



**Bangkok Dusit Medical Services (BDMS)**  
**Morgan Stanley Asia Pacific Corporate Day**  
**3-4 September 2019**



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## **BDMS Overview & Updates**

## Overview



48 Hospitals



~ 8,000 Beds



10 Centers of Excellence



BDMS Wellness Clinic



12,000+ Doctors  
8,000+ Nurses  
14,000+ Staffs



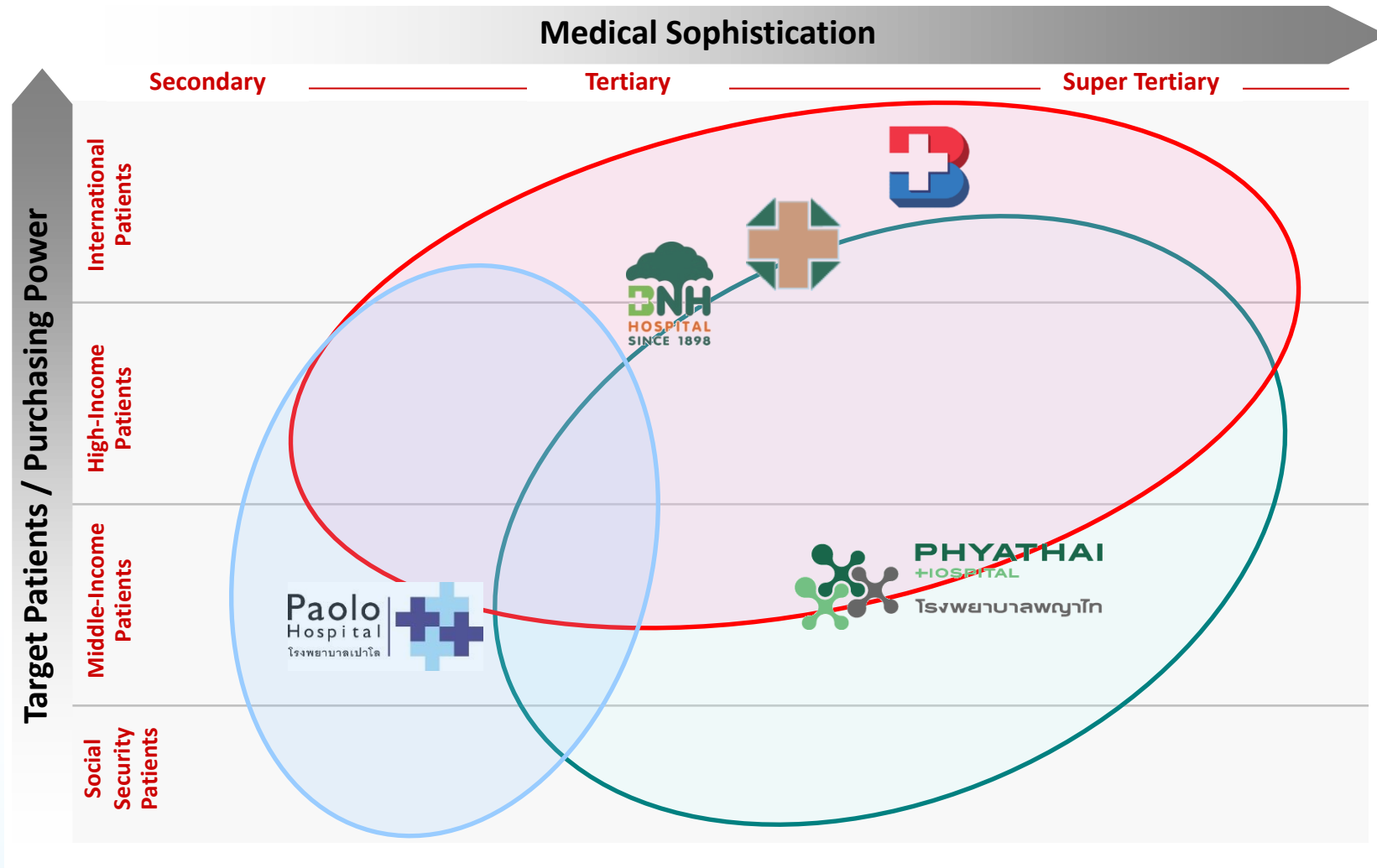
Pharmaceutical manufacturer and drug stores

- Established on February 26, 1972
- Top 5 private hospital operators in the world by market capitalization
- Hub-and-Spoke model with an established patient referral system helps create efficiency through scale

	Brand	No. of Hospitals	No. of Beds*
	Bangkok Hospital	25	4,057
	Samitivej Hospital	6	1,324
	Phyathai Hospital	5	1,241
	Paolo Hospital	6	1,008
	BNH Hospital	1	144
	Royal Hospital	2	130
	Local Hospital	3	395

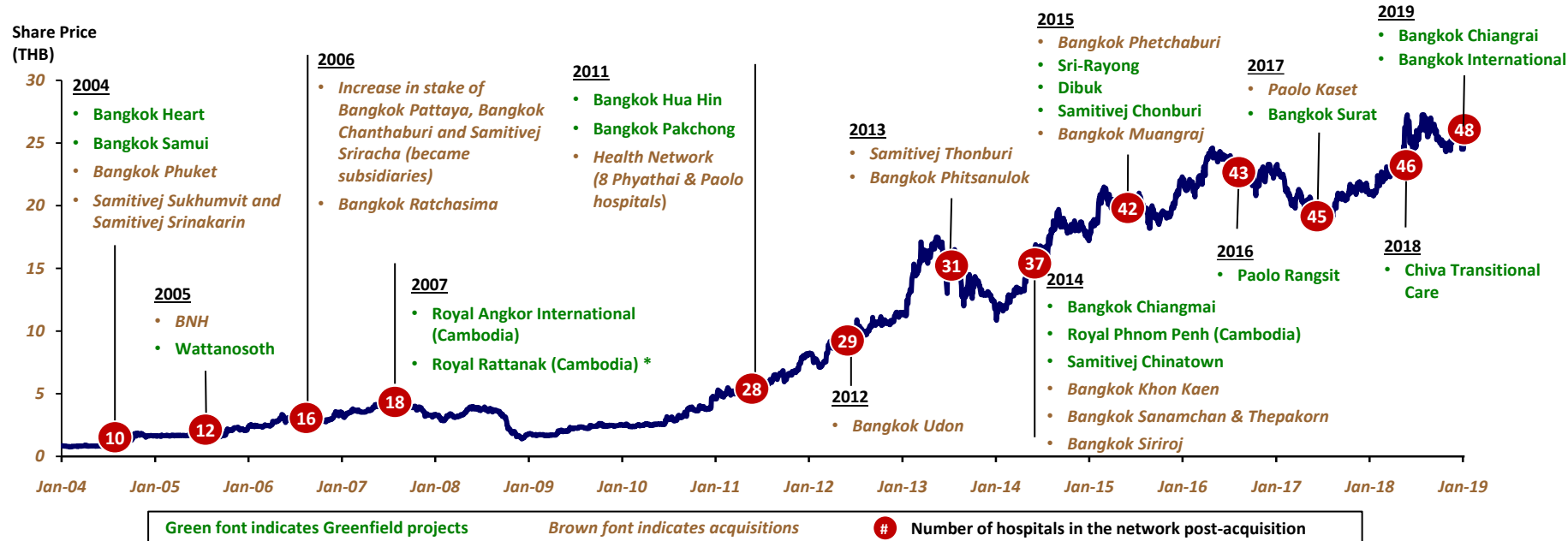
\* Maximum number of beds according to structure of the hospitals

# Diversification of Patient Mix



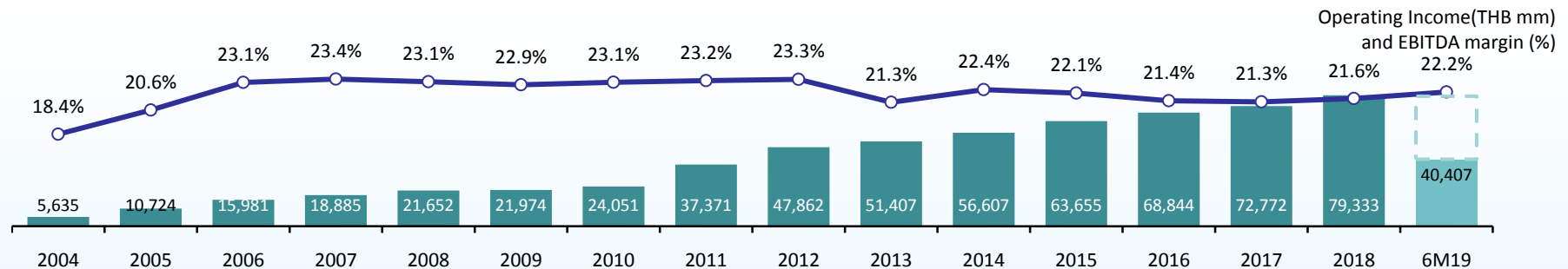
# Successful Track Record of Expansion Through M&A and Greenfield Projects

## Strong Share Price Performance Backed by a Successful Expansion Track Record



\* Transfer of business to our new facility, Royal Phnom Penh

## Solid Revenue Growth Over the Past Decade (2004-2018 CAGR of 20.8%) with Resilient EBITDA margin \*



Source: Derived from BDMS' financial statements

\* Excluding non-recurring items

**BDMS has developed 17 new hospitals and acquired a total of 30 hospitals to date**

# BDMS Complete Continuum of Healthcare



## Centers of Excellence



Super Tertiary Care

Tertiary Care

Secondary Care

Promotive

Preventive

Early  
Detection

Curative

Transitional

Rehabilitative



BDMS Wellness Clinic



Bangkok International



Chiva Transitional Care Hospital

## Non-Hospital Strategic Investment



Sterile Drug Manufacturer & Distributor



Generic Drug Manufacturer



Drug Store



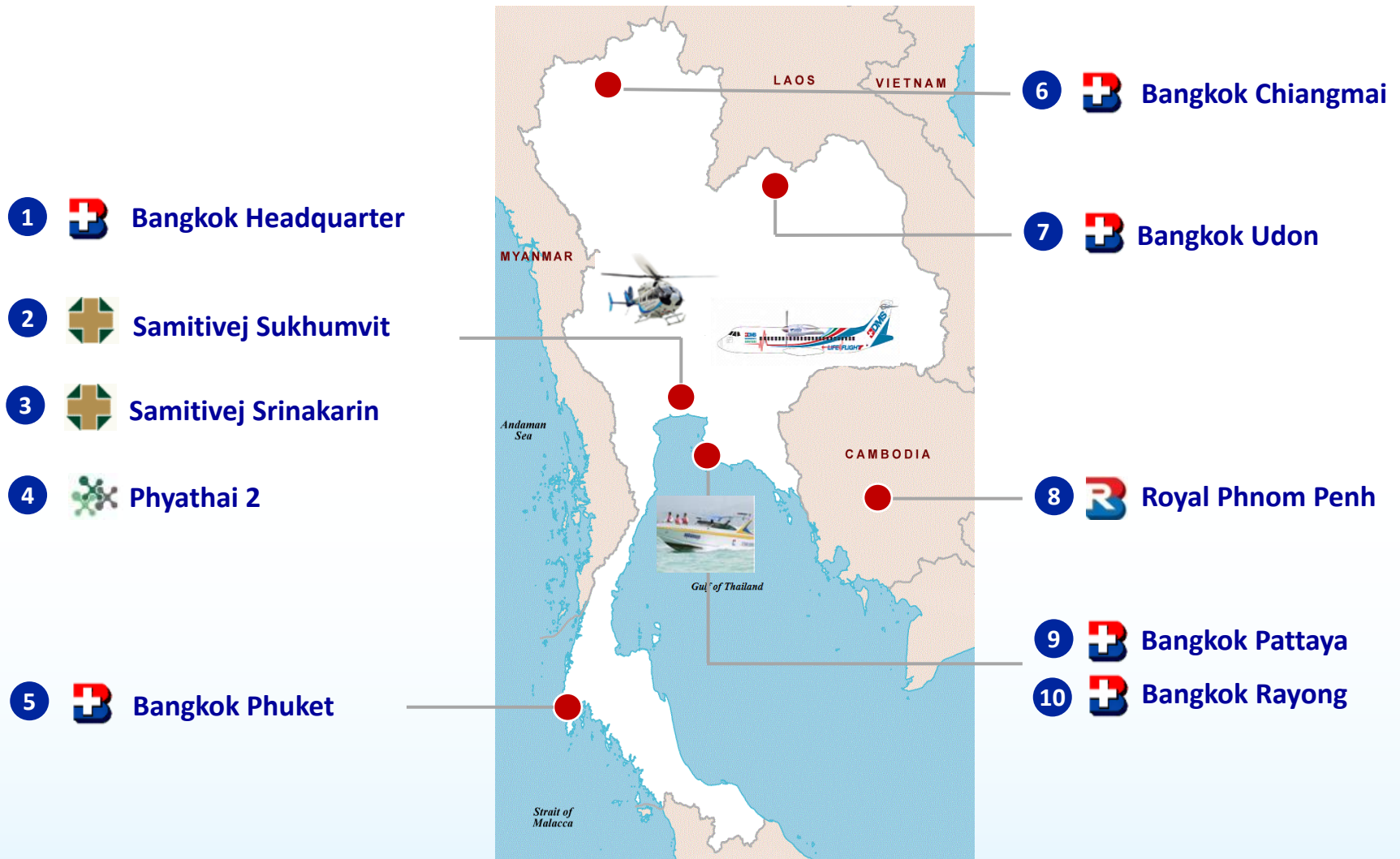
## Projects in Pipeline & Strategy

Projects in Pipeline	2019	2020	2021-2023
	<ul style="list-style-type: none"> <li>48 Hospitals</li> <li>~ 8,200 beds</li> </ul>	<ul style="list-style-type: none"> <li>~ 50 hospitals</li> <li>~ 8,500 beds</li> </ul>	<ul style="list-style-type: none"> <li>~ 9,000 beds</li> </ul>
	<ul style="list-style-type: none"> <li>✓ Bangkok Hospital Chiangrai (80 beds)</li> <li>✓ Expansion of Samitivej Sukhumvit (36 beds)</li> <li>✓ Bangkok International (172 beds)</li> <li>✓ Mövenpick BDMS Wellness Resort Bangkok (290 rooms)</li> </ul>	<ul style="list-style-type: none"> <li>○ Jomtien Hospital (233 beds)</li> </ul>	<ul style="list-style-type: none"> <li>○ Expansion of our Network Hospitals</li> </ul>

Strategy	Volume & Margin Driven	Innovation & Digital	Sustainability
	<ul style="list-style-type: none"> <li>Center of Excellence</li> <li>Increase occupancy rate</li> <li>Expand insurance patient base</li> </ul>	<ul style="list-style-type: none"> <li>International medical affiliation</li> <li>Smart Virtual Hospital</li> <li>Health application</li> </ul>	<ul style="list-style-type: none"> <li>Quality &amp; safety standard</li> <li>Good corporate governance</li> <li>Social responsibility</li> </ul>

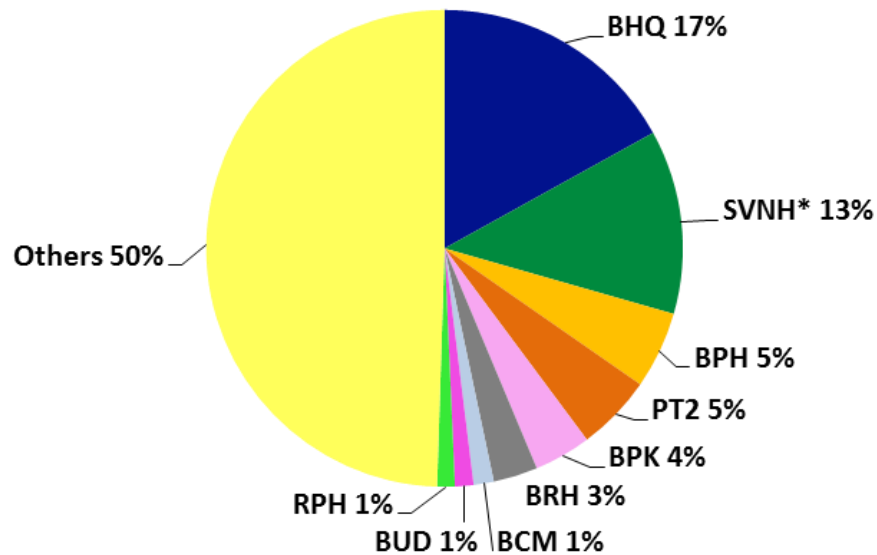
# BDMS Centers of Excellence Network

Upgrading Existing 10 Hospitals to Become Centers of Excellence with the Focus on International Patients

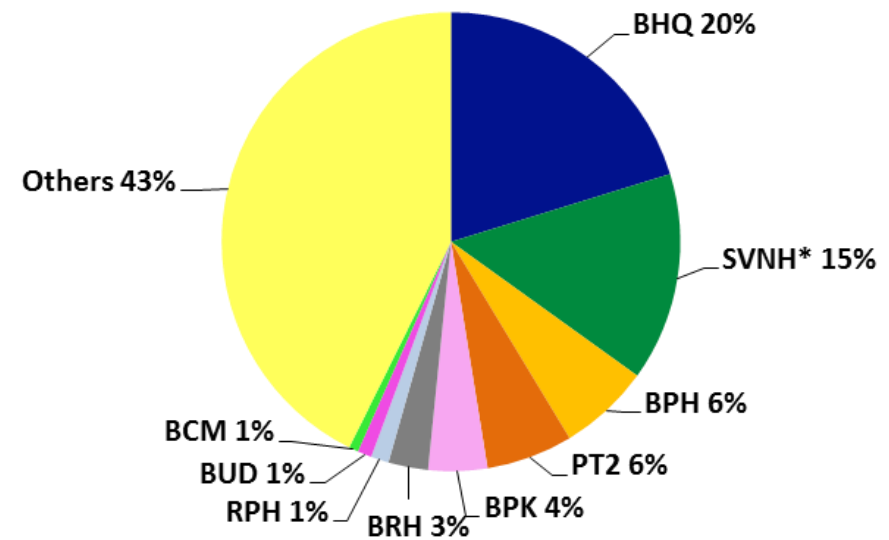


# Diversified Sources of Revenues and Profitability

## COE Operating Income Contribution in 6M19



## COE Total EBITDA Contribution in 6M19



## Commentary

- In 6M19, 10 Centers of Excellence (COE) contributed
  - 50% of total revenues
  - 57% of total EBITDA

\* SVH also included SNH performance

Remark: - EBITDA is calculated from revenue from hospital operations + revenue from goods + other income – cost from hospital operations – SG&A  
- Hospital abbreviation shown on Appendix

## Local and International Partnership



- Collaboration for education, training and research on orthopedics



- Collaboration on occupational health, pediatrics, rehabilitation, clinical simulation and informatics



- Others international and local institutions



- Collaboration for education and research on trauma and orthopedics



- Collaboration on Gastrointestinal Medicine



- Collaboration for knowledge sharing on orthopedics



- Research collaboration on the TRFS laser device for brain tumor surgery

## Alarm Center: One Number All Access For Life Care



- One number access to entire BDMS network  
 **Thailand Domestic Calls 1724**  
**International Calls +66-2-BANGKOK, +66-2-226-4565**



- Dedicated multilingual emergency team  




- Complete range of emergency transportation available  

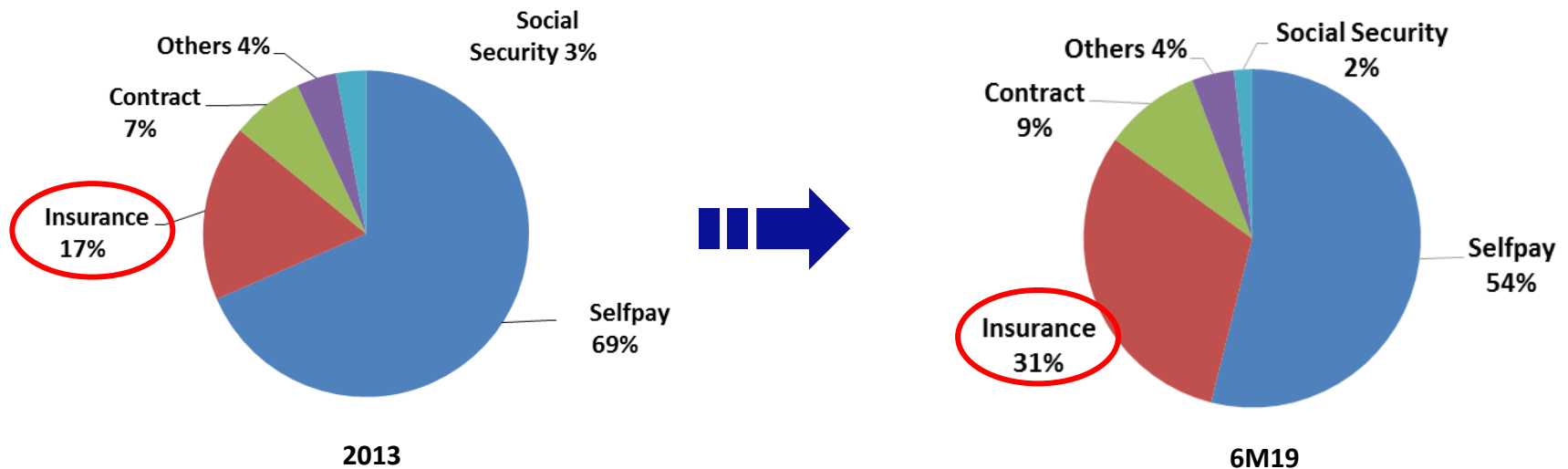

## New CAMTS-CAMTS EU: Dual Accreditation Awarded



- BDMS\* had received dual accreditation of The Commission on Accreditation of Medical Transport Systems (CAMTS) from USA and EU
- CAMTS is a review organization dedicated to improving quality and safety of medical transportation systems including fixed wing, sky ICU, medical escort, ambulance, motorlance and hydrolance

# Expanding Insurance Patient Base

## Patient Revenue by Payor: Increasing Insurance Portion



## Strategic Focus on Health Insurance

- Launched exclusive health insurance for BDMS network
  - Increase hospital traffic in BDMS network
  - Target insurance payor to increase from 29% in 2018 to 35% in the next few years
- E-Claim & E- Billing
- Utilization management



# Exclusive Health Insurance at BDMS Hospital Network

## My First Class Healthcare @ BDMS by Allianz Ayudhya



- Maximum benefit per year: THB 80m to THB 100m
- Covering all medical treatments
- Target high-end market

## The Viriyah Insurance Program 1 (Gold)



- Maximum benefit for injury or sickness per disability: THB 1m to THB 5m
- Target mid to high-end market

## The Viriyah Insurance Program 2 (Deductible Plan)



- Maximum benefit per year: THB 400k to THB 800k
- Choice of THB 20,000/ THB 50,000 deductible per year
- Target employee who already have welfare from company

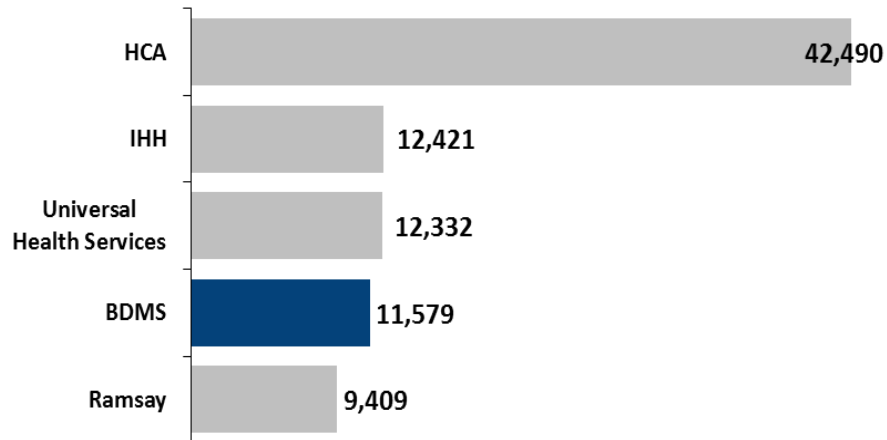
## The Viriyah Insurance Program 3 (Delight)



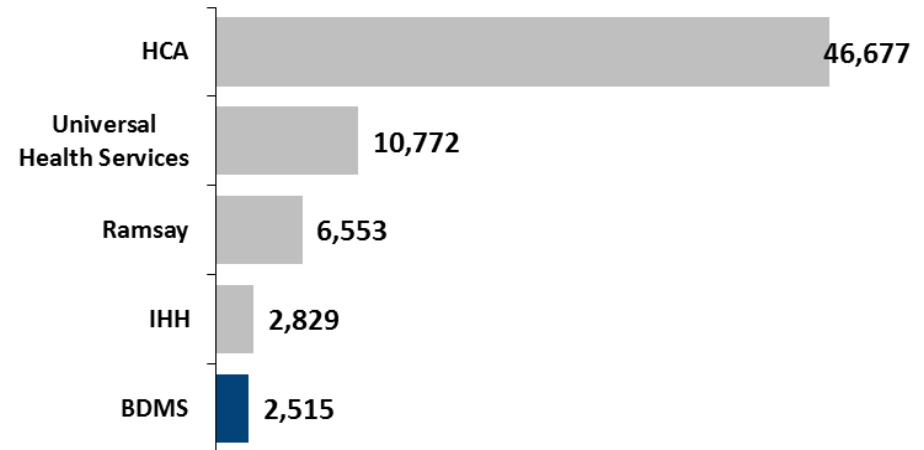
- Maximum benefit per year: THB 450k to THB 1.5m
- Target mid market

# Global Hospital Rankings

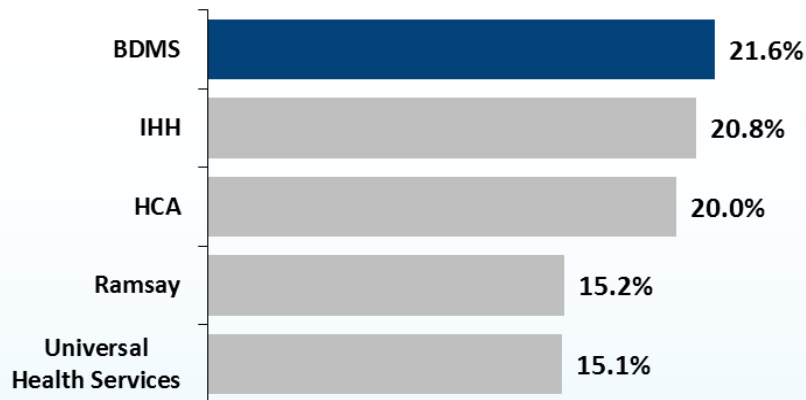
## Market Capitalization (USD mm)



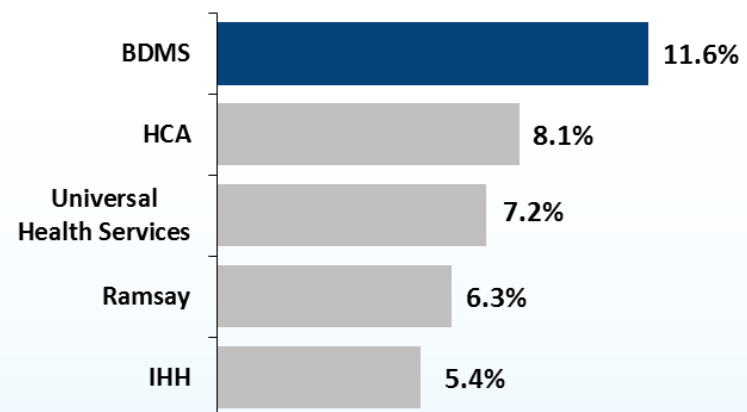
## Revenue (USD mm)



## EBITDA Margin



## Net Profit Margin



Remark: - Market capitalization as of 19 August 2019

- Financial performance for year ended December 2018 except Ramsay for the year ended June 2018



## **2Q19 & 6M19 in Review**

# Consolidated Financial Summary

## 2Q19 & 6M19 Results

	2Q19		6M19	
	Chg (yoy)	% to Revenue	Chg (yoy)	% to Revenue
Operating income	+6% (THB 19,637 mm)		+6% (THB 40,407 mm)	
Patient revenue	+7% (THB 18,692 mm)		+6% (THB 38,484 mm)	
<b>Breakdown by location</b>				
▪ Bangkok & Vicinity	+5%	58%	+5%	58%
▪ Outside Bangkok	+7%	42%	+7%	42%
<b>Breakdown by nationality</b>				
▪ Thai	+6%	70%	+5%	68%
▪ International	+8%	30%	+8%	32%
<b>Breakdown by type of patients</b>				
▪ Outpatients	+6%	45%	+7%	45%
▪ Inpatients	+7%	55%	+5%	55%

# Consolidated Financial Summary

## 2Q19 & 6M19 Profitability Ratio

<i>(THB mm)</i>	2Q19	2Q18	Chg (yoy)	6M19	6M18	Chg (yoy)
EBITDA *	3,892	3,860	+1%	8,962	8,793	+2%
EBITDA margin *	19.8%	20.9%		22.2%	23.0%	
Core profit	1,864	2,043	(9)%	4,790	4,962	(3)%
Core profit margin	9.5%	11.1%		11.9%	13.0%	
Net profit	1,865	2,043	(9)%	10,304	4,962	108%
Net profit	9.5%	11.1%		25.5%	13.0%	

\* Excluding non-recurring items

### 6M19 Non-recurring items (net of income tax)

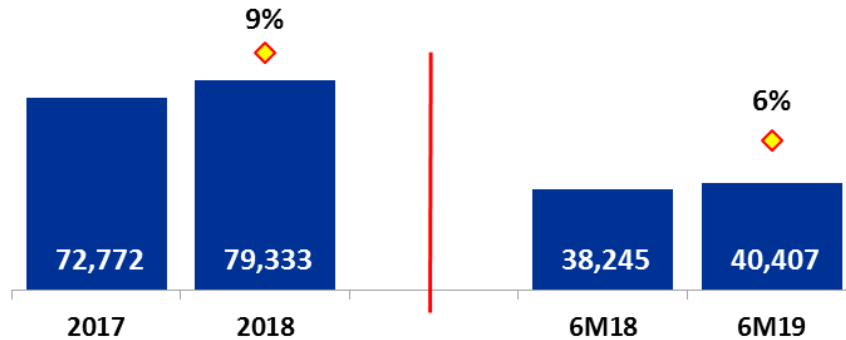
THB mm

1. Gain on divestment in Ramkhamhaeng Hospital Public Co., Ltd.	6,094
2. Provisions for employee benefits	(493)
3. One-time expenses in finding the land to locate electricity sub-station to accommodate the electricity usage at Bangkok International Hospital	(88)
4. Gain on sales in other long-term investment	1
<b>Total</b>	<b>5,514</b>

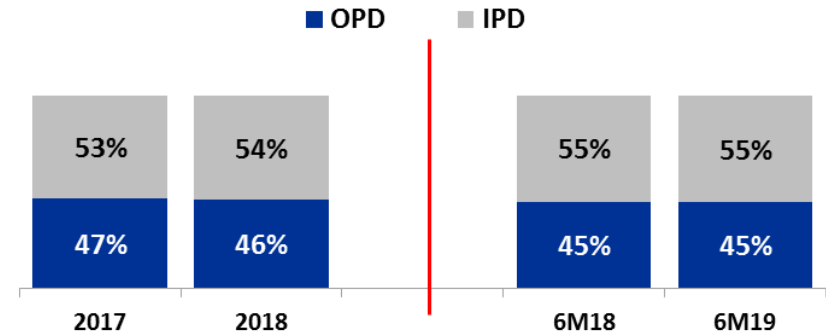
## **Operational Statistics & Financial Highlights**

# Operating Income Growth

## Operating Income (THB mm)



## Revenue Breakdown by Patient Types



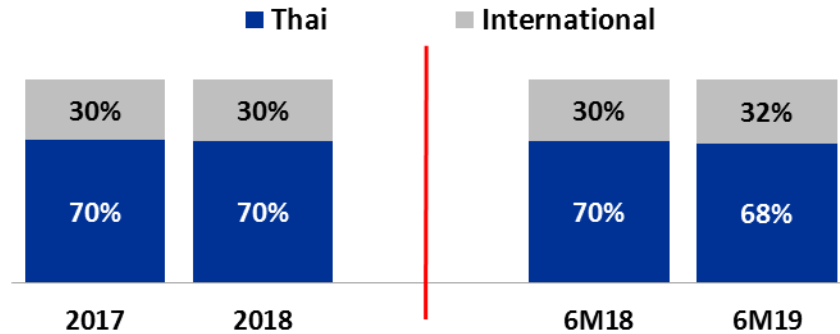
## Commentary

- 6M19 Operating income increased by 6% yoy mainly from
  - Patient revenue increased 6% yoy, attributed to
    - Higher price intensity from Center of Excellence
    - Strong growth from international patients of 8% yoy
    - Increase insurance patient base of 11% yoy (Thai insurance grew 10% while international insurance grew 18%)

# Thai and International Patients

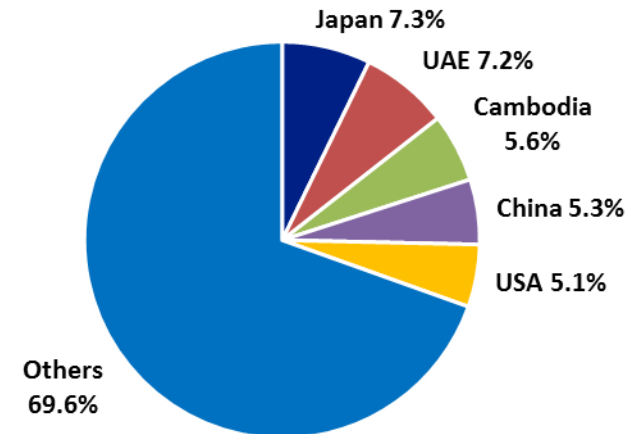
## Revenue Contribution by Nationality

% to patient revenue



## Top 5 Nationality contribution

% to international patients' revenue

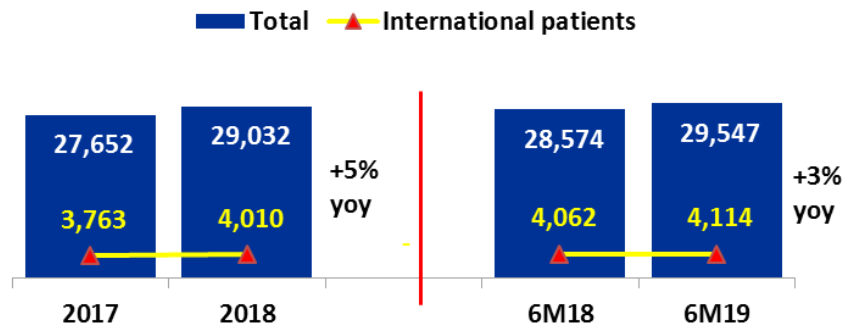


## Commentary

- In 6M19, strong growth from international patients of 8% yoy while Thai patients grew 5% yoy
  - Key growth for International patient revenues are UAE (+94%), Oman (+82%) and Cambodia (+22% yoy)

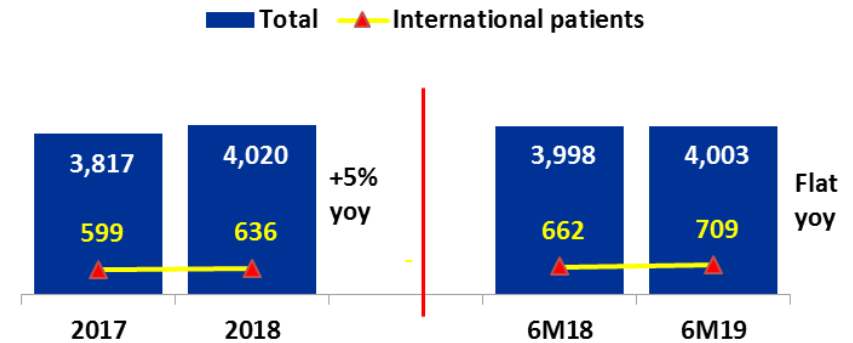
# Operational Statistics

## Number of OPD Visits per Day



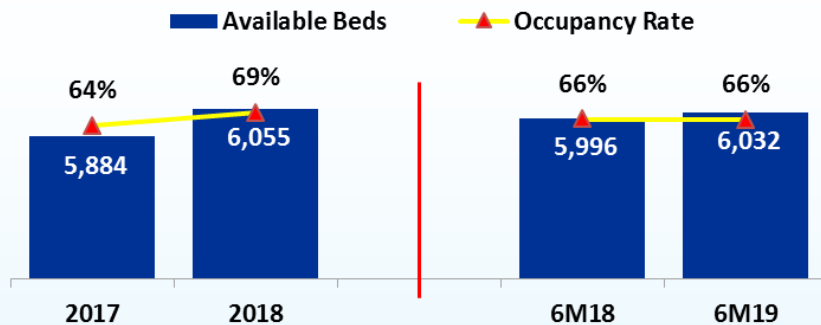
Remarks: - Including social security

## Average Daily Census ( ADC )

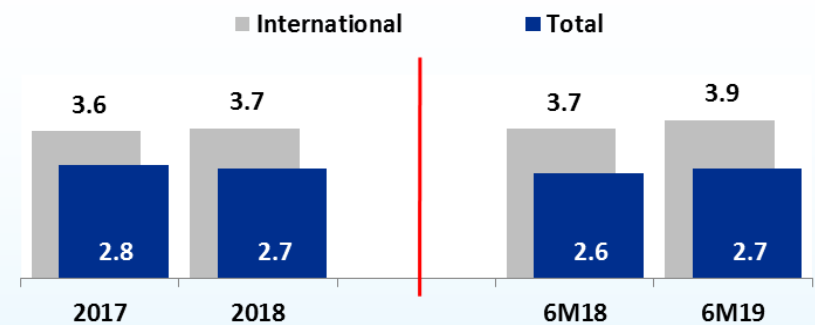


Remarks: - Including social security and new born patients

## Occupancy Rate Based on Available Beds

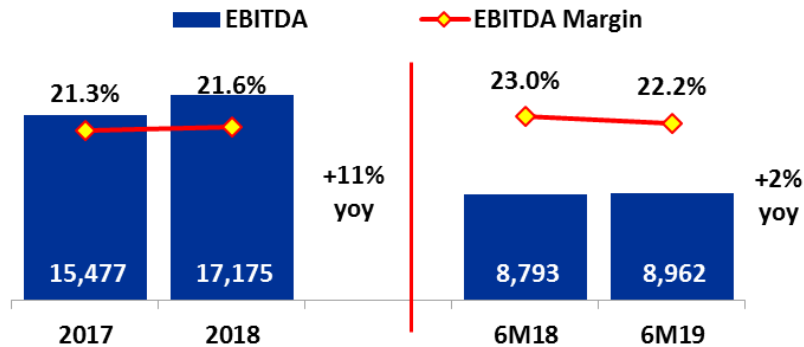


## Average Length of Stay (days)

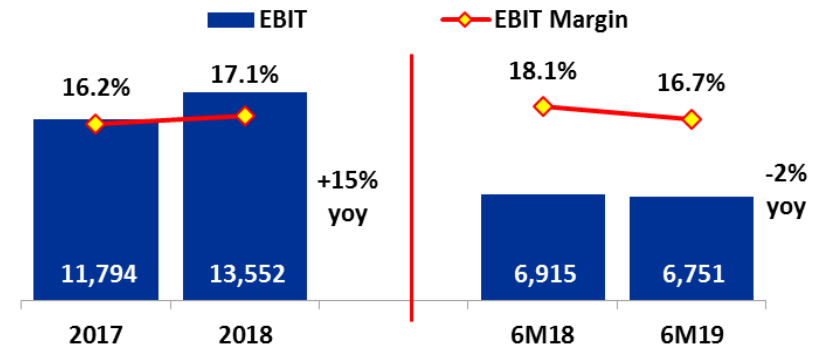


# Profitability Trend

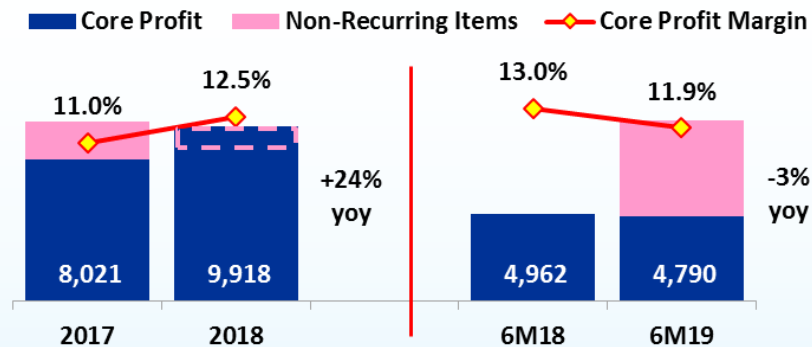
## EBITDA & EBITDA Margin \* (THB mm)



## EBIT & EBIT Margin \* (THB mm)



## Core Profit & Core Profit Margin \* (THB mm)



## Commentary

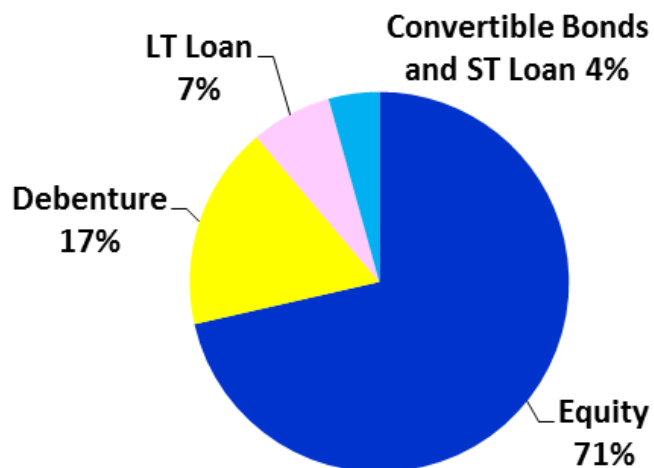
- In 6M19, core profit were THB 4,790 million with net profit margin of 11.9%
- If included non-recurring items totaling of THB 5,514 million, net profit was 10,304 with net profit margin of 25.5%

\* Excluding non-recurring items

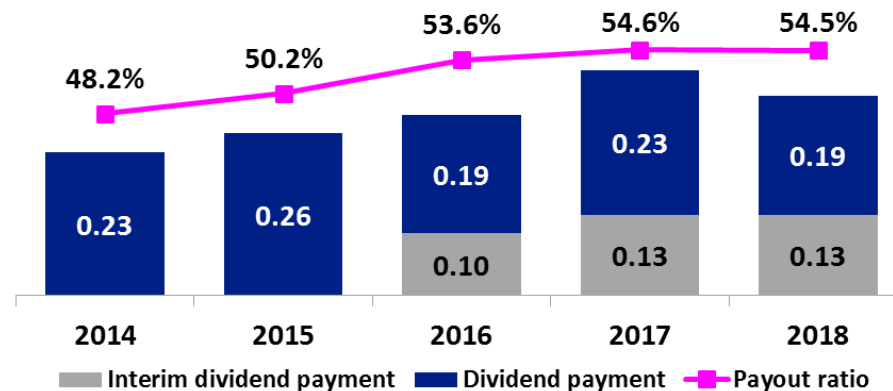


# Capital Management

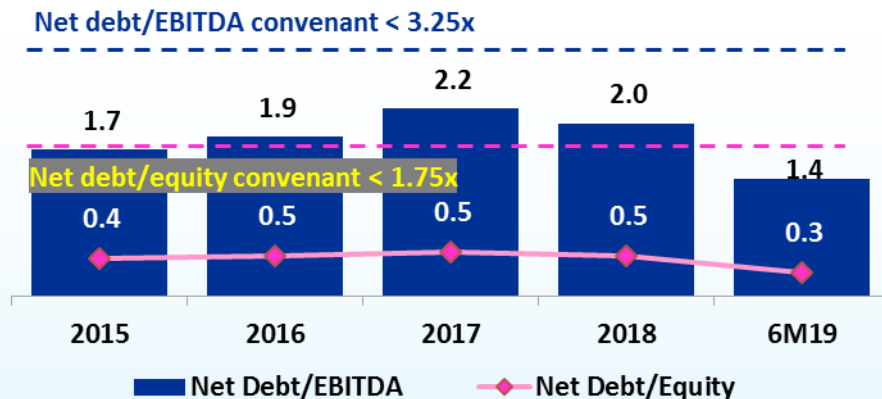
## Capital Structure as of June 2019



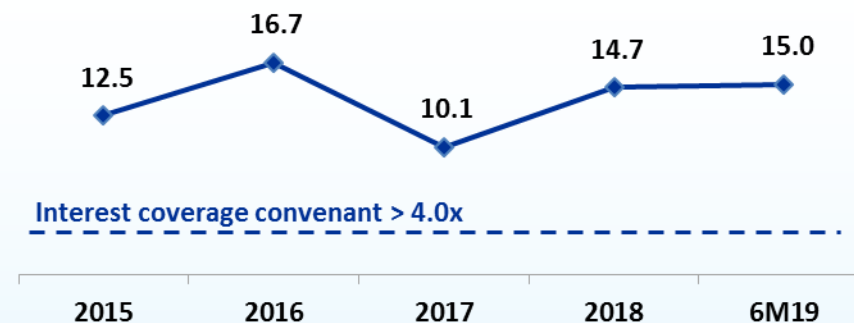
## Dividend Payment & Payout Ratio



## Gearing Ratios: Well Within Covenants



## Interest Coverage



## Healthcare Industry

# Key Trend for Thai Healthcare Industry

## Supportive Demographic and Economic Trends

- Aging demographics and rising income support growth of Thai healthcare
- Thailand as top tourist destination, capable medical personnel, convenient infrastructure & facilities and value for money attract medical tourism

## Healthy Trend

- Increase health conscious lifestyle driven demand on preventive care
- Shifting from traditionally treatment-based approach to preventive care which focuses on individual genetic, wellness, early detection, vaccination, diet and exercise including mental health awareness

## Health Insurance

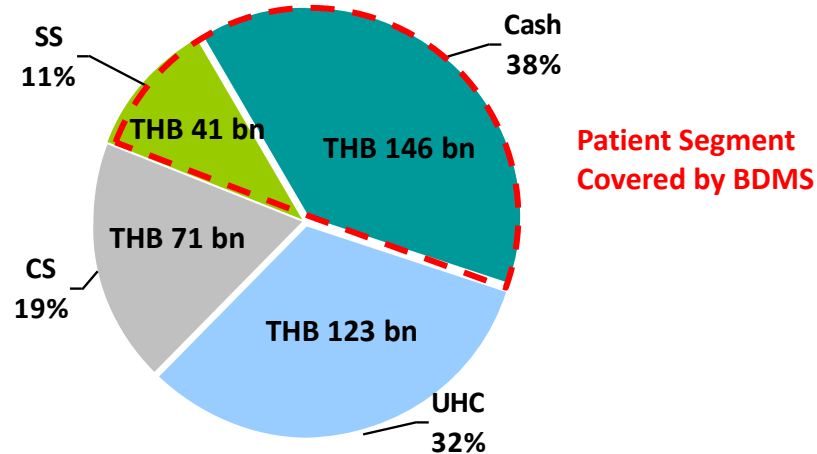
- Insurance companies increase co-operation with local hospitals to increase Thailand's private health insurance penetration
- Thai Government approved tax break on premiums paid for health insurance supporting an increase in healthcare demand

## Health Tech

- Mobile health apps would increase health conscious and preventive care
- Support existing healthcare service rather than replacement
- Mostly in searching for doctor and personal health information

## Healthcare Segments in Thailand

**Total Expenditure for 2016: THB 381 bn**



Source: National Health Security Office (NHSO), The Office of the National Economic and Social Development Board (NESDB) and Social Security Office (SSO)

<b>Universal Healthcare Coverage (UHC)</b>	A welfare program for Thai people to receive medical coverage for IPD and OPD care at registered facilities
<b>Civil Servant (CS)</b>	A welfare program provided to employees of governments and state-owned enterprises
<b>Social Security Scheme (SS)</b>	Minimum requirement of healthcare provided to employees of private companies
<b>Private Healthcare (Cash)</b>	Proportion of Thai population not covered or choose not to use public healthcare schemes (UHC, CS and SS), though may have private insurance coverage

# Thailand Healthcare Demand and Supply

## Healthcare Supply in Thailand (2016)

	# of Hospitals	# of Beds
Private	347	40,720
Public	864	100,782
<b>Total</b>	<b>1,211</b>	<b>141,502</b>

(Number per 10,000 population)	Thailand	Global*
Doctor	5	14
Nurse	24	30
Bed	22	26

\* Data as of 2014

Source: WHO, NESDB and NSO

## BDMS Market Coverage (2016)

	Total Private Beds	BDMS Registered Beds *	Market Share
Bangkok	17,404	2,830	16%
Central	11,614	2,024	17%
South	3,111	678	21%
Northeast	3,332	337	10%
North	5,259	220	4%
<b>Total</b>	<b>40,720</b>	<b>6,089</b>	<b>15%</b>

\* Company data as of June 2019

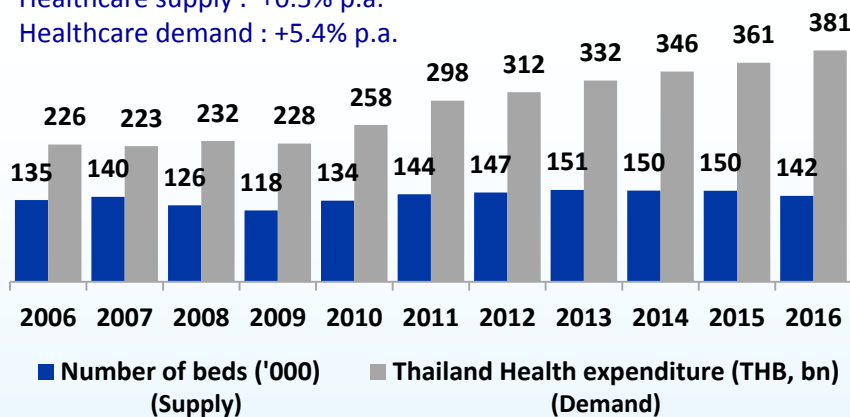
Source: NESDB and NSO

## Healthcare Demand Growing Faster than Supply

10 Years CAGR (2006-2016)

Healthcare supply : +0.5% p.a.

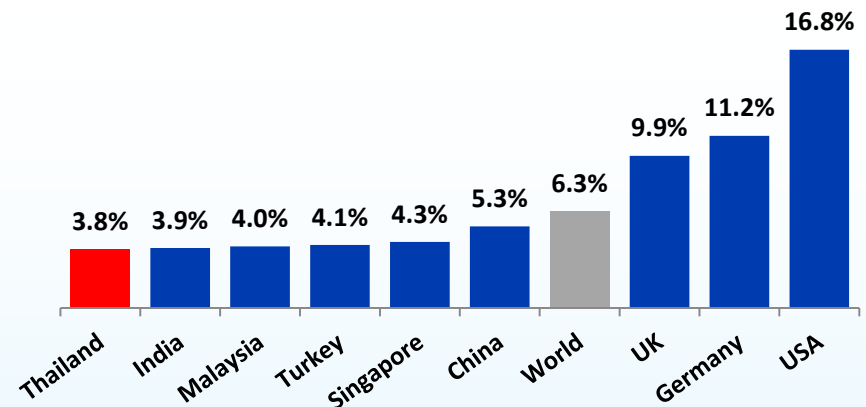
Healthcare demand : +5.4% p.a.



Source : NESDB and NSO

## Low Healthcare Penetration

% of Healthcare expenditure to GDP

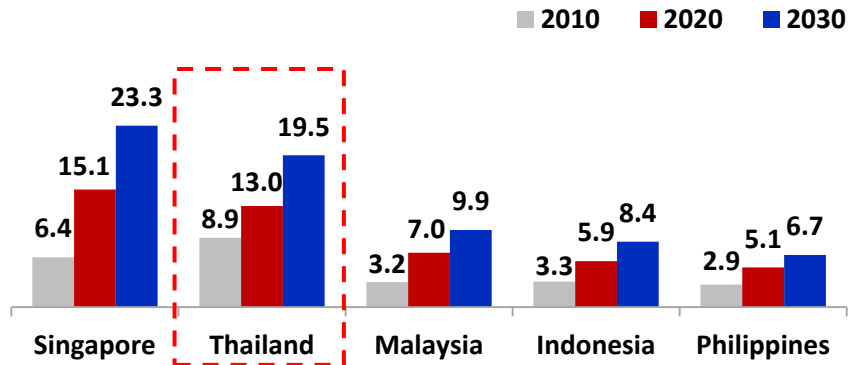


Source: WHO (2015)

# Increasing Thailand Healthcare Demand

## Population Growth and Aging Profile

Percentage of population above 65 years (%)



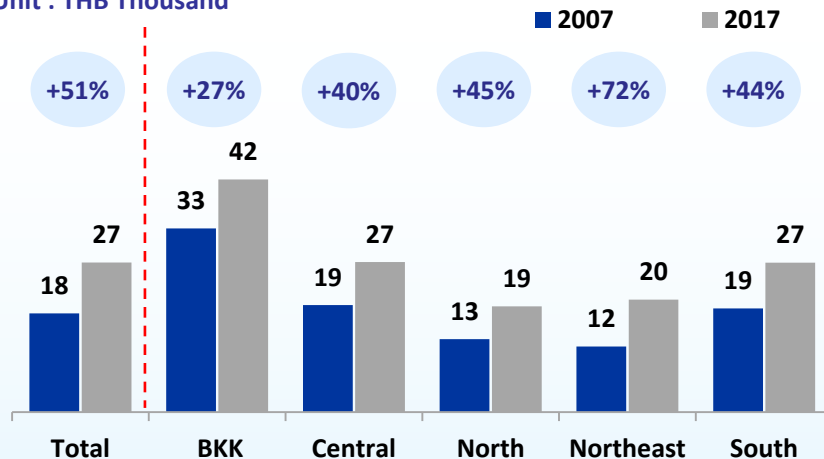
Source: UN Population Database: 2015

## Commentary

- Aging population generates greater demand for healthcare expenditure
- Monthly income per household in Thailand increased by 51% during 2007-17. This would support growing demand for healthcare
- Health insurance reduces financial burden of out-of-pocket expense. Increasing trend for health insurance will benefit private hospitals

## Thailand Monthly Income per Household

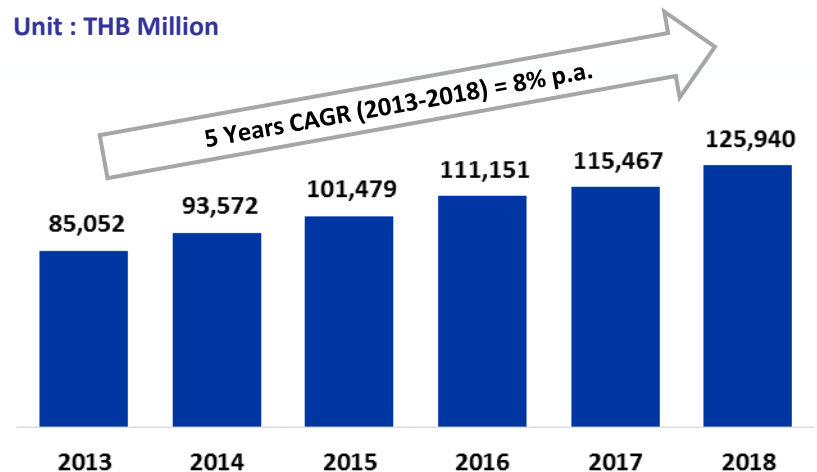
Unit : THB Thousand



Source : NESDB

## Health & Personal Accident Insurance Premium

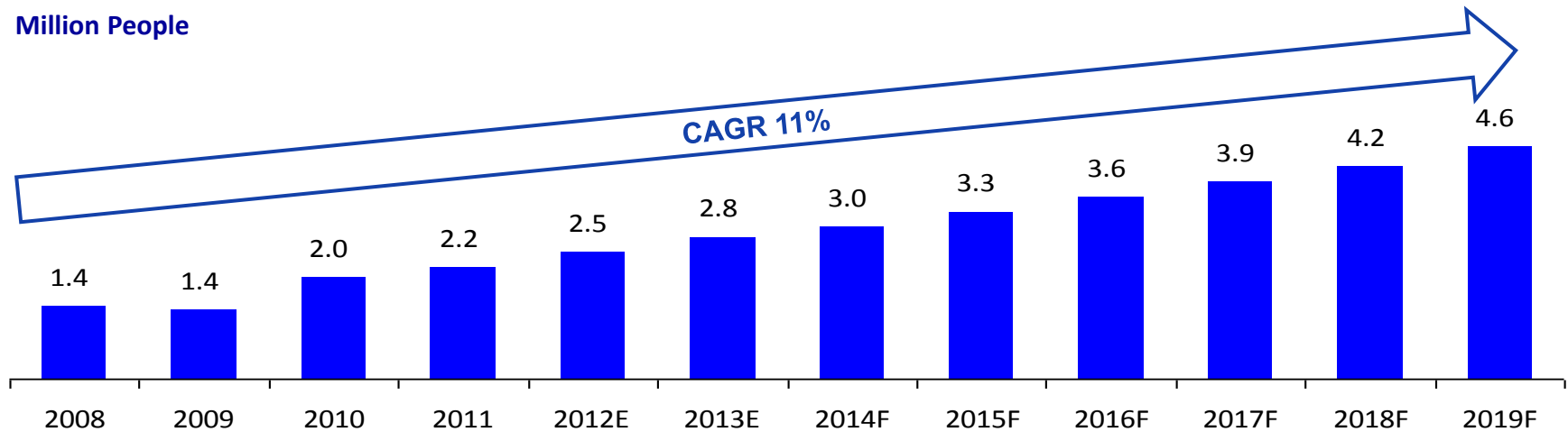
Unit : THB Million



Source: OIC

## Increasing Trend of Medical Tourists to Thailand

Million People



Source: EIC, SCB and Ministry of Commerce

## Medical Tourism as a Rising Phenomenon

Procedures ( In USD)	USA	Singapore*	Thailand	Malaysia*	India
Heart Bypass	123,000	17,200	15,000	12,100	7,900
Heart Valve Replacement	170,000	16,900	17,200	13,500	9,500
Knee Replacement	35,000	16,000	14,000	7,700	6,600
Spinal Fusion	110,000	12,800	9,500	6,000	10,300
IVF Treatment	12,400	14,900	4,100	6,900	2,500

\* Excluding doctor fee

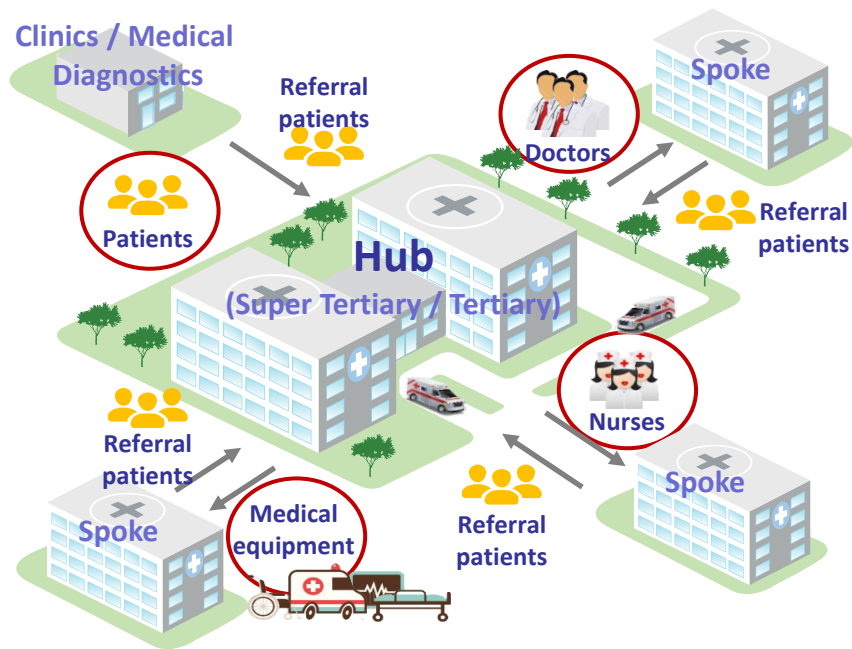
Source: Medicaltourism.com (2018)

## **Company Background**



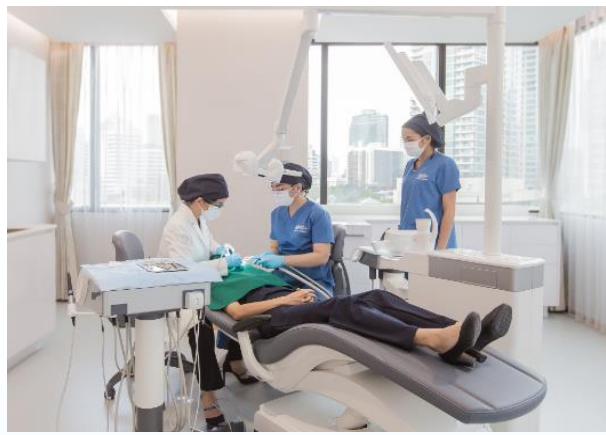
# 'Hub-and-Spoke' Model

## Providing a Proven Patient Referral System and Creating Efficiency Through Scale



- 1 Strong patient referral system within and across each hub and spoke
- 2 Enhances synergies and benefits of scale among hospitals within the group
- 3 Shared supporting services among multiple hubs which enhance efficiency and competitiveness
- 4 Established system provides a platform for future expansion

## A Brand New Wellness Clinic Delivering World-Class Services



### 7 Centers of Preventive Excellence

1

Regenerative Clinic

2

Musculoskeletal and Sports Clinic

3

Cardioscience Clinic

4

Neuroscience Clinic

5

Digestive Wellness Clinic

6

Fertility Clinic

7

Dental Clinic

- The first step in establishing the roots in preventative excellence. This has allowed BDMS to fully recognize its ambition.
- By combining our expertise, extensive network and service, we hope to become Asia's first premier preventative care facility that will set the global standard in wellness

# Mövenpick BDMS Wellness Resort Bangkok

## Luxury Wellness Resort in the Heart of Bangkok

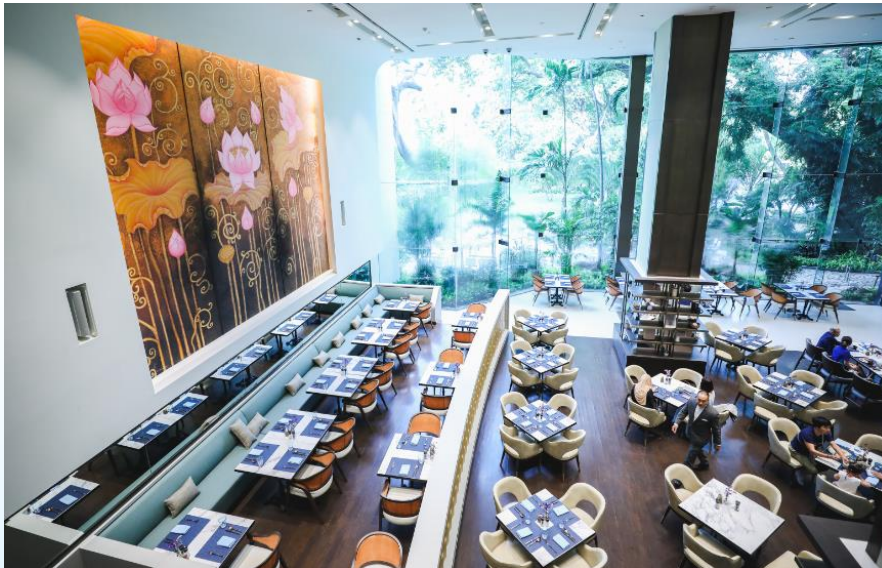


- Mövenpick BDMS Wellness Resort Bangkok (BWR) offers the perfect harmony of comfort and recuperation at the heart of Asia's most popular city destination with 290 rooms
- The resort is directly connected to BDMS Wellness Clinic and is located just a few minutes' walk from Thailand's most prestigious shopping centers and BTS sky train Ploenchit station
- With the holistic concept of healthy living, the resort offers a variety of dining venue serving healthy options with organic ingredients



# Mövenpick BDMS Wellness Resort Bangkok

## Luxury Wellness Resort in the Heart of Bangkok



## Shareholding Structure

(As of 15 March 2019)

	% of Shareholding
1 Mr. Prasert Prasarttong-Osoth, M.D. and family	22.1%
2 Mr. Wichai Thongtang and family	7.3%
3 Bangkok Airways*	7.2%
4 Thai NVDR Co., Ltd.	6.7%
5 The Viriyah Insurance Co., Ltd.	6.1%
6 Social Security Office	4.1%
7 Mr. Chirothana Suchato, M.D. and family	2.6%
8 Ladpli family**	2.4%
9 South East Asia UK (Type C) Nominess Limited	2.3%
10 Mr. Chuladej Yossundharakul, M.D. and family	1.9%
<b>Total</b>	<b>62.5%</b>

Source: Summary of the information from Thailand Securities Depository Company Limited (TSD)

\* Consisted of Bangkok Airways PCL and Bangkok Airways Holding Co., Ltd

\*\* Consisted of Miss Napamas Ladpli, Mrs. Atinuch Malakul Na Ayudhaya and Mr. Parameth Ladpli, M.D.

## Investments in Other Hospitals : - Listed Companies

- Bumrungrad Hospital PCL (BH) 24.88%

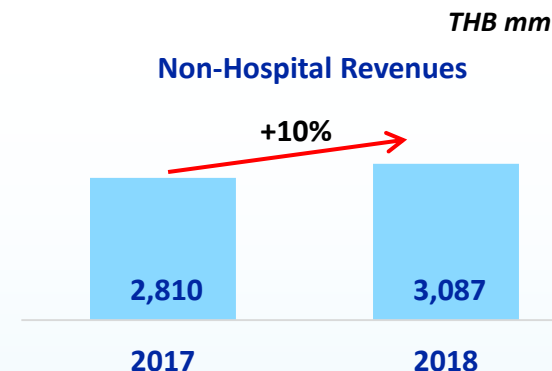
## Non- Hospital Strategic Investments \*

### Pharmaceutical Business

- |                                 |      |   |
|---------------------------------|------|---|
| ■ A.N.B. Laboratories           | 100% | Sterile pharmaceutical product manufacturer & distributor |
| ■ Save Drug Center              | 100% | Drugstore   |
| ■ The Medicpharma               | 87%  | Generic pharmaceutical product manufacturer               |
| ■ General Hospital Products PCL | 46%  | Sterile pharmaceutical product manufacturer               |

### Other Complimentary Business

- |                                    |      |  |
|------------------------------------|------|--|
| ■ National Healthcare Systems      | 100% | Central lab, central supply chain, procurement & other shared services |
| ■ Greenline Synergy                | 100% | Shared IT services   |
| ■ Bangkok Premier Insurance Broker | 100% | Health & life insurance broker   |
| ■ Bangkok Helicopter Services      | 100% | Transportation of patients via helicopter services                     |



\* Not included all BDMS' investments



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**Group 1 (Bangkok&West&Cambodia) Ownership No. of Beds**

1. Bangkok Hospital	} (BHQ)	100%		373
2. Bangkok Heart Hospital		100%		97
3. Wattanosoth Hospital		100%		48
4. Chiva Transitional Care		100%		52
5. Bangkok International		100%		172
6. Bangkok Huahin (BHN)		100%		64
7. Bangkok Sanamchan (BSN)		100%		210
8. Thepakorn (TPK)		44.5%		100
9. Bangkok Phetchaburi (BPR)		100%		255
10. Bangkok Muangraj (BMR)		100%		142
11. Royal Phnom Penh (RPH)		100%		100
12. Royal Angkor International (RAH)		80.0%		30


**Group 2**

13. Samitivej Sukhumvit (SVH)	95.8%		311
14. Samitivej Srinakarin (SNH)	95.8%		400
15. Samitivej Sriracha (SSH)	70.1%		184
16. Samitivej Thonburi (STH)	63.5%		150
17. Samitivej Chonburi (SCH)	100%		220
18. Samitivej Chinatown (SCT)	100%		59
19. BNH Hospital (BNH)	91.5%		144

**Group 3 (East)**

20. Bangkok Pattaya (BPH)	97.3%		400
21. Bangkok Rayong (BRH)	100%		220
22. Bangkok Chanthaburi (BCH)	99.7%		170
23. Bangkok Trat (BTH)	99.8%		114
24. Sri Rayong (SRH)	100%		195


**Group 4 (North&Northeast)**

25. Bangkok Chiangmai (BCM)	100%		175
26. Bangkok Ratchasima (BKH)	91.4%		180
27. Bangkok Pakchong (BHP)	91.4%		31




**Group 4 (North&Northeast)**

28. Bangkok Udon (BUD)	100%	120
29. Bangkok Phitsanulok (BPL)	100%	195
30. Bangkok Khon Kaen (BKN)	100%	140
31. Bangkok Chiangrai (BCR)	100%	80

**Group 5**

32. Phyathai 1 (PT1)	100%	224
33. Phyathai 2 (PT2)	99.2%	 260
34. Phyathai 3 (PT3)	98.2%	267
35. Phyathai Sriracha (PTS)	75.1%	350
36. Phyathai Nawamin (PTN)	99.8%	140
37. Paolo Paholyothin (PLP)	100%	267
38. Paolo Samutprakarn(PLS)	93.6%	200
39. Paolo Chokchai 4 (PLC)	85.7%	169
40. Paolo Rangsit (PLR)	100%	150
41. Paolo Kaset (PLK)	100%	162
42. Paolo Phrapradaeng (PLD)	84.0%	60

**Group 6 (South)**

43. Bangkok Phuket (BPK)	99.7%		266
44. Bangkok Siroj (BSI)	100%		151
45. Dibuk (DBK)	99.7%		100
46. Bangkok Hat Yai (BHH)	98.8%		200
47. Bangkok Samui (BSH)	100%		52
48. Bangkok Surat (BSR)	100%		150

**Group 7: Non-Hospital**

1. National Healthcare System	100%
2. Bio Molecular Laboratories	95.0%
3. The Medicpharma	87.1%
4. A.N.B Laboratories	100%
5. Save Drug Center	100%
6. General Hospital Products	46.0%

Remark:- Number of beds is structured beds