Achievements and challenges in elderly service development in Hong Kong

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HK Convention and Exhibition Centre

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Consultant Geriatrician, TMH M&G
Content

• The drives
• The achievements
• The challenges
• … and the way forward

... from the perspective of a geriatrician working in HA
Content

- The drives
- The achievements
- The challenges
- ... and the way forward
Population Ageing in Hong Kong

Hong Kong - Life expectancy at Birth (2016)
Male: **81.3 years**; Female: **87.3 years**

Total Fertility Rate (TFR)
(No. of live births per 1,000 women)

Life Expectancy (LE)
(Years)

Source: Census & Statistics Department, HKSAR
Impact of Population Ageing: HA Services Utilization

**Elderly patients (>= 65 years): Major users of HA services**
- Around 50% of HA patient days
- Around 50% of Accident & Emergency admissions to HA hospitals

**Remarks**
# Patient days for General Speciality only (i.e. Care Category: Acute General or Convalescence/Rehabilitation).
* Figures at age 0 refer to patient days (exclude Nursery only) per 1000 registered births.

**Elderly patients : major HA service users**
Characteristics of Elderly Patients and their clinical needs

• Multidisciplinary team approach important
  – More Chronic illnesses & comorbidities
  – Slower response to treatment
  – Environmental factors important
  – Mental impairment prevalent
    • Dementia in Hong Kong: 100,000 in 2009 (~ 330,000 by 2039)

• High “touch” care
  – Tech “low” or “high”

• Unnecessary hospitalization to be avoided
  – Caring at place of residence is better esp for dementia patients

Adverse outcomes of hospitalization for older patients
Hospital management of older adults. UptoDate May 2017

  Functional decline
  Falls
  Delirium
  Sleeplessness/sleep deprivation
  Tethers
  Infections
  Malnutrition
  Pressure ulcers
  Venous thromboembolism
  Adverse drug events
Hong Kong: Rapidly Ageing Population

Population Projections

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Elderly Population</th>
<th>Elderly Population Percentage</th>
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<tbody>
<tr>
<td>2016</td>
<td>7.34M</td>
<td>1.16M (16%)</td>
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<tr>
<td>2021</td>
<td>7.61M</td>
<td>1.45M (19%)</td>
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<tr>
<td>2031</td>
<td>8.00M</td>
<td>2.16M (27%)</td>
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Big Challenge to Health & Social Sectors
Content

• The drives
• The achievements
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• ... and the way forward
HA Strategies: Based on Stratified Needs & Risks

HA “Strategic Service Framework for Elderly Patients” (2012)

HA Patients

- High Risk Complex Conditions
- Chronic Diseases, with Comorbidities and / or Require Rehabilitation
- Majority Well but Many Have Stable Chronic Conditions or Mild Episodic Illnesses

Case management
Reduce avoidable hospitalization, Improve community support, Palliative care

Chronic disease management
Better manage chronic conditions & rehabilitation, prevent further deterioration

Supported self-care
Maintain well-being & improve disease control
Older patients with complex care needs requiring hospitalization (HA)
Service infrastructure development & …. gaps (1)

Hospital care

Older Patients with complex needs

AED triage

Acute wards

C/R wards

Policy & accessibility
HKSAR Policy
Physical & mental care services
Elder friendly designs

Assessment & Care Matching
Geriatrics support to AED
AED elderly care initiatives

Assessment & Care Matching
Designated Geriatric wards/beds
HARRPE’s score
10 ACE identification
CGA pilots & Liaison geriatric nursing
Inter-department collaboration

Care Matching & Rehab
Extended care/long stay care
Infirmary

Discharge planning

Assessment & Coverage
Early discharge planning
Transitional care preparation

10 Acute Care processes of Elderly care (ACE) identified

Identified through:
- Disease burden & service gaps
- Priority in system: KPI, Hospital accreditation criteria
- Staff & patients’ views
- Peer & literature review

1. Fall
2. Discharge planning
3. Pressure sore
4. Nutrition and enteral feeding
5. Urinary incontinence
6. Medication management
7. Acute confusion
8. Cognitive impairment
9. End of life care
10. Rehabilitation Potential
Ambulatory and Community

- **Community care & programs**
  - Community Call Centre (CHCC) & hot lines
  - Dementia Care Support Scheme (DCSS)
  - Medication programs – PDIS, Drug refill pilots
  - PRC & Voluntary support group
  - Smart patient websites
  - PEP & PPP

- **RCHE care CGAS**
  - Covered > 90% of all RCHEs in HK
  - > 2 decade Hx of collaboration with NGOs
  - EOL program in RCHE
  - Medico-social sharing platform

- **Transitional care in community**
  - Medico-social collaboration : Post-d/c multi-disciplinary support
  - Elderly patients with complex medico – social needs in community
  - Respite care in institutions
  - CNS – CGAS – ICM

- **Post-d/c support**
  - 19 GDHs
  - Rehabilitation & Transitional care
  - Resource Hub & Coordination centre

- **GDH**
  - Rehabilitation & Transitional care
  - Resource Hub & Coordination centre
Integrated Care and Discharge Support for High Risk Elderly Patients (HA)

- **Led by** Geriatricians
- **Integrated** multidisciplinary teams
- Partnership with **NGOs**
- **Medico-social** collaboration

**Hospital**

- **Formulate Care Plan**
- **Discharge planning**
- **Medical, functional & social needs assessment by Link Nurse**
- **A&E attendance** 16%

**Community Health Call Centre service**

- **Community**
- **Rehabilitation at outpatients or day hospitals**
- **Acute patient days** 15%

**NGOs – personal & social care services**

- **Outreach Nursing/ Allied Health services to home**
- **E- admission to MED** 16%

**Hospital Authority**
Content

• The drives
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Challenges & .... opportunities

• New MSC pilot program
  – A new model of medico-social collaboration with NGOs; extend services to surgical & orthopedics elderly patients with social & personal care

• Enhance CGAS in Mega-RCHE
  – A new model of integrated medical services in old age home settings, esp “mega-homes” (> 1,000 elderly residents)

• NGOs & community partners
  – Empowerment in chronic disease management and rehabilitation, besides dementia

• EOL care & support
  – EOL in RCHE full implementation, Medical palliative care in hospital/ home

• IT development and big data availability
  – Exploration of HARRPE score utility (frailty monitoring), Chronic illness modelling
1. Evolution of the current medical service model
   1. Innovative pilots & workable clinical service models
   2. Ride on the current infrastructures & organisational development
2. Clinical leadership – manpower planning
   1. Geriatric Vs non-Geriatric; staff role reengineering
   2. Knowledge and skill transfer & transdisciplinary approach
3. Collaboration
   1. Institutions – Social welfare sector (SWD/NGO), DH, Legal, Private sector/PPP
   2. Disciplines – Nursing, Allied Health, Pharmacy, Social workers/NGO staffs, TCM
4. Geron-technology & IT
   1. Personalised medicine (functional monitoring) & Big data management
   2. Adaptation to clinical practice & information sharing
5. Patient engagement
   1. Cultural – socio – legal advancement
   2. Acceptance of new service model & behaviour adaptation

_Innovation, Integration & Collaboration_
Enablers for success & way forward

- Clinical leadership & manpower planning
- Service model & Clinical governance
- Community partner empowerment & collaboration
- Manpower reengineering
  - Nursing
  - AH, Pharmacist
  - Social Work
- Telemedicine
  - Big Data
  - Geron-technology
- Patient centred care
  - Medico-social Collaboration

醫社合作
居家安老
社區共融
Thank you
Supplementary slides
## Fellow numbers of the different specialties (as of February 2017)

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<thead>
<tr>
<th>Specialties</th>
<th>No. of Fellows</th>
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<tr>
<td>Cardiology</td>
<td>265</td>
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<tr>
<td>Clinical Pharmacology &amp; Therapeutics</td>
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<tr>
<td>Critical Care Medicine</td>
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<tr>
<td>Dermatology &amp; Venerology</td>
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<td>Haematology and Haematological Oncology</td>
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<td>Respiratory Medicine</td>
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<td>Rheumatology</td>
<td>81</td>
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</table>
Risk Stratification – HARRPE Score

HARRPE = Hospital Admission Risk Reduction Programme for the Elderly
Community Geriatric Assessment service

- Community Geriatric Assessment service (CGAS)
- Start in 1994
- Now serves all clusters
  - Timely assessment & appropriate Mx of health problems for elderly people at risk in the community
  - Improve the interface b/w medical & social service sectors
  - Establish community based rehabilitation programs
  - Ensure correct placement of elderly people into institutions
  - Promote quality of care through education of caregivers
- Reduced admission rate, unplanned readmission rate, A&E attendance rate & incidence of adverse events & appraisal of service by clients or caregivers

Community Geriatric Assessment Teams (CGATs) 2016
- Covers ~640 RCHEs (90%)
- Provides outreach medical consultation, nursing assessment, treatment and community rehabilitation
Old Age Home distribution in NTWC 新界西區老人院舍分佈情況
Outreach Geriatric Services - Elderly Patients in Old Age Homes

- **Hong Kong Elderly:** ~7% live in Old Age Homes (OAHs)
  - ~700 OAHs in HK; by NGOs (subvented) & Private;
  - ~65,000 elderly, vast majority frail + multiple morbidities

- **Outreach Geriatric Teams to OAHs**
  - Outreach medical, nursing & rehabilitation support
  - Care supported by electronic patient record system
  - Training to OAH staff: Skill transfer, infection control
  - Covering > 90% OAHs in Hong Kong
  - Effective in reducing emergency hospitalisations & visits
Geriatric Services to Support End-of-life Care in Old Age Homes

- Elderly in Old Age Homes (OAHs)
- Many approaching last years of life, suffering from terminal illness
- ~15% died each year; accounted for >30% in patient deaths in HA
- Frequent admission to hospitals at last few months: receive futile aggressive/invasive treatment

- HA Started “End-of-life Care” program in OAHs since 2015
- “Tripartite collaboration”: Healthcare + Patients & Relatives + OAH Staff
- Advance Care Planning
- Enhance medical & nursing support: “Care-in-place”
- Engagement & training of staff
- Coordinated care pathway in hospitals
New Initiative: Partnership in Infirmary Service

- Long-term residential care for elderly in HK:
  - Social sector OAHs (NGOs & private):
    - Care & Attention Homes, Nursing Homes
  - HA Hospital Infirmary services
    - Patients required constant medical & nursing care

"Social Infirmary"

- Infirmary patients with more stable clinical conditions could be cared by social sector - Pilot infirmary service run by social sector
- With enhanced onsite medical & nursing support
Community Health Call Centre (CHCC) service - for High Risk Elderly Patients

**Target Patient List**
(High Risk based on HARPPE)

**Clinical Response Teams**

**Proactive Outbound Call within 2 Days upon Discharge:** All year round services, extended service hours

**A&E attendance / Emergency Admission of Target Patients**
25%

**Referrals:** E.g. Clinics, Social & NGOs support

**Electronic Patients Records**

**Protocol-guided advice**
(92 clinical protocols)

**Documentation**
NGO (DECCs)

- Training
  - Elders
  - Care-givers
  - Social Welfare staffs
- Empowerment
- Clinical support
- IT & Technology
Pilot Collaboration on Dementia Rehabilitation

“Dementia Community Support Scheme (DCSS)”
- Strengthen medical-social collaboration
- Enhance social care sector’s CAPACITY to provide structured rehabilitation to HA patients with mild / moderate dementia

- Traditional NGOs elderly social care centres:
  - Run by social workers, provide personal and social care support

New model of medical-social collaboration:

- Strengthen elderly social care centres’ Nurses & Therapists (OT or PT) capacity
- Structured rehabilitation programme and protocols developed by HA
- “Prescribed” rehabilitation components by HA doctors
- Designated HA nurses – liaison, skill transfer
Information Provision – HA’s Smart Patient Website

Cumulative hit counts at 25 Mn