

Transforming Healthcare for the Central Health Population

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Content

- **General background**
- **The Central Health Model of Care**
- **4 Principles & 6 Strategies**
- **Insights from our journey**



Singapore Healthcare – Longer life expectancy but also a rise in number of unhealthy years



Life expectancy and healthy years

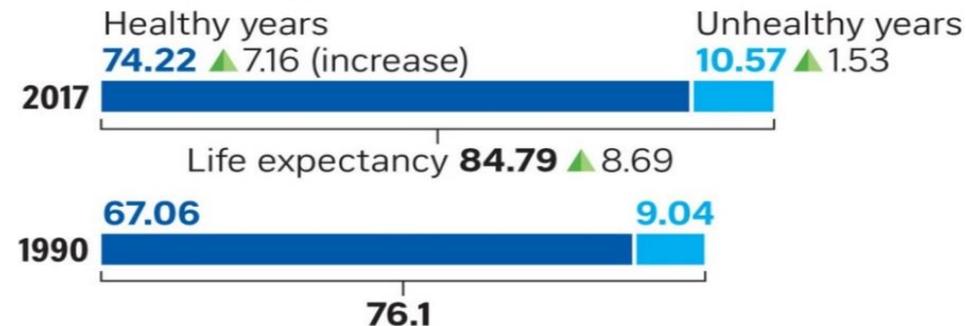
Life expectancy (2017)

Male	Years	Female	Years
Switzerland	82.12	Singapore	87.55
Singapore	81.94	Japan	87.21
Israel	81.28	Hong Kong	86.11
Hong Kong	81.15	Iceland	85.94
Japan	81.08	Spain	85.83

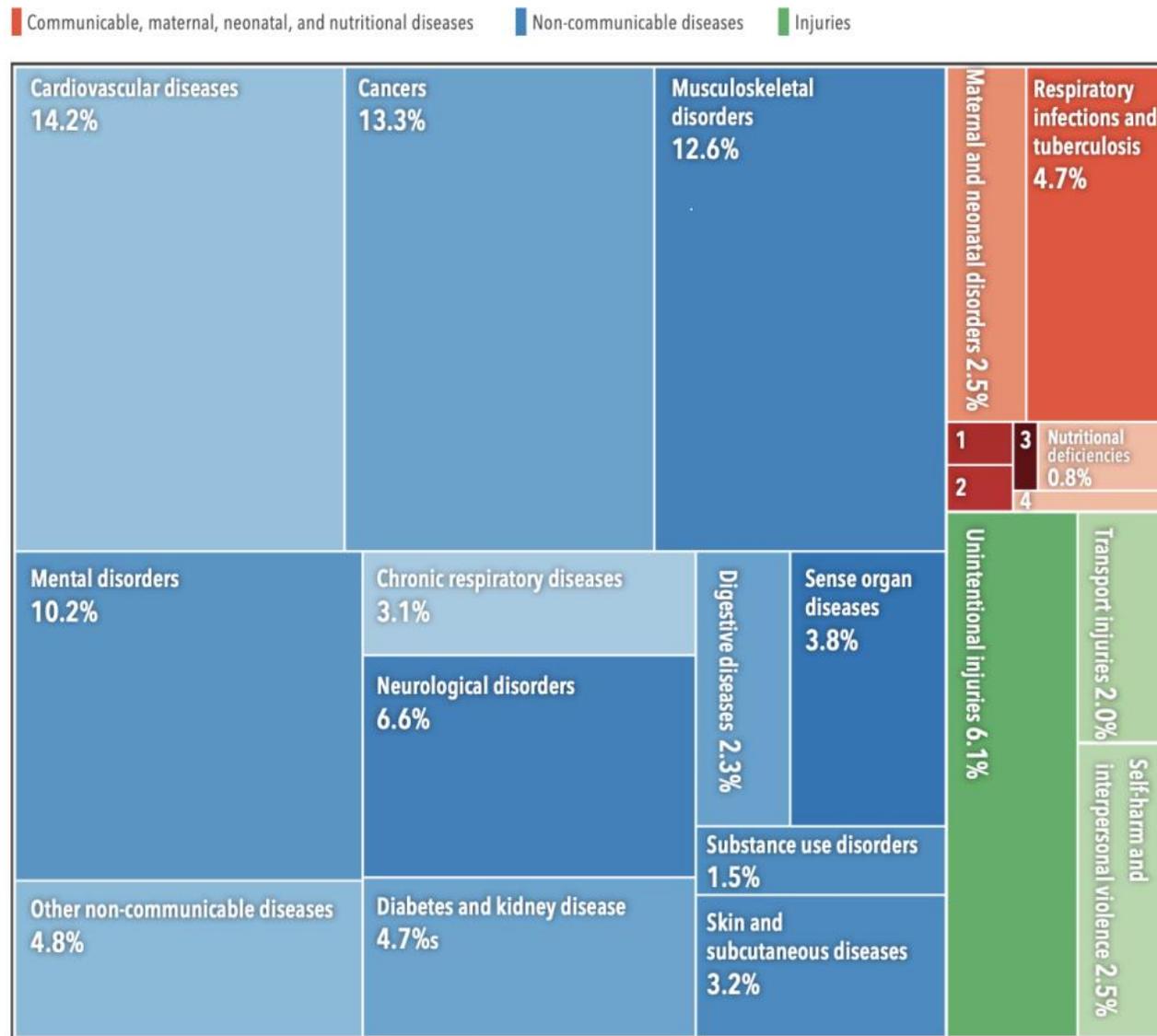
Years lived in good health (2017)

Male	Years	Female	Years
Singapore	72.58	Singapore	75.81
Hong Kong	72.34	Hong Kong	75.01
Japan	71.41	Japan	74.65
Switzerland	71.19	Spain	73.62
Italy	70.63	South Korea	73.45

Changes to Singaporeans' life expectancies



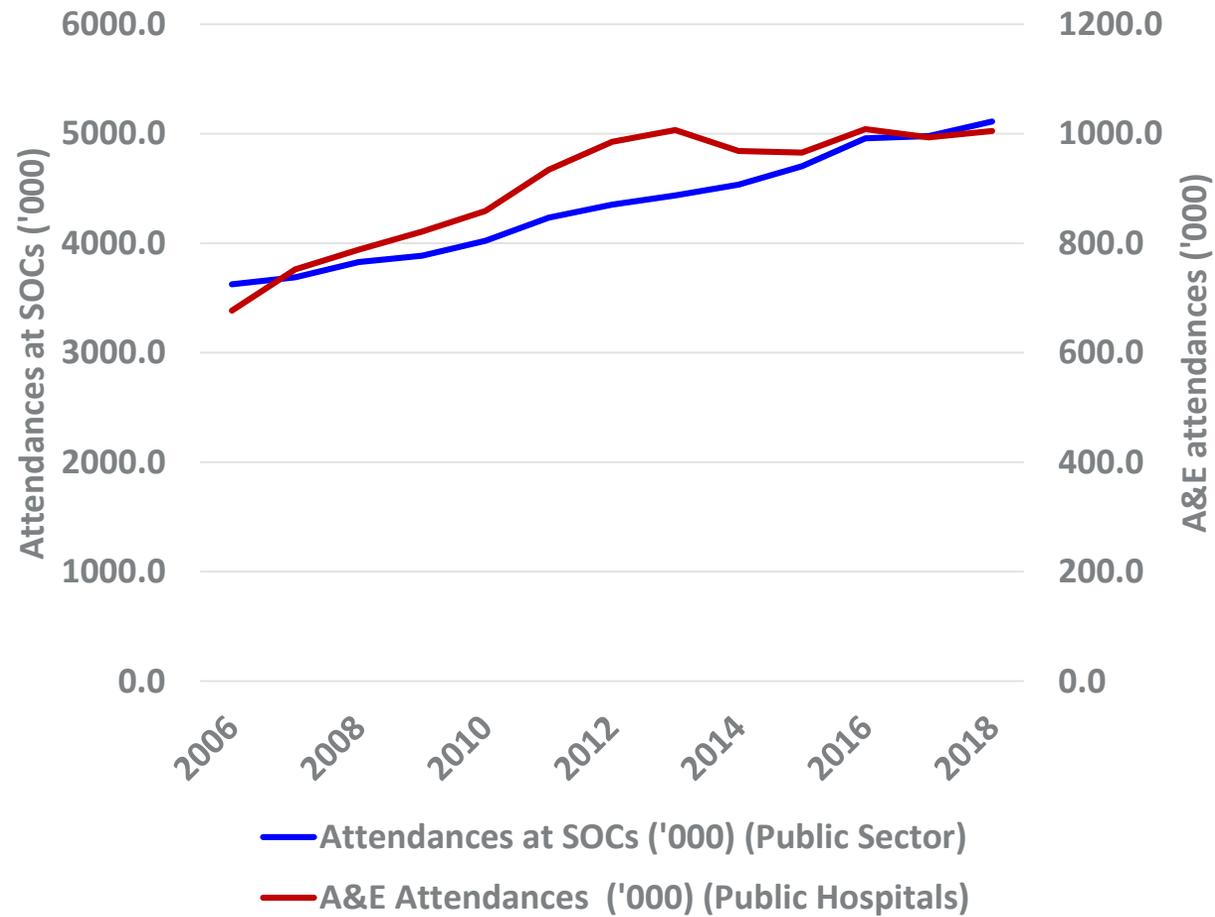
Distribution of disease burden by cause in Singapore, 2017



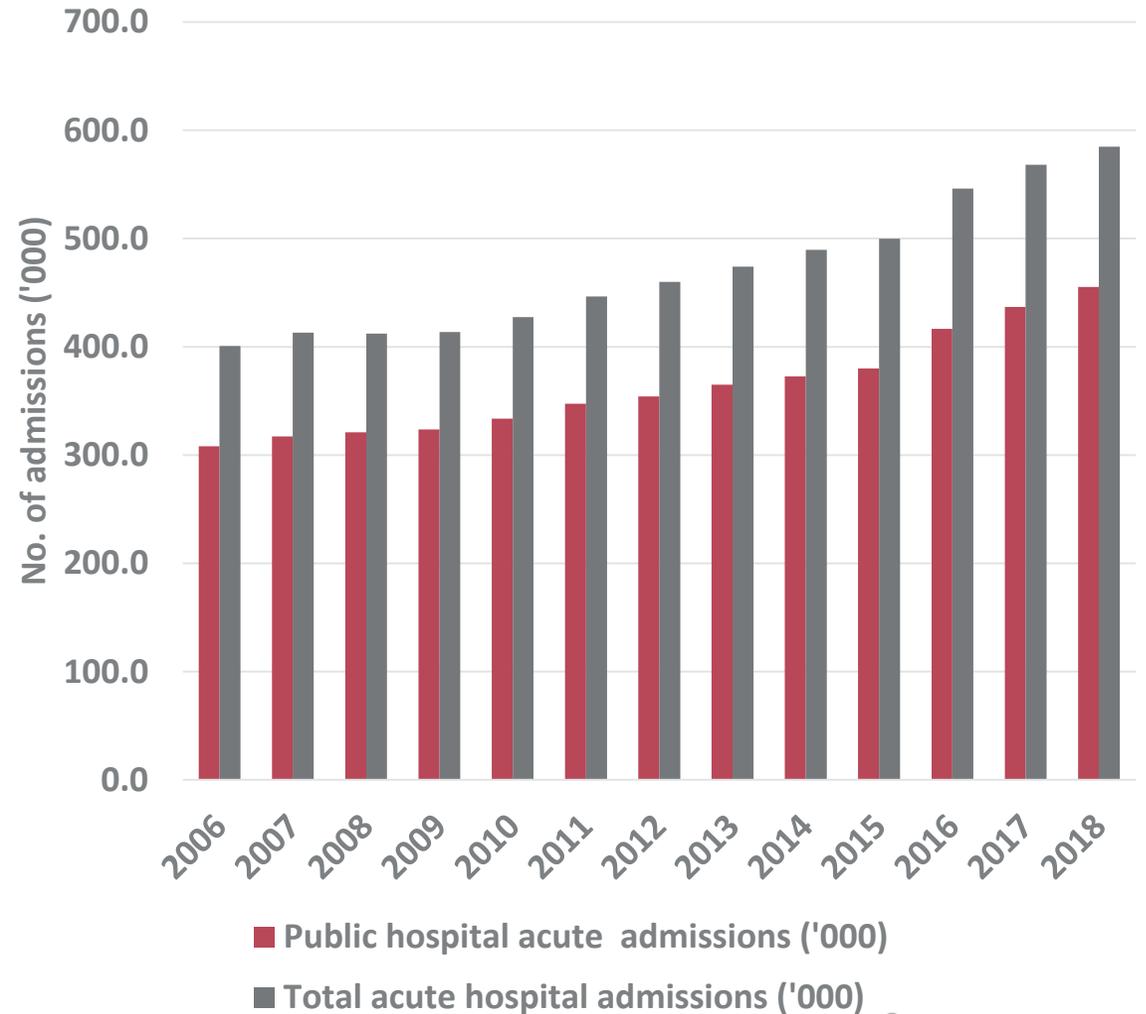
- 1. Enteric infections 0.3%
- 2. HIV/AIDS and sexually transmitted infections 0.3%
- 3. Neglected tropical diseases and malaria 0.2%
- 4. Other infectious diseases 0.3%

Source: The Burden of Disease in Singapore, 1990 – 2017

Attendances at public hospital accident & emergency (A&E) department & public sector specialist outpatient clinics (SOC), 2006 - 2018



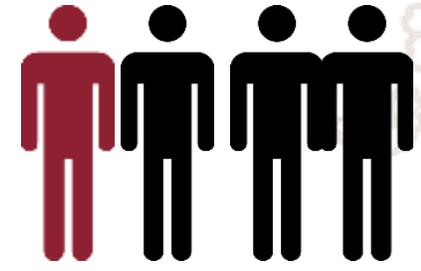
No. of acute hospital admissions in Singapore, 2006-2018



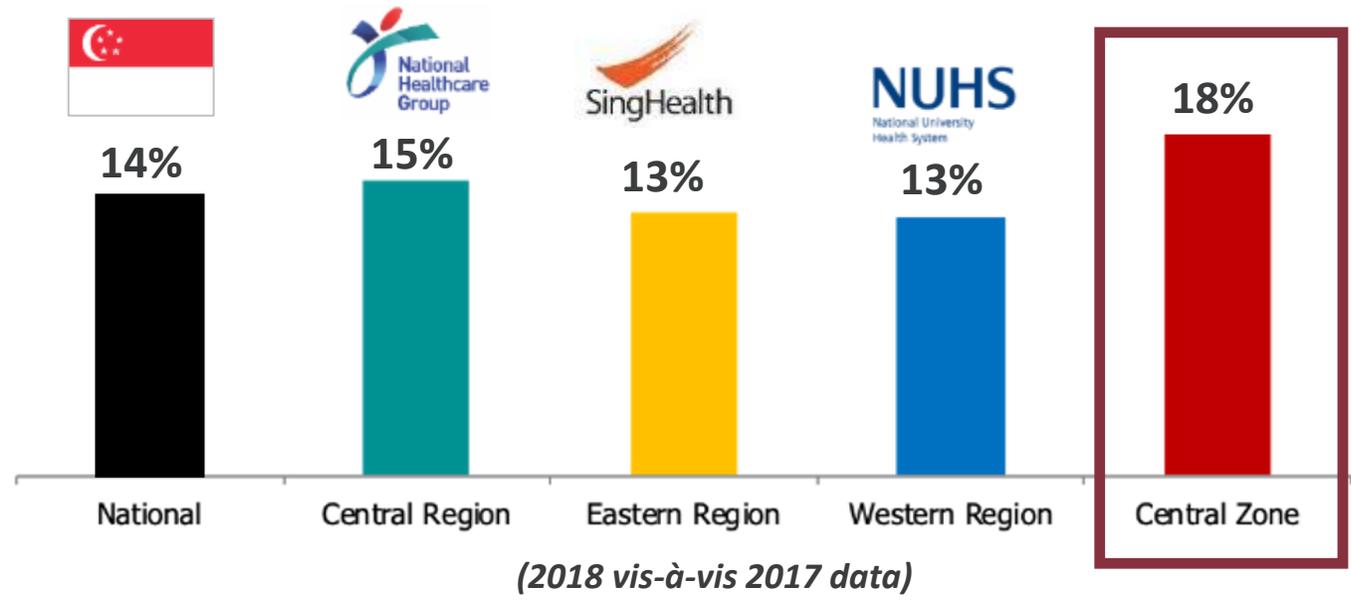
THE CENTRAL POPULATION WE SERVE



Makes up **25%** of Singapore's Population



Zone with the **Highest** Proportion of Residents **Aged ≥ 65** *^

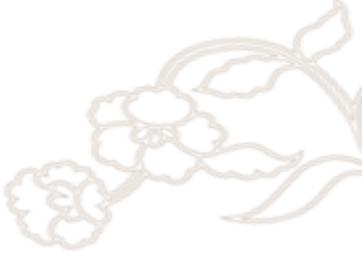


1 IN 3 Central Zone Elderly lives with Frailty#

*Singapore Department of Statistics, Population Trends, June 2018
^Statistics are compared again June 2017 data from Singapore Department of Statistics, Population Trends
Population Health Index 2016

Central Health Integrated Care Model

Premised on 4 Principles

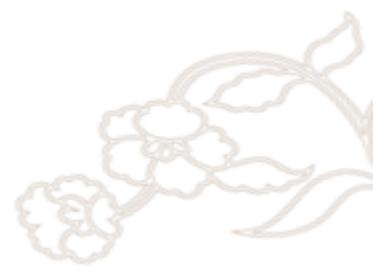


TODAY

TOMORROW

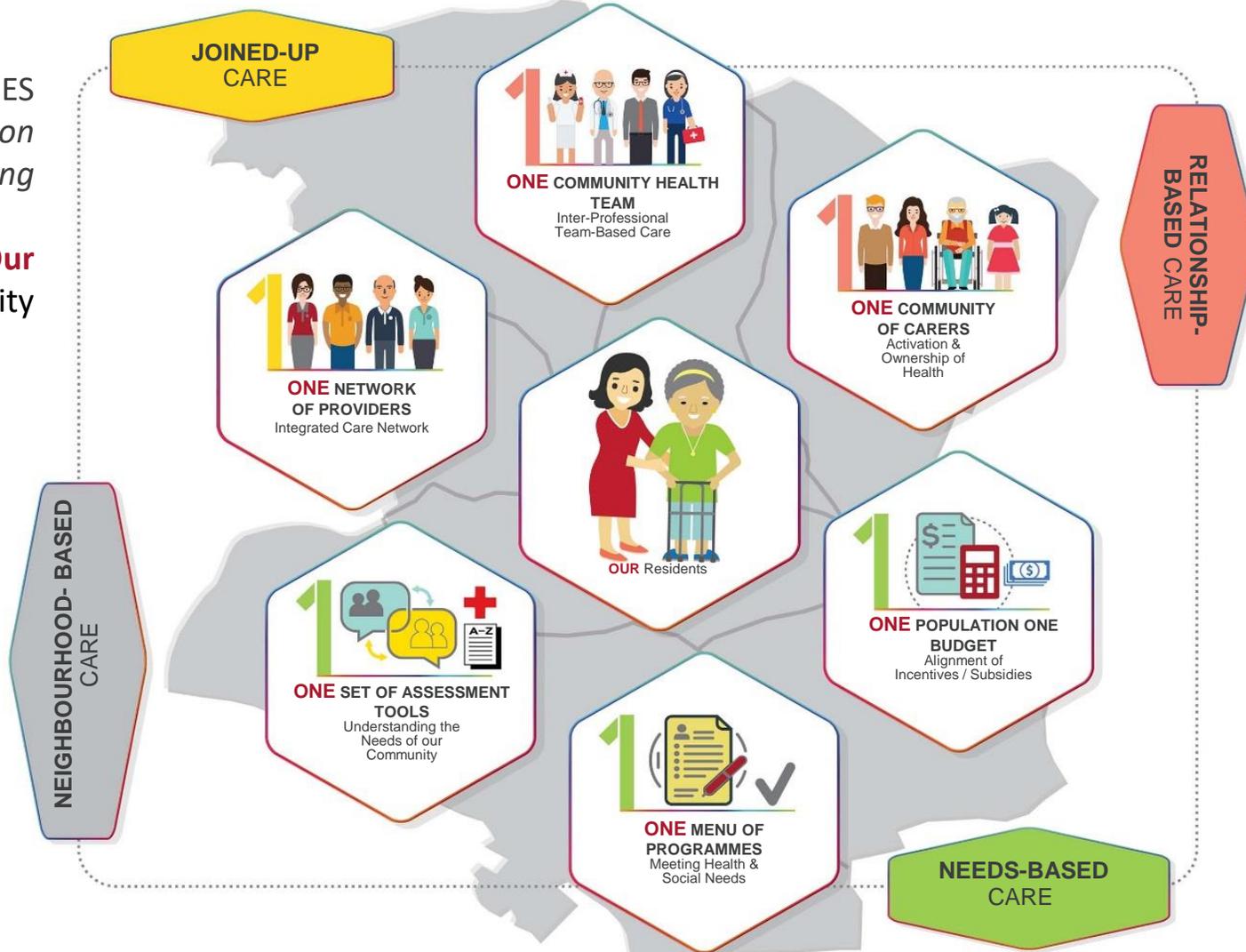


Central Health Model of Care



Our STRATEGIES
focused on
Activating

Our
Community



CENTRAL HEALTH'S MODEL OF CARE



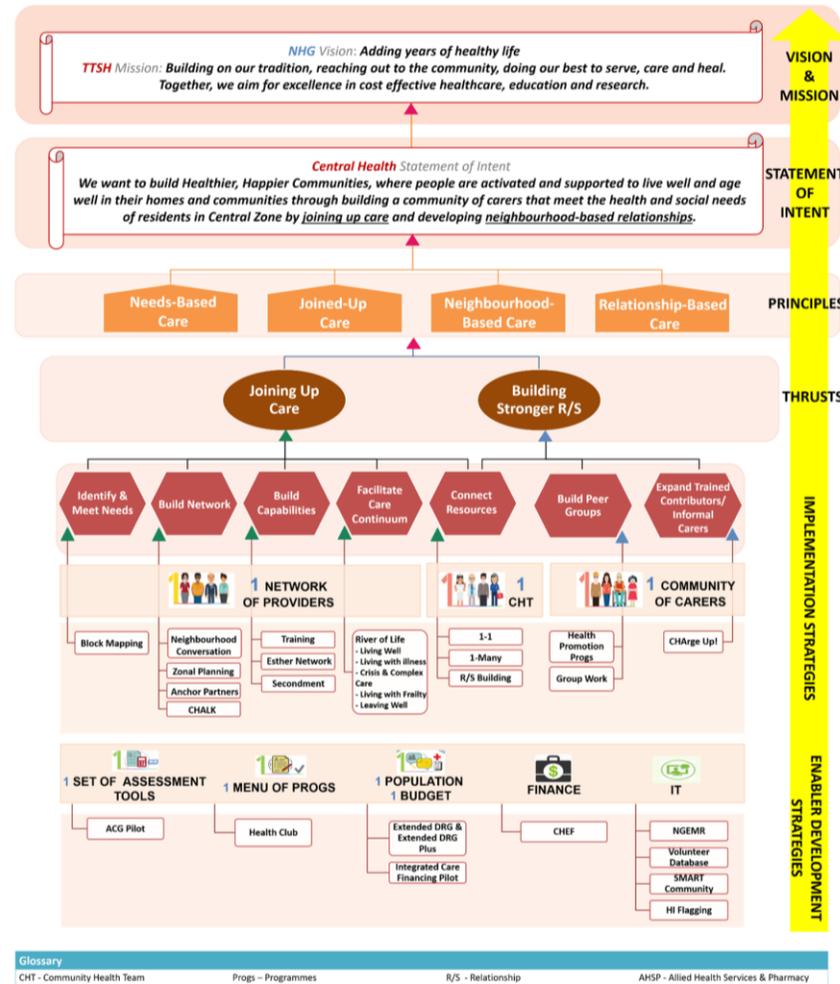


Central Health is an **Integrated Model of Care**,
building health together with you.

We function as an **Integrated Care Network**
serving Our Population in Central Singapore.



Community Health Development Road Map



Version 2: 23rd April 2019

DCH Road Map

One Network of Providers

One CHT

One Community of Carers

One Population, One Budget

One Set Of Assessment Tools

One Menu of Programmes

Finance

IT

Community Health Development Road Map



NHG Vision: Adding years of healthy life
TTSH Mission: Building on our tradition, reaching out to the community, doing our best to serve, care and heal. Together, we aim for excellence in cost effective healthcare, education and research.

Central Health Statement of Intent
We want to build Healthier, Happier Communities, where people are activated and supported to live well and age well in their homes and communities through building a community of carers that meet the health and social needs of residents in Central Zone by joining up care and developing neighbourhood-based relationships.

Needs-Based Care

Joined-Up Care

Neighbourhood-Based Care

Relationship-Based Care

DCH Road Map

One Network of Providers

One CHT

One Community of Carers

One Population, One Budget

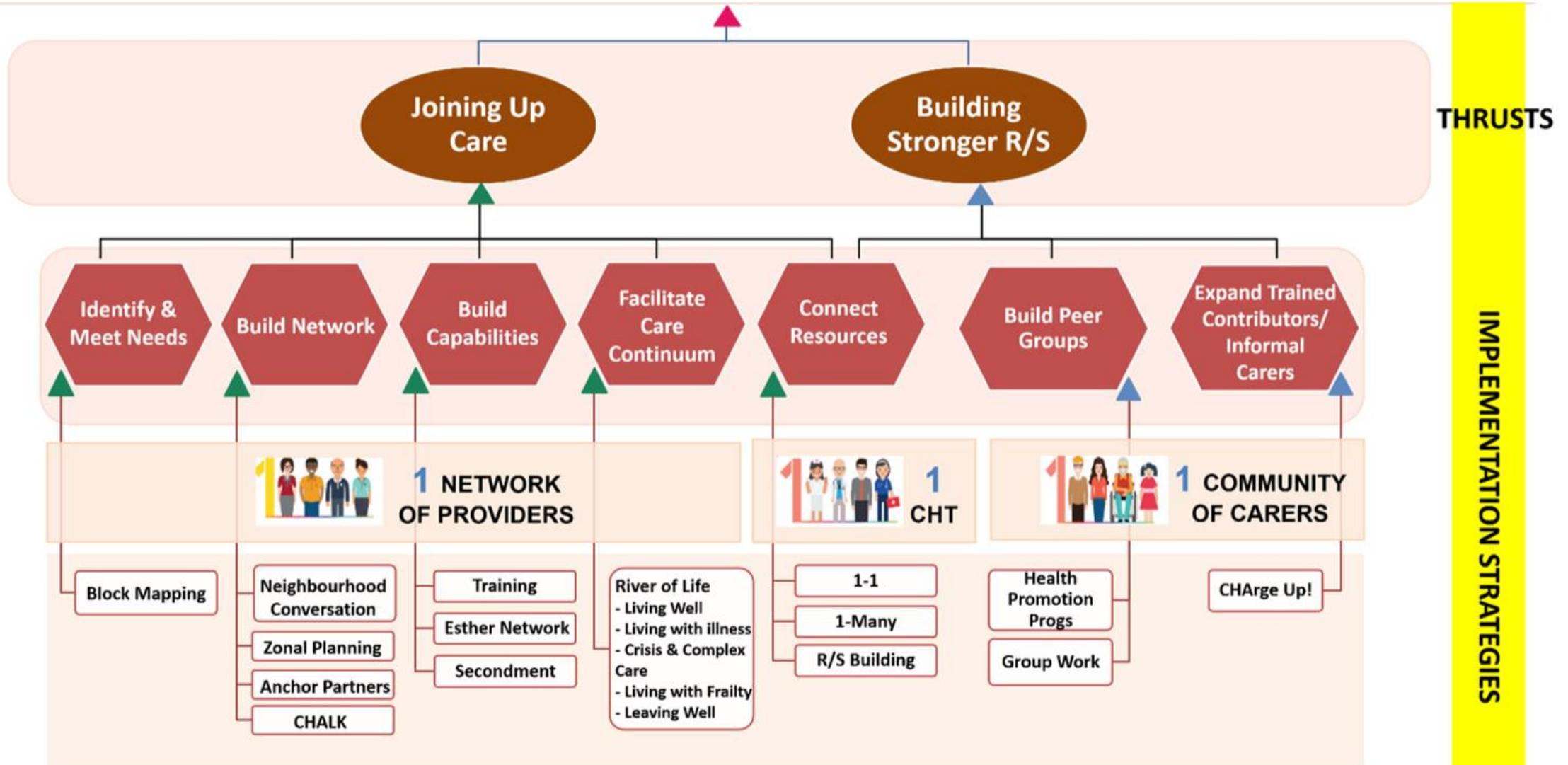
One Set Of Assessment Tools

One Menu of Programmes

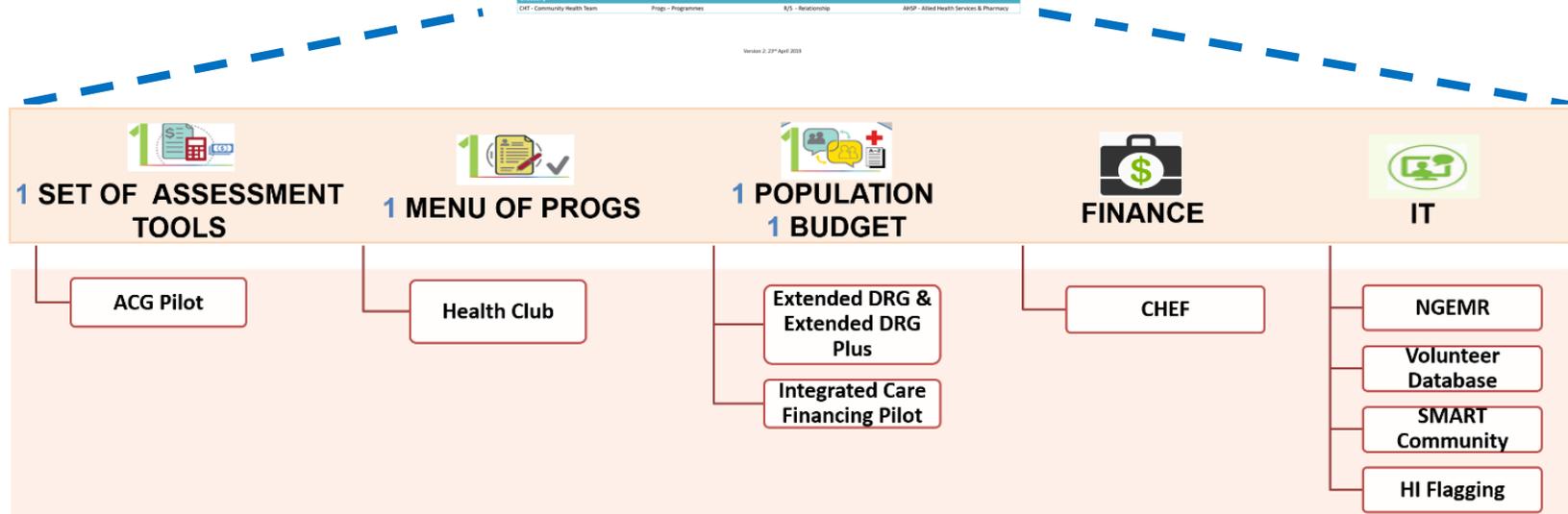
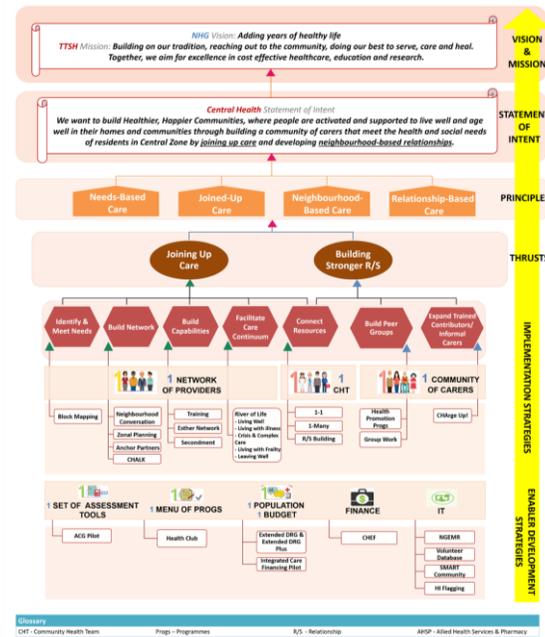
Finance

IT

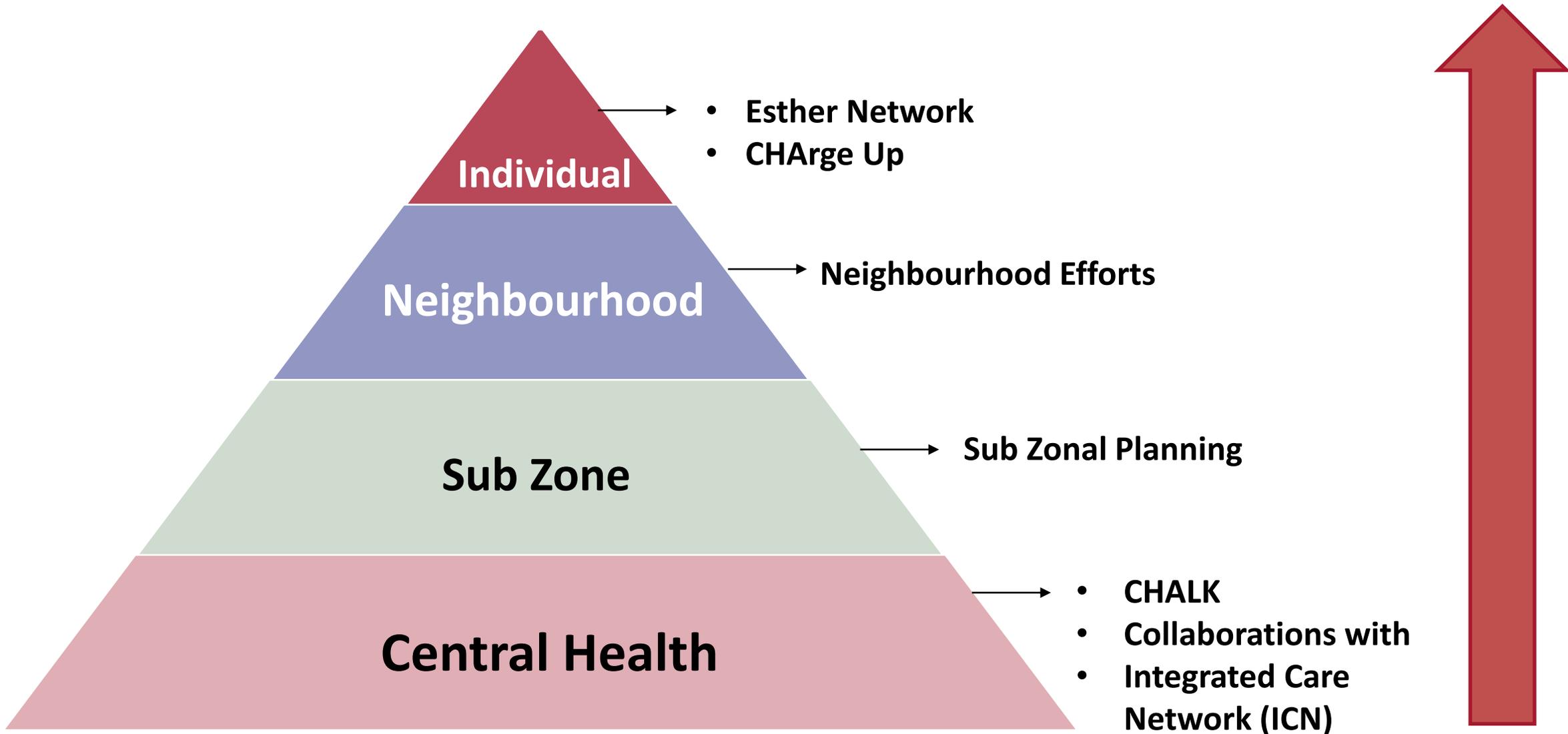
Community Health Development Road Map: Implementation Strategies



Community Health Development Road Map: Enabler Development Strategies



Levels of Engagement



Central Health Level Engagements: Central Health Action & Learning Kampung (CHALK)

Objective: An **engagement and learning** event to **foster a sense of community** and work towards the **co-creation of common goals** for providers in Central Zone.

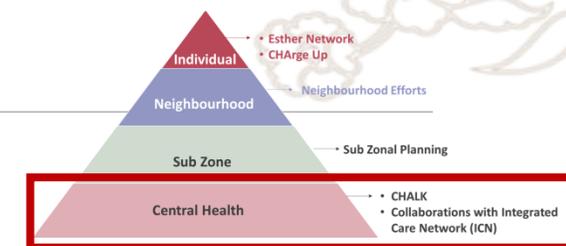
**Inaugural
CHALK:**

Date: 29 Nov 2018 (Thu)

Theme: Central Health: Building Health Together with You

Common Topics Discussed:

- Trust and collaboration
- Coming together
- Training/capability building
- Direct referral based on care needs
- Integrated information sharing
- Financing barriers and incentives

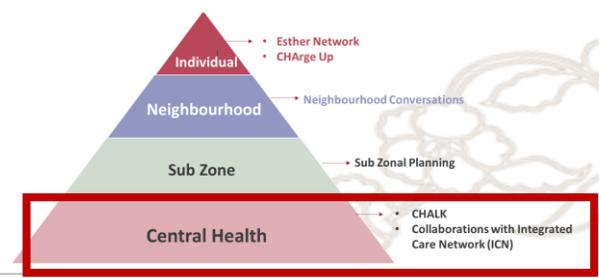


Central Health Strategic and Community Partners



Touching Lives, Honouring Our Seniors





Our Integrated Care Network (ICN)

Vanguard Partners in Care Integration

(i.e. Those who are interested in community / population management)

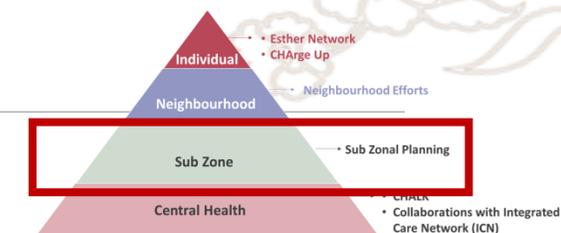
Leaders in Flow Management

(i.e. Those who can offer beds or space)

Specialised Areas

(i.e. EOL/Primary Care)

Sub-Zone Level Engagements: Sub Zonal Planning Committees



Objective:

Provide platforms to enable **relationship-building** amongst community partners for **advocacy** of services, **bonding** and **collaborations** to **drive mutually-agreed community initiatives** to **build holistic support** for residents



6

Zonal Planning Committees
established across Central
Zone



31

Partners engaged in
planning and driving
community initiatives at
the sub-zone level



3

Key focus areas identified
across Zonal Planning
Committees

4

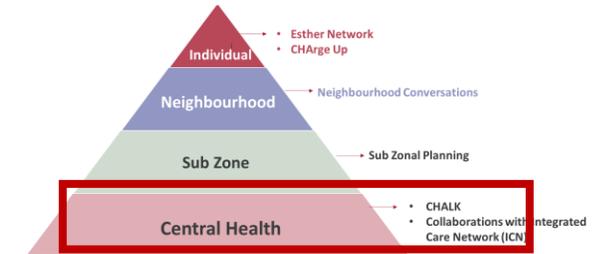
ESTHER projects
completed to enable
better patient-centred care
in the community

Sub-Zone Level Engagements

Sub Zonal Planning Committees



Example: Efforts by Ang Mo Kio Zonal Planning Committee



No. of Partners	Key Focus Area
8 (as at 31 Mar 2019)	Building Inclusive and Dementia-Friendly Communities
<ul style="list-style-type: none"> AMKFSC Cluster Support AMK-THK Community Hospital AWWA Ren Ci Nursing Home SATA CommHealth THK Moral Charity TOUCH Community Services TTSH 	<ul style="list-style-type: none"> First walkathon, Walk 2 Remember, completed on 16 Mar 2019 with 300 participants who are persons with dementia and their caregivers Plans to continue with awareness event on a yearly basis

SIGN UP FOR 报名参加 WALK 2 REMEMBER

Get ready for Walk 2 Remember a walkathon dedicated to lowering the risk of progression of dementia for you and your loved ones!

准备好了吗? Walk 2 Remember 首次举办的步行活动, 致力于降低你和您家人得失智症的风险!

First 300 participants to register will receive a free goodie bag! To be eligible, register at www.walk2remember.sg/events

有300位注册报名的公众可获赠免费礼包! 如果你想领取免费礼包, 请上网报名。存货有限。

16 MARCH 2019 2019年3月16日
SATURDAY, 0815HRS - 1300HRS 星期六 早上8点15分至下午1点
Bishan-Ang Mo Kio Park, The Promenade 碧山-宏茂桥公园广场

Free-of-charge! 入场免费!

CO-ORGANISER: ADA, Family Support Centre, Singapore Council for the Elderly, Singapore Council for the Handicapped, Singapore Council for the Mentally Ill, Singapore Council for the Physically Handicapped, Singapore Council for the Visually Handicapped, Singapore Council for the Deaf, Singapore Council for the Elderly, Singapore Council for the Handicapped, Singapore Council for the Mentally Ill, Singapore Council for the Physically Handicapped, Singapore Council for the Visually Handicapped, Singapore Council for the Deaf

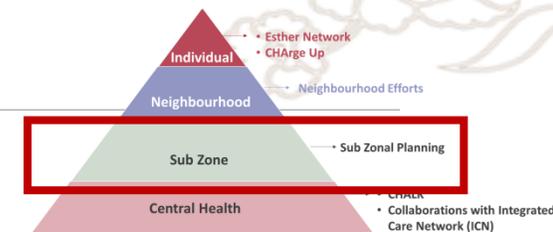
SUPPORTED BY: Family Support Centre, Singapore Council for the Elderly, Singapore Council for the Handicapped, Singapore Council for the Mentally Ill, Singapore Council for the Physically Handicapped, Singapore Council for the Visually Handicapped, Singapore Council for the Deaf

POWERED BY: Singapore Council for the Elderly, Singapore Council for the Handicapped, Singapore Council for the Mentally Ill, Singapore Council for the Physically Handicapped, Singapore Council for the Visually Handicapped, Singapore Council for the Deaf

Guest-of-Honour
Mr Henry Kwek, MP for Kebun Baru Constituency

Sub-Zone Level Engagements: NC & Sub Zonal Engagements

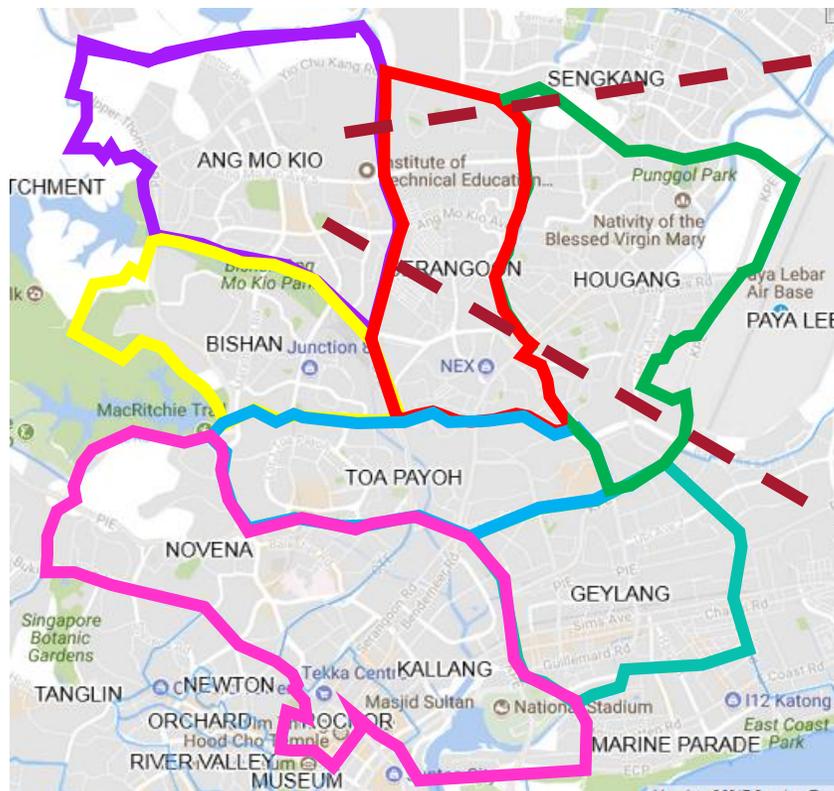
Cascading of strategies/plan for implementation and localization at the neighbourhood level



Sub Zone level – Sub Zonal Planning Committees

Neighbourhood level – Neighbourhood Conversations

To sustain, standardize, spread and feedback

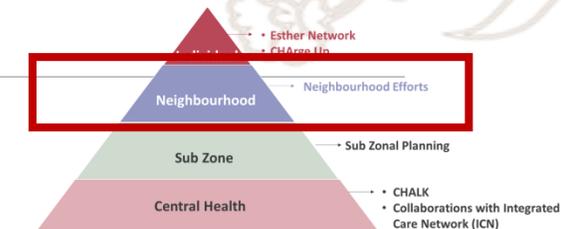


ANG MO KIO



Neighbourhood Level Engagements: Neighbourhood Conversations

Case Study: Ang Mo Kio Blk 400s (Teck Gee & Cheng San) Neighbourhood Conversations (Round 2)



Finessed Intent:

- Building towards a strong partnership in AMK

Opportunities:

- Block mapping / needs assessment to identify at risk subgroups;
- Care coordination
- Caregivers support

Projects Identified

- Block Mapping to further identify blocks to focus on and interventions to put in place
- Flagging of partners' clients when they uses TTSH services
- Expanding on the Dementia Friendly Community initiative

Participants:



Tan Tock Seng
HOSPITAL



AMKFSC
COMMUNITY SERVICES



TOUCH
Community Services



Ren Ci 仁慈



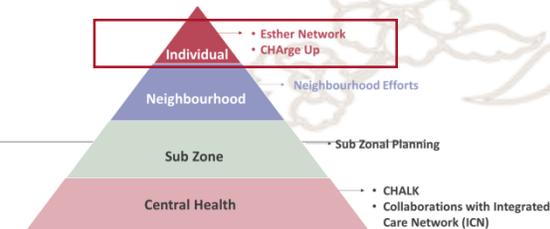
Individual Level Engagements: Esther Network

Partner Empowerment

ESTHER
Network for Health & Social Care
SINGAPORE



The ESTHER Network helps to focus **clinical & social** care on the **needs, expectations, priorities and fears of elderly people** entering the care system



Embracing ESTHER Network in Central Health, NHG

ESTHER is a patient, caregiver or resident who needs multi-agency care

- OBJECTIVES:** To build a culture of quality improvement, focused on Person-Centered Care
- based on ESTHER's needs and preferences
 - leads to improvements from ESTHER's perspective
 - involves ESTHER from start to end process



- ❖ Mindset change towards **Person-Centred Care** "What Matters to ESTHER?"
- ❖ Respect ESTHER's own strengths, experiences and support system
- ❖ Involves all levels of staff
 - Ground up approach: builds ownership
 - Coaching: builds sustainability
 - Sponsors: builds leadership
- ❖ **Systems thinking:** Make it easier for the next provider in the care chain



One CHT:

Enabling health engagement, care coordination and ageing-in-place

WHAT ARE COMMUNITY HEALTH TEAMS?

- **7 place-based, multi-disciplinary teams** embedded within each sub-zone of the Central Zone
- Aims to **build relationships** and **work with local partners** across health and social care domains to **enable health engagement, care coordination and ageing in place**

HOW THE COMMUNITY HEALTH TEAMS FUNCTION

Direct Service Provision

- Home visits
- Telephone reviews
- Site clinic reviews at Community Health Posts

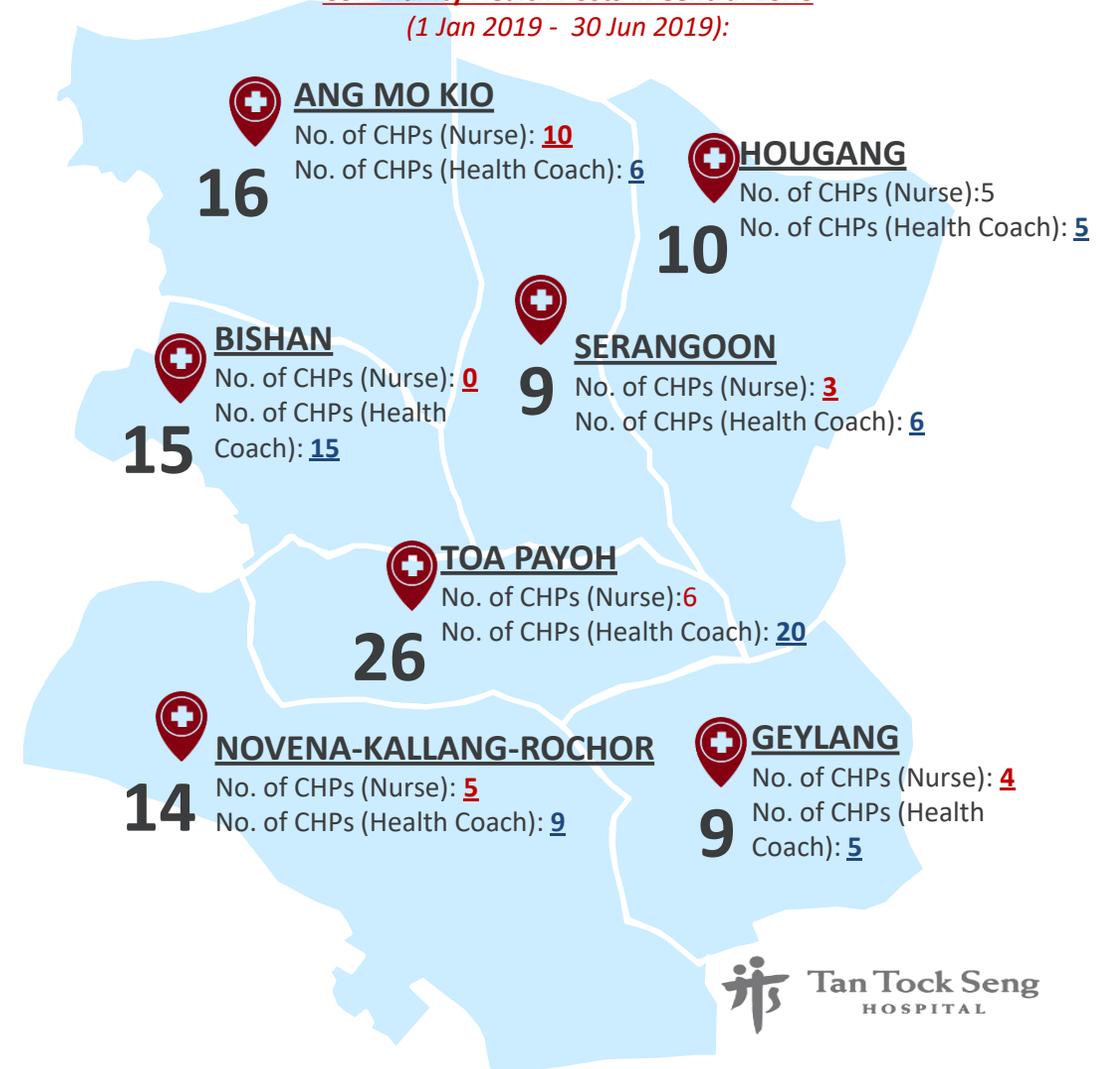


Collaboration & Activation

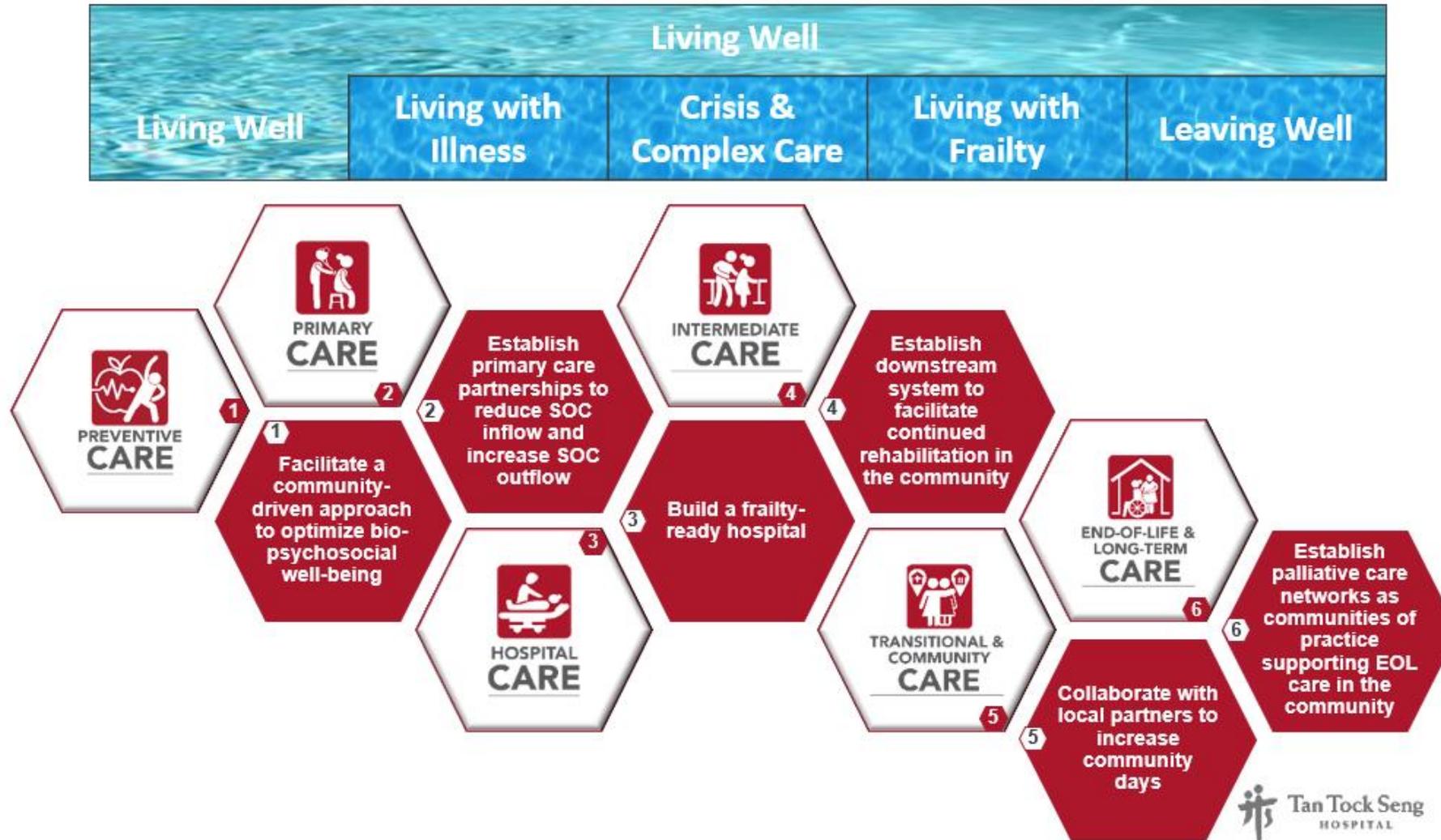
- Co-develop programmes
- Group education and coaching
- Training for partners

Community Health Posts in Central Zone

(1 Jan 2019 - 30 Jun 2019):



Community Health Programmes & Initiatives



One Community of Carers: Building the Capabilities of Our Community of Carers



One Community of Carers:

Building the Capabilities of Our Community of Carers



TTSH Volunteers

- 584** Active Volunteers
- 100** Volunteers served more than 5 years
- 87** Age of oldest active volunteer
- 48** Hours spent on average per year by each volunteer
- 31** TTSH volunteer programmes in 4 categories
- 16** Age of youngest active volunteer

Community Volunteers

- 89** Trained Carers
- 59** Trained Carers Supporting Home Visits
- 5** Community Partners in collaboration



^Asset Based Community Development is an approach to sustainable community-driven development. It builds on the assets that are found in the community and mobilises individuals, associations and institutions to come together to realise and develop their strengths.

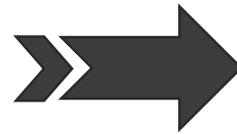
(Data are accurate as of 31 Jun 2019)

One Population, One Budget:**Central Zone Integrated Care Financing Pilot****Current State**Model of Care

Traditional hospital-centric
model of care

Financing Model

Volume-driven
Attendance-based
Program-based funding

**Future State**Model of Care

Integrated care through
collaboration with partners

Financing Model

One which will enable
integrated care to be
delivered across the care
continuum in a cost-efficient
manner



One Population, One Budget:

Extended DRG Bundles

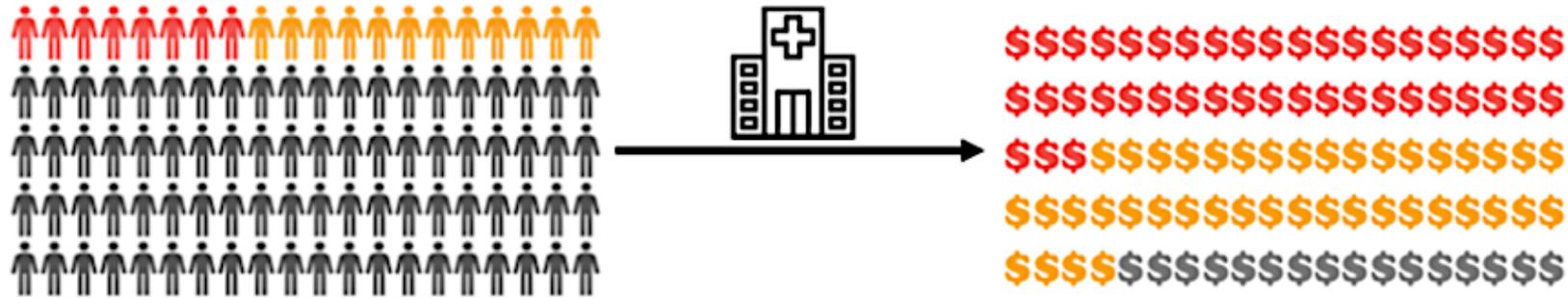
3 Key Objectives:

1. To manage the frailty curve through the integration of care and alignment of financial incentives.
2. To implement Extended DRG bundles with Social Service Agency (SSA)-run community hospitals.
3. To expand the Extended DRG bundles to include the Transitional Care component (Extended DRG **Plus**), with the aim to evaluate whether bundling TC helps to further optimise the system (care and savings).

DISPROPORTIONATE UTILISATION OF HEALTHCARE



Observation:
20% of **patients** living in Central/North utilize
84% of Central/North healthcare costs

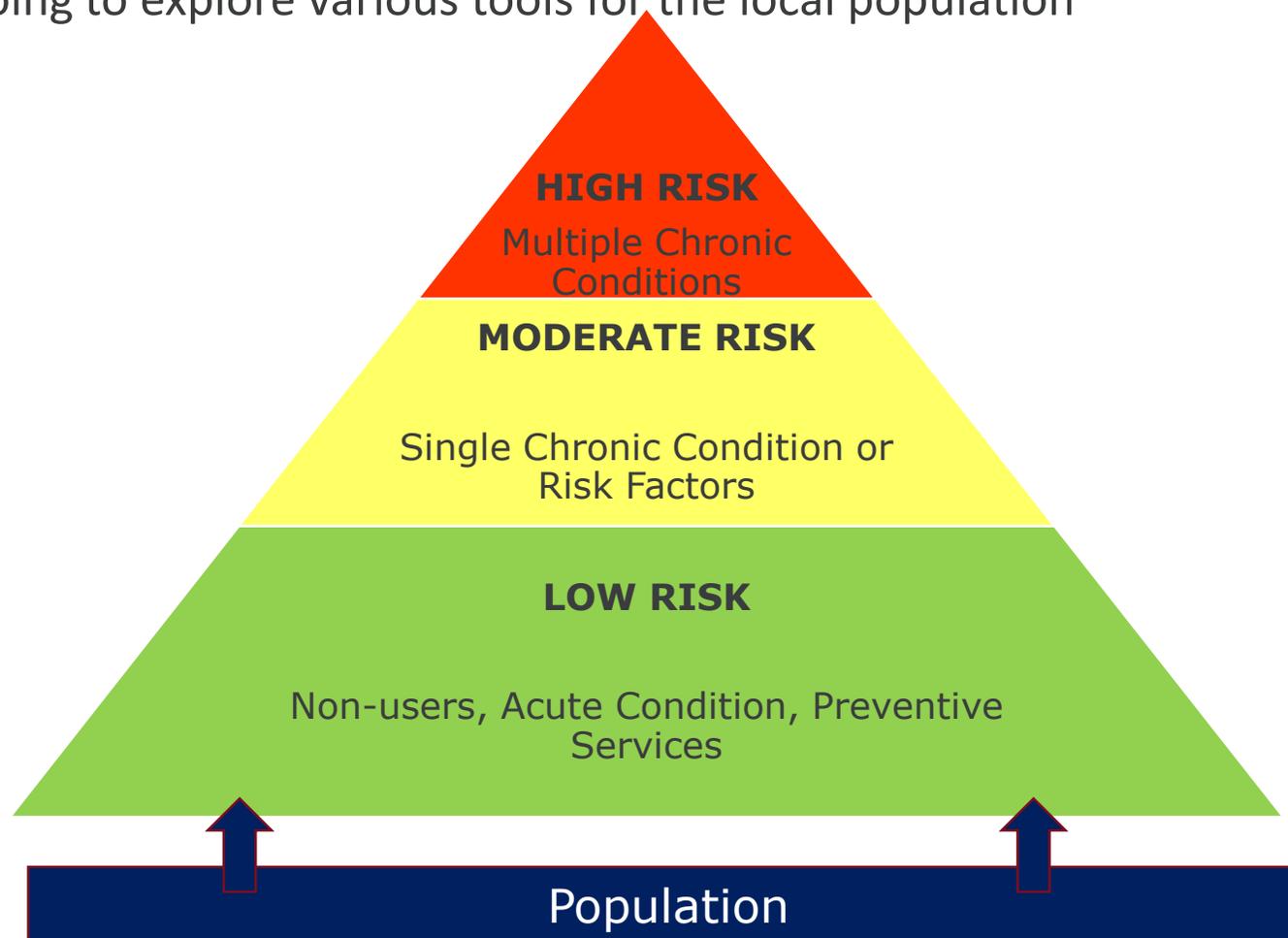


Observation:
5% of **patients** living in Central/North utilize
57% of Central/North healthcare costs



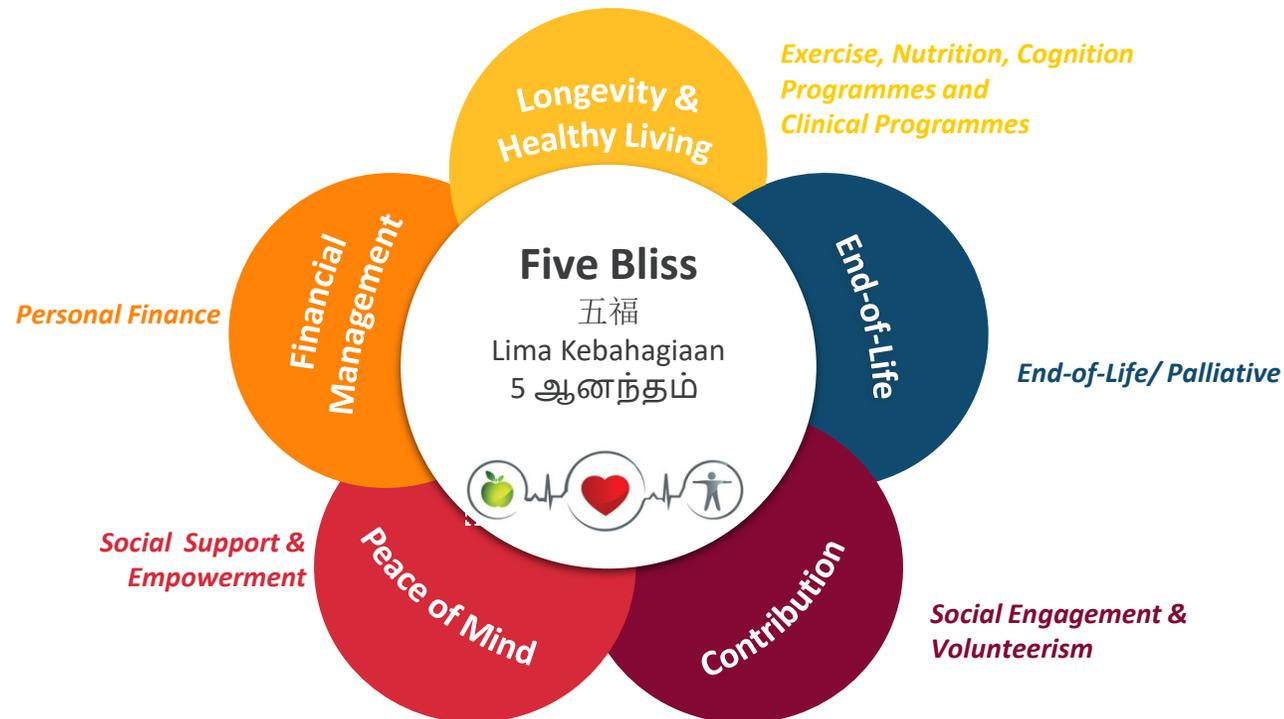
One Set of Assessment Tools: Population Risk Stratification

- Population risk stratification would allow us to better **target and optimise resources**
- Efforts on-going to explore various tools for the local population



One Menu of Programmes

- To create a repository of health & social programmes available in Central zone
- Potential partnerships (Health post, Social Service Agencies & Community Centre)
- Partners and Residents can seek out programs/activities on their own.



Finance

Central Health Enabling Fund



Objective:

- Dedicated to supporting community-related works that will help to achieve population health.

Examples of projects:

- **Esther Network**
- **Influenza vaccination program** for community-dwelling seniors in the Central zone region from the lower income groups
- **Collective leadership Workshop** for Central Health Community leaders



Graduation Ceremony of the inaugural batch of 16 ESTHER coaches from TTSH and Community Partners

Information Technology (IT)

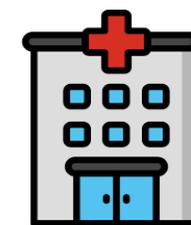
- Health Intelligence (HI) platform triggers
 - Improve care coordination and continuity of care



Tsao Foundation
Longevity is Opportunity



Patient/ Client/ Resident



TTS^H

- Geographic Information System for hot spot mapping

- Next Generation Electronic Medical Records (NGEMR)
 - To engage with IHIS and MOH on Central Health IT matters
 - To develop governance framework & strategies for data sharing and IT integration for Central Health

Profile of high healthcare-utilizing patients at Tan Tock Seng Hospital

Joshua Wong¹, Lim Wei-Yen¹, Ian Leong², Jeannie Teh², Loh Shu Ching²

¹Department of Clinical Epidemiology, Tan Tock Seng Hospital
²Division of Central Health, Tan Tock Seng Hospital

Background & Objective

Healthcare utilization is highly skewed, and a small number of patients disproportionately use very high resources. Understanding the profile of such high utilizers may facilitate the development of intervention programmes that try to keep patients healthy and reduce unnecessary healthcare use. Identifying the location of high-utilizer patients could allow better co-

Figure 1: Top 500 healthcare resource utilizers in 2015-2017 and their proximity to community partners with healthcare capabilities



¹Cityview Research (2018) and a modified version of the map by the Singapore Health Services (2018)

Figure 2: Top 500 healthcare resource utilizers in 2015-2017 and their proximity to community partners without healthcare capabilities



¹Cityview Research (2018) and a modified version of the map by the Singapore Health Services (2018)

Insights from journey thus far.....

1. Working community partners - Unique and complex ecosystem



- Different agenda, focus and priorities
- *Different strokes for different folks*: Segmented engagement approach based on readiness & like-mindedness
 - One to one
 - One to few
 - One to many
- Different lingo
 - Important to frame goals / aspirations in the appropriate language
 - E.g. ↓ **average length of stay**, ↓ **re-admission rates** VS. **building a trusted and supportive ecosystem to support healthy ageing in the community**

Insights from journey thus far.....

2. Greater need for investment of effort in developing a Community

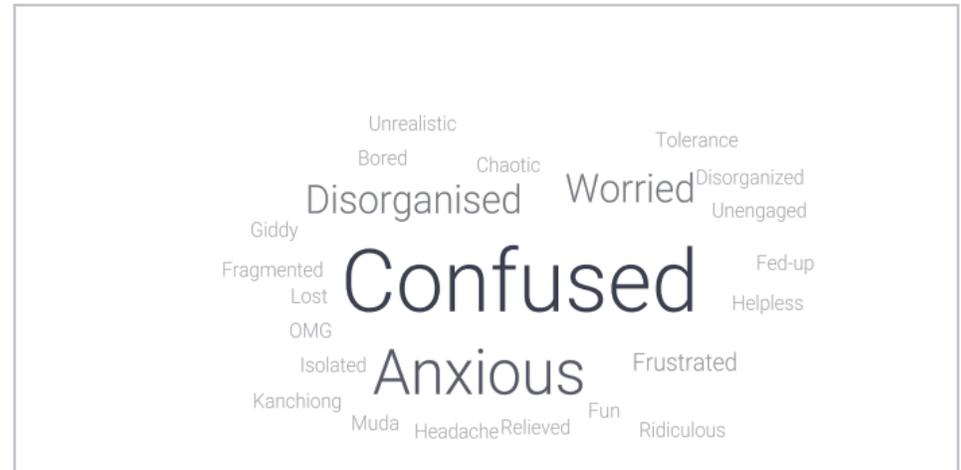


'The essential challenge is to transform the isolation and self-interest within our communities into connectedness and caring for the whole'

Community – The structure of belonging by Peter Block

- Central Health Collective Leadership Development
- Change management – Shifting attention from the problems to the possibilities

Q: Describe in one word, your emotions as a Resident/ Service Provider/ Community Health Team/ Neighbour during the game (Round 1).

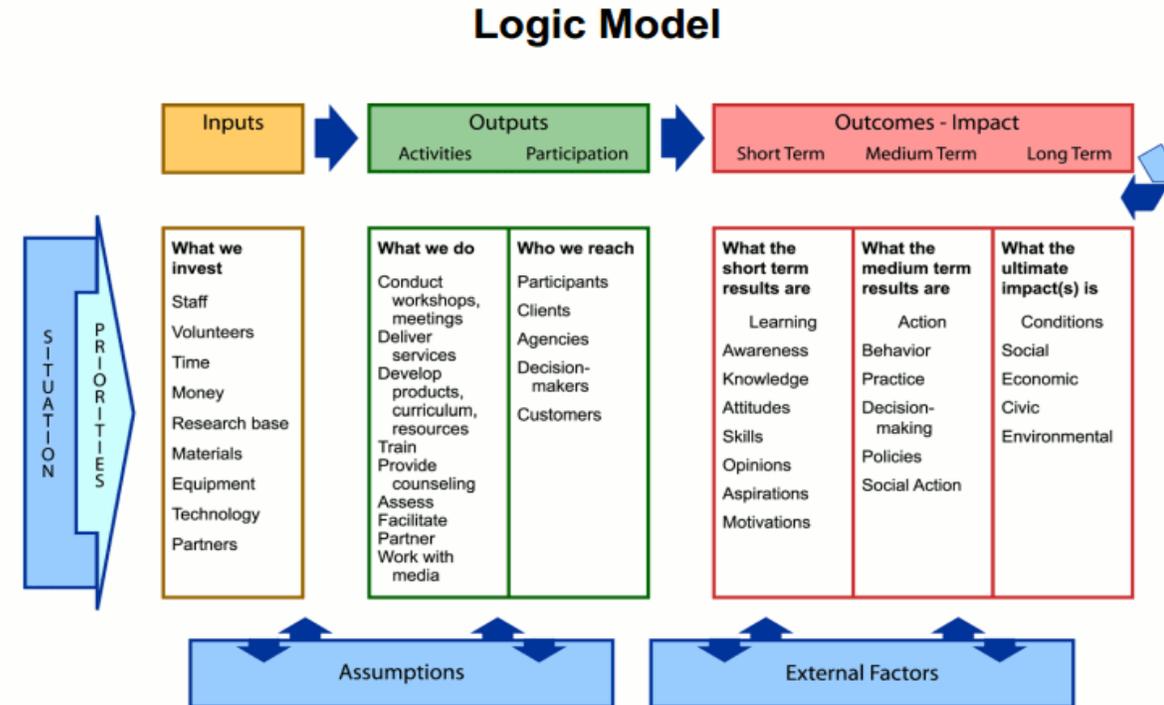


Insights from journey thus far.....

3. Programme evaluation to be a standard practice and discipline in programme development, implementation and review



- For relevance, sustainability & scalability
- To justify investments in manpower and time
- Measurements:
 - Operational activities: Balance Score Care indicators
 - Programme effectiveness: Programme indicators
 - Population health strategy: Population Health Indicators



Source: Enhancing programme performance with logic models. University of Wisconsin-Extension, Feb 2003



Insights from journey thus far.....

5. Important to involve the hospital staff

Population health management is not limited to only healthcare workers working in the community

- Benefits to both patients and hospital in ensuring continuity of care beyond hospital walls
- Care gaps and needs are often identified during hospitalization episodes
- Good understanding of community health strategies and programmes will promote active referral of cases to appropriate interventions; greater confidence in having patients managed in the community
- On-going road shows to internal clinical departments



DIVISION FOR CENTRAL HEALTH – THE SUM OF THE PARTS THAT MAKE UP THE WHOLE



Ms Loh Shu Ching
Executive Director
Division for Central Health



A/Prof Ian Leong
Clinical Director
Division for Central Health

Planning & Development



Communications



Activation



Community Health



