

resonance in design research for senior living

Institute of Ageing, CUHK

Rina Ko

Chinachem Group

Sustainability Conference 2021

7 May 2021



resonance in design research for senior living

1. senior living & health
2. integrate care model in residence
3. partner with seniors for design

design research

senior living & health

challenges...

covid 19

health characteristics

aspiration & status



Hong Kong / Law and Crime

Elderly Hong Kong couple found dead, husband believed to have killed himself

- According to police, pair's son found them at their North Point flat on Saturday evening
- The pair were rushed to Ruttonjee Hospital in Wan Chai, but were certified dead soon afterwards



South China Morning Post (2021.04.25)

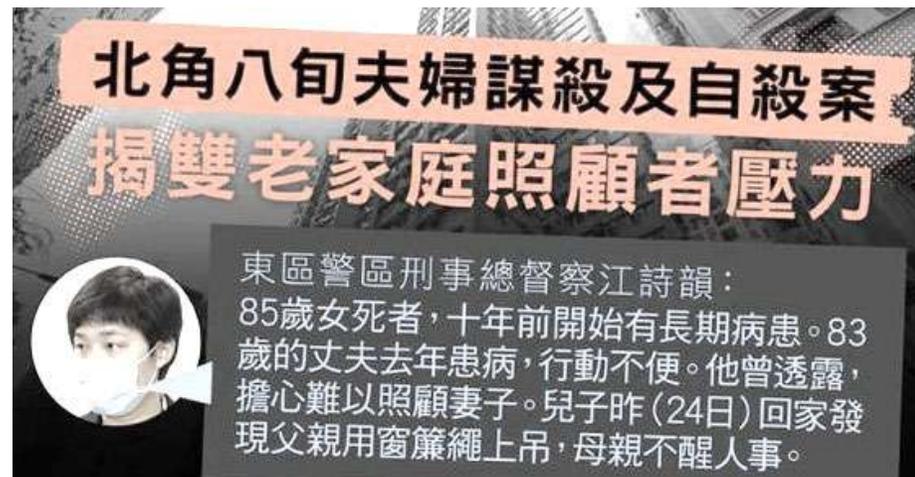
131



疫下暫託服務停 「就算有樓都唔代表無問題」

【明報專訊】「就算有樓都唔代表無問題。」獨力照顧妻子的八旬翁前晚被發現於北角私樓寓所吊頸，八旬老伴昏迷牀上，二人送院後不治。有同廈住戶表示，該廈有不少年老住戶，認為政府有責任多關顧長者。資深社工指出，政府的長者服務對象多為低收入家庭，或會忽略中產長者家庭需要；另外，雙老照顧容易令長者體力等透支，疫情下不少長者中心及日間暫託服務暫停，也導致年老照顧者失去喘息空間。

Ming Pao (2021.04.26)

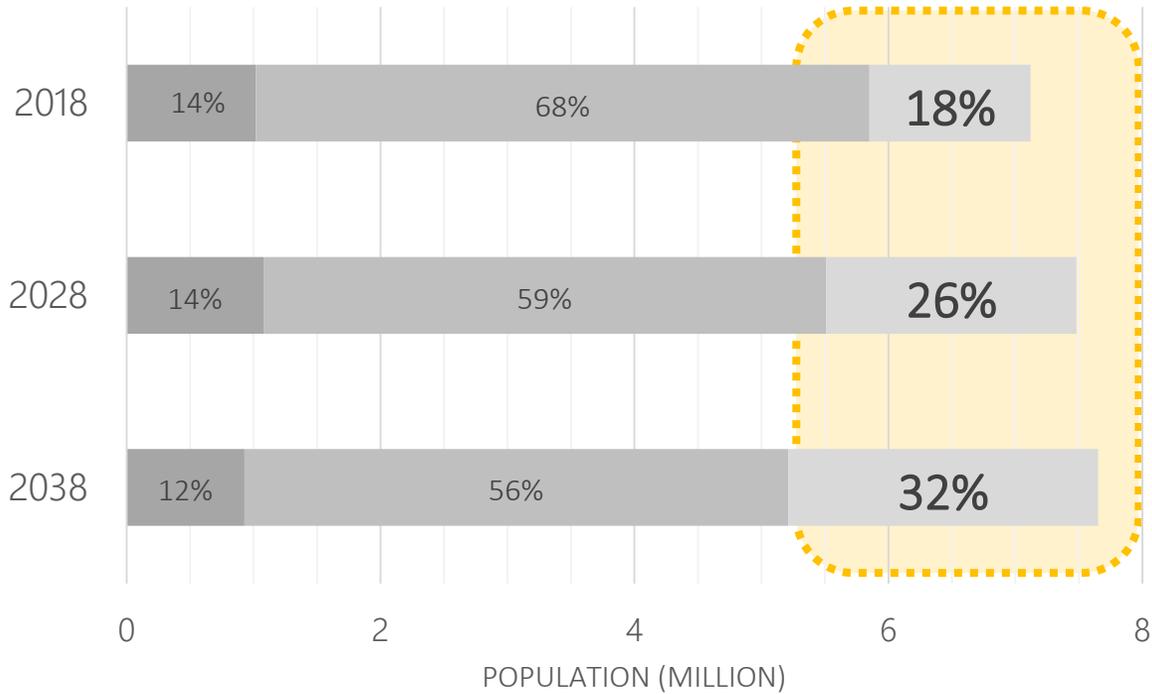


Stand News (2021.04.25)

lifespan

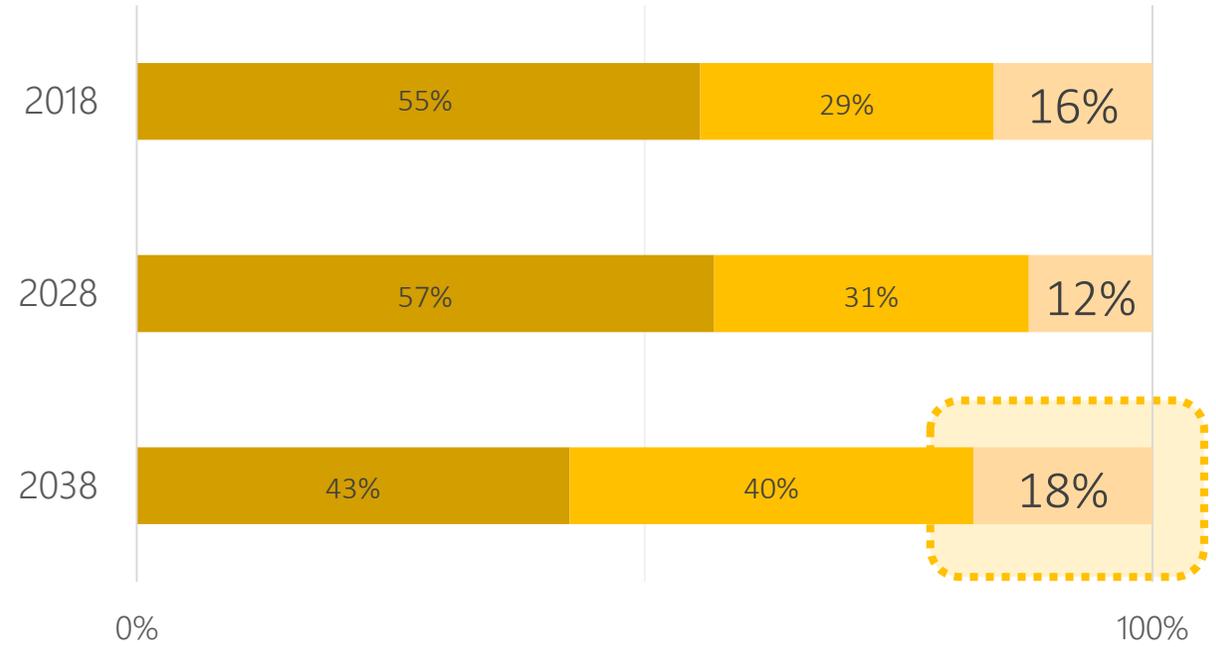
population

■ Below 18 ■ 18-64 ■ 65 and above

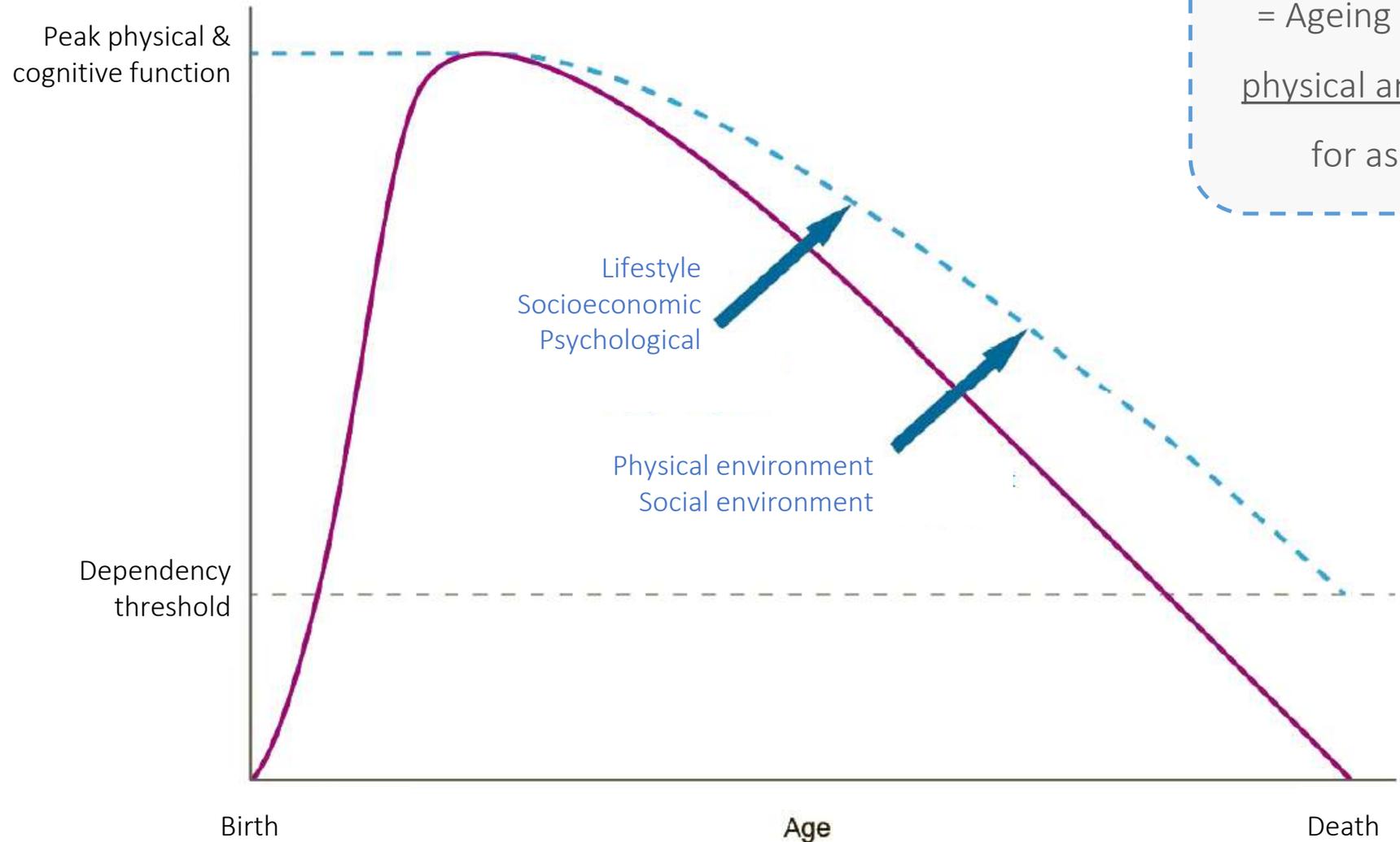


senior population

■ 65-74 ■ 75-84 ■ 85 and above



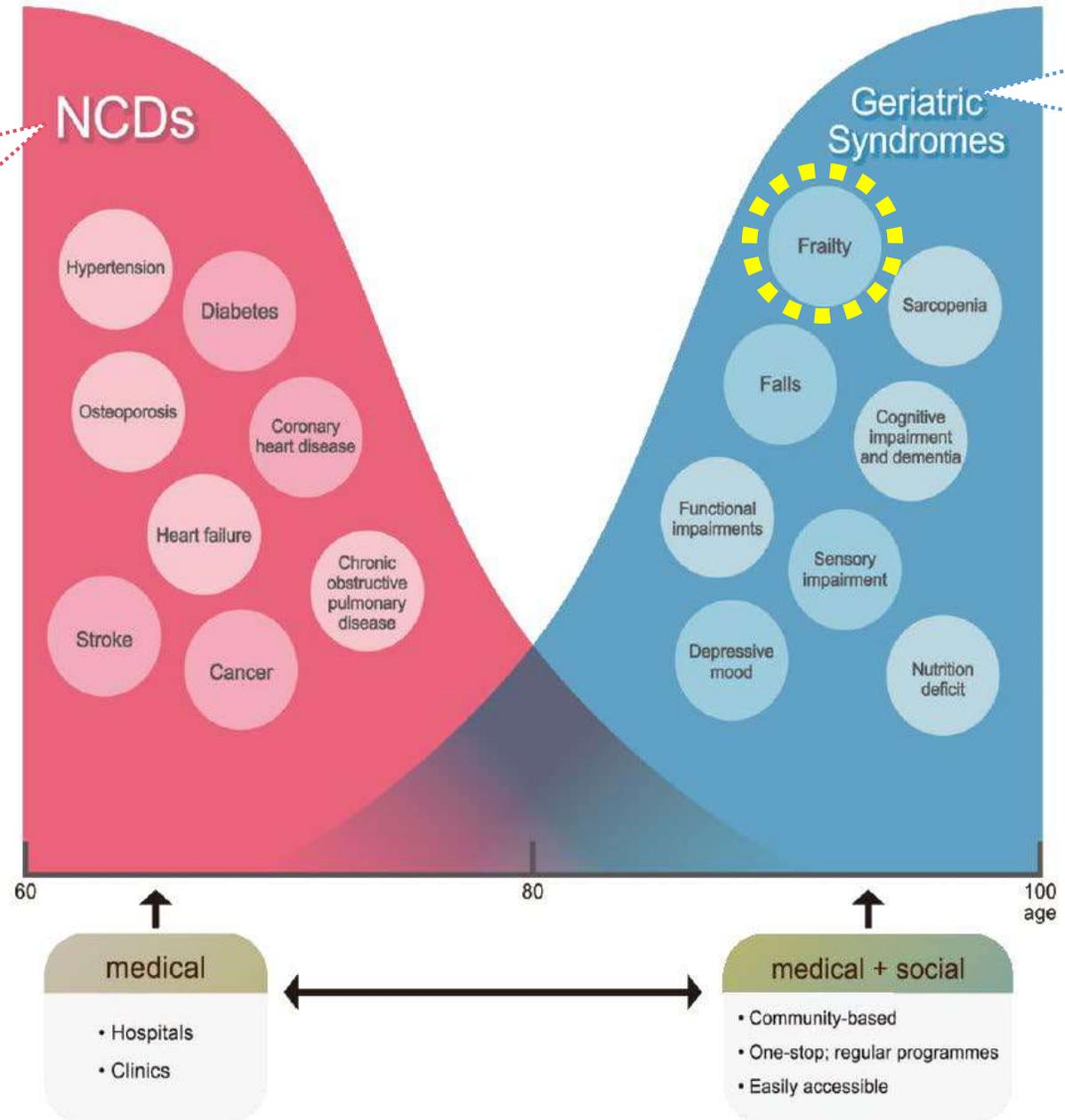
healthspan replaces lifespan



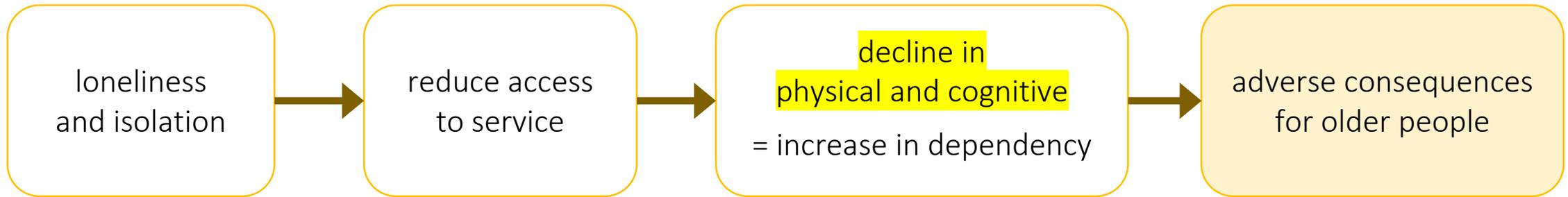
Healthy Ageing
= Ageing with preservation of physical and cognitive function,
for as long as possible.

health characteristics

Non-Communicable Disease
= long duration and generally slow progression
慢性病



Geriatric Syndromes
= multi-factorial risk factors that affects ageing
老年綜合症



Sky Post (2020)

South China Morning Post

Hong Kong / Society

Anxiety, isolation among Hong Kong's elderly amid Covid-19 pandemic – and how you can help



South China Morning Post (2020)

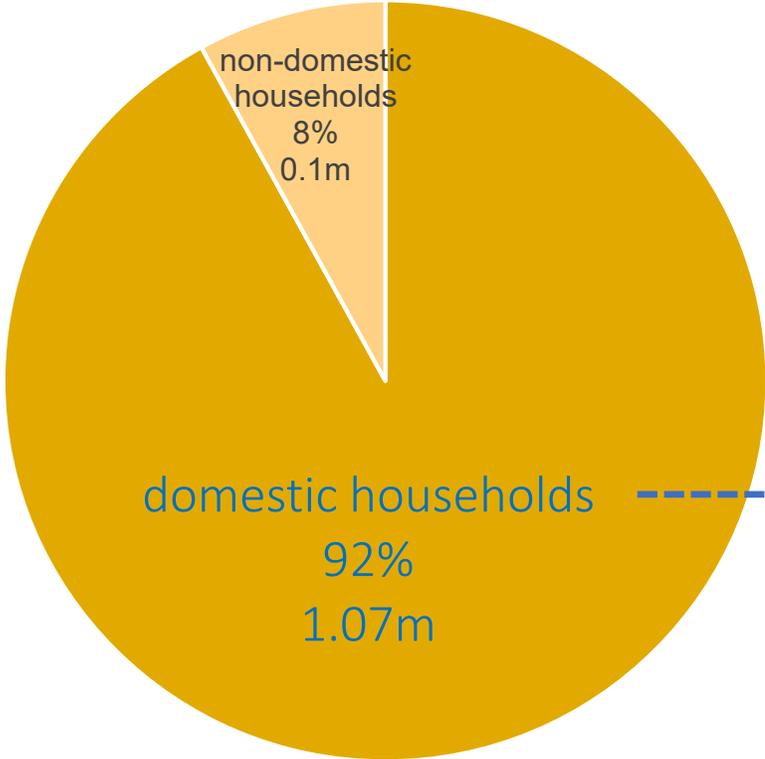
新冠肺炎 | 老無所「醫」 長者成疫情犧牲品？



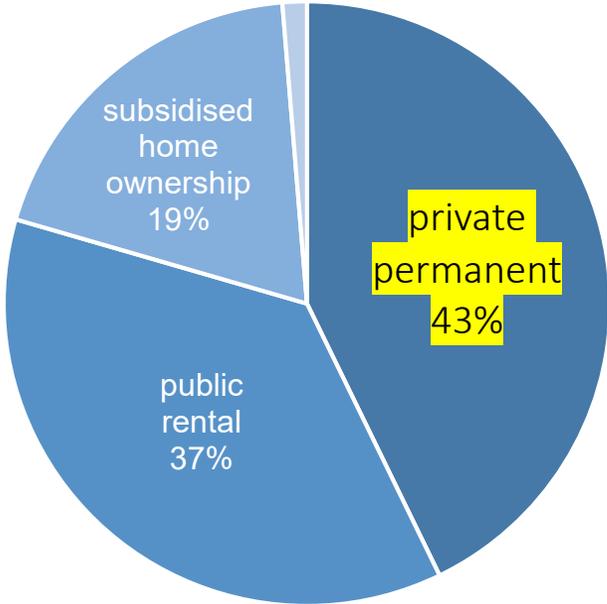
HK01 (2020)

housing characteristics

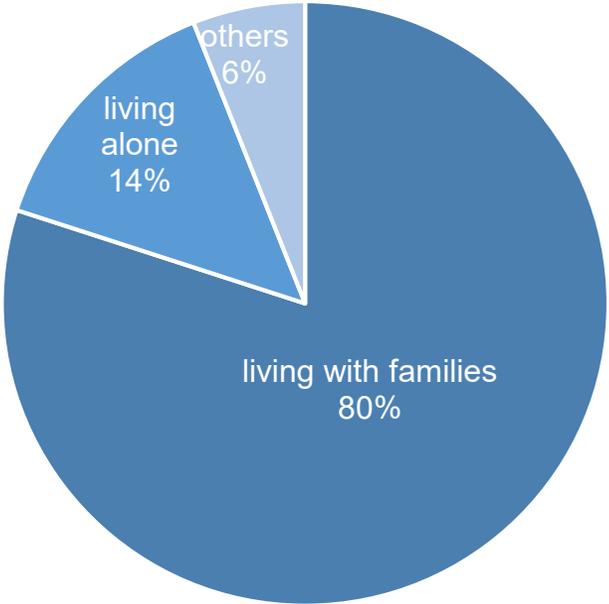
senior population = 1.17m



type of housing



living arrangement



Source: Census and Statistics Department (2018)

aspiration for senior living

survey 2021

445 respondents
aged 50+

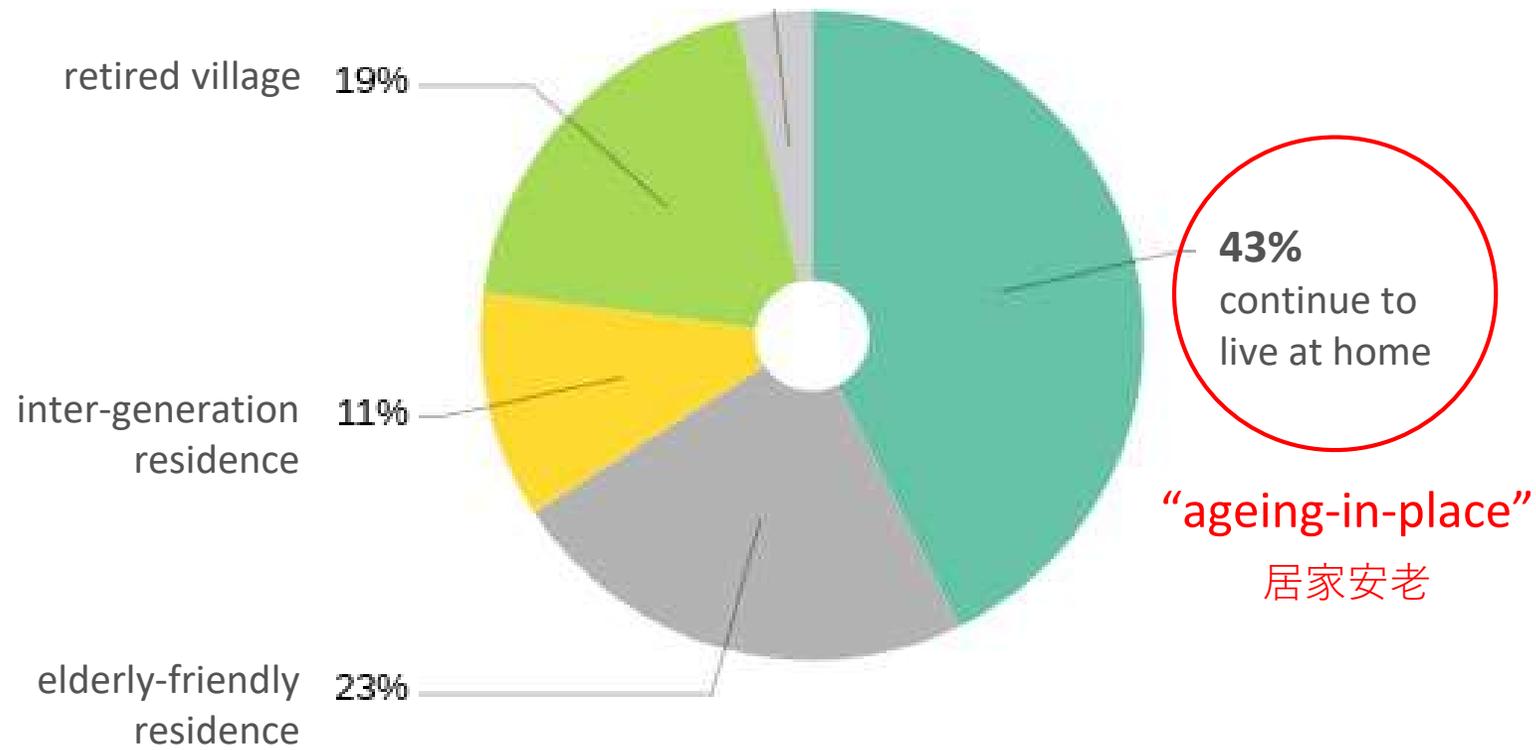
80% private housing

Chinachem
Residential Design Guide



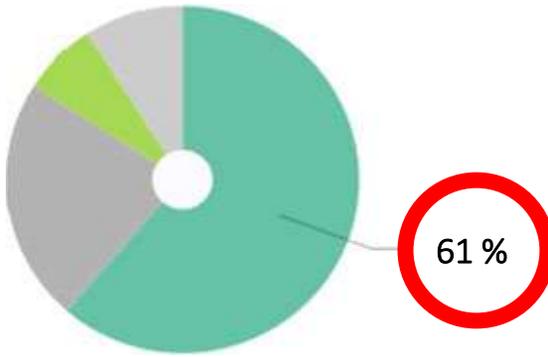
reference image: Chinachem Group (2021)

my future ideal residence ?

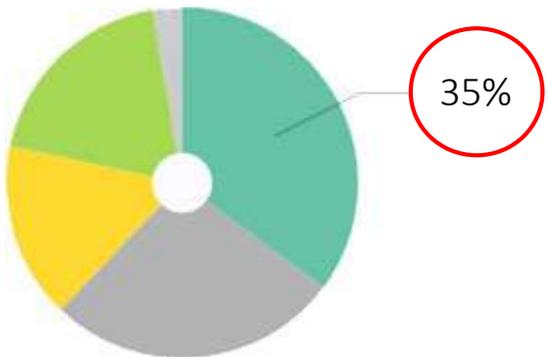


by type of housing:

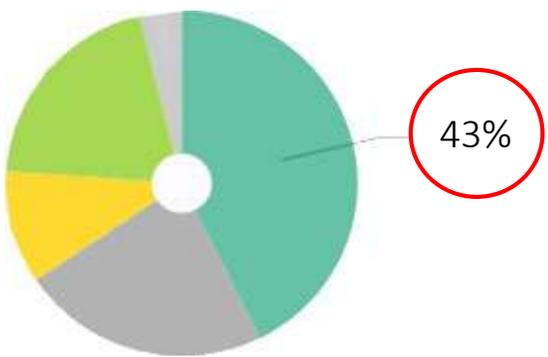
public rental



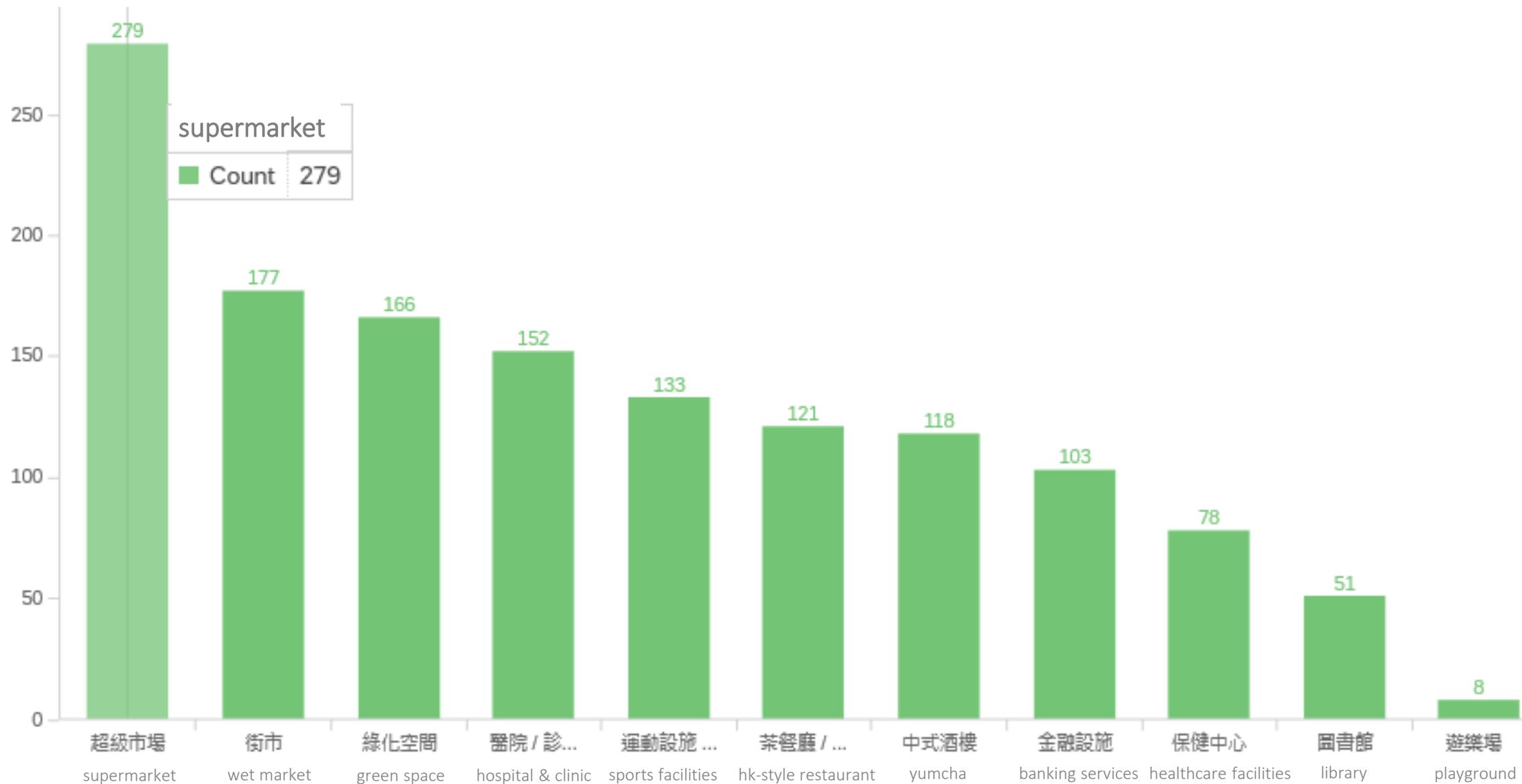
subsidized home ownership



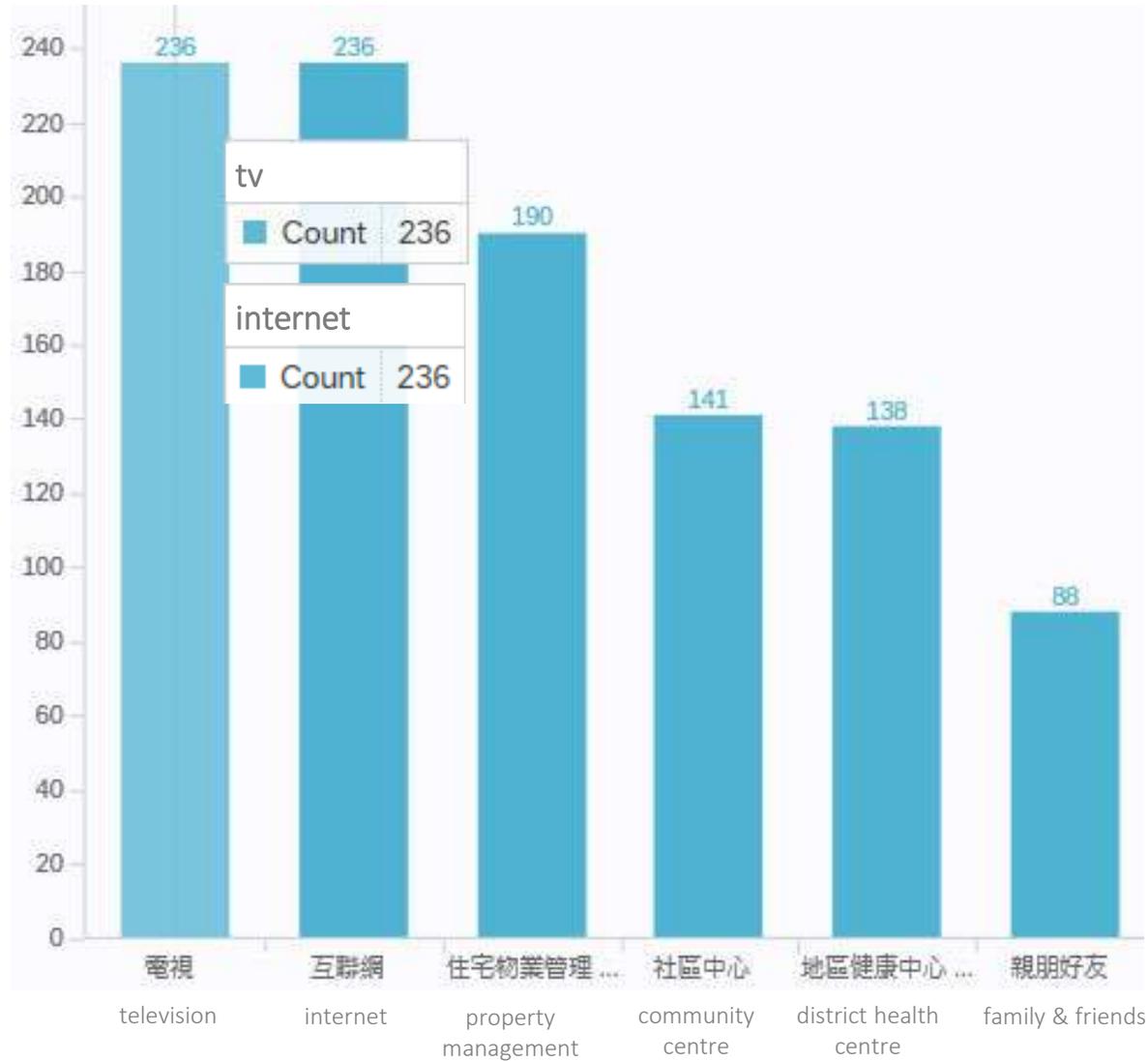
private



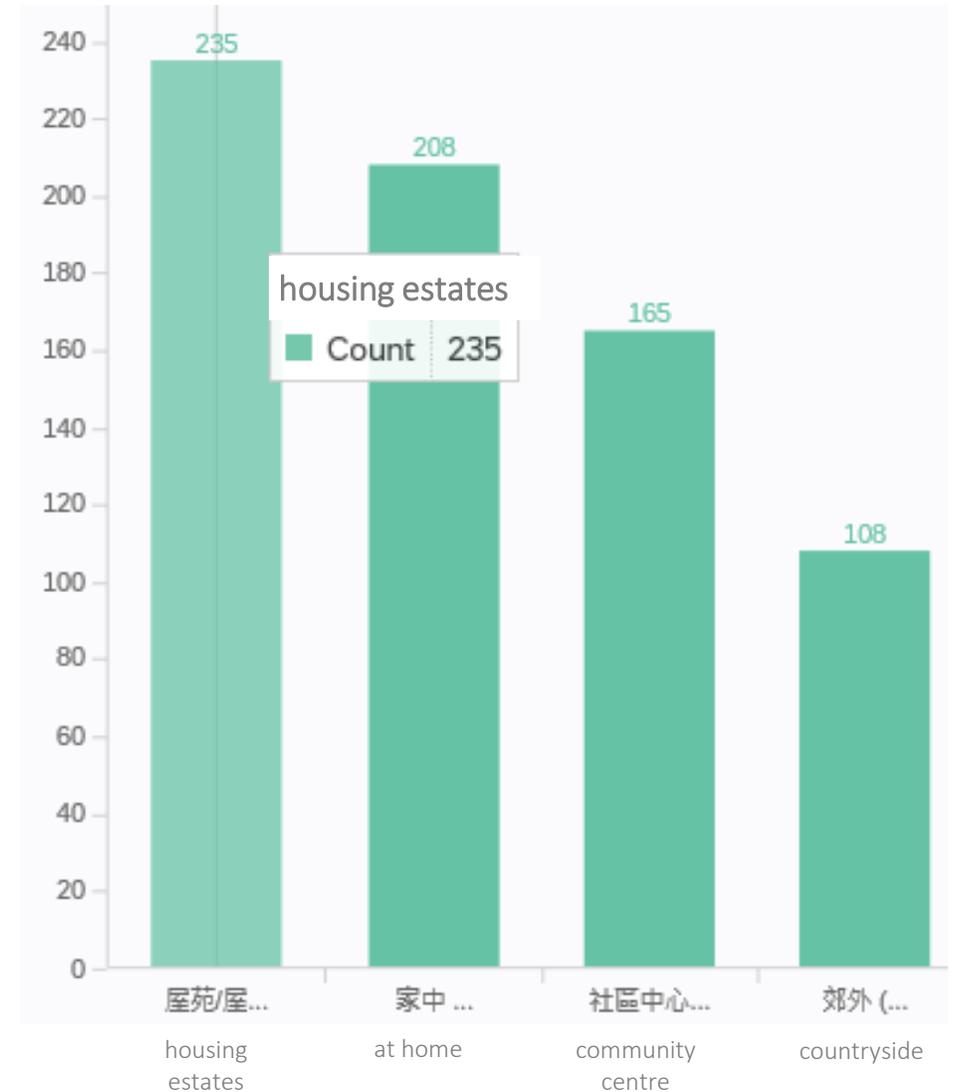
preferred facilities within 15 minutes walking distance?



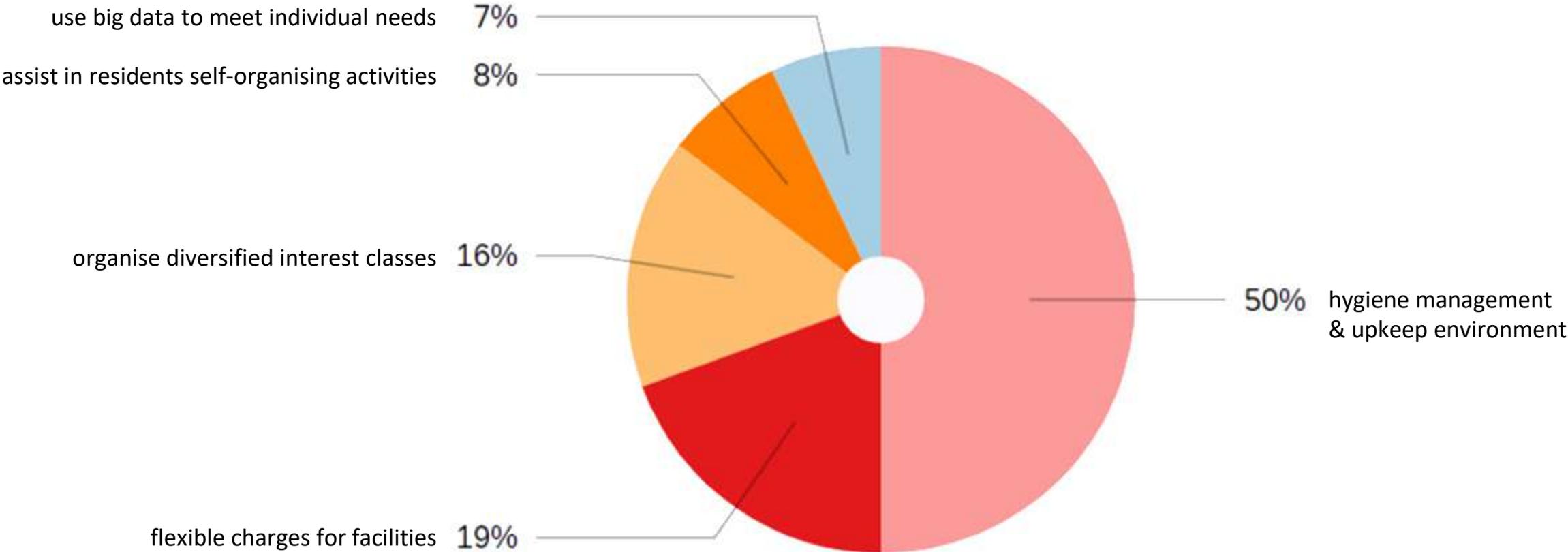
preferred channel for healthcare information?



preferred location for health-related activities?



expectations on property services ?





reference image: Research Features

增強互助...
... 鄰舍關係

Increase
neighbourhood
bonding

對獨居長者...
... 多加關注

Pay more attention to
single household elderly

一站式咨詢

One stop enquiry

定期有
個人健康評估

Regular personal body
checks

服務...

- 代購物
- 居家維修
- 緊急醫療/家居服務

Services

- Assist purchasing
- Home repairment
- Emergency medical and home services

線上智能家居...

- 監察居家者身體況
- 智能監察屋外情況

Smart Living

- Monitor elderly body status
- Detection of abnormal situations outside home

how we perceive age-friendliness in HK?

age-friendly city project

baseline 2018

9,785 respondents
(over 65% are seniors)
18 districts

Hong Kong Jockey Club

Age-friendly City Domains	Mean Scores	N
Social participation	4.29	9,705
Transportation	4.27	9,774
Respect and social inclusion	4.10	9,749
Communication and information	4.06	9,732
Outdoor spaces and buildings	4.04	9,782
Civic participation and employment	3.87	9,594
Housing	3.71	9,752
Community support and health services	3.67	9,743

Jockey Club Age-friendly City Project - Cross-district Report of Baseline Assessment on Age-friendliness (18 District), 2019.

views & findings on senior living



South China Morning Post (2019.07.22)

- * public rental housing - residents
- ... rated all 8 domains most positively

housing

- housing maintenance
- ageing-in-place (居家安老)
- barrier-free design

community support & health services

- insufficient and limited accessibility
- lack of sustainability, healthy lifestyle

senior living

integrate care model
in residence

stakeholders...

seniors

carers

property services

slow down ageing process – healthy ageing

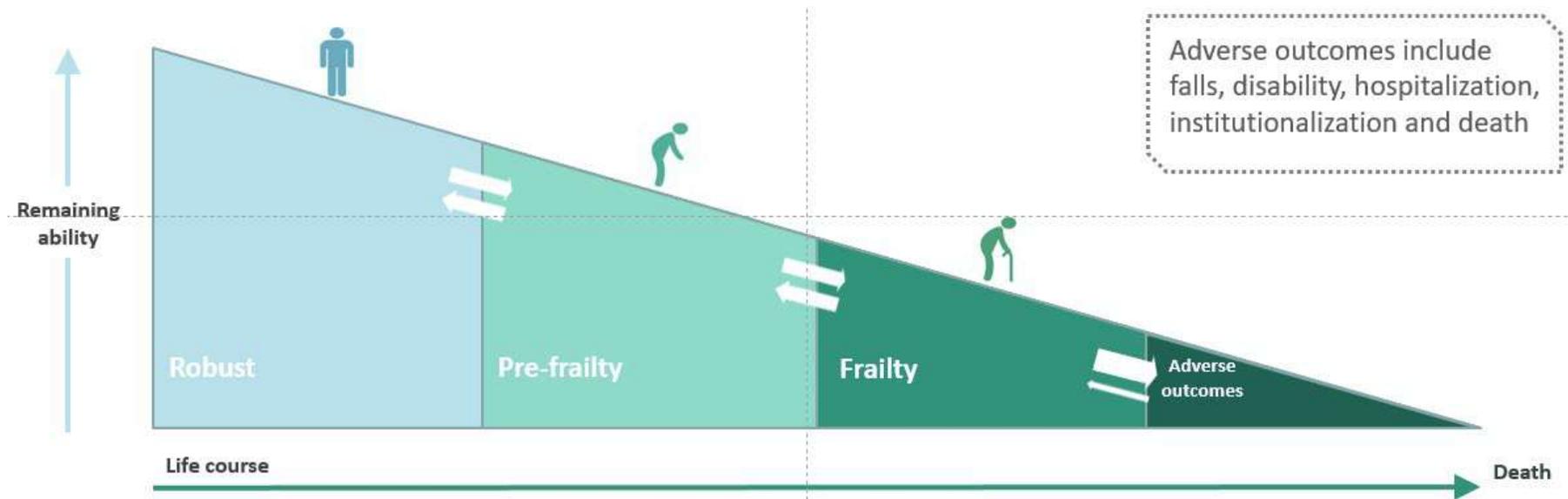
community eHealth
care project

2016 – 2019

443 participants
aged 60+
community centres

Hong Kong Jockey Club

reference image: wikipedia frailty syndrome



✓ Frailty (老年衰弱) is a common geriatric syndrome, but it is reversible.

at community centers

	traditional medical service <i>when needed</i>	health & social collaboration <i>day-to-day</i>
setting	hospital	community centre
health	disease treatment	preventive healthcare
social	-	social
key person	doctor	health & social worker
beneficiary	patient	service user
period	during sick	life course

lack of awareness and knowledge
on “healthy ageing”

at community centers



for pre-frail/ frail seniors

aim:

- empower center staff as first point of contact
- facilitate HS collaboration for older people

method:

- to learn self-care health knowledge
- to participate in intervention programmes
 - health assessment
 - personalised care plans
 - coordinated care



RESEARCH PAPER

Effect of an integrated care model for pre-frail and frail older people living in community

RUBY YU^{1,2}, CECILIA TONG¹, JEAN WOO^{1,2}

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²Department of Medicine and Therapeutics, Faculty of Medicine, The Chinese University of Hong Kong, Hong Kong, SAR, China

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Abstract

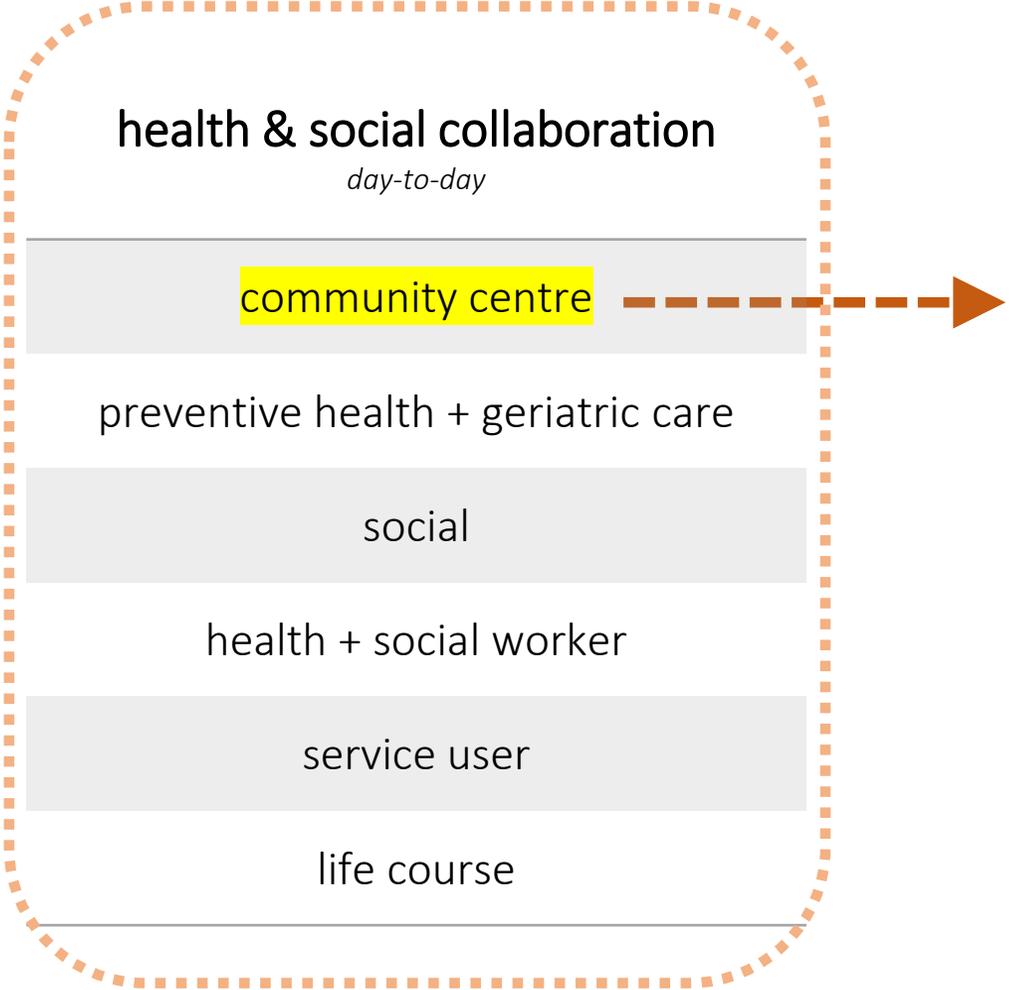
Objectives: to evaluate the effect of an integrated care model for pre-frail and frail community-dwelling older people.

Design: a quasi-experimental design.

Setting and participants: we enrolled people aged ≥ 60 years from a community care project. An inclusion criterion was pre-frailty/frailty, as measured by a simple frailty questionnaire (FRAIL) with a score of ≥ 1 .

Methods: we assigned participants to an intervention group ($n = 183$) in which they received an integrated intervention (in-depth assessment, personalised care plans and coordinated care) or a control group ($n = 270$) in which they received a group education session on frailty prevention. The outcomes were changes in frailty, individual domains of frailty ('fatigue', 'resistance', 'ambulation', 'illnesses' and 'loss of weight') and health services utilisation over 12 months. Assessments were conducted at baseline and at the 12-month follow-up.

at community centers



general perception:

community center = older people (?)

In fact,

- older people population: < 20%
- gender: mostly female
- health: mostly target non-communicable disease (NCD)

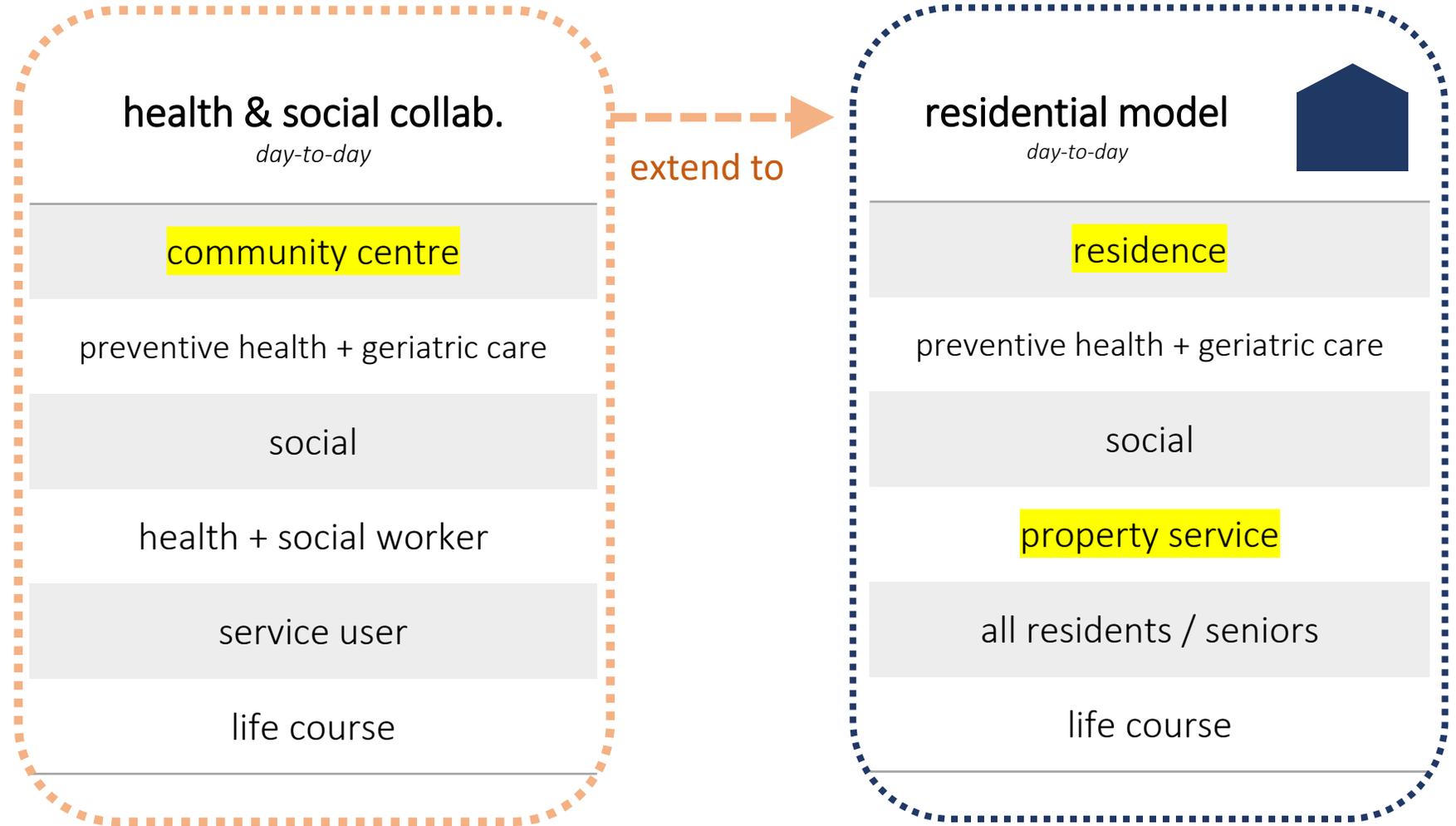
how to reach the rest >80%?

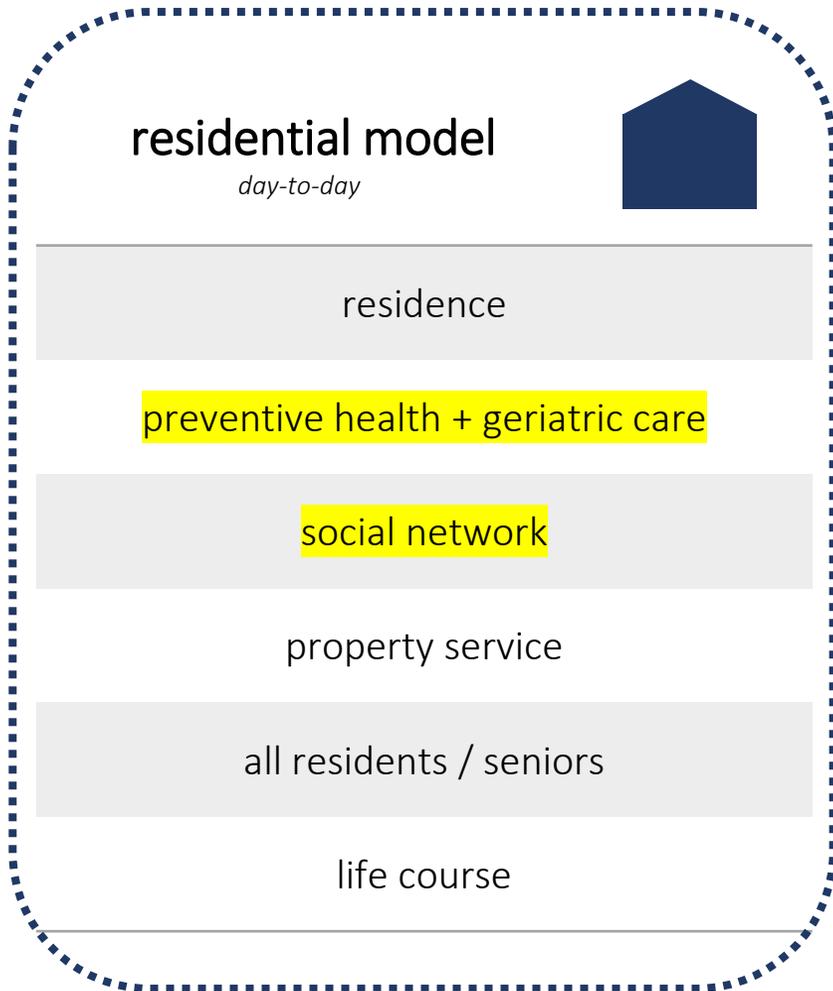
knowledge transfer project
“ageing-in-place x healthy ageing”

2021 – 2023

700 participants
all age
residence &
community centres

CUHK





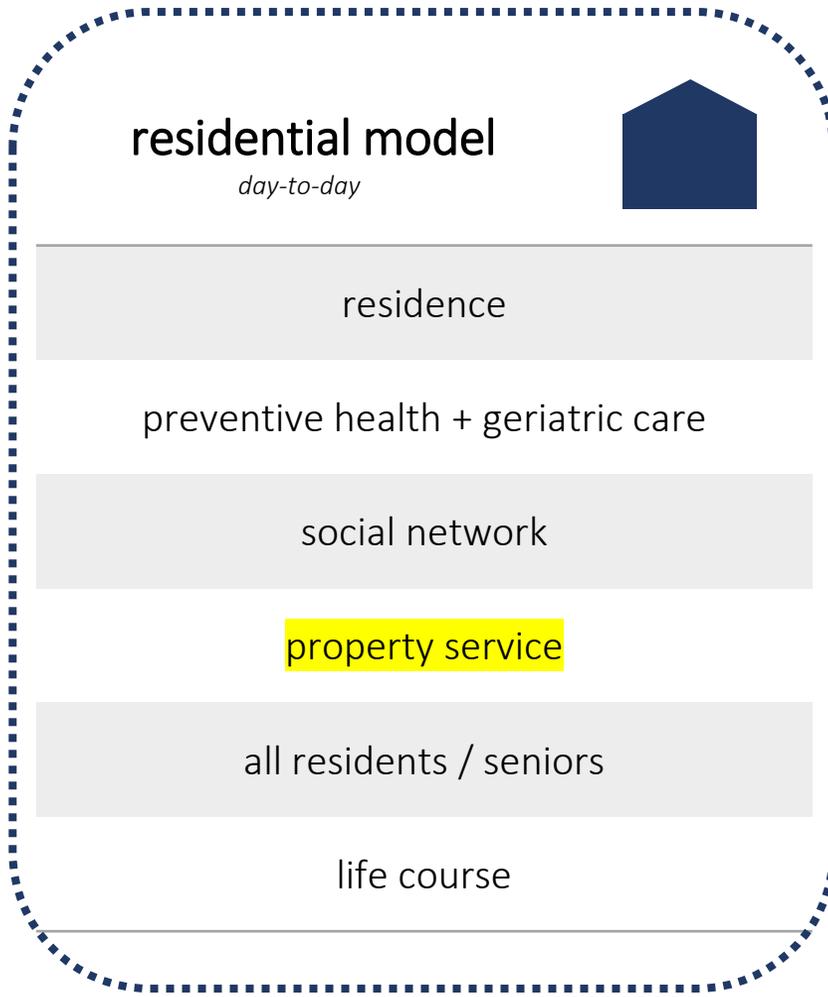
for residents (including seniors)

aim:

- empower property staff as first point of contact
- facilitate HS collaboration for older people

method:

- to learn self-care health knowledge
- to participate in intervention programmes
 - health assessment
 - personalised care plans
 - coordinated care

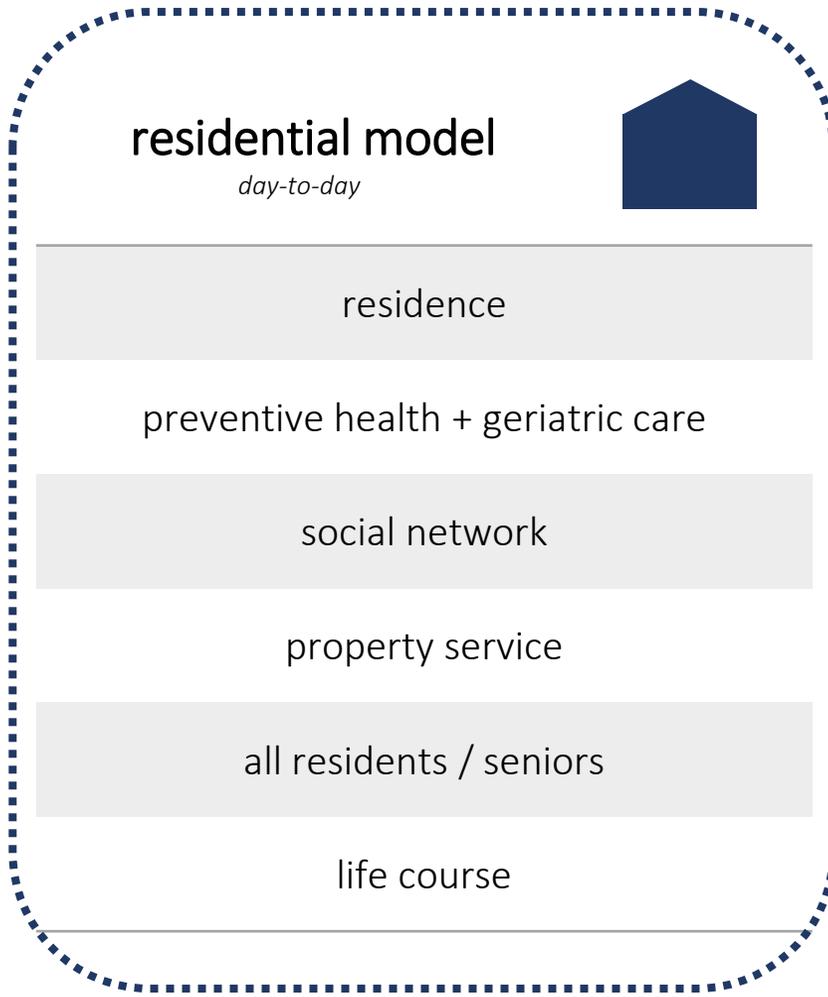


to facilitate **healthy lifestyle**:

- for all residents
- special attention to seniors' needs
- turn into social capital



reference image: Chinachem Group (2021)

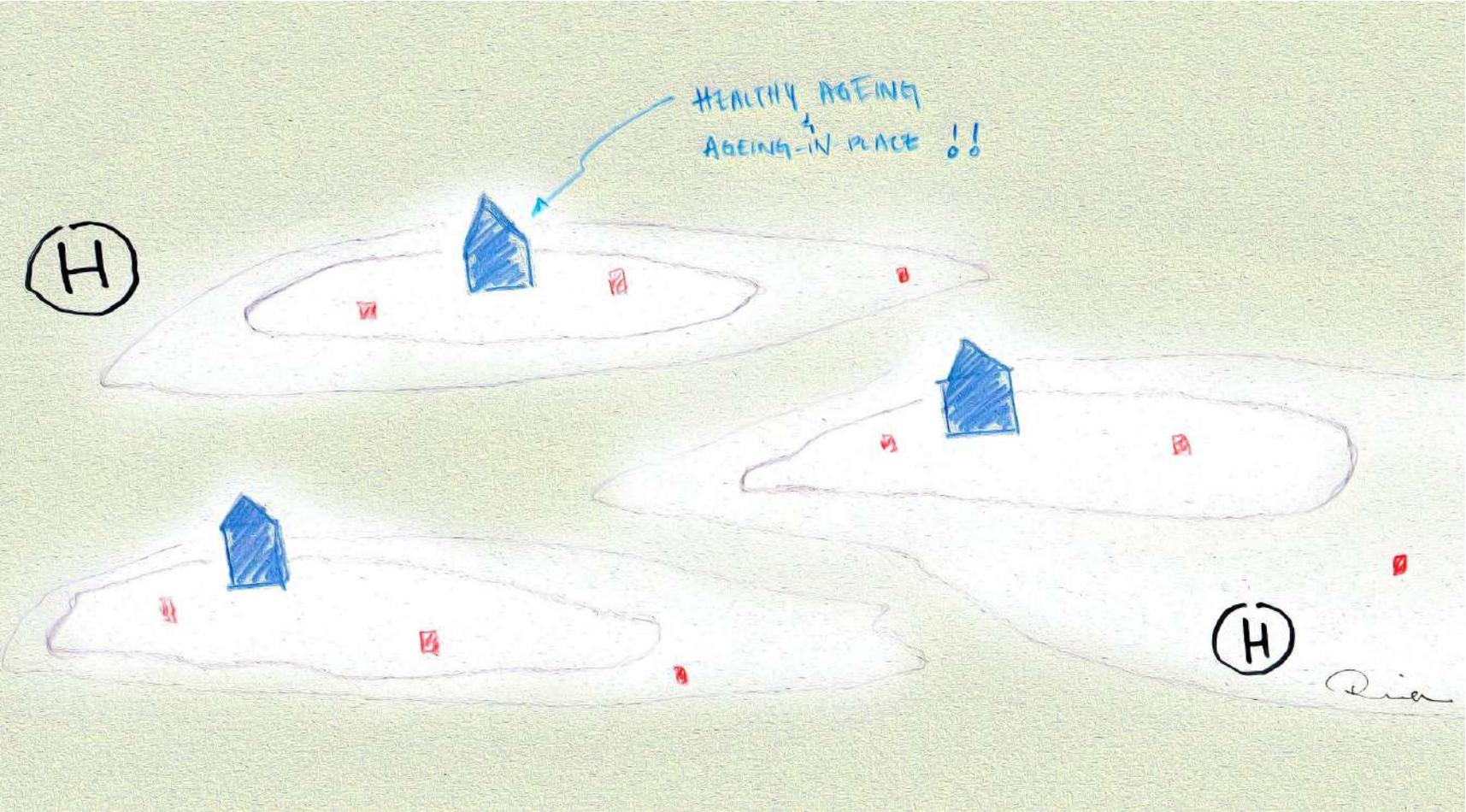


drives... design requirement:

- be seen as equal:
 - seniors, carers and property staff
- apart from BFA / UD
 - enhance spatial quality for health's sake
 - nature
 - daylight
 - materials...

design can alter health behaviour

integrated care model in residence



“For far too long hospital design has been an exclusive discipline of healthcare specialists.

*While functionality and technical requirements are large components of hospital architecture, there is **great space for creativity.***

*Just as the human body works only when each organ, limb or tendon is healthy enough do its job, the hospital - as a complex organism - can succeed only when its parts are **efficiently designed and coherently interconnected.**”*

Christine Binswanger, Herzog & de Meuron



social participation

partner with seniors
for design

stakeholders...

owners

users

community

to encourage senior participation

inclusive doesn't need to be the receiving end

closer to "true" inclusive?

does not stop from survey, focus group interview...

to create opportunities to attract people (particularly seniors) to share knowledge

not only a voice, but be part of it

Commentary

The Participation of Older People in the Concept and Design Phases of Housing in The Netherlands: A Theoretical Overview

Joost van Hoof ^{1,*} , Katja M. Rusinovic ² , Zsuzsu. K. C. T. Tavy ^{1,3}, Rudy F. M. van den Hoven ¹, Jeroen Dikken ^{1,3}, Suzan van der Pas ⁴ , Hanneke Kruize ⁵, Simone R. de Bruin ⁶  and Marianne E. van Bochove ^{2,7} 

¹ Faculty of Social Work & Education, The Hague University of Applied Sciences, Johanna Westerdijkplein 75, 2521 EN Den Haag, The Netherlands; z.k.c.t.tavy@hhs.nl (Z.K.C.T.T.); r.f.m.vandenhoven@hhs.nl (R.F.M.v.d.H.); j.dikken@hhs.nl (J.D.)

² Faculty of Public Management, Law & Safety, The Hague University of Applied Sciences, Johanna Westerdijkplein 75, 2521 EN Den Haag, The Netherlands; k.m.rusinovic@hhs.nl (K.M.R.); vanbochove@eshpm.eur.nl (M.E.v.B.)

³ Faculty of Health, Nutrition & Sport, The Hague University of Applied Sciences, Johanna Westerdijkplein 75, 2521 EN Den Haag, The Netherlands

⁴ Faculty of Social Work & Applied Psychology, University of Applied Sciences Leiden, Zernikedreef 11, 2333 CK Leiden, The Netherlands; pas.vd.s@hsleiden.nl

⁵ Centre for Sustainability, Environment and Health, National Institute for Public Health and the Environment, Antonie van Leeuwenhoeklaan 9, 3721 MA Bilthoven, The Netherlands; Hanneke.kruize@rivm.nl

⁶ Research Group Living Well with Dementia, Department of Health and Wellbeing, Windesheim University of Applied Sciences, Campus 2, 8017 CA Zwolle, The Netherlands; sr.de.bruin@windesheim.nl

⁷ Erasmus School of Health Policy & Management (ESHPM), Burgemeester Oudlaan 50,



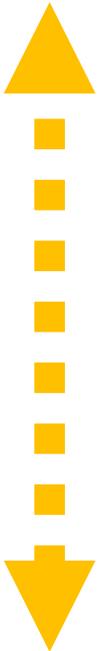
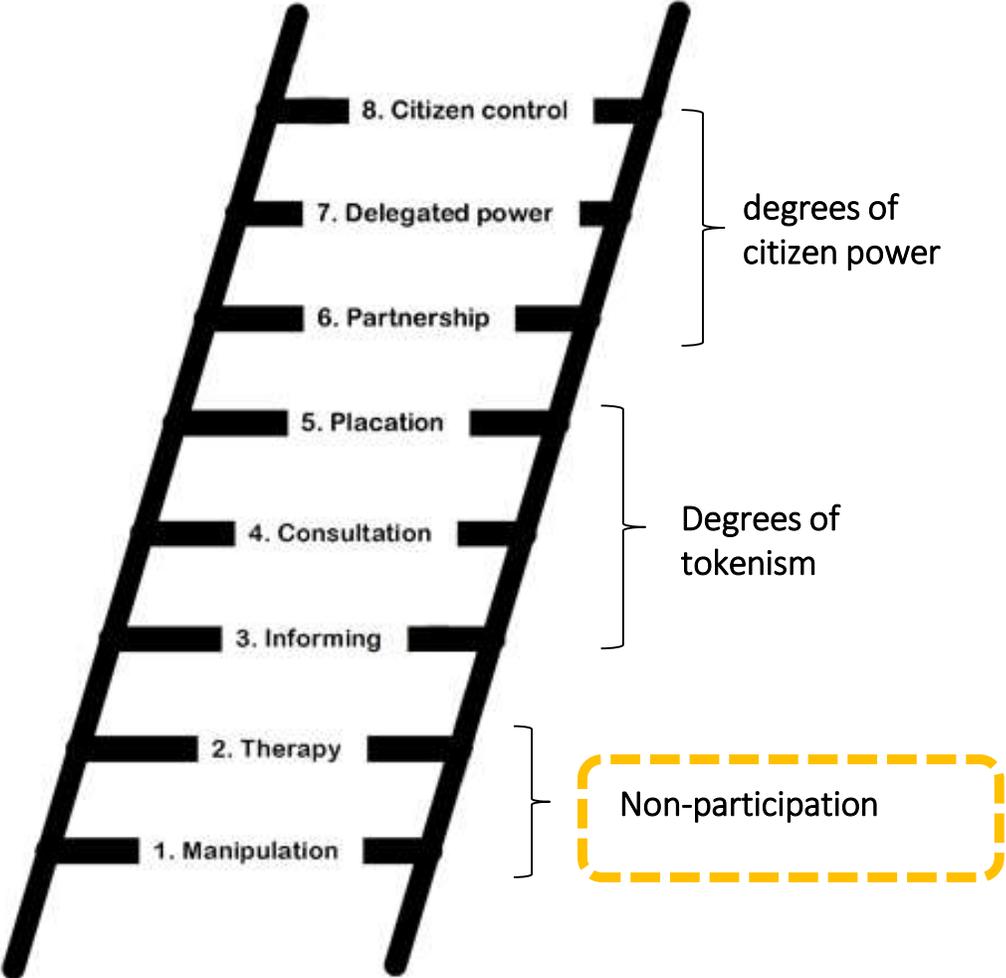
real estate developers

- commission an architect
- end-users were not involved

seniors' needs

- building codes & standards
- anthropometric data

concept & design for residential



Explore different roles that
(future) residents could play
from non-participation
to citizen power



IOA as a PLATFORM



Chinachem Group
residential design guide
2019 – 2024

Housing Society
inter-generational housing study
2021 – 2022

CUHK Sch. of Architecture
design studios
2020 -

HK Housing Society
elderly resource center
2019

Knowledge Transfer
“Nutcrackers”
2019 – 2021

Knowledge Transfer
“Healthy Ageing x Ageing in Place”
2021 – 2023



Explore different roles that
(future) residents could play

from non-participation
to citizen power

knowledge transfer - nutcrackers 小松隊



2019年 1月 - 2020年 12月

小松隊
Nutcrackers

Chapter 4: Thematic Session 'Architecture'
Heritage & Culture | Elderly Health
"建築設計": 建築活化 | 長者健康

Date: 2020.09.19, Sat
Time: 10AM-12:30PM
Venue: Online (Link will be sent after successful registration)
Register: <https://qrqo.page.link/Kxax>
Quota: 100



老如松柏...

是我們希望香港每一個人都會擁有的。
「松果」一寓意是一些可令長者生活得更開心舒適的建築城市設計。這些松柏的「果實」，不一定是宏大的概念，可以是一些細緻的設計事物。

小松隊將會聯同醫護健康及城市建築界的專業人士、與長者及學生，一起在香港中區「松果」，想一起成為小松隊隊員嗎？

A collaborative effort of health and built environment professionals, elders and students who will be digging for pine nuts in Hong Kong.

Pine nuts are some attentive observations in the city where design can be further explored to help building quality environments for our grannies, our parents and our seniors, where they will be happy and safe to live in.

Let's crack them up - the pine nuts!

一個月一個星期六
長者健康 建築環境
公開講座系列

名額有限
Limited Quota



Architects: this space is designed this way but made but not at hand from the users' tool

Design: what type of space can help to promote better lifestyle?

Provision: Why urban designer who is too focus on solution rather than design?

Field trips

 城市規劃 Urban Planning	 基礎設施 Infrastructure	 開放空間 Open Space	 建築 Buildings	 自然空間 Nature Space
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每月的星期六早上: 05/7, 09/8, 19/9, 31/10, 28/11, 19/12
詳情: <https://www.facebook.com/nutcrackers.cuhk/>
查詢: 李小姐 Down To LT 2443 7834



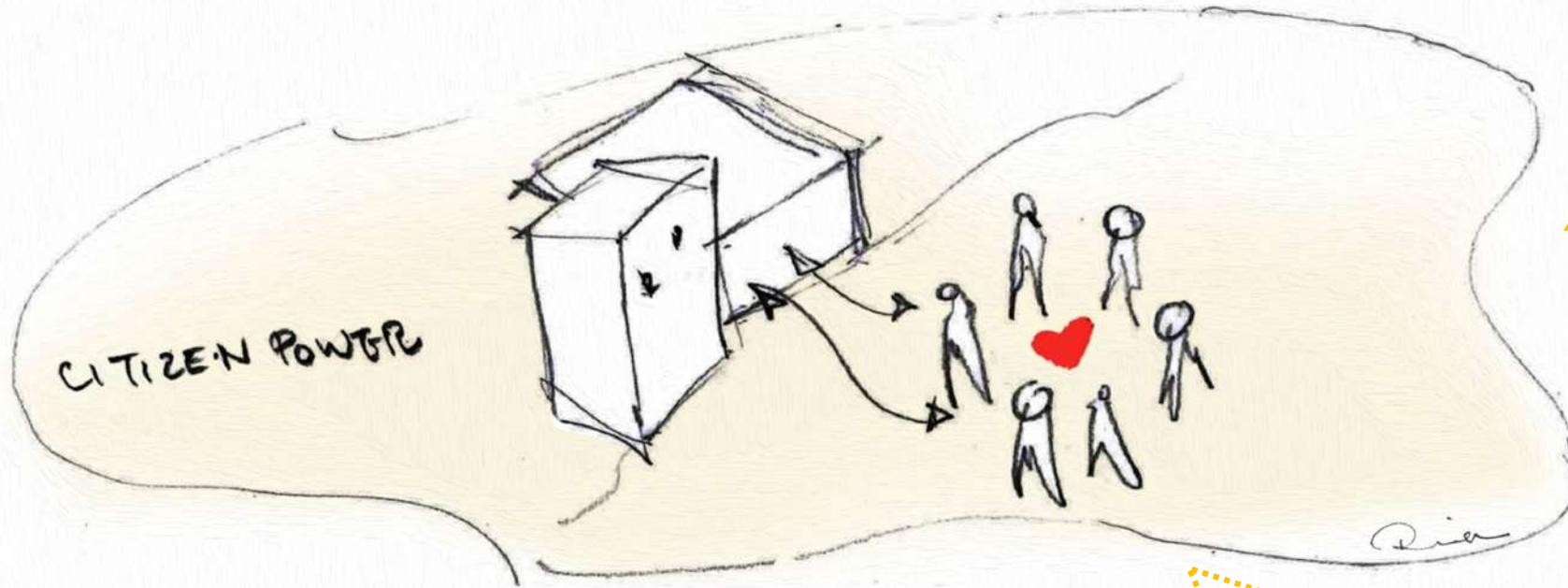
co-creation workshops – HK Housing Society & CUHK School of Architecture



consultation & advisory - Chinachem Group

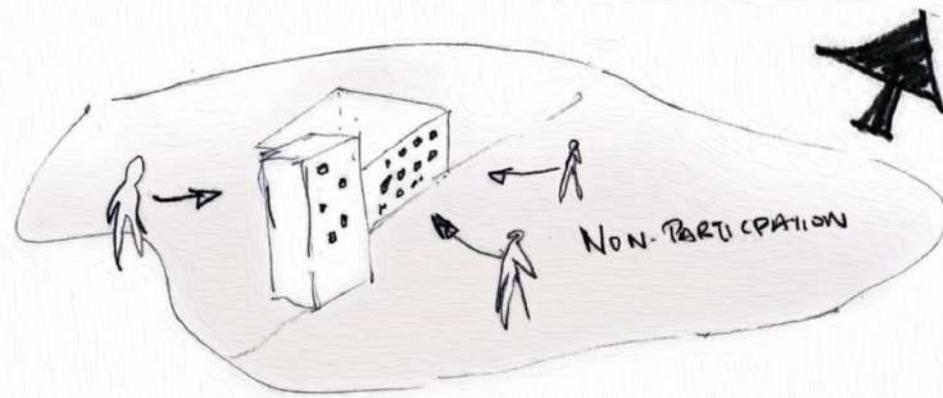


partner with seniors for design



很開心...
自己的聲音被尊重,
我們也不是...
一羣一無一樣嘅 '長者' !

i feel honoured.
my voice and identity
are being respected, and
not being defined by age
groups...



建築起樓很專業!
現在有更多知識,
更懂得欣賞。
仲可以參與其中,
真係得著很多!

the more i know
about building design,
the more i start to appreciate.
can't imagine i can be
part of it now...

design research for senior living

final note:

in search of resonance...

thank you, collaborators and musketeers!

- Chinachem Group
- URA & Incorporated Owners of 煥然壹居
- CUHK Nutcrackers Team
- *... and many more!*

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Institute of Ageing, CUHK

