



Bangkok Dusit Medical Services (BDMS)

Citi-Thailand C-Suite Corporate Day

17 January 2020





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BDMS Overview & Updates

BDMS



Overview



48 Hospitals



~ 8,300 Beds



10 Centers of Excellence



BDMS Wellness Clinic



12,000+ Doctors 9,000+ Nurses 15,000+ Staffs



Pharmaceutical manufacturer and drug stores

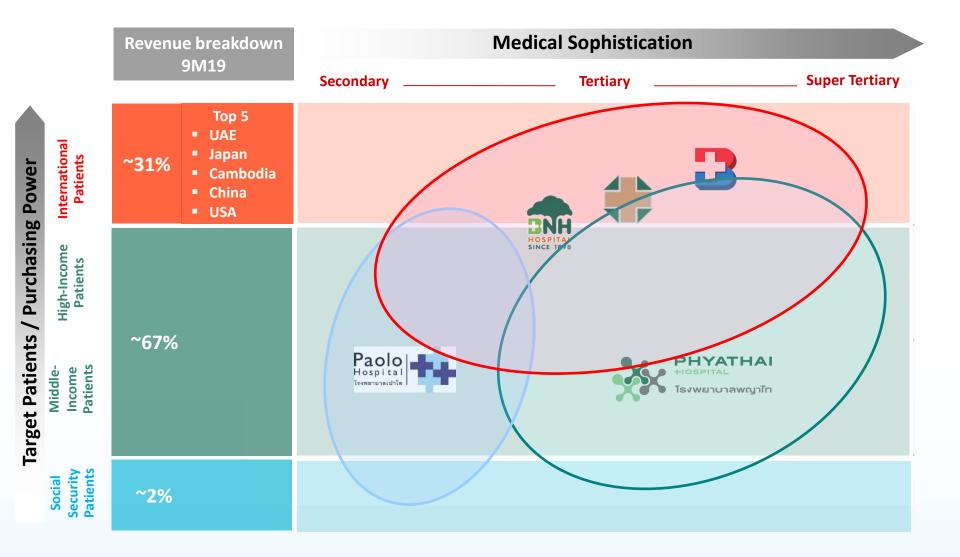
- Established on February 26, 1972
- Top 5 private hospital operators in the world by market capitalization
- Hub-and-Spoke model with an established patient referral system helps create efficiency through scale

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
	Bangkok Hospital Samitivej Hospital Phyathai Hospital Paolo Hospital BNH Hospital Royal Hospital	Hospitals Bangkok Hospital 25 Samitivej Hospital 6 Phyathai Hospital 5 Paolo Hospital 6 BNH Hospital 1 Royal Hospital 2

^{*} 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

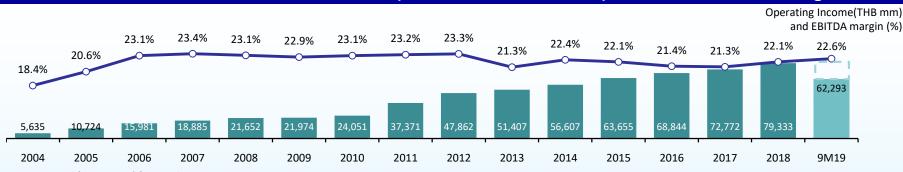


Strong Share Price Performance Backed by a Successful Expansion Track Record



^{*} 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 Five-Year Strategy



Strategy & Projects in Pipeline

	Volume & Margi	n Driven	Inno	ovation & Digital		Sustainability
 Leverage more on Hub&Spoke Center of Excellence Increase occupancy rate Expand insurance patient base 		 International medical affiliation Smart Virtual Hospital Health application 		- (Quality & safety standard Good corporate governance Social responsibility	
	2020	2021		2022		2023-2024
	49 Hospitals					~ 50 hospitals
	■ ~ 8,700 beds					• ~ 9,400 beds
	Jomtien Hospital (233 beds)					SamitivejInternationalChildren(100 beds)
Projects in Pipeline	Existing Hospital Exp	oansion (Occu	pancy Ra	ate > 80%)		
	 Paolo Chokchai 4 (59 beds) Samitiivej Chonburi (161 beds) 	O Bangkok Chanthabi (96 beds)	uri	 Paolo Chokchai 4 (59 beds) Phyathai Sriracha (100 beds) Bangkok Udon (135 beds) Bangkok Ratchas (166 beds) 	1	Expansion of our Network Hospitals

BDMS Complete Continuum of Healthcare





Center 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

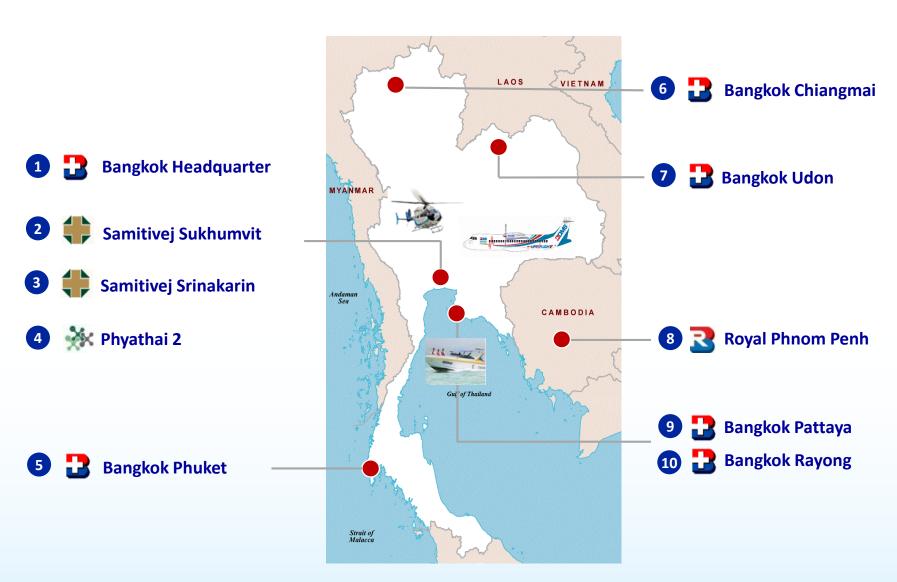
SAVE DRUG

Drug Store

BDMS Center of Excellence Network



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

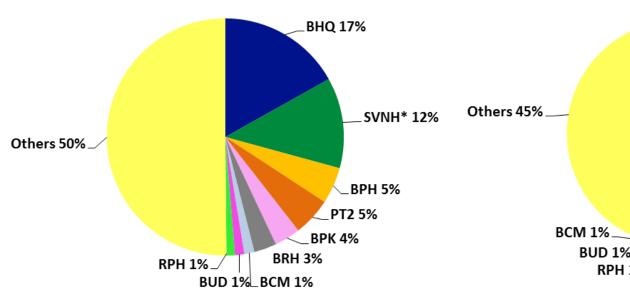


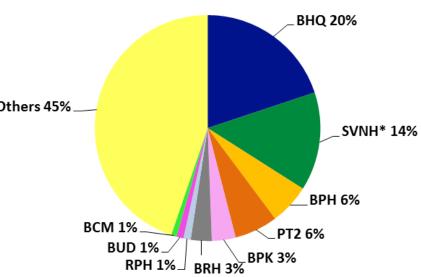
Diversified Sources of Revenues and Profitability



COE Operating Income Contribution in 9M19

COE Total EBITDA Contribution in 9M19





Commentary

- In 9M19, 10 Centers of Excellence (COE) contributed
 - 50% of total revenues
 - 55% of total EBITDA

^{*} SVNH included SVH and SNH performance

Medical Cooperation



Local and International Partnership



Collabpration on occupational health, pediatrics, rehabilitation, clinical simulation and informatics



Others international and local institutions

education, training and research on orthopedics

Collaboration for

Orthopaedic Institute
University of Missouri Health Care





Missouri

Collaboration for education and research on trauma and orthopedics



Collaboration on Gastrointestinal Medicine



Collaboration for knowledge sharing on orthopedics

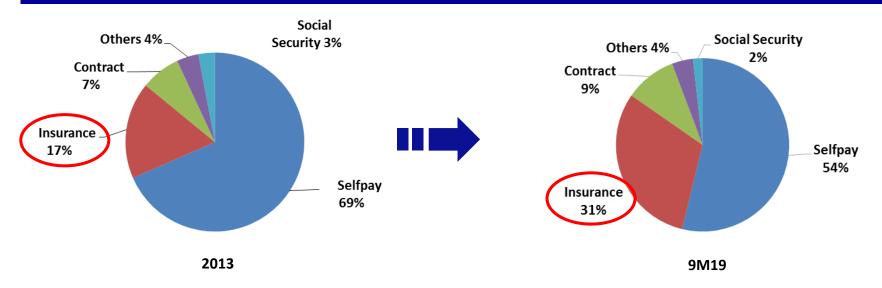


Research collaboration on the TRFS laser device for brain tumor surgery

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

FIRST CLASS Health Care

- 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)



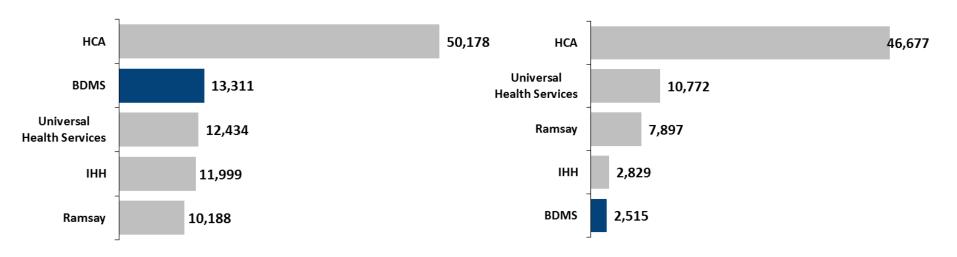
- Maximum benefit per year: THB 450k to THB 1.5m
- Target mid market

Global Hospital Rankings



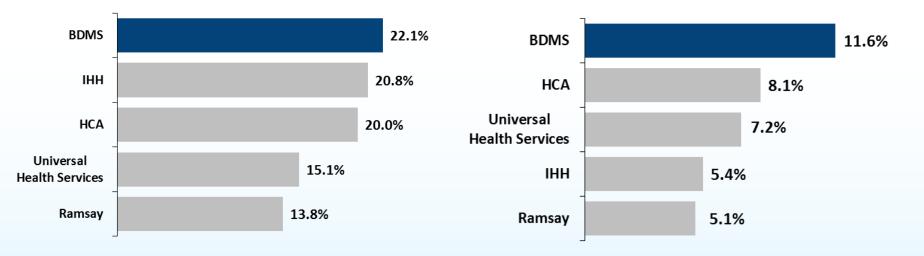
Market Capitalization (USD mm)

Revenue (USD mm)



EBITDA Margin

Net Profit Margin



Remark: - Market capitalization as of 3 January 2020

⁻ Financial performance for year ended December 2018 except Ramsay for the $\,$ year ended June 2019

3Q19 & 9M19 in Review





3Q19 & 9M19 Results

	3Q19		9M19	
	Chg	% to	Chg	% to
	(yoy)	Revenue	(yoy)	Revenue
Operating income	+8%		+6%	
	(THB 21,887 mm)		(THB 62,293 mm)	
Patient revenue	+8%		+7%	
	(THB 20,838 mm)		(THB 59,323 mm)	
Breakdown by location				
Bangkok & Vicinity	+6%	58%	+5%	58%
Outside Bangkok	+9%	42%	+8%	42%
Breakdown by nationality				
Thai	+8%	72%	+6%	69%
International	+5%	28%	+7%	31%
Breakdown by type of patie	nts			
Outpatients	+7%	45%	+7%	45%
Inpatients	+8%	55%	+6%	55%





3Q19 & 9M19 Profitability Ratio

(THB mm)	3Q19	3Q18	Chg (yoy)	9M19	9M18	Chg (yoy)
EBITDA *	5,089	4,820	+6%	14,051	13,612	+3%
EBITDA margin *	23.3%	23.7%		22.6%	23.2%	
Core profit	2,890	2,879	0%	7,680	7,841	(2)%
Core profit margin	13.2%	14.2%		12.3%	13.4%	
Net profit	2,890	2,879	0%	13,195	7,841	68%
Net profit	13.2%	14.2%		21.2%	13.4%	

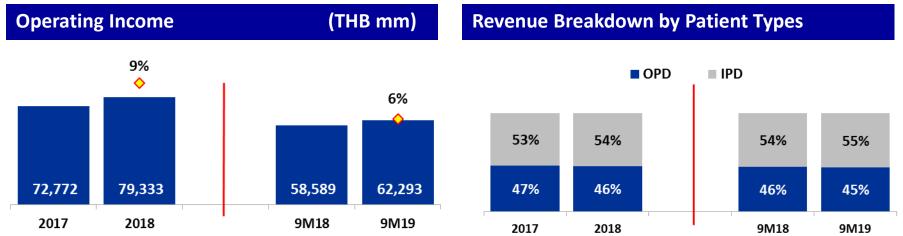
^{*} Excluding non-recurring items

9M19 Non-recurring items (net of income tax)	THB mm
1. Gain on divestment in Ramkhamhaeng Hospital Public Co., Ltd. ("RAM")	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
Total	5,514

Operational Statistics & Financial Highlights

Operating Income Growth





Commentary

- 9M19 Operating income increased by 6% yoy mainly from
 - Patient revenue increased 7% yoy, attributed to
 - Increase insurance patient base of 12% yoy (Thai insurance grew 11% while international insurance grew 14%)
 - Higher revenue from hospitals outside of Bangkok of 8% yoy
 - Growth from both Thai patients of 6% and international patients of 7% yoy
 - Revenues from sales of goods slightly decreased yoy due mainly to a decrease in sales of Save Drug Center Co., Ltd (SDC) and export sales of A.N.B. Laboratories Co., Ltd.

Thai and International Patients

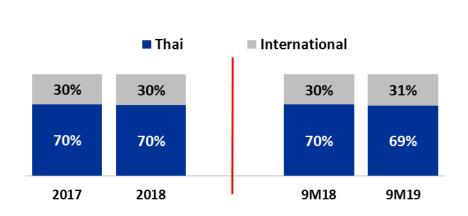


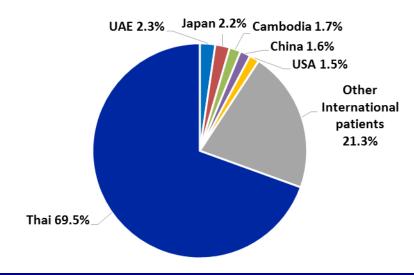
Revenue Contribution by Nationality

Top 5 Nationality contribution in 9M19

% to patient revenue

% to patient revenue





Commentary

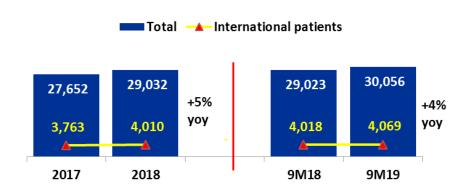
- In 9M19, strong growth from both Thai patients of 6% yoy and international patients of 7% yoy.
 - Key growth for International patient revenues are UAE (+78%), Oman (+67%) and Cambodia (+17% yoy)

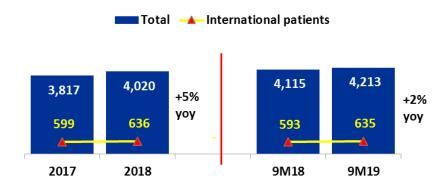
Operational Statistics



Number of OPD Visits per Day

Average Daily Census (ADC)



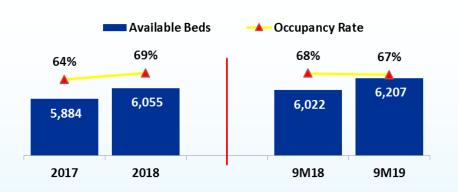


Remarks: - Including social security

Remarks: - Including social security and new born patients

Occupancy Rate Based on Available Beds

Average Length of Stay (days)





Profitability Trend

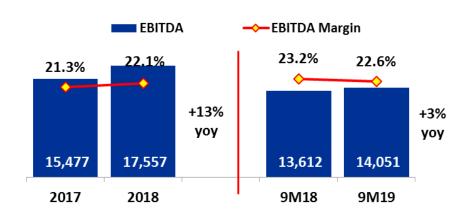
EBITDA & EBITDA Margin *

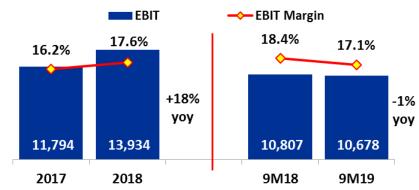
(THB mm)

EBIT & EBIT Margin *

(THB mm)

23





Core Profit & Core Profit Margin * (THB mm)

Non-Recurring Items (Gain) ——Core Profit Margin Core Profit 13.4% 12.9% 12.3% 11.0% -2% +27% yoy yoy 8,021 10,224 7,841 7,680 2017 2018 9M18 9M19

Commentary in 9M19

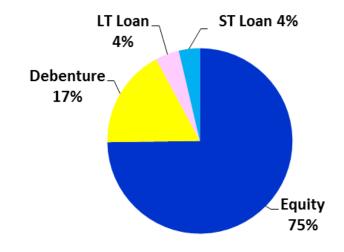
- EBITDA margin decreased mainly from losses of SDC and Wellness while EBIT margin decreased due mainly to divestment of all investment in RAM during 1Q19
- If included non-recurring items totaling of THB 5,514 million, net profit was THB 13,195 million with net profit margin of 21.2%

* Excluding non-recurring items

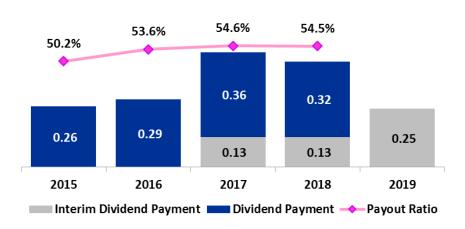
Capital Management

Bangkok Dusit Medical Services

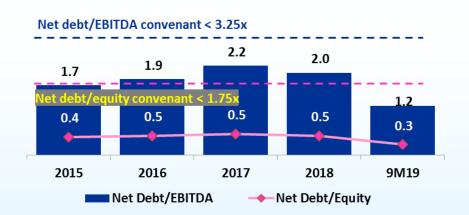
Capital Structure as of September 2019



Dividend Payment & Payout Ratio



Gearing Ratios: Well Within Covenants



Interest Coverage



Healthcare Industry

Opportunities in Thailand Healthcare Sector



Despite sluggish local and global economy, Thai healthcare sector continues to be resilient

Rising Demand for Healthcare

- ✓ Aging demographics and increasing non-communicable diseases
- ✓ Growing medical tourism from capable medical personnel, convenient infrastructure and value for money

Positive Private Health Insurance Momentum

- ✓ Co-operation between insurance companies and local hospitals driving private health insurance penetration
- **✓** Thai Government tax break on premium for health insurance

Preventive Trend

- ✓ Increasing health conscious lifestyle
- ✓ Focusing on precision medicine, wellness, early detection and exercise including mental health awareness

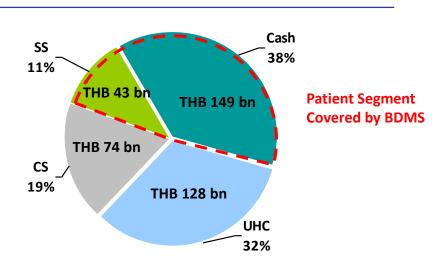
Health Tech

- ✓ Smart hospitals
- ✓ Mobile health application helps increase healthcare accessibility



Healthcare Segments in Thailand

Total Expenditure for 2017: THB 394 bn



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

Universal Healthcare Coverage (UHC)	A welfare program for Thai people to receive medical coverage for IPD and OPD care at registered facilities	
Civil Servant (CS)	A welfare program provided to employees of governments and state-owned enterprises	
Social Security Scheme (SS)	Minimum requirement of healthcare provided to employees of private companies	
Private Healthcare (Cash)	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
Total	1,211	141,502

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

^{*} Data as of 2014

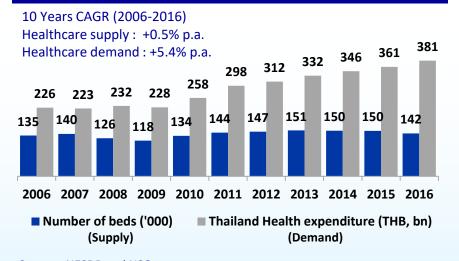
Source: WHO, NESDB and NSO

BDMS Market Coverage (2019)

	Total Private Beds	BDMS Registered Beds *	Market Share
Bangkok	13,966	2,702	19%
Central	11,719	2,222	19%
South	2,910	749	26%
Northeast	3,309	384	12%
North	4,273	264	6%
Total	36,177	6,321	17%

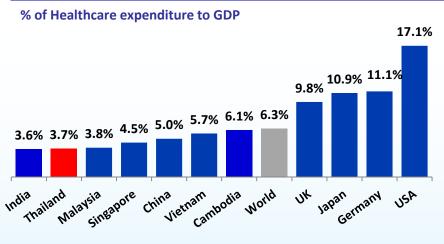
Source: Department of Health Service Support, Ministry of Public Health

Healthcare Demand Growing Faster than Supply



Source: NESDB and NSO

Low Healthcare Penetration



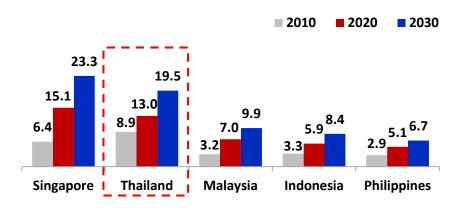
Source: WHO (2016)

Increasing Thailand Healthcare Demand



Population Growth and Aging Profile

Percentage of population above 65 years (%)

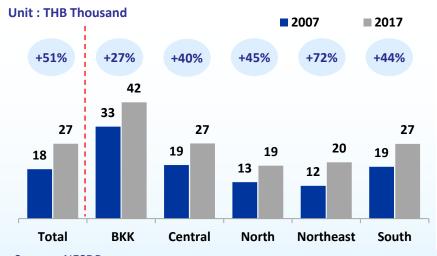


Commentary

- 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 outof-pocket expense. Increasing trend for health insurance will benefit private hospitals

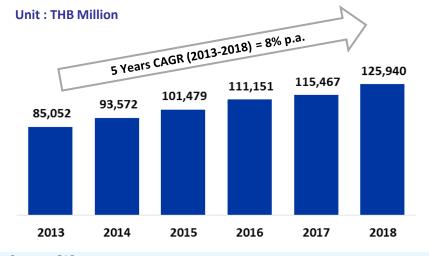
Source: UN Population Database: 2015

Thailand Monthly Income per Household



Source: NESDB

Health & Personal Accident Insurance Premium

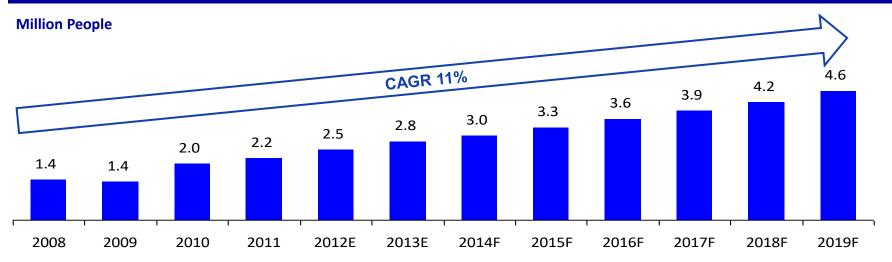


Source: OIC

Medical Tourism



Increasing Trend of Medical Tourists to Thailand



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

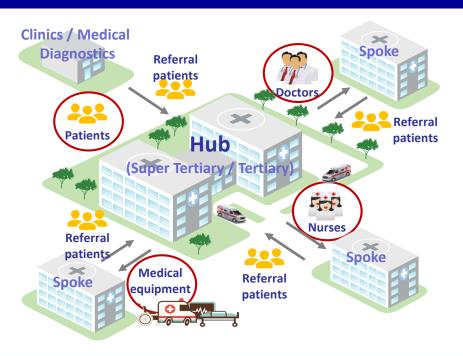
Source: Medicaltourism.com (2018)

Company Information

'Hub-and-Spoke' Model



Providing a Proven Patient Referral System and Creating Efficiency Through Scale





- 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
- Established system provides a platform for future expansion

BDMS Wellness Clinic



A Brand New Wellness Clinic Delivering World-Class Services







7 Centers of Preventive Excellence

- 1 Regenerative Clinic
- 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



The Grand Opening of Bangkok International Hospital on 14 Nov 19

The Next Level of Experience and Satisfaction in Neurological, Orthopedic and Spine Care











Shareholding Structure (As of 30 December 2019)

		% of Shareholding
1	Mr. Prasert Prasarttong-Osoth, M.D. and family	20.2%
2	Thai NVDR Co., Ltd.	8.8%
3	Bangkok Airways*	6.5%
4	Mr. Wichai Thongtang and family	6.2%
5	The Viriyah Insurance Co., Ltd.	6.0%
6	Mr. Chirotchana Suchato, M.D. and family	2.6%
7	Social Security Office	2.5%
8	South East Asia UK (Type C) Nominess Limited	2.4%
9	Ladpli family**	2.3%
10	State Street Europe Limited	2.0%
	Total	59.5%

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



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

100%

Health & life insurance broker

Broker

Transportation of patients via helicopter

services

Bangkok Helicopter Services	100%

Non-Hospital Revenues

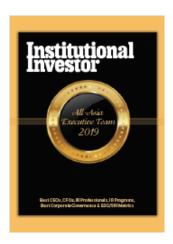


THB mm

^{*} Not included all BDMS' investments

BDMS Awards & Recognition in 2019





All- Asia Executive Team Most Honored Company - Thailand from Institutional Investor



Thailand's Top Corporate
Brands Hall of Fame
from Chulalongkorn
University



Asia's Outstanding Companies
Poll – Thailand for 2010s
from Asiamoney



SET Awards
Outstanding Investor
Relations Awards
(Market Cap over THB 100 bn)



The Best Managed
Healthcare Company in Asia
from FinanceAsia



IR Magazine
Best in Country
-Thailand

BDMS Awards & Recognition in 2019



Thailand Corporate Excellence Awards 2019





- BDMS received HRH Crown Princess Maha Chakri Sirindhorn's Trophies for winning of
 - 1) Excellence Award on Product / Service
 - 2) Excellence Award Corporate Improvement

from the following areas:-

- Trusted Health Care Network
- Product and/or Service Quality JCI, TEMOS, CAMTS

Operation Excellence

Customer Experience – Service with Thai hospitality

BDMS core values

- Seeking Cutting Age Technologies from worldwide
- BDMS also received Distinguished Award Trophy on Human Resource Management



For More Information:- www.bangkokhospital.com

Group 1 (Bangkok&West&Cambodia)	<u>Ownership</u>	No. of Beds	Group 4 (North&Northeast)	<u>Ownership</u>	No. of Beds
1. Bangkok Hospital	100%	373	28. Bangkok Udon (BUD)	100%	120
2. Bangkok Heart Hospital	100%	97	29. Bangkok Phitsanulok (BPL)	100%	195
3. Wattanosoth Hospital - (BHQ)	100% 🥝	48	30. Bangkok Khon Kaen (BKN)	100%	140
4. Chiva Transitional Care	100%	52	31. Bangkok Chiangrai (BCR)	100%	80
5. Bangkok International	100%	172	Group 5		
6. Bangkok Huahin (BHN)	100% 📀	64	32. Phyathai 1 (PT1)	100%	224
7. Bangkok Sanamchan (BSN)	100%	210	33. Phyathai 2 (PT2)	99.2%	
8. Thepakorn (TPK)	50.0%	100	34. Phyathai 3 (PT3)	98.2%	267
9. Bangkok Phetchaburi (BPR)	100%	255	35. Phyathai Sriracha (PTS)	75.1%	350
10. Bangkok Muangraj (BMR)	100%	142	36. Phyathai Nawamin (PTN)	99.8%	140
11. Royal Phnom Penh (RPH)	100% 🥝	100	37. Paolo Paholyothin (PLP)	100%	267
12. Royal Angkor International (RAH)	80.0%	30	38. Paolo Samutprakarn(PLS)	93.6%	200
Group 2			39. Paolo Chokchai 4 (PLC)	85.7%	169
13. Samitivej Sukhumvit (SVH)	95.8%	311	40. Paolo Rangsit (PLR)	100%	150
14. Samitivej Srinakarin (SNH)	95.8%	400	41. Paolo Kaset (PLK)	100%	162
15. Samitivej Sriracha (SSH)	70.1%	184	42. Paolo Phrapradaeng (PLD)	84.0%	60
16. Samitivej Thonburi (STH)	63.5%	150	, ,	04.070	00
17. Samitivej Chonburi (SCH)	100%	220	Group 6 (South)	00 70/	266
18. Samitivej Chinatown (SCT)	100%	59	43. Bangkok Phuket (BPK)	99.7%	266
19. BNH Hospital (BNH)	91.5%	144	44. Bangkok Siriroj (BSI)	10070	131
Group 3 (East)			45. Dibuk (DBK)	99.7%	100
20. Bangkok Pattaya (BPH)	97.3%	400	46. Bangkok Hat Yai (BHH)	98.8%	200
21. Bangkok Rayong (BRH)	100%	220	47. Bangkok Samui (BSH)	100% 🥝	52
22. Bangkok Chanthaburi (BCH)	99.7%	170	48. Bangkok Surat (BSR)	100%	150
23. Bangkok Trat (BTH)	99.8%	114	Group 7: Non-Hospital		
24. Sri Rayong (SRH)	100%	195	 National Healthcare System 	100%	
Group 4 (North&Northeast)			2. Bio Molecular Laboratories	95.0%	
25. Bangkok Chiangmai (BCM)	100%	175	3. The Medicpharma	87.1%	
26. Bangkok Ratchasima (BKH)	91.4%	180	4. A.N.B Laboratories	100%	
27. Bangkok Pakchong (BHP)	91.4%	31	5. Save Drug Center (SDC)	100%	40
6. General Hospital Products 46.0% 40					

Remark:- Number of beds is structured beds