

Bangkok Dusit Medical Services (BDMS)

Investor Presentation

3Q16 & 9M16 Results

February 2017

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Overview

- Established on February 26, 1972
- Largest private hospital operator in Thailand in terms of revenues from patient services and market capitalization
- Owns and manages 44 hospitals (with total beds* of 7,831) under 6 hospital brands:

	Brand	No. of Hospitals	No. of Beds*
	Bangkok Hospital	20	3,136
	Phyathai Hospital	5	1,340
	Samitivej Hospital	5	1,195
	Paolo Hospital	5	960
	BNH Hospital	1	144
	Royal Hospital	2	130
	Local Hospital	6	926

* Maximum number of beds according to structure of the hospitals

Shareholding Structure

As of 29 January 2016

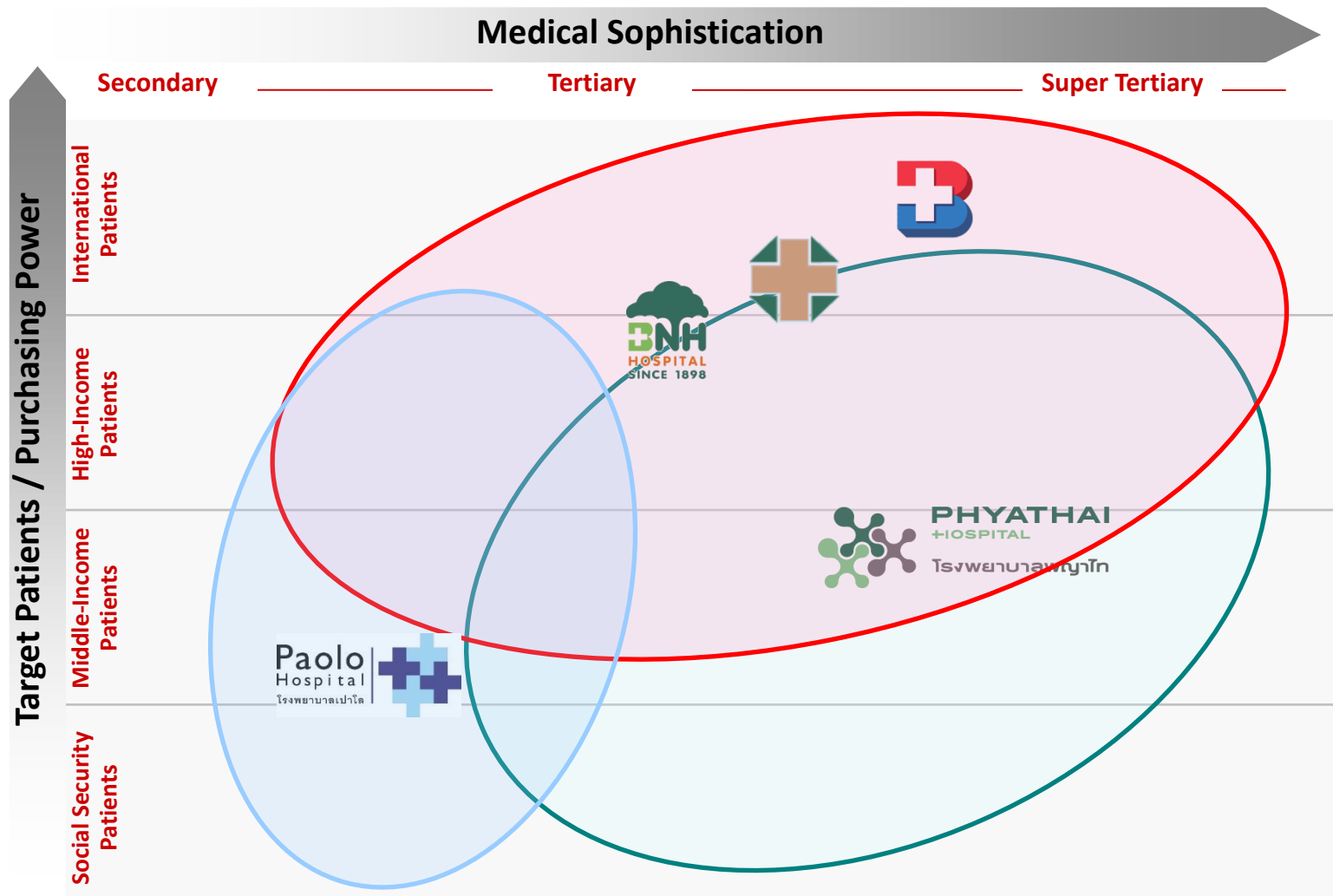
		% of Shareholding
1	Mr. Prasert Prasarttong-Osoth, M.D. and family	22.4%
2	Mr. Wichai Thongtang and family	10.7%
3	Bangkok Airways*	7.8%
4	The Viriyah Insurance Co., Ltd.	6.1%
5	Thai NVDR Co., Ltd.	3.4%
6	Mr. Chirothana Suchato, M.D. and family	2.7%
7	Ladpli family**	2.3%
8	Social Security Office	2.2%
9	Mr. Chuladej Yossundharakul, M.D. and family	1.9%
10	Chase Nominee Limited	1.3%
	Total	60.7%

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

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

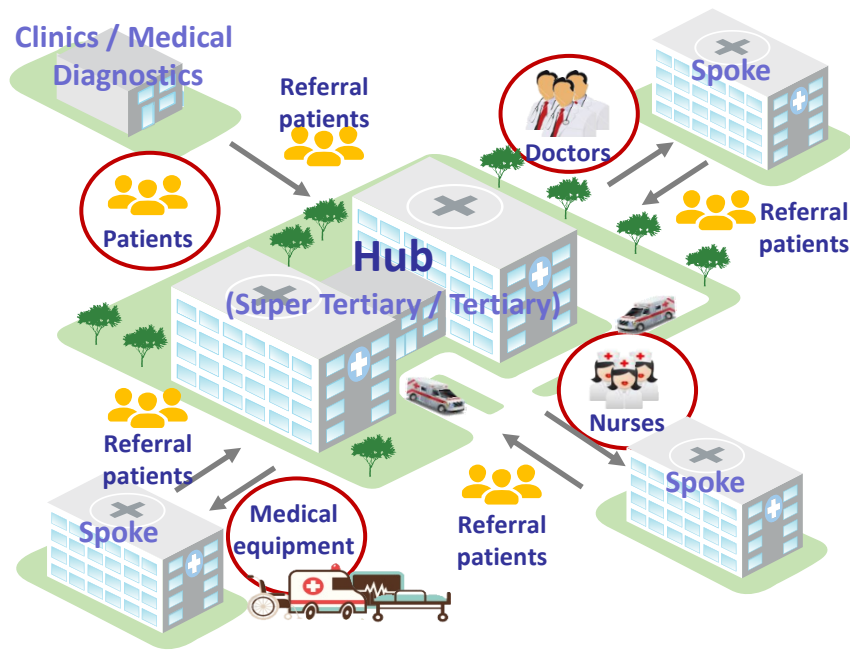
** Consisted of Miss Noppamas Ladpli, Mrs. Atinuch Malakul Na Ayudhaya and Mr. Parameth Ladpli

Diversification of Patient Mix



'Hub-and-Spoke' Model

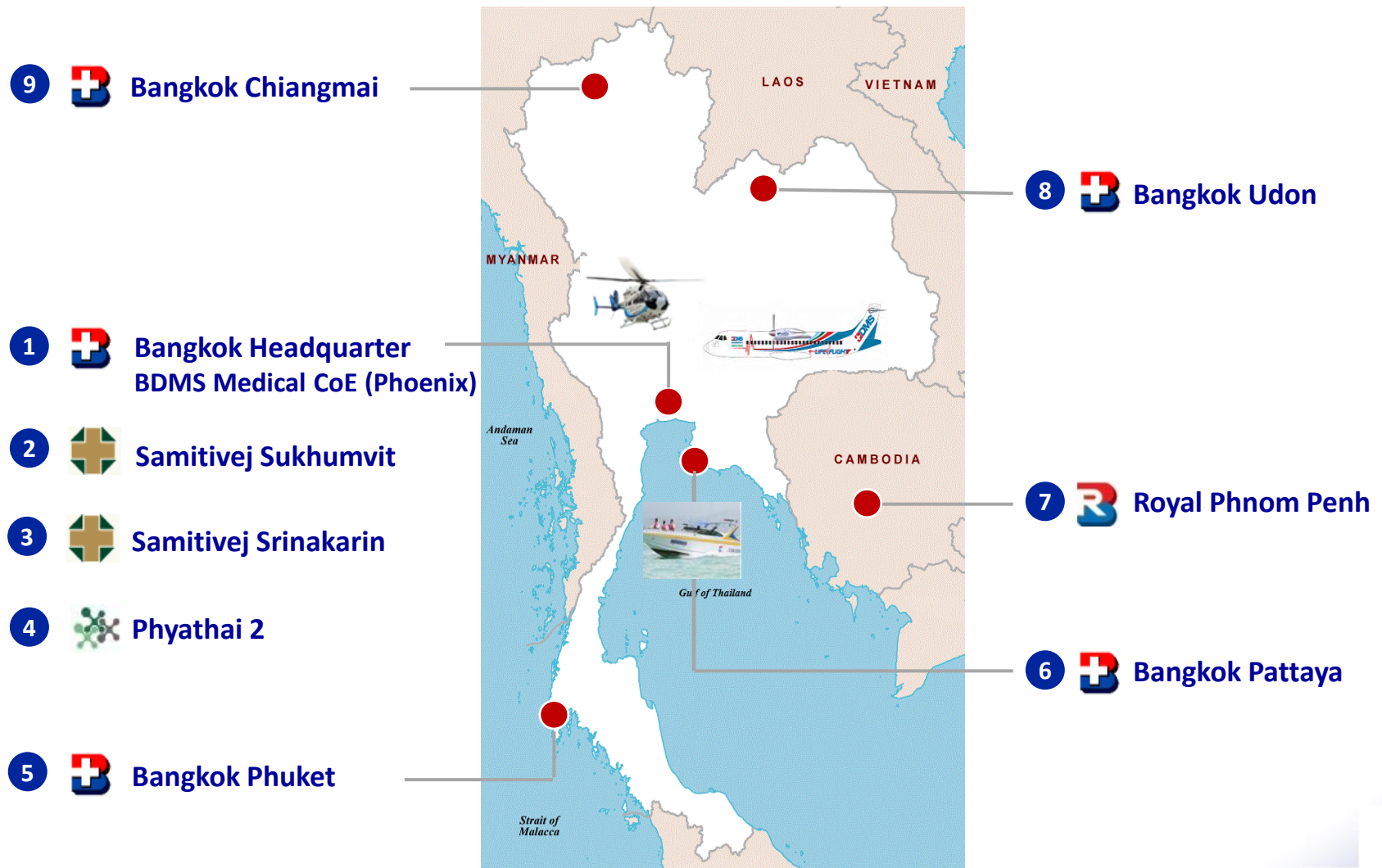
Providing a Proven Patient Referral System and Creating Efficiency Through Scale



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

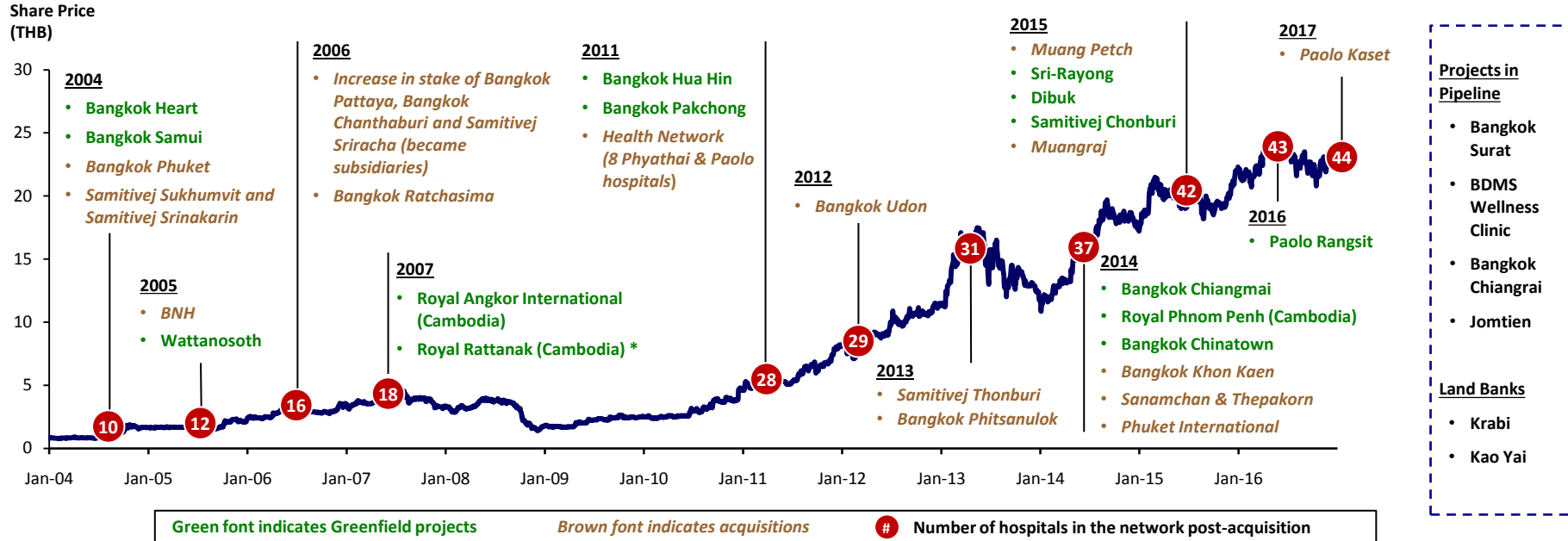
BDMS Centers of Excellence Network

Upgrading Existing 9 Hospitals to Become Centers of Excellence with the Focus on International Patients



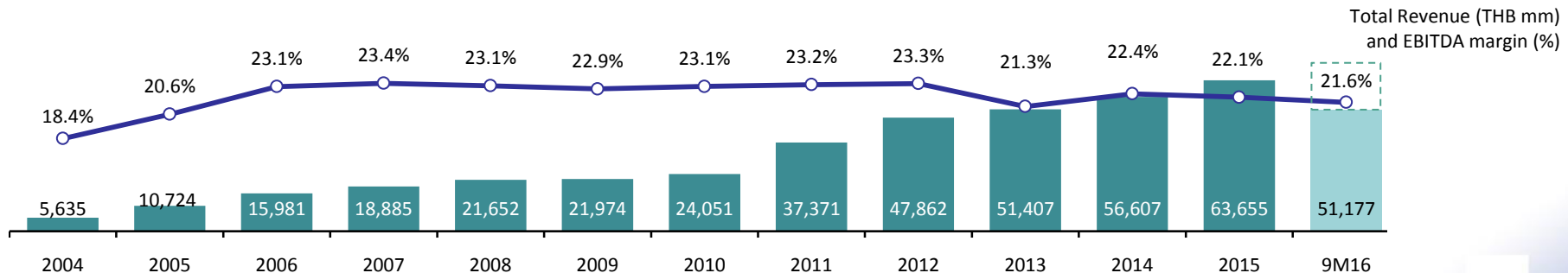
Successful Track Record of Expansion Through M&A and Greenfield Projects

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 (2004-2015 CAGR of 24.7%) with Resilient EBITDA margin



Source: Derived from BDMS' financial statements

BDMS has developed 13 new hospitals and acquired a total of 30 hospitals to date

BDMS Wellness Clinic

A Brand New Wellness Clinic Delivering World-Class Services



- Acquiring 15 rai of land and 3 buildings in the northern part of the Park Nai Lert
- Providing premium comprehensive wellness & preventive healthcare services
- Targeting high-end Thai and International customers
- OPD clinic will open to public by 2H17
- IPD clinic will be exclusive only to the members of BDMS Wellness Clinic.



- 1 Park Nai Lert Hotel (280 rooms) 2 Promenade Building
3 Staff Canteen Building

Continue to Expand Our Footprint in the Upcountry

New Hospitals in Pipeline



Bangkok Hospital Surat



Bangkok Hospital Chiangrai



Hospitals	Total Beds	1 st Phase	Project Details	Commission Date
1 Bangkok Hospital Surat	150	50	<ul style="list-style-type: none"> Secondary care hospital Targeting middle income patients in Surat and networking with Bangkok Hospital Samui 	1H17
2 Bangkok Hospital Chiangrai	80	56	<ul style="list-style-type: none"> Basic tertiary care hospital Targeting residents of Chiangrai, Phayao and Nan area and international patients from Southern China, Myanmar and Laos 	2018

Expansion of Existing Hospitals

Accommodate Rising Demand in Healthcare



Chiva Residence & Chiva Transitional Care Hospital



Hospitals	Total Beds	Project Details	Commission Date
1 Chiva Transitional Care Hospital	58	<ul style="list-style-type: none"> Focus on elderly care and rehabilitation for patients who require extended hospitalization 	2017
2 Phoenix Project at Bangkok Hospital Headquarter (BHQ)	220	<ul style="list-style-type: none"> Focus on Neurology Center, Orthopedics Center, Spine Center, Longevity Care Center and Rehabilitation Center Located next to BHQ on the land of 4 Rai 	2018

Expansion of Existing Hospitals

Upgrading Current Hub Hospitals



Phoenix Project



Expansion of Samitivej Sukhumvit Hospital

Hospitals	Total Beds	Project Details	Commission Date
3 Expansion of Samitivej Sukhumvit Hospital	45	<ul style="list-style-type: none"> Focus on Japanese patients, liver and Gastrointestinal Located near Samitivej Sukhumvit Hospital on the land of 1 Rai 	2018

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

Others



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



- Collaboration with local institutions

Investments

Investments in Other Hospitals : - Listed Companies

- Ramkhamhaeng Hospital PCL 38.24%
- Bumrungrad Hospital PCL 23.95%

Non- Hospital Strategic Investments⁽¹⁾

- BDMS Wellness Clinic 100% Providing premium comprehensive wellness & preventive healthcare services

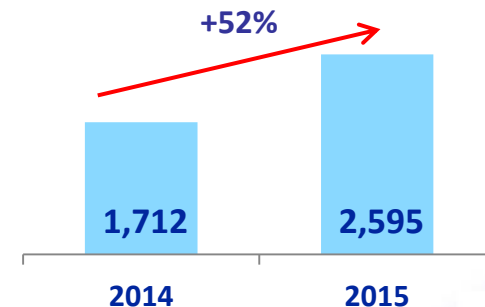
Pharmaceutical Business

- 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 45% 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 Life Insurance Broker 100% Health & life insurance broker
- Bangkok Health Insurance 100% Health Insurance
- Bangkok Helicopter Services 100% Transportation of patients via helicopter services

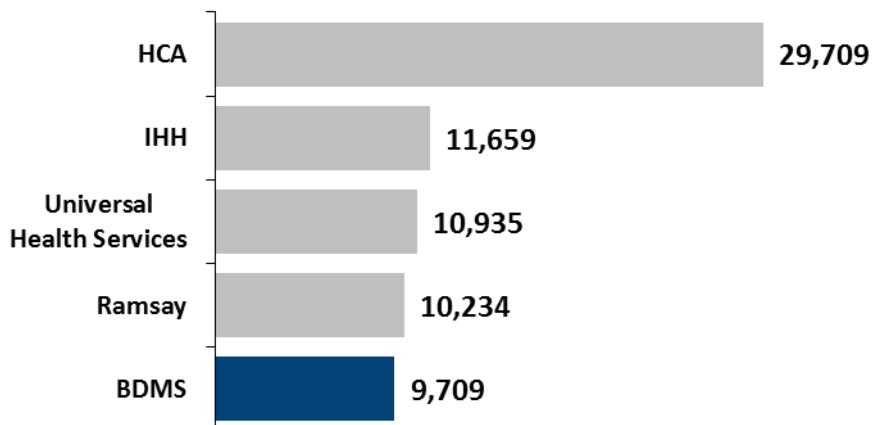
Non-Hospital Revenues



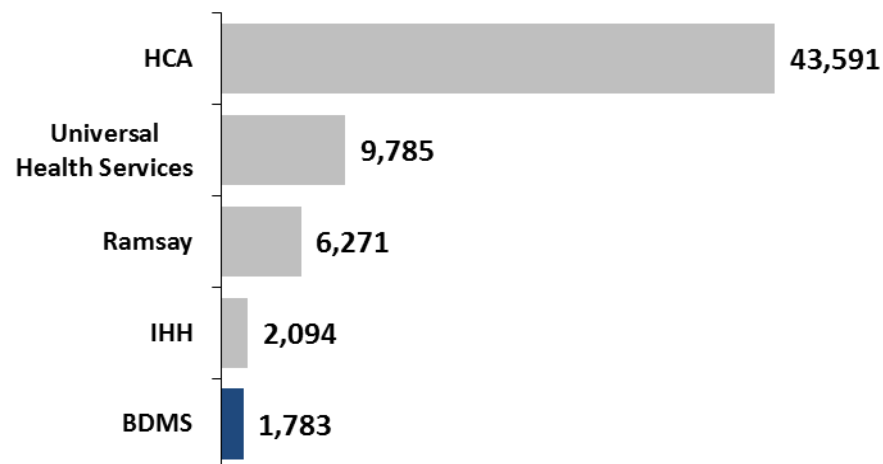
(1) Not included all BDMS' investments

Global Hospital Rankings

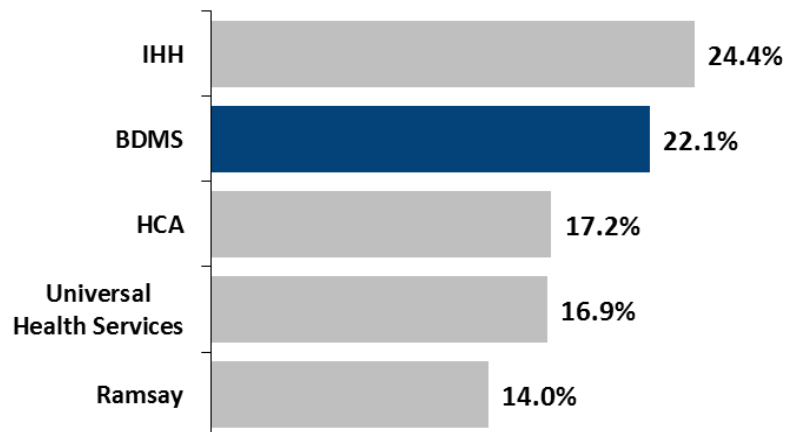
Market Capitalization (USD mm)



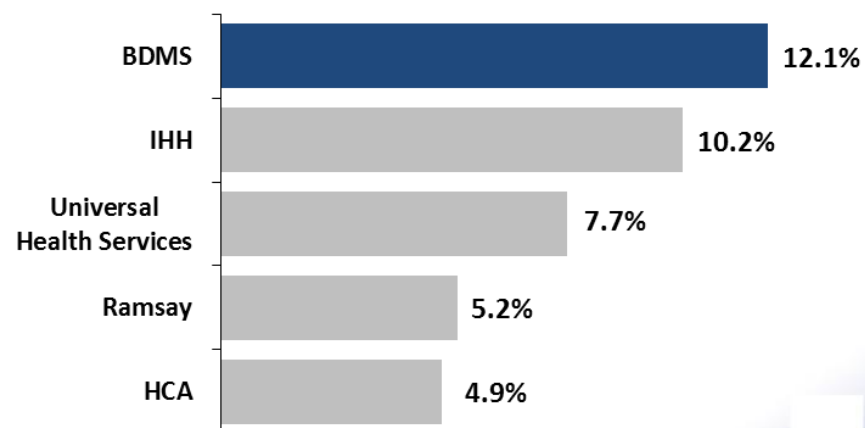
Revenue (USD mm)



EBITDA Margin



Net Profit Margin



Remark: - Market capitalization as of 1 February 2017

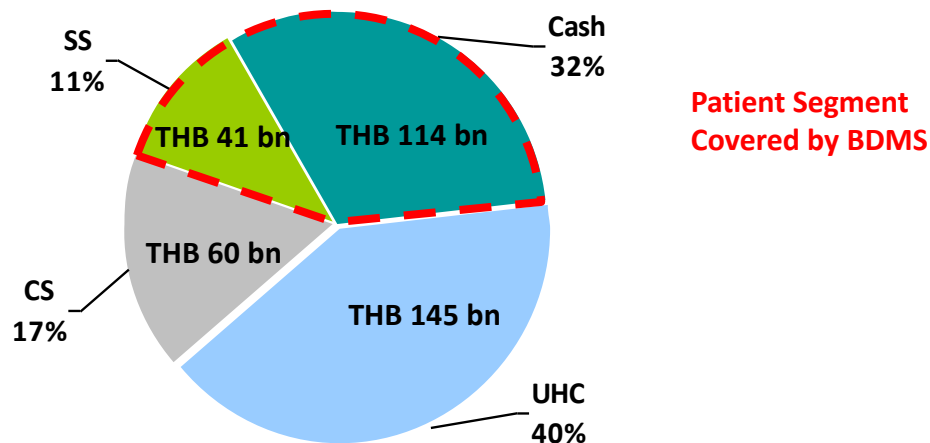
- Financial performance (excluding non-recurring items) for year ended December 2015 except Ramsay for the year ended June 2016

Healthcare Industry

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

Increasing Healthcare Demand

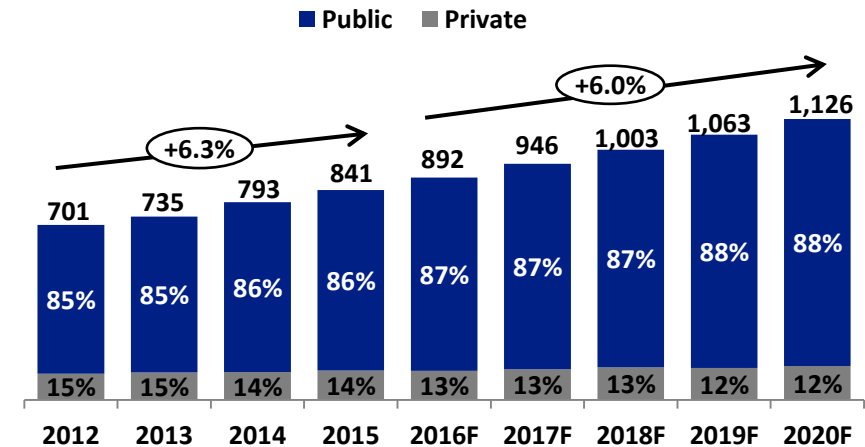
BDMS Market Coverage (2014)

	Total Private Beds	BDMS Registered Beds	Market Share
Bangkok	14,339	2,571	18%
Central	10,654	1,890	17%
South	2,467	601	24%
Northeast	2,904	337	12%
North	4,128	194	5%
Total	34,492	5,593	16%
Number of beds per 10,000 population	Thailand		21
	Global Average (2006-2012)		26

Source: World Health Organization and Department of Health Service Support

Increasing Healthcare Expenditures in Thailand

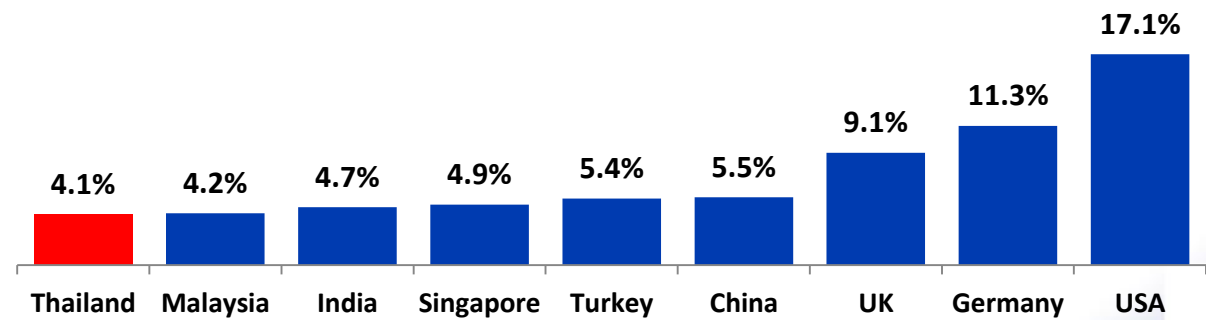
Unit : THB in Billion



Source : EIC SCB, World Health Organization, BMI

Low Healthcare Penetration

- Healthcare expenditure as % of GDP in Thailand is still low compared to other developing and developed countries

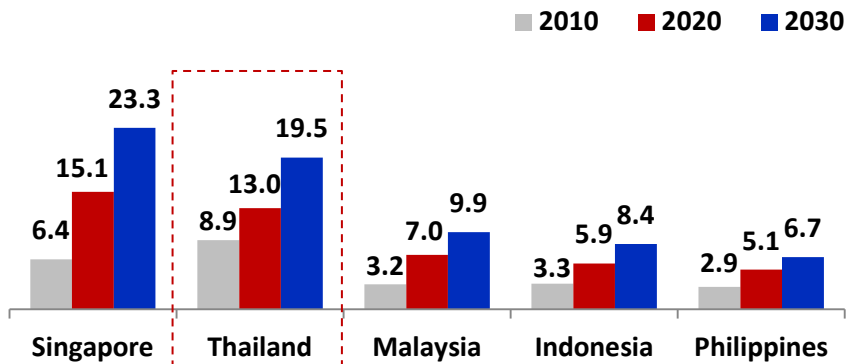


Source: World Health Organization for 2014

Increasing Healthcare Demand

Population Growth and Aging Profile

Percentage of population above 65 years (%)

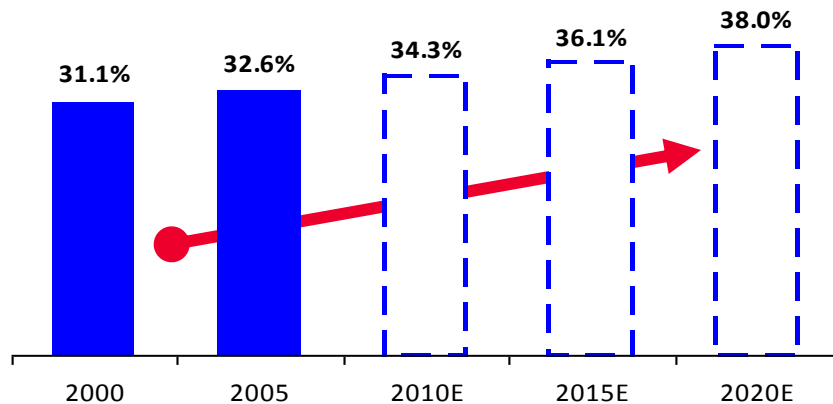


Source: UN Population Database: 2015

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

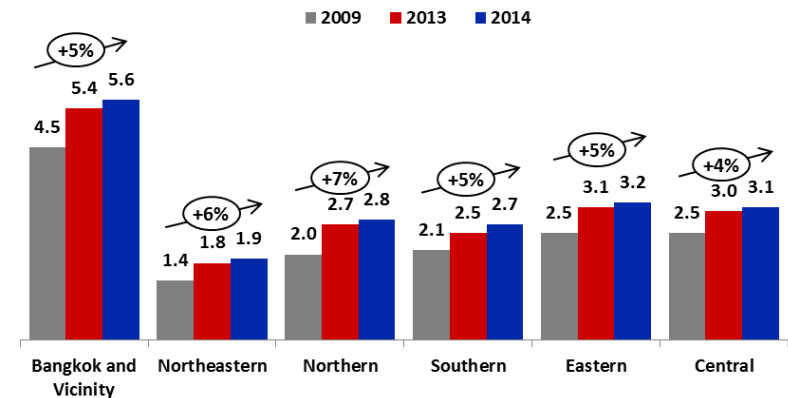
Urbanization



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

Rising Income per Capita

Unit : THB in Billion

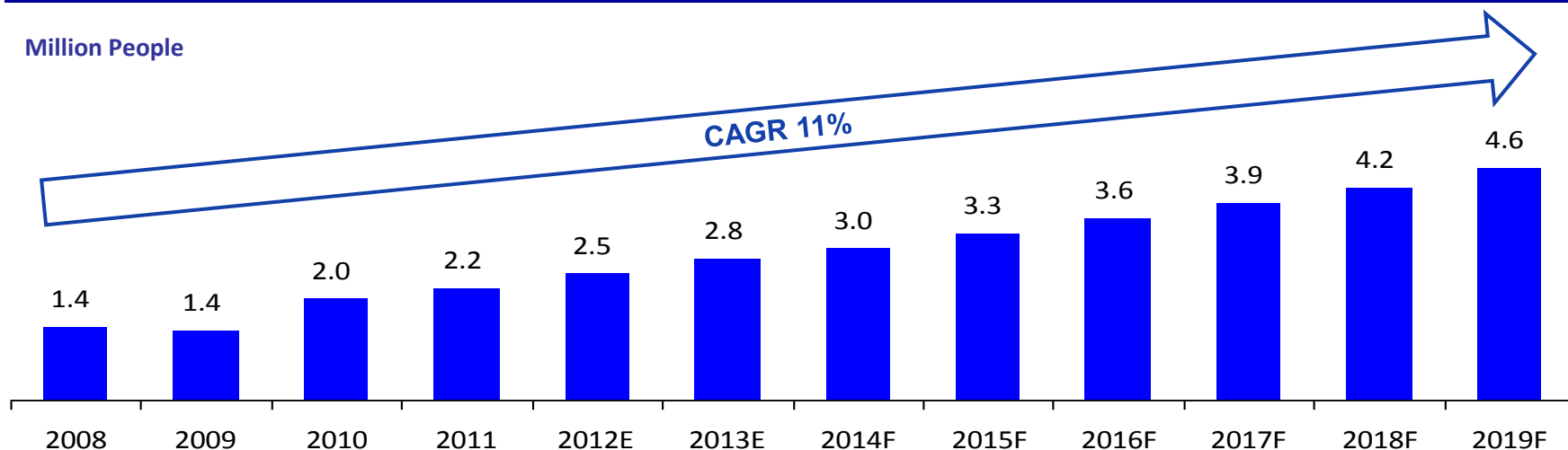


Source : EIC SCB, World Health Organization, BMI

Medical Tourism

Increasing trend of international patient visits

Million People



Source: Economic Intelligence Center, SCB and Ministry of Commerce

Medical Tourism as a Rising Phenomenon

Procedures (In USD)	USA	Singapore	Thailand	Malaysia	India
Coronary Artery Bypass Graft	88,000	54,500	23,000	20,800	14,400
Valve Replacement with Bypass	85,000	49,000	22,000	18,500	11,900
Hip Replacement	33,000	21,400	16,500	12,500	8,000
Knee Replacement	34,000	19,200	11,500	12,500	7,500
Spinal Fusion	41,000	27,800	16,000	17,900	9,500
Gastric Bypass	18,000	13,500	12,000	8,200	6,800

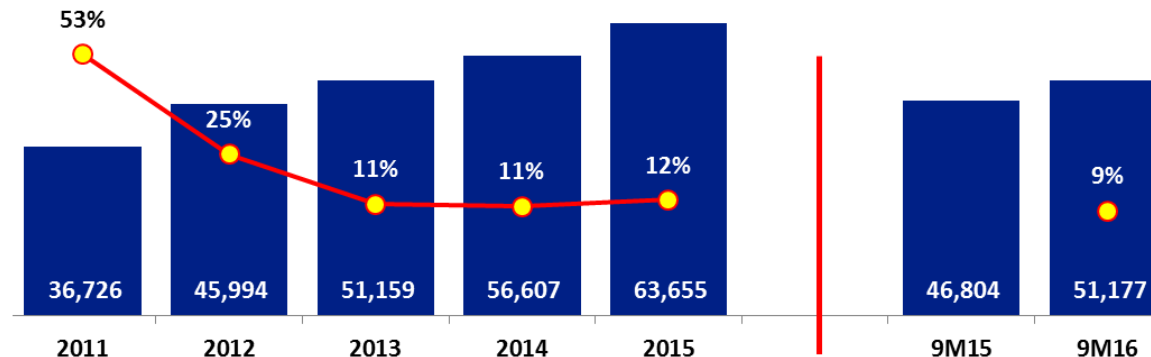
Source: "Patient Beyond Border" 3rd edition by Josef Woodman (2015)

Operational Statistics

Operating Income Growth

Operating Income Trend

(THB mm)



Commentary

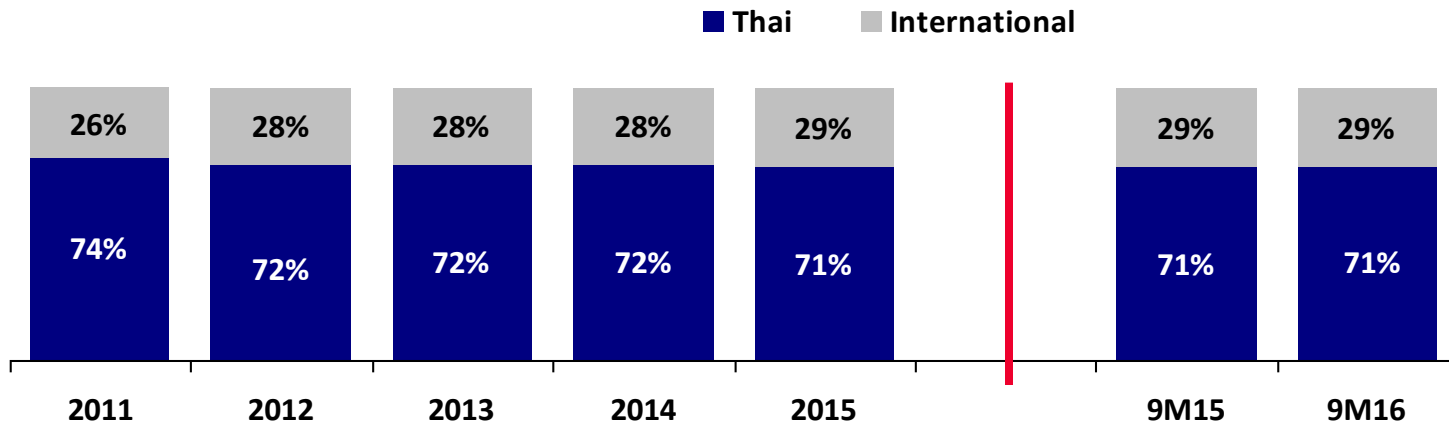
- **9M16** Operating income increased by **9%** yoy, primarily from
 - Revenue from hospital operations grew **10%** yoy mainly from
 - Increase in number of patients
 - Increase in healthcare inflation, intensity and complexity cases
 - Consolidation of new network hospitals
 - Patient ward renovation and patient referral system

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

- 13 new hospitals (less than 2 full calendar years) are consisted of BCM, BSN, TPK, PIH, RPH, BKN, BCT, MPH, SRH, DBK, SCH, Muangraj and PLR and consolidation of Save Drug Center

Expanding Both Thai and International Patients

Revenue Contribution by Nationality

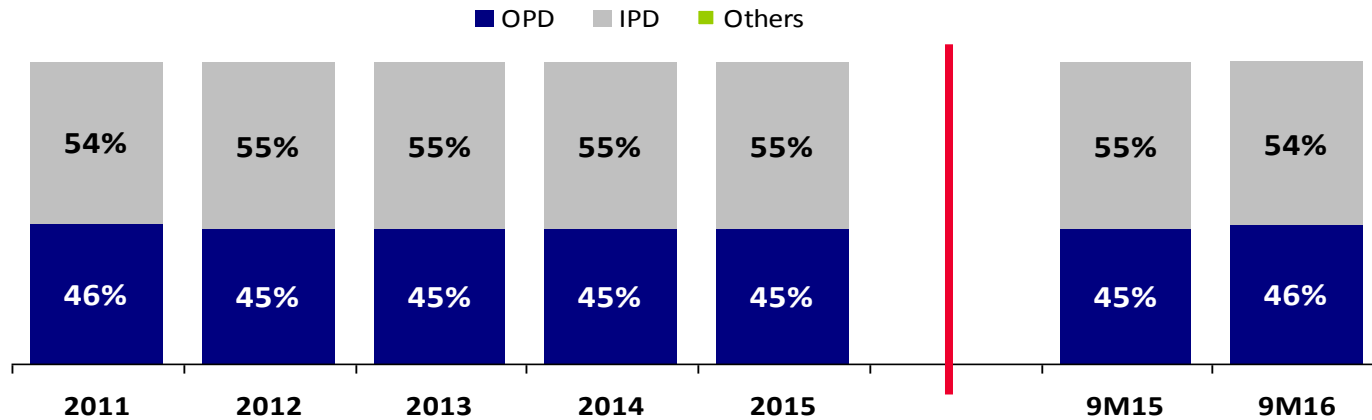


Commentary

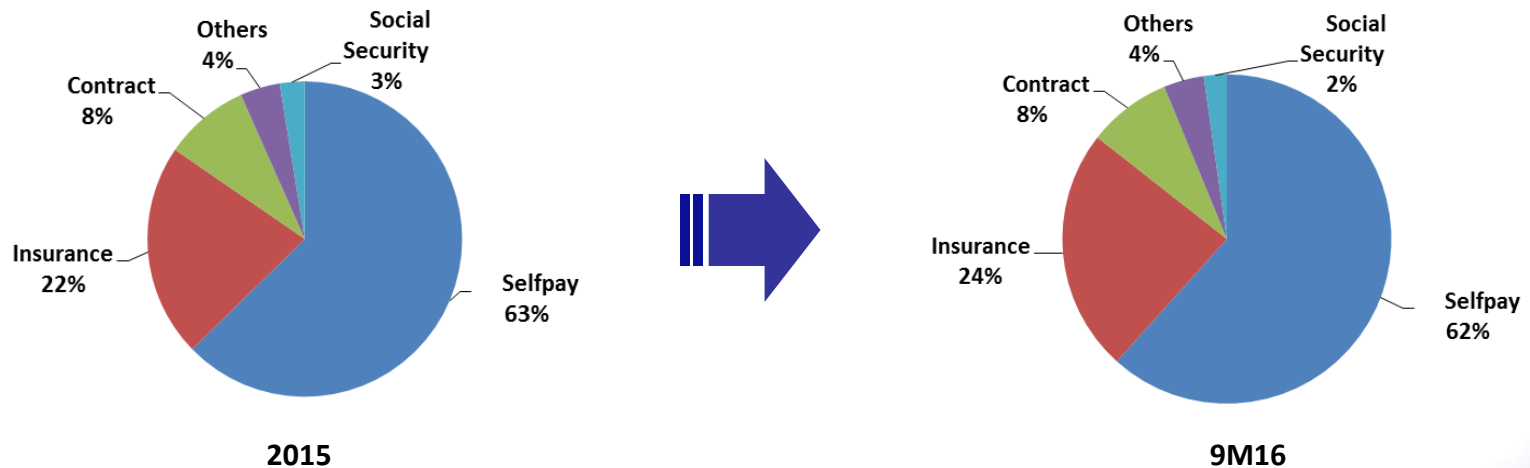
- **9M16** revenue from Thai patients grew 8% while international patients grew 11% yoy
- Top 5 international patient revenues are from Japan, Myanmar, UAE, UK and Australia which contribute 2.4%, 2.0%, 1.8%, 1.6% and 1.4% of total patient revenues respectively
- International patient revenues grew significantly for Cambodia (+34%), Qatar (+29%) and Australia (+25%)

Patient Mix

Revenue Breakdown by Patient Types



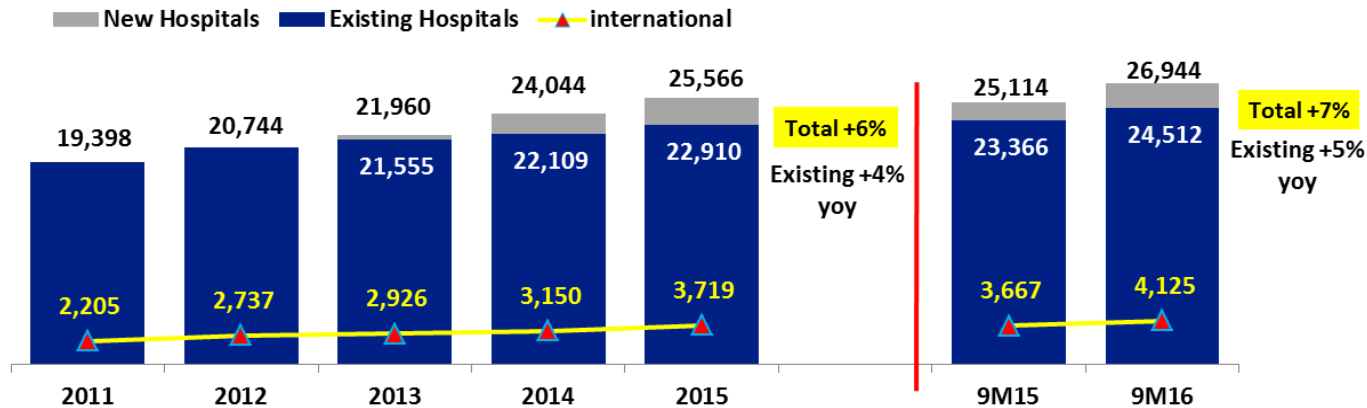
Patient Revenue by Payor: Increasing Insurance Portion



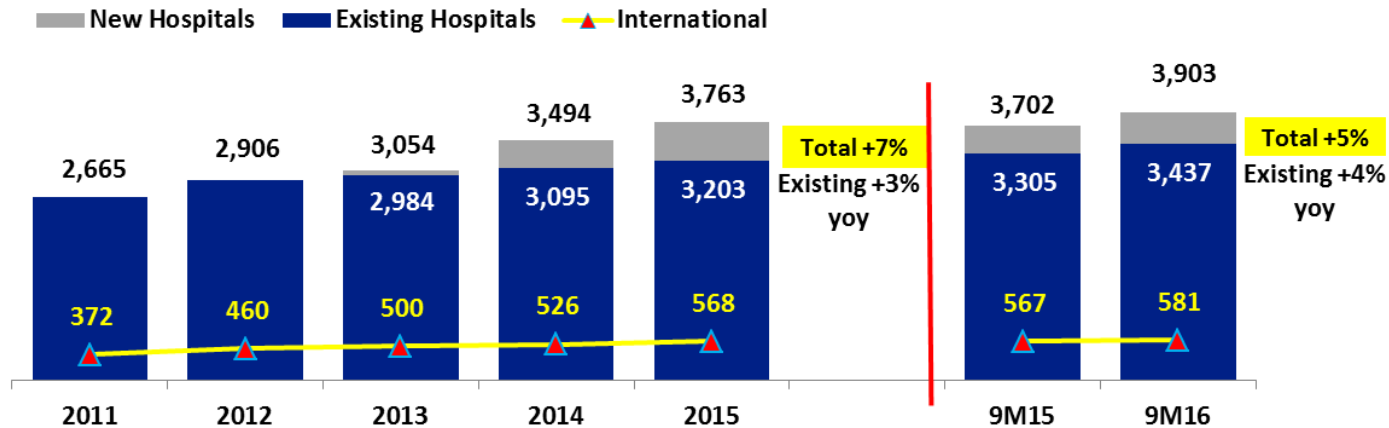
Source:- BDMS management report

Patient Base Expansion From Both Organic Growth & Acquisitions

Number of OPD Visits per Day



Average Daily Census (ADC)

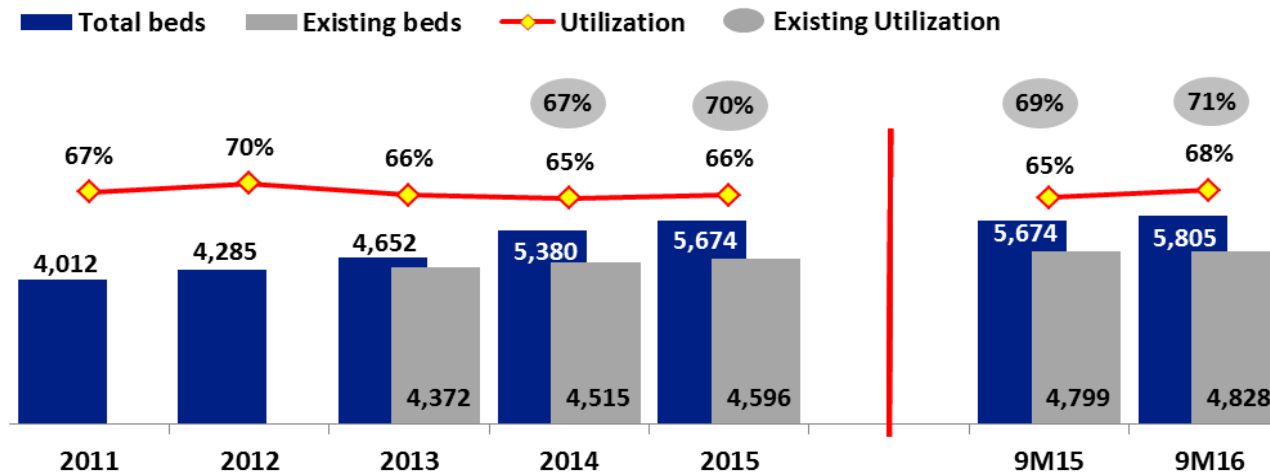


Remarks: - Including social security

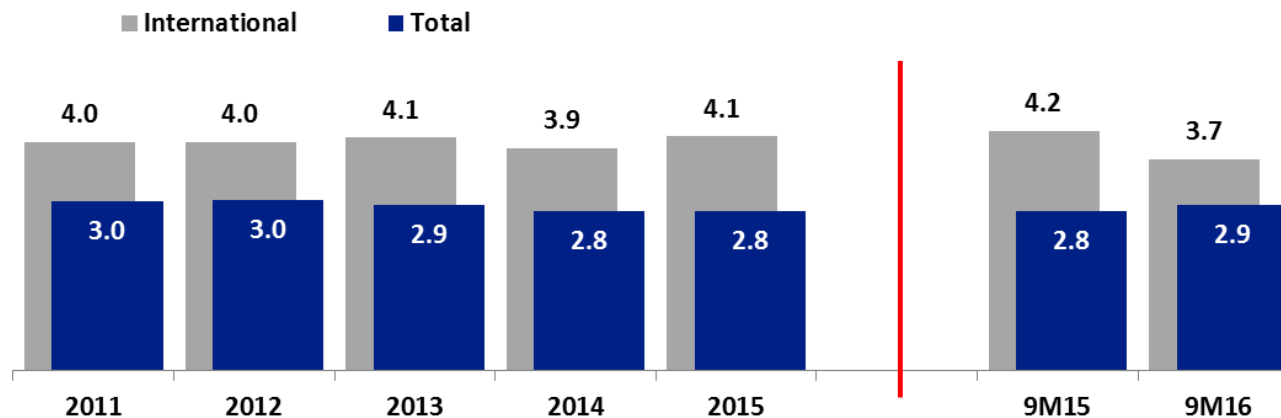
Source:- BDMS Management Report

Utilization of Beds

Utilization Based on Available Beds



Average Length of Stay (days)

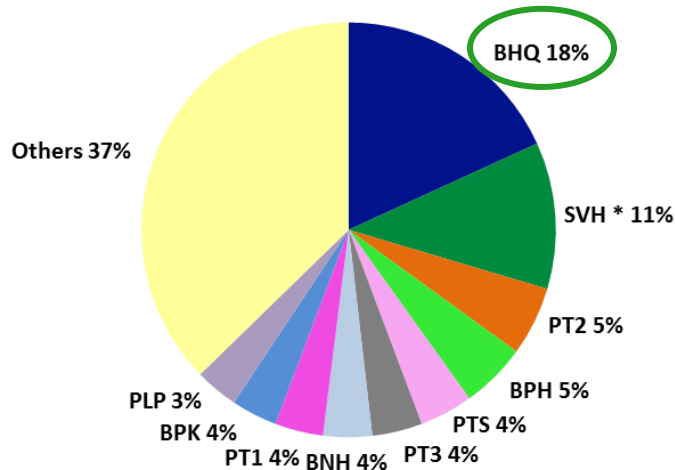


Remarks:- Including social security patients

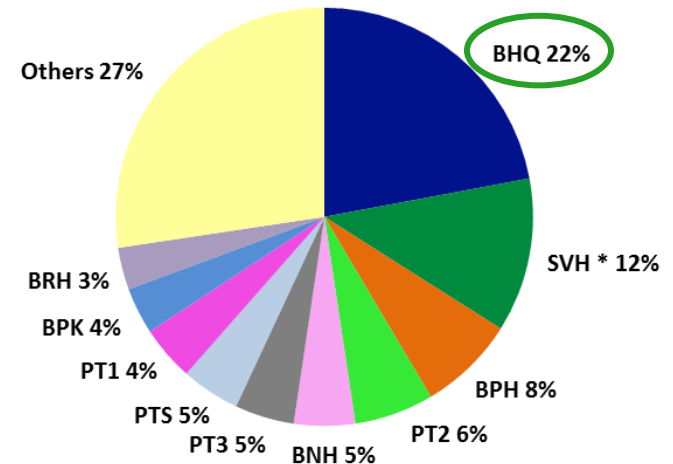
Financial Highlights

Diversified Sources of Revenues and Profitability

Operating Income Contribution in 9M16



Total EBITDA Contribution in 9M16



Commentary

- During 9M16, top 5 hospitals contributed 43% of total revenue and 53% of total EBITDA
- Revenue of Bangkok&vicinity hospitals grew 7% yoy
 - Existing Hospitals that grew more than 7% yoy are STH (+22%), PT1 (+18%), PT2 (+15%), BNH (+13%), PLS (+10%), PLC (+8%) and SVH (+8%)
- Revenue of Upcountry hospitals grew 14% yoy
 - Existing Hospital that grew more than 14% yoy is BUD (+29%), BPL (+27%), BKH (+18%) and BHN (+18%)

* SVH also included SNH performance

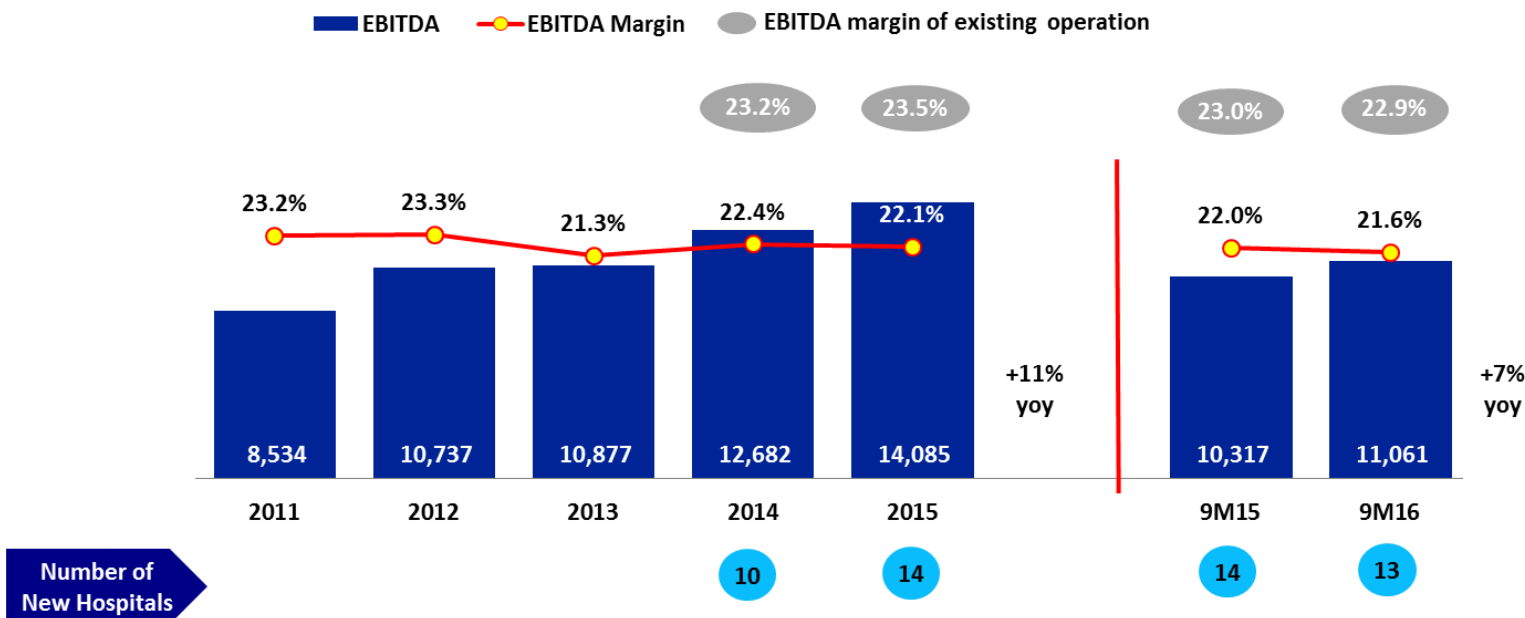
Remark: - Operating income is calculated from hospital revenue + revenue from sales of goods and food + other income

- EBITDA is calculated from revenue from hospital operations + revenue from F&B + other income – cost from hospital operations – SG&A expenses

Profitability Trend

EBITDA & EBITDA Margin

(THB mm)



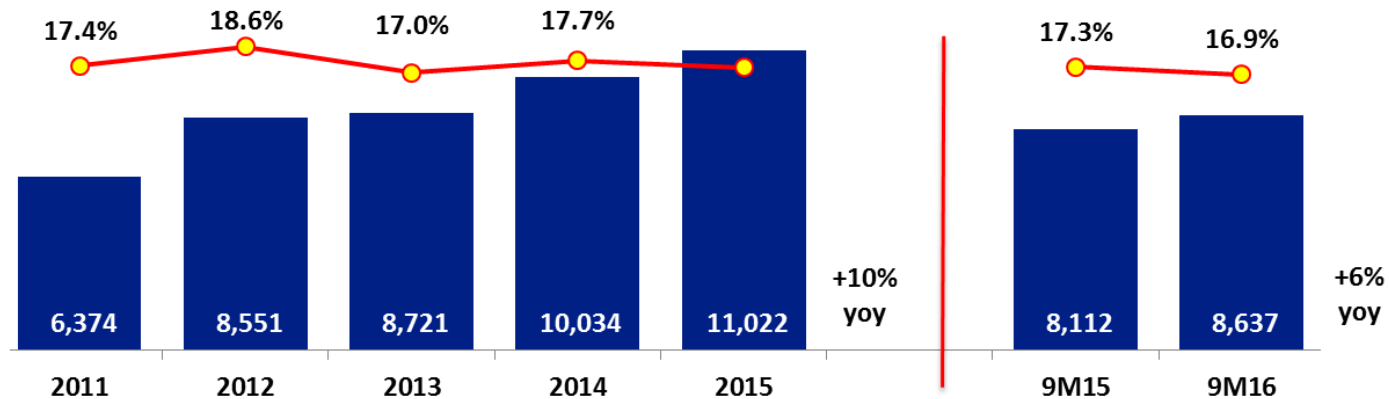
Commentary

- **9M16 EBITDA margin decreased yoy due mainly to**
 - Slower growth in the tourist destination hospitals due to changing in mix of international patients
- However, EBITDA margin of existing operations in 9M16 is similar to 9M15

Profitability Trend

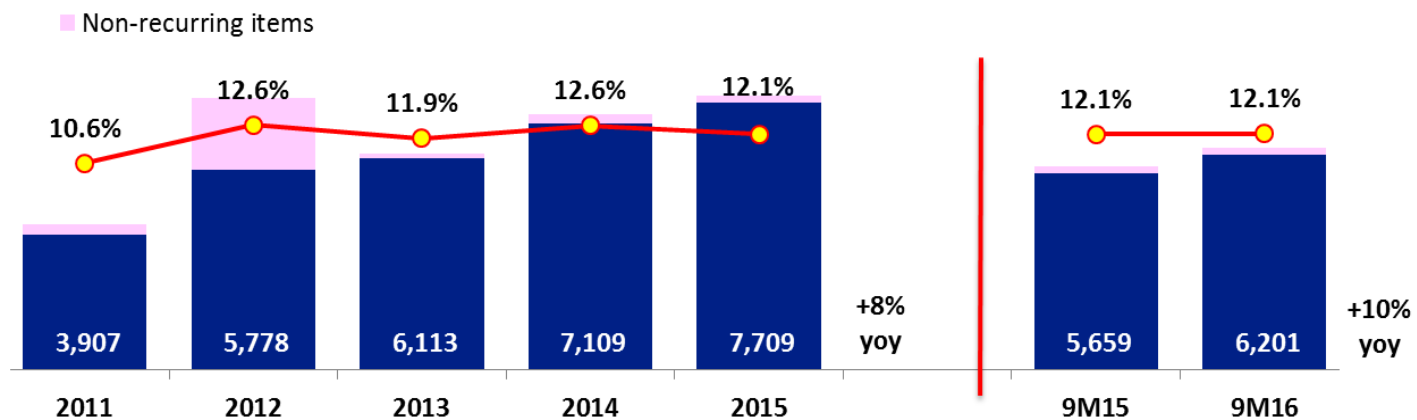
EBIT & EBIT Margin*

(THB mm)



Recurring Profit & Recurring Profit Margin*

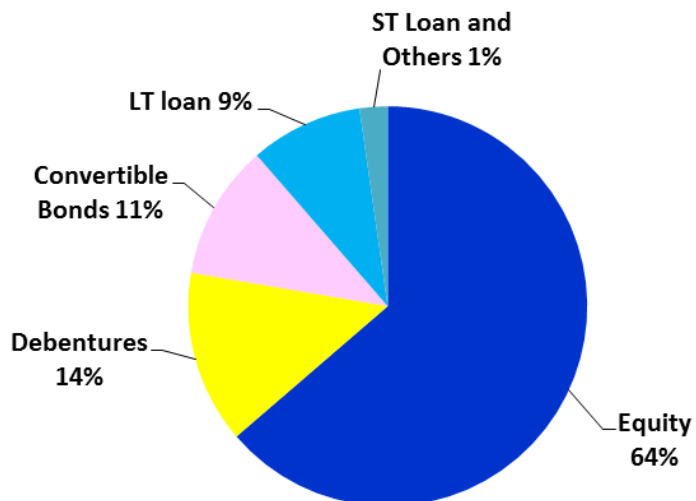
(THB mm)



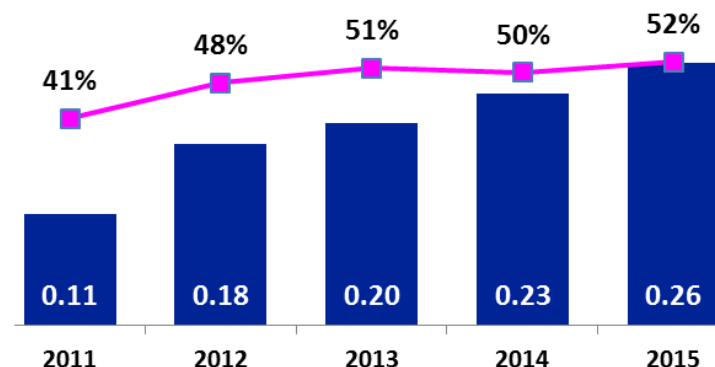
* Excluding non-recurring items

Capital Management

Capital Structure as of September 2016



Dividend Payment & Payout Ratio

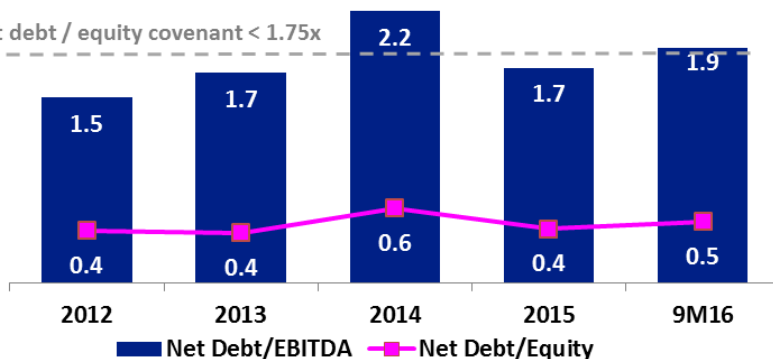


Remark:- Dividend payment has been adjusted to reflect the change in par value from THB 1.00/share to THB 0.10/share since April 2014

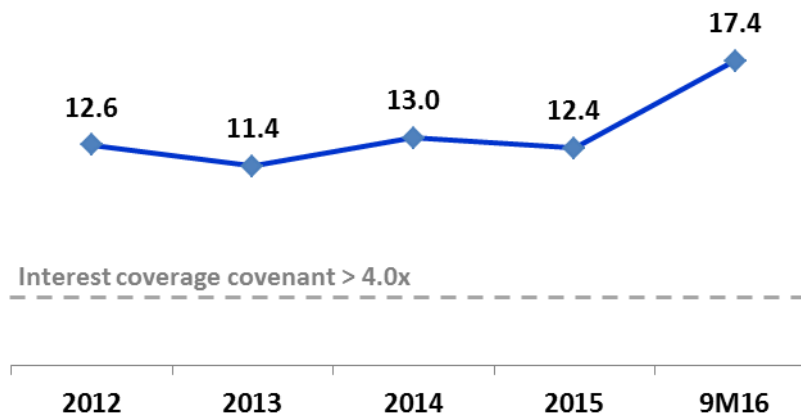
Gearing Ratios: Well Within Covenants

Net debt / EBITDA covenant < 3.25x

Net debt / equity covenant < 1.75x



Interest Coverage



Interest coverage covenant > 4.0x

Financial Management Policies

Leverage

- Maintain conservative leverage ratios
 - Debt / EBITDA not more than 2.5x
 - Debt / Equity not more than 1.0x

Dividend Policy

- More than 50% of Company only net profit, subject to operational results and the ability to pay dividend each year

Funding and Liquidity

- Manage liquidity as a group by using cash pooling system in order to minimize cost of fund and level of Group borrowing
- BDMS has strong financial flexibility
 - Has uncommitted short – term bank facilities of THB 10,000 mm

Interest Rate Risk

- Maintain appropriated proportion of fixed / floating interest rate debt
- Current proportion: Fixed 77% : Float 23%




Currency Risk

- Minimize currency risk by borrowing in THB or using hedging instruments

Appendix

Your Trusted Healthcare Network

Group 1 (Bangkok and West)

	Ownership	No. of Beds
1. Bangkok Hospital	100% 	343
2. Bangkok Heart Hospital	(BHQ) 100% 	97
3. Wattanosoth Hospital		48
4. Bangkok Huahin (BHN)		60
5. Bangkok Chinatown (BCT)	100% 	59
6. Bangkok Sanamchan (BSN)	100%	200
7. Thepakorn (TPK)	44.5%	100
8. Muang Petch (MPH)	100%	255
9. Muangraj	100%	125


Group 2

10. Samitivej Sukhumvit (SVH)	95.8% 	275
11. Samitivej Srinakarin (SNH)	95.8% 	400
12. Samitivej Sriracha (SSH)	69.8% 	150
13. Samitivej Thonburi (STH)	63.5%	150
14. Samitivej Chonburi (SCH)	100%	220
15. BNH Hospital (BNH)	91.5% 	144

Group 3 (East)

16. Bangkok Pattaya (BPH)	97.3% 	400
17. Bangkok Rayong (BRH)	100%	220
18. Bangkok Chanthaburi (BCH)	99.7%	170
19. Bangkok Trat (BTH)	99.8% 	114
20. Sri Rayong (SRH)	100%	195


Group 4 (North, Northeast and Cambodia)

21. Bangkok Chiangmai (BCM)	100% 	181
22. Bangkok Ratchasima (BKH)	91.4%	180
23. Bangkok Pakchong	91.4%	31
24. Bangkok Udon (BUD)	100%	120
25. Bangkok Phitsanulok (BPL)	100%	195




Group 4 (North, Northeast and Cambodia)

	Ownership	No. of Beds
26. Bangkok Khon Kaen (BKN)	100%	140
27. Bangkok Phrapradaeng (BPD)	84.0%	60
28. Royal Phnom Penh (RPH)	100%	100
29. Royal Angkor International (RAH)	80.0%	30

Group 5

30. Phyathai 1 (PT1)	100%	350
31. Phyathai 2 (PT2)	99.2% 	260
32. Phyathai 3 (PT3)	98.2%	240
33. Phyathai Sriracha (PTS)	74.4%	350
34. Phyathai Nawamin (PTN)	99.8%	140
35. Paolo Paholyothin (PLP)	100%	300
36. Paolo Samutprakarn(PLS)	93.6%	200
37. Paolo Chokchai 4 (PLC)	85.7%	148
38. Paolo Rangsit (PLR)	100%	150
39. Paolo Kaset	100%	162

Group 6 (South)

40. Bangkok Phuket (BPK)	99.7% 	266
41. Phuket International (PIH)	100% 	151
42. Dibuk (DBK)	99.7%	100
43. Bangkok Hat Yai (BHH)	98.8%	200
44. Bangkok Samui (BSH)	100% 	52

Group 7: Non-Hospital

1. National Healthcare System	100%
2. Bio Molecular Laboratories	95.0%
3. The Medicpharma	86.9%
4. A.N.B Laboratories	100%
5. Save Drug Center	100%
6. General Hospital Products	44.7%

Remark:- Number of beds is structured beds