



Bangkok Dusit Medical Services (BDMS)

25th Credit Suisse Asian Investment Conference

23 March 2022

Member of

Dow Jones Sustainability Indices

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Contents





BDMS at Glance



The Largest Private Healthcare Operator in Thailand



53 Hospitals



8,200+ Beds



11,000+ Doctors (Full time ~3,000)



7,000+
Registered
Nurses



11 Center of Excellence Member of
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- 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 ~ 3,800

Brand	No. of Hospitals	No. of Beds*
Bangkok Hospital	26	3,948
Samitivej Hospital	7	1,315
Phyathai Hospital	5	1,131
Paolo Hospital	7	968
BNH Hospital	1	115
Royal Hospital	2	133
Local Hospital	5	605

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

Non-Hospital Business









Investing in Facilities and Service Improvement



Hospital Projects in Pipeline

~8,500 beds

2022

- Bangkok Udon (142 beds)
- Paolo Chokchai 4 –
 Premium (59 beds)
- Paolo Chokchai 4 –
 Social Security (30 beds)

2023

- Bangkok Rayong Cancer
- Phyathai Sriracha Social Security (100 beds)
- Phyathai 1 (160 beds)

~9,000 beds

2025-2026

 Expansion of existing hospitals

2024

- Samitivej International Children (102 beds)
- Bangkok Rayong –
 Pluakdaeng
 (200 beds)

Update on BDMS Response to COVID-19



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

Our Frontline Team



11,000+ **Doctors**

7,000+ Registered nurses

Vaccination









10,000+ tests per day

Testing



6,000+ beds

Hospitel



2,300+

beds

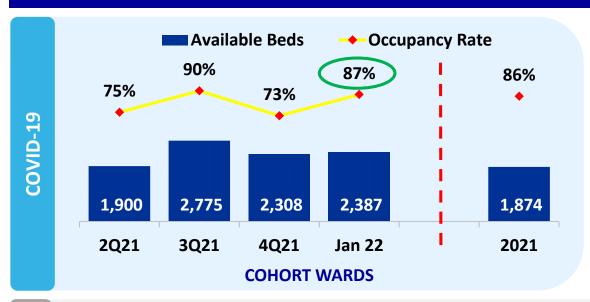
Cohort Wards

2022 Jan ~7,900 tests per day ~30-40% **Occupancy rate** ~87% **Occupancy rate**

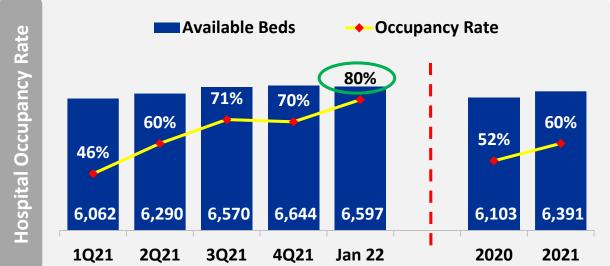
COVID-19 Facilities and Occupancy Rate



Improving Non COVID-19 Wards Occupancy Rate







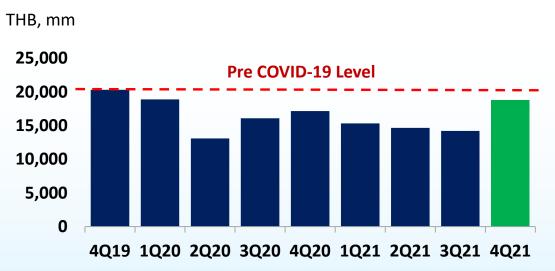
- In Jan 2022, hospital occupancy rate increased to 80%
 - Occupancy rate of cohort wards increased to 87% due to surge in Omicron cases
 - Occupancy rate of non COVID-19 patient wards improved to 76% due to increase in elective surgery and the recovery of fly-in patients



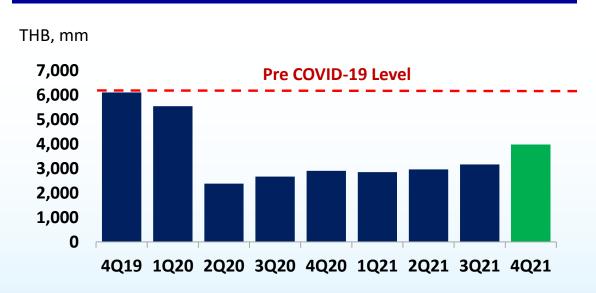
Positive Outlook on Returning of Non COVID-19 Patients and Fly-in Patients

- BDMS patient revenues would be an uptrend in 2022 supported by recovery of
 - Non COVID-19 Thai patients
 - Fly-in patients
- Higher portion of people vaccinated in Thailand and around the world would lead activities nearly back to normal level
- There was a positive trend of international patient in 4Q21; however, it was still ~50% below Pre COVID-19 (2019)

Non COVID-19 Patient Revenues



International Patient Revenues



Fly-in Patients Recovery on Its Way



Fly-in Patients Picking up in 4Q21

- Thailand Test & Go scheme*, starting on 1 November 2021, supported growth of fly-in patients in 4Q21
- Middle East and CLMV market picked up in 4Q21; however, their 2021 revenues were 85% and 50%, respectively, below Pre COVID-19 (2019)
- With relaxation of global travel restriction, fly-in patients are set to see growth in 2022

Key Fly-in Patients Trend

% of BDMS Hospital Revenues Middle East 5.0% CLMV 4.0% 2.5% 2.0% 1.2% 1.2% 1.1% 0.8% 4Q19 1Q20 2Q20 3Q20 4Q20 1Q21 2Q21 3Q21 4Q21

Expected International Patients by Nationality



BDMS Key Strategic Priority in 2022



Focus on Four Main Areas to Ensure Long-term Sustainable Growth

CUSTOMERS

Expand patients:

Value-based pricing

- Thai/Expat
- Medical tourism
- Referral

INNOVATION

Multi-channel services:

Smart healthcare

- Digital health/market
- Mobile applications
- Smart hospital
 e.g. Computerized physician
 order entry (CPOE)



3rd PARTY

Enhance relationship:

Increase utilization

- Insurance
- Social security
- Universal Coverage for Emergency Patients (UCEP)
- Corporate partner

SERVICES/PRODUCTS

Strategic healthcare:

Healthcare excellence

- Center of excellence
- Genomic center
- Procurement & resource management



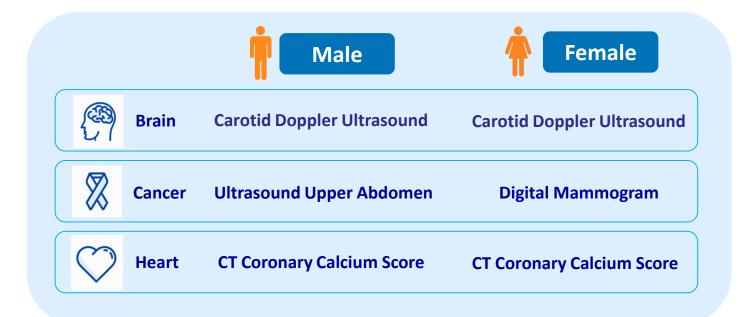


Expand Patient Base Through Value-Based Pricing



Special Packages for Brain, Cancer and Heart Screening at BDMS Network Hospital





- A health check-up package to screen 3 types of diseases at any BDMS hospitals or clinic in Thailand and Cambodia for THB 5,550
- This package is for persons of 35 years of age or older
- Available for purchase during 28 February 31 March 2022
- Can be used until 31 August 2022

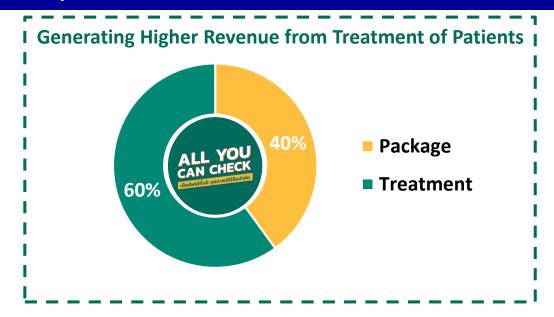


Expand Patient Base Through Value-Based Pricing



Example of Checkup Packages at Phyathai and Paolo Group: All You Can Check





TOTAL PACKAGES

9,160
As of January 2022



Patient type

New 25%

Existing 75%





2 Smart Hospital



BDMS Healthcare Ecosystem – Digitally Enabled with Patient at the Centre

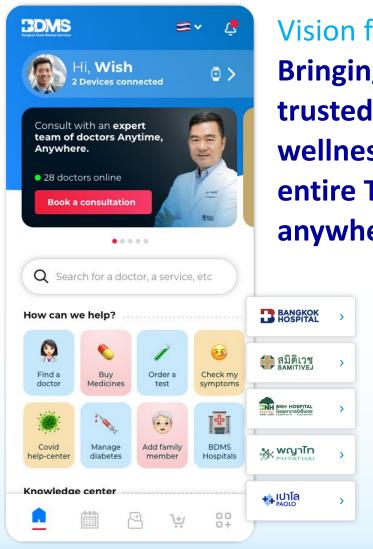
Tele-consultation 1st Phase (expected to be **launched by 2H22)** Health Tele-pharmacy Mall Health packages **Home lab** services **Patient Health** Records **BDMS Hospital** Network Health content Home care Disease SAVE DRUG management N Health



Smart Hospital – 5 Years Aspiration



Building Sustainable Long-Term Growth



Vision for BDMS Ecosystem:

Bringing all of BDMS' trusted healthcare and wellness network to the entire Thailand, anytime, anywhere, and beyond

CAPEX Budget in 2022



5 Years aspiration:



20M+

lives in Thailand



10-15%

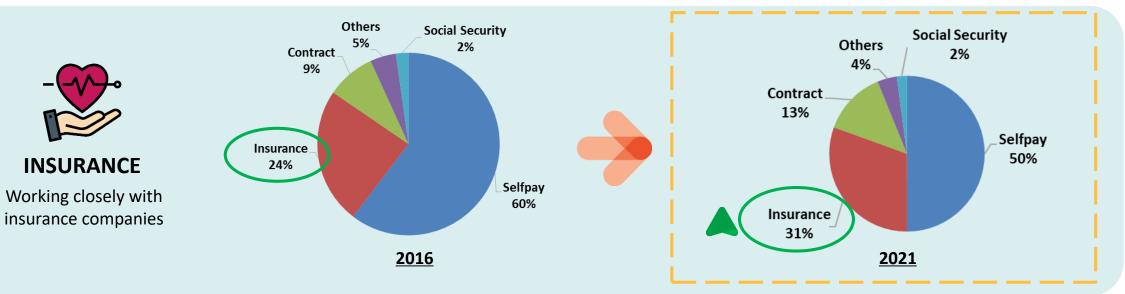
of overall BDMS revenue in 5 years



3 Increase Utilization



Strengthening Relationship with Third Party Payors to Diversify Patient Base and Increase Occupancy Rate





SOCIAL SECURITY

Increased to **600k+**

registered members

5 Hospitals

- 1. Phyathai Sriracha
- 2. Phyathai Chokchai 4
- 3. Paolo Kaset
- 4. Paolo Samutprakarn
- 5. Paolo Phrapradaeng

+2
Hospitals



Hospitals

- 6. Phyathai Nawamin
- 7. Dibuk





Continued Cooperation with Local and International Institutions

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

Missouri **Orthopaedic Institute**

Collaboration for education, training and research on orthopedics







Dr. Keith L. Black

Director of the Maxine Dunitz Neurosurgical Institute at Cedars-Sinai

Collaboration on brain and nervous system

Sano Hospital Sano Hospital

Collaboration on **Gastrointestinal Medicine**

Nagoya University

Collaboration for education and training

Others

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















Center of Excellence - Advancing Oncology Care



BDMS Key Strategies on Oncology







- Precision oncology: Surgery
- Precision oncology medicine: Target therapy & immunotherapy
- Precision oncology: Radiation therapy
- Genome testing (Next-gen sequencing): Test and Treat
- International collaboration
 - USA: MDACC, OHSU
 - Japan
 - Kameda medical center
 - Yamagata heavy ion center
 - Tokyo national cancer center

Wattanosoth Cancer Hospital New Ambulatory Chemotherapy













Genomic Center



N Health Novogene Genomics Co., Ltd.

JV Company

between N Health & Novogene*

(*the world leading genomic service provider)

2021

Health Nevogene

Establishing

Genomic center – premier next generation sequencing facility

in Thailand





2022

2023

illumına

Strategic alliance with Illumina

(The world largest genetic technology provider)



Personalized Medicine

Opportunity in upper ASEAN in 2021



247 million population



3.7 million babies born



0.5 million new cancer cases



Bangkok Dusit Medical Services

Health & Wellness

HEALTH & WELLNESS

Hotel Building







Spa



MICE - New Building



- Temporary closed Mövenpick BDMS Wellness Resort Bangkok ("BWR") for renovation to become the modern and complete holistic health and wellness resort
- Newly renovated BWR will be opened in 4Q22

Sustainability Development



Embracing ESG aspects into business process

Environmental





Building Eco-mindset

Moving to Green Business

Social









Customers & Patients

Investors & Shareholders

Employees





Suppliers

Communities

Corporate Governance





ESG Rating



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LAST UPDATE: March 29, 2021











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



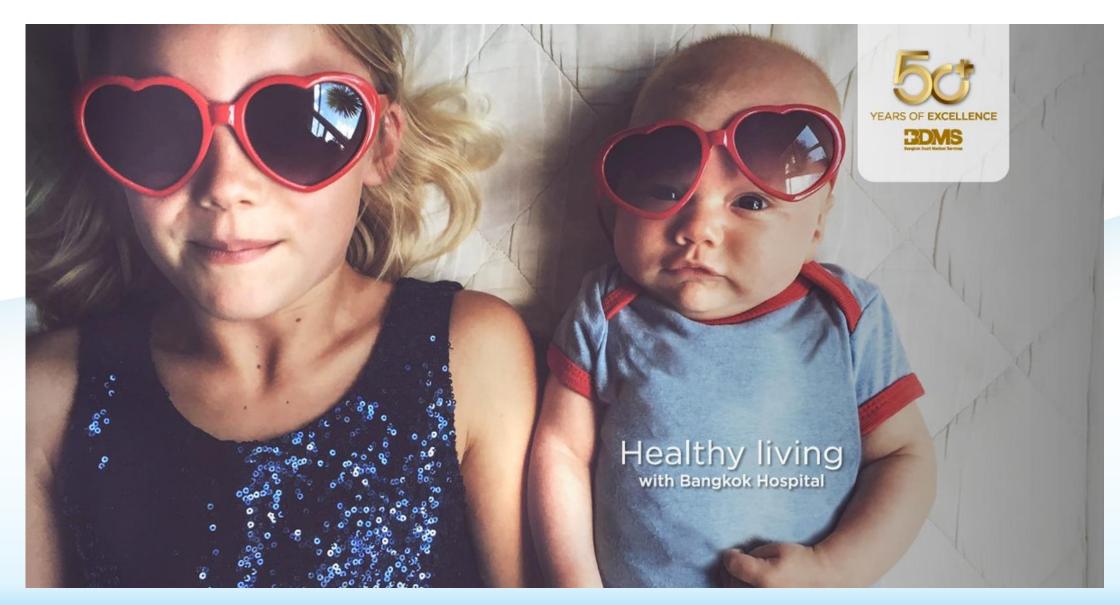








4Q21 & 2021 Performance



4Q21 Operational Recap and Financial Summary



4Q21 Highlights

	4Q21			
	% Chg	% to		
		Revenue		
Operating income	21%			
	THB 21,878 mm			
Hospital revenue	22%			
	THB 20,914 mm			
Breakdown by nationality				
Thai	21%	82%		
International	27%	18%		
Breakdown by location				
Bangkok & Vicinity	21%	57%		
 Outside Bangkok 	22%	43%		
Breakdown by type of patients				
Outpatients	16%	46%		
Inpatients	29%	54%		

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

- All operational statistics are from BDMS management report
- Margin was calculated as a percentage of operating income

Profitability and Ratio

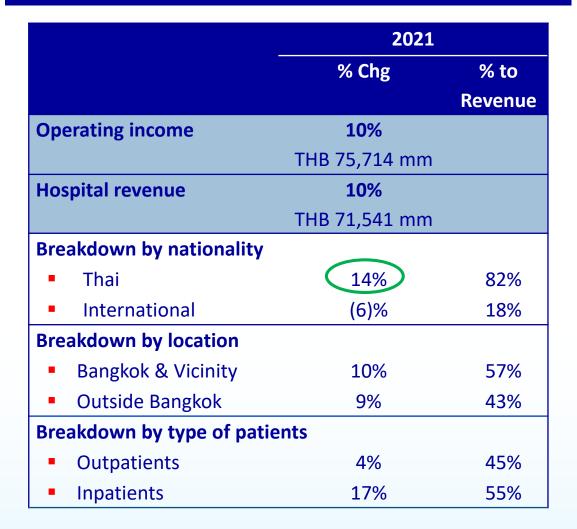
(THB mm)	4Q21	4Q20	Chg. (yoy)
EBITDA	5,218	3,412	53%
EBITDA margin	23.8%	18.8%	
EBIT	3,685	1,839	100%
EBIT margin	16.8%	10.2%	
Core profit	2,636	1,224	115%
Core profit margin	12.0%	6.8%	
Non-recurring item	-	1,164	
Net profit	2,636	2,388	10%
Net profit margin	12.0%	13.2%	

Remark: - 4Q20 had net gain on divestment of all investment in Bumrungrad Hospital Public Co., Ltd. ("BH")

- Hospital revenue increased by 22% yoy mainly from
 - COVID-19 patient revenue (~15% of hospital revenue).
 If excluding this, non COVID-19 revenue would increase 4% yoy
 - A return of non COVID-19 Thai patients and a recovery of fly-in patients

2021 Operational Recap and Financial Summary







Profitability and Ratio

(THB mm)	2021	2020	Chg. (yoy)
EBITDA	17,545	14,938	17%
EBITDA margin	23.2%	21.6%	
EBIT	11,322	8,843	28%
EBIT margin	15.0%	12.8%	
Core profit	7,936	6,045	31%
Core profit margin	10.5%	8.8%	
Non-recurring items	-	1,169	
Net profit	7,936	7,214	10%
Net profit margin	10.5%	10.4%	

Remark: - 2020 had net gain on divestment of all investment in BH

- Hospital revenue increased by 10% yoy mainly from growth of Thai patients due to higher COVID-19 patient volume. (COVID-19 revenue accounted for ~14% of hospital revenue)
- EBITDA margin improved to 23.2% from good revenue growth and continued cost saving program

Operating Income Growth

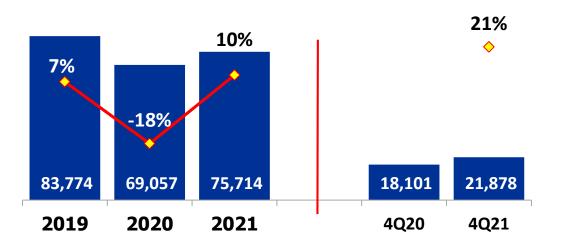


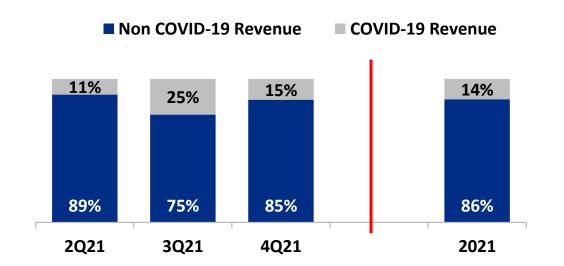
Operating Income Trend

(THB mm)

COVID-19 Revenue Contribution to Hospital Revenue

Growth YoY





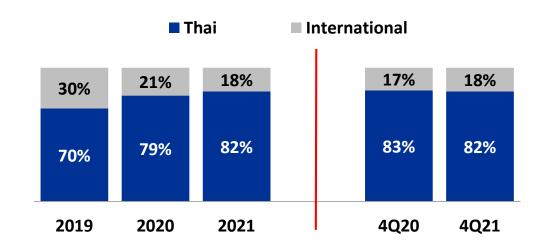
- 2021 Operating income increased by 10% yoy mainly from
 - Hospital revenue increased by 10% yoy mainly from Thai patients revenue as a results of higher number of COVID-19 patients due to the adverse impact of COVID-19 pandemic this year
 - Revenue from Bangkok hospitals and outside Bangkok hospitals increased by 10% and 9% yoy, respectively

Thai and International Patients



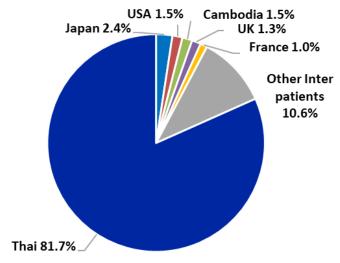
Revenue Contribution by Nationality

% to hospital revenue



Top 5 Nationality contribution in 2021

% to hospital revenue



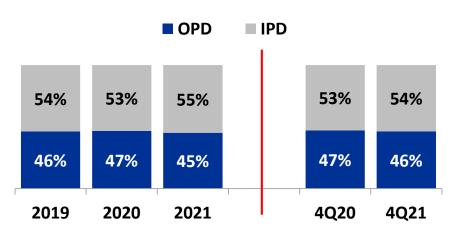
- In 2021, Revenue from Thai patient increased 14% yoy while revenue from inter patient decreased by 6% yoy
 - Decrease in revenue from inter patients was mainly from decrease of Middle East patients 30%, Germany patients 14% and CLMV patients 7% yoy
 - However, there were positive revenue growth from Indian patients +17%, Japan patients 10% and USA patients +4% yoy

Patient Mix



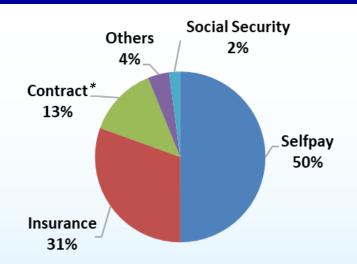
Revenue Contribution by Patient Types

% to hospital revenue



In 2021, OPD revenue and IPD revenue increased by 4% and 17% yoy, respectively

2021 Patient Revenue by Payor



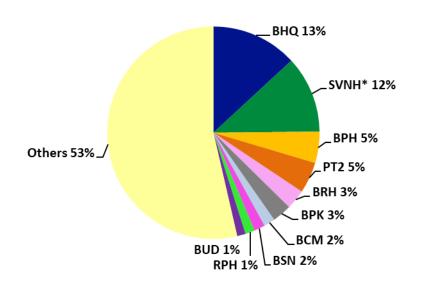
Revenue portion from contract patients increased significantly from 9% in 2020 to 13% in 2021 due to an increase of UCEP patients from COVID-19 patients

³¹

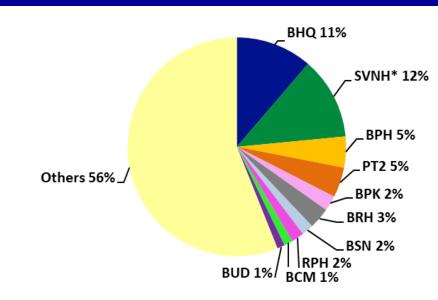
Diversified Sources of Revenues and Profitability



CoE Operating Income Contribution in 2021



CoE Total EBITDA Contribution in 2021



Commentary

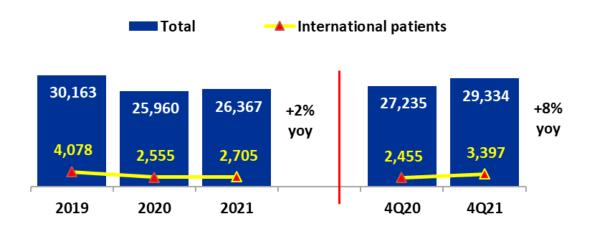
In 2021, revenue from Center of Excellence (CoE) contributed 47% of operating income and 44% of total EBITDA with EBITDA margin of around 22%

^{*} SVNH included SVH and SNH performance

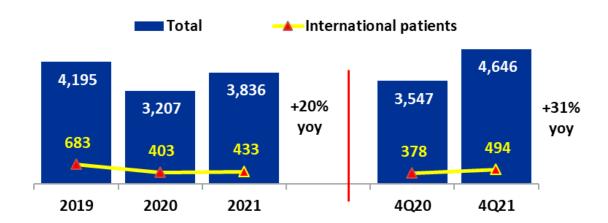
Patient Volume and Occupancy Rate

Bangkok Dusit Medical Services

Number of OPD Visits per Day



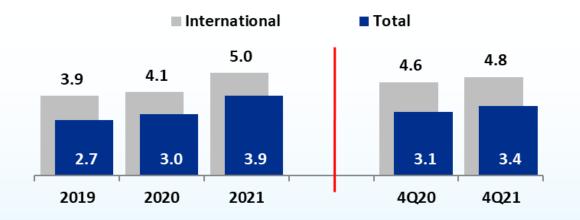
Average Daily Census (ADC)



Occupancy Rate Based on Available Beds



Average Length of Stay (days)



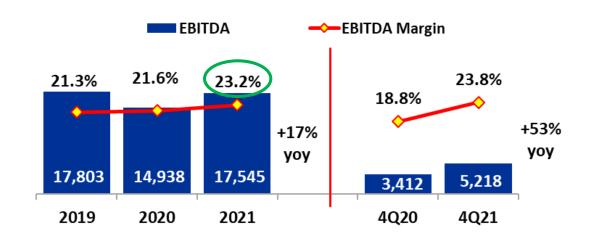
Remarks:- Excluding hospitels and field hospital
- Including social security patients while excluding new born patients

Profitability Trend

Bangkok Dusit Medical Services

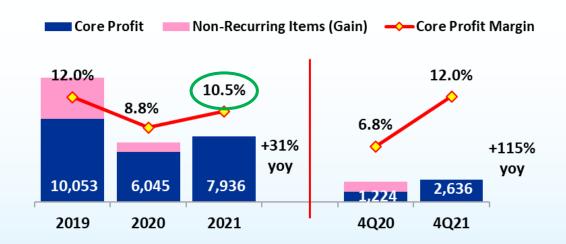
EBITDA & EBITDA Margin

(THB mm)



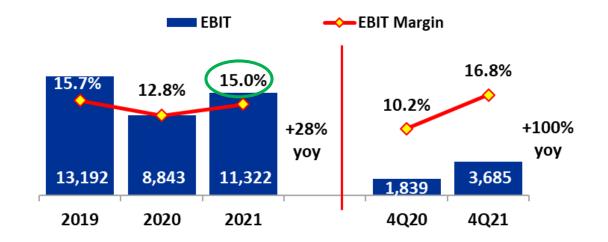
Core Profit & Core Profit Margin

(THB mm)



EBIT & EBIT Margin

(THB mm)



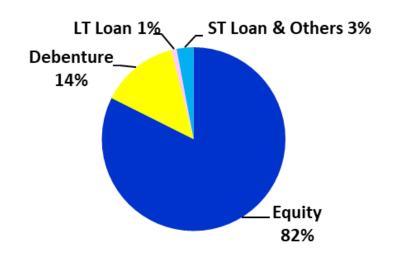
Commentary

In 2021, core profit was THB 7,836 million, increased by 31% yoy due to higher operating income, continued cost saving program and lower finance costs

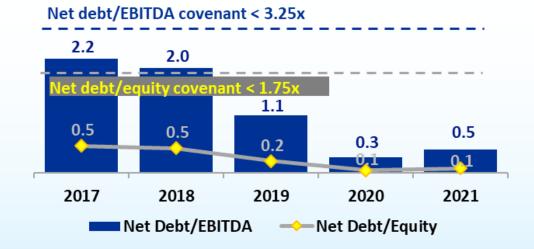
Capital Management

Bangkok Dusit Medical Services

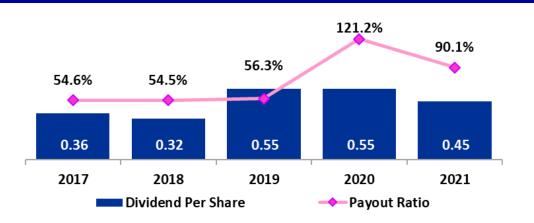
Capital Structure as of Dec 2021



Gearing Ratios: Well Within Covenants

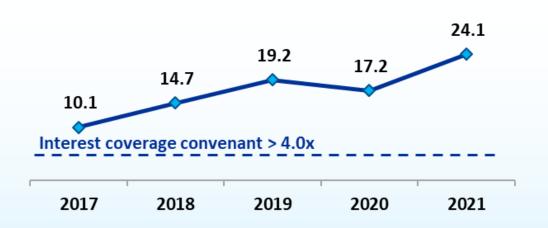


Dividend Payment & Payout Ratio

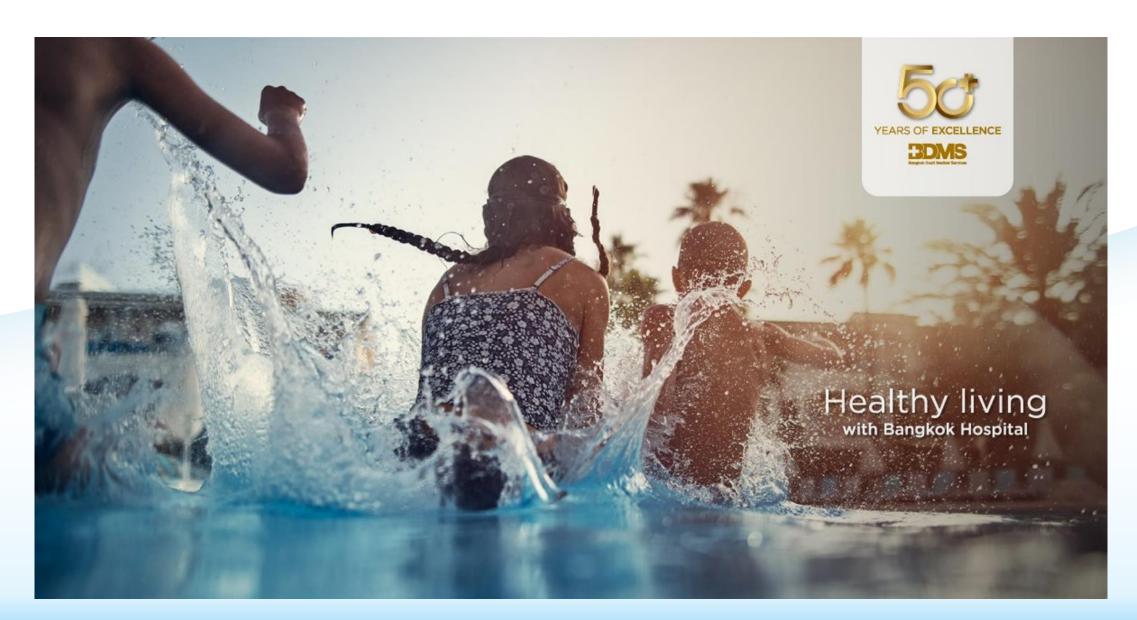


^{*} Board of Directors had resolution on 23 February 2022 to propose for dividend payment of Baht 0.45 per share.

Interest Coverage



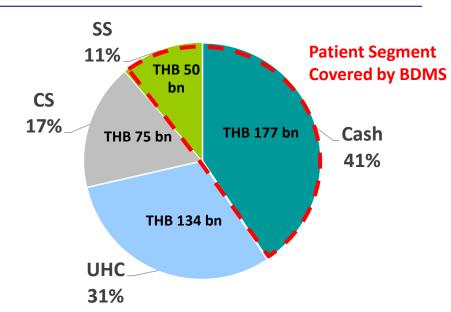
Healthcare Industry





Healthcare Segments in Thailand

Total Expenditure for 2019: THB 436 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 (2021)

	# of Hospitals	# of Beds
Private	396	38,117
Public	901	98,781
Total	1,297	136,898

(Number per 10,000 population)	Thailand	Global
Doctor (2019)	9	18
Nurse (2019)	32	39
Bed (2016)	22	26

Source: WHO and Ministry of Public Health

Healthcare Demand Growing Faster than Supply

CAGR (2009-2019)



■ Number of beds ('000) ■ Thailand health expenditure (THB, bln) (Supply) (Demand)

Source: NESDB and NSO



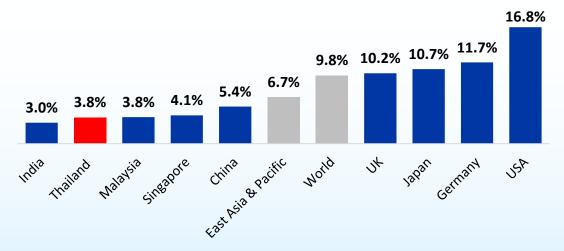
BDMS Market Coverage (2021)

	Total Private Beds	BDMS Registered Beds	Market Share
Bangkok	14,892	2,698	18%
Central	12,027	2,458	20%
South	2,908	768	26%
Northeast	3,543	469	13%
North	4,747	310	7%
Total	38,117	6,703	18%

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

Low Healthcare Penetration

% of Healthcare expenditure to GDP

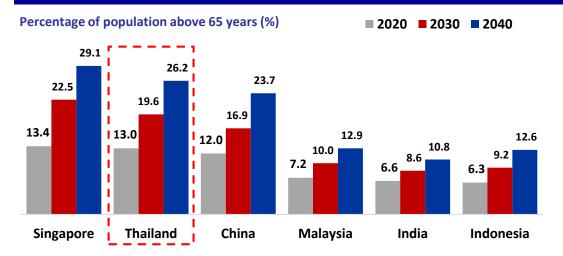


Source: WHO (2019) 38

Increasing Thailand Healthcare Demand

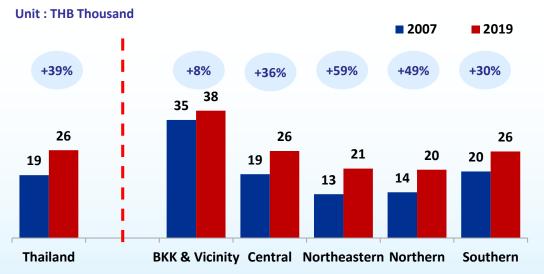


Population Growth and Aging Profile



Source: UN Population Database: 2019

Thailand Monthly Income per Household

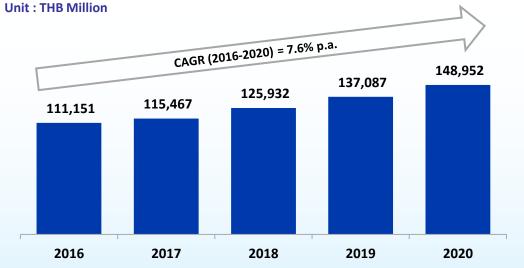


Source: NSO

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

Medical Tourism



Medical Tourism as a Rising Phenomenon

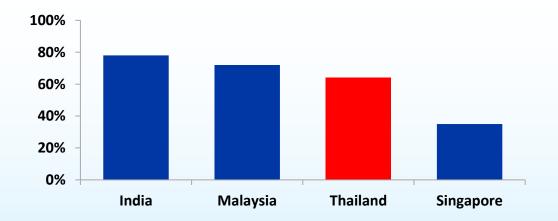
Procedures (In USD)	USA	Singapore*	Thailand	Malaysia*	India
Heart Bypass	123,000	17,200	15,000	12,100	7,900
Heart Valve Replacement	170,000	16,900	17,200	13,500	9,500
Knee Replacement	35,000	16,000	14,000	7,700	6,600
IVF Treatment	12,400	14,900	4,100	6,900	2,500

^{*} Excluding doctor fee

Source: Medicaltourism.com (2019)

Saving as Compared to Other Medical Tourism Market

Saving % Compared to US



- Thailand key major advantages
 - Affordability: Thailand medical treatments are approx.
 40-70% cheaper than those offered in other medical tourist destinations
 - Highly trained medical professional and clinical personnel
 - Excellent services with Thai hospitality
 - Regional hub: Thailand shares the spotlight with Singapore, Malaysia and India to form a regional medical tourism hub

Company Information



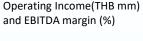
Successful Track Record of Expansion Through M&A and Greenfield Projects

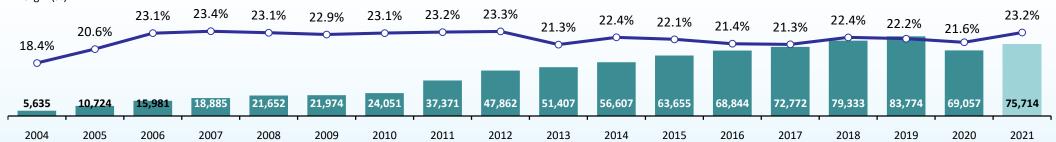


Strong Share Price Performance Backed by a Successful Expansion Track Record



Solid Revenue Growth Over the Past Decade (2004-2021 CAGR of 15.5%) with Resilient EBITDA margin *





Source: Derived from BDMS' financial statements

^{*} Excluding non-recurring items



Shareholding Structure (As of 30 December 2021)

		% of Shareholding
1	Mr. Prasert Prasarttong-Osoth, M.D. and spouse	14.6%
2	Thai NVDR Co., Ltd.	8.7%
3	Bangkok Airways PCL and Bangkok Airways Holding Co., Ltd.	6.5%
4	The Viriyah Insurance PCL	5.9%
5	Social Security Office	3.9%
6	UBS AG Singapore Branch	3.6%
7	Miss Poramaporn Prasarttong-Osoth, M.D.	3.6%
8	South East Asia UK (Type C) Nominees Limited	3.5%
9	Mr. Chirotchana Suchato, M.D. and spouse	2.5%
10	Mr. Att Thongtang and spouse	2.1%
	Total	54.9%

Appendix



For More Information:- www.bangkokhospital.com

Group 1 (Bangkok&West)	Ownership	No. of Beds
1. Bangkok Hospital	100%]	329
2. Bangkok Heart Hospital	100%	54
3. Wattanosoth Hospital	100% 📗	48
4. Wattanosoth International (BHQ)	100%	30
5. Chiva Transitional Care	100%	52
6. Bangkok International	100% ^J	172
7. Bangkok Huahin (BHN)	100% 🥝	58
8. Bangkok Sanamchan (BSN)	100%	191
9. Thepakorn (TPK)	50.0%	100
10. Bangkok Phetchaburi (BPR)	100%	200
11. Bangkok Muangraj (BMR)	100%	140
Group 2		
12. Samitivej Sukhumvit (SVH)	95.8% 🥝	275
13. Japanses by Samitivej	95.8%	30
14. Samitivej Srinakarin (SNH)	95.8% 🥝	300
15. Samitivej Sriracha (SSH)	67.4%	260
16. Samitivej Thonburi (STH)	64.0%	150
17. Samitivej Chonburi (SCH)	100%	250
18. Samitivej Chinatown (SCT)	100%	50
19. BNH Hospital (BNH)	91.5%	115
Group 3 (East)		
20. Bangkok Pattaya (BPH)	97.3%	400
21. Bangkok Rayong (BRH)	100%	222
22. Bangkok Chanthaburi (BCH)	99.7%	200
23. Bangkok Trat (BTH)	99.8%	100
24. Koh Chang International	99.8%	3
25. Sri Rayong (SRH)	100%	195
26. Jomtien (JTH)	97.3%	232

Group 4 (North&Northeast)	Ownership	No. of Beds
27. Bangkok Chiangmai (BCM)	100% (3 139
28. Bangkok Ratchasima (BKH)	91.5%	285
29. Bangkok Pakchong (BHP)	91.5%	40
30. Bangkok Udon (BUD)	100%	105
31. Bangkok Phitsanulok (BPL)	100%	200
32. Bangkok Khon Kaen (BKN)	100%	150
33. Bangkok Chiangrai (BCR)	100%	80
Group 5		
34. Phyathai 1 (PT1)	98.6%	174
35. Phyathai 2 (PT2)	97.8%	<u>262</u>
36. Phyathai 3 (PT3)	97.6%	260
37. Phyathai Sriracha (PTS)	74.4%	295
38. Phyathai Nawamin (PTN)	99.8%	140
39. Paolo Phaholyothin (PLP)	100%	220
40. Paolo Samutprakarn(PLS)	93.7%	200
41. Paolo Chokchai 4 (PLC)	85.7%	169
42. Paolo Chokchai (PLC)	85.7%	29
43. Paolo Rangsit (PLR)	100%	128
44. Paolo Kaset (PLK)	100%	162
45. Paolo Phrapradaeng (PLD)	84.0%	60

Gro	up 6 (South&Cambodia)	Ownership	No. of B	ed	
46.	Bangkok Phuket (BPK)	99.7%	234		
47.	Bangkok Siriroj (BSI)	100%	181		
48.	Dibuk (DBK)	99.7%	75		
49.	Bangkok Hat Yai (BHH)	98.8%	193		
50.	Bangkok Samui (BSH)	100%	57		
51.	Bangkok Surat (BSR)	100%	88		
52.	Royal Phnom Penh (RPH)	100%	100		
53.	Royal Angkor International (RA	AH) 80.0%	33		
Group 7: Non-Hospital					

1.	National Healthcare System	98.7%
2.	Bio Molecular Laboratories	95.0%
3.	The Medicpharma	87.1%
4.	A.N.B Laboratories	100%
5.	Save Drug Center (SDC)	100%
6.	General Hospital Products	47.2%

BDMS Wellness

1.	BDMS Wellness Clinic	100%
2.	BDMS Wellness Resort	100%
	(Mövenpick BDMS Wellness Resort)	

Thank you

BDMS IR

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