

Bangkok Dusit Medical Services (BDMS)

Thailand Focus 2021

27 August 2021



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.

Bangkok Dusit Medical Service

Contents

- BDMS Overview
- **BDMS** Response to COVID-19
- **2Q21 & 6M21 in Review**
- Operational Statistics & Financial Highlights
- Healthcare Industry
- Company Background



BDMS Overview

BDMS



Overview



49 Hospitals



~ 8,600 Beds



11 Centers of Excellence



BDMS Wellness Clinic & Mövenpick BDMS Wellness Resort Bangkok



11,000+ Doctors 8,000+ Nurses 24,000+ Staffs



Pharmaceutical manufacturer and drug stores

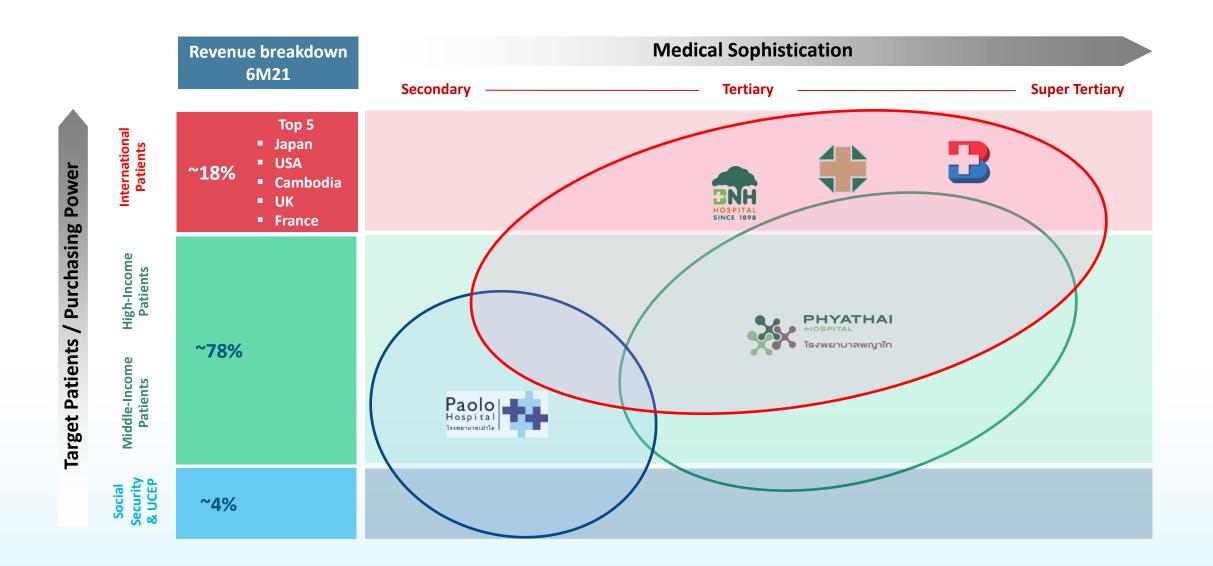
- Top 5 private hospital operators in the world by market capitalization
- Hub-and-Spoke model with an established patient referral system with the patients volume of
 - OPD visit ~ 30,000 patients a day
 - Average daily census ~ 3,200

Brand	No. of Hospitals	No. of Beds*
Bangkok Hospital	25	4,072
Samitivej Hospital	6	1,364
A Phyathai Hospital	5	1,241
Paolo Hospital	6	1,008
BNH Hospital	1	144
Royal Hospital	2	130
Local Hospital	4	627

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

Diversification of Patient Mix





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





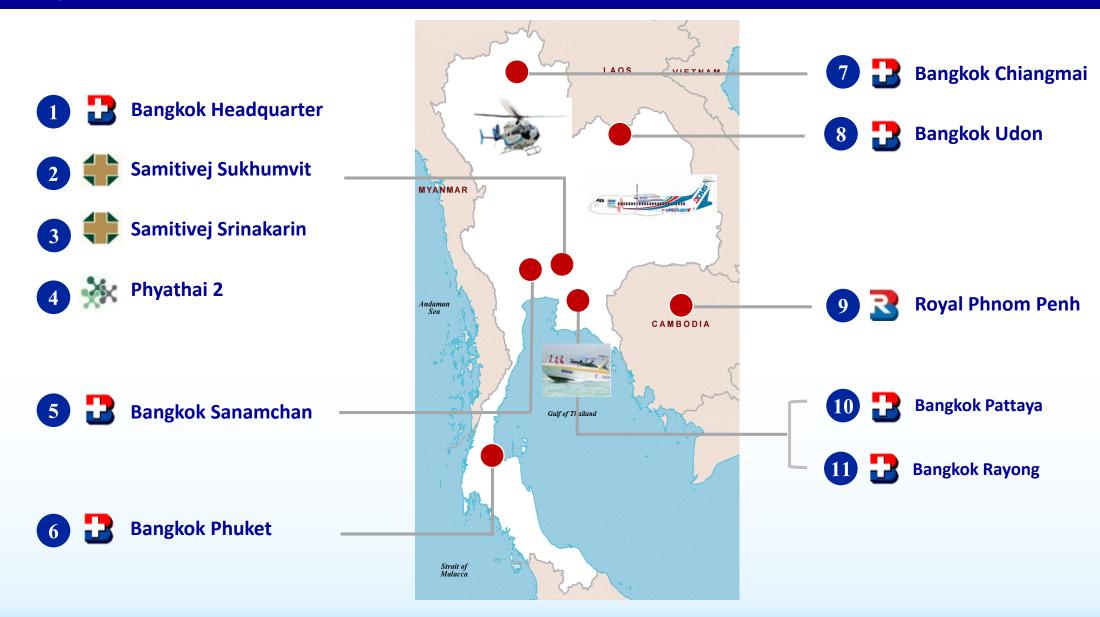
Generic Drug Manufacturer



Drug Store



Development of 11 Center of Excellence



Medical Cooperation



Local and International Partnership

Oregon Health & Science University

Collaboration on occupational health, pediatrics, rehabilitation, clinical simulation, preventive cardiology and dental



Hannover **Medical School**

Collaboration for education and research on trauma and orthopedics







Dr. Keith L. Black

Director of the Maxine Dunitz Neurosurgical Institute at Cedars-Sinai

Collaboration on brain and nervous system



Collaboration on **Gastrointestinal Medicine**



Nagoya University

Collaboration for education and training

Missouri **Orthopaedic Institute**

Collaboration for education, training and research on orthopedics







Others

- Kameda Medical Center
- Straumann Holding AG
- Takatsuki Hospital
- Other international & local institutions

2021 Key Strategic Priorities



Solid, Stable and Sustainable Growth for Our Stakeholders



GROWING REVENUE

 Expand hospital and non-hospital customers base with affordable pricing strategy



INCREASING UTILIZATION

- Increase insurance and corporate contracts
- Enhance referral network both domestic and international



INNOVATION

- Smart healthcare (Telemedicine and E-commerce)
- Promote digital innovation and health applications



COST MONITORING & CAPEX

- Set efficiency and cost control as priority
- Manage cost in accordance with revenue
- Capex for existing facilities and service improvement



SUSTAINABILITY DEVELOPMENT

- Embracing ESG aspects into business process
- Local and International accreditations in collaboration with leading global healthcare institution



Expand Customers Base with Affordable Pricing Strategy



BDMS Promotional Campaign: Reaching 50th Anniversary



- BDMS Health Check up starts at THB 990
- Offering period: 14-28 February 2021
- Valid until 31 August 2021

Example of Absolute Care Packages at Bangkok Hospital Headquarter



Absolute Surgery Packages *

- Pre-surgery: free medical clearance and COVID-19 Testing for patient and one relative
- Post operation: free one-time medical supply, medicine for wound dressing and doctor fee to follow up post operation
- * For surgery packages more than THB 100,000 Valid till December 2021



Absolute Prevention Packages

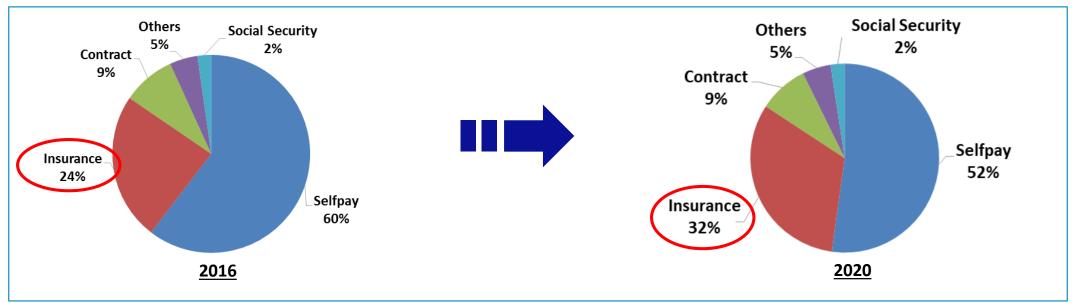




Expand Insurance Patient Base



Exclusive Insurance Policies





Allianz (II) AYUDHYA

My First Class Healthcare @ BDMS

- Coverage Limit up to THB 100 million per year
- Cover all medical treatment

วิริยะประกัน

	THE VIRIYAH	INSURANCE
		<u>Coverage</u>
1.	Cancer Pro by BDMS	3 – 9 MB
2.	Aun Jai Rak Gold	1 - 5 MB
3.	Delight	450K – 1.5 MB
4.	Deductible	400 – 800K
5.	Viriyah Healthcare by BDMS	100 – 700K



Expand Insurance Patient Base



Partnership with Local and International Insurance Companies





















BLA Medevac Hotline

Inter Partnership





- BDMS Partner with
 - Ping An Good Doctor, a leading global online healthcare services platform with more than 200 million members
 - Ping An Health (PAH), the largest insurance company in China in term of market capitalization
- The partnership would help bolster Chinese patients to be one of the top 3 inter patients in the next 3 years



Promoting Health Innovation and Technology



Improve Patient Care and Experience

TELE-CONSULTATION

- Health application
 - Online appointment
 - Medical consultation
 - Payment gateway

DRUG DISTRIBUTION

 Drug distribution services both online and home delivery

2

HOME CARE

- Blood collection
- Vaccine at home

3





E-PATIENT PROFILE

 Electronic platform for patient profile and medical history, lab test and medicine information

INSURANCE

 Platform for insurance management

MOBILE DIANOSIS SOLUTION

 Tytocare: portable medical exam device for home use with sign realtime report



CAPEX – Investing in Existing Facilities and Service Improvement



Projects in Pipeline

~9,000 beds

2021

- Paolo Chokchai 4 (30 beds)
- Bangkok Chanthaburi (96 beds)
- Bangkok Ratchasima (166 beds)

2022

- Paolo Chokchai 4 (59 beds)
- Bangkok Udon (142 beds)

2023

- Phyathai Sriracha (100 beds)
- Phyathai 1 (160 beds)

~9,500 beds

2024-2025

- SamitivejInternational Children(102 beds) *
- Expansion of existing hospitals
- * New hospital



Sustainability Development



Environmental





Building Eco-mindset

Moving to Green Business







Customers & Patients

Investors & Shareholders

Employees





Suppliers

Communities

Corporate
Governance





ESG Rating



LAST UPDATE: March 29, 2021







This is to certify that

Bangkok Dusit Medical Services PCL
is a constituent company in the FTSE4Good Index Series









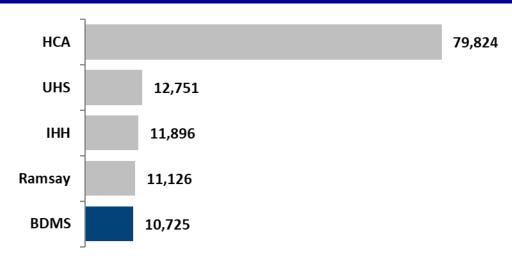




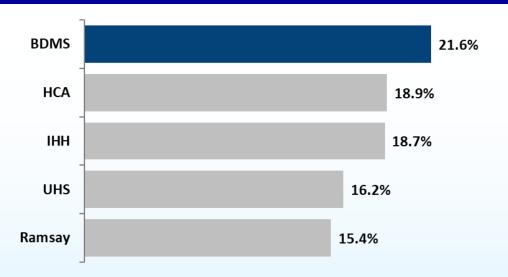
Global Hospital Rankings



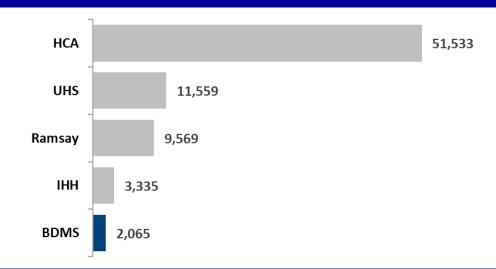
Market Capitalization (USD mm)



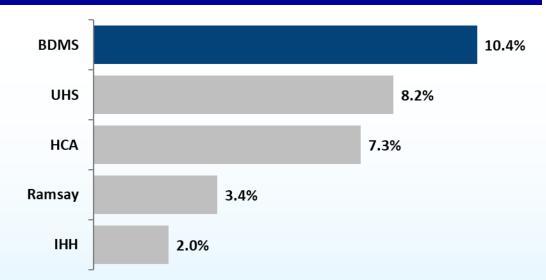
EBITDA Margin



Revenue (USD mm)



Net Profit Margin



Remark: - Market capitalization as of 20 August 2021



BDMS Reponse to COVID-19

BDMS Response to COVID-19



Caring for our Patients, Doctors, Nurses, Employee and the Communities

Our Frontline Team



11,000+ doctors

8,000+
Registered nurses



9,340* tests per day



100* beds

Vaccination

Testing

Hospitel

Field Hospital

Cohort Wards

1 million+



* Capacity

5,000+
beds



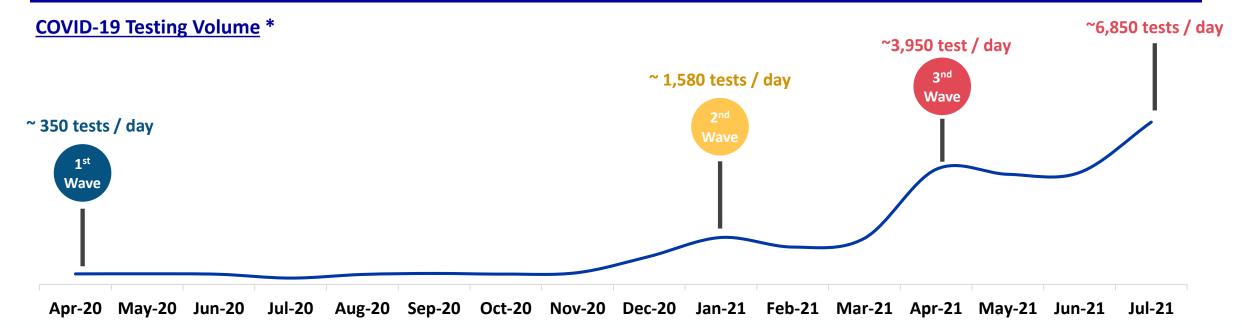
2,900+*
beds



COVID-19: Testing Volume Trend

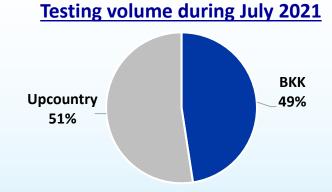


Increasing COVID-19 Testing Capacity from 6,880 tests/day during beginning of 3rd wave to now 9,340 tests/day



^{*} COVID-19 testing included PCR, Rapid Antibody and Rapid Antigen





- In July 2021, testing volume peaked at ~ 9,000 tests / day
- Upcountry volume increased mainly from Southern area due to Phuket Sandbox

COVID-19: Hospitel



Increasing Hospitel Rooms for Treating COVID-19 patients with Mild Symptoms

EXAMPLE of HOSPITELS















Remark: Data as of August 2021

COVID-19: BDMS Field Hospital



A 100-bed Field Hospital to Take Care of COVID-19 patients with Moderate Symptoms











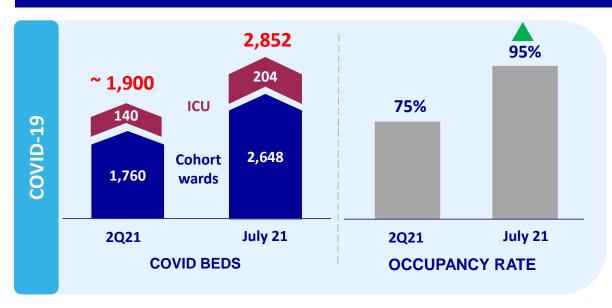


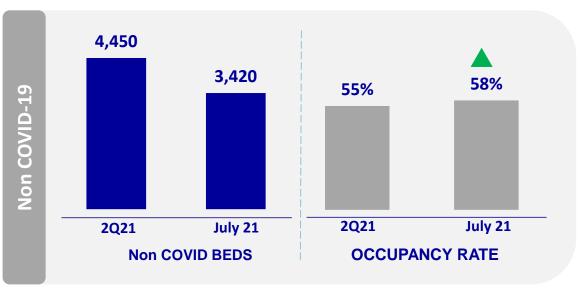
- BDMS teams up with The Royal Thai Air Force and our corporate partners to set up 100-bed field hospital for COVID-19 patients with moderate symptoms (yellow) at *Thupatemi Stadium* to help take the pressure off hospitals struggling to cope with more seriously ill patients
- BDMS uses 5 intelligent robots to deliver food and medicine to reduce transmission risk while health workers will monitor patients thru VDO link

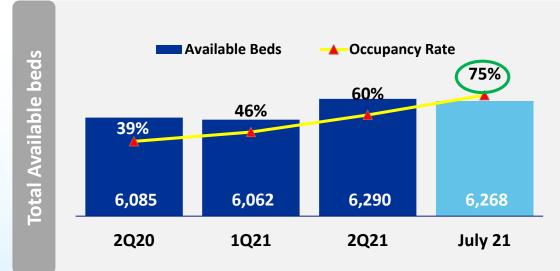
COVID-19: Cohort Wards



Increasing Cohort Wards for Treating COVID-19 Patients with Moderate and Serious Symptoms







- Cohort wards increased from 1,900 beds as of June
 2021 to 2,852 beds as of July 2021 (~ 46% of total 6,268 available beds)
- Occupancy rate of cohort wards increased from ~75% in April-May to 90% in Jun and reached 95% in July 2021



2Q21 & 6M21 in Review

2Q21 Operational Recap and Financial Summary



	2Q21		
	% Chg % t		
		Revenue	
Operating income	24%		
	THB 17,397 mm		
Patient revenue	26%		
	THB 16,443 mm		
Breakdown by nationality			
Thai	27%	82%	
International	24%	18%	
Breakdown by location			
Bangkok & Vicinity	27%	58%	
 Outside Bangkok 	20%	42%	
Breakdown by type of patients			
Outpatients	22%	44%	
Inpatients	30%	56%	

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

- All operational statistics are from BDMS management report



Profitability and Ratio

(THB mm)	2Q21	2Q20	Chg. (yoy)
EBITDA	3,681	2,587	42%
EBITDA margin	21.2%	18.5%	
EBIT	2,139	972	120%
EBIT margin	12.3%	7.0%	
Net profit	1,452	458	217%
Net profit margin	8.3%	3.3%	

Remark: - Margin was calculated as a percentage of operating income

Commentary

- Patient revenue grew 26% yoy mainly from
 - Higher revenue from COVID-19 testing and treatment.
 If excluding COVID-19 related revenue, patient revenue would increase approximately 12% yoy
 - Higher volume growth from both Thai and International (mostly from expatriates) together with growth from health insurance and domestic contract patients

6M21 Operational Recap and Financial Summary



6M21 Highlights

	6M21		
	% Chg	% to	
		Revenue	
Operating income	(1)%		
	THB 33,678 mm		
Patient revenue	(1)%		
	THB 31,754 mm		
Breakdown by nationality			
Thai	8%	82%	
International	(27)% 18%		
Breakdown by location			
Bangkok & Vicinity	1%	57%	
 Outside Bangkok (4)% 43% 		43%	
Breakdown by type of patients			
Outpatients	3%	46%	
Inpatients	(2)%	54%	

Profitability and Ratio

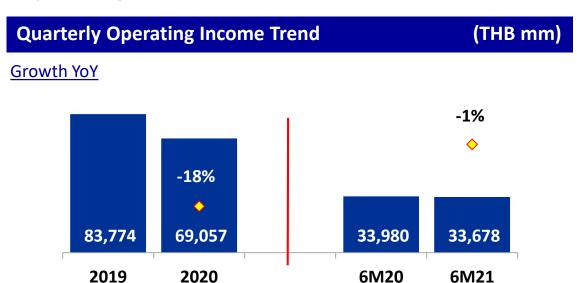
(THB mm)	6M21	6M20	Chg. (yoy)
EBITDA	7,208	7,377	(2)%
EBITDA margin	21.4%	21.7%	
Share of profit from associates	8	181	(96)%
EBIT	4,102	4,398	(7)%
EBIT margin	12.2%	12.9%	
Net profit	2,791	3,026	(8)%
Net profit margin	8.3%	8.9%	

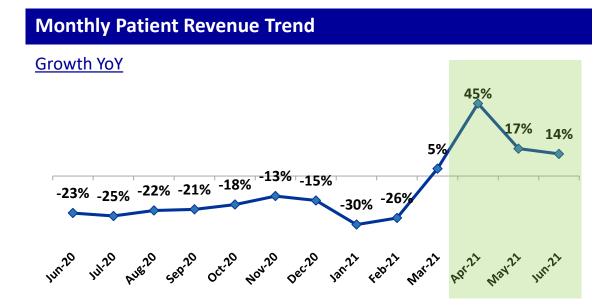
Commentary

 Net profit decreased 8% yoy mainly from a decrease in share of profit from associates as a results of divestment of all investment in Bumrungrad Hospital Public Co., Ltd. (BH) during 4Q20

Operating Income Growth







Commentary

- 6M21 Operating income slightly decreased 1% yoy mainly from
 - Patient revenue decreased 1% yoy mainly from decrease in pricing due to lower intensity and complexity from treating
 COVID-19 patients together with affordable price packages that BDMS launched this year
 - However, there was a growth from both outpatient and inpatient volumes as a results of the 3rd wave of COVID-19 during 2Q21

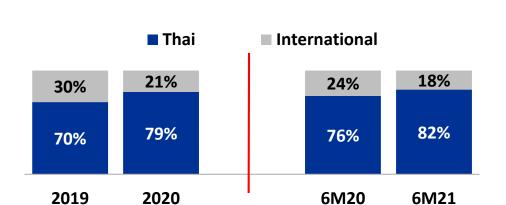
Thai and International Patients

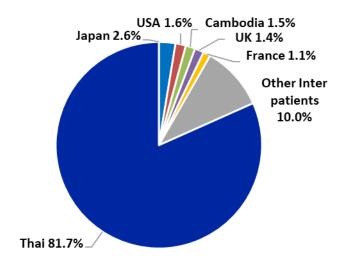


Revenue Contribution by Nationality

•

% to patient revenue





Top 5 Nationality contribution in 6M21

Commentary

% to patient revenue

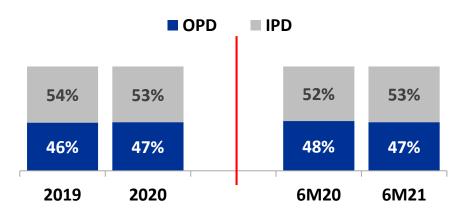
- In 6M21, Revenue from Thai patients grew 8% while inter patients decreased by 27% yoy
 - Decrease in revenue from inter patients was mainly from decrease of Middle East patients 69%, Australia patients 44% and CLMV patients 31% yoy

Patient Mix



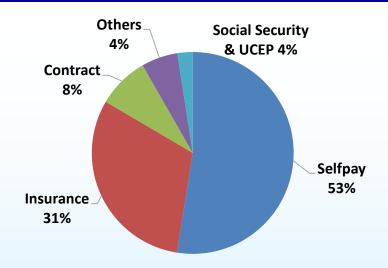
Revenue Contribution by Patient Types

% to patient revenue



In 6M21, OPD revenue increased 3% while IPD revenue decreased 2% yoy

6M21 Patient Revenue by Payor

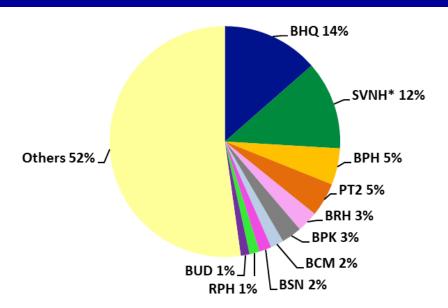


In 6M21, Revenue portion from social security and UCEP increased mainly from COVID-19 treatment during 2Q21

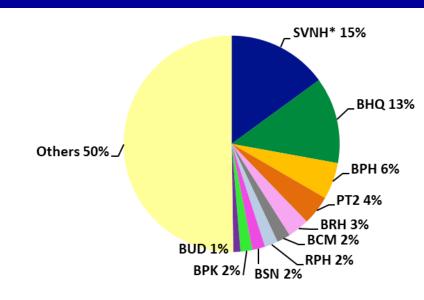
Diversified Sources of Revenues and Profitability



CoE Operating Income Contribution in 6M21



CoE Total EBITDA Contribution in 6M21



Commentary

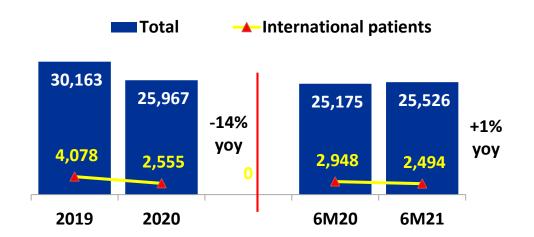
- In 6M21, revenue from Center of Excellence (CoE) contributed 48% of operating income and 50% of total EBITDA
- Revenue from CoE decreased 4% yoy due mainly to decrease in inter patients. However, BCM and SVNH had revenue growth of 15% and 2% yoy, respectively in 6M21

^{*} SVNH included SVH and SNH performance

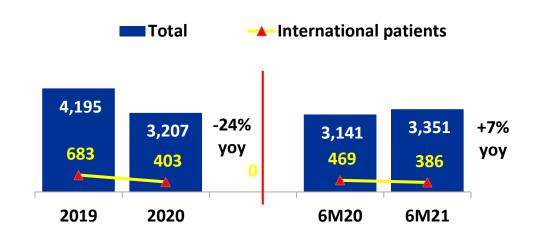
Patient Volume and Occupancy Rate



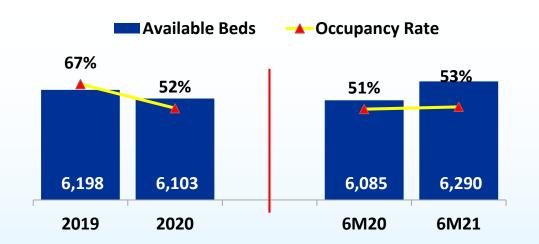
Number of OPD Visits per Day



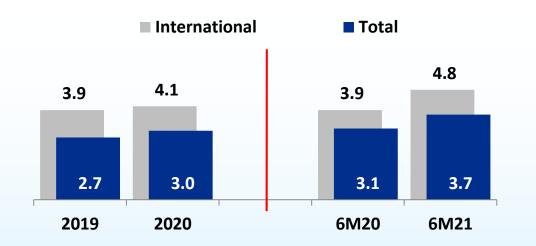
Average Daily Census (ADC)



Occupancy Rate Based on Available Beds



Average Length of Stay (days)



Profitability Trend

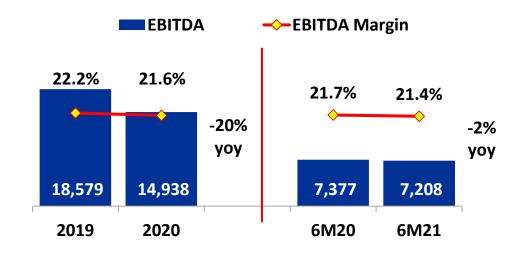
Bangkok Dusit Medical Service

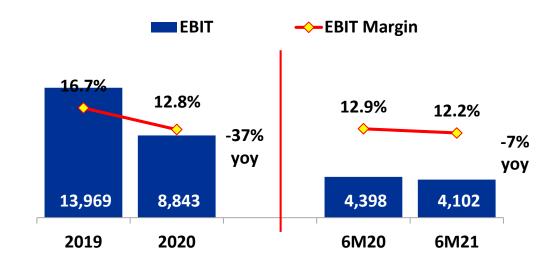
(THB mm)

32

EBITDA & EBITDA Margin *

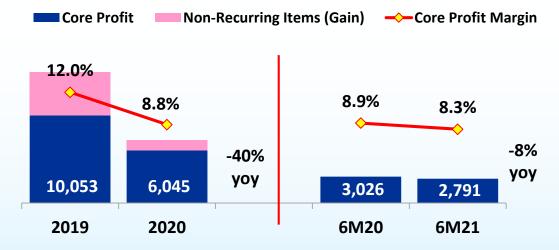
(THB mm)





Core Profit & Core Profit Margin *

(THB mm)



Commentary

EBIT & EBIT Margin *

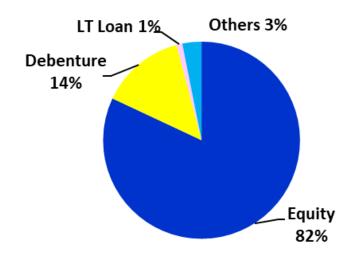
In 6M21, net profit was decreased by 8% yoy due mainly to no share of profit from BH due to divestment of all investment in BH during 4Q20

* Excluding non-recurring items

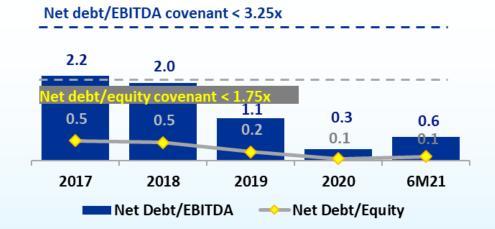
Capital Management

Bangkok Dusit Medical Services

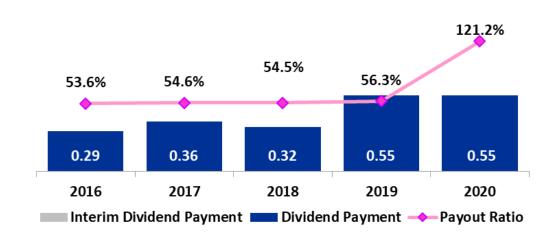
Capital Structure as of June 2021



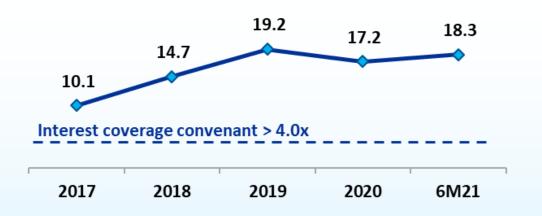
Gearing Ratios: Well Within Covenants



Dividend Payment & Payout Ratio



Interest Coverage

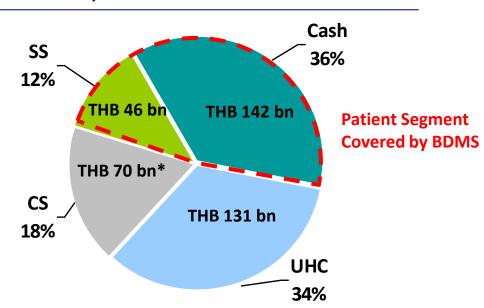




Healthcare Industry

Healthcare Segments in Thailand





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

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 (2020)

	# of Hospitals	# of Beds
Private	381	36,044
Public	899	97,791
Total	1,592	133,968

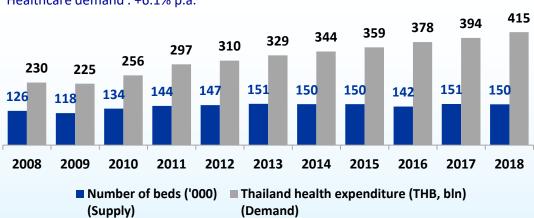
(Number per 10,000 population)	Thailand	Global
Doctor (2018)	8	15
Nurse (2018)	28	38
Bed (2016)	22	26

Source: WHO and Ministry of Public Health

Healthcare Demand Growing Faster than Supply

CAGR (2008-2018)

Healthcare supply: +1.7% p.a. Healthcare demand: +6.1% p.a.



Source: NESDB and NSO

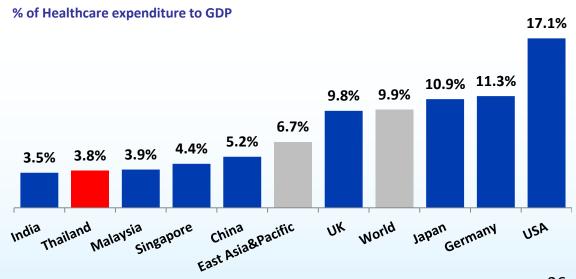


BDMS Market Coverage (2020)

	Total Private Beds	BDMS Registered Beds	Market Share
Bangkok	13,980	2,702	19%
Central	11,611	2,308	20%
South	2,863	729	25%
Northeast	3,318	384	12%
North	4,272	264	6%
Total	36,044	6,387	18%

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

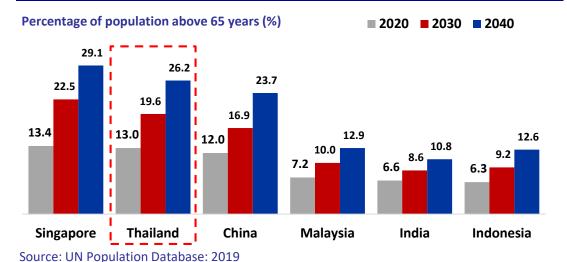
Low Healthcare Penetration



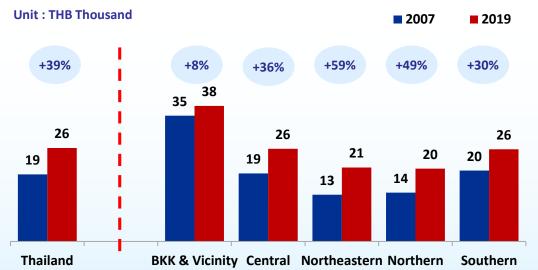
Source: WHO (2017) 36

Increasing Thailand Healthcare Demand

Population Growth and Aging Profile



Thailand Monthly Income per Household



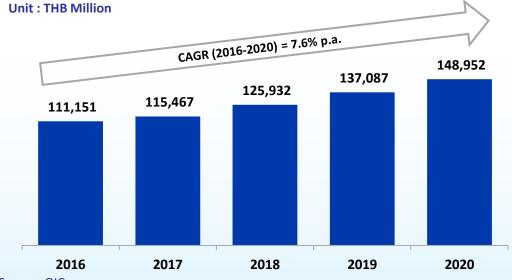
Source : NSO



Commentary

- Aging population generates greater demand for healthcare expenditure
- Monthly income per household in Thailand increased by 39% during 2007-19. 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

Health & Personal Accident Insurance Premium

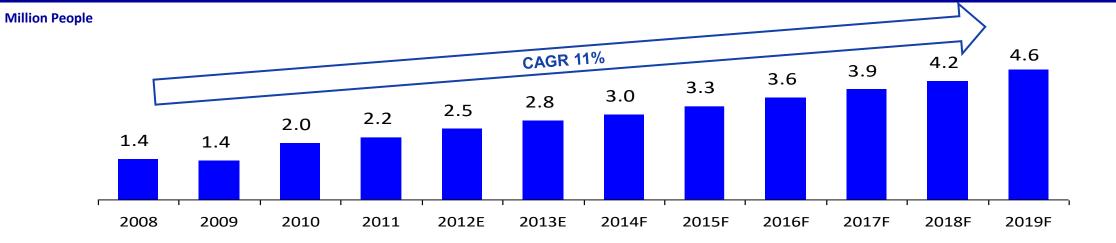


Source: OIC 37

Medical Tourism



Increasing Trend of Medical Tourists to Thailand

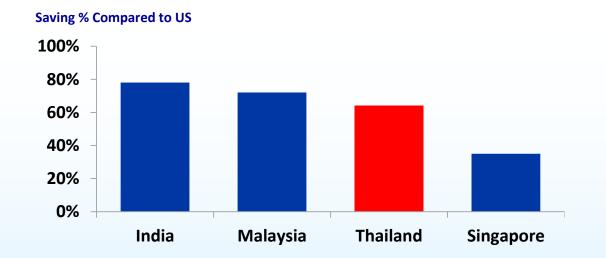


Source: EIC, SCB and Ministry of Commerce

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
IVF Treatment	12,400	14,900	4,100	6,900	2,500

Saving as Compared to Other Medical Tourism Market



Source: Medicaltourism.com (2019)

^{*} Excluding doctor fee



Company Information

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

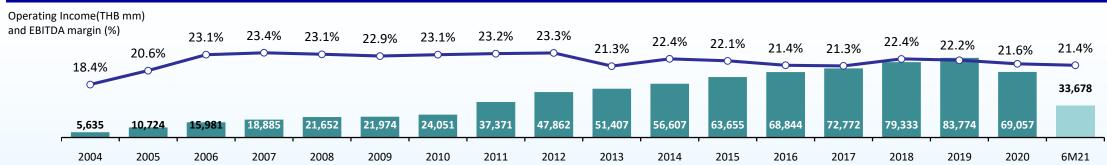


Strong Share Price Performance Backed by a Successful Expansion Track Record



^{*} Transfer of business to our new facility, Royal Phnom Penh

Solid Revenue Growth Over the Past Decade (2004-2020 CAGR of 17.0%) with Resilient EBITDA margin *



Source: Derived from BDMS' financial statements

^{*} Excluding non-recurring items



Shareholding Structure (As of 11 March 2021)

		% of Shareholding
1	Mr. Prasert Prasarttong-Osoth, M.D. and spouse	15.1%
2	Thai NVDR Co., Ltd.	7.7%
3	Bangkok Airways PCL and Bangkok Airways Holding Co., Ltd.	6.5%
4	The Viriyah Insurance PCL	6.0%
5	Social Security Office	3.9%
6	UBS AG Singapore Branch	3.5%
7	Miss Poramaporn Prasarttong-Osoth, M.D.	3.5%
8	South East Asia UK (Type C) Nominees Limited	3.0%
9	Mr. Chirotchana Suchato, M.D. and spouse	2.5%
10	Mr. Att Thongtang and spouse	2.1%
	Total	53.8%

Appendix



For More Information:- www.bangkokhospital.com

Group 1 (Bangkok&West&Cambodia) Ownership No. of Beds	Group 4 (North&Northeast)	Ownership No. of Beds	Group 6 (South)	Ownership No. of Beds
1. Bangkok Hospital 100% 373	26. Bangkok Chiangmai (BCM)	100% ⊘ 175	44. Bangkok Phuket (BPK)	99.7% 🥝 266
2. Bangkok Heart Hospital 100% 97	27. Bangkok Ratchasima (BKH)	91.5% 171	45. Bangkok Siriroj (BSI)	100% 🥝 151
3. Wattanosoth Hospital - (BHQ) 100% - 🔗 48	28. Bangkok Pakchong (BHP)	91.5% 40	46. Dibuk (DBK)	99.7% 100
4. Chiva Transitional Care 100% 52	29. Bangkok Udon (BUD)	100% 120	47. Bangkok Hat Yai (BHH)	98.8% 200
5. Bangkok International 100% 172	30. Bangkok Phitsanulok (BPL)	100% 195	48. Bangkok Samui (BSH)	100% 🥝 52
6. Bangkok Huahin (BHN) 100% 64	31. Bangkok Khon Kaen (BKN)	100% 140	49. Bangkok Surat (BSR)	100% 150
7. Bangkok Sanamchan (BSN) 100% 210	32. Bangkok Chiangrai (BCR)	100% 80		
8. Thepakorn (TPK) 50.0% 100				
9. Bangkok Phetchaburi (BPR) 100% 255	Group 5		Group 7: Non-Hospital	
10. Bangkok Muangraj (BMR) 100% 142	33. Phyathai 1 (PT1)	98.6% 224	National Healthcare System	98.7%
11. Royal Phnom Penh (RPH) 100% 100	34. Phyathai 2 (PT2)	97.8% 260	Bio Molecular Laboratories	95.0%
12. Royal Angkor International (RAH) 80.0% 30	35. Phyathai 3 (PT3)	97.6% 267	3. The Medicpharma	87.1%
	36. Phyathai Sriracha (PTS)	74.4% 350	4. A.N.B Laboratories	100%
Group 2	37. Phyathai Nawamin (PTN)	99.8% 140	5. Save Drug Center (SDC)	100%
13. Samitivej Sukhumvit (SVH) 95.8% 95.8% 311	38. Paolo Phaholyothin (PLP)	100% 267	6. General Hospital Products	47.2%
14. Samitivej Srinakarin (SNH) 95.8% 400	39. Paolo Samutprakarn(PLS)	93.7% 200	o. General Hospital Froducts	17.270
15. Samitivej Sriracha (SSH) 67.4% Ø 184	40. Paolo Chokchai 4 (PLC)	85.7% 169		
16. Samitivej Thonburi (STH) 64.0% 150	41. Paolo Rangsit (PLR)	100% 150	BDMS Wellness	
17. Samitivej Chonburi (SCH) 100% 260	42. Paolo Kaset (PLK)	100% 162	1. BDMS Wellness Clinic	100%
18. Samitivej Chinatown (SCT) 100% 59	43. Paolo Phrapradaeng (PLD)	84.0% 60	2. BDMS Wellness Resort	100%
19. BNH Hospital (BNH) 91.5% 🥏 144	ior radio rimapradacing (i 25)	0.1075	(Mövenpick BDMS Wellness	Resort)
Group 3 (East)				
20. Bangkok Pattaya (BPH) 97.3% 👰 400				
21. Bangkok Rayong (BRH) 100% 🥝 220				
22. Bangkok Chanthaburi (BCH) 99.7% 185				
23. Bangkok Trat (BTH) 99.8% 114				
24. Sri Rayong (SRH) 100% 195				
25. Jomtien (JTH) 100% 232				42

Remark:- Number of beds is structured beds