THAILAND HEALTHCARE DIGITAL TRANFROMING

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THAILAND, EHEALTH (HEALTH IT) CHALLENGE

Thailand

COUNTRY AT A GLANCE

Population	69.18 million	2018
GDP	$455 billion	2017
GDP growth	3.9%	2017
Inflation	0.7%	2017

http://worldpopulationreview.com/countries/thailand-population/

https://www.focus-economics.com/countries/thailand

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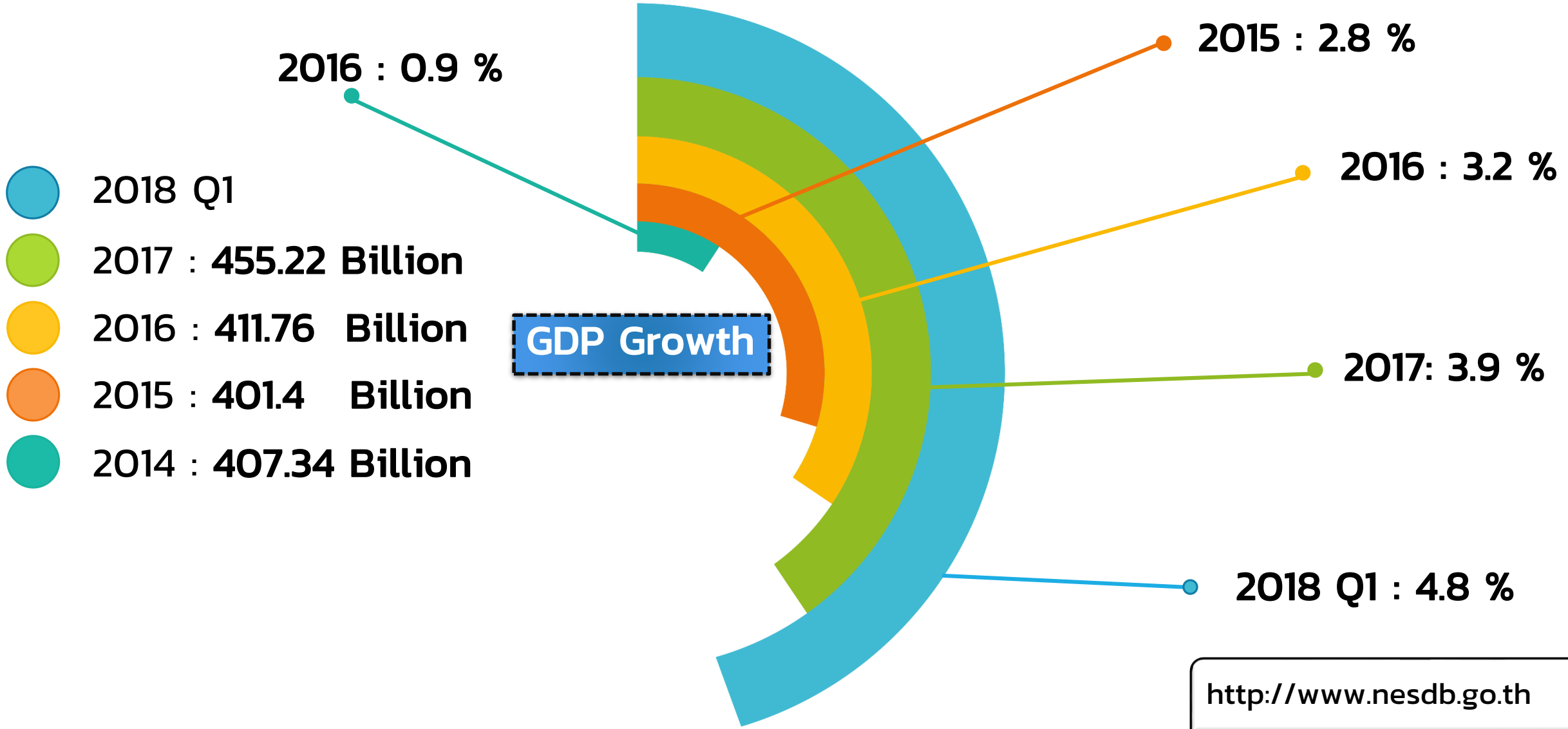
Thailand GDP 2014 – Current



http://www.nesdb.go.th

THAILAND HEALTHCARE SPENDING

HEALTHCARE SPENDING, BY COUNTRIES (% OF GDP)

	2007	2008	2009	2010	2011	2012
MALAYSIA	3.8	3.8	4.6	4.7	4.5	4.7
THAILAND	3.6	4.0	4.2	3.9	4.1	4.2
AEC AVERAGE	3.8	3.9	4.2	3.9	3.8	3.8
UNITED STATES	16.1	16.5	17.6	17.5	17.7	18.0
JAPAN	6.7	6.8	7.0	7.2	7.3	7.4
GERMANY	10.5	10.7	11.7	11.4	11.3	11.5

Source: Economist Intelligence Unit, WHO

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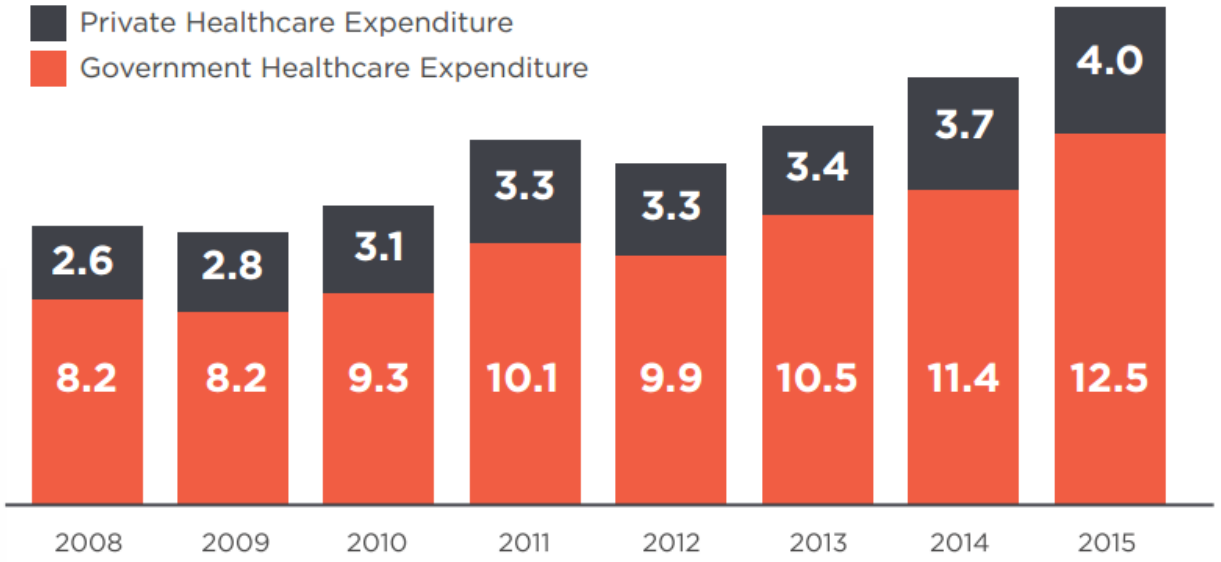
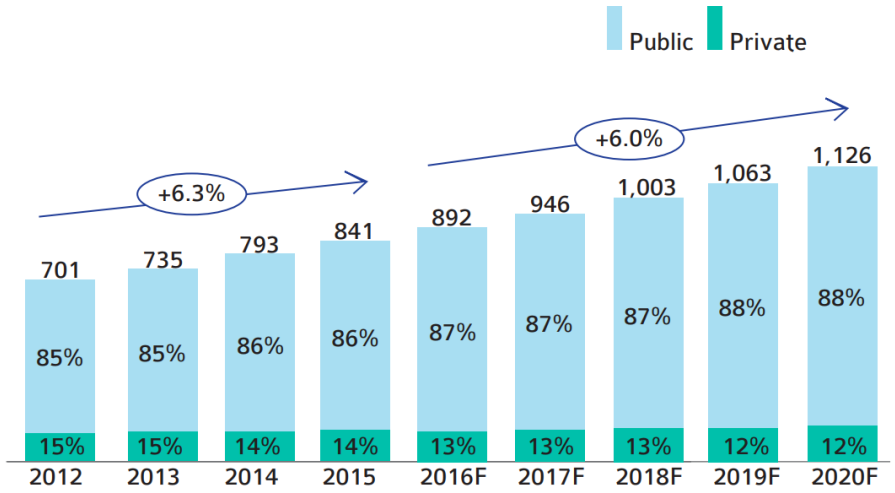
THAILAND HEALTHCARE EXPENDITURES (IN BILLION THB)



Source: Economist Intelligence Unit, WHO

Increasing Healthcare Expenditures in Thailand

Unit: THB in Billion



Source: EIC SCB, World Health Organization, BMI

http://www.boi.go.th/upload/content/TIR_Apr17_40465.pdf

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THAI HEALTHCARE SCHEME

UC, SSS and CSMBS are three main health insurance schemes. A combination of These health insurance schemes, resulting in a 99.47% universal coverage among the entire population.

SCHEME	UNIVERSAL COVERAGE (UC)	SOCIAL SECURITY SCHEME (SSS)	CIVIL SERVANT MEDICAL BENEFIT SCHEME (CSMBS)	PRIVATE INSURANCE
SCHEME NATURE	Citizen entitlement	Mandatory	Fringe benefit	Private contract
TARGET BENEFICIARIES	Thai citizen	Private sector employee	Government employee, dependents * and retirees	Insured employees and employers
POPULATION COVERAGE (2017)	48.80 Million	14 Million	5 Million	6-9 Million**
SOURCE OF FUNDING	Government (USD 94.24/ Cap)	Tri-party: employer, Employee, government (USD 102.24/Cap)	Government (USD 384.12/ Cap)	Insurance buyers
MANAGEMENT ORGANIZATION	National Health Security Office, Ministry of Public Health	Social Security Office, Ministry of Labour and Welfare	Controller General, Ministry of Finance	Private Insurance Companies

Source Ministry of Public Health, National Economic and Social Development, National Health Security Office

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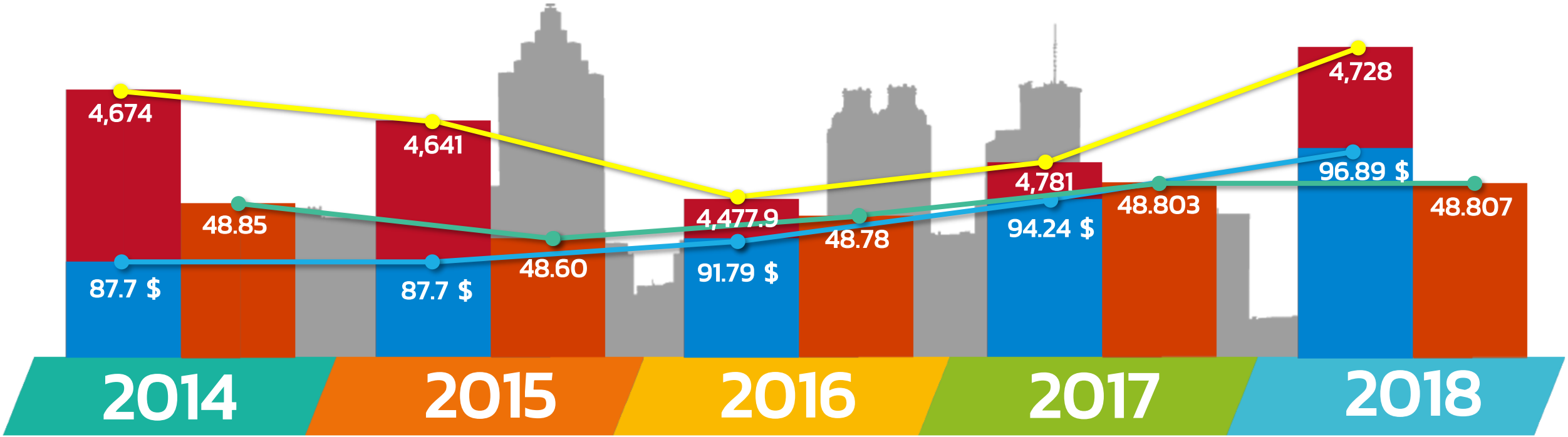
Universal Coverage Funding from 2014 - Current



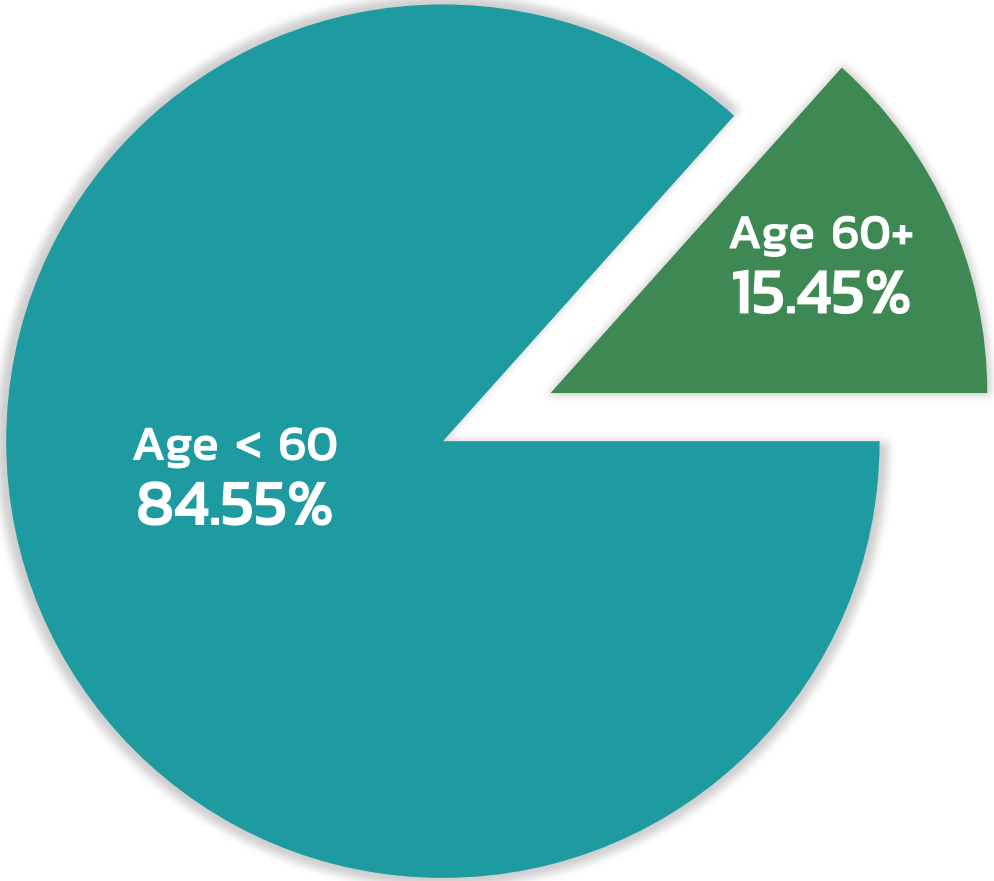
Per cap (USD)

Population (Million)

Universal Coverage Funding (Million USD)

https://www.nhso.go.th/

Aging Society (60+)

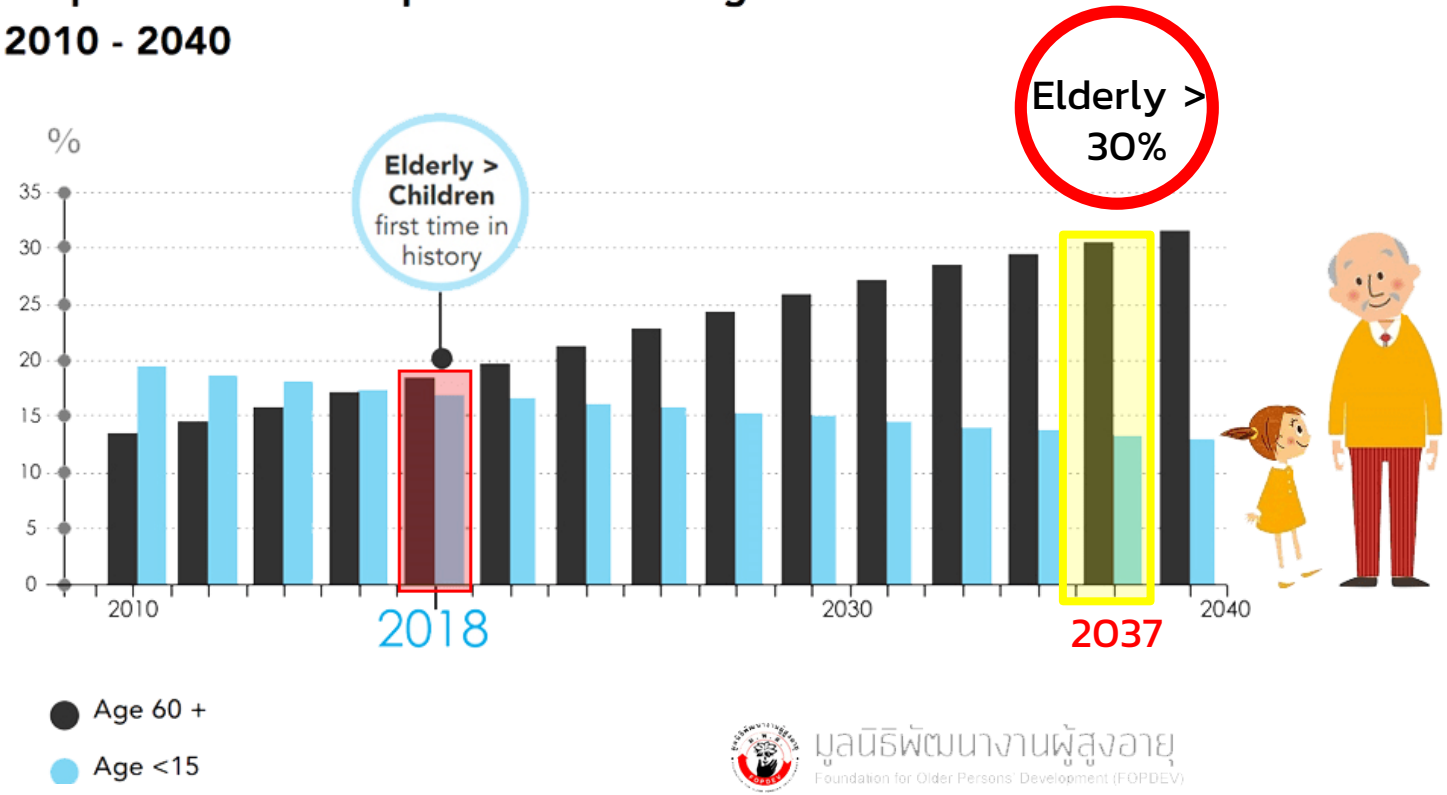


31 Dec 2017

44.24 %

55.76 %

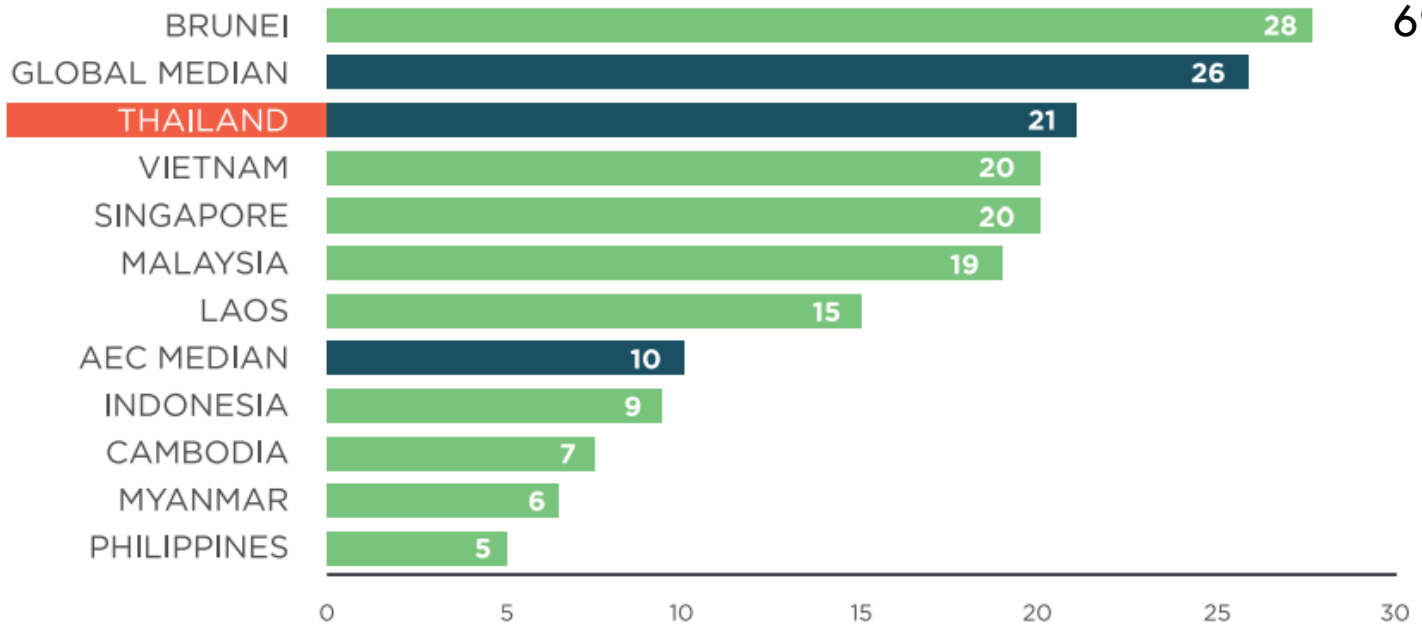
Proportion of the Population under Age 15 and 60 Years or Over: 2010 - 2040



มูลนิธิพัฒนางานผู้สูงอายุ
Foundation for Older Persons' Development (FOPDEV)

THAILAND HEALTHCARE INFRASTRUCTURE

NUMBER OF HOSPITAL BEDS PER 10,000 POPULATION, 2013



69.18

Source http://www.solidiance.com/

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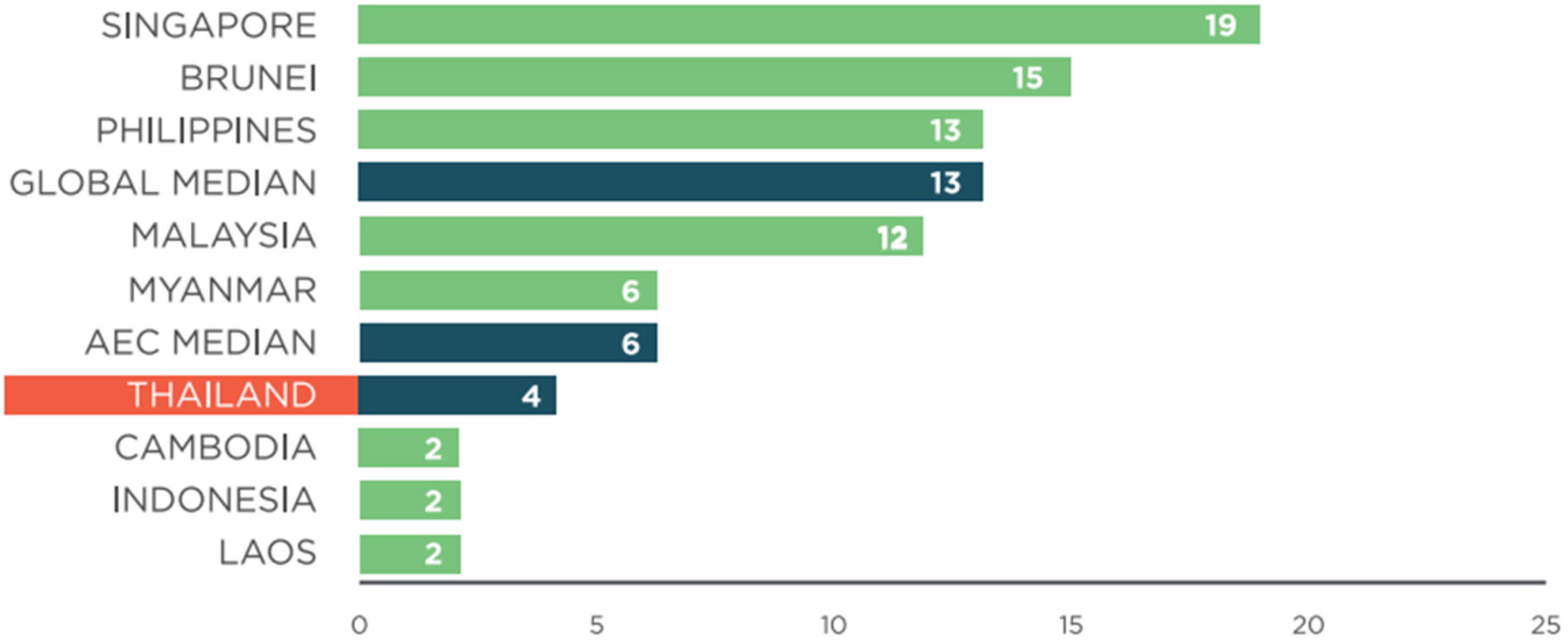
NUMBER OF DOCTORS PER 10,000 POPULATION, 2013



Source http://www.solidiance.com/

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OPD : 78,067,722 Different ID

OPD : 305,301,989 Visits

IPD: 7,141,475 Different ID

IPD : 29,641,647 Day of admission

OCTOBER 2016 TO JUNE 2017...

Source : https://hdcservice.moph.go.th

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Crowded

...Overload...

CURRENT

Types of Hospital (under MOPH) in Thailand,

- Primary care 9,873 Health Promoting hospitals
- 787 Community hospitals
- 83 Secondary Hospitals
- 33 Tertiary hospitals

ICT MOPH has built HIS for the largest sectors of Health care.

- JHCIS in 2007
- JHOS in 2010

THE HEALTH SERVICES INFORMATION SYSTEM, BEFORE 2013

Water fall model

2016-2017, MOPH Health Services Information system

Service Units

DATA Set

Private Cloud at OPS

Provincial Public Health Office

DATA Set

HDC Big data

Summary Data

HDC service
http://hdcservice.moph.go.th

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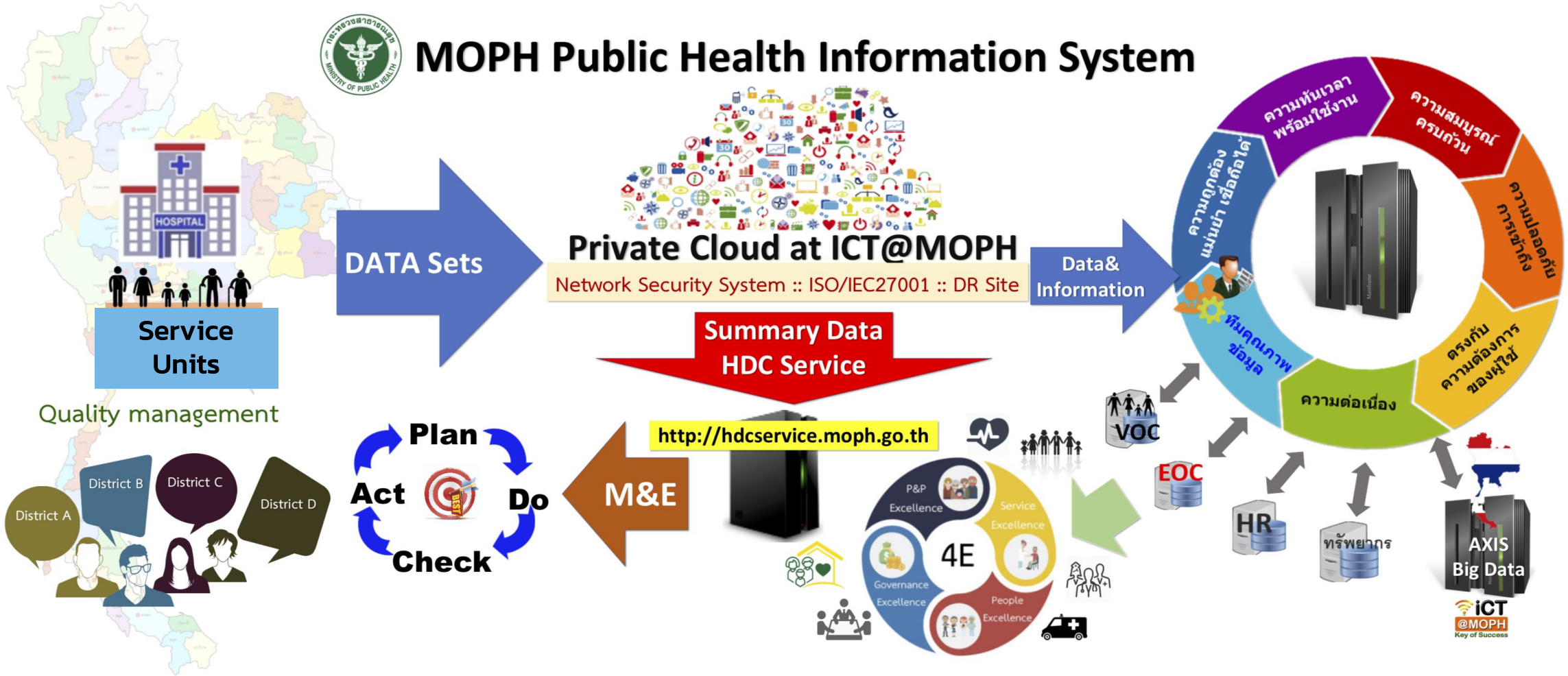
Recently, MOPH Health Services Information system



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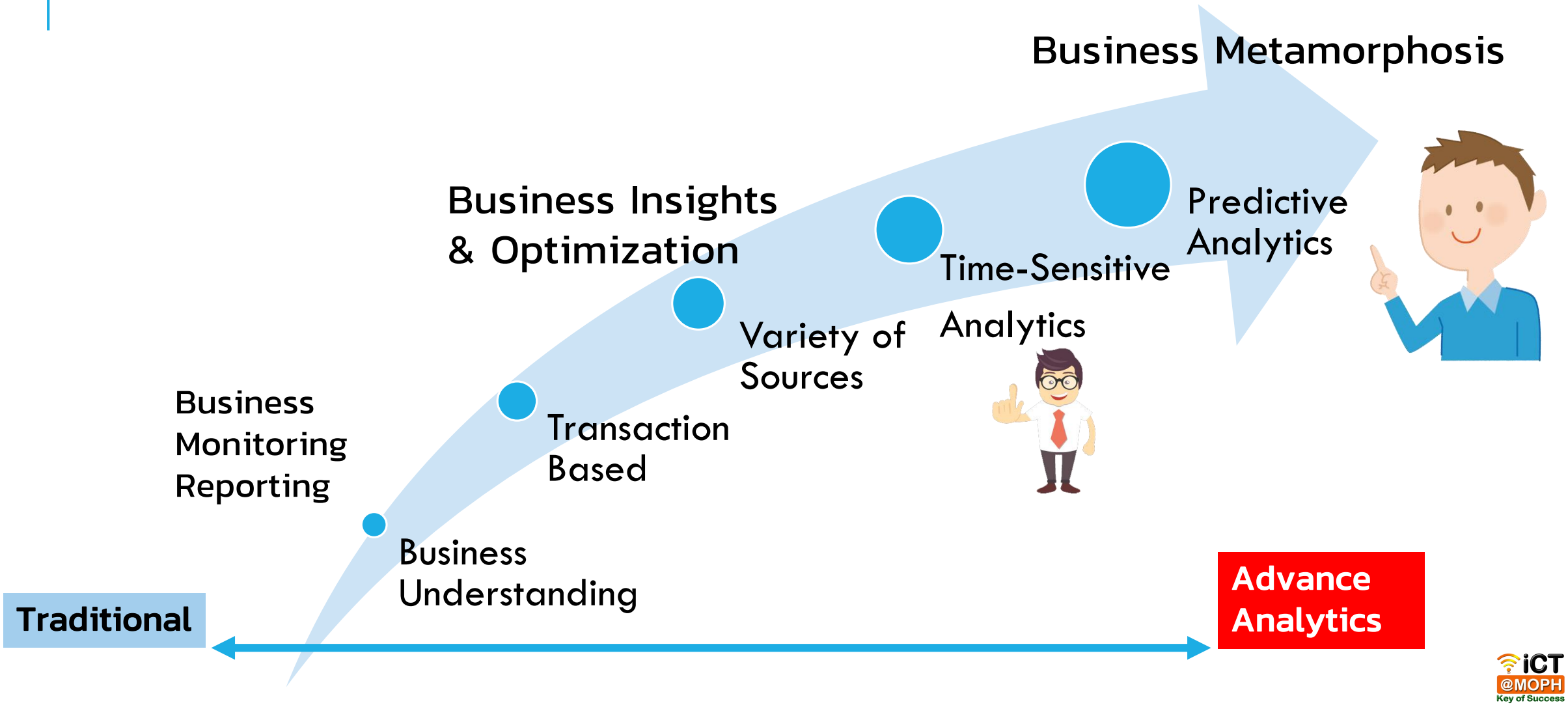
THAILAND BIG DATA MATURITY MODEL



THAILAND INTERNET USER PROFILE 2018

Internet Thailand usage 2018

Heavily !!!

Overall

	HOURS	MINUTES
Workday	9	48
Holiday	10	54

2018 Internet Usage Average: HOURS 10, MINUTES 5

Gen Y ,Champion 4 years consecutively

	Baby Boomer		Gen X		Gen Y		Gen Z	
	HOURS	MINUTES	HOURS	MINUTES	HOURS	MINUTES	HOURS	MINUTES
Workday/day	8	21	8	25	10	22	10	22
Holiday/day	8	26	8	55	11	52	11	50

Range

- **Gen Z** < 18 yrs.
- **Gen Y** 18-37 yrs.
- **Gen X** 38-53 yrs.
- **Baby Boomer** 54-72 yrs.

BIG CHANGE TO BIG CHANCE FUTURE ECONOMY & INTERNET GOVERNANCE

ETDA

THAILAND INTERNET USER PROFILE 2018

Internet Usage

Change from last year

2018

Average
> 2016 /day

HOURS	MINUTES
3	41

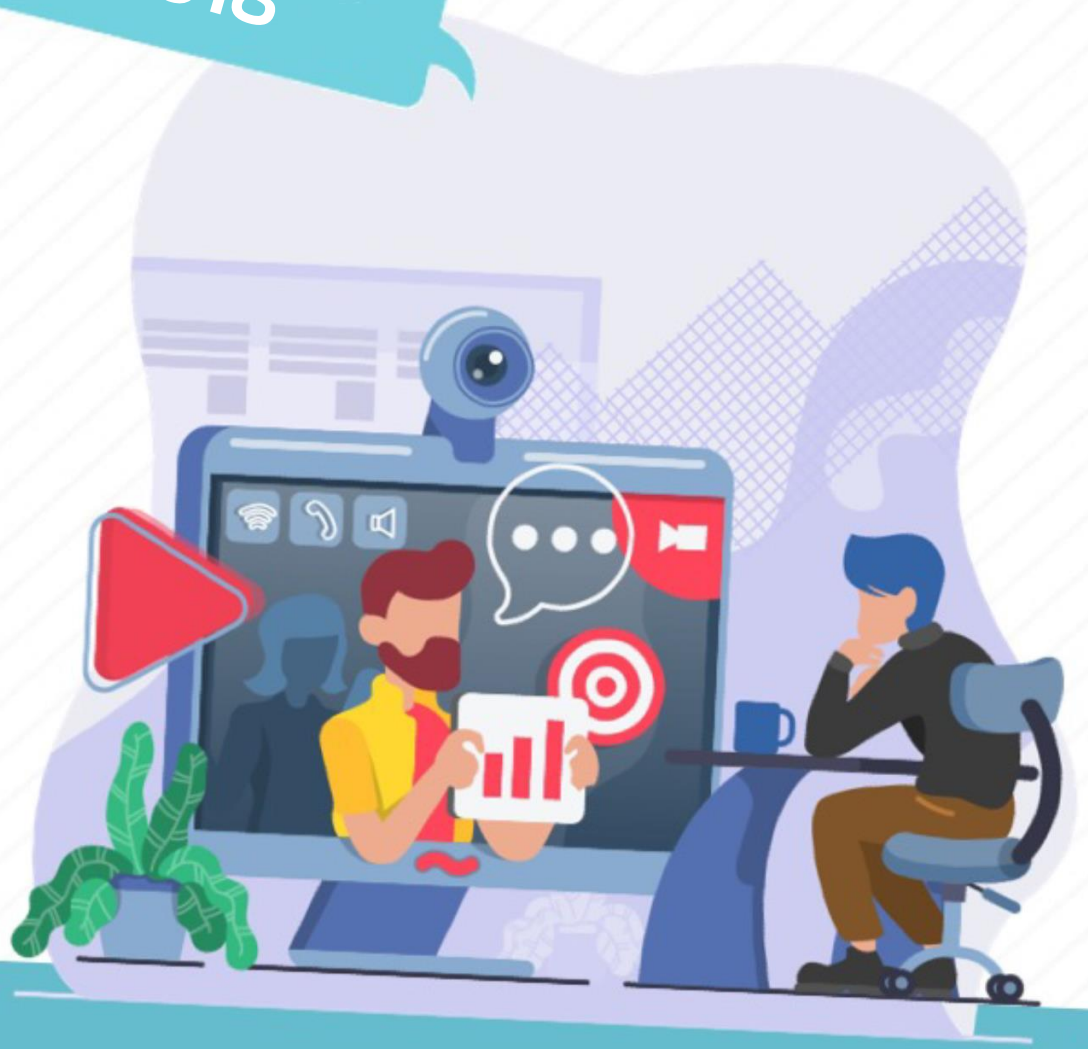
Thais use internet more 2017.

Workday/day

HOURS	MINUTES
3	18

Holiday/day

HOURS	MINUTES
4	6

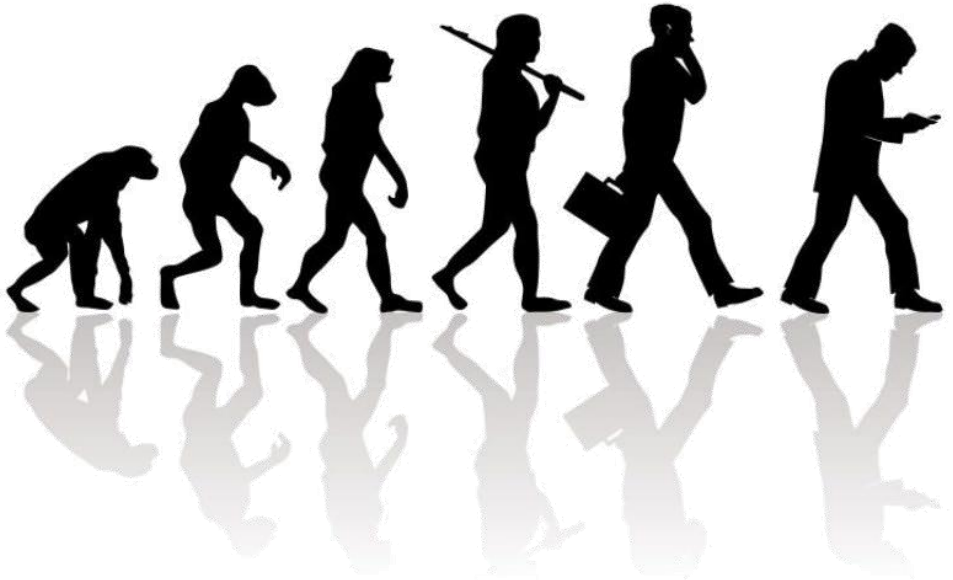


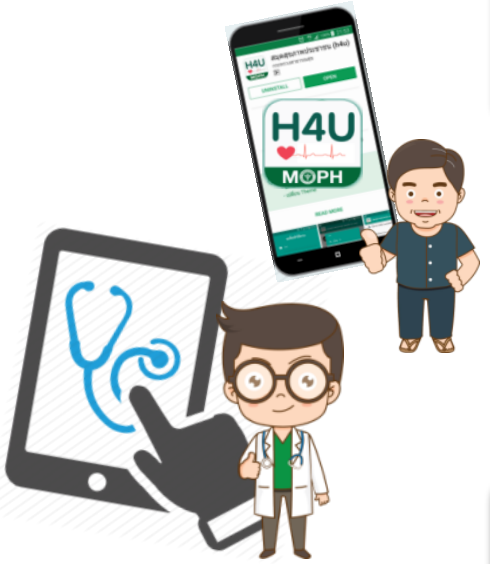
BIG CHANGE TO BIG CHANCE
FUTURE ECONOMY & INTERNET GOVERNANCE

ETDA

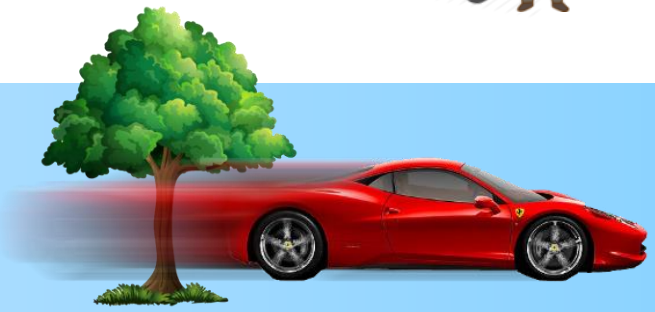
Physical Channel

Virtual Channel





Mass Service



Premium Service

Physical Channel

HIS Gateway

Big Data MoPH

HDC

Private Health Information Cloud

Virtual Channel

H4U

(Personal Health Profile Application)

Primary care cluster App.

(Telehealth App.)

MoPHPP

(MoPH Patient Web Portal)

Smart Health ID

Patient administration cloud service

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MOPH Applications, 2018 – 2020

H4U, Health for you Application

Personal health profile application on mobile devices. Create and manage by MOPH, Thailand.

Smart Health ID

Patient administration cloud service platform, By Thai citizen ID.

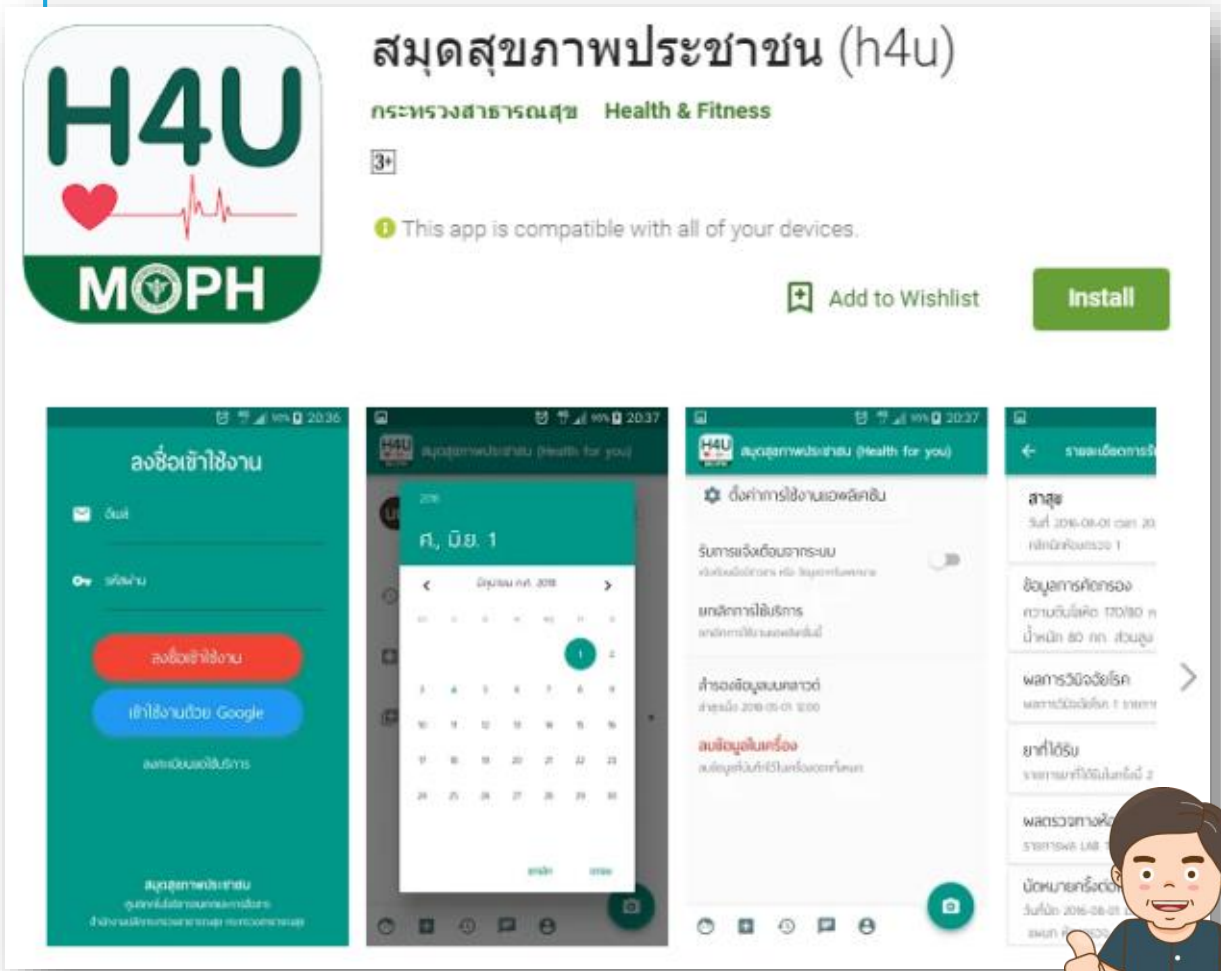
H4U Portal

Personal health profile website.
Create and manage by MOPH,Thailand.

Primary care cluster App.

Telehealth & Telemedicine

H4U by MOPH



- Basic information
- Prescription
- Brief treatment
- Laboratory
- Appointment

Google play

Available on the App Store

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Thank you for your attention

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bsi. ISO/IEC 27001 Information Security Management