



มหาวิทยาลัยมหิดล
คณะแพทยศาสตร์
ศิริราชพยาบาล

Principle of Geriatric Medicine

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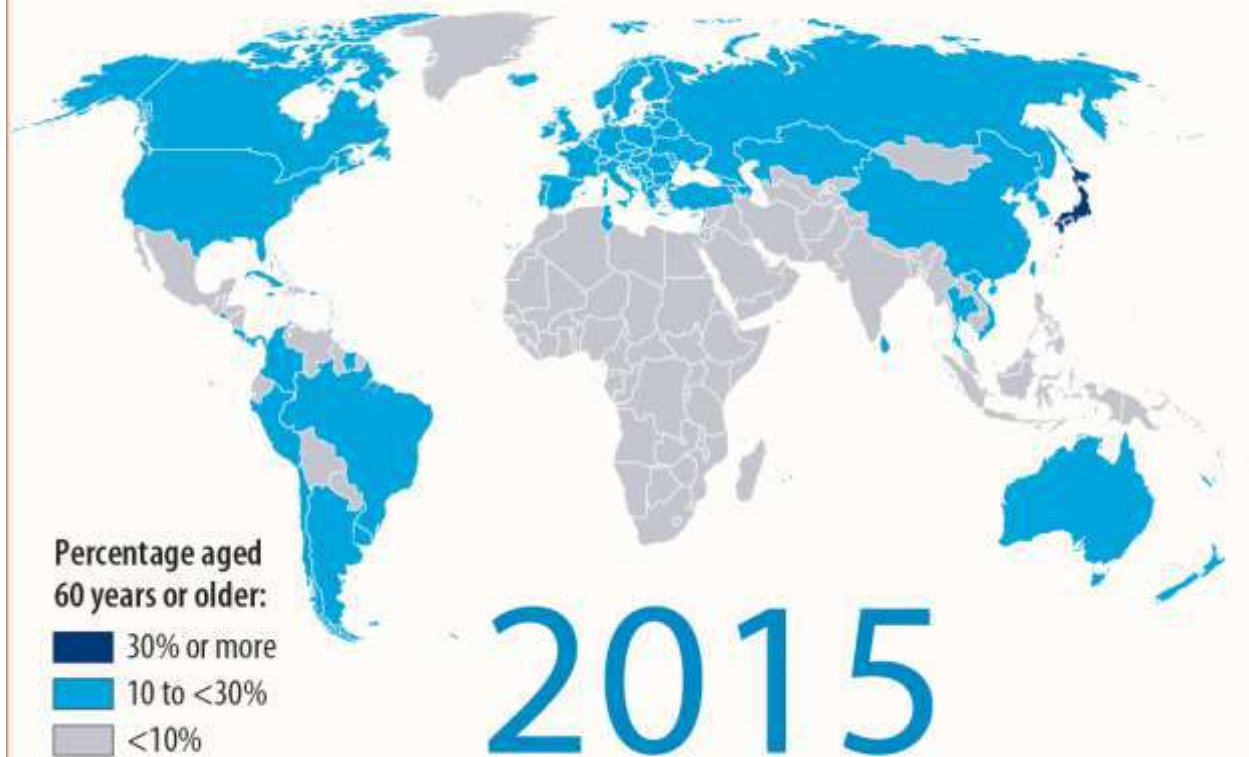
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Ageing and Health

#yearsahead

Populations are getting older



World Health
Organization



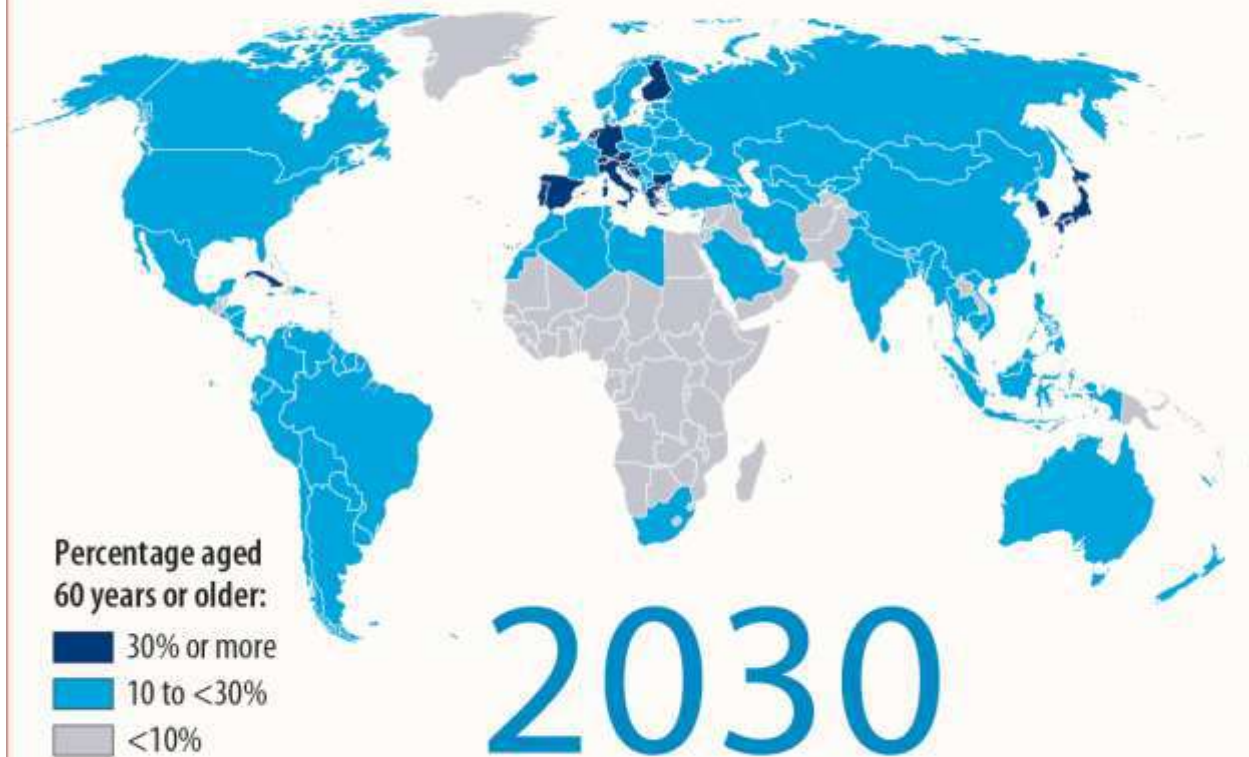
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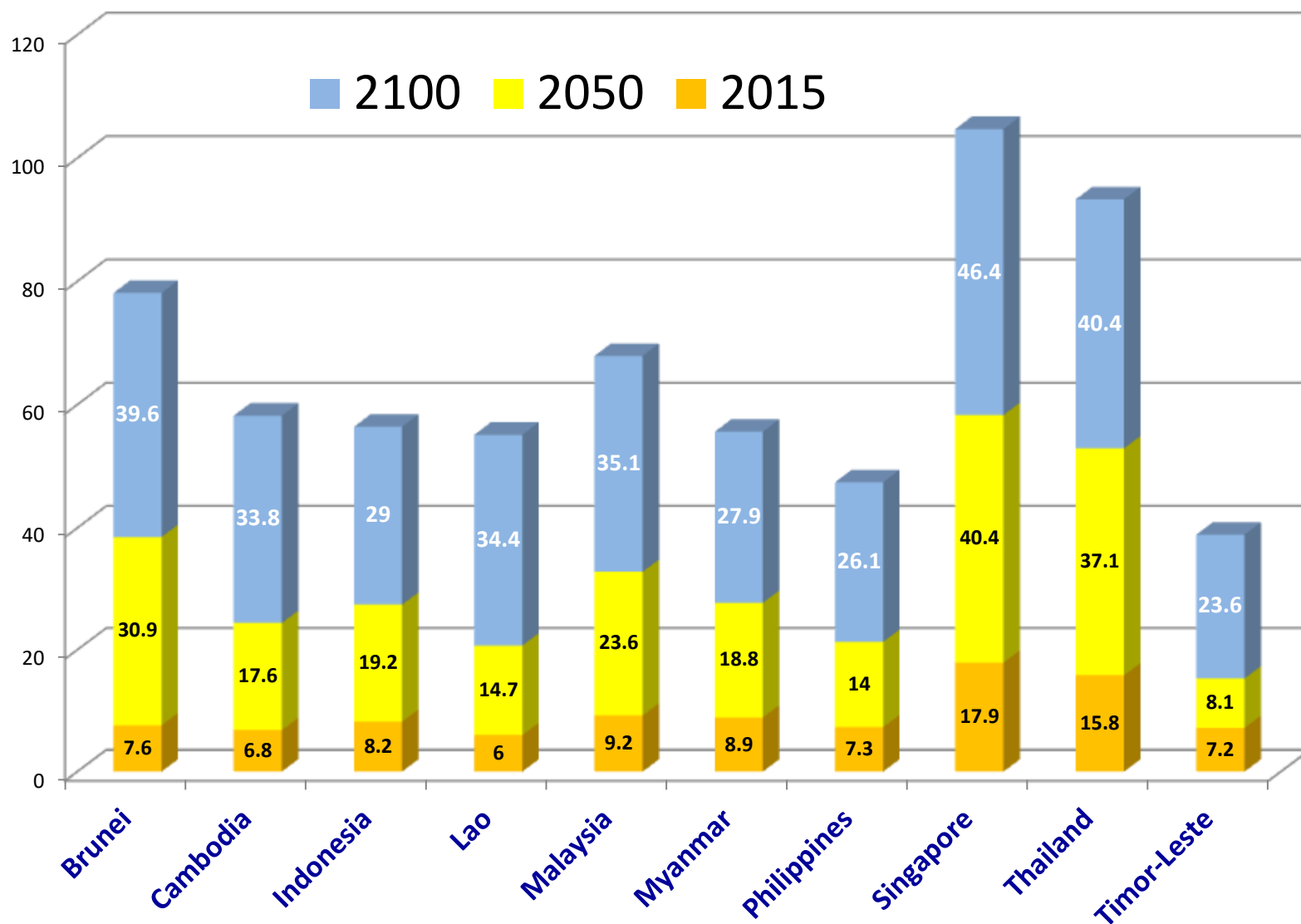
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Populations are getting older



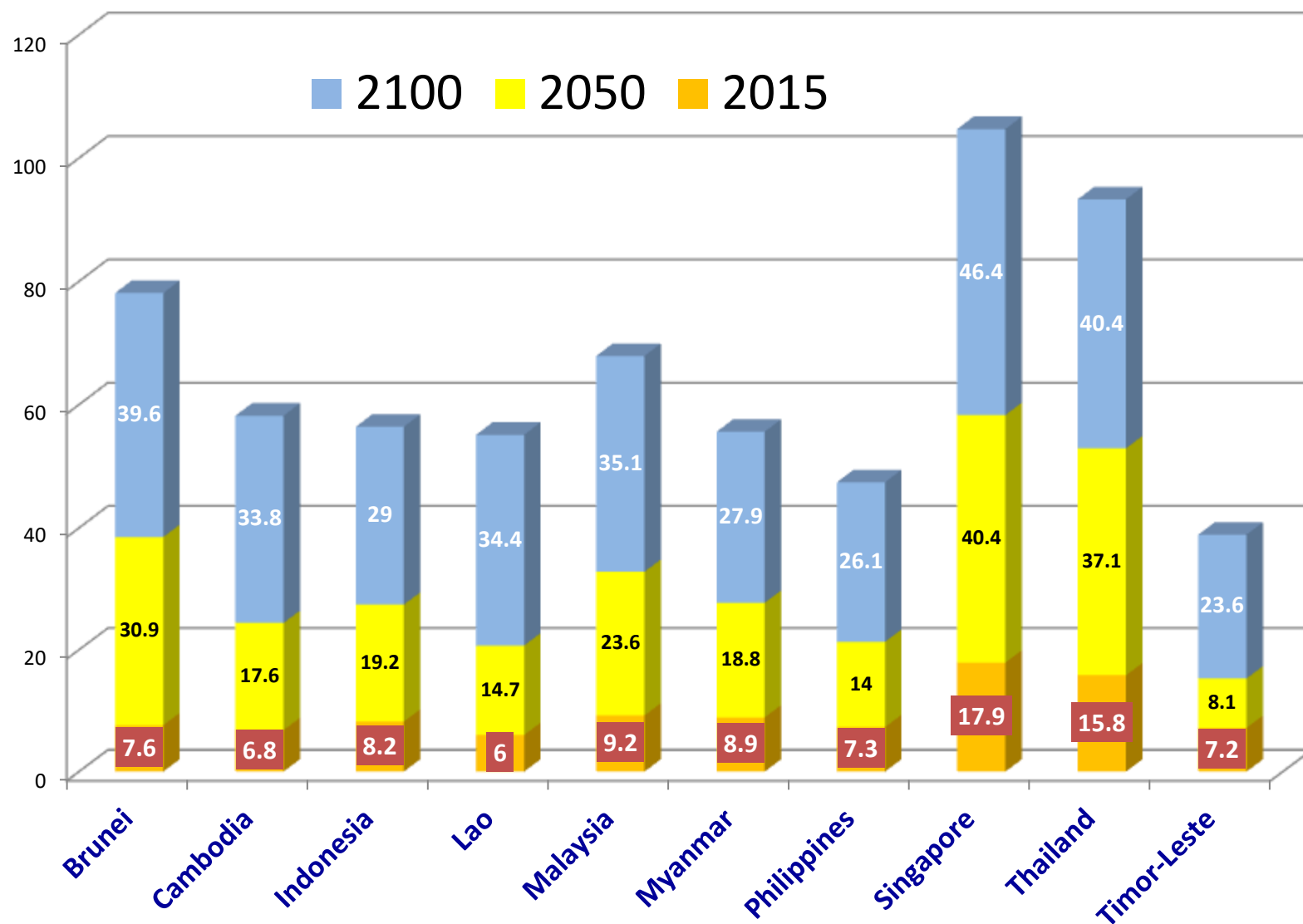
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Trend of percentage of people aged ≥ 60 in ASEAN countries



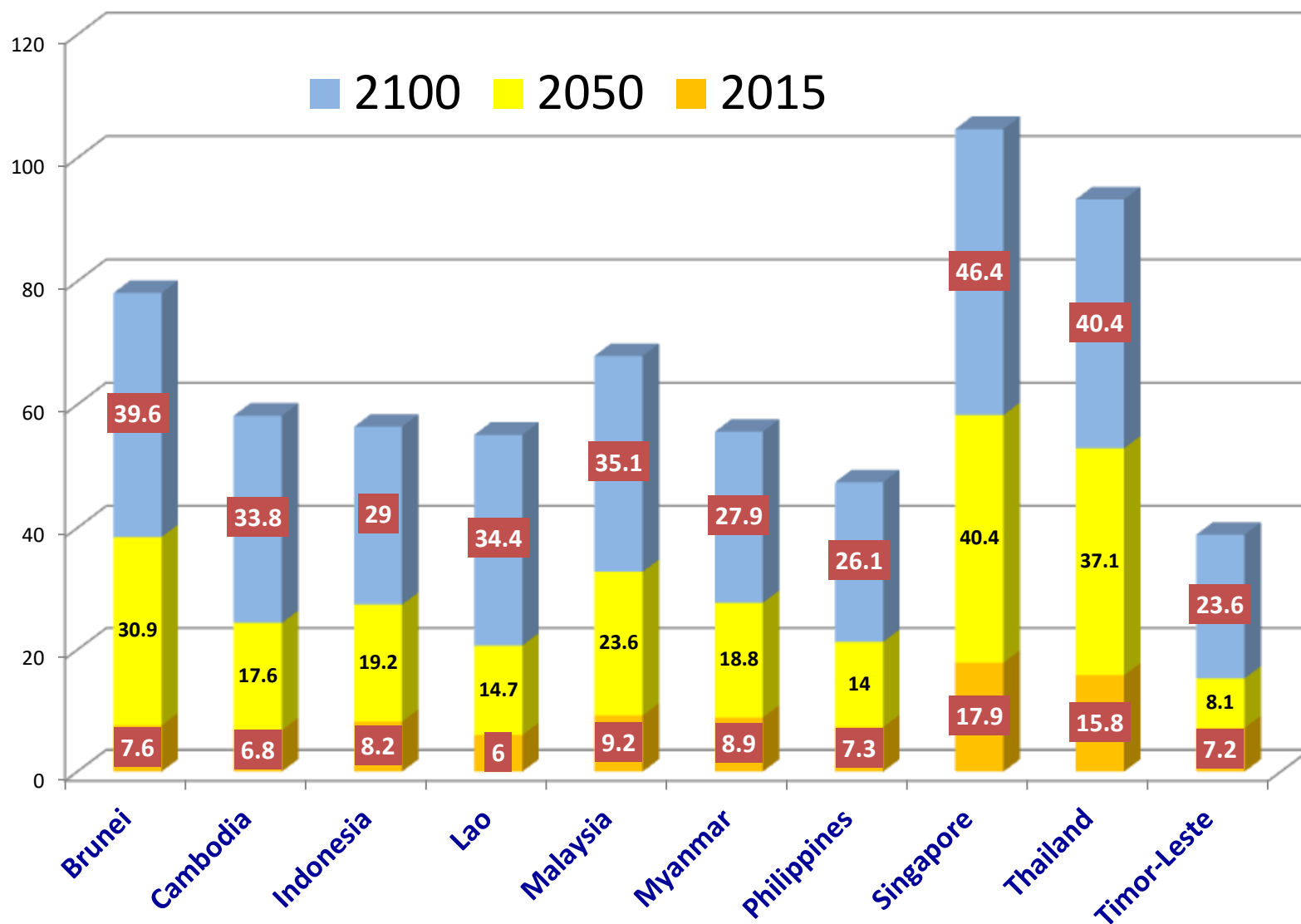
United Nations, Department of Economic & Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP. 241.

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Global AgeWatch Index

Domains



1. Income security



2. Health status



3. Employment and education



4. Enabling environment

Indicators

1.1 Pension income coverage

1.2 Poverty rate in old age

1.3 Relative welfare of older people

1.4 GDP per capita

2.1 Life expectancy at 60

2.2 Healthy life expectancy at 60

2.3 Psychological wellbeing

3.1 Employment of older people

3.2 Educational status of older people

4.1 Social connections

4.2 Physical safety

4.3 Civic freedom

4.4 Access to public transport

Direct "outcome" indicators of older people's wellbeing

Proxy of enabling attributes/capabilities of older people

Enabling social environment of society



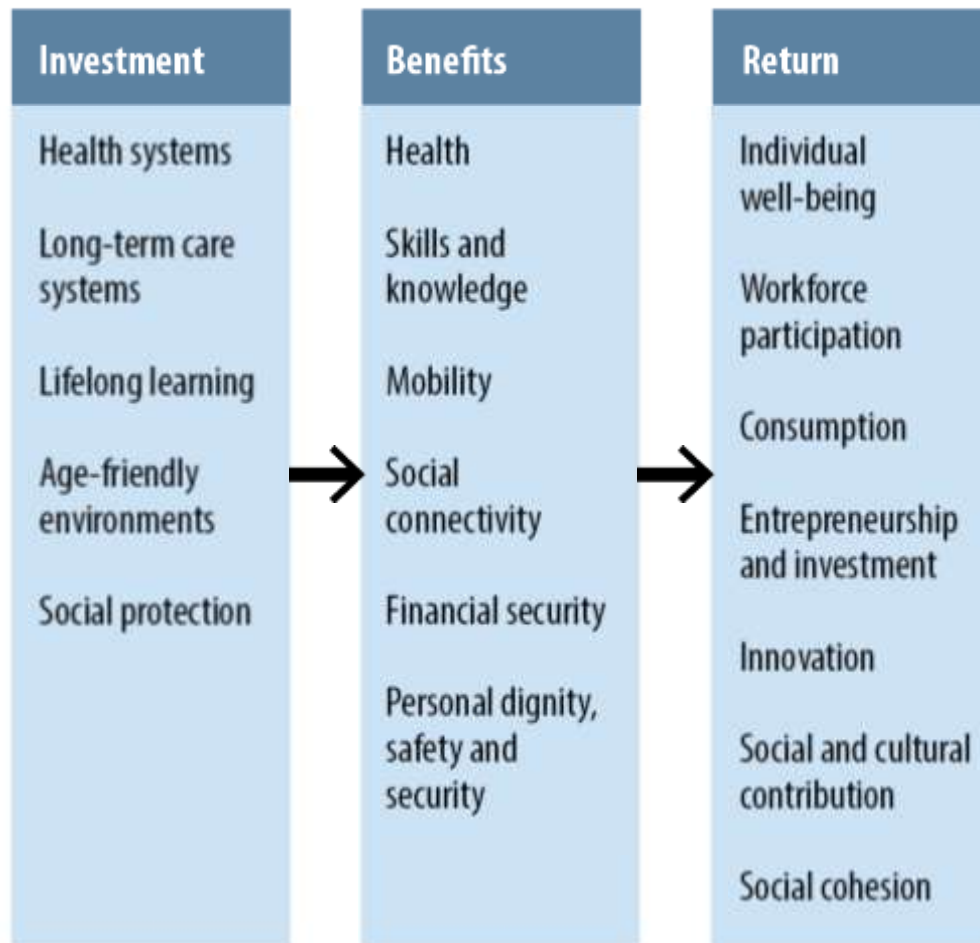
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There is no “typical” older person





Healthy Aging is an investment, Not a cost !





Priority areas for action



Align health systems

- Place older people at the center of health care
- Shift the care focus from managing diseases to optimizing what people can do
- Develop the health workforce



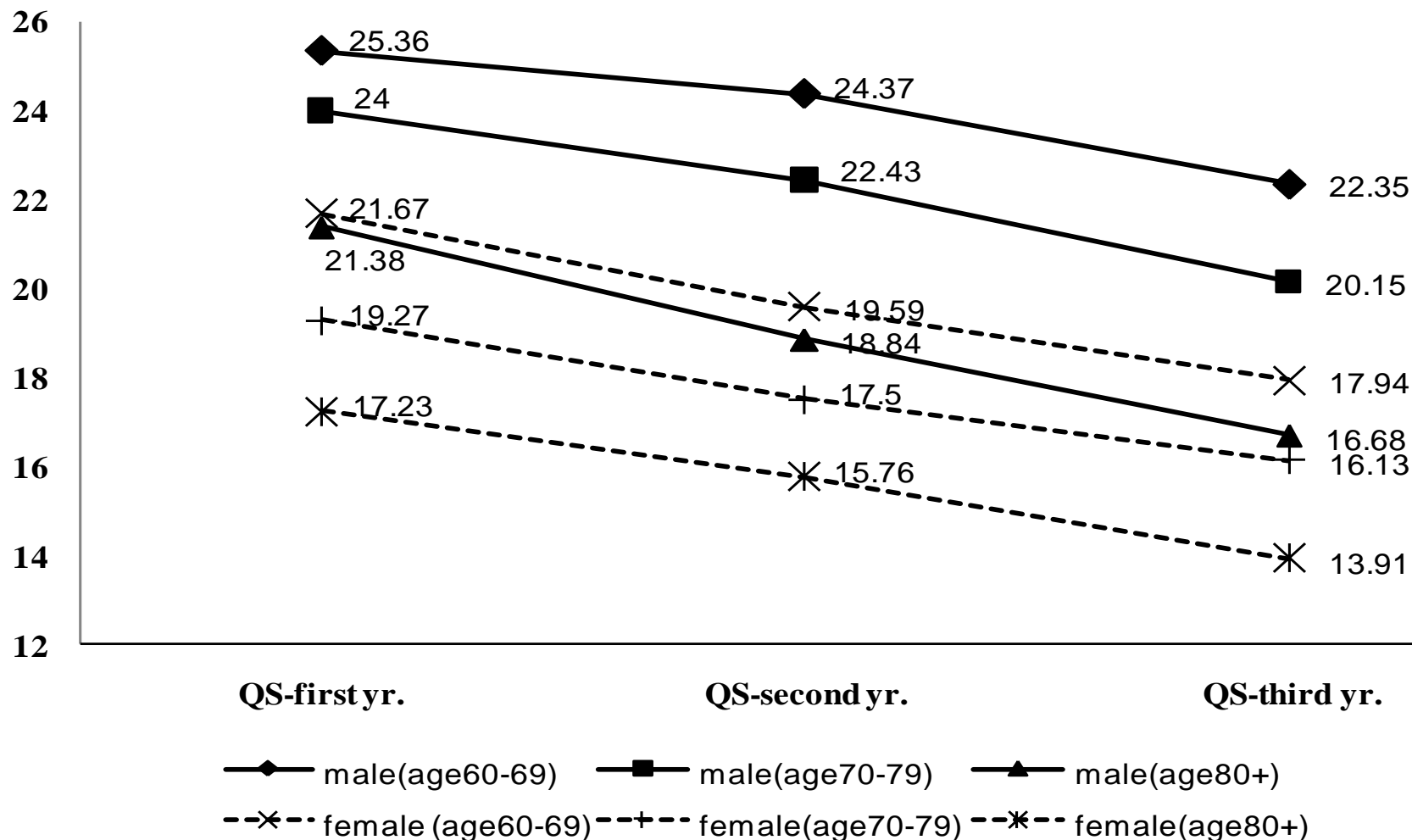
Unique clinical features of older patients

R-A-M-P-S

- ☯ Reduced body reserve
(dynamic & heterogenous)
- ☯ Atypical presentation
- ☯ Multiple pathology
- ☯ Polypharmacy
- ☯ Social adversity



Decline of muscle strength with age





Atypical presentation (Geriatric syndrome)

- ☯ **Instability (Fall)**
- ☯ **Immobility**
- ☯ **Intellectual impairment**
- ☯ **Incontinence**
- ☯ **Insomnia**
- ☯ **Inanition (anorexia)**
- ☯ **Iatrogenesis**



Common Chronic Diseases among Older Patients

- **Musculoskeletal disorders**
 - Osteoarthritis, crystal-induced arthropathy
 - Osteoporosis
- **General medical problems**
 - Hypertension, Diabetes mellitus, Dyslipidemia, Circulatory disorders : stroke, coronary heart disease
 - Under-nutrition
 - Infections
- **Neurodegenerative disorders**
 - Parkinson's disease
 - Dementia
 - Delirium
 - Depression



Polypharmacy





Social assessment for older patients

- ❖ Relationship within family
 - ❖ Caregiver : aware of elder abuse in dementia
 - Physical abuse
 - Caring abuse : nutrition, drug compliance, pressure ulcer, incontinence, instrumentation
- Pay attention to living alone, poor !!



What is “Geriatric Medicine” ?

“....that branch of general medicine concerned with the

☯ clinical (physical & mental)

☯ rehabilitative

☯ social

☯ preventive

aspects of illness and health in the elderly”



**So, the world desperately needs
a special health system/clinic
for older people and patients !!!**

Geriatric Medicine



Priority areas for action





Target of national long-term care

- **Year 2016 : 600 million baht**

10% of bedbound elderly (~ 100,000 cases in 1,000 sub-districts)

- **Year 2017 : 900 million baht**

50% of bedbound elderly (~ 500,000 cases in 5,000 sub-districts)

- **Year 2018 : 1,200 million baht**

100% of bedbound elderly (~ 1,000,000 cases)



1. Functional assessment (ADL) to target those who need long-term care in the community





2. Organizing local elderly club

- **Place** : usually in local health facility
- **Data base** : information of member
- **Club committee** : regular meeting supervised by local health personnel.
- **Regulation** : financial record & audit.
- **Fund raising**: from member/ other sources.
- **Activities** : health promotion activities, income generating activities, religious activity, volunteer---home visit



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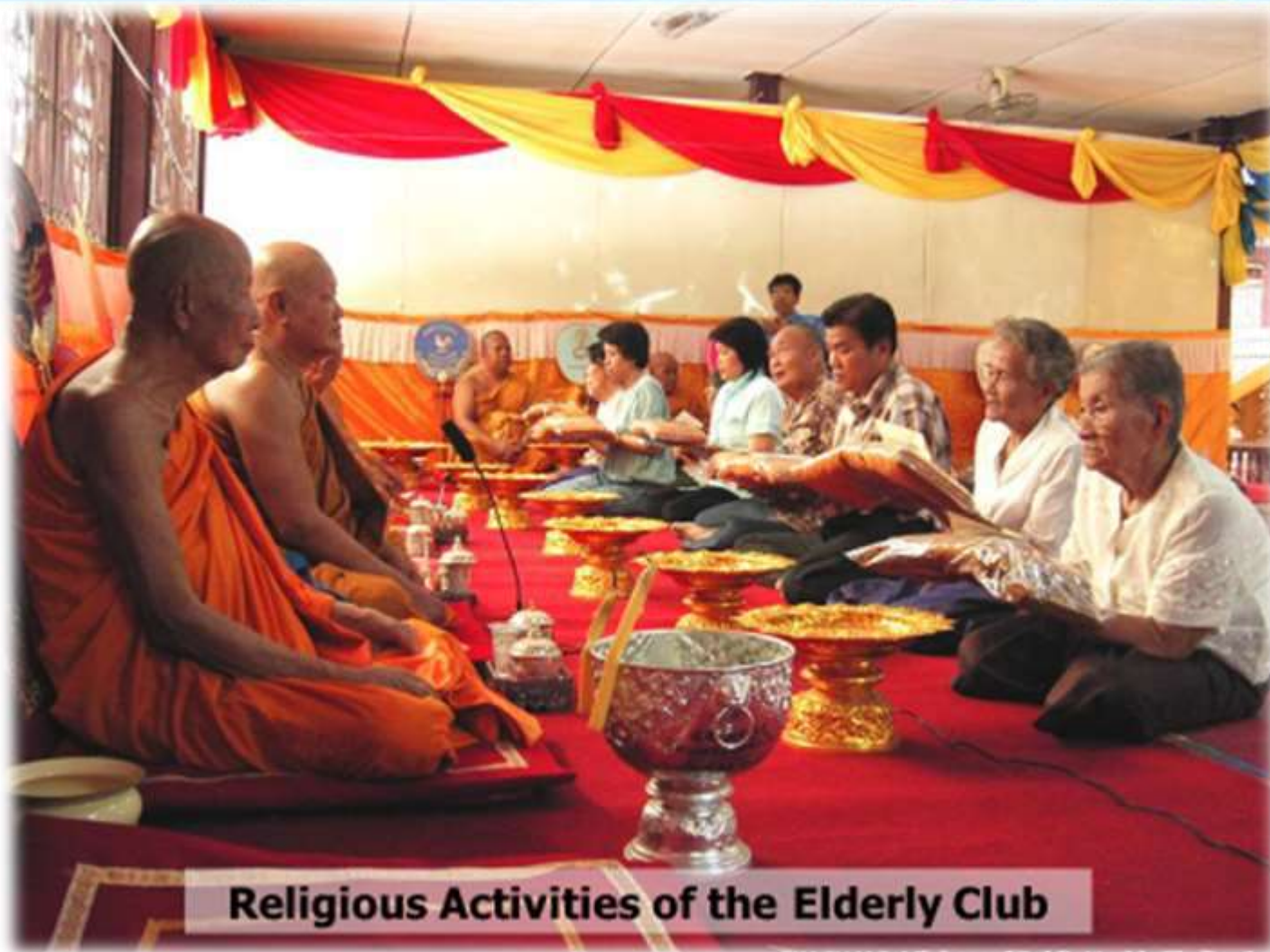
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Religious Activities of the Elderly Club



3. Local volunteer : key player

- **Elderly Care Volunteer**
- **Health Volunteer (MoPH)**
- **Volunteer from Elderly Club**
- **Neighbors**
- **School children volunteer**



Local health volunteer (LHV)

- Established since 1978**
- 20th March each year is the National Local Health Volunteer Day**
- Working in every village**
- Around 1,050,000 LHV nationwide**
- Being trained and educated to provide basic and primary health care for those in need.**



PRACHAI P. Min



4. Well-organized working system

► Integration model

► Network :

- ❖ local administration (health and other gov. agencies at sub-district, district and provincial)
- ❖ elderly club, volunteer, people in community, etc.

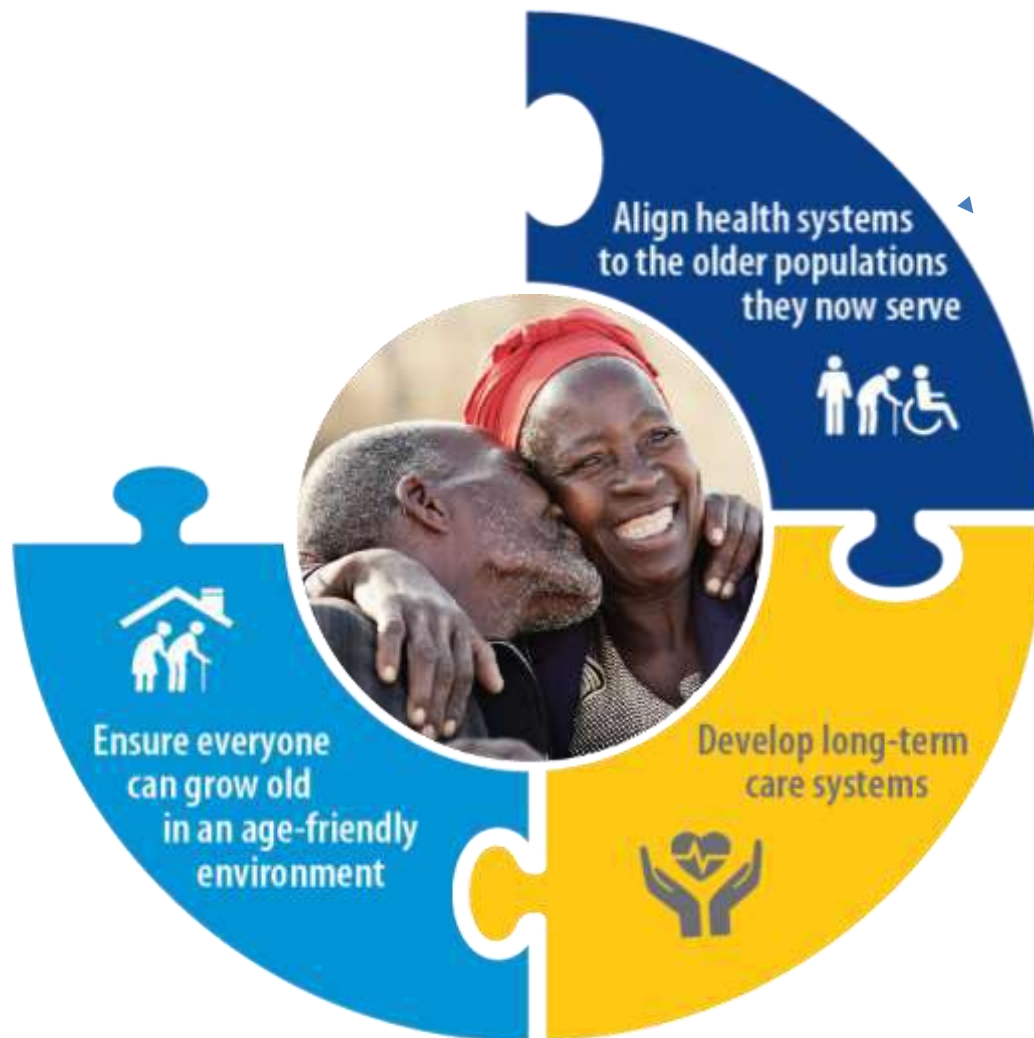
► Services :

- ❖ training of care manager, caregivers and volunteer
- ❖ home care, services /care for special problems, etc.



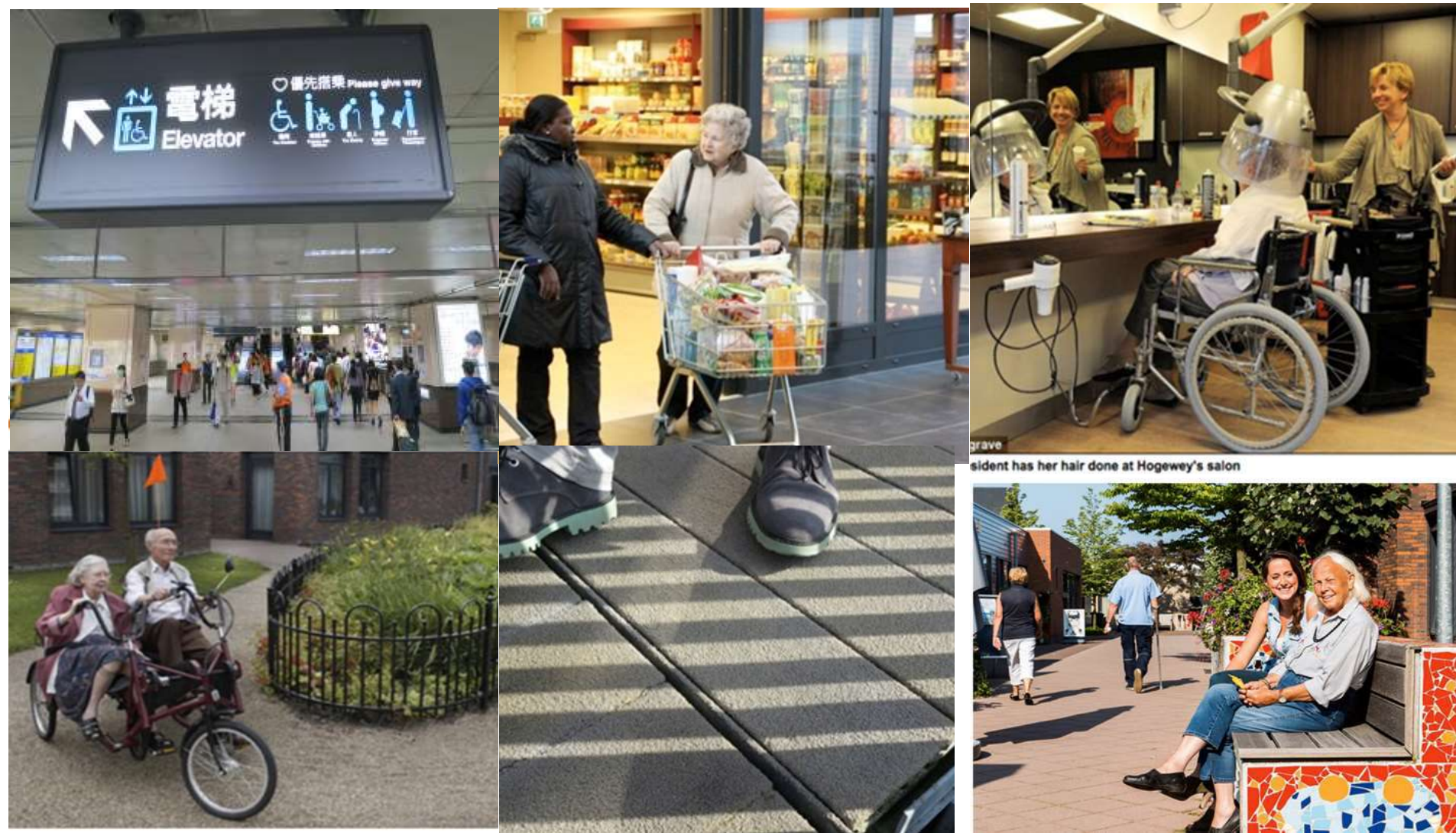


Priority areas for action





Aged-friendly Environment





Aged-friendly Environment

Outdoor spaces and buildings

- Pavement : non-slip, wide enough for wheelchairs, well-maintained, free of obstructions, reserved for pedestrians and have dropped curbs to road level.
- Public area : clean, pleasant and available in the community
- Green space : sufficient in number, safe and well-maintained
- Outdoor safety : good street lighting, police and community volunteer patrols

Public safety : sufficient in number, safe and well-maintained



Aged-friendly Environment Transportation

- Public transportation : reliable, frequent (including at night and on weekends and holidays), affordable and consistent cost, easy access to all city services
- Public transport vehicle : clean, well-maintained, accessible, not overcrowded, equipped with priority seating for older people
- Public transport stop and station : appropriately located, accessible, safe, clean, well-lit and well-marked with sufficient number in seating and shelter



Comprehensive Geriatric Assessment

- **Physical : physical health, nutrition, drug**
- **Mental : depression, dementia, delirium**
- **Social : care-givers, financial, environment**
- **Function : basic & instrumental activity of daily living**





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Vaccination recommended by Royal College of Physicians of Thailand

Vaccines ¹	Age groups (years)		
	19 – 26 years	27 – 64 years	≥ 65 years
Tetanus, diphtheria, pertussis vaccine (TT or Td or Tdap) ²	Boost with 1 dose of TT or Td every 10 years		
Varicella vaccine	Substitute one-time of TT or Td with Tdap ³		
Measles, mumps, rubella (MMR) vaccine	2 doses ⁴ (consider serological test before vaccination)		
Human Papillomavirus (HPV) vaccine	1-2 doses ⁵		
	3 doses (female) ⁶		
	3 doses (male) ⁷		
Influenza vaccine ⁸	1 dose annually ⁹		1 dose annually
Hepatitis A vaccine ¹⁰	2 doses (consider serological test before vaccination)		
Hepatitis B vaccine ¹¹	3 doses (consider serological test before vaccination)		
23-valent pneumococcal polysaccharide vaccine	1 dose (with re-vaccination) ¹²		1 dose
13-valent pneumococcal conjugate vaccine	1 dose (Optional)		1 dose ¹³ (age ≥ 50 years)
Meningococcal polysaccharide or conjugate vaccine	For high risk persons ¹⁴		
Zoster vaccine			1 dose (age ≥ 60 years) ¹⁵



Recommended vaccine



Optional vaccine (considered in specific conditions:ตารางที่ 2)



Not recommended



Priority areas for action





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The 2nd National Plan for Older People 2002 - 2020

The 2nd National Plan on The Elderly (2002-2021)

1st Revised of 2009



*The National Committee on the Elderly
The Ministry of Social Development and Human Security
Thailand*



Thailand 'Older People' Act 2003

Section No. 11

- Item No.8 : The older people who are abused, exploited illegally, or neglected must be saved by the state.
- Item No. 9 : The older people are eligible for legal advice and services, or family problem solving.
- Item No. 10 : The older people must universally access to basic life need including shelter, food and clothes.



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Older people are valuable assets to the society