

Bangkok Dusit Medical Services (BDMS)
Investor Presentation 2Q18&6M18 Results
September 2018



Important Notice

- The information contained in this presentation is for information purposes only and does not constitute an offer or invitation to sell or the solicitation of an offer or invitation to purchase or subscribe for share in Bangkok Dusit Medical Services Public Company Limited ("BDMS" and shares in BDMS, "shares") in any jurisdiction nor should it or any part of it from the basis of , or be relied upon in any connection with, any contract or commitment whatsoever.
- This presentation may include information which is forward-looking in nature. Forward-looking information involve known and unknown risks, uncertainties and other factors which may impact on the actual outcomes, including economic conditions in the markets in which BDMS operates and general achievement of BDMS business forecasts, which will cause the actual results, performance or achievements of BDMS to differ, perhaps materially, from the results, performance or achievements expressed or implied in this presentation.
- This presentation has been prepared by the BDMS. The information in this presentation has not been independently verified. No representation, warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the information and opinions in this presentation. None of the BDMS or any of its agents or advisors or any of their respective affiliates, advisors or representatives, shall have any liability (in negligence or otherwise) for any loss howsoever arising from any use of this presentation or its contents or otherwise arising in connection with this presentation.
- This presentation is made, furnished and distributed for information purposes only. No part of this presentation shall be relied upon directly or indirectly for any investment decision-making or for any other purposes.
- This presentation and all other information, materials or documents provided in connection therewith, shall not, either in whole or in part, be reproduced, redistributed or made available to any other person, save in strict compliance with all applicable laws.













Contents

- Overview
- **2Q18 & 6M18 in review**
- Operational Statistics & Financial Highlights
- Healthcare Industry













Overview

BDMS

Overview



45 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*
3	Bangkok Hospital	21	3,602
1	Samitivej Hospital	6	1,288
××	Phyathai Hospital	5	1,241
**	Paolo Hospital	6	1,008
ENH HOSPITAL STYCE 1818	BNH Hospital	1	144
R	Royal Hospital	2	130
	Local Hospital	4	546

^{*} Maximum number of beds according to structure of the hospitals





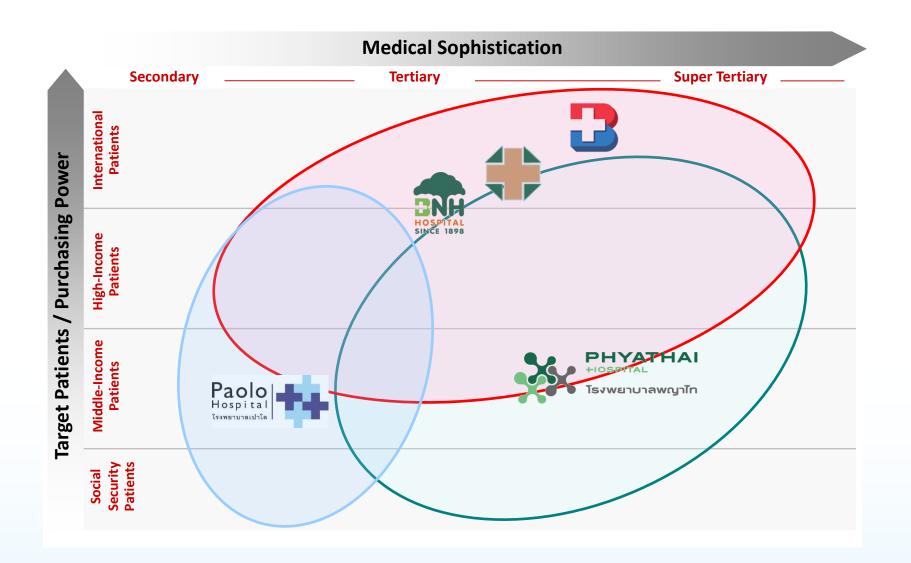








Diversification of Patient Mix









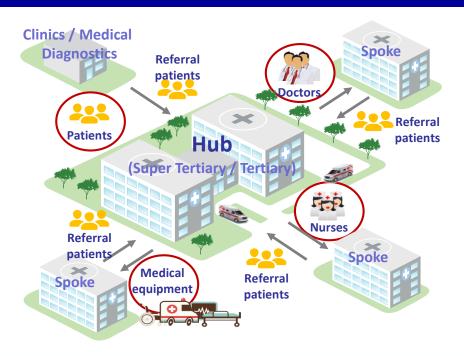






'Hub-and-Spoke' Model

Providing a Proven Patient Referral System and Creating Efficiency Through Scale





- Strong patient referral system within and across each hub and spoke
- 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







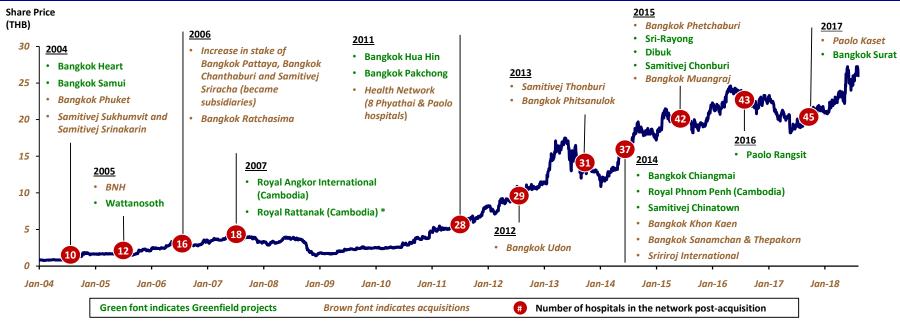






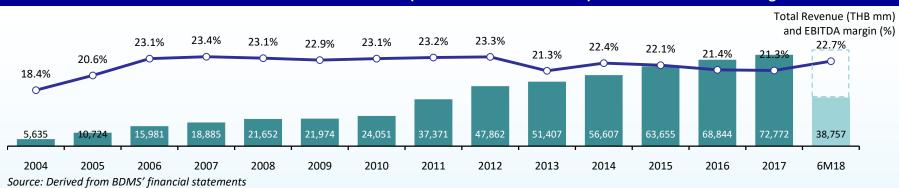
Successful Track Record of Expansion Through M&A and Greenfield Projects

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 (2004-2017 CAGR of 21.7%) with Resilient EBITDA margin



BDMS has developed 14 new hospitals and acquired a total of 30 hospitals to date













BDMS Future Plan

Key Strategies					
	2017	2018	2019	2020	
	45 Hospitals			~ 50 hospitals	
	■ ~8,000 beds			■ ~8,500 beds	
Hospitals in Pipeline	✓ Paolo Kaset (162 beds) ✓ Bangkok Surat (150 beds)	 Bangkok Chiangrai (80 beds) Chiva Transitional Care (52 beds) 	Phoenix Project (175 beds)	 International Hospital (100 beds) Jomtien Hospital (233 beds) 	
	✓ BDMSWellnessClinic: 1 Clinic	8 Clinics for Wellness	Full operation for BDMS Wellness Clinic		
Focus on Margin Expansion	 Increase utilization of ramping-up hospitals Improving operational efficiencies Centers of excellence International medical affiliation 				
Long-term	Completed continTop referral hospit				

Long-term Target

- Top referral hospitals in Asia Pacific
- Long-term EBITDA margin target of ~ 25%













BDMS Complete Continuum of Healthcare



Centers of Excellence



Super Tertiary Care



Tertiary Care



Promotive

Preventive

Early Detection

Curative

Transitional

Rehabilitative



BDMS Wellness Clinic



Phoenix Project



Chiva Transitional Care Hospital

Non-Hospital Strategic Investment



Sterile Drug Manufacturer & Distributor



Generic Drug Manufacturer



Drug Store







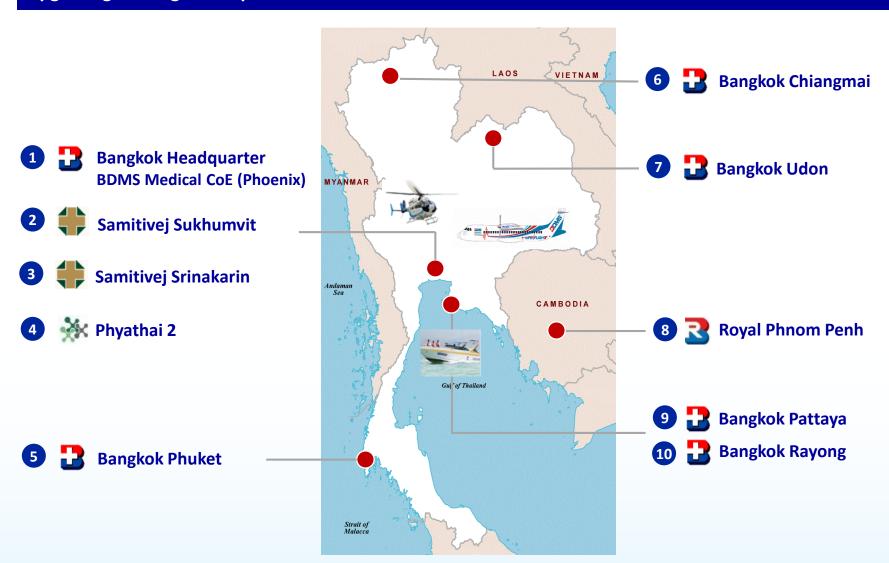






BDMS Centers of Excellence Network

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











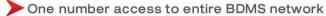




BDMS Network Capabilities

Alarm Center: One Number All Access For Life Care







International Calls +66-2-BANGKOK, +66-2-226-4565











State-of-the-Art Medical Equipment



New Radiation Machine: Varian EDGE



PET/CT Scan with Flow Motion













BDMS Wellness Clinic

A Brand New Wellness Clinic Delivering World-Class Services









- Comprehensive preventative-care center
- Targeting high-end Thai and International customers
- Currently open Regenerative Clinic, Musculokskeletal and Sports Clinic and Dental Clinic

8 Centers of Preventive Excellence

- 1 Regenerative Clinic
- Musculoskeletal and Sports Clinic
- 3 Cardioscience Clinic
- 4 Neuroscience Clinic
- Digestive Wellness Clinic
- 6 Breast Clinic
- 7 Fertility Clinic
- 8 Dental Clinic









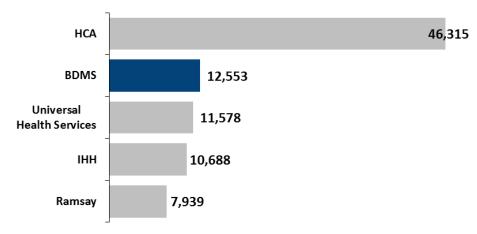


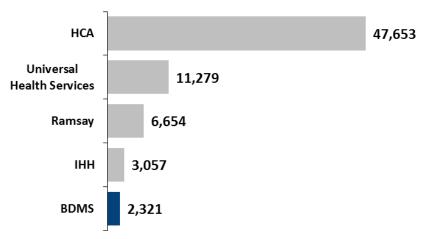


Global Hospital Rankings

Market Capitalization (USD mm)

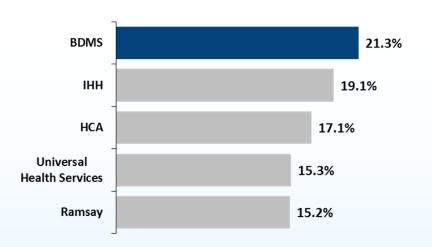
Revenue (USD mm)

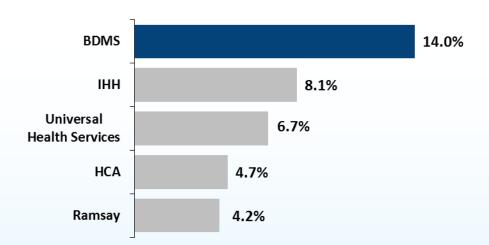




EBITDA Margin

Net Profit Margin





Remark: - Market capitalization as of 13 September 2018

- Financial performance for year ended December 2017 except Ramsay for the year ended June 2018













Strategic Focus on Health Insurance





My First Class Healthcare @ BDMS by Allianz Ayudhya: Exclusive Health Insurance at BDMS Network with High Coverage at THB 100 Million per Year



1st Class for you by World Class Health Care Service & World Class Health Protection



วงเงินสูงสุดถึง 100 ล้านบาทต่อปี ให้ความคุ้มครองสุขภาพ ในโรงพยาบาลเครือ BDMs กว่า 45 โรงพยาบาลทั่วประเทศและกัมพชา



ครอบคลุมทุกการรักษาพยาบาล ทั้งผู้ป่วยใน ผู้ป่วยนอก ทันตกรรม คลอดบุตร และสายตา



ค่าตรวจสุขภาพ สูงสุดถึง 20,000 บาท/ปี สัณณาต้องมีผลบังคับต่อเชื่องมามากกว่า 12 เดือน



บริการดูแลคุณตลอดการเจ็บป่วย การบริการดูแลคุณยามพักฟื้นที่บ้าน (Nursing care)



สิทธิประโยชน์เหนือระดับสำหรับลูกค้า HEALTH PRESTIGE ของขวัญวันเกิดสุดพิเศษ และโทรศัพท์หมายเลขพิเศษสำหรับให้บริการด้านกรมธรรม์ของคุณ













The Best Managed Healthcare Company in Asia by FinanceAsia





BDMS remains committed to be "Your Trusted Healthcare Network"



BDMS won Best Managed Healthcare Company in Asia from FinanceAsia's 18th Annual Best companies in Asia Poll which gathered over 140 responses from fund managers and analysts around the world













2Q18 & 6M18 in review

Consolidated Financial Summary

2Q18 & 6M18 Results

	2Q18		6M18	
	Chg	% to	Chg	% to
	(yoy)	Revenue	(yoy)	Revenue
Operating income	+9%		+12%	
	(THB 18,729 mm)		(THB 38,757 mm)	
Patient revenue	+10%		+13%	
	(THB 17,799 mm)		(THB 36,856 mm)	
Breakdown by location				
Bangkok & Vicinity	+7%	59%	+10%	58%
Upcountry	+14%	41%	+16%	42%
Breakdown by nationality				
Thai	+11%	72%	+13%	70%
International	+7%	28%	+10%	30%
Breakdown by type of patie	ents			
Outpatients	+10%	46%	+10%	45%
Inpatients	+9%	54%	+14%	55%













Consolidated Financial Summary

2Q18 & 6M18 Profitability Ratio

(THB mm)	2Q18	2Q17	Chg (yoy)	6M18	6M17	Chg (yoy)
EBITDA	3,853	3,366	+14%	8,786	7,156	+23%
EBITDA margin	20.5%	19.6%		22.7%	20.7%	
Core profit	2,043	1,596	+28%	4,962	3,569	+39%
Core profit margin	10.9%	9.3%		12.8%	10.3%	
Net profit	2,043	3,791*	(46)%	4,962	5,764*	(14)%
Net profit margin	10.9%	22.1%*		12.8%	16.7%*	

^{*} Including extra gain of THB 2,195 million (net of taxes) on partial sale of investment in Bumrungrad Hospital Public Co., Ltd. (BH)









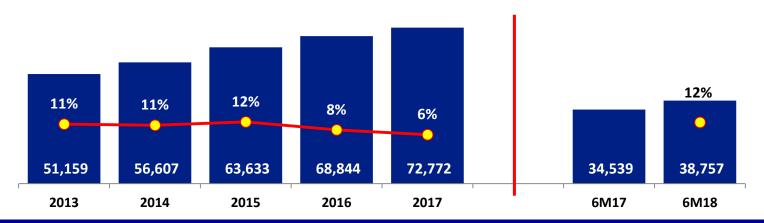




Operational Statistics & Financial Highlights

Operating Income Trend

(THB mm)



Commentary

- 6M18 Operating income increased by 12% yoy mainly from
 - Patient revenue increased 13% yoy, attributed to
 - Solid growth from Center of Excellence
 - Expansion of insurance patients base
 - Increasing in influenza and outbreak during 1Q18
 - Revenue from sales of goods grew 10% yoy from increase in sales of The Medicpharma,
 A.N.B. Laboratories and Bangkok Save Drug

Remark:- Operating income is calculated from hospital revenue + revenue from sales of goods and food + other income









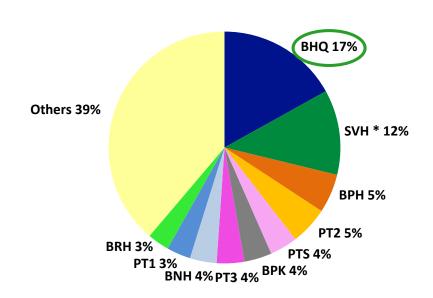


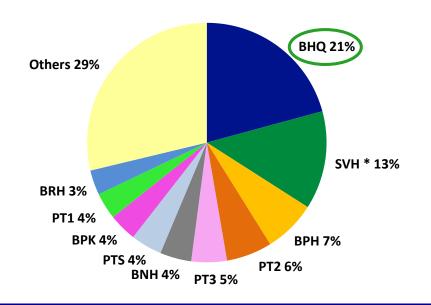


Diversified Sources of Revenues and Profitability

Operating Income Contribution in 6M18

Total EBITDA Contribution in 6M18





Commentary

- In 6M18, top 5 hospitals contributed 43% of total revenues and 52% of total EBITDA
- Key hospitals that drive revenue growth were SCH (+49%), BKN (+36%), BCM (+27%), BSN (+25%), PT3 (+16%), BRH (+16%), SSH (+15%) and PTS (+14% yoy)

Remark: - Operating income is calculated from hospital revenue + revenue from sales of goods and food + other income

- EBITDA is calculated from revenue from hospital operations + revenue from F&B + other income cost from hospital operations SG&A expenses
- Hospital abbreviation shown on Appendix









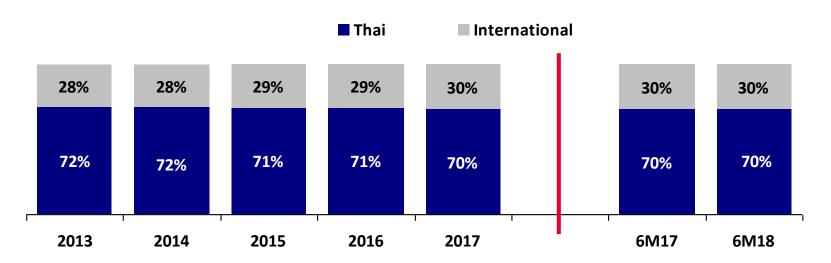




^{*} SVH also included SNH performance

Thai and International Patients

Revenue Contribution by Nationality



Commentary

- 6M18 revenues from Thai patients grew 13% yoy while international patients grew 10% yoy
 - Top 5 international patient revenues are from Japan, China, UK, Myanmar and USA which contribute 2.1%, 1.8%, 1.6%, 1.6% and 1.5% of total patient revenues respectively
 - Key growth for International patient revenues are Kuwait (+80%), China (+30%) and Cambodia (+19% yoy)







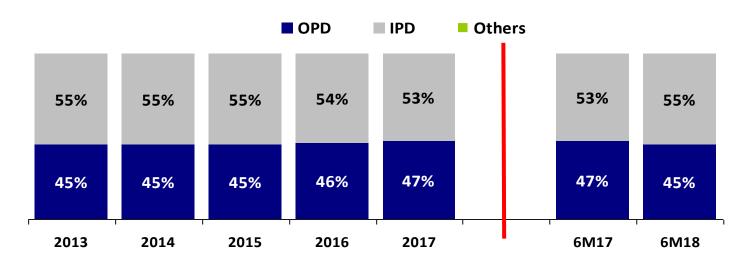




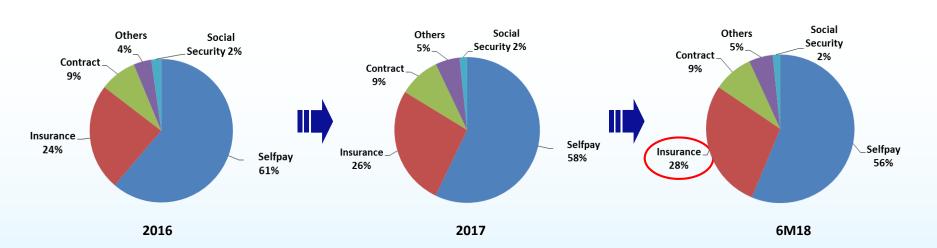


Patient Mix

Revenue Breakdown by Patient Types



Patient Revenue by Payor: Increasing Insurance Portion









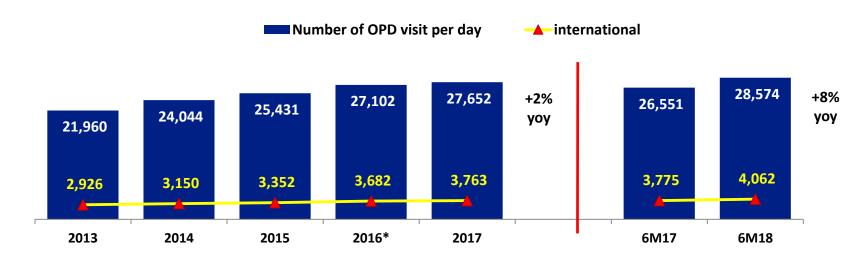




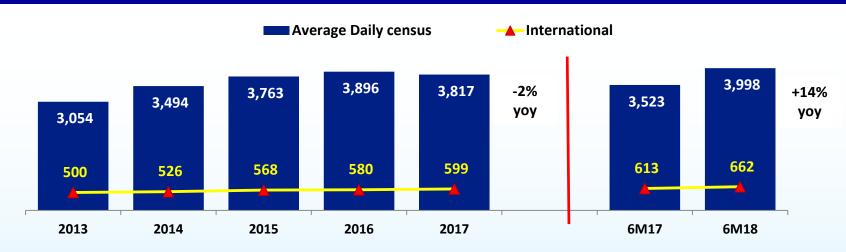


Patient Volume

Number of OPD Visits per Day



Average Daily Census (ADC)



Remarks: - Including social security







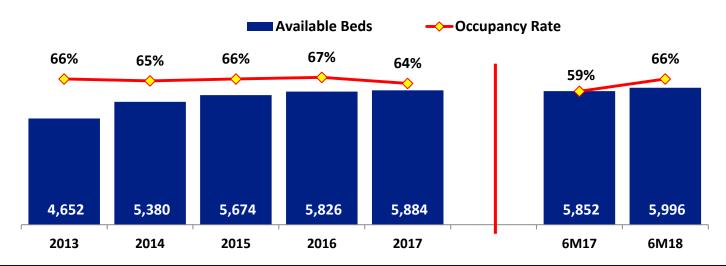




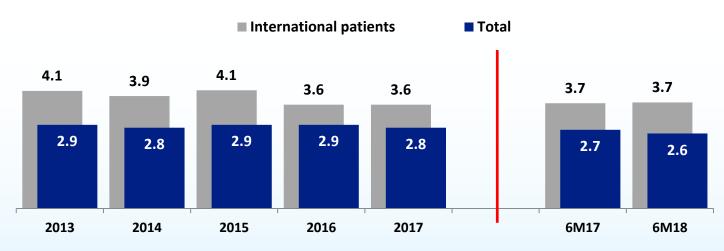


Utilization of Beds

Occupancy Rate Based on Available Beds



Average Length of Stay (days)



Remarks:- Including social security patients









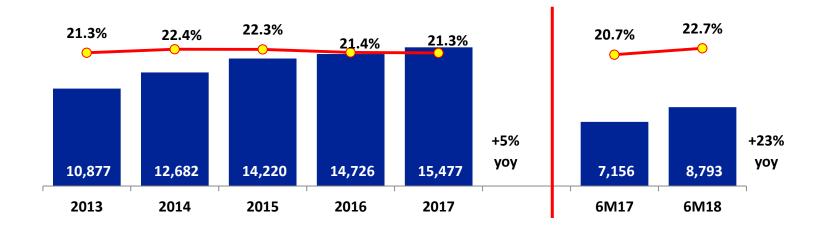




Profitability Trend

EBITDA & EBITDA Margin

(THB mm)



EBIT & EBIT Margin *

(THB mm)



^{*} Excluding non-recurring items









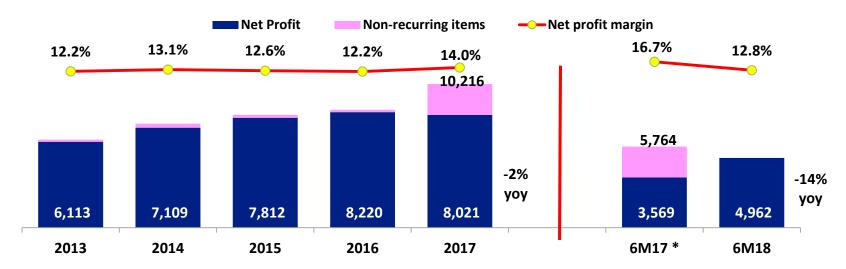




Profitability Trend

Net Profit & Net Profit Margin

(THB mm)



^{*} If excluding non-recurring item, net profit margin in 6M17 would be 10.3%

Commentary

- In 6M18, net profit were THB 4,962 million with net profit margin of 12.8%
- If excluded gain on sales of investment in BH of Baht 2,195 mm in 6M17, net profit grew 39% yoy mainly from
 - Strong revenue growth
 - Continued cost containment measures
 - Decrease in finance expenses







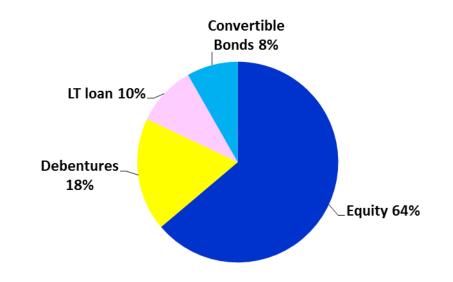




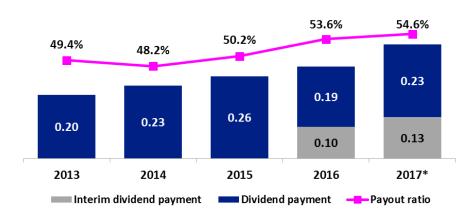


Capital Management

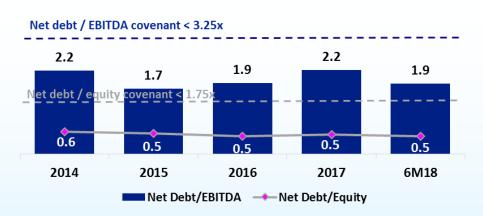
Capital Structure as of June 2018



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









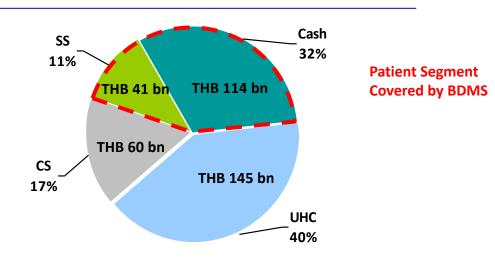




Thailand Healthcare Coverage

Healthcare Segments in Thailand

Total Expenditure for 2014: THB 360 bn*



^{*} Excluding general government expenditure on healthcare Source: SSO, NHSO, WHO, BOT, Phatra Securities estimates

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 & Supply

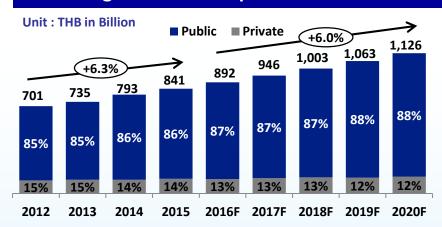
Healthcare Supply in Thailand (2014)

	# of Hospitals	# of Beds
Private	329	34,567
Public	1,019	120,322
Total	1,348	154,889

(Number per 10,000 population)	Thailand	Global
Doctor	4	14
Nurse	21	30
Bed	21	26

Source: WHO, Department of Health Service Support, Bureau of Policy and Strategy

Increasing Healthcare Expenditures in Thailand



Source: EIC SCB and WHO







BDMS Market Coverage (2014)

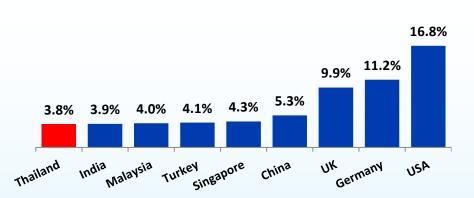
	Total Private Beds	BDMS Registered Beds *	Market Share
Bangkok	14,339	2,871	20%
Central	10,654	2,004	19%
South	2,467	662	26%
Northeast	2,904	337	12%
North	4,128	194	5%
Total	34,492	6,014	17%

^{*} Company data as of 2017

Source: WHO and Department of Health Service Support

Low Healthcare Penetration

% of Healthcare expenditure to GDP



Source: WHO (2015)



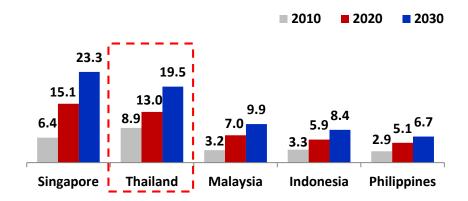




Increasing Healthcare Demand

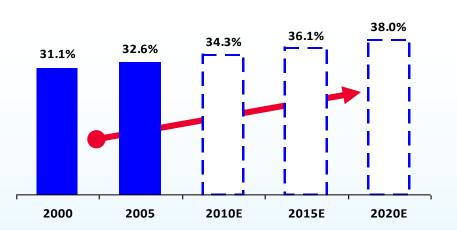
Population Growth and Aging Profile

Percentage of population above 65 years (%)



Source: UN Population Database: 2015

Urbanization



Sources: NESDB, Health & Welfare Surveys, National Statistics Office (Data related to Thailand)



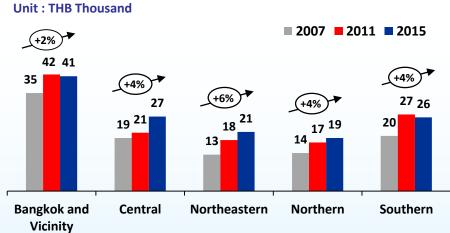
สมิติเวช SAMITIVE

BNH HOSPITAL ISOMETHATION (Sathorn - Convent)

Commentary

- Aging population will have great implications on both healthcare costs as well as its capacity to serve demand. In addition, aging population also means a strain on healthcare capacity if it fails to catch up well with increasing demand
- Increasing degree of urbanization is expected over time from 31.1% in 2008 to 38.0% in 2020
- The trend has also been the same for overall South East Asia countries where rapid urbanization is expected from 36.7% in 2000 to 50.6% in 2025

Rising Monthly Income per Capita



Source: NSO

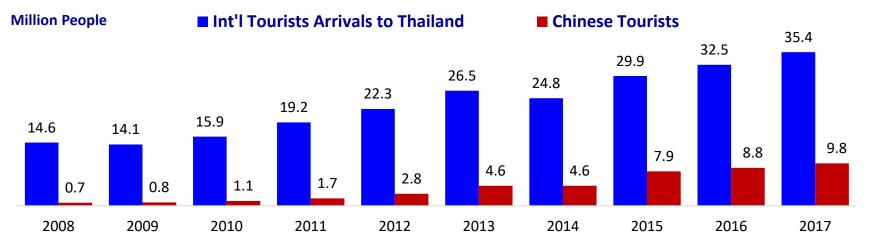






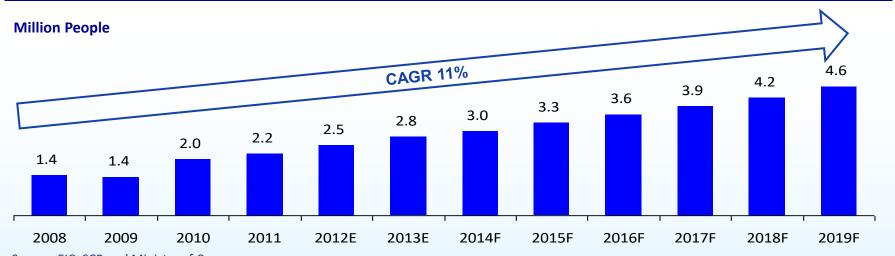
Medical Tourism

Chinese Tourists Drive Strong Growth of International Tourists Arrival to Thailand



Source: Tourism Authority of Thailand and Ministry of Tourism & Sports

Increasing Trend of Medical Tourists to Thailand



Source: EIC, SCB and Ministry of Commerce













Medical Tourism

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

Source: Medicaltourism.com (2016)

Comparison Five Year Survival Rate of Primary Tumor

Primary Tumor	China	Taiwan	Japan	Germany	Hong Kong	USA	BDMS
Breast	73%	82.4%	84.7%	85.3%	90%	88.6%	94.8%
Lung	16.1%	14.3%	30.1%	16.2%	21%	18.7%	39.6%
Colorectal	47.2%	60%	62.3%	63.4%	60.9%	64.4%	78.5%

Sources: WHO, http://www.thelancet.com, http://onlinelibrary.wiley.com and Wattanosoth Cancer Registry 2014













Sustainability Development

Your Trusted Healthcare Network

Good Corporate Governance

Practiced good Corporate Governance to ensure long-term growth and sustainability









Employee Well-Being and Human Rights

Fully committed to support diversity and human rights in term of gender and cultural differences



Environmental Friendly

Encouraged reductions of energy use without reducing the quality of care and raised awareness on efficient energy consumption



Social and Community **Development**

Encouraged donation of medical supplies and equipment to unfortunate person

Provided health check-up to promote health and well-being of communities













Appendix

		% of Shareholding
1	Mr. Prasert Prasarttong-Osoth, M.D. and family	23.3%
2	Mr. Wichai Thongtang and family	7.5%
3	Bangkok Airways*	7.3%
4	The Viriyah Insurance Co., Ltd.	6.1%
5	Thai NVDR Co., Ltd.	5.3%
6	Social Security Office	4.1%
7	Mr. Chirotchana Suchato, M.D. and family	2.6%
8	Ladpli family**	2.3%
9	Mr. Chuladej Yossundharakul, M.D. and family	1.9%
10	The Bank of New York Mellon	1.7%
	Total	62.1%

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

^{**} Consisted of Miss Napamas Ladpli, Mrs. Atinuch Malakul Na Ayudhaya and Mr. Parameth Ladpli













^{*} Consisted of Bangkok Airways PCL and Bangkok Airways Holding Co., Ltd

Medical Cooperation

International and Local Partnership

Cancer



Sister Institute with MD Anderson on cancer

Occupational health, Pediatrics, Rehabilitation and Informatics



Collaboration with Oregon Health and Science
 University on occupational health, pediatrics,
 rehabilitation, clinical simulation and informatics

Trauma and Orthopedics



 Collaboration with Missouri Orthopaedic Institute, University of Missouri Health Care in education, training and research



Collaboration with Hannover Medical School for education and research on trauma and orthopedics



 Collaboration with Stanford University for knowledge sharing on orthopedics













Medical Cooperation

International and Local Partnership

Neuroscience



Research collaboration with Department of **Neurosurgery, Cedars-Sinai on the TRFS laser** device for brain tumor surgery

Collaboration with Black Brain Health Center of Dr. Keith L. Black, one of the world leading neurosurgeons

Gastrointestinal



■ Collaboration with Sano Hospital on **Gastrointestinal Medicine**



Collaboration with Nagoya University for education, medical treatment assistance and patient referral

Others







Collaboration with local institutions













Investments

Investments in Other Hospitals : - Listed Companies

- Ramkhamhaeng Hospital PCL (RAM) 38.24%
- Bumrungrad Hospital PCL (BH) 20.50%

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

Shared IT services

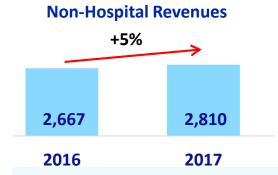
Bangkok Premier Life Insurance
Broker

Bangkok Helicopter Services

100%

Transportation of patients via helicopter services

ТНВ тт



^{*} Not included all BDMS' investments













For More Information:- www.bangkokhospital.com

Group 1 (Bangkok&West&Cambodia)	Ownership	No. of Beds	Group 4 (North&Northeast)	<u>Ownership</u>	No. of Beds
1. Bangkok Hospital	100%	373	26. Bangkok Udon (BUD)	100%	120
2. Bangkok Heart Hospital ├─ (BHQ)	100%	97	27. Bangkok Phitsanulok (BPL)	100%	195
3. Wattanosoth Hospital	100%	48	28. Bangkok Khon Kaen (BKN)	100%	140
4. Bangkok Huahin (BHN)	100% 🥝	64	Group 5		
5. Bangkok Sanamchan (BSN)	100%	210	29. Phyathai 1 (PT1)	100%	224
6. Thepakorn (TPK)	44.5%	100	30. Phyathai 2 (PT2)	99.2% 🥝	260
7. Bangkok Phetchaburi (BPR)	100%	255	31. Phyathai 3 (PT3)	98.2%	267
8. Bangkok Muangraj (BMR)	100%	142	32. Phyathai Sriracha (PTS)	75.1%	350
9. Royal Phnom Penh (RPH)	100% 🥝	100	33. Phyathai Nawamin (PTN)	99.8%	140
10. Royal Angkor International (RAH)	80.0%	30	34. Paolo Paholyothin (PLP)	100%	267
Group 2			35. Paolo Samutprakarn(PLS)	93.6%	200
11. Samitivej Sukhumvit (SVH)	95.8%	275	36. Paolo Chokchai 4 (PLC)	85.7%	169
12. Samitivej Srinakarin (SNH)	95.8%	400	37. Paolo Rangsit (PLR)	100%	150
13. Samitivej Sriracha (SSH)	70.1%	184	38. Paolo Kaset (PLK)	100%	162
14. Samitivej Thonburi (STH)	63.5%	150	39. Paolo Phrapradaeng (PLD)	84.0%	60
15. Samitivej Chonburi (SCH)	100%	220	Group 6 (South)		
16. Samitivej Chinatown (SCT)	100% 🥝	59	40. Bangkok Phuket (BPK)	99.7%	266
17. BNH Hospital (BNH)	91.5% 🥝	144	41. Siriroj International (SIH)	100%	
Group 3 (East)			42. Dibuk (DBK)	99.7%	100
18. Bangkok Pattaya (BPH)	97.3%	400	43. Bangkok Hat Yai (BHH)	98.8%	200
19. Bangkok Rayong (BRH)	100%	220	44. Bangkok Samui (BSH)	100%	52
20. Bangkok Chanthaburi (BCH)	99.7%	170	45. Bangkok Surat (BSR)	100%	150
21. Bangkok Trat (BTH)	99.8%	114	Group 7: Non-Hospital		
22. Sri Rayong (SRH)	100%	195	National Healthcare System	100%	
Group 4 (North&Northeast)			2. Bio Molecular Laboratories	95.0%	
23. Bangkok Chiangmai (BCM)	100%	175	3. The Medicpharma	87.1%	
24. Bangkok Ratchasima (BKH)	91.4%	180	4. A.N.B Laboratories	100%	
25. Bangkok Pakchong (BHP)	91.4%	31	5. Save Drug Center	100%	
Demarks Number of bode is structured bod			6. General Hospital Products	46.0%	

Remark:- Number of beds is structured beds











