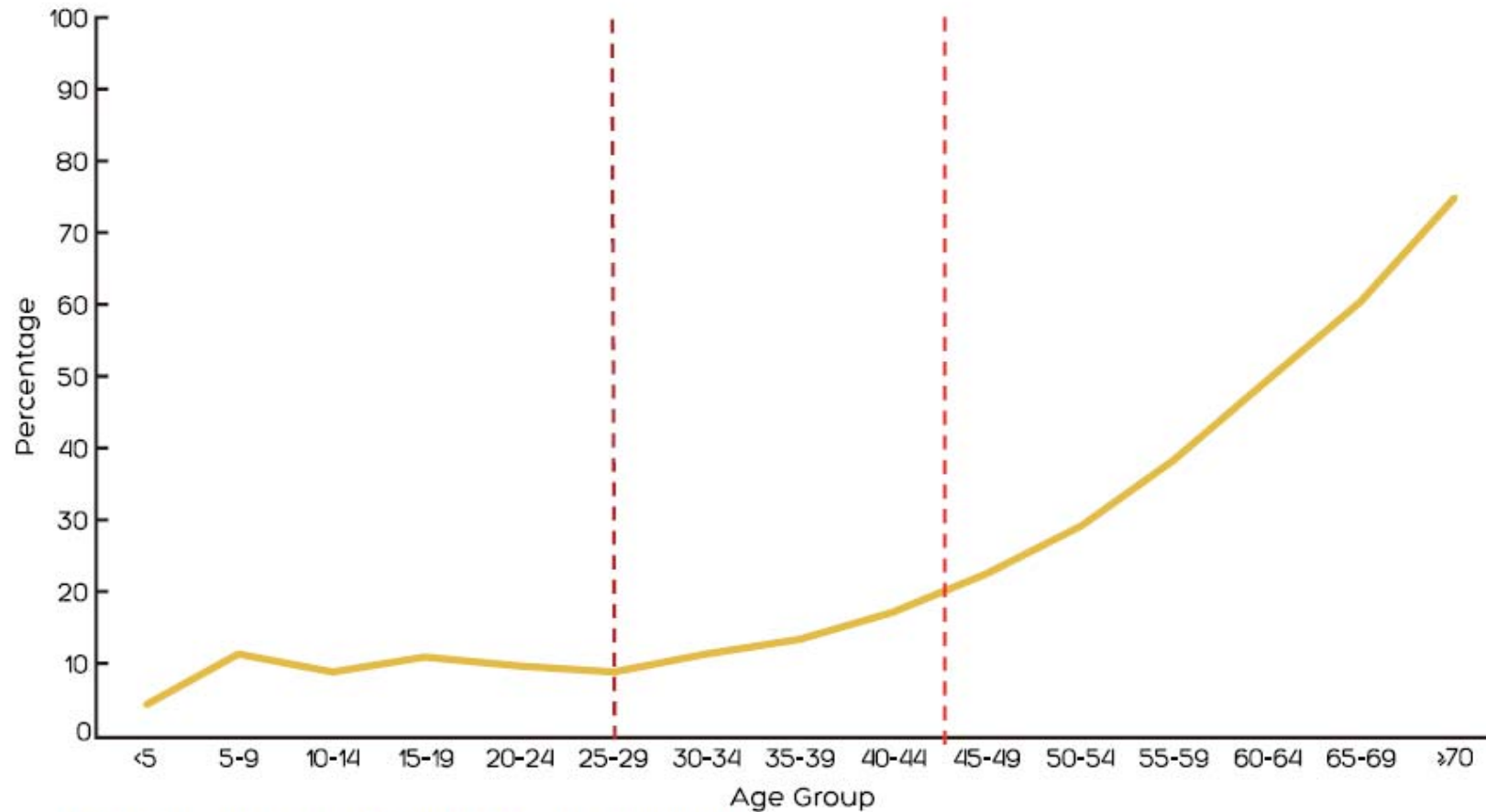


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Chronic Disease by Type and Age



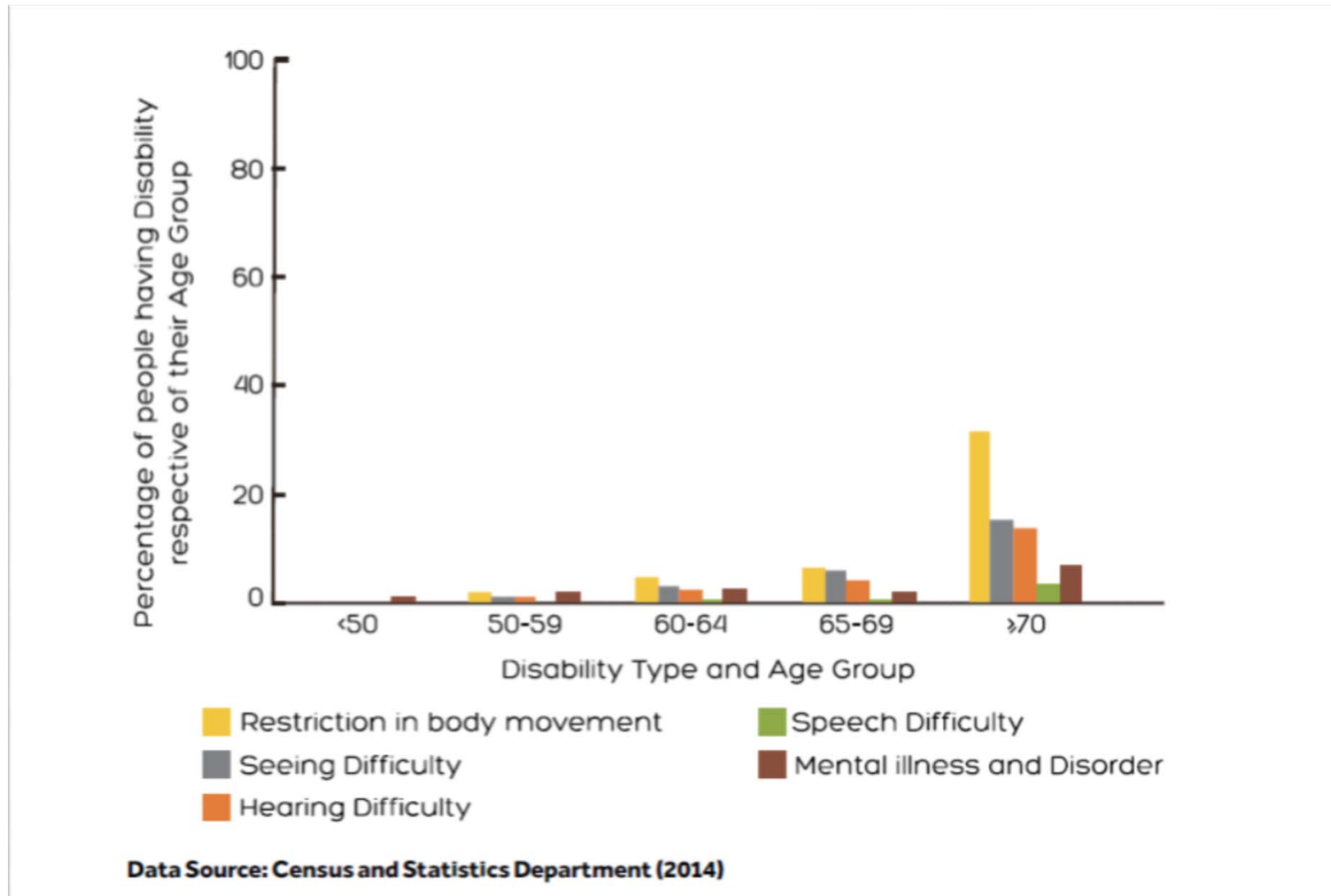
Percentage of People of Having at least 1 Chronic Conditions



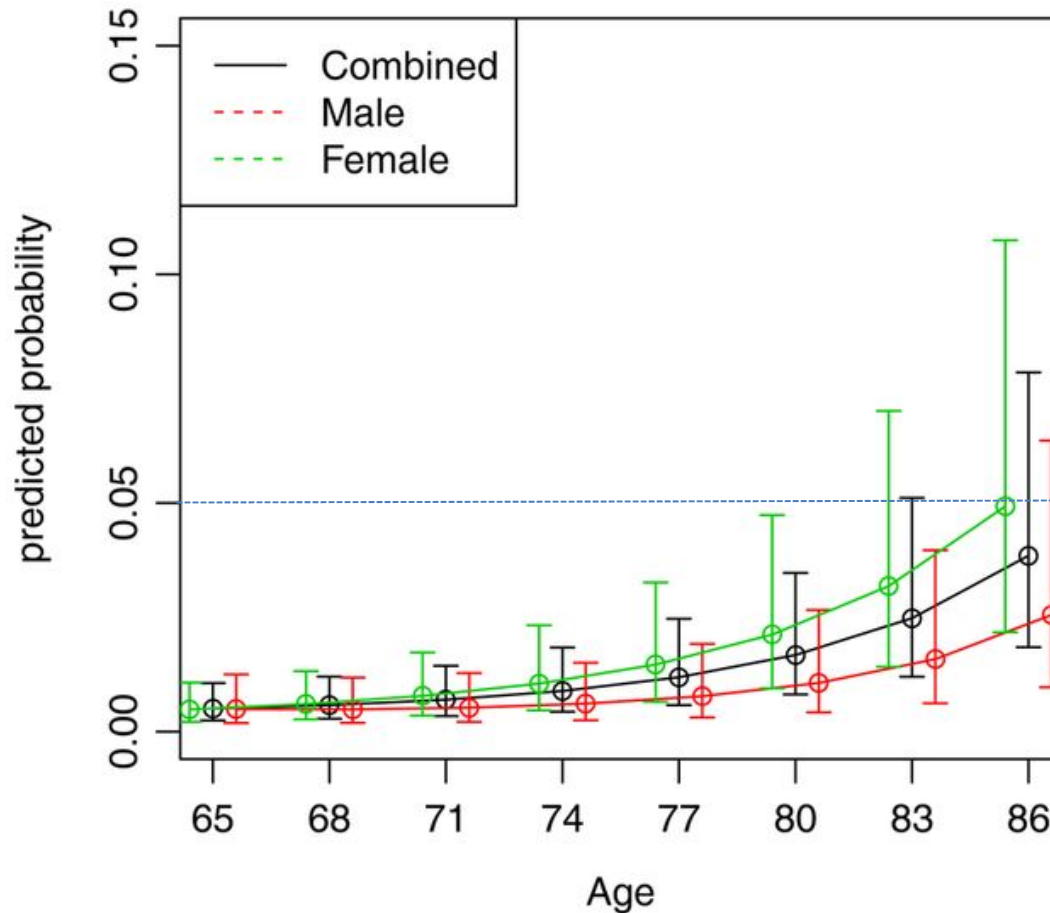
Data Source: Census and Statistics Department (2013)



Chronic Disease by Type and Age



Trends of ADL Disability in Hong Kong



ADL disability: unable to perform at least one of seven ADL independently

- Bathing
- Dressing
- Toileting
- Transferring from a bed to a chair
- Feeding
- Grooming
- Ability to walk across a small room

The model has adjusted for period, cohort, marital status, educational level, employment status, type of housing, physical exercise, smoking, alcohol intake, BMI, number of prescribed medications and self-rated health. ADL, activities of daily living; BMI, body mass index.

Source: Ruby Yu et al. BMJ Open 2016;6:e013259

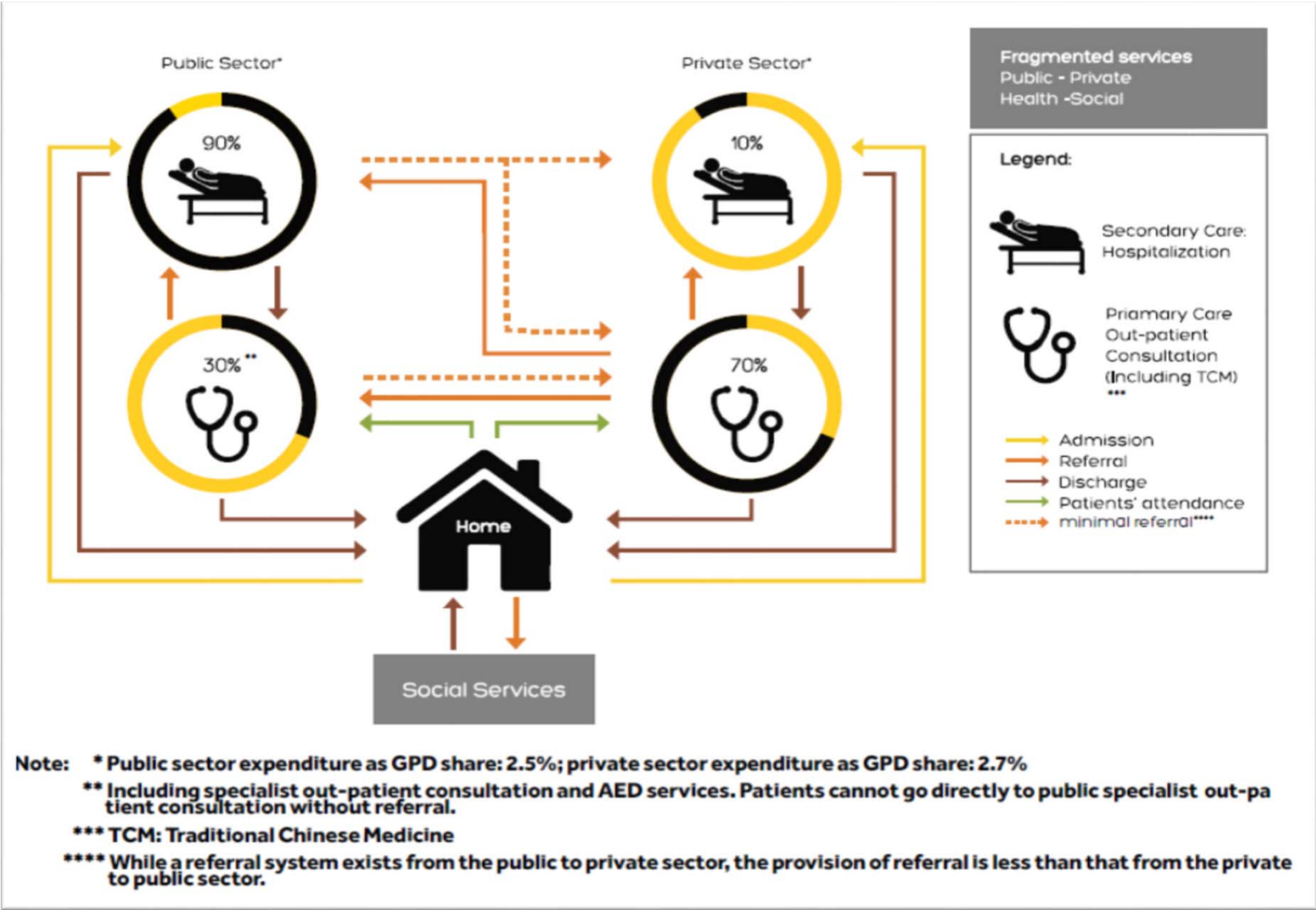


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Health Care and Social Care System of Hong Kong



Source: Our Hong Kong Foundation

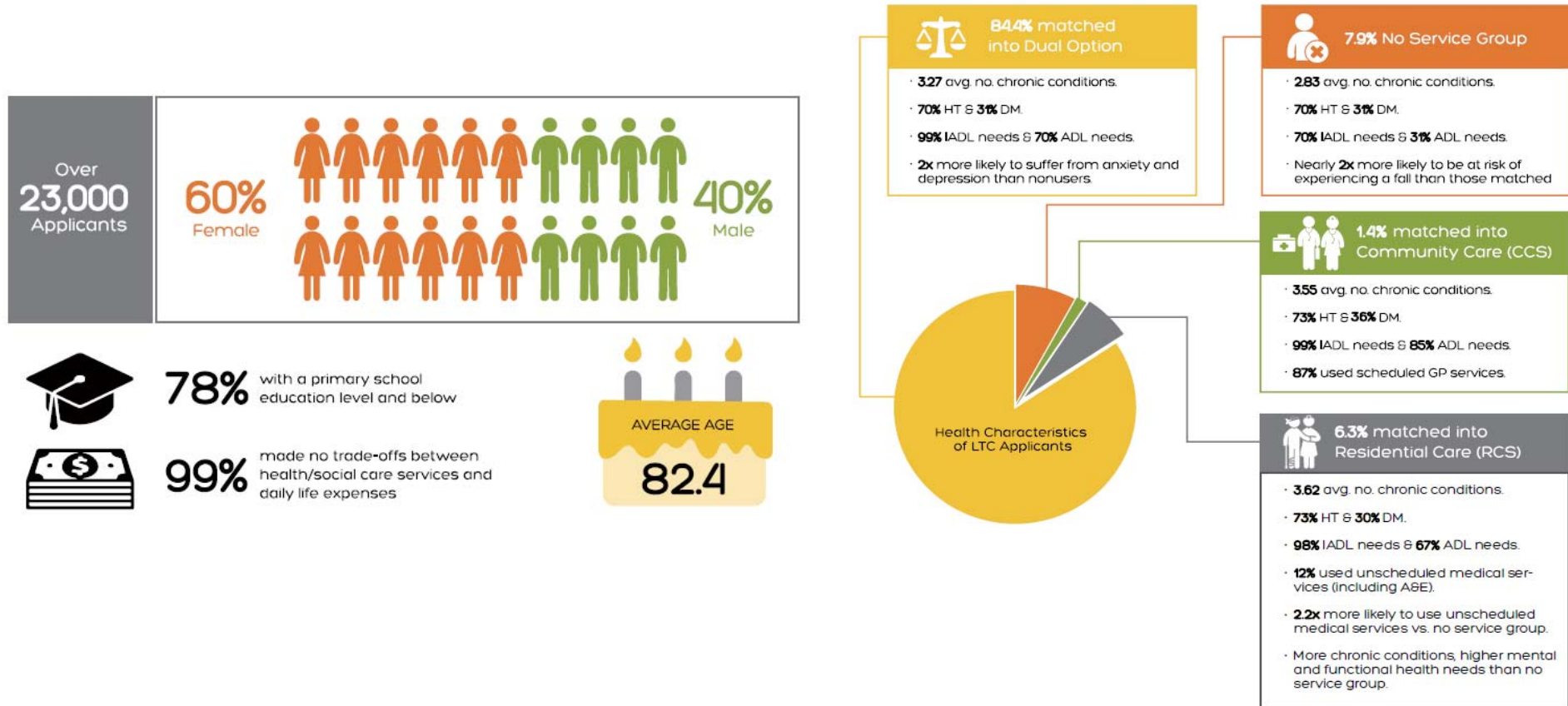


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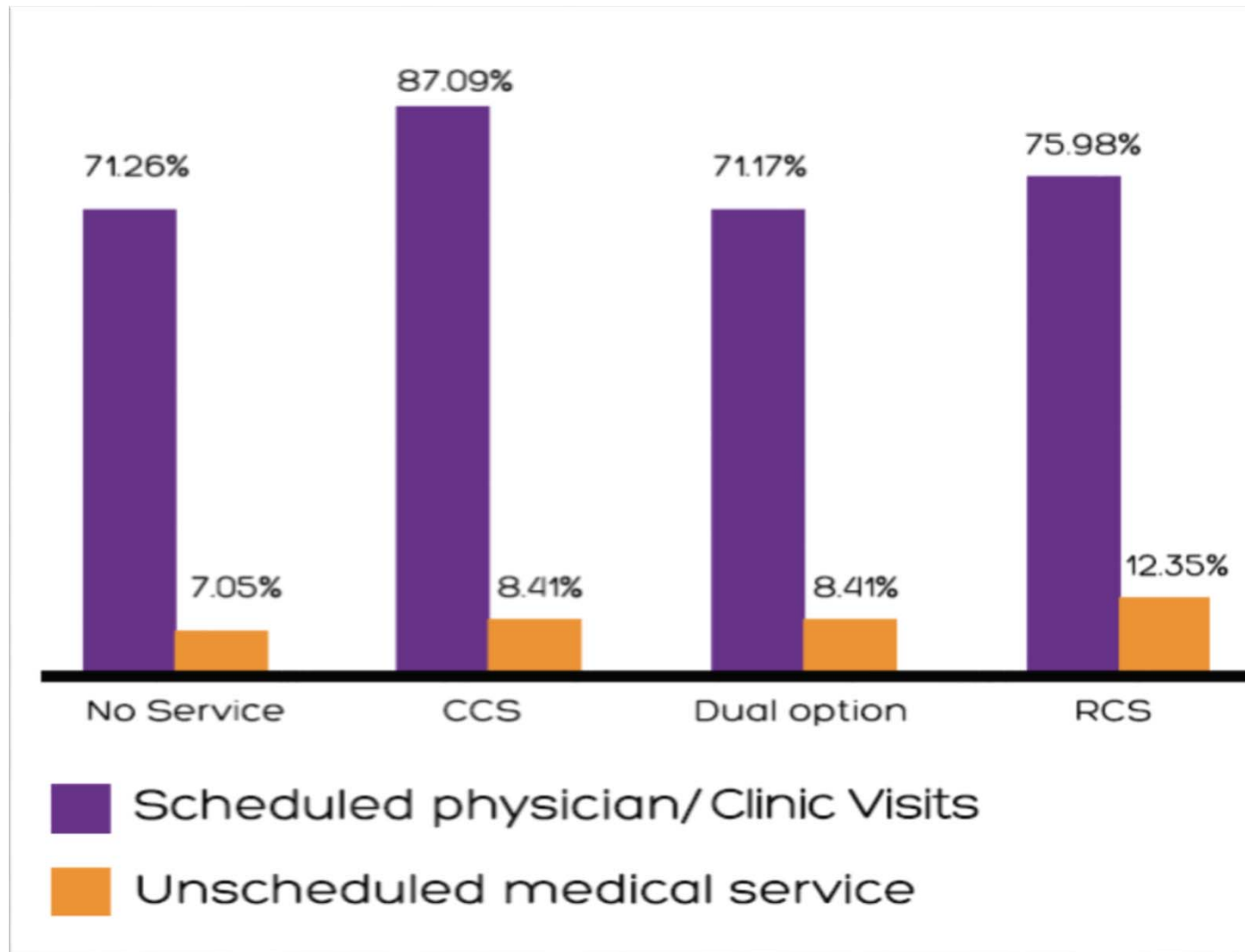
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Profile of Long Term Care Applicants



Source: Our Hong Kong Foundation

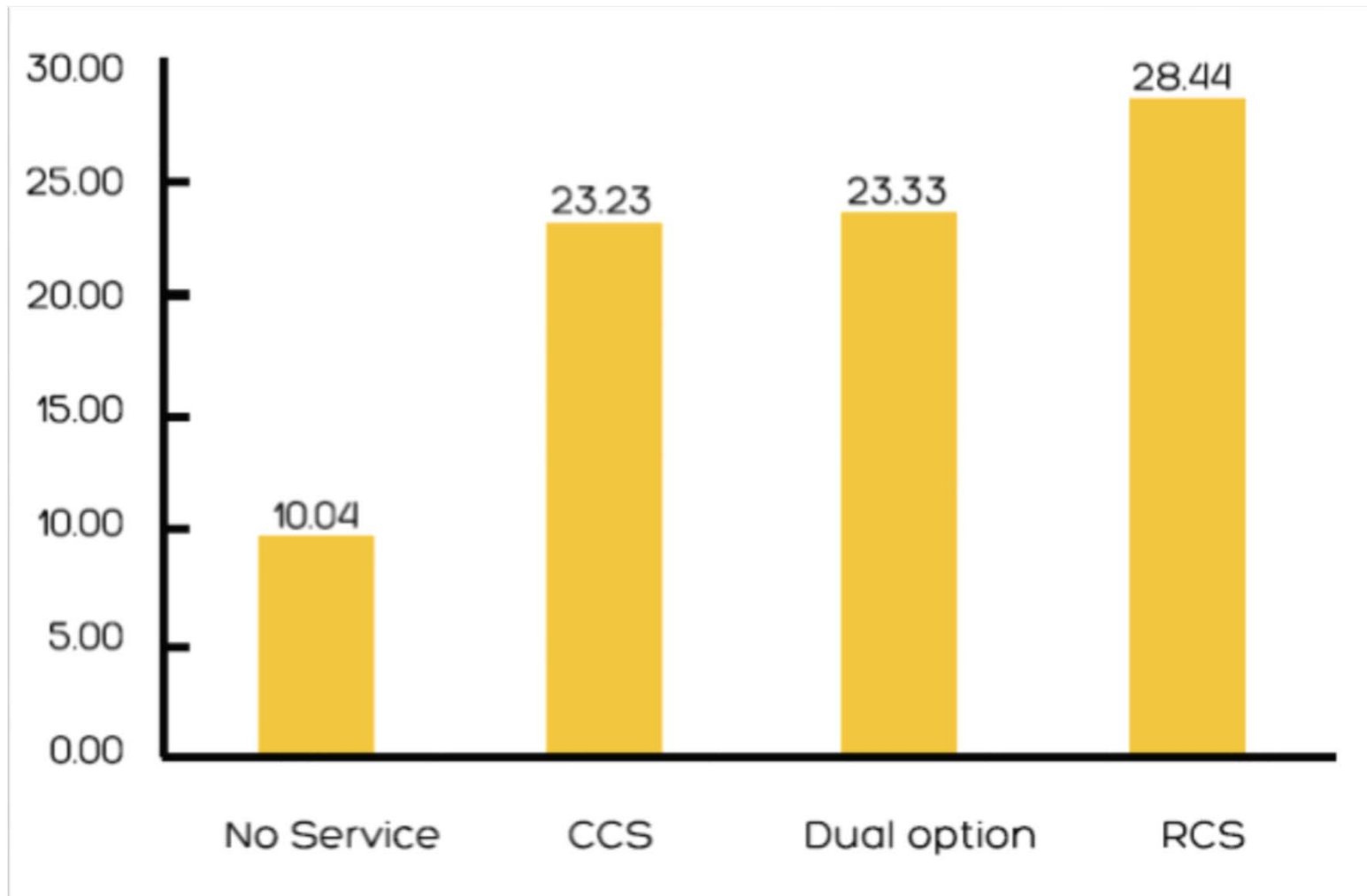
Utilization of Healthcare Services



Date source: Social Work Department (2013-2014); Our Hong Kong Foundation



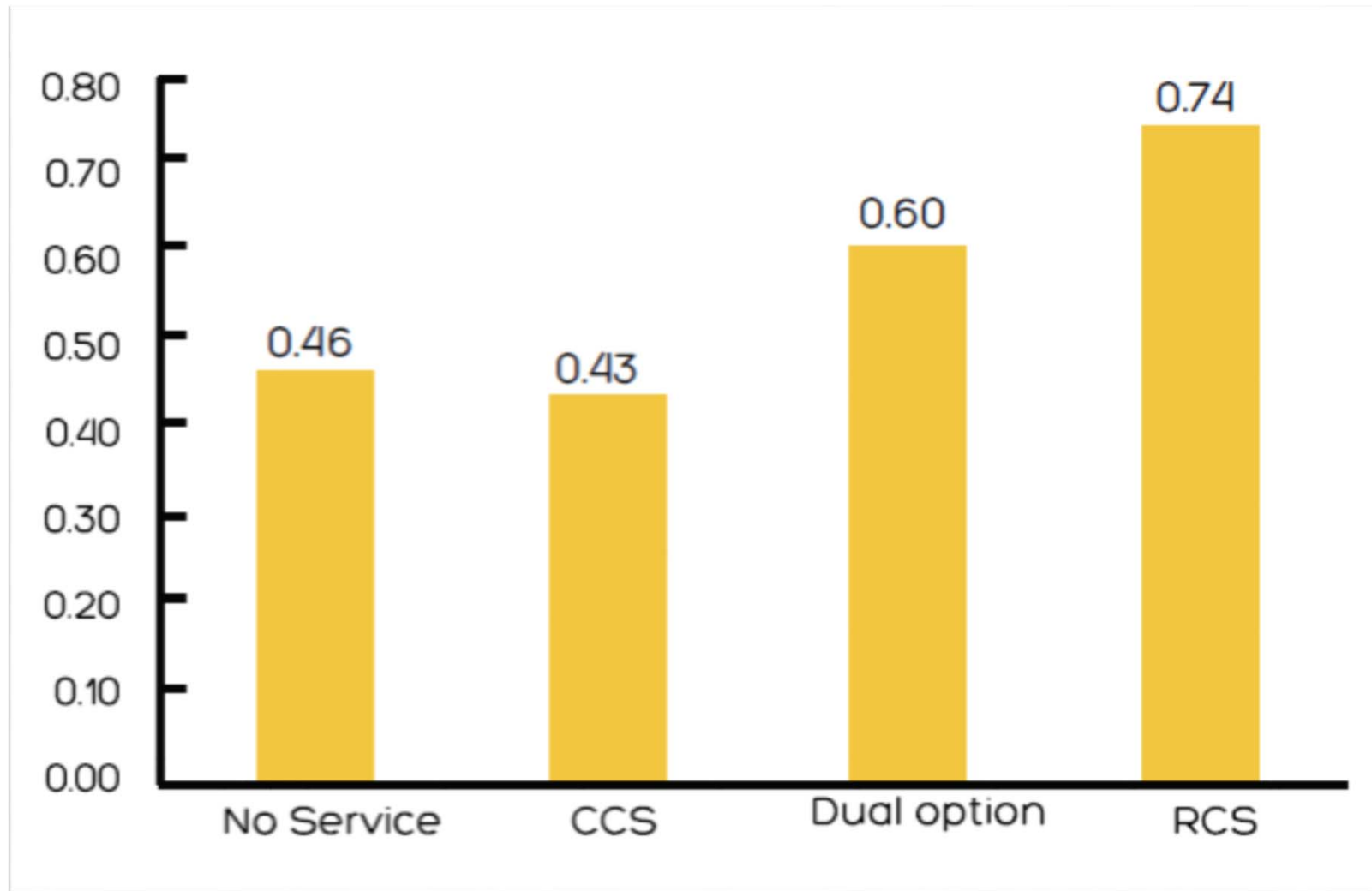
Index of Functional Health (IADLs and ADLs)



Date source: Social Work Department (2013-2014); Our Hong Kong Foundation



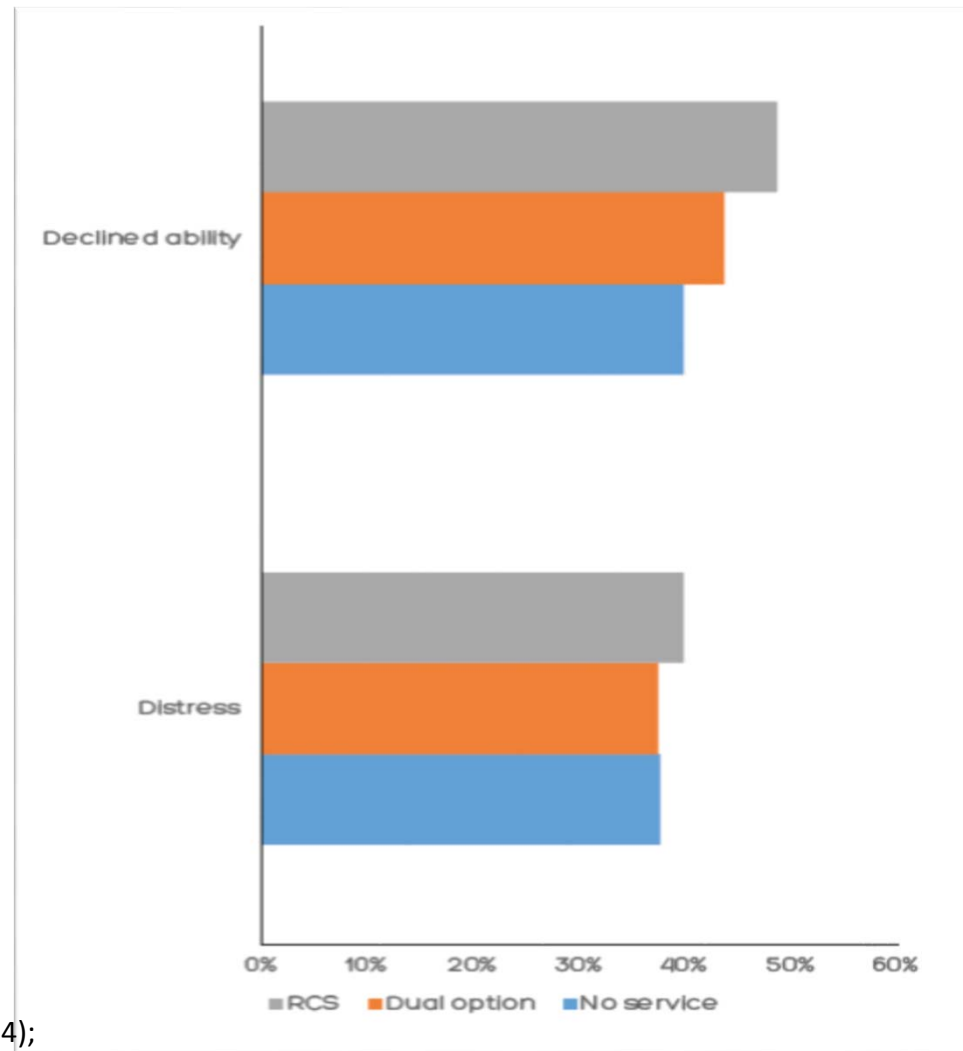
Index of Mental Health Needs



Date source: Social Work Department (2013-2014); Our Hong Kong Foundation



Psychological Status of Primary Caregivers of Older People



Date source:
Social Work Department (2013-2014);
Our Hong Kong Foundation

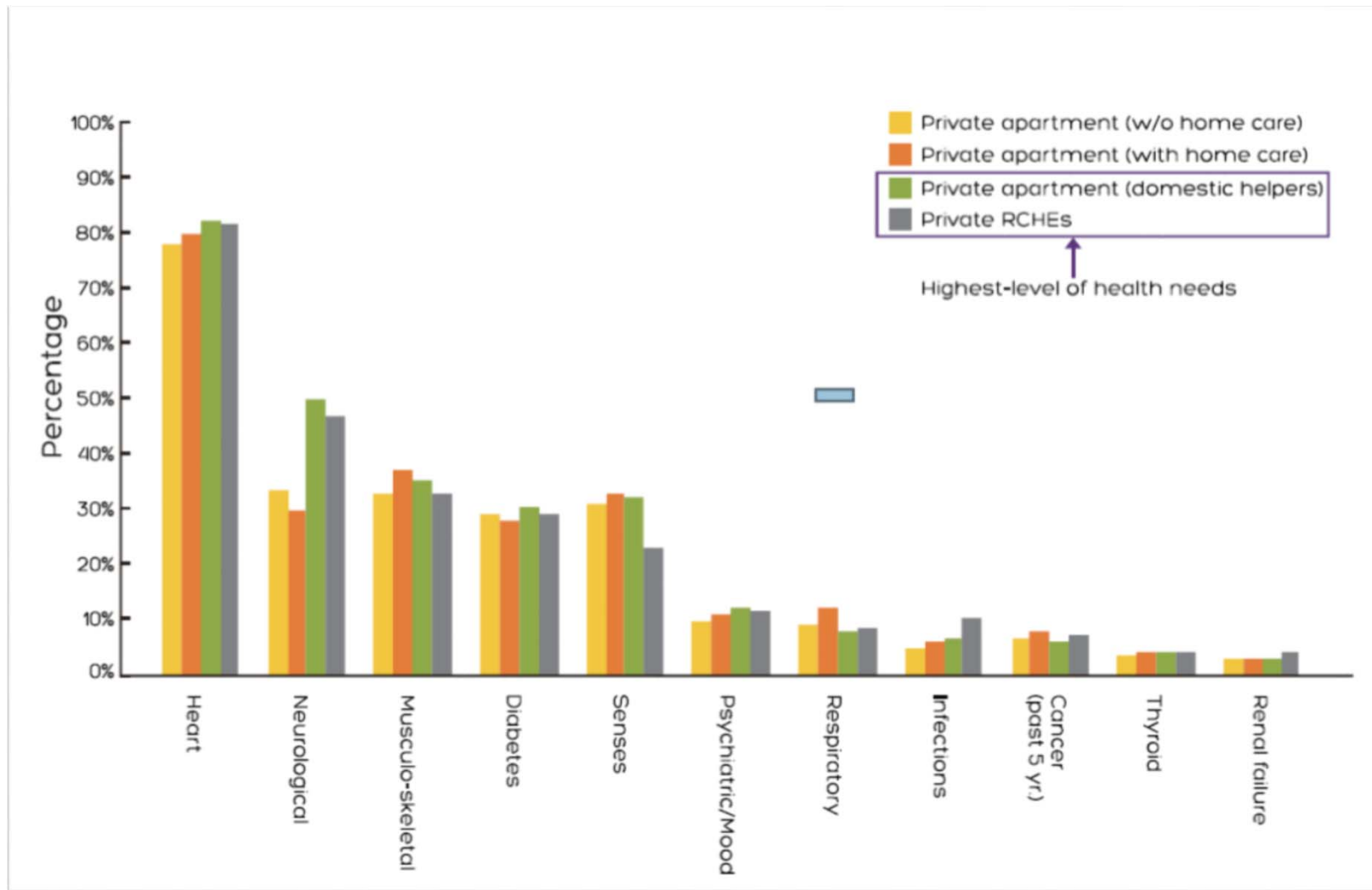


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Health Needs in Applicants for Long Term Care with Different Living Arrangements



Date source: Social Work Department (2013-2014); Our Hong Kong Foundation





Health System Transformation to be “Fit-for-purpose”

Healthcare Delivery System

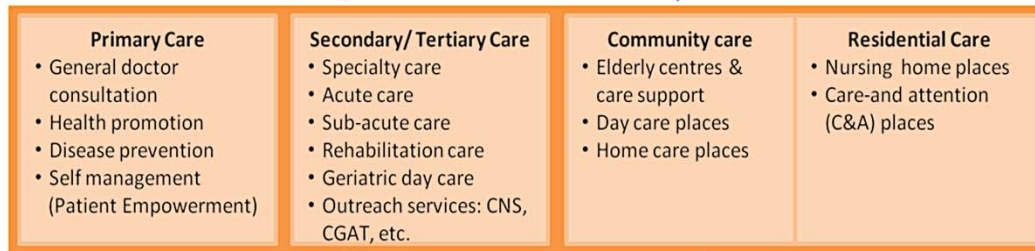
Organisation of Healthcare

- Public & private Provision
- Financing



Healthcare Delivery

- Types of care
- Public & private



Horizontal & vertical integration for continuity in transition

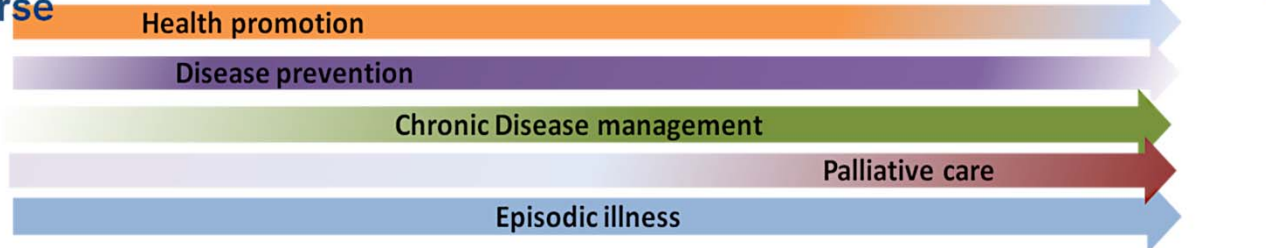
Availability
Accessibility

Affordability
Acceptability

Needs and Demand for Care

Robust – Frail – Disabled – Dependent – End of Life
Multiple Chronic Diseases and Multiple Morbidity
Social Needs

Life Course



Temporal integration for continuity in life course



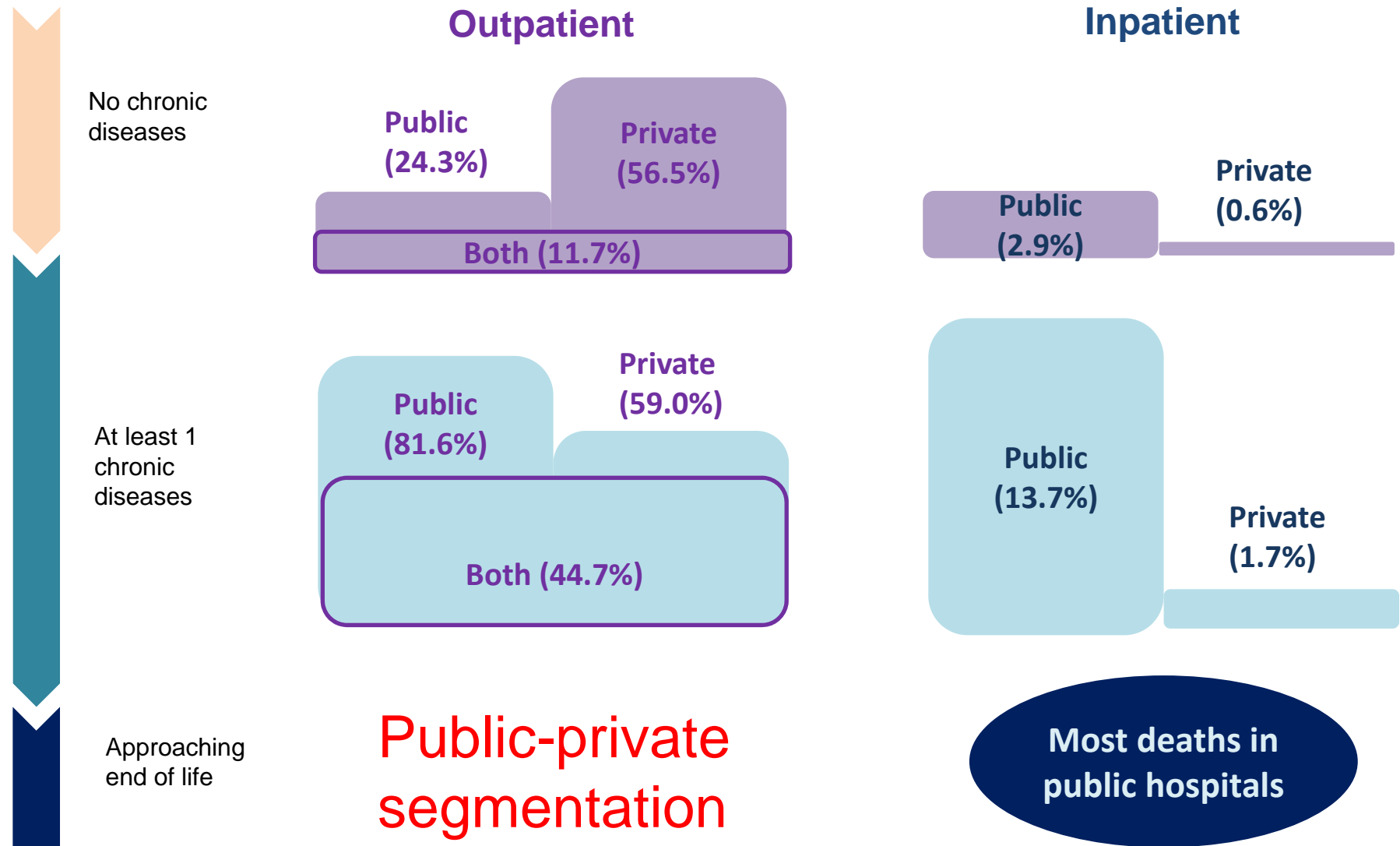
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Source: HMRF Commissioned Study: Quality of Healthcare for the Ageing – Health System and Service Models to Better Cater for an Ageing Population

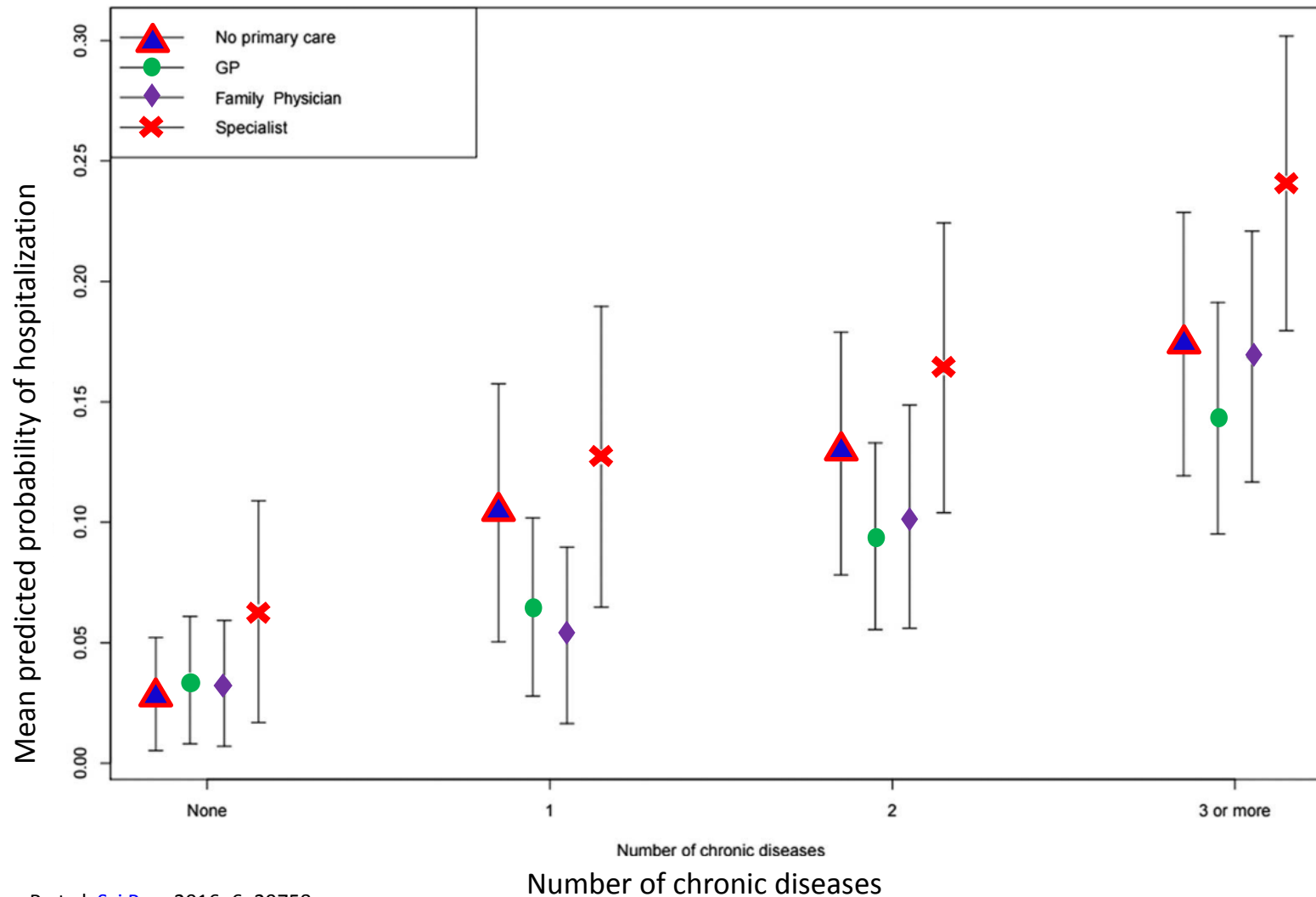
Hong Kong Elderly



Source: Census and Statistics Department, HKSAR. Thematic Household Survey No. 50.



Impact on Hospitalisations Associated with Chronic Diseases is Modified by Sources of Care



Source: Chung R et al. [Sci Rep.](https://doi.org/10.1038/s41598-016-02975-8) 2016; 6: 29758

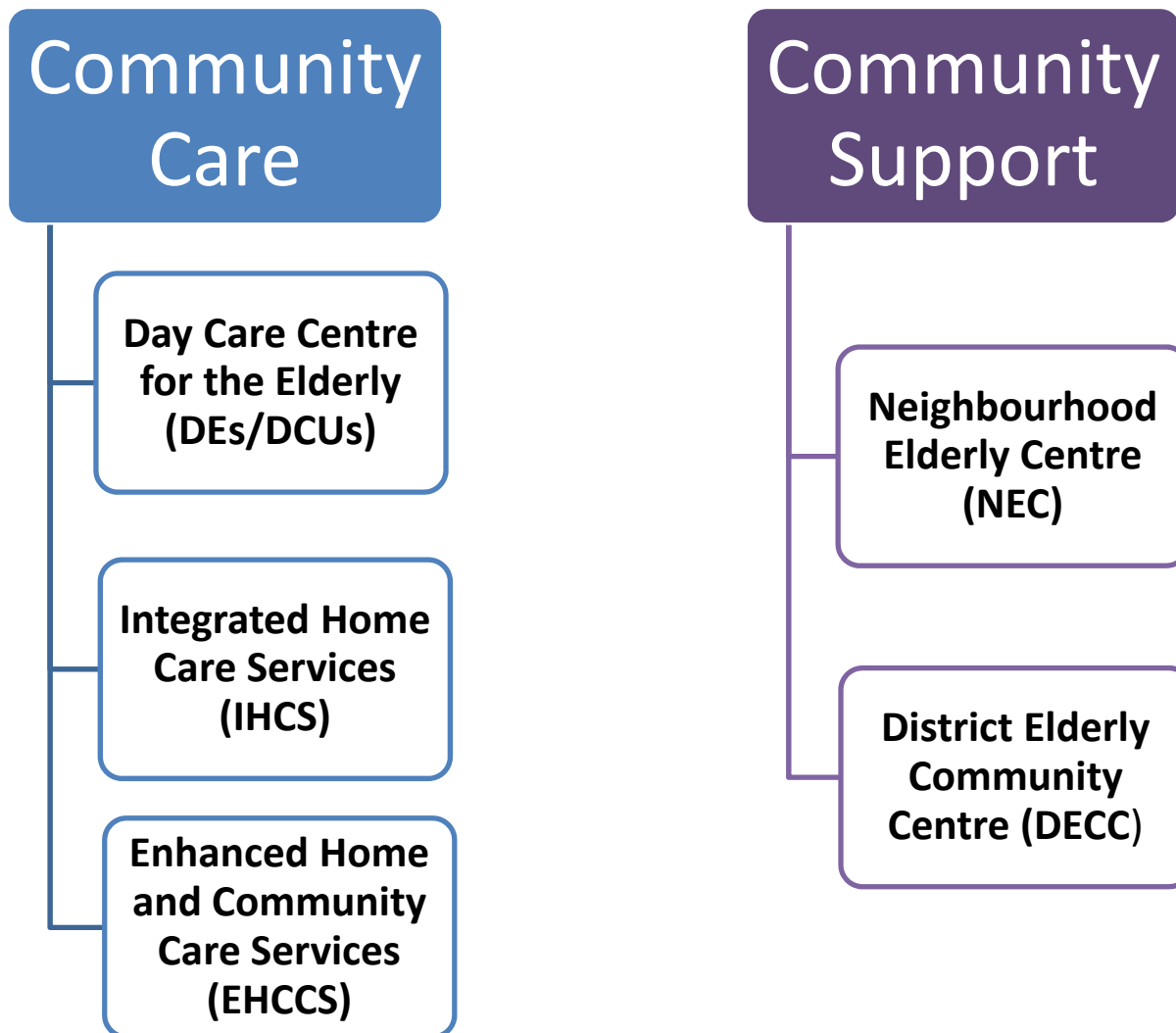


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Community Care and Support Services in Hong Kong



Community Care and Support Services in Hong Kong

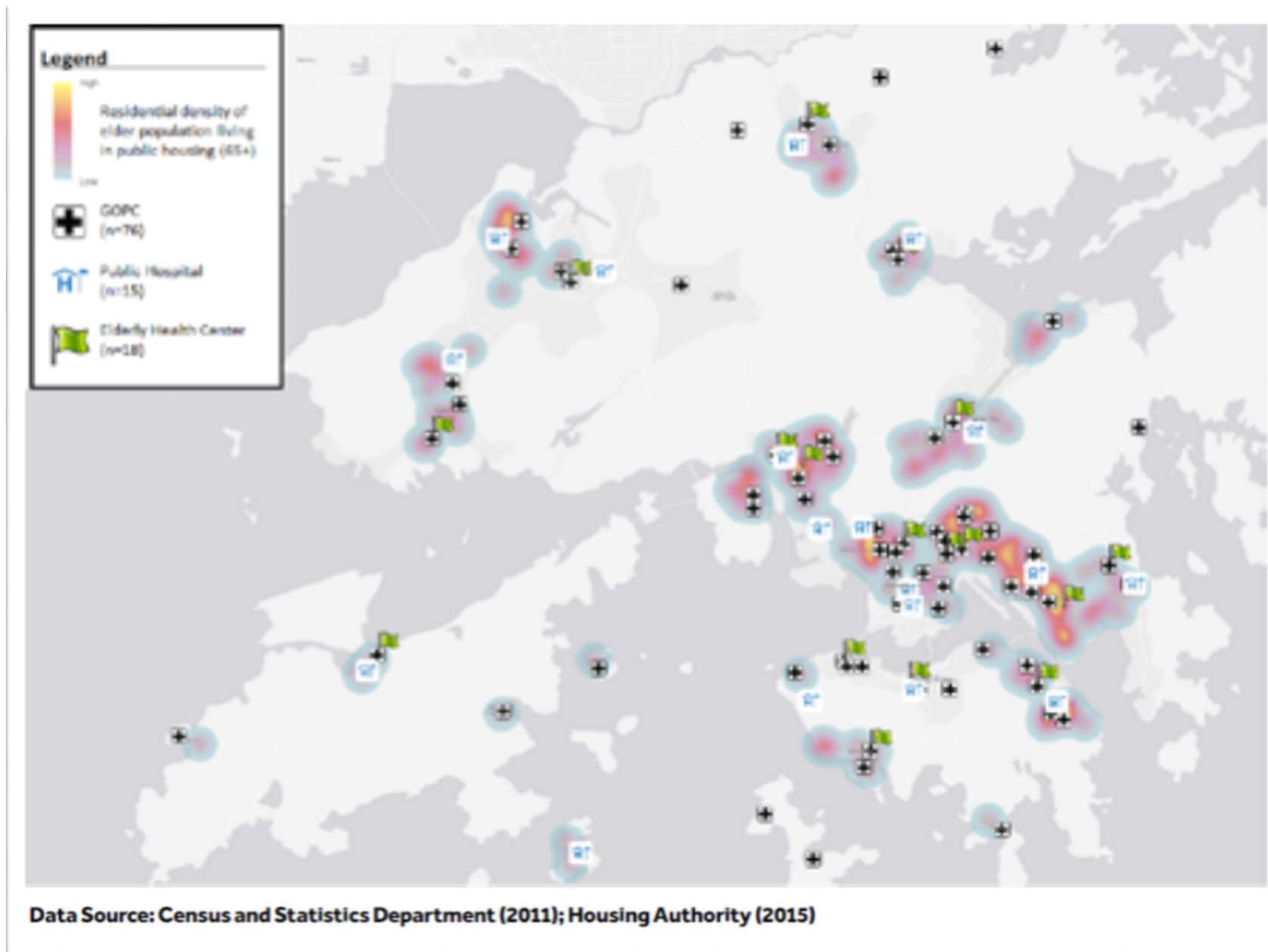
Number of Centres	
Day Care Centre for the Elderly (DEs/DCUs)	76
Neighbourhood Elderly Centre (NEC)	169
District Elderly Community Centre (DECC)	41



Districts and Organisations under HA and SWD

Districts	Clusters under HA		Welfare Offices under SWD
Eastern	Hong Kong East		Eastern and Wan Chai District Social Welfare Office
Wan Chai			
Islands	Lantau Island: Kowloon West	Other Islands: Hong Kong East	Central Western, Southern and Islands Welfare Office
Central and Western	Hong Kong West		
Southern			
Yau Tsim Mong	Kowloon Central		Kowloon City and Yau Tsim Mong Welfare Office
Kowloon City			
Wong Tai Sin			Wong Tai Sin and Sai Kung District Social Welfare Office
Kwun Tong	Kowloon East		Kwun Tong District Social Welfare Office
Sai Kung			Wong Tai Sin and Sai Kung District Social Welfare Office
Sum Shui Po	Kowloon West		Sham Shui Po District Social Welfare Office
Kwai Tsing			Tsuen Wan and Kwai Tsing District Social Welfare Office
Tsuen Wan			
Sha Tin	New Territories East		Shatin District Social Welfare Office
Tai Po			Tai Po and North District Social Welfare Office
North			
Tuen Mun	New Territories West		Tuen Mun District Social Welfare Office
Yuen Long			Yuen Long District Social Welfare Office

Location of Primary Care Service Facilities vs Residential Density of Older People in Public Housing



Distribution of Long Term Care Services vs Residential Density of Older People



Data Source: Social Work Department(2016); Housing Authority(2015); Census and Statistics Department(2011)



Recommended Service Model Components for System-wide, Hospital and Community Integrated Care

Recommended model: System integration via primary care-led hubs and community networks

1: Enabling policies & shared values

3: Multi- and inter-disciplinary services

5: Care for patients with dementia

2: Training and education

4: Shared medical or service use records

Hospital and inpatient network

6: Screening and needs assessments for care planning

7: A&E multidisciplinary community referral (MCR)

8: Inpatient assessment and discharge support team (ADST)

9: Medical support for community care homes

Primary care hub and community network

10: Enhanced community manpower and skills

11: Public-private primary care coordination

12: Equitable service access

13: Patient centered care, community engagement and caregiver support

EOL care for terminal illness and life-limiting conditions





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Community-centric Health System

Community-centric Health System

- Population approach
- Community-based hubs
- Person(alised) specific
- Integrated care



Definition of Community

“A community is a group of people who have common characteristics or interests. Communities can be defined by: geographical location, race, ethnicity, age, occupation, a shared interest or affinity (such as religion and faith) or other common bonds, such as health need or disadvantage”

Source: The National Institute for Health and Care Excellence (NICE)



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Elements of Sense of Community & their Hypothesised Relationships

1. Membership

- Boundaries: Common symbol system
 - Emotional safety: Personal investment
- Diagram illustrating hypothesised relationships for Membership:
- A downward arrow points from "Boundaries" to "Emotional safety".
 - An upward arrow points from "Personal investment" to "Sense of belonging and identification".
 - A second upward arrow points from "Sense of belonging and identification" to "Common symbol system".

2. Influence

- Member openness to influence ← → power of member to influence
- Member need for consensual validation community's need for conformity

3. Integration and fulfillment of needs

- Degree communities successfully facilitate person-environment fit

4. Shared emotional connection

- Shared emotional connection
- High-quality interaction

Source: McMillan DW, Chavis DM (1986). Sense of community: a definition and theory. Journal of Community Psychology



Definition and Theory of Sense of Community

- Territorial and geographical
- “Relational” - “Quality of character of human relationship”

Definition has 4 elements

- **Membership** – feeling of belonging or of sharing a sense of personal relatedness
- **Influence** – sense of mattering, of making a difference to a group and of the group mattering to its members
- **Reinforcement** – integration and fulfillment of needs
- **Shared emotional connection** – commitment and belief that members shared and will share history, common places, time together, and similar experiences

Source: McMillan DW, Chavis DM (1986). Sense of community: a definition and theory. Journal of Community Psychology



Theory of Community Well-being

- Communities are diverse
- Communities of place and communities of interest
- Community wellbeing and individual wellbeing are linked
- Community wellbeing concerns social relationships between people
- Interventions can influence communities
- Community conditions affect wellbeing
- Interventions by government and organisations can help improve wellbeing
- Community wellbeing depends on people, places and power

Source: South JAS, Bagnall A-M (2016) Building community wellbeing – an initial theory of change



Building Communities

- **Bonding social capital** closer connections between people characterized by strong bonds e.g. among family members & close friends
- **Bridging social capital** distant connections between people characterized by weaker cross-cutting ties e.g. business associates & acquaintance
- **Linking social capital** connections with people in positions of power

Source: Institute of Public Care Community Building (2010)



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Empowering and Engaging People

- **Purpose** is to unlock community and individual resources for action at all levels
- Empower individuals to make effective decisions about their own health and co-producers of health services
- Communities are enabled to become actively engaged in co-producing healthy environments, providing care services in partnership with the health sector

Source: WHO (2015) WHO Global Strategy on People-centered and Integrated Health Services



Empowering and Engaging People & Co-production of Health

- **Empowering people**
 - supporting people and communities to take control of their own health needs
 - uptake of healthier behaviours
 - ability of people to self-manage their own illnesses
 - changes in people's living environments
 - empowerment at different levels is mutually reinforcing level of individual, carer and the family or household specific population group / community

Source: WHO (2015) WHO Global Strategy on People-centered and Integrated Health Services



Empowering and Engaging People & Co-production of Health

- **Engaging community**
 - engaging people and communities in the design, planning and delivery of health service
 - participate in strategic decision-making on how, where and on what health resources should be spent
 - enabling choices about care and treatment options
 - community's capacity to self-organized and generate changes in their living environment
 - providing opportunities for communities to develop knowledge, skills and confidence
 - support public policies that promote health services that better meet their needs

Source: WHO (2015) WHO Global Strategy on People-centered and Integrated Health Services



Empowering and Engaging People & Co-production of Health

- **Fostering co-production**
 - care delivered in an equal and reciprocal relationship between clinical and non-clinical professions & the individuals using care services, their families, carers and communities
 - a long-term relationship between people, providers and health systems where information, decision-making and service delivery become shared

Source: WHO (2015) WHO Global Strategy on People-centered and Integrated Health Services



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MCP – Multispecialty, Community-based, Provider

1. A new care model of integrated providers
2. Combines the delivery of primary care and community-based health and care services
3. ‘Care-hubs’ of integrated teams
4. Serves a community of 30-50,000 people
5. Defining feature is the registered list
6. Also covers the specified unregistered population
7. Single, whole-population budget for all the services

Source: NHS (2016) New care models



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MCP Care Model Operated at 4 Different Levels:

1. Whole population level aims to address determinants of health and tackle inequalities, builds social capital by mobilizing citizens, local employers and the voluntary sector
2. For people with self-limited conditions, a more coherent and effective local network of urgent care
3. People with ongoing care needs provide a broader ranges of services in the community more joined-up between primary, community, social and acute care services, physical and mental health
4. Patients with very high needs and costs, an “extensive care” service

Source: NHS (2016) New care models



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