

BANGKOK CHAIN HOSPITAL

THAILAND / HEALTHCARE

BCH TB

BUY

UNCHANGED

TARGET PRICE	THB28.50
CLOSE	THB20.50
UP/DOWNSIDE	+39.0%
PRIOR TP	THB28.50
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+17.1%

Top beneficiary of Omicron wave

- 1Q22 earnings remain strong; higher Covid patient volume to offset declining reimbursement rate of Covid treatments.
- 2022E core profit and non-Covid profit to exceed pre-Covid levels by 217% and 48%, respectively.
- Maintain BUY with our 2022 DCF-based TP of THB28.5.

Continuing to capture revenue from green Covid patients

The market is concerned about Covid-related revenue falling after the government launches its new Covid treatment payment scheme, UCEP Plus, starting on 16 Mar. From BCH's analyst meeting on 11 Mar, we are confident that it should continue to capture strong Covid-related service revenue under a new scheme in which green symptom Covid patients have three main treatment options: 1) hospitals for SSO patients which BCH can reimburse cTHB2,000 per day; 2) home isolation for non-SSO patients which BCH can reimburse up to THB12,000 per case; and 3) an alternative hospital package starting from THB28,000 per case for self-pay and insurance patients. The reimbursement rate for yellow and red symptom Covid patients will not be impacted by UCEP Plus.

Expect strong 1Q22 earnings to be in line with 4Q21

Despite the reimbursement rate declining under UCEP Plus, we expect the higher volume of Covid patients to offset the decline. The number of infected patients rose from an average of c6,700 cases per day to more than 20,000 over the past three weeks. The number of Covid patients under BCH's hospitals and hospitals also increased to c13,500 beds/day in Jan-Feb, higher than c3,700 beds/day in 4Q21 and c11,700 beds/day in 3Q21. Overall, we expect Covid-related revenue contributions to increase to 65-70% in 1Q22 from 59% in 4Q21, and roughly forecast a core profit of THB2.4b in 1Q22 (vs THB2.5b in 4Q21).

2022E non-Covid profit to grow by 27% to THB1.7b

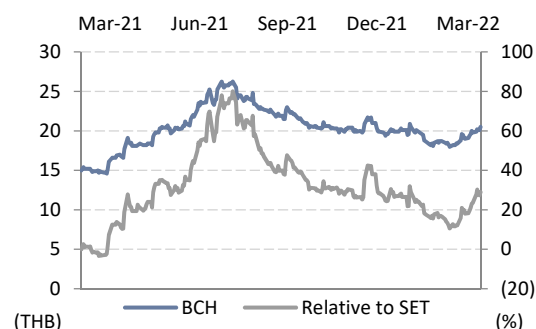
We estimate that 2021 non-Covid profit was THB1.3b and it should grow to THB1.7b in 2022, exceeding the pre-Covid level by 48%, driven by the recovery in both Thai and international non-Covid patient numbers, a larger SSO-registered member base and a better utilisation rate for its three new hospitals. We also expect an additional profit of THB1.9b based on Covid-related revenue of THB6.6b in 2022 (vs THB12.5b in 2021). As a result, we expect a total core profit of THB3.6b in 2022.

Revised 2022E core profit

We revise up our 2022E core profit by 68% to reflect the strong 1Q22 outlook. BCH trades at an attractive 14x 2022E P/E (30x non-Covid profit) vs its peers' average of 35x and its five-year average of 34x. A short-term catalyst would be strong 1Q22 earnings.

KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	21,405	17,319	12,451	13,414
Net profit	6,846	3,645	1,977	2,273
EPS (THB)	2.75	1.46	0.79	0.91
vs Consensus (%)	-	57.3	1.7	5.4
EBITDA	10,248	6,029	3,885	4,313
Core net profit	6,846	3,645	1,977	2,273
Core EPS (THB)	2.75	1.46	0.79	0.91
Chg. In EPS est. (%)	nm	68.3	0.0	nm
EPS growth (%)	456.9	(46.8)	(45.8)	14.9
Core P/E (x)	7.5	14.0	25.9	22.5
Dividend yield (%)	1.6	5.9	3.6	1.9
EV/EBITDA (x)	5.3	8.7	13.3	11.6
Price/book (x)	3.9	3.7	3.7	3.4
Net debt/Equity (%)	12.5	(2.1)	(8.1)	(19.0)
ROE (%)	68.9	27.4	14.4	15.8



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	13.9	3.0	41.4
Relative to country (%)	16.7	0.5	34.3
Mkt cap (USD m)	1,537		
3m avg. daily turnover (USD m)	14.8		
Free float (%)	44		
Major shareholder	Chalerm Harnphanich (33%)		
12m high/low (THB)	26.75/14.30		
Issued shares (m)	2,493.75		

Sources: Bloomberg consensus; FSSIA estimates



Teerapol Udomvej, CFA

 teerapol.udo@fssia.com
 +66 2611 3535

Investment thesis

BCH is the leading service provider under the Social Security Office (SSO) scheme with a 5% market share. It will likely be the hospital that benefits the most from Covid-19 services, including screening services and treatment services for Covid patients.

After Covid-19 subsidies, the World Medical Hospital (WMC) should continue to capture the rising demand from medical tourists. Currently, 50% of WMC's revenue is derived from international patients, especially Middle Eastern patients. The recovery of that patient segment should start in 2022.

BCH opened three new hospitals in 2020-21. We see Covid-19 as the driver for its new hospitals to turn around earlier than expected due to the influx of Covid patients, some of which could convert to regular patients in the future.

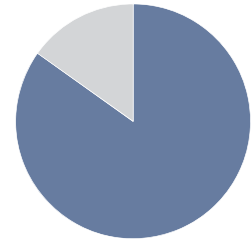
Company profile

The company operates its business as a group, providing healthcare services for both cash patients and patients under the social security scheme.

www.bangkokchainhospital.com

Principal activities (revenue, 2021)

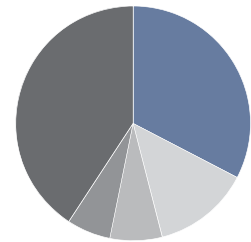
- Cash patient revenue - 84.8 %
- SSO patient revenue - 15.2 %



Source: Bangkok Chain Hospital

Major shareholders

- Chalerm Harnphanich - 32.6 %
- Thai NVDR - 13.4 %
- Somporn Harnphanich - 7.2 %
- Thailand Social Security Office - 6.1 %
- Others - 40.8 %



Source: Bangkok Chain Hospital

Catalysts

Key growth drivers include 1) more SSO registered members; 2) rising demand from medical tourists; and 3) an improving EBITDA margin led by new hospitals.

Risks to our call

Downside risks to our DCF-based target price include 1) a slowdown in international patients due to economic concerns, political protests or floods; 2) regulatory risks from drug prices and medical bill controls; and 3) SSO provision expenses following a limited SSO budget.

Event calendar

Date	Event
May 2022	1Q22 result announcement

Key assumptions

	2022E	2023E	2024E
	(%)	(%)	(%)
SSO volume growth	16	7	3
SSO revenue / patient growth	2	2	2
OPD volume growth	(10)	(40)	3
OPD revenue / patient growth	(8)	33	3
IPD volume growth	(32)	(54)	4
IPD revenue / patient growth	2	8	8

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in patient volume, we project 2023 earnings would rise by 2%, and vice versa, all else being equal.
- For every 1% increase in EBITDA margin, we project 2023 earnings would rise by 5%, and vice versa, all else being equal.

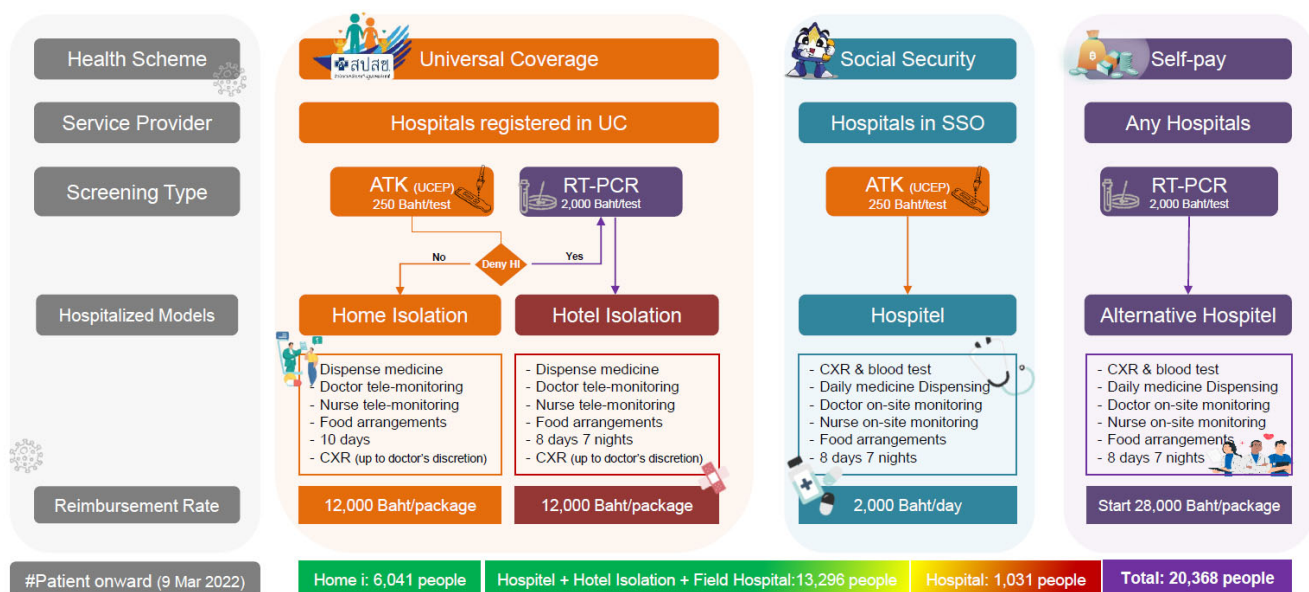
Source: FSSIA estimates

Key takeaways from 4Q21 analyst meeting

We attended BCH's analyst meeting on 11 Mar and received positive feedback from the meeting. Key takeaways are as follow:

- Covid-related revenue should grow q-q. The number of Covid patients jumped to c13,500 beds/day (12,500 beds for hospitels and 1,000 beds for hospitals) in Jan-Feb, higher than c3,700 beds/day (2,800 beds for hospitels and 900 beds for hospitals) in 4Q21 and c11,700 beds/day (10,200 beds for hospitels and 1,500 beds for hospitals) in 3Q21. Meanwhile, RT-PCR tests administered also increased to c3,700 cases/day in Jan-Feb from c2,200 cases/day in 4Q21.
- BCH should continue to capture the Covid-related revenue stream, even under the new UCEP Plus scheme starting from 16 Mar. Under the new scheme, green symptom Covid patients are encouraged to enter the Home Isolation program. BCH has also joined the program and can reimburse up to THB12,000 per case. For green symptom Covid patients under the SSO scheme, patients can still receive treatments in hospitels and BCH can reimburse up to THB2,000 per day. Alternatively, BCH is offering a hospitel package starting from THB28,000 per case for self-pay and insurance patients. Note that yellow and red symptom Covid patients can undergo a free RT-PCR test and be admitted in any hospital under UCEP Plus. Thus, there is no impact on yellow and red symptom patients.
- BCH maintains its revenue target of THB17b in 2022 (vs THB9b in 2019 and THB21b in 2021), consisting of Covid-related revenue at 9%, Moderna vaccinations at 18% and non-Covid revenue at 72%. This implies that non-Covid revenue should jump by 38% from THB8.9b in 2021 to THB12.3b in 2022. Key drivers would be more SSO registered members, renovations and expansions of its six hospitals and ramping up the revenue from its three new hospitals.
- BCH expects a strong recovery of international patient numbers in 2022. It plans to open the second foot Diabetic Center at KH Ramkhamhaeng (the flagship is at WMC) to attract more Middle East patients. Management also mentioned the potential to capture Saudi Arabian patients as BCH has already offered its products to Saudi Arabia's government.
- Management mentioned that there is a chance that the SSO may increase its reimbursement rate this year given that the last increase was in 2020. The SSO should factor in the treatment cost for Covid patients into both fixed payments (for green symptom patients) and high-cost care (for yellow and red symptoms).

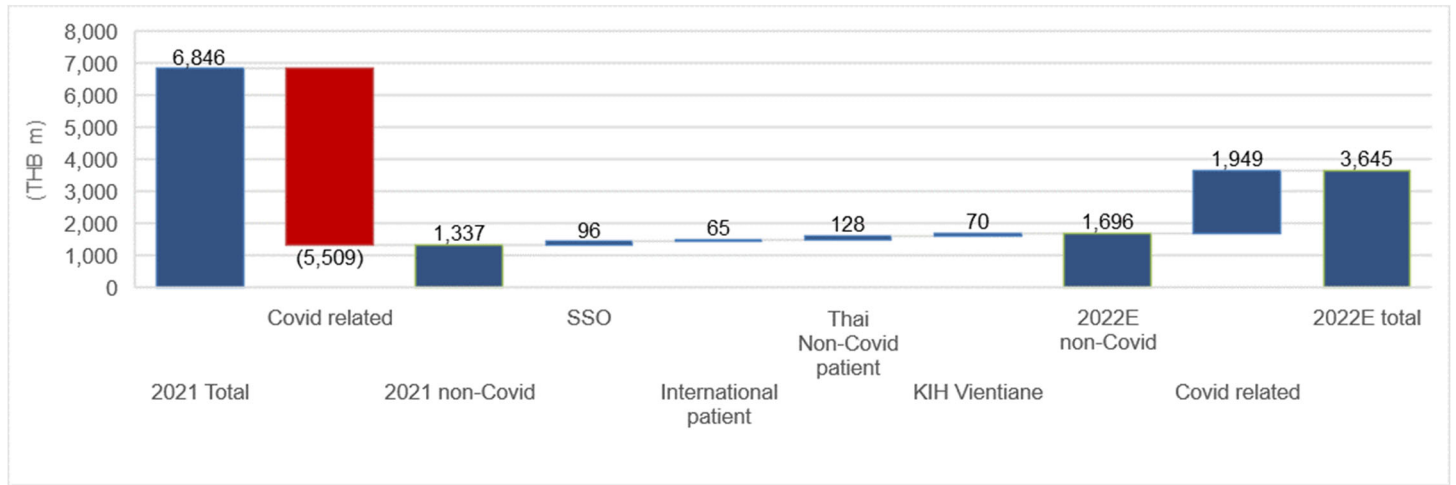
Exhibit 1: BCH's services for green symptom Covid patients



Remark: 1. Patients with more symptoms (yellow / red color) can undergo a free RT-PCR test and admitted in any hospital under UCEP COVID-19 coverage
 2. Private health insurance remains in effect for COVID-19, however, insurance claims are at the discretion of the hospital.

Source: BCH

Exhibit 2: 2022E core profit breakdown



Source: FSSIA estimates

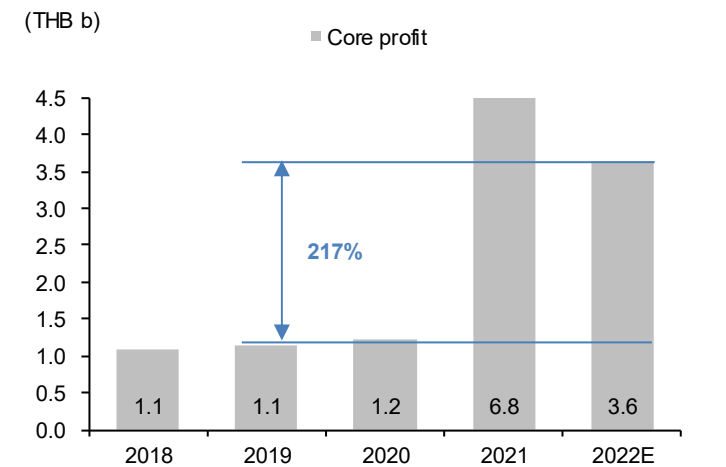
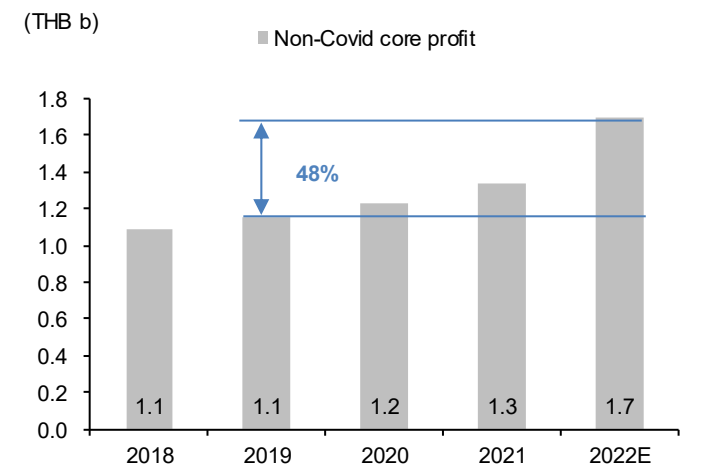
Exhibit 3: 2022E key earnings forecast items

Key growth items	Assumptions
SSO	Expect SSO registered members to increase by 16% (vs management's guidance of 24%)
International patients	Expect international patient revenue to grow by 26% with an NPM of 25-30%
Non-Covid Thai patients	Expect non-Covid Thai patient revenue in 2022 to grow by 15-20% with an NPM of 20%
KIH Vientiane	Expect KIH Vientiane's revenue to grow from THB150m in 2021 (134 days of operation) to THB500m in 2022 with an NPM of 25%
Covid-related services	Expect Covid-related revenue of THB6.6b in 2022, accounting for 53% of Covid-related revenue in 2021 with an NPM of 35-40% (vs 55% NPM estimated in 2021)

Source: FSSIA estimates

Exhibit 4: Non-Covid core profit to exceed 2019 level by 48%

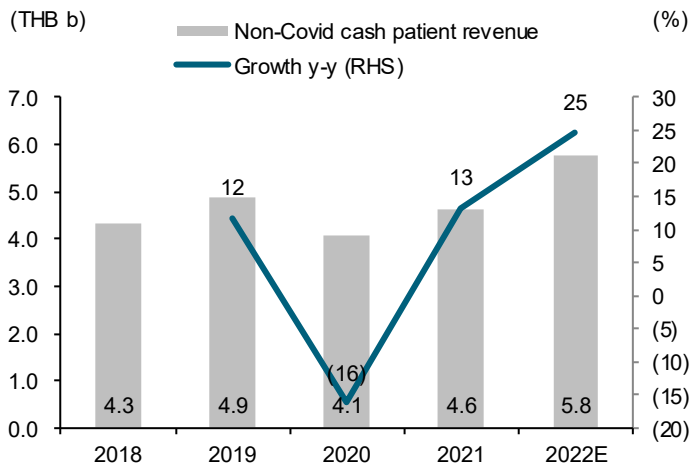
Exhibit 5: Core profit including Covid-related services to exceed 2019 level by 217%



Sources: BCH; FSSIA estimates

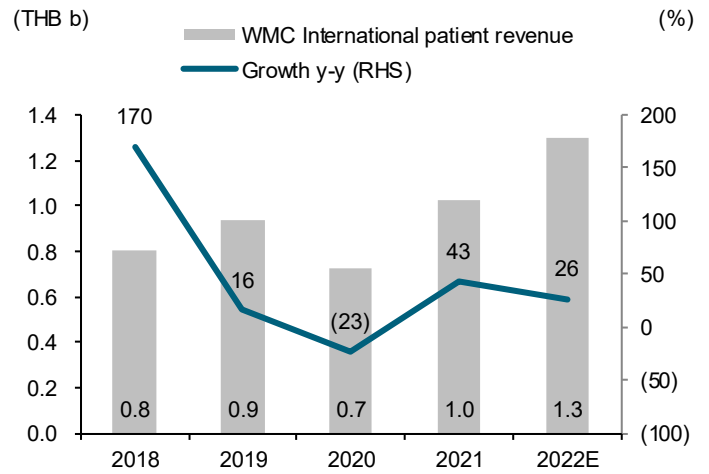
Sources: BCH; FSSIA estimates

Exhibit 6: Non-Covid cash patient revenue



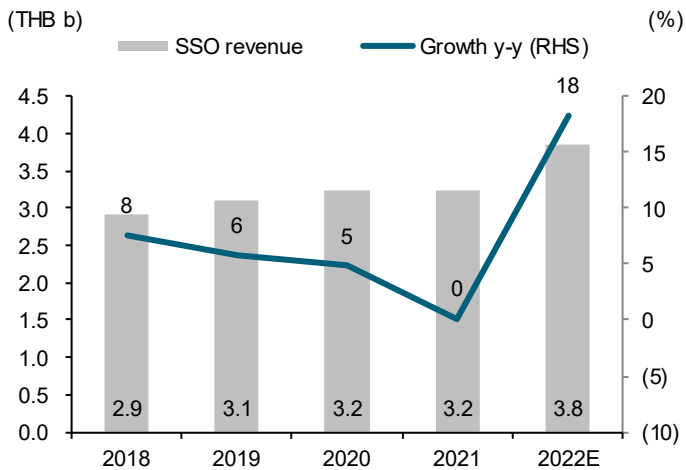
Note: Exclude international patient revenue at WMC
Sources: BCH; FSSIA estimates

Exhibit 7: International patient revenue (at WMC only)



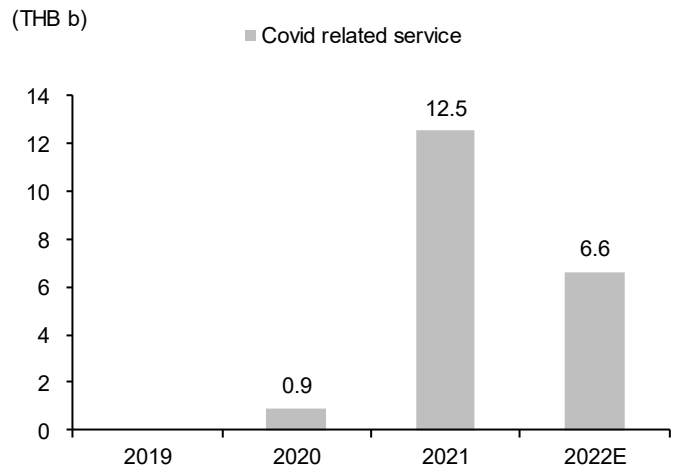
Sources: BCH; FSSIA estimates

Exhibit 8: SSO revenue



Sources: BCH; FSSIA estimates

Exhibit 9: Covid-related revenue



Sources: BCH; FSSIA estimates

Recap: 4Q21 results review

BCH reported a strong 4Q21 core profit of THB2.5b (+790% y-y, -14% q-q), beating our estimate and Bloomberg's consensus estimate by 65-75% due to better-than-expected revenue and the strong EBITDA margin at 55% (vs our forecast of 46%).

Revenue jumped 195% y-y in 4Q21 thanks to the recovery of non-Covid patient numbers and revenue from 0.34m Moderna vaccination doses. However, revenue dropped 14% q-q due to the slowdown in Covid-related revenue.

SSO revenue jumped 24% y-y and 46% q-q thanks to the pent-up demand for high-cost treatments and additional SSO revenue of THB59m for chronic disease treatments, as the actual amount received was larger than the accrued amount.

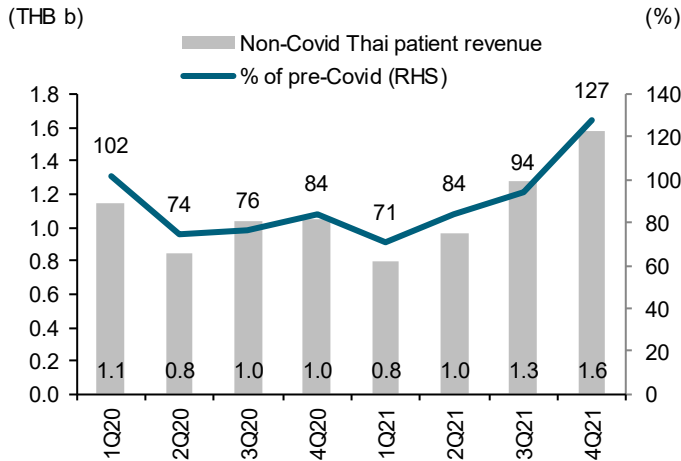
The EBITDA margin improved to 55% in 4Q21 from 52% in 3Q21 and 27% in 4Q20.

Exhibit 10: 4Q21 results review

	4Q20	1Q21	2Q21	3Q21	4Q21	----- Change -----		2020	2021	Chg
	(THB m)	(THB m)	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(THB m)	(y-y %)
Sales	2,308	2,316	4,313	7,959	6,816	(14)	195	8,928	21,405	140
COGS (incl. depreciation)	(1,571)	(1,619)	(2,318)	(3,689)	(2,935)	(20)	87	(5,975)	(10,561)	77
Gross profit	737	698	1,995	4,271	3,881	(9)	427	2,953	10,844	267
SG&A	(363)	(291)	(401)	(367)	(411)	12	13	(1,213)	(1,469)	21
Operating profit	374	407	1,594	3,904	3,470	(11)	829	1,741	9,374	439
Net other income	35	68	18	19	24	24	(32)	93	129	38
Interest expense	(35)	(28)	(35)	(40)	(48)	21	38	(132)	(151)	14
Pretax profit	373	447	1,577	3,882	3,445	(11)	822	1,702	9,352	449
Income Tax	(68)	(84)	(312)	(772)	(679)	(12)	904	(313)	(1,846)	490
Associates	1	1	1	0	1	699	(18)	3	2	n/a
Minority interest	(28)	(40)	(121)	(215)	(286)	33	925	(163)	(661)	307
Core profit	279	324	1,146	2,896	2,480	(14)	790	1,229	6,846	457
Reported net profit	279	324	1,146	2,896	2,480	(14)	790	1,229	6,846	457
Outstanding shares (m)	2,494	2,494	2,494	2,494	2,494	0	0	2,494	2,494	0
Core EPS (THB)	0.11	0.13	0.46	1.16	0.99	(14)	790	0.49	2.75	457
EPS (THB)	0.11	0.13	0.46	1.16	0.99	(14)	790	0.49	2.75	457
COGS (excl. depreciation)	1,362	1,402	2,113	3,468	2,703	64	169	5,193	9,687	87
Depreciation	210	217	205	220	232	7	7	782	874	12
EBITDA	618	691	1,817	4,143	3,725	128	411	2,616	10,377	297
Key ratios	(%)	(%)	(%)	(%)	(%)	(ppt)	(ppt)	(%)	(%)	(ppt)
Gross margin	32	30	46	54	57	3	25	33	51	18
SG&A/Revenue	16	13	9	5	6	1	(10)	14	7	(7)
EBITDA margin	27	30	42	52	55	3	28	29	48	19
Net profit margin	12	14	27	36	36	(0)	24	14	32	18
Operating stats	(y-y %)	(y-y %)	(y-y %)	(y-y %)	(y-y %)					
Cash-OPD revenue growth	23	45	117	70	101					
Cash-OPD volume growth	11	39	176	155	197					
Cash-OPD revenue per head growth	10	4	(21)	(33)	(32)					
Cash-IPD revenue growth	(17)	(22)	263	966	526					
Cash-IPD volume growth	(27)	(20)	454	1,352	249					
Cash-IPD revenue per head growth	14	(3)	(34)	(27)	79					
SSO revenue growth	12	1	(4)	(18)	24					
SSO registered member ('000)	881	888	890	894	899					
SSO registered member growth	0	0	0	1	2					
SSO revenue per head growth	11	1	(4)	(19)	21					

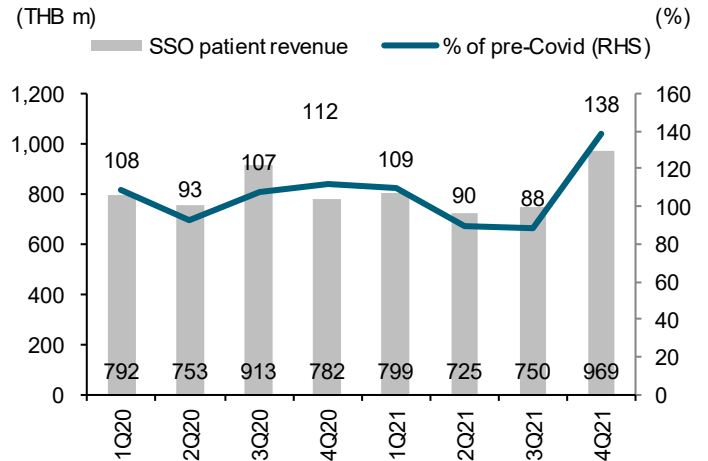
Sources: CHG; FSSIA estimates

Exhibit 11: Non-Covid Thai general patient revenue



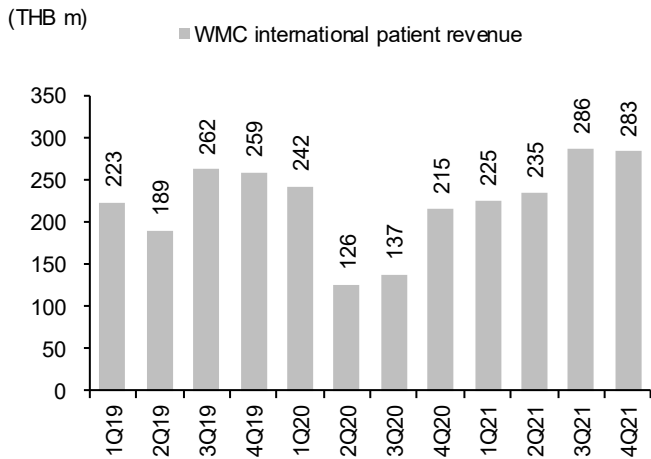
Source: BCH

Exhibit 12: SSO revenue



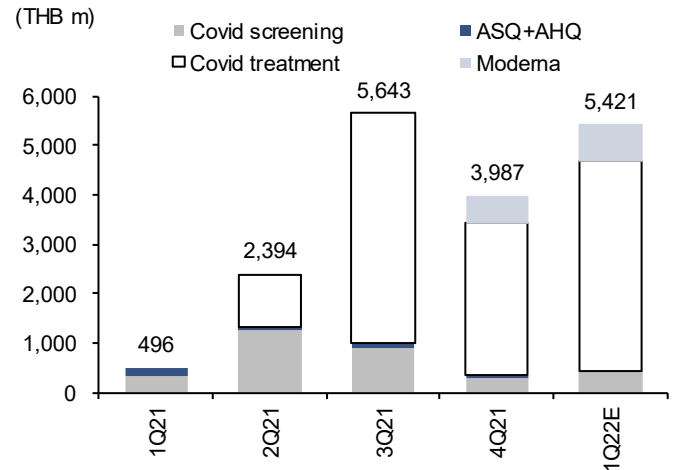
Source: BCH

Exhibit 13: WMC – international patient revenue



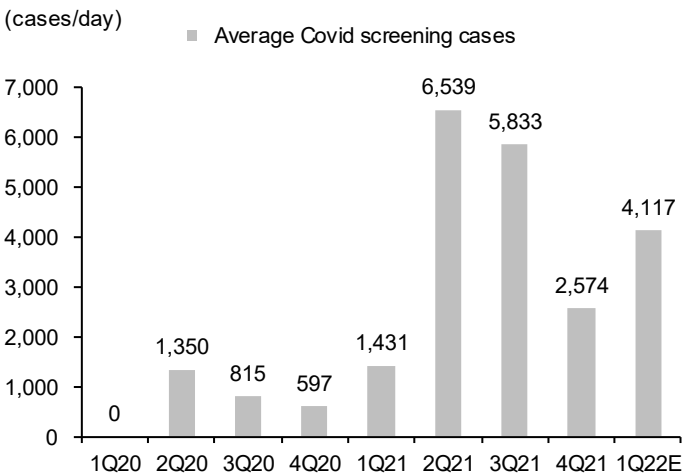
Source: BCH

Exhibit 14: Covid-related revenue



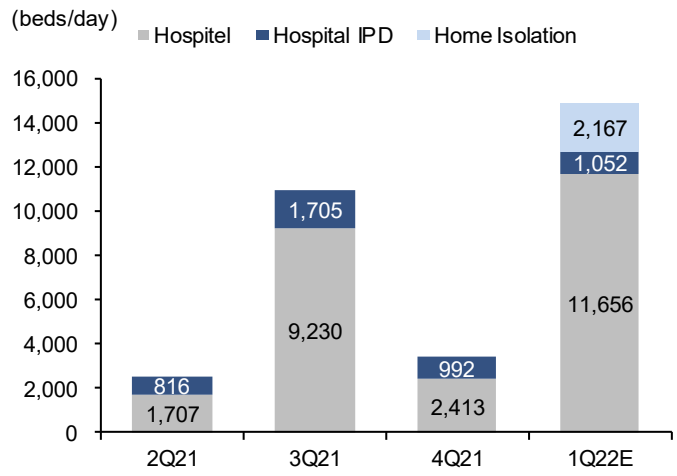
Sources: BCH; FSSIA estimates

Exhibit 15: Number of Covid screening cases



Sources: BCH; FSSIA estimates

Exhibit 16: Number of Covid patients under BCH



Sources: BCH; FSSIA estimates

Exhibit 17: Forecast revisions

	Current			Previous			% Change		
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
SSO registered members ('000)	1,036	1,108	1,142	1,000	1,010	1,142	3.6	9.7	0.0
SSO revenue per head (THB)	3,705	3,779	3,855	3,600	3,708	3,855	2.9	1.9	0.0
Cash-OPD visit number per day (no.)	6,600	3,967	4,086	4,000	3,480	4,086	65.0	14.0	0.0
Cash-OPD revenue per head (THB)	2,100	2,800	2,884	3,068	3,099	2,884	(31.6)	(9.6)	0.0
Cash-IPD admission number per day (no.)	355	165	171	197	177	171	80.0	(7.2)	0.0
Cash-IPD revenue per head (THB)	65,000	70,000	75,385	73,562	76,504	75,385	(11.6)	(8.5)	0.0
Revenue (THB m)	17,319	12,451	13,414	13,374	12,637	13,414	29.5	(1.5)	0.0
EBITDA margin (%)	34.8	31.2	32.2	30.2	30.2	32.2	4.6	1.0	0.0
Core profit (THB m)	3,645	1,977	2,273	2,166	1,977	2,273	68.3	0.0	0.0

Note: Change of items in percentage terms are represented in ppt change

Source: FSSIA estimates

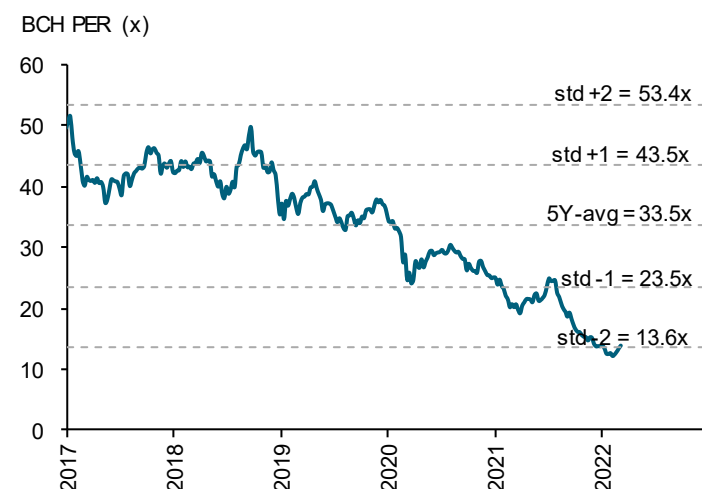
Exhibit 18: DCF-derived TP

Cost of equity assumptions	(%)	Cost of debt assumptions	(%)
Risk-free rate	3.0	Pre-tax cost of debt	4.0
Market risk premium	8.0	Marginal tax rate	20.0
Stock beta	1.0		
Cost of equity, Ke	10.6	Net cost of debt, Kd	3.2
Weight applied	70.0	Weight applied	30.0
WACC	8.4		

DCF valuation estimate	(THB b)	(THB/share)	Comments
NPV	26.5	10.6	WACC 8.4%, Risk-free rate 3%, Risk premium 8%
Terminal value	45.7	18.3	Terminal growth 3%
Cash & liquid assets	4.4	1.7	At end-2022E
Investments	0.0	0.0	At end-2022E
Debt	(4.0)	(1.6)	At end-2022E
Minorities	(1.5)	(0.6)	At end-2022E
Residual ordinary equity	71.0	28.5	

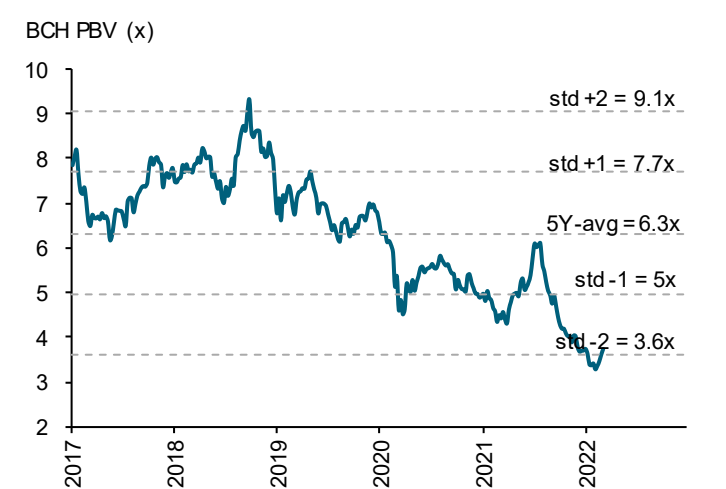
Source: FSSIA estimates

Exhibit 19: Historical P/E band



Sources: Bloomberg; FSSIA estimates

Exhibit 20: Historical P/BV band



Sources: Bloomberg; FSSIA estimates

Exhibit 21: Peer comparisons as of 11 Mar-22

Company	BBG	Rec	Share price			Market Cap (USD m)	PE		ROE		PBV		- EV/ EBITDA -	
			Current (LCY)	Target (LCY)	Upside (%)		22E (x)	23E (x)	22E (%)	23E (%)	22E (x)	23E (x)	22E (x)	23E (x)
Thailand														
Bangkok Dusit Med Service	BDMS TB	BUY	25.50	29.00	13.7	12,188	40.1	32.3	11.8	13.9	4.7	4.3	20.4	17.3
Bumrungrad Hospital	BH TB	BUY	166.00	190.00	14.5	3,967	48.4	31.5	15.7	23.0	7.6	6.9	28.1	19.7
Bangkok Chain Hospital	BCH TB	BUY	20.50	28.50	39.0	1,537	14.0	25.9	27.4	14.4	3.7	3.7	8.7	13.3
Chularat Hospital	CHG TB	BUY	3.70	4.70	27.0	1,224	19.1	27.9	28.2	19.2	5.4	5.3	12.5	16.8
Praram 9 Hospital	PR9 TB	BUY	11.80	15.00	27.1	279	25.0	19.5	8.4	10.2	2.0	2.0	10.3	8.4
Thonburi Healthcare Group	THG TB	HOLD	60.00	32.50	(45.8)	1,529	112.1	81.6	5.4	7.3	6.1	5.9	39.2	33.7
Vibhavadi Medical Center	VIBHA TB	BUY	2.58	3.20	24.0	1,053	37.4	32.3	9.4	9.2	3.1	2.9	27.6	24.8
Ramkhamhaeng Hospital	RAM TB	BUY	37.50	48.00	28.0	1,353	24.6	22.2	13.5	14.5	3.3	3.1	16.7	15.1
Rajthanee Hospital	RJH TB	n/a	32.25	n/a	n/a	289	9.8	20.1	56.4	25.5	6.5	5.0	7.4	13.4
Ekachai Medical Care	EKH TB	n/a	7.70	n/a	n/a	139	14.2	26.7	33.5	15.0	5.3	4.6	9.4	15.3
Thailand average						23,559	34.5	32.0	21.0	15.2	4.8	4.4	18.0	17.8
Regional														
Ramsay Health Care	RHC AU	n/a	61.70	n/a	n/a	10,247	30.0	35.1	11.3	9.8	3.4	3.4	11.3	11.5
Ihh Healthcare Bhd	IHH SP	n/a	2.06	n/a	n/a	13,273	36.9	34.7	6.4	6.7	2.4	2.3	16.2	15.1
Ryman Healthcare	RYM NZ	n/a	9.56	n/a	n/a	3,247	20.6	21.2	12.2	7.4	2.1	1.9	26.4	22.2
Apollo Hospitals Enterprise	APHS IN	n/a	4,854	n/a	n/a	9,209	821.9	75.5	2.4	19.1	19.4	16.8	64.5	31.9
Kpj Healthcare Berhad	KPJ MK	n/a	0.99	n/a	n/a	1,022	76.2	30.0	2.8	6.6	2.2	2.0	15.3	12.2
Raffles Medical Group	RFMD SP	n/a	1.15	n/a	n/a	1,595	28.5	30.0	8.4	7.5	2.5	2.3	15.4	14.9
Mitra Keluarga Karyasehat	MIKA IJ	n/a	2,200	n/a	n/a	2,187	27.5	30.8	21.2	18.2	6.5	5.7	17.5	19.1
Aier Eye Hospital Group	300015 CH	n/a	32.50	n/a	n/a	26,155	71.6	53.6	20.1	22.0	19.5	13.5	40.6	32.3
Regional average						66,936	139.2	38.9	10.6	12.2	7.3	6.0	25.9	19.9
Overall average						90,495	81.0	35.0	16.4	13.9	5.9	5.1	21.5	18.7

Sources: Bloomberg; FSSIA estimates

Financial Statements

Bangkok Chain Hospital

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Revenue	8,928	21,405	17,319	12,451	13,414
Cost of goods sold	(5,193)	(9,687)	(9,697)	(7,321)	(7,827)
Gross profit	3,735	11,717	7,622	5,130	5,587
Other operating income	-	-	-	-	-
Operating costs	(1,213)	(1,469)	(1,593)	(1,245)	(1,274)
Operating EBITDA	2,523	10,248	6,029	3,885	4,313
Depreciation	(782)	(874)	(976)	(1,009)	(1,047)
Goodwill amortisation	-	-	-	-	-
Operating EBIT	1,741	9,374	5,053	2,876	3,266
Net financing costs	(125)	(147)	(102)	(69)	(49)
Associates	3	2	.	2	2
Recurring non-operating income	89	127	131	137	143
Non-recurring items	0	0	0	0	0
Profit before tax	1,705	9,354	5,082	2,944	3,360
Tax	(313)	(1,846)	(1,016)	(588)	(672)
Profit after tax	1,392	7,507	4,065	2,355	2,689
Minority interests	(163)	(661)	(420)	(378)	(416)
Preferred dividends	-	-	-	-	-
Other items	-	-	-	-	-
Reported net profit	1,229	6,846	3,645	1,977	2,273
Non-recurring items & goodwill (net)	0	0	0	0	0
Recurring net profit	1,229	6,846	3,645	1,977	2,273
Per share (THB)					
Recurring EPS *	0.49	2.75	1.46	0.79	0.91
Reported EPS	0.49	2.75	1.46	0.79	0.91
DPS	0.23	0.33	1.20	0.73	0.40
Diluted shares (used to calculate per share data)	2,494	2,494	2,494	2,494	2,494
Growth					
Revenue (%)	0.5	139.8	(19.1)	(28.1)	7.7
Operating EBITDA (%)	10.7	306.3	(41.2)	(35.6)	11.0
Operating EBIT (%)	7.8	438.6	(46.1)	(43.1)	13.6
Recurring EPS (%)	7.0	456.9	(46.8)	(45.8)	14.9
Reported EPS (%)	8.3	456.9	(46.8)	(45.8)	14.9
Operating performance					
Gross margin inc. depreciation (%)	33.1	50.7	38.4	33.1	33.8
Gross margin of key business (%)	33.1	50.7	38.4	33.1	33.8
Operating EBITDA margin (%)	28.3	47.9	34.8	31.2	32.2
Operating EBIT margin (%)	19.5	43.8	29.2	23.1	24.3
Net margin (%)	13.8	32.0	21.0	15.9	16.9
Effective tax rate (%)	18.4	19.7	20.0	20.0	20.0
Dividend payout on recurring profit (%)	46.7	12.0	82.1	92.2	43.5
Interest cover (X)	14.6	64.5	51.1	43.8	69.5
Inventory days	16.9	12.9	16.4	19.1	15.9
Debtor days	67.5	42.9	74.7	104.0	96.5
Creditor days	52.7	40.3	51.1	59.5	49.5
Operating ROIC (%)	11.4	51.4	26.9	16.3	19.2
ROIC (%)	11.5	50.1	26.5	16.4	19.2
ROE (%)	18.7	68.9	27.4	14.4	15.8
ROA (%)	9.8	35.5	16.9	11.1	12.9
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Cash patient revenue	5,688	18,161	13,481	8,261	9,013
SSO patient revenue	3,240	3,244	3,838	4,189	4,401
NHSO patient revenue	0	0	0	0	0

Sources: Bangkok Chain Hospital; FSSIA estimates

Financial Statements

Bangkok Chain Hospital

Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	1,229	6,846	3,645	1,977	2,273
Depreciation	782	874	976	1,009	1,047
Associates & minorities	-	-	-	-	-
Other non-cash items	94	660	418	378	416
Change in working capital	(593)	(2,204)	1,130	211	108
Cash flow from operations	1,512	6,175	6,170	3,575	3,843
Capex - maintenance	(2,546)	(678)	(864)	(623)	(671)
Capex - new investment	-	-	-	-	-
Net acquisitions & disposals	5	(1)	0	0	0
Other investments (net)	-	-	-	-	-
Cash flow from investing	(2,541)	(679)	(864)	(623)	(671)
Dividends paid	(574)	(821)	(2,992)	(1,823)	(989)
Equity finance	0	0	0	0	0
Debt finance	1,837	(274)	(3,000)	(800)	(800)
Other financing cash flows	(168)	(90)	(210)	(189)	(208)
Cash flow from financing	1,096	(1,186)	(6,202)	(2,812)	(1,997)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	67	4,310	(896)	140	1,176
Free cash flow to firm (FCFF)	(896.48)	5,647.32	5,430.11	3,039.43	3,240.86
Free cash flow to equity (FCFE)	640.69	5,131.91	2,096.25	1,963.04	2,164.78

Per share (THB)	2020	2021	2022E	2023E	2024E
FCFF per share	(0.36)	2.26	2.18	1.22	1.30
FCFE per share	0.26	2.06	0.84	0.79	0.87
Recurring cash flow per share	0.84	3.36	2.02	1.35	1.50

Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	18,773	19,417	20,283	20,906	21,576
Less: Accumulated depreciation	(6,369)	(7,175)	(8,151)	(9,160)	(10,206)
Tangible fixed assets (net)	12,404	12,243	12,132	11,746	11,370
Intangible fixed assets (net)	522	540	540	540	540
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	33	34	34	34	34
Cash & equivalents	946	5,256	4,360	4,500	5,676
A/C receivable	1,487	3,547	3,547	3,547	3,547
Inventories	250	437	437	330	353
Other current assets	856	4,302	1,661	56	60
Current assets	3,538	13,541	10,005	8,433	9,636
Other assets	30	26	26	26	26
Total assets	16,527	26,384	22,737	20,779	21,606
Common equity	6,885	12,980	13,633	13,787	15,072
Minorities etc.	742	1,326	1,536	1,725	1,933
Total shareholders' equity	7,626	14,306	15,169	15,512	17,004
Long term debt	5,150	6,791	3,791	2,991	2,191
Other long-term liabilities	207	170	170	170	170
Long-term liabilities	5,357	6,961	3,961	3,161	2,361
A/C payable	784	1,358	1,359	1,026	1,097
Short term debt	2,165	250	250	250	250
Other current liabilities	595	3,510	1,998	830	894
Current liabilities	3,544	5,117	3,607	2,106	2,241
Total liabilities and shareholders' equity	16,527	26,384	22,737	20,779	21,606
Net working capital	1,214	3,418	2,288	2,077	1,969
Invested capital	14,203	16,260	15,020	14,423	13,939

* Includes convertibles and preferred stock which is being treated as debt

Per share (THB)	2020	2021	2022E	2023E	2024E
Book value per share	2.76	5.20	5.47	5.53	6.04
Tangible book value per share	2.55	4.99	5.25	5.31	5.83

Financial strength	2020	2021	2022E	2023E	2024E
Net debt/equity (%)	83.5	12.5	(2.1)	(8.1)	(19.0)
Net debt/total assets (%)	38.5	6.8	(1.4)	(6.1)	(15.0)
Current ratio (x)	1.0	2.6	2.8	4.0	4.3
CF interest cover (x)	6.1	35.9	21.6	29.5	45.1

Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	41.6	7.5	14.0	25.9	22.5
Recurring P/E @ target price (x) *	57.8	10.4	19.5	35.9	31.3
Reported P/E (x)	41.6	7.5	14.0	25.9	22.5
Dividend yield (%)	1.1	1.6	5.9	3.6	1.9
Price/book (x)	7.4	3.9	3.7	3.7	3.4
Price/tangible book (x)	8.0	4.1	3.9	3.9	3.5
EV/EBITDA (x) **	23.1	5.3	8.7	13.3	11.6
EV/EBITDA @ target price (x) **	31.0	7.2	12.0	18.4	16.2
EV/invested capital (x)	4.1	3.3	3.5	3.6	3.6

* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income

Sources: Bangkok Chain Hospital; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PCSGH	PDJ	PG	PHOL	PLANB	PLANET
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TRC	TSC	TSR	TSTE	TSTH
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSIB	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T	TAE	TAKUNI	TBSP
TCC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
TMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
UPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIJK	WP	XO
YUASA	ZEN	ZIGA	ZMICO							

GOOD LEVEL										
7UP	A	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
B52	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
GSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
OCEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TIPIP	TPLAS
TTI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		

Description

Score Range

Excellent

90-100

Very Good

80-89

Good

70-79

Disclaimer:

The disclosure of the survey results of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey results may be changed after that date. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; ** delisted

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAHA	AP	AQUA	ARROW
ASK	ASP	AYUD	B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	CM	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									
DECLARED										
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
BM	BROCK	BUI	CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

Level	
Certified	This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties.
Declared	This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

Disclaimer:

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: The Securities and Exchange Commission, Thailand; * FSSIA's compilation

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

Teerapol Udomvej, CFA FSS International Investment Advisory Securities Co., Ltd

The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

This report has been prepared by FSS International Investment Advisory Company Limited (FSSIA). The information herein has been obtained from sources believed to be reliable and accurate; however FSS makes no representation as to the accuracy and completeness of such information. Information and opinions expressed herein are subject to change without notice. FSS has no intention to solicit investors to buy or sell any security in this report. In addition, FSS does not guarantee returns nor price of the securities described in the report nor accept any liability for any loss or damage of any kind arising out of the use of such information or opinions in this report. Investors should study this report carefully in making investment decisions. All rights are reserved.

This report may not be reproduced, distributed or published by any person in any manner for any purpose without permission of FSSIA. Investment in securities has risks. Investors are advised to consider carefully before making investment decisions.

Company	Ticker	Price	Rating	Valuation & Risks
Bangkok Chain Hospital	BCH TB	THB 20.50	BUY	Downside risks to our DCF-based target price include 1) a slowdown in international patients due to economic concerns, political protests or floods; 2) regulatory risks from drug prices and medical bill controls; and 3) SSO provision expenses following a limited SSO budget.
Bangkok Dusit Medical Services	BDMS TB	THB 25.50	BUY	Downside risks to our DCF-based target price include 1) a slowdown in international patients due to economic concerns, political protests or floods; 2) regulatory risks from drug price and medical bill controls; and 3) higher-than-expected capex and opex for CoE projects.
Bumrungrad Hospital	BH TB	THB 166.00	BUY	Downside risks to our DCF-based target price include 1) a slowdown in international patients due to economic concerns, political protests or floods; 2) regulatory risks from drug prices and medical bill controls; and 3) higher medical fee discount promotions, leading to a weaker EBITDA margin.
Chularat Hospital	CHG TB	THB 3.70	BUY	Downside risks to our DCF-based target price include 1) a slowdown in Thai patient volume due to economic concerns; 2) regulatory risks from drug price and medical bill controls; and 3) SSO provision expenses following limited budgets from the SSO.
Praram 9 Hospital	PR9 TB	THB 11.80	BUY	Downside risks to our DCF-based target price include 1) weak patient volumes following the economic slowdown; 2) regulatory risks from drug price and medical bill controls; and 3) higher-than-expected expenses from its new building.
Thonburi Healthcare Group	THG TB	THB 60.00	HOLD	Downside risks to our DCF-based target price include 1) weak patient volume following the economic slowdown; 2) regulatory risks from drug prices and medical bill controls; and 3) higher-than-expected expenses from new hospitals. Upside risk is big-lot sales of Jin Wellbeing County units.
Vibhavadi Medical Center	VIBHA TB	THB 2.58	BUY	Downside risks to our DCF-based target price include 1) a slowdown in Thai patient volume due to economic concerns; 2) regulatory risks from drug prices and medical bill controls; and 3) SSO provision expenses following limited budgets from the SSO.
Ramkhamhaeng Hospital	RAM TB	THB 37.50	BUY	Downside risks to our DCF-based target price include 1) weak patient volumes following the economic slowdown; 2) regulatory risks from drug price and medical bill controls; and 3) losses from its subsidiary companies.

Source: FSSIA estimates

Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finansia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 11-Mar-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as $(\text{target price}^* - \text{current price}) / \text{current price}$.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

Industry Recommendations

Overweight. The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

Neutral. The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

Underweight. The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

Country (Strategy) Recommendations

Overweight (O). Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Neutral (N). Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Underweight (U). Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.