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Raffles Medical Group Ltd (SGX:BSL) | **As of 9 February 2019**

Sector: Healthcare | **Closing Price: S$1.10** | **Recommendation: SELL**

Industry: Providers & Services | **Target Price: S$0.86** | **Upside/(Downside): (22.0%)**

Figure 1: Market Data

Market Cap (S$ mn)	1,977.2
Shares Outstanding (mn)	1,797.4
LTM P/E (x)	27.3
LTM EV/EBITDA (x)	21.1
ROE (%)	8.53
Avg 3M Daily Shares (mn)	1.63
Free Float (mn)	827.4
52-Week Price Range	0.98 – 1.21
Dividend Yield (%)	2.06

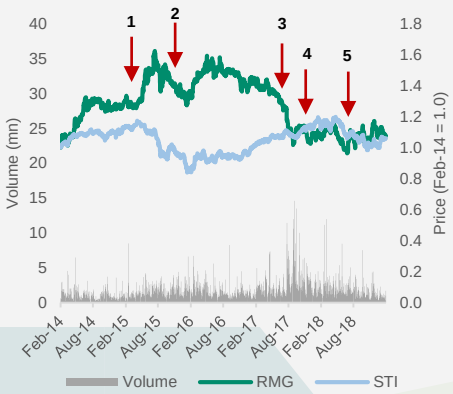
Source: Bloomberg, Reuters, Company Data

Figure 2: Major Shareholders (% Shares)

Raffles Medical Holdings	38.18%
Loo, Choon Yong	10.04%
Standard Life Aberdeen	5.97%
S&D Holdings	3.25%
FIL Limited	2.71%

Source: Company Data

Figure 3: Price Performance (Rebased)



Source: Reuters

Figure 4: Historical Events

Date	Event
May-15	**1/** Formed JV with LiuJiazui Group to develop 400-bed Shanghai hospital.
Sep-15	**2/** 3Q15 earnings miss due to softer local operations and rising staff costs.
Jul-17	**3/** 1Q17 earnings miss from weaker medical tourists patient volume.
Sep-17	**4/** Management guided 3Y EBITDA breakeven in China.
Apr-18	**5/** 1Q18 earnings in-line, guided weaker local revenues and rising costs from China.

Source: Bloomberg, MDRMS Estimates

Executive Summary

Disappointing revenue growths since 2016 have cast doubts on RMG's ability to grow its operations further in Singapore, pushing RMG to venture into China to seek its next stage of growth. Due to its high fixed cost model, margins have been on the decline since, resulting in lacklustre earnings. Moving forward, we believe weakness in earnings from its local operations will persist, given its structural disadvantages in its group practice model, and its poor positioning in the local medical industry. More importantly, we are bearish in its China foray, given China's inherently challenging operating environment, and what we perceive as unrealistic expectations set by management. As such, we initiate coverage on Raffles Medical Group ("RMG") with a **SELL** recommendation, with a target price of S$0.86, representing a downside of 22.0%

Key Highlights

Crippled by Poor Operating Model. In an industry where customer loyalty lies with individual doctors rather than hospital brands, RMG is severely disadvantaged by its group practice model. Under this model, physicians are under payroll, which does not incentivise them to work beyond their scope of duties. In the same vein, this model provides poor incentives to well-known and established doctors, resulting in an inability to attract and retain talent. Additionally, doctors under payroll also results in higher fixed cost, which poses substantial downside risks from softer revenues – which we believe will be the case, as explained in our subsequent theses.

Unattractive Growth in Core Operations. Two core patient demographics of RMG are under threat – working class adults and medical tourists. As Singapore's population continues to age, and insurance premiums rise in cost, RMG's pool of working class adults is gradually on the decline. Additionally, RMG faces industry headwinds as increasingly competitive medical tourism in neighbouring countries have started to pull the highest paying customers away from RMG.

Too much Optimism in China. China has an inherently hostile environment for foreign private hospitals, due to two main reasons. First, there is an inherent distaste for private hospitals, as the public perceives physicians in public hospitals to be of a higher quality. The public also has a deep seated mistrust for foreign hospitals that arose from cultural difference in expectations from hospital treatments. Second, as foreign-owned hospitals are only allowed to operate within Free Trade Zones (FTZ), we view market competition within the area to be extremely high, with RMG offering little competitive advantage to stand out. Despite all these, RMG's management seems to have a gross overestimation in its ability to capture 10-20% of the local market.

Poor corporate governance. RMG's lack of corporate disclosures poses substantial risks to investors, as it provides a limited understanding on RMG's operations. We are also uncomfortable with Dr Loo's concentration of power. The recent appointment of Sarah Lu, Dr Loo's daughter, further begs the question if shareholder interests are sufficiently represented.

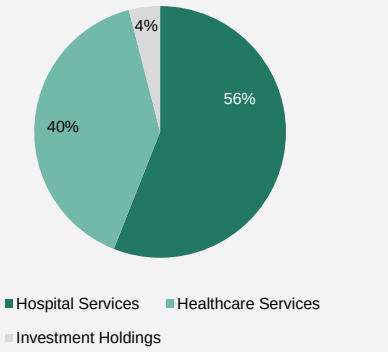
Valuation. Using a 10 year DCF, we derived a target price of $0.86 for RMG which represents a downside of 22.0% from its last closing price on 9 February 2019. Key inputs to our target price include a WACC of 6.02%, a terminal growth rate of 1.75% and a re-levered beta of 0.56. at current price levels, we do not find RMG compelling given that it will be up against slowing growth on the home front as well as structural headwinds in the coming years in relation to the launch of its China hospitals.

Figure 5: Financial Valuation and Metrics

FYE 31-Dec	2017A	2018E	2019E	2020E	2021E	2022E
Revenue (S$ mn)	477.58	484.71	533.79	565.83	600.12	640.25
YoY Growth	0.8%	1.5%	10.1%	6.0%	6.1%	6.7%
Adj. EBITDA (S$ mn)	92.73	98.37	75.69	77.01	100.42	103.07
EBIT Margin	16.5%	16.8%	9.9%	9.1%	12.1%	11.4%
Net Profit (S$ mn)	67.36	66.79	42.96	41.68	60.19	60.24
EPS (SGD cents)	3.9	3.8	2.3	2.3	3.5	3.5
ROA	6.7%	6.1%	3.2%	3.5%	4.2%	4.7%
ROE	8.7%	8.3%	5.1%	4.8%	6.5%	6.2%
P/E	27.9x	28.7x	47.4x	48.4x	31.6x	31.4x
EV/EBITDA	20.1x	26.1x	25.7x	19.7x	19.2x	17.5x
P/B	2.6x	2.5x	2.4x	2.3x	2.1x	2.0x

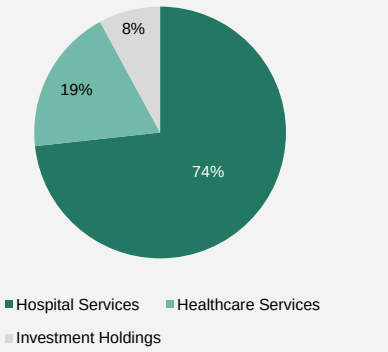
Source: MDRMS Estimates

Figure 6: 2017 Revenue by Segment



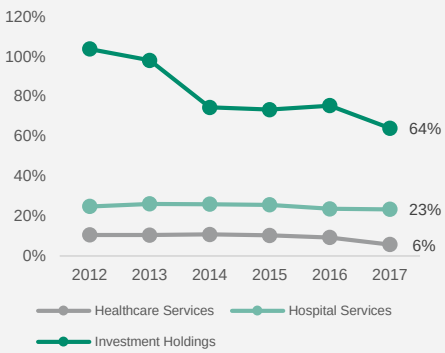
Source: Company Data

Figure 7: 2017 PBT By Segment



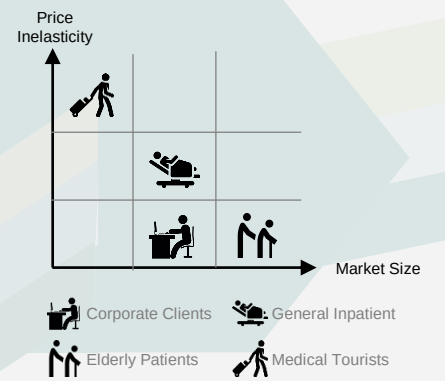
Source: Company Data

Figure 8: EBIT Margins by Segment



Source: Company Data

Figure 9: End Customer Analysis



Source: MDRMS Estimates

Business Description

Founded in 1976 with the initial aim of providing medical services to corporate clients, Raffles Medical Group (SGX: BSL) is an integrated healthcare provider based in Singapore. It operates medical facilities in 13 cities located across Singapore, China, Japan, Vietnam and Cambodia. RMG is one of the leading private healthcare practices and provides a wide range of services under the "Raffles" brand name. In recent years, the group has ramped up overseas expansion efforts, particularly in China. As a fully integrated healthcare provider, Raffles Medical provides all the various aspect of healthcare – from insurance, to primary care and tertiary care.

Business and Geographical Segments

RMG operates through 3 different segments: hospital services (56%), healthcare services (40%) and investment holdings (4%). The hospital services segment is engaged in the provision of specialised medical services and operation of hospitals. The segment also engages in the business of medical laboratories and imaging centres. The healthcare services segment is engaged in the operation of medical clinics and other general medical services such as health insurance, trading of medical equipment and the provision of management and consultancy services. (Fig 6, 7 and 8)

Hospital Services. The hospital services segment revolves around the provision of tertiary care through Raffles Hospital, a private hospital located in Central Singapore. Raffles Hospital offers a wide range of services that spans across 35 medical disciplines. Recent developments to the segment include the construction of Raffles Specialist Centre – an extension to Raffles Hospital – and the planned opening of two hospitals in Chongqing and Shanghai in the upcoming few quarters. Raffles Hospital operates with the group practice model, rather than the more common partnership model – this means that its doctors are employed by RMG and operate under the group rather than their own private practice.

Healthcare Services. The healthcare services segment consists of 3 businesses: 1) the operation of medical clinics, 2) provision of health insurance and 3) trading of pharmaceutical and nutraceutical products and diagnostic equipment. The majority of revenue from this segment comes from the operation of medical clinics and sale of health insurance. Raffles Medical operates 67 primary medical care, dental and traditional Chinese Medicine clinics located all around Singapore. RMG provides insurance through its subsidiary, Raffles Health insurance, which provides corporate and personal insurance plans. The segment serves both private customers and corporate customers who engage in corporate programmes with RMG. An example of a corporate client is the Ministry of Health and Civil Aviation Authority of Singapore, which signed a contract with RMG to provide Air Borders screening services.

Investment Holdings. This segment includes the rental income received from the leasing out of RMG's rental properties**.** On average, 80% of the revenue generated are inter-segment revenue. Effectively, investment holdings only contributed 0.6% to FY17 revenue.

Corporate Strategy

Group Practice Model. RMG operates with a group practice model where all of its clinics and medical professionals operate under RMG (as compared to running independently). RMG is the largest group practice in Singapore and the one with its own hospital. The rationale behind the adoption of this model is 1) for RMG to reap economies of scale through shared resources and enhanced presence and 2) to have a totally integrated platform operating across the whole value chain. However, this model causes RMG to be less competitive with the quality of its staff and treatment. A lack of ownership means that doctors' interest may not be aligned with RMG – there is less incentive for them to go above and beyond in their work. Additionally, top specialists tend to choose to start their own practice (rather than join a group practice) due to the potential upside in remuneration.

Hub-and-Spoke Framework. RMG operates across the entire healthcare spectrum (primary, secondary and tertiary). One way it drives patient growth is by feeding patients from its clinics to its hospital. This creates customer stickiness by making it more difficult for patients to admit themselves into other hospitals. RMG employs this strategy globally as well, setting up overseas offices with the purpose of referring patients to Raffles Hospital. RMG is one of only two private healthcare providers to operate with this model in Singapore – the other is IHH Healthcare Berhad. However, IHH is better positioned to pursue this model due to its much larger scale and a much larger presence overseas compared to RMG. IHH operates 4 hospitals and 65 clinics in Singapore, and 44 hospitals overseas. This allows them to not only feed patients from clinics to hospital, but within hospitals as well.

Corporate Tie-Ups. RMG engages in many corporate tie-ups, where medical services is provided to employees of corporate clients at cheaper corporate rates. RMG currently has more than 6,500 corporate clients – notable ones include DBS, Singapore Airlines, and Google. This provides RMG with a source of steady and recurring revenue due to a strong reputation for corporate healthcare and its positioning as a leader in providing healthcare screening services. However, this segment is approaching its growth headroom due to 1) a limited total addressable market and 2) limited pricing power. (Fig 9) RMG cannot count on this strategy to effectively pursue growth. They compete primarily with Fullerton Health for corporate tie-up plans. Fullerton Health currently serves more than 25,000 corporate clients.

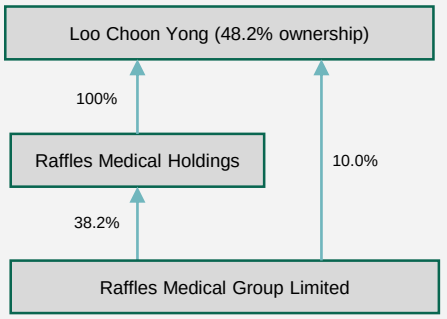
Figure 10: Board of Directors

Name	Position	Ex.	Ind.
Loo Choon Yong	Chairman	X	
Koh Poh Tiong	Lead Director		X
Eric Ang	Director		X
Wee Beng Geok	Director		X
Lim Pin	Director		X
Raymond Lim	Director		X
Lim Beng Chee	Director		X
Tan Soo Nan	Director	X	
Oliver Lim	Director		
Sarah Lu	Director		

Ex. = Executive; Ind. = Independent

Source: Company Data

Figure 11: Dr. Loo's Ownership Structure



Source: Company Data

Figure 12: RMG's ACGS Ranking

Year	Rank
2014	53
2015	79
2017	55

* RMG's ranking for the ASEAN Corporate Governance Scorecard (ACGS) is among the top 100 largest Singapore listed companies. RMG has constantly underperformed in this respect.

Source: Singapore Institute of Directors

Figure 13: SGTI Rankings 2018

Company	Rank	Score
Parkway Life REIT	26	74.5
HMI	119	69
RMG	194	62
TalkMed	194	62

* The Singapore Governance and Transparency Index (SGTI) is the leading index for assessing corporate governance practices of Singapore-listed companies.

Source: Centre for Governance, Institutions & Organisations

Expansion Outside Singapore. Due to an increasing supply of public healthcare and decreased inflow of medical tourists into Singapore, the ROI for setting up healthcare facilities in Singapore is decreasing despite increasing overall healthcare spending. RMG is attempting to mitigate this issue by expanding into overseas markets where industry growth is higher and the market is more underserved. Two hospitals in China are currently in the works for RMG: a 700-bed hospital in Chongqing due for completion 4Q18, and a 400-bed hospital in Shanghai due for completion 2H19.

Corporate Governance

Board of Directors

RMG's board is headed by Dr. Choon Yong Loo, the Executive Chairman and co-founder of the group. Dr. Loo is also the largest shareholder of RMG, holding a combined 48.2% stake in the company – both directly and indirectly, through his ownership in Raffles Medical Holdings (Fig 11). The company's senior management consists of 12 people from varying backgrounds – 3 of which (including Dr. Loo) having started out their careers as medical doctors. The members of senior management (besides Dr. Loo) have an average tenure of nearly 9 years at the company. RMG's board of directors consists of Dr. Loo and 10 non-executive members with a wide range of competencies and backgrounds. Of the 11 members in the Board of Directors, 4 are medical doctors, while the rest have backgrounds in finance and management. The remuneration policy of RMG's key executives consists of a base salary, fixed allowances and compulsory employer contributions to the CPF account. In addition, one also gets bonus based on his relative performance of the Group, business units and performance of each individual Executive Director. Performance-based bonuses – which have no stated limit – are paid in the form of share options. In 2017, the board of directors received an average of 24.8% of their remuneration in the form of share options.

Evaluation of the Board

We believe Dr. Loo's multiple roles as 1) the founder, 2) the controlling shareholder, 3) the chairman of the board and 4) the executive director of RMG pose substantial risks to shareholders in the follow areas:

Demonstrated Conservativeness. RMG's M&A and investing activity is been notably less aggressive than its peers due to Dr. Loo's conservative attitude – the firm spends the least on developing medical technology and has only made one acquisition in the past 10 years. This makes us concerned with RMG's ability to stay competitive as peers increase their presence through the development of higher quality and more complex treatment.

Concentration of Power. There is no clear number 2 or stipulated succession plan for RMG. Apart from a lack of checks and balances, should Dr. Loo step down, or if there are any unforeseen circumstances in which he is suddenly unable to lead, we are not confident that RMG's management team is able to step up and fulfil his role.

Lack of Independence. 4 out of 11 board members are not independent (Fig 10). Notably, the latest member of the board, Sarah Lu, is the daughter of Dr. Loo. We are uncertain of her ability as a board member due to her limited experience outside the medical field having only worked as a doctor for 13 years. We take the view that she might not have been the best choice for a board member. As such, the board seems to poorly represent shareholder's interests.

Share Options

Share options outstanding amounted to 58 million at end 2017, amounting to about 3% of RMG's 1.8 billion shares outstanding. The issuing of share options for performance-based bonuses is unlikely to raise concerns on potential share dilution, given its relatively insignificant amount.

Corporate Disclosure

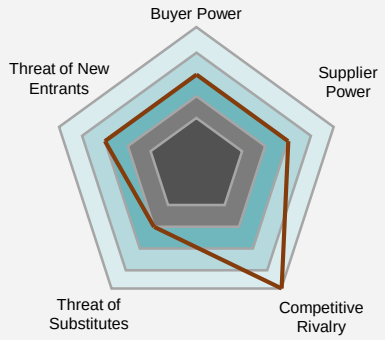
For a company its size, RMG fairs poorly in corporate disclosure. It received a score of 62 against an average score of 56.3 in the Singapore Governance and Transparency Index 2018, coming in at 194^{h} place amongst 505 companies. It received the same score as TalkMed group – a company nearly 3 times smaller. (Fig 13) There is a major lack of financial performance indicators in RMG's annual reports. Unlike some of its larger competitors (e.g. IHH), RMG does not report important key metrics such as average revenue per patient admission and occupancy rate. We are uncomfortable with the level of visibility on RMG's operations due to its lack of disclosure. Investors of RMG will thus face increased risks from greater uncertainty.

Industry Overview & Competitive Positioning

Key Players in the Healthcare Services Industry

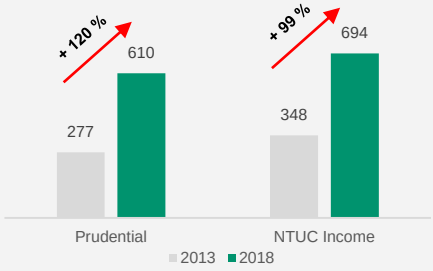
Primary Healthcare Providers. Primary healthcare refers to outpatient polyclinics and clinics run by general practitioners. MOH reports that there are 20 polyclinics and 1,700 private GP clinics in Singapore (of which RMG operates 67). Competition is stiff between private GP clinics due to the less specialised nature of the treatments administered and the lack of differentiation between clinics. GP clinics differentiate themselves through geographical location and brand name. Barriers to entry are also low due to the lack of specialised training required for GPs.

Figure 14: Porter's 5 Forces



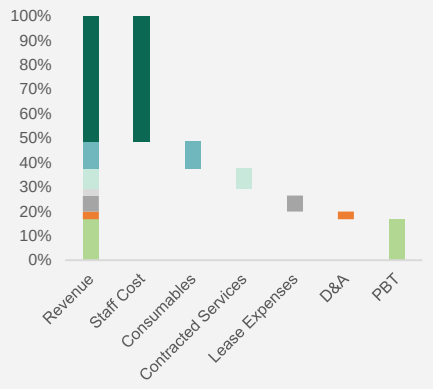
Source: MDRMS Estimates

Figure 15: Rising Insurance Premiums



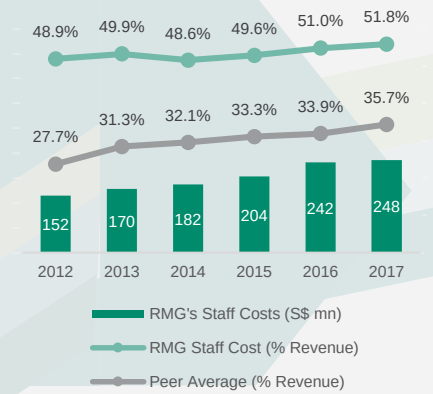
Source: The Straits Times

Figure 16: RMG 2017 Cost Breakdown



Source: Company Data

Figure 17: Rising Staff Costs



Source: Respective Company Data

Secondary Healthcare Providers. Secondary healthcare refers to outpatient services provided by medical specialists. These healthcare professionals can be accesses either through integrated hospitals such as Raffles Hospital, or privately run clinics. ASP and barriers to entry are higher due to the specialised nature of the treatments administered; however, the cost of hiring specialists is also significantly higher due to their highly specialised and niche training.

Tertiary Healthcare Providers. Tertiary services refer to consultative healthcare for inpatients. Procedures that fall under this category are coronary artery bypass surgery, neurosurgeries, sever burn treatments and other complex treatments and procedures. ASP for these treatments is typically higher and there is a higher barrier to entry for the provision of these treatments as specialised equipment and expertise is required.

Insurance Providers. With 69.6% of Singaporeans covered by integrated plans, the majority of medical treatment is paid for with insurance policies, either through co-payments or full rider schemes (whereby the insurer covers the entire bill). Treatments paid for with insurance (especially full rider policies) are typically more price inelastic and generate higher ASPs as the consumer is not the one incurring the costs, allowing doctors to charge more. Singapore currently has 7 insurers (including the recently added Raffles Medical) in the Integrated Shield Plan (IP) market. Since 2015, insurers had been recording underwriting losses. To mitigate underwriting losses, insurers have raised premiums by more than 80% for the past 2 years for policies with no riders and 220% for policies with full riders. (Fig 15) By passing on the costs to consumers, the quantity demanded for IPs will likely fall moving forward unless the government supports with subsidies to ensure co-payment is affordable.

Key Drivers

Medical tourism. RMG, like other private hospitals in Singapore, serve many foreign patients. RMG reports that more than 35% of Raffles Hospital's patients are foreigners, with a majority of them (>20%) coming from Indonesia. These patients are more price inelastic as they typically represent the upper class demographic of their home country – this translates to higher profit margins for premium healthcare providers. As players are unable to compete solely based on price, in order to capture opportunities within this segment, private hospitals offer additional services such as luxury suites and transportation services to differentiate themselves. A strong overseas network from associate clinics or international insurance companies also helps increase the number of foreign patients through a system of referrals. RMG expands its overseas reach by opening representative offices in Bangladesh, Indonesia, Myanmar, Russia and Vietnam. In Asia, RMG operates in clinics in 12 other cities in China, Vietnam and Cambodia, 10 of which came from a 55% acquisition of International SOS in 2015 for a consideration of US$24.5mn. These external branches help facilitate RMG's hub-and-spoke model, where overseas patients are referred to RMG's hospital in Singapore.

Insurance Take-Up Rate. As treatments paid for using insurance generates a higher ASP, the insurance take-up rate in Singapore affects the cost per inpatient treatment for RMG's Raffles Hospital. The insurance take-up rate is driven by 1) lower insurance premiums and 2) government policies increasing the supply of insurance plans in the market.

Staff Costs. Staff costs make up the largest cost of healthcare providers (Fig 16), at an industry average 41.3% of revenue. This is due to the bargaining power that doctors – particularly specialists – possess due to a low supply of credible doctors. As hospitals move towards the use of automation technology, there would possibly be decreased need for nurses and support staff, leading to a reduction in staff costs in the long run. Doctors, due to their specialised training and skillset, are unlikely to be disrupted by automation technology. RMG's incurs much more staff costs compared to its peers, 51.8% in 2017 compared to a peer average of 41.3%. This is due to its group practice model where its staff are under payroll. This accounts for the stark increase in staff costs in FY16 and FY17 with the opening of Raffles Medical Hospital Expansion. (Fig 17)

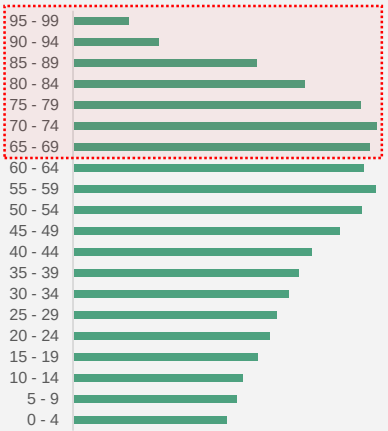
Significant Industry Trends

Ageing Population

In Singapore, With the elderly forecasted to make up a third of the population by 2050 (Fig 18), medical care providers are anticipated to benefit from increased business from the elderly, who more frequently seek treatment. We expect the disease profile to continue to shift from communicable diseases to more chronic conditions. However, expertise limitations for elderly illnesses are barriers to entry for private hospitals as it is observed that the percentage of older patients opting for private healthcare declines with age (Fig 19). According to Ministry of Health, public hospitals serve a large majority (95%) of "elderly illnesses" such as cancer, pneumonia, heart diseases, hypertensive diseases and lung diseases. Hence, public hospitals have a huge market share as: (1) university hospitals such as National Heart Centre have strong specialization expertise, (2) public hospitals accept emergency patients, where there may be further complications and (3) huge government subsidies. Moving forward, private hospitals that can work on these areas may be able to capitalize off the trend.

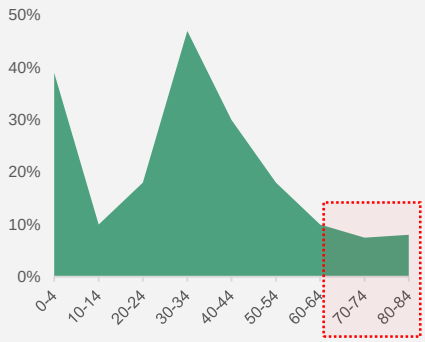
China will likely face a similar situation due to its strict one-child policy prior to subsequent revisions in 2013 and 2016. China's cabinet estimates that a quarter of its population will be over 60 by 2030. We expect private hospitals that are highly specialised and renowned in treating the aforementioned chronic illnesses to benefit.

Figure 18: Singapore's 2050 Demographics



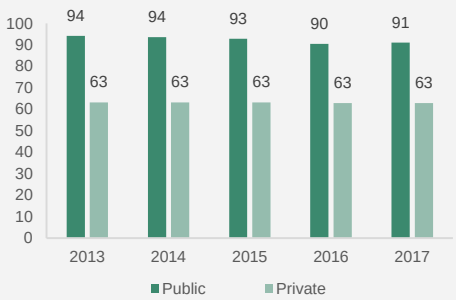
Source: United Nations, Department of Economics

Figure 19: Private Hospital Admissions



Source: Ministry of Health, Singapore

Figure 20: China Hospital Utilisation (%)



Source: China National Statistics

Figure 21: Singapore Hospital Pipeline

Year	Hospital	Beds
2014	Ng Teng Fong General Hospital	700
2015	Yishun Community Hospital	400
2016	Jurong Community Hospital	400
2018	Sengkang General Hospital Sengkang Community Hospital	1400
2020	Outram Community Hospital	550
2022	Woodlands Health Campus	1800

Source: Ministry of Health

Shift towards Primary Healthcare

Singapore has seen a greater focus on primary care as a move to shift away from the current more hospital-centric model. There have been government efforts to focus on moving upstream (GPs and diagnostics) to reduce the progression of chronic diseases. For instance, subsidies under the Community Health Assist Scheme – catering to lower-and middle-income patients who see private GPs – have been enhanced over the years. Also, GPs will be organizing themselves into virtual networks and deliver healthcare through a multi-disciplinary team of doctors, nurses and allied health professionals to manage patients' needs more holistically and effectively. However, pricing power may be under pressure as healthcare shifts towards prevention, potentially lowering revenue intensity for the private healthcare operators.

China healthcare system is heavily reliant on tertiary healthcare facilities in its major cities. The general public does not trust primary healthcare facilities, following the belief that the best doctors work in hospitals. Specialists are thus visited even for mild headaches or the common cold, causing overcrowded public hospitals (Fig 20), and a huge gap in general practitioners (GPs), with just 1 in 6,666, versus the WHO recommended 1 in 1,500 to 2,000. As such, more public healthcare spending has been allocated to building primary healthcare facilities and encourage medical innovation to address these issues.

Increasing Importance of Technology

Technology is likely to play a critical role in the next stage of hospital development. Technology will focus on patient diagnosis, monitoring and in-home care. Technologies include telemedicine, remote patient monitoring wearable devices, robotic surgery and 3D printing can help increase efficiency, shift monitoring to outpatient facilities, provide new revenue streams and optimise operations. The use of technology could help peers differentiate themselves from each other and attract medical tourists with higher spending power. For instance, IHH has differentiated themselves from RMG by branding themselves as being at the forefront of using the latest and most innovative medical technology which makes it hard for RMG to compete. Some of the technologies include the provision of minimally invasive surgeries, a hybrid operating room and proton beam therapy which serve to improve surgical outcomes and effectiveness.

Government Policies and Regulation

Singapore

Insurance co-payments. New guidelines were introduced in March 2018 for full riders, where patients have to make at least a 5% of co-payment for all medical bills. Insurance policies will no longer fully cover medical bills for patients. This policy was introduced to prevent over-charging on insurance holders by private hospitals, and to push patients to be more prudent to prevent exploitation of the insurance system. We believe the increase in out-of-pocket expenses for private hospital patients would reduce demand for less specialised healthcare services provided by private healthcare facilities.

Healthcare 2020 Masterplan. Given the rising costs of healthcare, an ageing population, and reduced private healthcare coverage by insurance, Singapore's government is under pressure to increase access to affordable and quality healthcare through its public hospitals. This has been done through its Healthcare 2020 Masterplan, notably:

i. An increase in at least c.4250 public hospital beds by 2022 (Fig 21). 60 to 100 beds will be added per year until hospital beds are deemed sufficient for the population.
ii. Expanding access to the Community Health Assist Scheme (CHAS) to residents aged 40 and above, from initially 65. Household income criterion was increased from $800 to $1,500 per month, however.
iii. Public hospitals are now more attractive to work in, since the 2012 mandated increase in salary across the public healthcare sector.

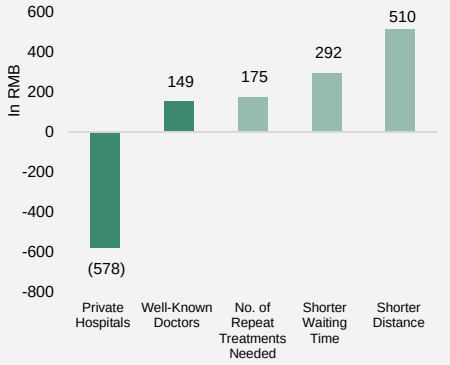
China

Healthy China 2030. The country's first long-term blueprint to improve healthcare was unveiled only in 2016. Healthy China 2030 pledged to bolster health innovation and make access to medical care more equal. The blueprint highlighted continued efforts to beef up its national public insurance system, through increasing aid-the-poor funds and expanding coverage. It also stated its desire to improve primary healthcare facilities. For instance, in its 13th Five Year Plan, the government stated its goal to provide each household with a family doctor by 2020. The blueprint highlights China's emphasis on healthcare, especially since the plan was drafted by over 20 departments, with the health industry expected to become a mainstay of the national economy.

Encouraging foreign investments. Regulators have been progressively relaxing restrictions on foreign ownership of private hospitals, leading to an influx of foreign capital. This was to reduce the burden on public hospitals, along with its efforts to promote primary healthcare, notably:

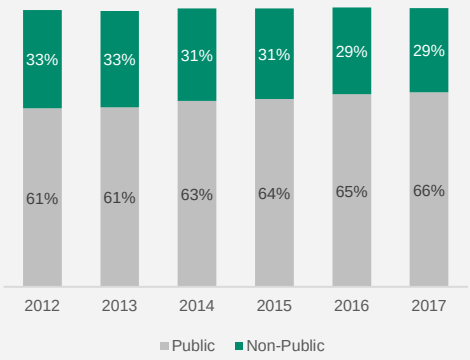
i. Since 2009, physicians are allowed to practice in multiple locations. The application process was removed in certain cities, and the upper limit for registrants were removed in 2014 to further ease supply side shortages for doctors.
ii. In Jul 2014, foreign investors are allowed to establish wholly foreign-owned hospitals in pilot trade zeons of Beijing, Tianjin, Shanghai, Jiangsu, Fujian, Guangdong and Hainan.
iii. In 2015, the government announced reforms that would allow qualified private hospitals to treat patients under the public healthcare insurance plans, *yibao*.

Figure 22: Marginal Willingness to Pay



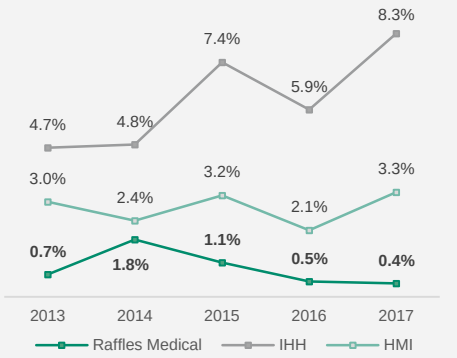
Source: BMC Health Service Research

Figure 23: Public/Private Specialists Mix



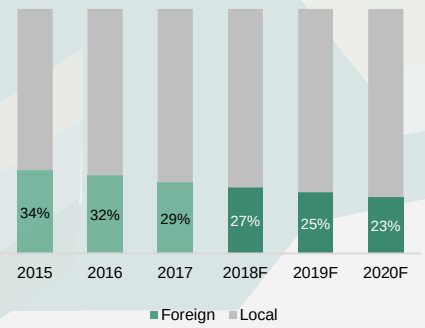
Source: Ministry of Health

Figure 24: Tech Spending % Sales



Source: Respective Company Data, MDRMS Estimates

Figure 25: RMG's Worsening Patient Mix



Source: Company Data, MDRMS Estimates

RMG's Competitive Positioning

Private vs Public Hospitals

Private healthcare in Singapore is generally regarded to offer a better quality of healthcare than their public counterparts primarily due to shorter waiting times arising from lower utilisation and more personalised services. As such, private healthcare providers are able to command much higher prices for their services. However, the Singapore government is committed to increasing the supply of public healthcare and as such, we expect private healthcare to start losing their competitive edge as wait time for public healthcare decreases.

Private Competitors

Private hospitals in Singapore differentiate themselves through 1) price, 2) reputation, 3) additional services (e.g. premium accommodation, logistics support for international patients) and 4) location (although this increase in importance for emergency cases). Primary research finds that it is well known among the local healthcare services that RMG is less renowned for the complexity and quality of its procedures than its peers. RMG hence differentiates itself primarily through price – its treatments are generally more affordable than its peers. (Appx. 17).

Investment Summary

Our **SELL** recommendation on RMG is based on 3 key drivers.

1. Crippled by Poor Operating Model

Poor Economic Moat

Inability to attract the best talent. The quality of doctors are especially important in the tertiary healthcare industry, as customer loyalty usually lies with renowned doctors rather than the hospital name. (Fig 22) However, a group practice is unlikely to attract such doctors, compared to its industry peers. Specialists under competitors like IHH own their own practice, staff and are responsible for their own P&L. These doctors would therefore be rewarded for their talent and incentivised for going above and beyond typical duties. The same will not apply for RMG's group practice model, where specialists are under payroll.

Inability to Move Up the Value Chain

RMG is widely known for providing more generic services such as medical screening, or kidney stone relief. Such services are easily replicable by competitors, as they require relatively less expertise (i.e. versus oncology). Additionally, it is hard to build customer loyalty and stickiness outside of its corporate tie-ups. Due to its inability to attract renowned and experienced doctors, and its focus on providing more generic services, its ecosystem would not be conducive for building sufficient expertise for higher valued, more specialised services.

Margin Pressures

Susceptible to downside risks with high fixed costs. RMG's substantial staff cost, way above the industry average, (Fig 17) is a result of its Group Practice Model. Unlike its peers, which receive a cut of profits from its doctors, these costs are largely fixed costs. This can be observed from how EBIT margins fell greatly when RMG increased its clinic capacity significantly in 2015 and 2016. While high fixed costs are not inherently bad, this poses substantial downside risks from a lacklustre top line – both in Singapore and China. Poor demand will lead to contracting margins as well. This will be further addressed in our subsequent theses.

Physician shortage to further pressure margins. (Appx. 20). Singapore's physicians are becoming increasingly attracted to working in public hospitals (Fig 23) as a result of a mandatory wage increase in 2012. The strong pipeline of public hospital beds also to increase competition for physicians, further increasing staff costs for RMG. Increased intake for medical students would be unlikely to ease the supply shortage as it would take 10- 12 years before students become qualified specialists. Taking into account RMG's high staff costs structure, we estimate that a 5% increase in staff costs will drive down EPS by c.14.8% in FY2019.

2. Unattractive Growth in Core Operations

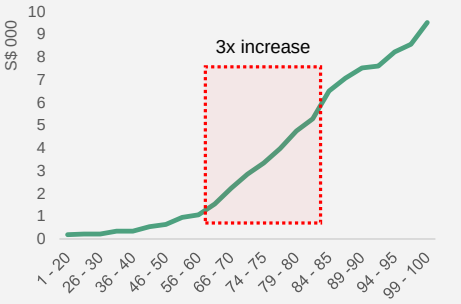
Falling Market Share of Medical Tourists Amidst a Challenging Environment

The gap between Singapore and the neighbouring countries has been narrowing rapidly due to the cheaper options abroad with rising quality of care. On average, cost of treatment in Malaysia is 33-42% lower than the cost of treatment in Singapore. This cost advantage and competitive pricing will allow neighbouring countries to attract more medical tourists moving forward as price-sensitive medical travellers seek cheaper options. Hence, RMG needs to attract price-insensitive medical travellers where the role of technology is significant to focus on revenue-intensive complex surgeries. However, RMG has not been proactive in making medical technology investments unlike their peers (Fig 24). This has allowed IHH's hospitals to charge higher rates than RMG, hence, registering a higher 2017 EBITDA margin of 25% against RMG's 19% (Appx. 35). Moving forward, our team expects RMG to continue losing high-cost medical tourists, causing a shift in patient mix (Fig 25) which worsens their unit economics.

Unfounded Optimism on Ageing Population for RMG

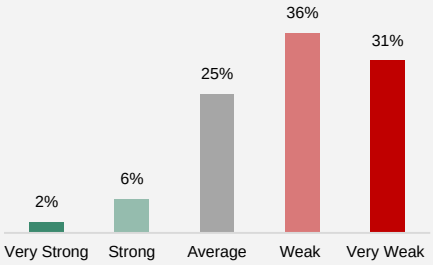
The market has been upbeat on the industry trend of ageing population to drive demand for healthcare services. As Singapore ages, demand for healthcare is expected to edge up.

Figure 26: Insurance Premiums with Age



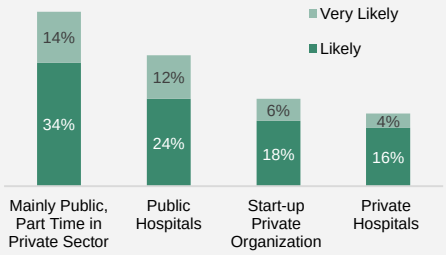
Source: Raffles Health Insurance

Figure 27: Degree of Trust in Private Sector



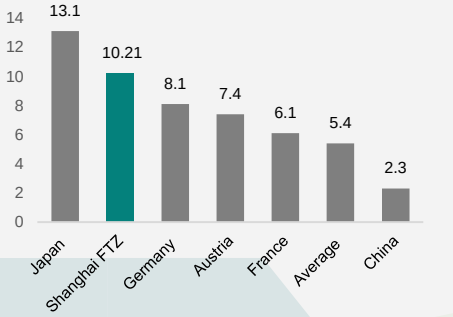
Source: Tengxun News Report

Figure 28: Doctor Hospital Preference



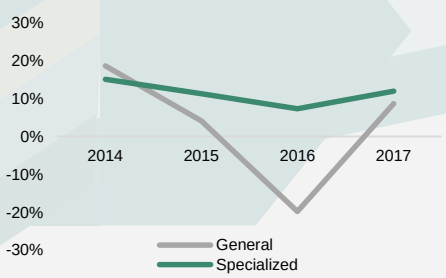
Source: Accenture

Figure 29: Hospital Beds per 1,000 People



Source: World Bank, MDRMS Estimates

Figure 30:Hospital Inpatient Load Growth



Source: China National Statistics

However, given that RMG's core competency lies in its corporate tie-ups and B2B segment, most of their revenue is generated from working adults. In the long run, as the bulk of population shifts away from age 40-60, the demographic shift shrinks RMG's core market as the working adults constitute a smaller proportion. Also, our research has shown that the percentage of patients opting for private hospitals declines as they age, with the proportion of public hospital admissions to be 93% in 2017, up from 90% in 2010 for patients age 65 and above. (Appx. 3). Hence, our team finds that the demographic is in favor of the public hospitals but not private hospitals. Although the ageing population drives the healthcare industry, we believe that it merely supports the growth of RMG rather than spurs growth due to their difficulties in attracting older patients.

More Expensive, Less Rewarding Insurance for Private Healthcare

Singapore Integrated Plan (IP) premiums have already risen more than 80% over the past 2 years for policies with no riders and 220% for policies with full riders. A close-up look at the private hospital insurance plans for Prudential and NTUC Income have shown a 120% and 99% increase respectively from 2013 to 2018. This is further exacerbated by MOH's announcement in early 2018 that there will be a removal of full rider policies effective 1 April 2019, where all IP riders are required to co-pay at least 5% of their total hospital bill. This is likely to shift a portion of price sensitive patients to public hospitals instead of private hospitals. As for the elderly population, insurance premiums increase significantly while tripling from age 65 ($2,233) to 85 ($6,508), more elderly are likely to prefer public hospitals (Fig 26). Hence, we find that rising insurance premiums and out-of-pocket expenses for private hospital admissions are expected to drive both middle age and older patients away from RMG, shrinking future customer pool.

3. Too Much Optimism in China

Mismatch between Value Proposition and Local Preferences

An Inherent Preference for Public Hospitals. While new policies in China now permit wholly foreign-owned hospitals (WFOH), 78% of local patients still demonstrate strong preference for public hospitals. (Appx. 23). This is because of deep-seated mistrust against foreign doctors (Fig 27) who are perceived to overcharge, have ineffective treatments and issue unnecessary tests. This is a result of cultural misalignment between Chinese patients who expect immediate treatments, versus Western patients who rather multiple screenings for a careful diagnosis. (Appx 25) Ultimately, it translates to negative willingness-to-pay for a private label (Appx 26).

Inability to House Well-Known Local Doctors Keeps Demand at Bay. As aforementioned, patients will pay a premium for renowned doctors, not hospital brands. RMG's group practice model of owning and training its own foreign doctors puts it at a disadvantage against established players, who already have locally well-known doctors working with them. Moreover, it is difficult for RMG to attract local doctors who prefer to work at public hospitals (Fig 28) as it provides more stable and reputable career progression. All in all, this leads to weaker demand in private hospitals where patient load is only 13% despite stronger growth in numbers (Appx 28).

Lack of Competitive Advantage in a Highly Competitive Market

High Concentration of Foreign Hospitals As WFOHs are only permitted in Free-Trade-Zone (FTZ), it causes a high density of new private hospitals. (Appx. 30). This results in an oversupply of beds to addressable market, with 10.21 private beds in Pudong, Shanghai FTZ per 1,000 people. It is significantly higher than comparable average at 5.4 and China at 2.3 (Fig 29).

Community Health Centres Grabbing Market Share. Apart from WFOHs, the government has also established a new tiered healthcare system (分级诊疗) that leverages the local hub-and-spoke model to divert primary care patients from tertiary hospitals to community centres. It has seen success with 2,600,000 cases – a 117% increase -- transferred to community level, which in turn causes patient volume growth rate to fall from 4.47% to 0.73%. (Appx. 31 and 32).

Branded as a General Hospital, RMG Lacks a Differentiating Factor. Specialized hospitals have seen more stable inpatient growth, leading to higher revenue. (Fig 30) This is because patients tend to associate doctors in specialized hospitals to be better skilled, which create a stronger brand name that serves as its competitive edge over peers. However, Raffles Medical has established itself as a foreign-owned general hospital, which puts itself on the other side and at a disadvantage. Furthermore, exclusion from medical groups (Eg. Shanghai's 1+1+1 program) puts it at a loss of up to 66.6m patients who are tied in to local tiered ecosystem.

Questionable Strategy in China Cast Doubt Over Management

Unrealistic expectations. Unrealistic expectations. Dr. Loo has indicated extreme optimism in a statement that "by targeting the top 10-20%, RMG can serve 140m patients in China at current price range". (Appx. 33) Our team did a sense check (Appx. 34), and believe that realistically, the addressable market should be a mere 28.1m, just 20% of his initial estimate. Even if we do forfeit the mandate by having a 40% price discount, the market would only be 126Mn at best. RMG also claimed to only increase bed capacity (from 200) at 75% utilisation – which is unrealistic itself, given that average utilisations in less crowded areas are only at 65%.

Contradictory strategies. Despite management confidence to target 140m patients at current rate, RMG Chongqing yet still allocated 200 of 700 beds to *yibao* which mandates a substantial cut in inpatient fees. This hints at low initial utilization rate, which is why RMG would need to rely on cheaper yibao beds that are "barely profitable" to rein in demand. Additionally, new doctors hired are required to be 'fluent in English', which indicates that RMG is more likely to be targeting the expat target audience, instead of the proclaimed 140 Mn locals.

Figure 31: Consensus versus MDRMS

in S$ mn	FY18 Revenue	FY19 Revenue
Credit Suisse	514	595
Goldman Sachs	487	551
Daiwa	492	708
OCBC	507	571
Median	**499**	**583**
MDRMS	**485**	**574**

Source: Respective Analysts, MDRMS Estimates

Figure 32: China Education Share Prices

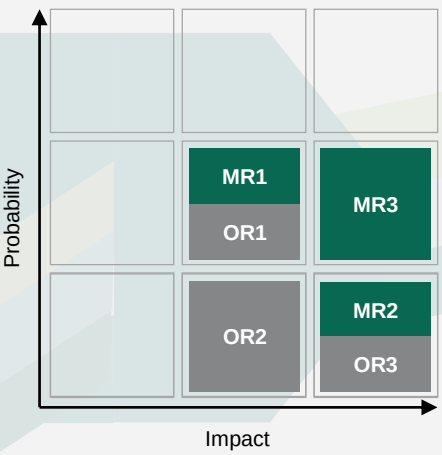
Source: Bloomberg

Figure 33: China Education Events

Date	Event
Nov-16	No restrictions on IPOs for for-profit schools. Reduced restrictions on Kindergartens, secondary and tertiary education on profit-making.
Aug-18	**1/** Restrictions on M&A and foreign ownership placed on private education companies. Share prices of publicly listed stocks fell up to 30%.
Nov-18	**2/** Prohibition of financing of for-profit Kindergarten companies via the equity market. Such kindergartens also not allowed to expand through acquisitions. Stocks like RYB fell > 50%.

Source: Ministry of Education (China), MDRMS Estimates

Figure 34: Risk Matrix



Source: MDRMS Estimates

Potential Catalysts

Earnings Miss and/or Poorer-Than-Expected Management Guidance. We are bearish on RMG (Fig 31), and believe there will be an earnings miss, or disappointing guidance on its Chinese venture, given the current neutral stance of the market (4 buy, 5 hold, 1 sell). We could see a de-rating due to potential delays in China in its FY18 earnings release (on **24/02/19**), or softer earnings from local operations in its 2Q or 3Q earnings release (**c.06/08/19** and **c.29/10/19** respectively).

Unfavourable Regulations in China. A reversal in regulatory trends in China could cause a drastic de-rating to RMG. Experience from the Chinese Education sector show just how strongly the market reacts to a tightening of regulations (Fig 32, 33). Additionally, given that healthcare is an strategic industry in ensuring the welfare of the people, it is possible that Chinese regulators tend to prefer local firms, and would increase restrictions should it feel that foreign involvement becomes too large.

Investment Risks (Fig 34)

Market Risks

MR1: Weakening SGD Driving Medical Tourism. Weakening of the SGD could lead to an uptick in the volume of medical tourism. This will lead to optimism surrounding RMG's local operation and a possible rerating of the stock. **Mitigation**: This risk is partially mitigated by the SEA's slowing economic growth eating into discretionary spending, such as travelling to Singapore for medical treatment. Additionally, RMG does not have as much pricing power as before due to increasing competition from its competitors and improving healthcare quality in neighbouring countries.

MR2: Favorable Government Policy. Government policy favourable to medical tourism traffic in private healthcare, such as the recent measure by the Ministry of Health to stop foreign patient referrals to local hospitals could boost volume from foreign patients. This will likely result in stock upside due to the current pessimism surrounding the medical tourism market in Singapore. **Mitigation:** This is unlikely to be the case, as the move to stop reporting medical tourist statistics hint at a shift in focus away from medical tourism.

MR3: Expansion of Free Trade Zones China. There have been discussions by Chinese regulators to expand the Shanghai FTZ. This could increase the traffic of expats, boosting utilisation rates for RMG's China operations, as well as reduce the hospital density as new players could open hospitals elsewhere. **Mitigation:** Unlikely to see near-term impact, especially since hospital density in the region is already high. (Appx. 30).

Operational/Business Risk

OR1: Better-than-expected Chinese Operations. Management currently forecasts a negative 10 million EBITDA loss from its Chongqing hospital in FY18. Better-than-expected financial results may spark interest from investors who were initially uncertain about its China operations. **Mitigation:** RMG's valuation shows that the market is already bullish on its China operations. Upside arising from better-than-expected results is hence unlikely to be very significant. Additionally, we believe that challenging Chinese landscape will make such results unlikely.

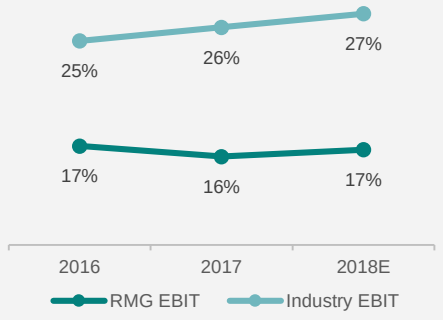
OR2: New Projects or Value Accretive Acquisitions. RMG's maintains a relatively healthy balance sheet with significant debt headroom. They are able to pursue acquisitions or take on potential projects. The announcement of its Chinese venture, for instance, saw a significant re-rating. **Mitigation:** Unlikely to have a near-term impact, as RMG would be occupied with its two China projects, that would not be profitable anytime soon. Additionally, RMG helmed by Dr. Loo seem to be very conservative, as can be seen from a lack thereof M&A in the past 10 years.

Financial Analysis

Revenue: Historical revenue experienced double digit growth of 10% and hit its peak of 15% in 2016 due to full year recognition of revenue from MC Holdings international SOS clinic that was acquired in the last quarter of 2015. Topline was also boosted by the opening of Raffles Holland V. The twin impacts of consolidation and new clinics offset the slowdown in medical tourism that contributed to a slower growth in hospital services in 2016. In 2017, RMG bore the full brunt of the negative effects of fewer foreigners seeking medical treatment and instead opted to go to Thailand/Malaysia which offered similar quality of care but at a significant discount. We projected sales for the next 10 years based on a changing patient mix with a smaller proportion of medical tourists, poor receptiveness of Raffles Shield for international policy holders and normalising clinic revenue growth.

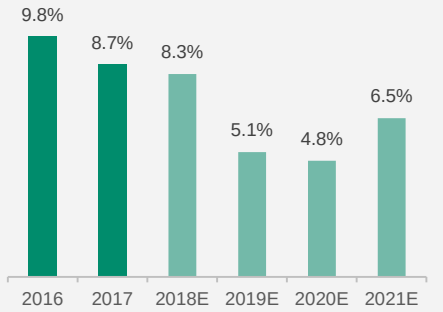
We expect RMG to continue losing share of foreign patients due to lack of differentiation. We acknowledge that local patient load will still grow but due to the lower contribution from local patients (~30% lower bill size vs foreign patients), local hospital services segment will only grow at 2% YoY.

Figure 35: EBIT Comparison



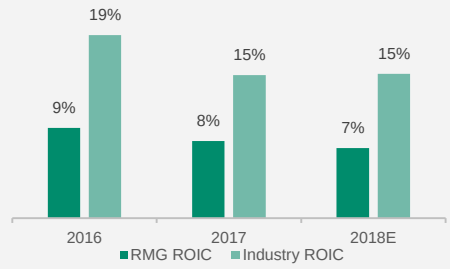
Source: MDRMS Estimates, Bloomberg

Figure 36: Declining ROE



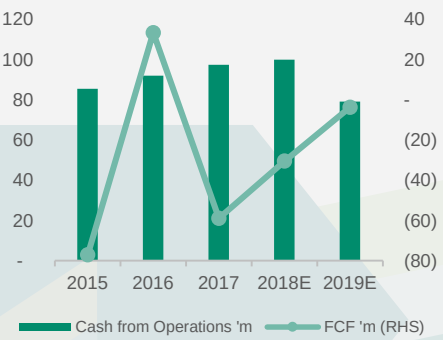
Source: MDRMS Estimates, Company Data

Figure 37: ROIC Comparison



Source: MDRMS Estimates, Bloomberg

Figure 38: RMG Cash Flows



Source: MDRMS Estimates, Company Data

Figure 39: Risk Free Rate

Core Market	Weight	10Y Gov Bond
Singapore	70%	2.55%
China	30%	3.29%
Blended RfR	**100%**	**2.77%**

Source: MDRMS Estimates, MAS, Bloomberg

For the Integrated Plan (IP) market, we projected RMG to command ~11% market share of the 200,000 new annual IP sign-ons by 2020, contributing approximately S$11million to topline (in line with management's guidance of S$10-S$12mil annually.) The new IP plan will also be the main growth driver for Raffles Health Insurance (RHI) in light of fewer renewals of international healthcare plans for expatriates that is expected to persist. As such, growth of 4% in 2019 and 2020 can be expected but will taper off in a highly fragmented market.

We forecasted revenue from clinics to grow at a modest 2% YoY given MOH's push for people to take ownership over their own health and a gradual shift towards primary healthcare. While management might paint a rosy outlook for RMG's china hospitals, we expect strong headwinds in a highly competitive market where public perception of foreign owned private hospitals are not as well regarded as local Chinese hospitals. Despite China's operations having a combined bed capacity that is 3.5x that of Singapore's, revenue contribution from China's operations is only expected to form 30% of total revenue in 2026 - 2027 when utilisation rates start to stabilise. (40% for Chongqing; 60% for Chongqing Yibao and 50% for Shanghai). In addition, it would be an uphill task for RMG to raise their utilisation rates after 2027 given that RMG's expertise lies in corporate tie ups and the provision of health screening services. This suggests that most patients would not require a hospital ward and thus would not contribute to utilisation rates.

Margins: Staff costs will continue to form the bulk of operating expenses at ~50% of revenue. This will likely continue since half the head count at RMG's China hospitals are Singaporean doctors. Coupled with higher depreciation charge from increased fitting of the China hospitals, margins will be pressured. With slow take up of hospital beds, operating margins are set to fall from 16% in 2017 to 12% in 2027. Underwriting losses in the initial years till 2020 from Raffles Health Insurance IP due to lack of scale in a highly fragmented market would also put pressure on margins. Historically, RMG's EBIT and EBITDA margins had been lagging peers since 2016 (Fig 35). With margin compression taking place, ROE is similarly on a downtrend (Fig 36) and is only expected to recover starting 2021 while ROIC is significantly lower than its peers (Fig 37).

Capex: Despite recent spike in capex for the previous 4 years related to the construction of the Raffles hospital extension as well as china hospitals, capex margin still lags competitors (2% vs 4%). This further substantiates our point that RMG is not investing sufficiently to stay ahead of competition. For our forecasts, we assumed capex margin to increase to 9% till 2020 to account for the costs required to fit the newly constructed China hospitals.

Cash Generation: Although cash from operations has been relatively stable in the past 5 years, RMG's FCF has been volatile due to capex outlay from hospital expansion and launch of China hospitals. Moving forward, FCF will continue to be pressured due to start up associated upfront capex.(Fig 38).

Operating efficiency: Trade payable days are about twice the inventory and receivable days giving rise to a cash conversion cycle of -72 days in 2017. It appears that RMG is extremely efficient in managing its working capital needs. However, there is a lack of disclosure on RMG's trade payables. While inventory and receivable days are mostly in line with peers' median of 36 days and 11 days respectively, payable days stand at 151 days vs peers of 54 days. RMG seems to be indirectly financed by related parties of non controlling interests of MC Holdings with a "loan" that is renewed annually since 2015. This casts doubts on RMG's operating efficiency.

Valuation

Since RMG's revenue is recurring in nature and operating cash flow has proven to be relatively stable with predictable capex requirements, we utilised a 10-year DCF as our primary valuation method given the lack of pure play domestic hospitals or listed foreign-owned hospitals that cater to a similar demographic. IHH, for instance, has hospitals in Hong Kong, Turkey. China and other ASEAN regions, while smaller players such as Talkmed and Q&M Dental are niche players that target a different demographic. Also, a 10-year DCF was used as we believe that RMG's China hospitals would take a minimum of 8 years before reaching a stable utilisation rate at full capacity. Our DCF also accounted for the capital outlay of RMB1bn and RMB800bn respectively for Chongqing and Shanghai. (Appx.11).

WACC

Cost of Equity: Our risk-free rate aims to match the duration and currency of the cash flows projected. As such, using the respective 10Y Government bonds, we blended the risk-free rate based on China's revenue contribution when operations stabilise (Fig 39). Similarly, we blended the market risk premium according to the core market's percentage contribution to total revenue after taking into account the country risk premium of 0.98% for China (Fig 40). For beta, we used a bottom-up approach to derive a re-levered beta of 0.56 (Appx. 9). Then, applying the CAPM formula, our total cost of equity for RMG was 6.42%.

Cost of Debt: We accounted for a spread of 0.54% from Damodaran given that RMG's implied credit rating is AAA as suggested by RMG's interest coverage ratio of 386x. We then added the spread to the blended risk-free rate of 2.77% to derive the cost of debt at 3.31%.

WACC: After accounting for the tax shielding of debt, and the relative weight of equity and debt, we arrived at a WACC of 6.02%. (Fig 41).

Figure 40: Market Risk Premium

Core Market	Weight	10Y Gov Bond
Singapore	70%	5.96%
China	30%	7.92%
Blended MRP	**100%**	**6.55%**

Source: MDRMS Estimates, MAS, Bloomberg

Figure 41: WACC Computation

Target Capital Structure	
Debt-to-total capitalization	11%
Equity-to-total capitalization	89%
Cost of Debt	
Cost of Debt	3.31%
Tax Rate	17.00%
After-tax Cost of Debt	**2.75%**
Cost of Equity	
Risk Free Rate	2.77%
Country Risk Premium – China	0.98%
Market Risk Premium	6.55%
Re-levered Beta	0.56
Cost of Equity	**6.42%**
WACC	**6.02%**

Source: MDRMS Estimates, MAS, Bloomberg

We also took into account the likelihood of key scenarios occurring to generate the waterfall chart below. Our analysis shows that even after we have assumed the occurrence of two highly positive developments which work out in the favour of RMG's China hospitals (a 5% reduction in staff costs and well as a 10% YoY increase in both China hospitals), a target of price $1.03 was obtained. This price is still 6% below the current share price of $1.10, which leads us to believe that our recommendation is fairly sound despite the potential risks involved.

Terminal Value

We used a terminal growth of 1.75% that is attained from Singapore's long term population growth rate. We feel that pegging the TGR to Singapore's population growth is representative of the growing healthcare demand by the local population. We have decided to exclude China's long term population growth as RMG's key focus is on expatriates instead of the local Chinese population. Furthermore, long term global population rate till 2050 is estimated by the UN's Department of Economic and Social Affairs to be 0.99%. Hence we feel that our TGR of 1.75% is a reasonable proxy for RMG.

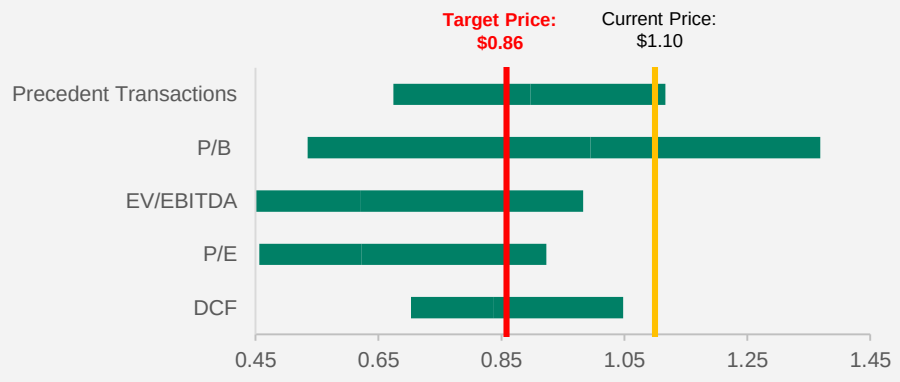
Figure 42: Sensitivity Analysis

Terminal Growth Rate \ WACC	5.27%	5.52%	5.77%	6.02%	6.27%	6.52%	6.77%
0.75%	0.87	0.82	0.78	0.74	0.70	0.67	0.64
1.00%	0.90	0.85	0.81	0.76	0.73	0.69	0.66
1.25%	0.95	0.89	0.84	0.79	0.75	0.71	0.68
1.50%	0.99	0.93	0.87	0.82	0.78	0.74	0.70
1.75%	1.05	0.98	0.91	**0.86**	0.81	0.77	0.73
2.00%	1.11	1.03	0.96	0.90	0.84	0.80	0.75
2.25%	1.18	1.09	1.01	0.94	0.88	0.83	0.78
2.50%	1.27	1.16	1.07	0.99	0.93	0.87	0.81
2.75%	1.37	1.25	1.14	1.05	0.98	0.91	0.85

Source: MDRMS Estimates

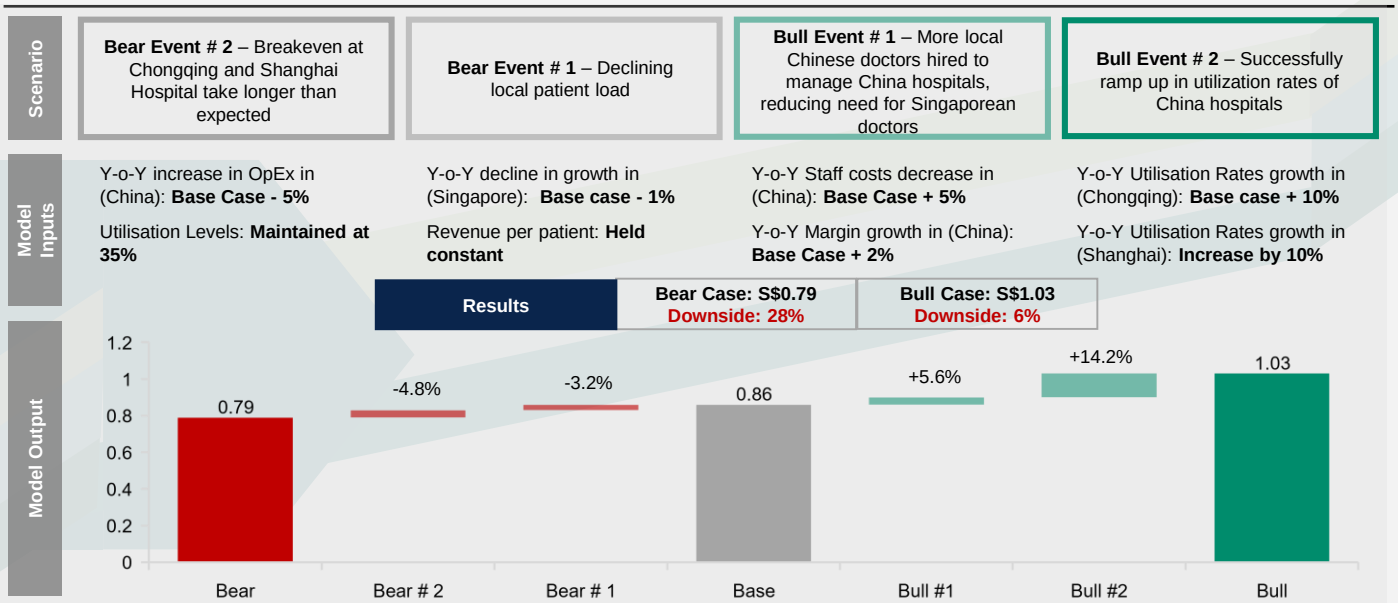
Our sensitivity analysis (Fig 42) conducted by varying WACC (±0.25%) and terminal growth rate (0.75% - 2.75%) reflects a potential price range of between S$0.64 and S$1.37. Only 11% of the figures in the entire sensitivity table is above the current price of $1.10. As such, this lends further support to our sell recommendation. Moreover, we believe our derived TP of S$0.86 versus the current price of S$1.10 is a reasonable estimate, as it intercepts all 5 of our target ranges from different main valuation methodologies (Fig 43).

Figure 43: Football Field Analysis



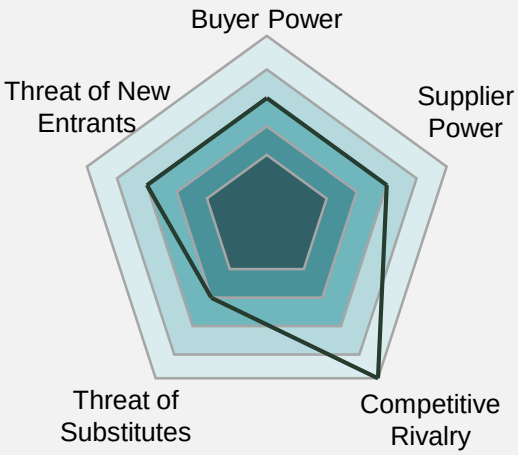
Source: MDRMS Estimates, Bloomberg, Capital IQ

Figure 44: Waterfall Chart



Source: MDRMS Estimates,

Appendix 1 – Porter's 5 Forces



Bargaining Power of Buyers – Moderate
Although healthcare procedures are mostly homogenous, there is some level of customer stickiness with customers as going to a new hospital requires a troublesome onboarding process with numerous check ups and administrative work. However, Singapore's Ministry of Health (MOH) plans to make the National Electronic Health Record's (NEHR) mandatory over 2019, which would require private healthcare providers, from large private hospitals to GP clinics, to upload their data. The sharing of medical information may therefore make it easier for customers to switch medical providers.

Bargaining Power of Suppliers – Moderate
Suppliers are 1) suppliers of medical goods and 2) medical professionals such as doctors and nurses. Suppliers of medical goods have a low bargaining power against RMG as being a large integrated medical provider, RMG benefits from economies of scale in its medical supply orders. However, medical professionals have a relatively high bargaining power as medical doctors are highly sought after and possess specialised skills. Additionally, in order to maintain its reputation, RMG has to be cautious of hiring too many foreign doctors, which are generally seen as inferior in Singapore – this causes the supply of qualified doctors to remain low

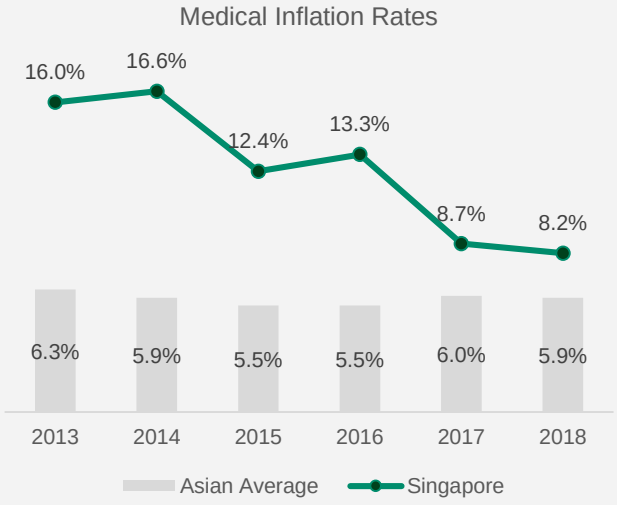
Threat of New Entrants: Moderate
For RMG's hospital segment, the threat of new entrants is low as there are high barriers to entry in the private hospital industry in Singapore stemming from (1) tight regulations from the MOH (2) a low supply of reputable medical specialists, (3) high capital outlay required to open new hospitals and (4) competition from private hospitals. However, the threat of new entrants is high for the healthcare services segment as it is easy to open private outpatient clinics in Singapore.

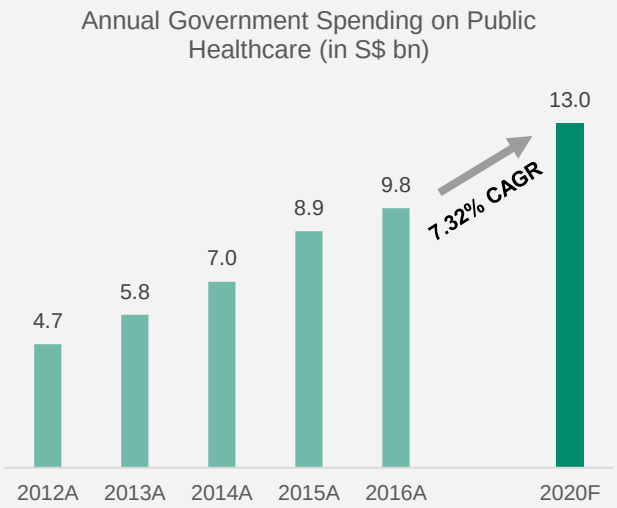
Threat of Substitutes: Low
The largest potential substitute to mainstream Western medicine is alternative medicine. However, alternative medicine such as traditional Chinese Medicine (TCM) poses a relatively low threat as rising medical literacy and a modernisation of the population leads to growing scepticism over its effectiveness. Additionally, there are increasing studies that find that it is not a very effective form of treatment.

Degree of Rivalry: Moderate
Although there is some degree of competition among private hospitals in terms of services – and to a smaller degree – price, most private hospitals are known for a different area of expertise. As such, they are slightly differentiated in terms of product offerings, which reduces the degree of rivalry. Additionally, for urgent medical cases – in which private healthcare is the preferred choice – proximity to the patient matters more so than the reputation of the hospital.

Competitive Dynamics: High
The increase in access to public healthcare arising from MOH's plan to increase supply of public healthcare threatens the businesses of private healthcare providers for more price-sensitive consumers. Additionally, foreign healthcare providers, which are traditionally seen as inferior to Singapore's healthcare, are starting to catch up, resulting in increased competition from regional players. This is due to the decline in (i) the cost differential between Singapore and neighbouring countries, and (ii) the rising quality of care and standards in neighbouring countries. The MTI scores of neighbouring states have therefore been increasing, with the difference in MTI with Singapore decreasing.

Appendix 2: Healthcare Trends in Singapore

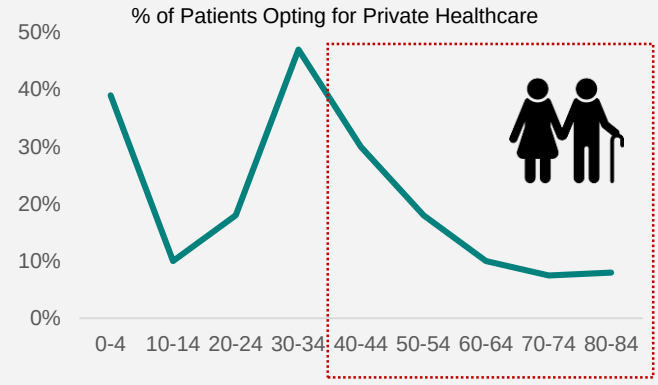




Medical inflation rates are still high due to (i) increased insurance up-take and (ii) higher staff and overhead costs. However, rates have slowed significantly due to an increase in access to public healthcare with increased government spending. This is expected to continue with the huge 7.32% CAGR in public healthcare funding by the government, as part of SG's Healthcare 2020 Masterplan.

Appendix 3: Weakening Demand from Elderly Population for Private Healthcare

Proportion of patients choosing private hospitals declines after the age of 35 due to **high cost burden from treatment fees and insurance premiums**



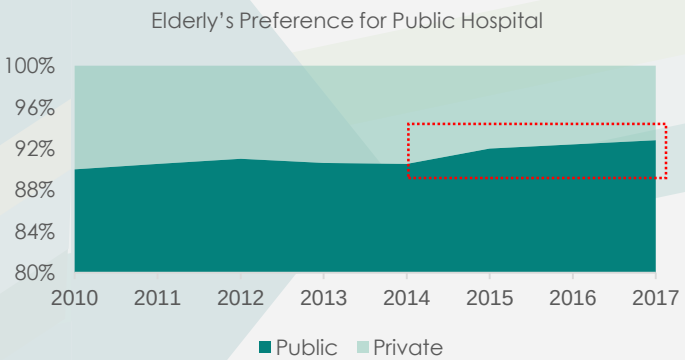
Higher Average Treatment Cost

Av/day, S$	Medical Specialties	Surgical Specialties
Private	**3026.6**	**5578.2**
Class A	1611.7	2500.0
Class C	320.4	478.6

Private healthcare cost **2 to 12x more** than public healthcare

High Insurance Premiums

Insurance premiums **triple** from age 65 ($2,233) to 85 ($6,508)



Source: Ministry of Health, Singapore Statistics

Appendix 4 – Income Statement

FYE 31 Dec	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
Revenue	**410,535**	**473,608**	**477,583**	**484,711**	**533,399**	**564,740**	**598,145**	**640,732**
Cost of revenue	**(284,678)**	**(333,386)**	**(341,226)**	**(339,698)**	**(404,204)**	**(427,965)**	**(450,861)**	**(493,586)**
Inventories and consumables used	(44,270)	(51,235)	(54,067)	(53,318)	(60,261)	(64,552)	(69,142)	(75,063)
Purchased and contracted services	(36,871)	(40,415)	(39,559)	(43,103)	(56,214)	(65,100)	(70,758)	(78,677)
Staff costs	(203,537)	(241,736)	(247,600)	(243,277)	(287,728)	(298,313)	(310,961)	(339,846)
Gross profit	**125,857**	**140,222**	**136,357**	**145,013**	**129,195**	**136,775**	**147,284**	**147,147**
Operating lease expenses	(11,040)	(14,215)	(13,204)	(12,479)	(12,711)	(12,975)	(13,246)	(13,547)
Other operating expenses	(25,123)	(32,925)	(31,908)	(31,768)	(32,358)	(33,030)	(33,720)	(34,486)
EBITDA	**89,694**	**93,082**	**91,245**	**100,766**	**84,126**	**90,769**	**100,318**	**99,114**
Depreciation of property, plant and equipment	(12,757)	(14,491)	(14,388)	(15,277)	(20,964)	(23,753)	(25,297)	(27,851)
Amortisation of intangible assets	(50)	(174)	(604)	(1,606)	(1,652)	(1,702)	(1,754)	(1,810)
Other operating income	3,717	3,529	3,833	-	-	-	-	-
Operating profit	**80,604**	**81,946**	**80,086**	**83,883**	**61,510**	**65,314**	**73,267**	**69,453**
Financial income	1,098	1,138	936	1,029	1,057	1,099	2,109	2,155
Finance expenses	(95)	(154)	(204)	(1,766)	(2,358)	(2,358)	(2,358)	(2,358)
Profit before taxation	**81,607**	**82,930**	**80,818**	**83,146**	**60,209**	**64,055**	**73,018**	**69,249**
Tax expense	(12,576)	(14,984)	(12,157)	(14,135)	(10,038)	(10,807)	(12,437)	(11,754)
Profit after taxation for the year	**69,031**	**67,946**	**68,661**	**69,011**	**50,171**	**53,248**	**60,581**	**57,495**

Key Metrics	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
Revenue Growth %	9.6%	15.4%	0.8%	1.5%	10.1%	6.0%	6.1%	6.7%
Gross Margin %	30.7%	29.6%	28.6%	29.1%	22.3%	21.5%	24.3%	23.3%
EBITDA Margin %	22.3%	19.9%	19.4%	20.3%	14.2%	13.6%	16.7%	16.1%
EBIT Margin %	19.8%	17.3%	16.5%	16.8%	9.9%	9.1%	12.1%	11.4%
Net Profit Margin %	17.0%	14.3%	14.1%	13.8%	8.0%	7.4%	10.0%	9.4%
Staff Costs as % of Sales	50%	51%	52%	51%	56%	56%	52%	53%
D&A as % of Sales	3%	3%	3%	4%	4%	5%	5%	5%
Other OPEX as % of Sales	6%	7%	6%	6%	6%	6%	5%	5%

Appendix 5 – Balance Sheet

FYE 31 Dec	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
Non-current assets								
Property, plant and equipment	264,273	270,066	384,021	412,125	431,191	458,920	457,608	448,947
Intangible assets and goodwill	32,139	30,660	36,773	38,380	37,304	35,667	35,622	33,749
Investment properties	343,866	371,472	385,498	453,597	484,660	509,660	509,660	509,660
Deferred tax assets	790	437	1,025	1,025	1,025	1,025	1,025	1,025
Trade and other receivables	3,233	4,711	3,060	3,807	4,193	4,445	4,681	4,994
Total non-current assets	**644,301**	**677,346**	**810,377**	**908,934**	**958,373**	**1,009,716**	**1,008,596**	**998,375**
Current assets								
Inventories	9,577	9,994	9,955	11,342	13,685	14,669	14,997	14,732
Trade and other receivables	74,995	101,408	87,259	78,315	82,738	87,704	93,018	99,238
Cash and cash equivalents	86,057	111,883	98,270	93,511	297,775	73,602	323,117	176,962
Total current assets	**170,629**	**223,285**	**195,484**	**183,168**	**394,198**	**175,975**	**431,133**	**290,932**
Total assets	**814,930**	**900,631**	**1,005,861**	**1,092,102**	**1,352,571**	**1,185,691**	**1,439,729**	**1,289,307**
Current liabilities								
Loans and borrowings	11,402	13,451	41,204	108,432	250,772	108,432	250,772	108,432
Current tax liabilities	12,529	14,163	12,904	12,904	12,904	12,904	12,904	12,904
Trade and other payables	118,451	144,728	126,305	125,279	132,669	142,210	136,307	147,318
Other financial liabilities	1,654	166	2,941	2,941	2,941	2,941	2,941	2,941
Insurance contract provisions	12,804	11,705	11,137	13,308	14,656	15,536	11,402	12,165
Total current liabilities	**156,840**	**184,213**	**194,491**	**262,864**	**413,942**	**282,023**	**414,327**	**283,760**
Non-current liabilities								
Loans and borrowings	20,880	16,947	38,000	9,316	80,486	9,316	80,486	9,316
Trade and other payables	3,385	4,397	15,102	8,591	10,365	11,110	11,359	12,277
Other financial liabilities	7,136	8,377	1,773	1,773	1,773	1,773	1,773	1,773
Deferred tax liabilities	4,662	4,853	4,870	4,870	4,870	4,870	4,870	4,870
Total non-current liabilities	**36,063**	**34,574**	**59,745**	**24,549**	**97,493**	**27,069**	**98,487**	**28,235**
Total liabilities	**192,903**	**218,787**	**254,236**	**287,413**	**511,435**	**309,092**	**512,814**	**311,995**
Equity								
Share capital	286,366	314,165	340,201	347,005	353,945	361,024	368,245	375,609
Reserves	316,739	352,223	393,849	444,622	467,178	494,749	540,310	586,153
Translation Reserve	(1,149)	(4,092)	(4,376)	(4,376)	(4,376)	(4,376)	(4,376)	(4,376)
Share option Reserve	21,089	23,745	26,194	26,194	26,194	26,194	26,194	26,194
Revaluation Reserve	1,712	1,712	1,712	1,712	1,712	1,712	1,712	1,712
Other Reserve	(8,790)	(8,543)	(4,714)	(4,714)	(10,439)	(10,439)	(10,439)	(10,439)
Accumulated Profits	303,877	339,401	375,033	425,806	454,087	481,659	527,219	573,062
Non-controlling interests	18,922	15,456	17,575	13,062	20,012	20,826	18,360	15,550
Total equity	**622,027**	**681,844**	**751,625**	**804,689**	**841,135**	**876,599**	**926,915**	**977,312**
Total equity and liabilities	**814,930**	**900,631**	**1,005,861**	**1,092,102**	**1,352,571**	**1,185,691**	**1,439,729**	**1,289,307**

Appendix 6 – Cash Flow Statement

Cash flows from operating activities	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
Profit for the year	69,031	67,946	68,661	66,794	42,956	41,675	60,186	60,235
Adjustments for:	25,088	29,945	25,934	31,578	32,737	35,335	40,235	42,833
Amortisation of intangible assets	50	174	604	1,883	1,983	2,033	2,265	2,321
Changes in fair value of investment properties	(1,494)	(1,530)	(3,085)	-	-	-	-	-
Depreciation of PPE	12,757	14,491	14,388	15,277	20,968	23,762	25,316	27,868
Equity settled share based payment transactions	2,205	2,656	2,449	-	-	-	-	-
Finance expenses	95	154	204	1,766	2,358	2,358	2,358	2,358
Finance income	(1,098)	(1,138)	(936)	(1,029)	(1,057)	(1,099)	(2,109)	(2,155)
Gain on disposal of a subsidiary	-	-	-	-	-	-	-	-
Gain on disposal of PPE, net	(37)	-	-	-	-	-	-	-
Loss on disposal of PPE, net	6	-	10	-	-	-	-	-
PPE written off	28	154	143	-	-	-	-	-
Tax expense	12,576	14,984	12,157	13,681	8,484	8,281	12,404	12,440
Changes in net working capital:	(8,769)	(5,965)	2,705	1,444	3,361	4,965	(15,667)	6,423
Inventories	(226)	(417)	39	(1,387)	(2,342)	(984)	(328)	265
Trade and other receivables	(8,114)	(28,474)	16,343	8,197	(4,808)	(5,218)	(5,551)	(6,533)
Trade and other payables	(2,139)	24,025	(13,109)	(7,537)	9,164	10,287	(5,654)	11,928
Insurance contract provisions	1,710	(1,099)	(568)	2,171	1,348	880	(4,133)	762
Cash generated from operations	**85,350**	**91,926**	**97,300**	**99,816**	**79,054**	**81,975**	**84,755**	**109,491**
Tax paid	(12,534)	(12,693)	(13,970)	(13,681)	(8,484)	(8,281)	(12,404)	(12,440)
Interest paid	-	(379)	(637)	(1,766)	(2,358)	(2,358)	(2,358)	(2,358)
Net cash generated from operating activities	**72,816**	**78,854**	**82,693**	**84,369**	**68,211**	**71,336**	**69,992**	**94,693**
Cash flows from investing activities								
Interest received	1,126	1,188	952	1,029	1,057	1,099	2,109	2,155
Proceeds from disposal of PPE	479	-	12	-	-	-	-	-
Proceeds from disposal of a subsidiary	-	-	-	-	-	-	-	-
Acquisition of subsidiaries, net of cash acquired	(29,786)	-	-	-	-	-	-	-
Purchase of PPE	(34,687)	(14,497)	(10,007)	(43,382)	(40,034)	(51,491)	(24,005)	(19,207)
Acquisition of intangible assets	-	-	(5,888)	(3,490)	(907)	(396)	(2,220)	(448)
Payment for investment properties under development	(115,328)	(31,063)	(125,733)	(68,099)	(31,063)	(25,000)	-	-
Net cash used in investing activities	**(178,196)**	**(44,372)**	**(140,664)**	**(113,941)**	**(70,948)**	**(75,788)**	**(24,116)**	**(17,501)**
Cash flows from financing activities								
Dividends paid to owners of Company	(11,581)	(13,980)	(14,389)	(13,359)	(8,591)	(8,335)	(12,037)	(12,047)
Acquisition of non-controlling interests	-	-	-	(2,413)	-	-	-	-
Dividends paid to non-controlling interest	(100)	(116)	-	-	-	-	-	-
Loan from subsidiary's non-controlling interest	1,376	623	233	-	-	-	-	-
Proceeds from issue of shares under share option scheme	12,396	7,093	5,278	2,041	2,082	2,124	2,166	2,209
Proceeds from issue of shares to non-controlling interests of subsidiaries	13,414	-	4,122	-	-	-	-	-
Proceeds from bank loans	105,792	95,886	236,219	317,262	321,942	37,262	321,942	37,262
Repayment of bank loans	(80,152)	(97,992)	(186,721)	(278,719)	(108,432)	(250,772)	(108,432)	(250,772)
Net cash used in financing activities	**41,145**	**(8,486)**	**44,742**	**24,813**	**207,001**	**(219,721)**	**203,639**	**(223,348)**
Cash and cash equivalents at beginning of the year	150,179	86,057	111,883	98,270	93,511	297,775	73,602	323,117
Net (decrease)/ increase in cash and cash equivalents	(64,235)	25,996	(13,229)	(4,759)	204,264	(224,173)	249,515	(146,155)
Effect of exchange rate fluctuations on cash held	113	(170)	(384)	-	-	-	-	-
Cash and cash equivalents at end of the year	**86,057**	**111,883**	**98,270**	**93,511**	**297,775**	**73,602**	**323,117**	**176,962**

Appendix 7 – Revenue Projections for Singapore Operations

Summary	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
Healthcare Services Revenue	**149,189**	**193,823**	**189,797**	**192,178**	**195,153**	**198,091**	**200,728**	**203,129**
Healthcare Services (Clinics)	77,072	126,496	131,587	131,104	130,589	131,368	133,453	135,538
Raffles Health Insurance	72,117	67,327	58,210	58,234	60,647	62,782	63,271	63,525
Airport Screening	N/A	N/A	N/A	2,840	3,918	3,941	4,004	4,066
Hospital Services	**249,465**	**263,453**	**268,108**	**270,886**	**274,752**	**279,692**	**284,951**	**289,956**
Investment Holdings	**11,881**	**16,332**	**19,679**	**21,646**	**23,811**	**26,192**	**28,811**	**30,252**
Total Revenue	**410,535**	**473,608**	**477,583**	**484,711**	**493,716**	**503,975**	**514,490**	**523,338**

Revenue Drivers	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
Healthcare Services (Clinics)								
Total clinic revenue ('000)	**77,072**	**126,496**	**131,587**	**131,104**	**130,589**	**131,368**	**133,453**	**135,538**
Number of clinics	42	56	60	61	62	63	64	65
Revenue per clinic ('000)	1,835	2,259	2,193	2,149	2,106	2,085	2,085	2,085
Raffles Health Insurance								
Gross premiums ('000)	72,117	67,327	58,210	56,234	54,347	52,860	52,331	51,809
Individual premiums	24,130	22,466	23,305	23,072	22,841	22,613	22,387	22,163
Group premiums	47,890	44,756	34,866	33,122	31,466	30,208	29,906	29,607
Inward reinsurance premiums	97	105	39	39	39	39	39	39
Integrated Plans ('000)	N/A	N/A	N/A	2000	6,300	9,923	10,940	11,716
Insurance Premiums	N/A	N/A	N/A	400	420	441	463	486
IP Sign ups ('000)	N/A	N/A	N/A	5.0	15.0	22.5	23.6	24.1
Hospital Services								
Total Revenue from Foreign Patients ('000)	107,779	99,620	91,574	84,537	78,041	72,045	67,866	65,208
Total Revenue from Local Patients ('000)	141,686	163,833	176,534	186,349	196,710	207,647	217,085	224,748
Revenue per Foreign Patient	1,350	1,316	1,292	1,266	1,241	1,216	1,216	1,241
Revenue per Local Patient	914	1,000	1,018	1,033	1,048	1,064	1,080	1,096
Patient mix ('000)	235	240	244	247	251	254	257	258
No. of Foreign Patients ('000)	80	76	71	67	63	59	56	53
No. of Local Patients ('000)	155	164	173	180	188	195	201	205

Appendix 8 – Revenue Projections for China Operations

*Summary (**SGD ' 000**)*	2019F	2020F	2021F	2022F	2023F
China Revenue	40,076	61,855	85,628	116,909	138,381
Cost of Revenue	(60,209)	(78,995)	(81,347)	(111,064)	(124,543)
Inventories and consumables used	(6,011)	(9,278)	(12,844)	(17,536)	(20,757)
Purchased and contracted services	(8,015)	(12,371)	(17,126)	(23,382)	(20,757)
Staff costs	(46,182)	(57,346)	(51,377)	(70,146)	(83,029)

*Revenue Drivers **(CNY '000)***	2019F	2020F	2021F	2022F	2023F
Chongqing Hospital					
Private Beds Revenue	**105,930**	**169,223**	**239,169**	**257,580**	**309,096**
Revenue per Bed	1,766	1,880	1,993	2,103	2,208
Bed Capacity	300	300	300	350	400
Bed Utilisation Rate	20%	30%	40%	35%	35%
Yibao Beds Revenue	-	-	-	24,355	39,747
Revenue per Bed	918	936	955	974	994
Bed Capacity	-	-	-	100	100
Bed Utilisation Rate	0%	0%	0%	25%	40%
Total Revenue for Chongqing	**105,930**	**169,223**	**239,169**	**281,934**	**348,843**
Shanghai Hospital					
Revenue	**96,300**	**142,909**	**192,927**	**308,014**	**349,456**
Revenue per Bed	1,926	2,042	2,144	2,240	2,330
Bed Capacity	200	200	200	250	300
Bed Utilisation Rate	25%	35%	45%	55%	50%
Total Revenue for Shanghai	**96,300**	**142,909**	**192,927**	**308,014**	**349,456**

Appendix 9 – Beta Calculation

Peers	Levered Beta	D/E	Tax Rate	Unlevered Beta
IHH Healthcare	0.79	26%	29%	0.66
ISEC Healthcare	0.34	0%	22%	0.34
HMI Ltd	0.96	46%	28%	0.72
Q&M Dental Group	0.69	76%	3%	0.40
Singapore O&G	0.94	0%	12%	0.94
TalkMed Group Ltd	0.38	0%	19%	0.38
Aier Eye Hospital	0.67	27%	23%	0.56
Topchoice – A	0.61	44%	20%	0.45
Harmonicare Medical	0.44	0%	13%	0.44
CRM Holdings	1.06	3%	23%	1.04
Median	**0.68**	**15%**	**21%**	**0.50**
Raffles Medical	**0.56**	**11%**	**15%**	**0.50**

Adj. Regression Beta: **0.65**

Bottom-up Beta: **0.56**

We took the target capital structure of 11%, consistent with the weightage for WACC computation.

Appendix 10 – WACC Calculation

Cost of Equity	
Risk Free Rate	2.77%
Country Risk Premium	0.98%
Equity Risk Premium	6.55%
Relevered Beta	0.56
Cost of Equity	**6.42%**

Cost of Debt	
Blended Risk Free Rate	2.77%
Spread	0.54%
Cost of Debt	3.31%
Tax Rate	17%
After-tax Cost of Debt	**2.75%**

Weighted Average Cost of Capital

Target Capital Structure	Cost of Equity	Cost of Debt	WACC
11%	6.42%	2.75%	6.02%

Appendix 11 – DCF Computation

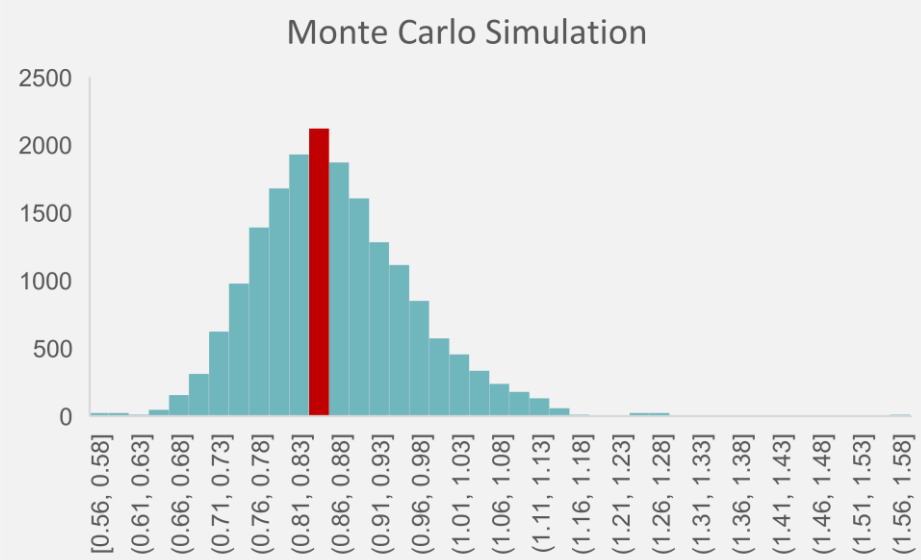
FYE 31 Dec	2018F	2019F	2020F	2021F	2022F	2023F	2024F	2025F	2026F	2027F
Revenue	**484,711**	**533,791**	**565,830**	**600,118**	**640,247**	**672,299**	**703,143**	**731,929**	**773,004**	**792,405**
% Growth	1.5%	10.1%	6.0%	6.1%	6.7%	5.0%	4.6%	4.1%	5.6%	2.5%
EBITDA	**98,373**	**75,693**	**77,011**	**100,422**	**103,068**	**112,568**	**116,360**	**119,761**	**124,239**	**126,854**
% Margin	20.3%	14.2%	13.6%	16.7%	16.1%	16.7%	16.5%	16.4%	16.1%	16.0%
Depreciation	(15,277)	(20,968)	(23,762)	(25,316)	(27,868)	(30,544)	(29,372)	(27,363)	(27,778)	(28,222)
Amortisation	(1,883)	(1,983)	(2,033)	(2,265)	(2,321)	(2,414)	(2,482)	(2,583)	(1,685)	(1,684)
EBIT	**81,212**	**52,741**	**51,215**	**72,840**	**72,878**	**79,610**	**84,505**	**89,815**	**94,775**	**96,948**
% Margin	16.8%	9.9%	9.1%	12.1%	11.4%	11.8%	12.0%	12.3%	12.3%	12.2%
Tax Rate	17.0%	16.5%	16.6%	17.1%	17.1%	17.3%	17.3%	17.3%	17.4%	17.4%
EBIT * (1-T)	**67,406**	**43,775**	**42,509**	**60,457**	**60,489**	**66,077**	**70,140**	**74,547**	**78,664**	**80,467**
(+) D&A	17,161	22,951	25,795	27,582	30,189	32,958	31,854	29,946	29,946	29,906
(-) Change in NWC	1,444	3,361	4,965	(15,667)	6,423	6,533	6,141	(1,473)	22,848	(398)
(-) Capital Expenditure	(43,382)	(40,034)	(51,491)	(24,005)	(19,207)	(20,169)	(56,251)	(29,277)	(30,920)	(31,696)
Unlevered FCFF	**42,629**	**30,053**	**21,778**	**48,367**	**77,895**	**85,398**	**51,883**	**73,743**	**100,055**	**78,279**

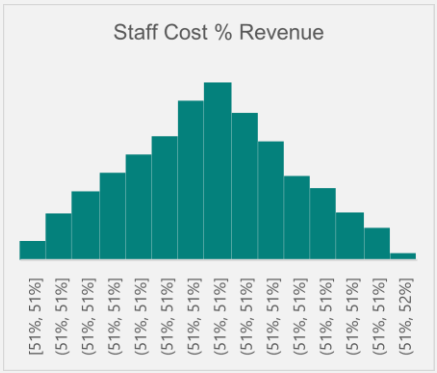
Terminal Value Calculation (SGD' 000)			
TGR	1.25%	**1.75%**	2.25%
Terminal Value 2027F ('000)	1,661,663	**1,865,416**	2,123,218
PV of TV	972,572	**1,091,829**	1,242,720
Implied EV/EBITDA	16.12x	**18.10x**	20.60x
Target Price	0.79	**0.86**	0.94

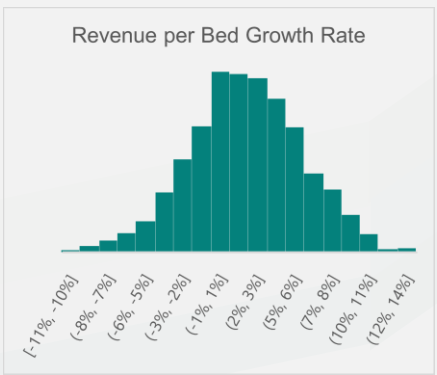
Appendix 12 – Comparable Companies Analysis

Company Name	Market Cap (SGDm)	Shares Outstanding (m)	Stock Price (4/1/19)	P/E			EV/EBITDA			P/B			Dividend Yield
				LTM	NTM	2019F	LTM	NTM	2019F	LTM	NTM	2019F	
Raffles Medical Group	1959	1797	1.09	27.3x	34.0x	33.7x	21.1x	20.0x	20.2x	2.6x	2.4x	2.4x	2.06%
Hospital and Healthcare Services													
IHH Healthcare	15,426	8,769	1.80	NM	43.8x	43.9x	20.0x	17.2x	17.2x	2.1x	1.9x	1.9x	0.56%
ISEC Healthcare	132	517	0.26	NM	NM	NM	NM	NM	NM	2.0x	NM	NM	5.80%
Health Management Intl	461	837	0.55	24.2x	21.1x	22.3x	NM	11.9x	12.6x	5.3x	4.1x	4.5x	1.22%
Q & M Dental Singapore	393	786	0.50	25.6x	NM	25.3x	14.4x	22.8x	23.0x	3.6x	3.1x	3.2x	2.64%
Singapore O&G	167	477	0.35	15.7x	NM	15.9x	11.4x	NM	11.3x	3.7x	NM	3.6x	4.83%
Talkmed Group	775	1,314	0.59	28.1x	29.5x	29.2x	22.6x	NM	NM	12.1x	NM	NM	3.61%
Aier Eye Hospital	11,742	2,383	5.06	57.9x	40.2x	40.3x	NM	24.9x	24.8x	10.6x	7.0x	7.0x	0.81%
Topchoice Medical	2,927	321	9.38	47.6x	38.1x	38.4x	NM	24.9x	25.1x	11.7x	8.9x	8.9x	0.07%
Harmonicare Medical Holdings	237	758	0.31	NM	12.9x	13.1x	15.7x	5.0x	5.1x	0.9x	0.8x	0.8x	NA
China Resources Medical Holdings	1,089	1,297	0.85	18.0x	12.0x	12.0x	20.9x	6.3x	6.5x	1.0x	0.9x	0.9x	2.28%
25th Percentile				21.1x	17.0x	15.9x	14.8x	9.1x	10.1x	2.0x	1.4x	1.7x	
75th Percentile				37.8x	39.2x	38.4x	20.7x	23.8x	23.5x	9.2x	5.5x	5.1x	
Average				31.0x	28.2x	26.7x	17.5x	16.1x	15.7x	5.3x	3.8x	3.9x	
Median				25.6x	29.5x	25.3x	17.8x	17.2x	14.9x	3.6x	3.1x	3.4x	

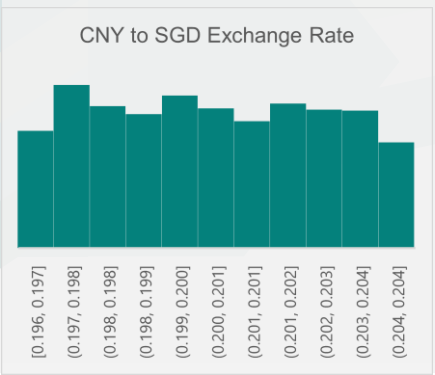
Appendix 13: Monte Carlo Simulation

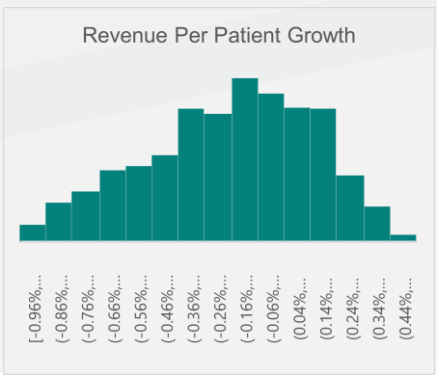


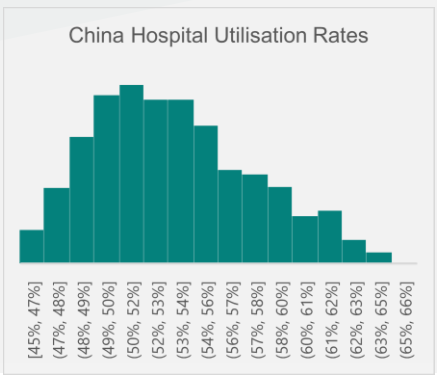




In our Monte Carlo Simulation, 55% of our results were lower than our price target of S$0.86. Furthermore, only 1.7% of our simulations exceeded the current price, which aligns with our stance that there are little upside risks to our valuation. The variables and the respective distributions used are as observed from the following graphs.







Appendix 14 – Team Estimates vs Consensus

Street Estimates

Date 2/9/2019

	Revenue				Revenue growth (%)		
In SGD (mm)	FY17a	FY18e	FY19e	FY20e	FY18e	FY19e	FY20e
CS	478	514	595	741	7.6%	15.7%	24.7%
GS	478	487	551	604	1.9%	13.1%	9.8%
Daiwa	478	492	708	836	2.9%	43.9%	18.1%
OCBC	478	507	571		6.1%	12.8%	
Median	**478**	**499**	**583**	**741**	**4.5%**	**16.7%**	**27.2%**
Team Estimates	**478**	**485**	**574**	**628**	**1.5%**	**18.4%**	**9.4%**
Diff.	*(0.0%)*	*(2.9%)*	*(1.5%)*	*(15.3%)*	*(3.0%)*	*1.6%*	*(17.8%)*

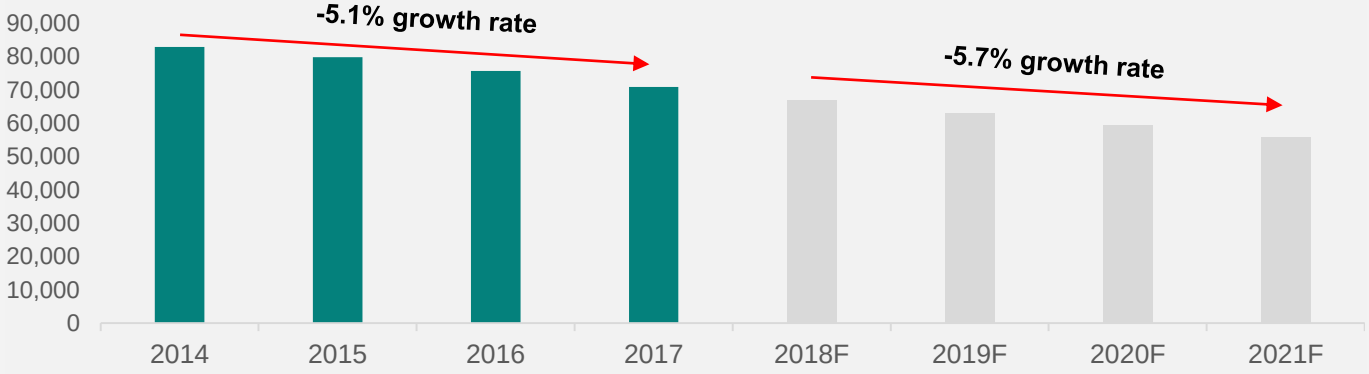
	EBITDA				EBITDA growth (%)			EBITDA margin (%)			
In SGD (mm)	FY17a	FY18e	FY19e	FY20e	FY18e	FY19e	FY20e	FY17a	FY18e	FY19e	FY20e
CS	95	99	98	105	3.9%	0.8%	7.4%	19.9%	19.2%	16.5%	14.2%
GS	95	96	100	119	0.7%	4.8%	18.6%	19.9%	19.7%	18.2%	19.7%
Daiwa	95	102	115	137	7.4%	(12.7%)	19.1%	19.9%	20.7%	16.2%	16.4%
OCBC	95	98	93		2.7%	5.3%		19.9%	19.3%	16.2%	
Median	**95**	**98**	**99**	**119**	**3.3%**	**(1.0%)**	**20.1%**	**19.9%**	**19.7%**	**17.0%**	**16.1%**
Team Estimates	**93**	**98**	**76**	**77**	**6.1%**	**(23.1%)**	**1.7%**	**19.4%**	**20.3%**	**13.2%**	**12.3%**
Diff.	*(2.5%)*	*0.1%*	*(23.7%)*	*(35.3%)*	*2.8%*	*(22.1%)*	*(18.3%)*	*(0.5%)*	*0.6%*	*(3.8%)*	*(3.8%)*

	Net Profit				Net profit growth (%)			Net profit margin (%)			
In SGD (mm)	FY17a	FY18e	FY19e	FY20e	FY18e	FY19e	FY20e	FY17a	FY18e	FY19e	FY20e
CS	71	59	54	54	(17.5%)	(8.8%)	1.1%	14.9%	11.5%	9.0%	7.3%
GS	71	64	57	67	(9.7%)	(10.8%)	18.1%	14.8%	13.1%	10.4%	11.1%
Daiwa	71	70	72	83	(1.4%)	2.9%	15.3%	14.9%	14.2%	10.2%	9.9%
OCBC	71	68	59		(4.2%)	(13.0%)		14.8%	13.4%	10.3%	
Median	**71**	**66**	**58**	**67**	**(7.1%)**	**(11.9%)**	**16.0%**	**14.8%**	**13.2%**	**10.0%**	**9.1%**
Team Estimates	**69**	**69**	**42**	**41**	**(0.8%)**	**(39.4%)**	**(2.1%)**	**14.5%**	**14.2%**	**7.3%**	**6.5%**
Diff.	*(2.0%)*	*4.6%*	*(28.1%)*	*(39.3%)*	*6.3%*	*(27.5%)*	*(18.1%)*	*(0.3%)*	*1.0%*	*(2.7%)*	*(2.6%)*

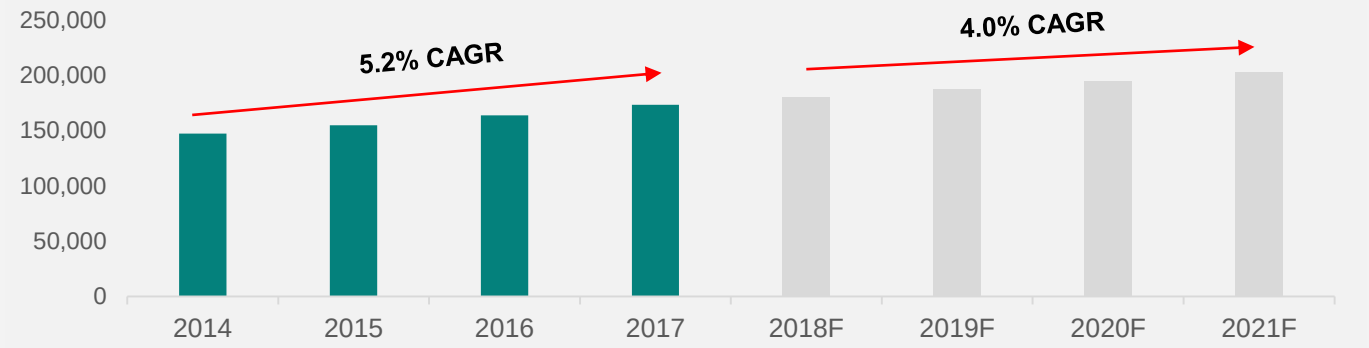
	EPS				EPS growth (%)		
In SGD (mm)	FY17a	FY18e	FY19e	FY20e	FY18e	FY19e	FY20e
CS	0.04	0.03	0.03	0.03	(25.0%)	--	--
GS	0.04	0.04	0.03	0.04	--	(25.0%)	33.3%
Daiwa	0.04	0.04	0.04	0.05	--	2.5%	14.6%
OCBC	0.04	0.04	0.03		(2.5%)	(15.4%)	
Median	**0.04**	**0.04**	**0.03**	**0.04**	**(1.3%)**	**(20.3%)**	**27.0%**
Team Estimates	**0.04**	**0.04**	**0.02**	**0.02**	**(2.8%)**	**(39.4%)**	**(2.1%)**
Diff.	*-0.01*	*-0.03*	*-0.26*	*-0.43*	*(1.6%)*	*(19.2%)*	*(29.1%)*

Appendix 15 – Hospital Patient Load

Foreign Patient Load

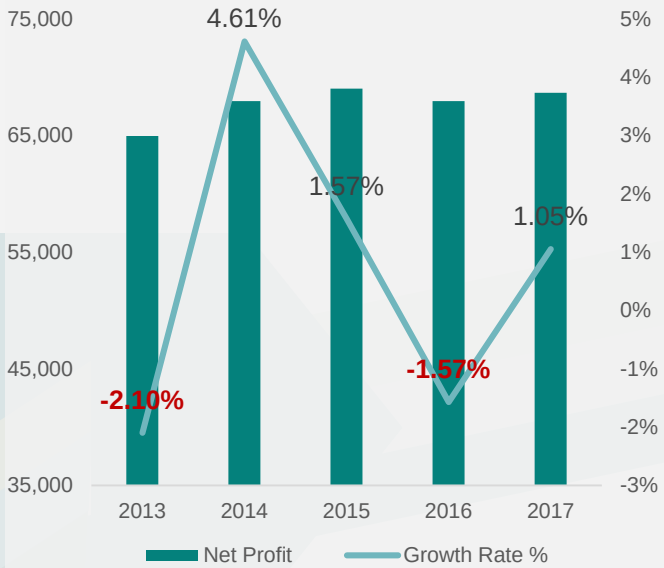


Local Patient Load

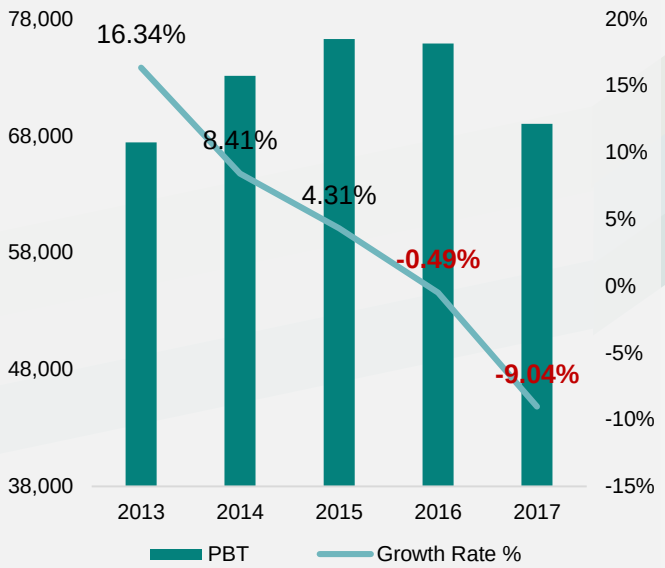


Appendix 16 – RMG's Profit Breakdown

Adj. NPAT (Overall)



Adj. NPAT (Overall)



Main Takeaways:

1. RMG's stable NPAT performance is masked by contributions from investment holdings.
2. Excluding profits from investment holdings, profit growth turned negative in the past 2 financial years.

Appendix 17 – Medical Treatment Cost in Singapore

Treatment Name	CGH	Gleneagles	KK Hospital	Mount A.	Mount E.	NUH	RMG	SGH	TTSH
Appendectomy	4,376	n.a.	n.a.	12,825	n.a.	4,988	10,306	n.a.	4,955
Bronchitis	n.a.	5,035	1,253	4,563	n.a.	n.a.	n.a.	n.a.	n.a.
Labor and Delivery (C)	n.a.	11,388	7,422	8,285	11,501	6,987	6,694	6,896	n.a.
Labor and Delivery (R)	n.a.	7,154	4,039	5,610	7,335	4,570	4,201	3,392	n.a.
Heart Attack	4,170	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8,398
Knee Repair Surgery	n.a.	14,373	n.a.	10,729	13,945	8,731	n.a.	6,312	7,059
Myopia / Lasik Surgery	n.a.	3,481	n.a.	n.a.	n.a.	n.a.	n.a.	N/A	2,442
Kidney Stone Relief	n.a.	7,886	n.a.	4,814	5,501	3,794	6,115	3,598	3,068
Cyst / Tumor Removal	761	4,413	276	2,312	3,955	1,438	3,289	1,106	1,120

Treatment Cost by Rank

Treatment Name	CGH	Gleneagles	KK Hospital	Mount A.	Mount E.	NUH	RMG	SGH	TTSH
Appendectomy	5	n.a.	n.a.	2	n.a.	3	1	n.a.	4
Bronchitis	n.a.	1	3	2	n.a.	n.a.	n.a.	n.a.	n.a.
Labor and Delivery (C)	n.a.	3	5	4	2	6	1	7	n.a.
Labor and Delivery (R)	n.a.	3	6	4	1	5	2	7	n.a.
Heart Attack	2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1
Knee Repair Surgery	n.a.	1	n.a.	3	2	4	n.a.	6	5
Myopia / Lasik Surgery	n.a.	1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2
Kidney Stone Relief	n.a.	1	n.a.	4	3	5	2	6	7
Cyst / Tumor Removal	8	1	9	4	2	5	3	7	6

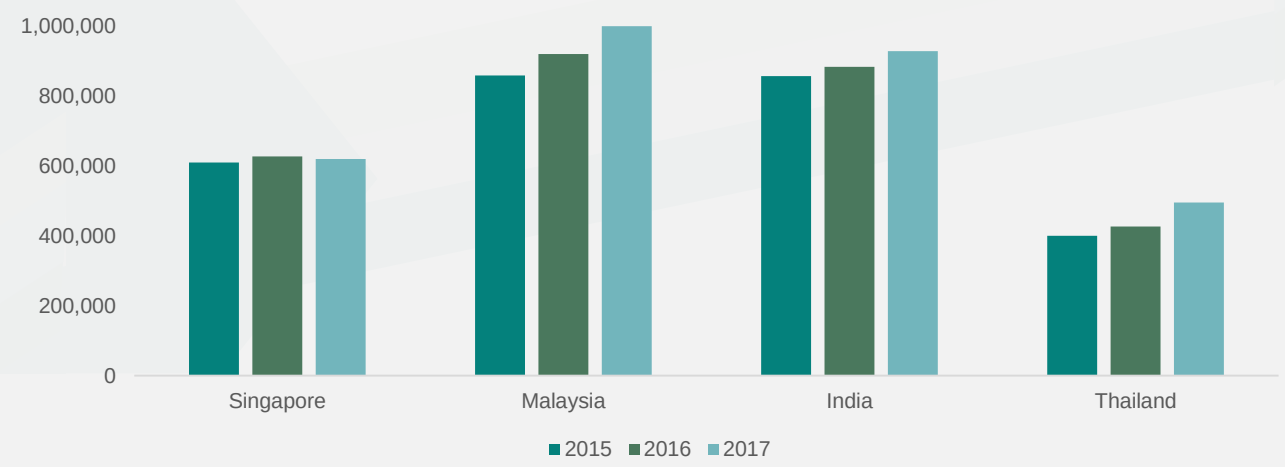
Appendix 18 – Treatment Cost Comparison in Asia Pacific

Procedure (USD)	Singapore	Malaysia	India	Thailand
Heart bypass	**17,200**	12,100	7,900	15,000
Hip replacement	13,900	8,000	7,200	**17,000**
Dental implant	**2,700**	1,500	900	1,720
Gastric bypass	13,700	9,900	7,000	**16,800**
Breast implants	**8,400**	3,800	3,000	3,500
IVF treatment	**14,900**	6,900	200	4,100

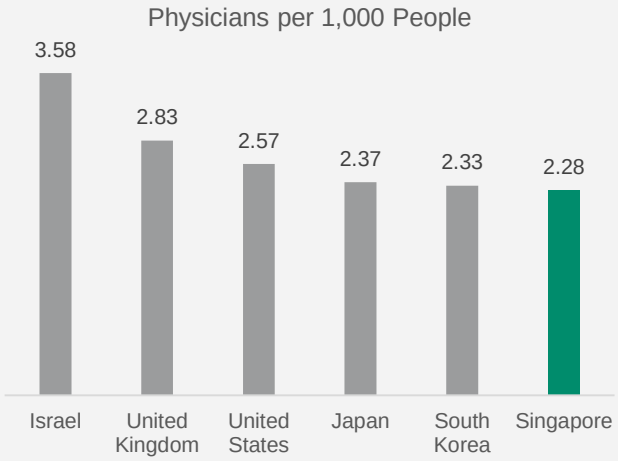
Source: Medical Tourism Association 2018

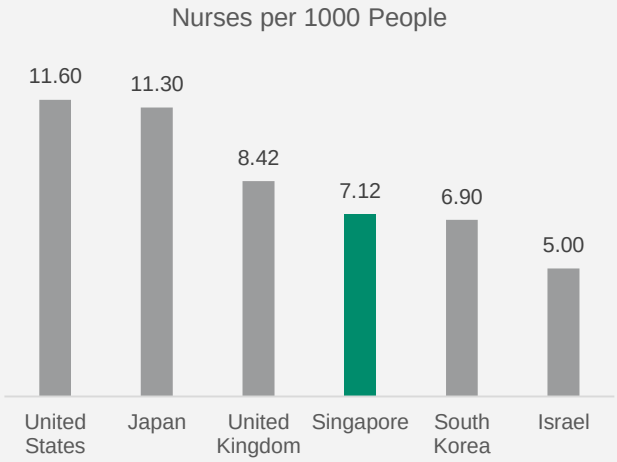
Singapore's surgical costs are on average **79%, 137%, 73%** higher than Malaysia, India and Thailand.

Appendix 19 – Medical Tourism Volume



Appendix 20 – General Shortage of Physicians in Singapore

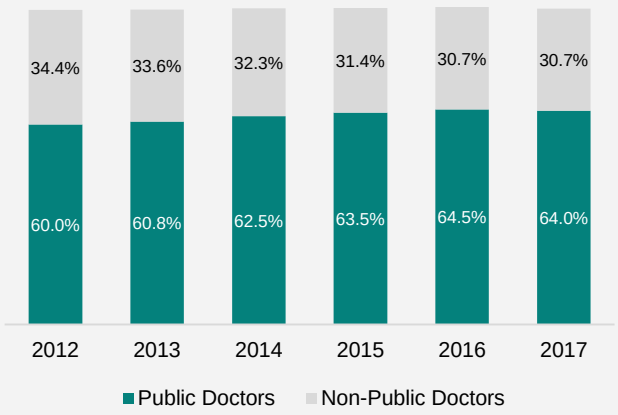




Appendix 21 – Staff Mix between Public and Private Hospitals (SG)

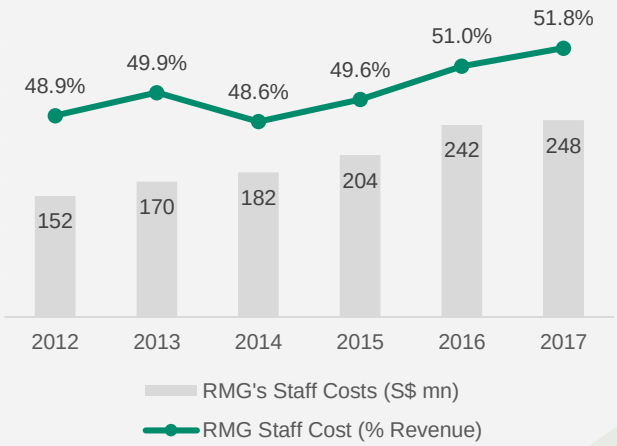
High Percentage of Public Doctors

2012: **Mandated 20% increase in salary** for public medical workers who make up majority of workforce

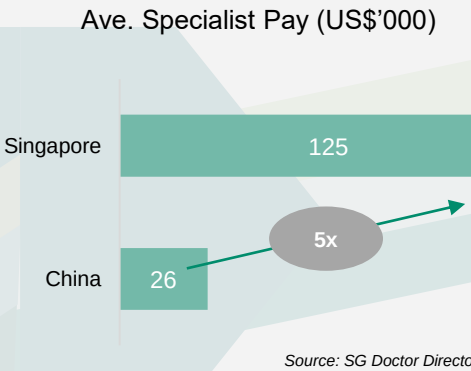


Leading to Already Increasing Staff Costs

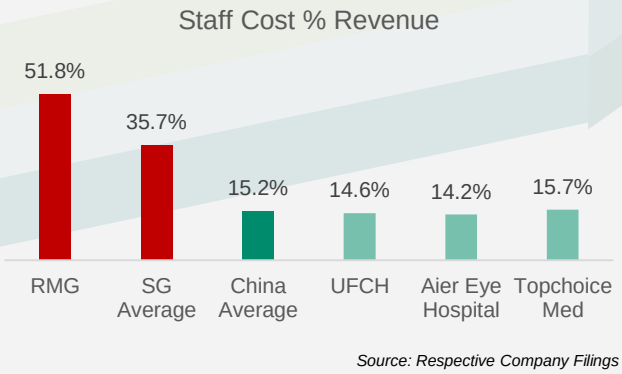
RMG's staff cost increased by a 5-year CAGR of **10.2%** (FY12-17)



Appendix 22 – Staff Salary Comparison between Singapore and China



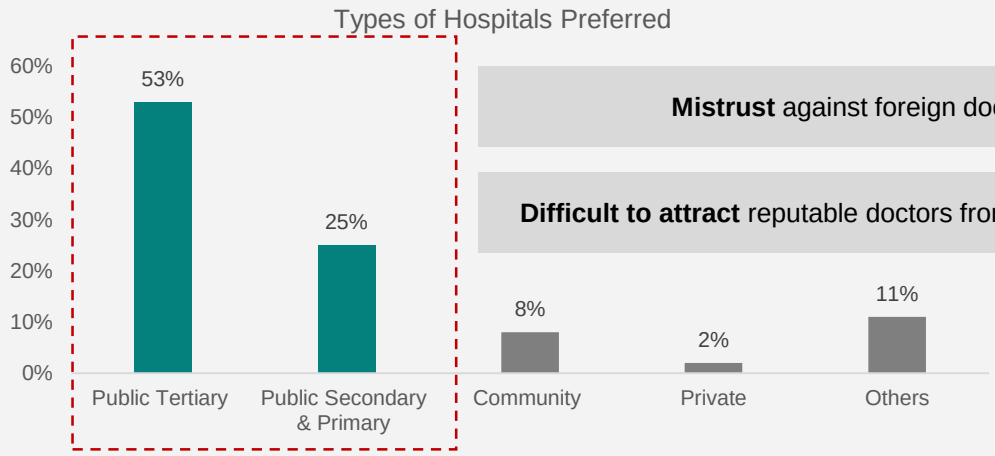
Source: SG Doctor Directory, MIMS



Source: Respective Company Filings

Substantially lower staff costs in China due to lower specialist pay

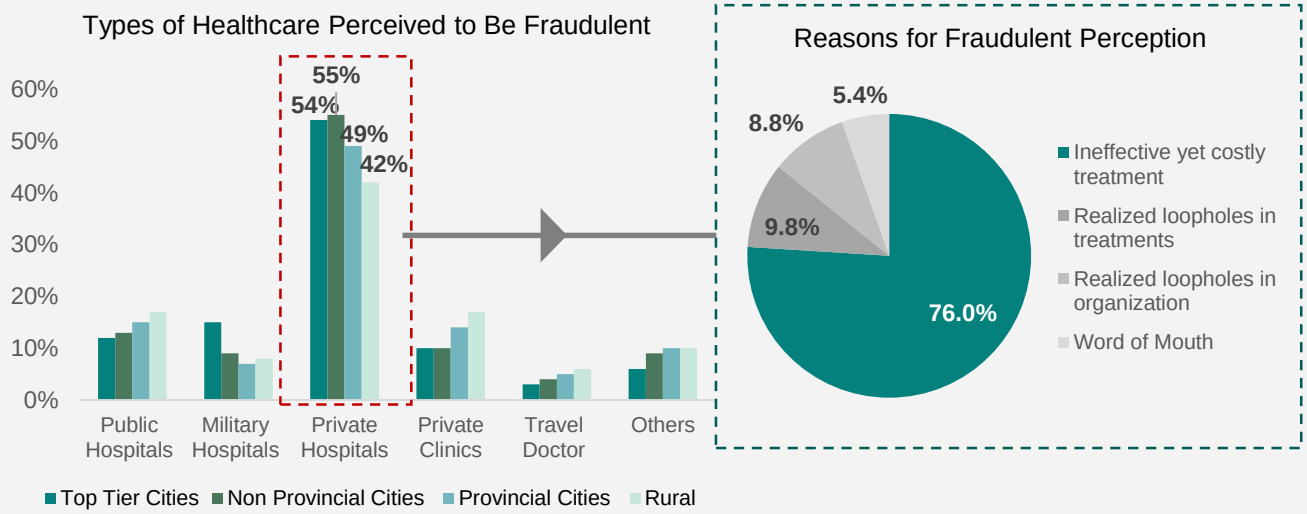
Appendix 23 – Strong Inherent Preference for Public Hospitals (China)



Mistrust against foreign doctors

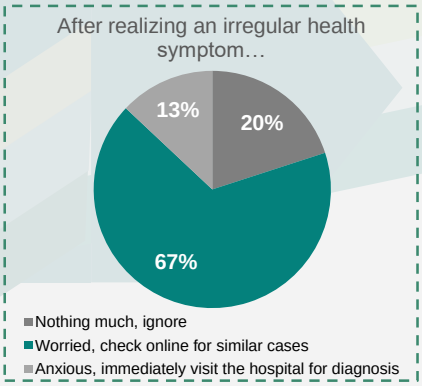
Difficult to attract reputable doctors from public hospitals

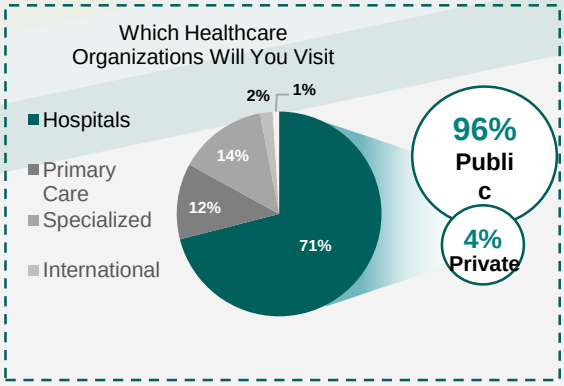
Appendix 24 – Reasons for Local Mistrust in Private Healthcare (China)

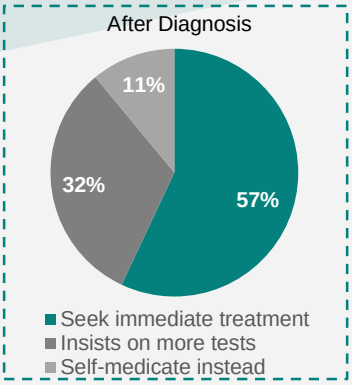


Appendix 25 – Comparing Western vs Chinese Patient

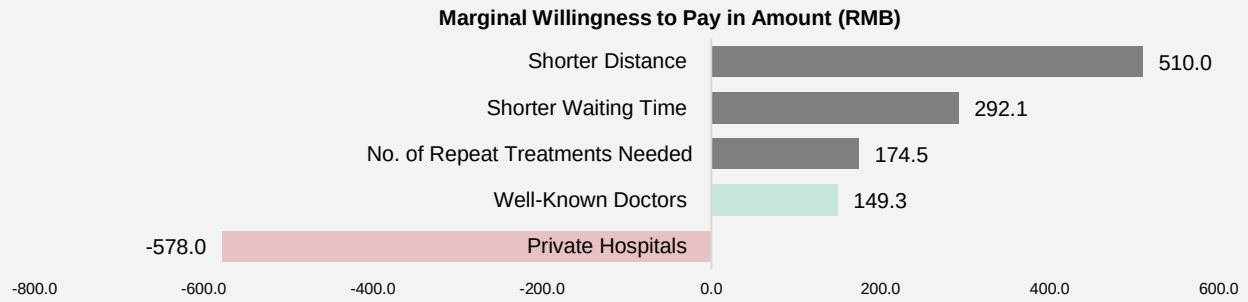
Seeks professional diagnosis	Visits family clinics	Applies for multiple tests
Research for self-diagnosis	**Visits Public Hospitals**	**Seeks immediate treatment**



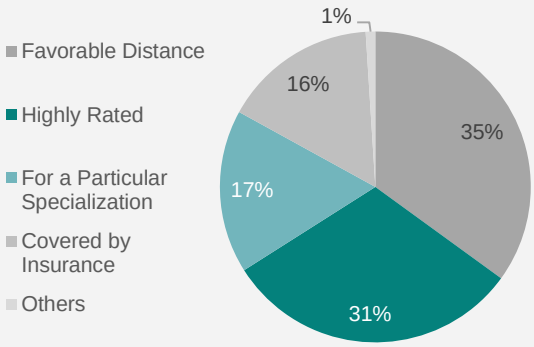




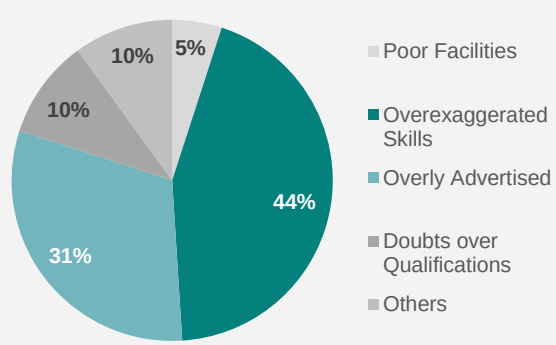
Appendix 26: Negative Marginal Willingness-to-Pay for Private Care



Appendix 27: Reasons Against Private Healthcare and For Public Healthcare



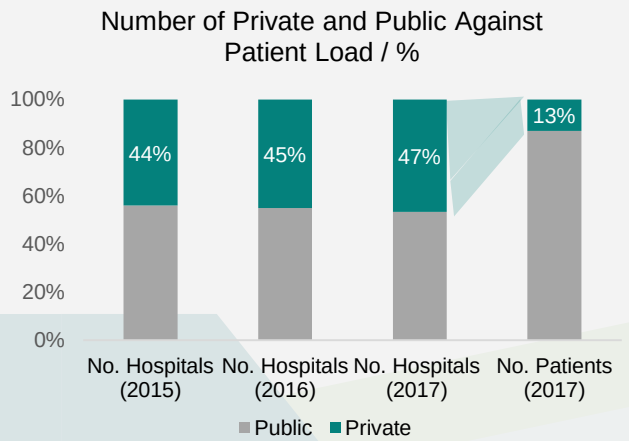
Chinese parents are driven by **brand name of hospitals and / or specialized field**

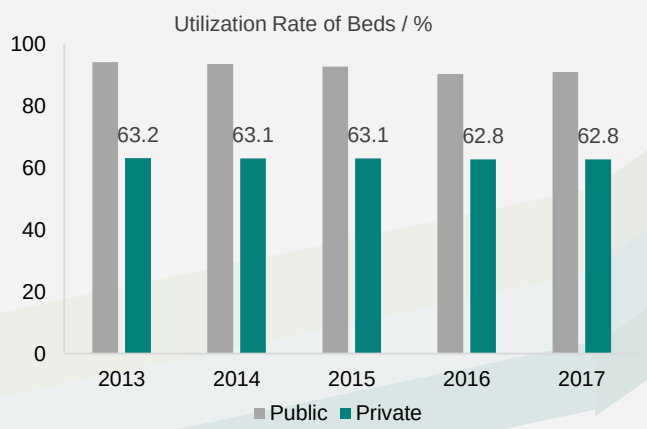


Chinese patients are largely concerned of whether doctors are able to deliver treatments effectively

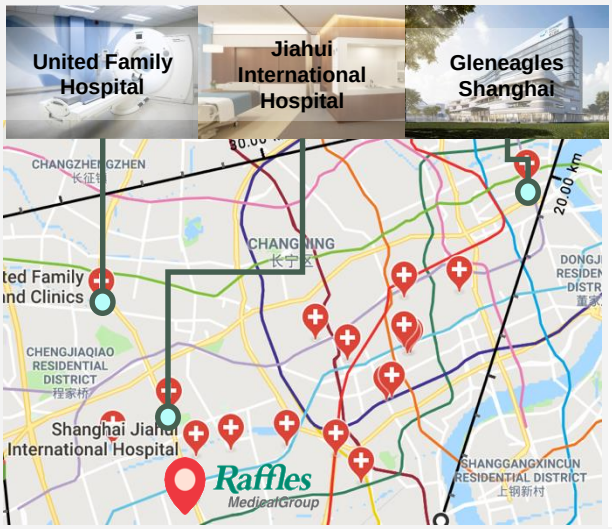
Appendix 28: Poor Utilization Rate of Private Hospitals in China

Despite increasing number of private hospitals, it still records low patient load and poor utilization rate of beds





Appendix 30: Market Sizing the High Density of Private Hospitals in Shanghai FTZ

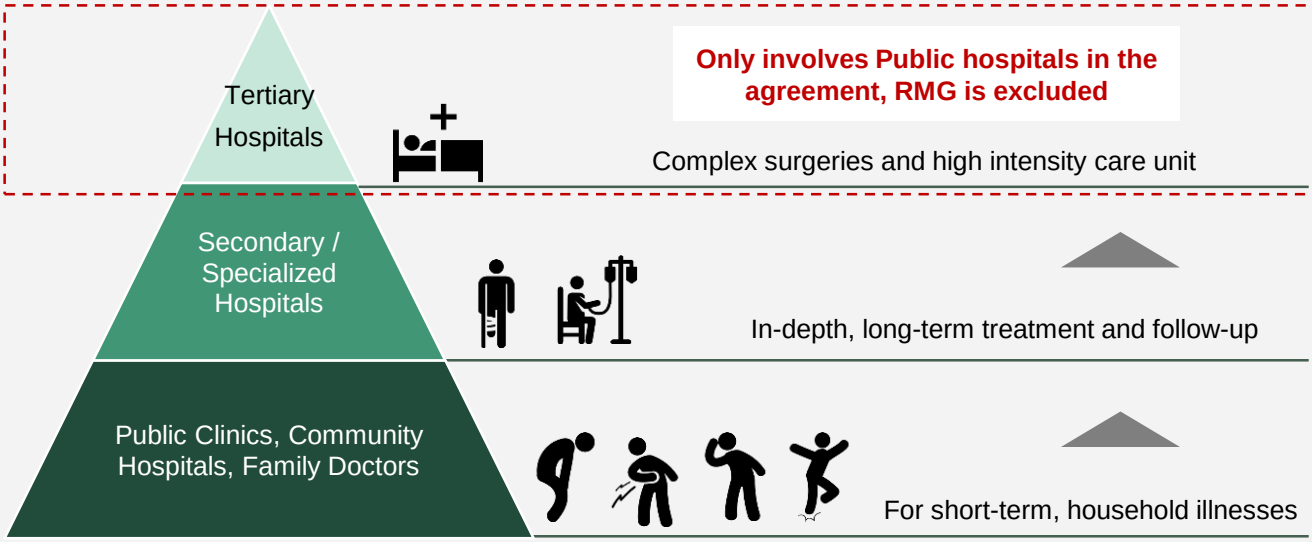


Assumptions:

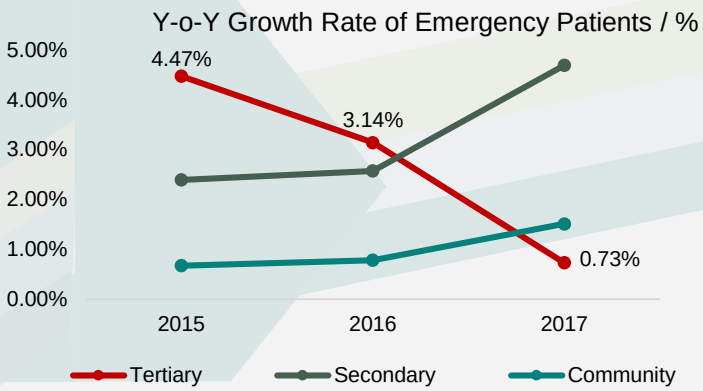
1. Taking the average number of beds of most recent hospitals multiplied across number of private hospitals in FTZ
2. Addressable market includes A. Expats in Shanghai since most hospitals in FTZ are WFOHs, B. Top 20% of locals in Pudong

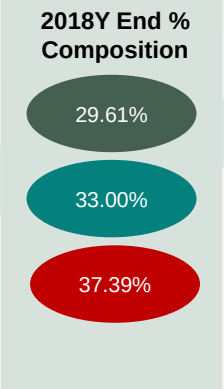
Pudong, Shanghai		
Number of Beds		
Shanghai Branch of United Family Hospitals	200	*Company Reports*
Artemed Group Hospital	450	*Company Reports*
Savaid Hospital	260	*Company Reports*
Raffles Hospital	400	*Company Reports*
Average Number of Beds	**327.5**	
Number of Private Hospitals Within Area	10	
Total Number of Beds	**3275**	
Numnber of Expats to Shanghai (2017)	219,953	*CEIC, 2017*
Top 20% of locals in Pudong, Shanghai	100,880	*Team Estimates, Shanghai Yearbook*
Total addressable market	**320,833**	
Number of Beds Per 1,000 Person (Shanghai FTZ)	**10.21**	

Appendix 31: Tiered System (分级治疗) Creates Local Hub-and-Spoke



Appendix 32: Tiered System (分级治疗) Creates Local Hub-and-Spoke





Patient load has equalized over different hospital type as **more patients have been diverted from tertiary to primary care**

Appendix 33: Statements Made by Dr Loo, Executive Chairman of Raffles Medical

Expectations to target 140Mn

A 'very difficult' road ahead in China

Says Andrew Chow, head of research for Singapore at UOB Kay Hian, "In the next 12 to 18 months, the China investment will be a drag on earnings. It will take a while to ramp up, and fixed costs will be ahead of that." (It's a similar story for Raffles' Malaysian competitor, IHH Healthcare, which has three China projects under way.)

Loo acknowledges Raffles Medical has a "very difficult" road. "But we are serious people," he adds. "We do our sums." After studying Chinese health care for 32 years and walking through some 100 Chinese hospitals, Loo believes China finally has enough well-heeled people -- 140 million per his estimate -- who can afford Raffles' international standard of care.

Expectations to target 700Mn with insurance partnerships

CGTN

Health 23:42, 28-Jan-2019

Raffles Medical Group: 'We're in China for the long-run'

Loo acknowledged that the hospital's operating costs will be higher, as they will be hiring a mixture of local and foreign staff. However, he pointed out that based on the group's market survey, "the top 10-20 percent in China can afford us."

"And we intend to work with insurance companies so that with the insurance policies, the 50 percent of Chinese people can afford us if they become a member or they take out an insurance policy. That way we can serve 700 million people. In Chongqing itself there will be an addressable market of 17 million people," he added.

Expectations to maintain current premiums in China

RHB

25 April 2017

Raffles Medical Group

Management expects revenue per bed to not be lower than that in Singapore. In our assumption, we use Raffles Hospital's average inpatient bill size in Singapore.

- "We either succeed gloriously or fail miserably" – Dr Loo on Raffles Medical's venture into China.

Appendix 34: Market Sizing for China's Addressable Market

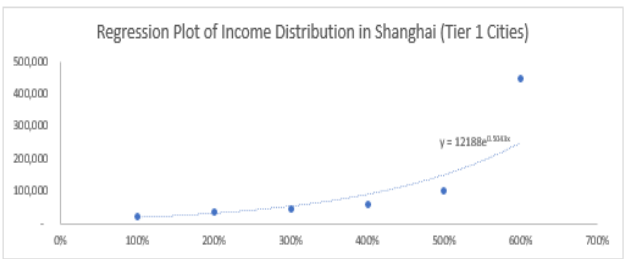
Taking an average inpatient cost of RMG 12,500 and expenditure percentage of 7.0% of total income (sourced from historical data by the China Statistical Yearbook) it is used to calculate the required income an individual is expected to earn to afford the above treatment. The calculated income bracket is then mapped to the income distribution curve in both Shanghai and Chongqing to get the top % of population expected to afford private healthcare. Assuming that patients from Tier 1 cities will prefer to visit RMG in Shanghai over Chongqing, and patients from Tier 2 cities will visit RMG at Chongqing over Shanghai, we apply the respective top % in Shanghai and Chongqing to the total population in Tier 1 and Tier 2 cities respectively. This gives us the total addressable market based on expected required income.

A. Shanghai

			China Statistical Yearbook
Base Case Inpatient Cost	$	12,500.00	*中国卫生和计划生育统计年鉴2016*
Buffer		0%	
Average Inpatient Cost	**$**	**12,500.00**	
			China Statistical Yearbook
Average % Expenditure on Healthcare		7.0%	*上海统计年鉴2017*
Required Income	**$**	**178,571.43**	

Income Distribution in Shanghai		*China Statistical Yearbook 上海统计年鉴2017*
Low Income	0-20	24,841
Medium-Low	20-40	38,060
Medium	40-60	48,710
Medium-High	60-80	62,423
Top 20%	80-95	100,688
Top 1%	95-100	450,000

This figure is an example of the market size analysis for Shanghai / Tier 1 cities. The process is repeated for Chongqing with an additional 20% price discount to account for differences in purchasing price parity. It is expected that only the top 4.67% in Chongqing and tier 2 cities can afford RMG private healthcare.



Where y=$178,571, x value is	5.32
% of Population to Have Required Income	**13.5%**

Top 13.5% Of Urban Population in Shanghai / Tier 1

Summing Up Both Tier 1 and 2 Cities	
Addressable Market in Tier 1	15,937,715
Addressable Market in Tier 2	12,166,049
Total Addressable	**28,103,764**

% of Income on Healthcare Expenditure	Discount to Healthcare Cost 0%	10%	20%	30%	40%
7.00%	28,103,764	28,255,685	45,837,065	65,769,189	88,779,137
7.50%	22,827,116	38,554,196	56,135,575	76,067,699	99,077,647
8.00%	32,460,730	48,187,809	65,769,189	85,701,312	108,711,261
8.50%	41,510,118	57,237,198	74,818,577	94,750,701	117,760,649
9.00%	50,042,109	65,769,189	83,350,568	103,282,692	126,292,640

Sensitivity Analysis using Expected Inpatient Costs

Sensitivity analysis is further carried out to check the bull and bear case of our assumptions. Our team concluded that not only does the base case makes up only 17% of the expected 140,000,000 addressable market as claimed, even in the bull case scenario, it is still unable to reach the expected 140 Mn mark.

Sensitivity Analysis using Private Insurance

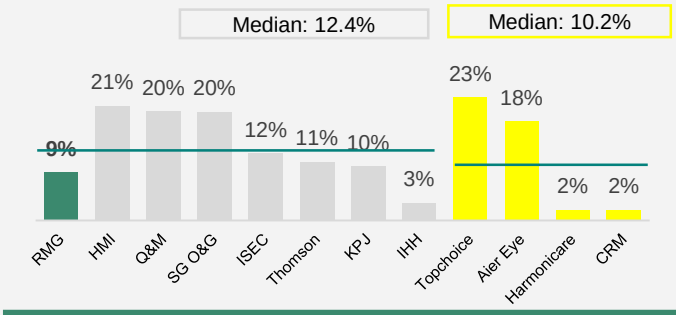
In response to Dr Loo's claims that partnerships with private insurance companies will help increase addressable market size to 700 Mn, our team deduces that since the average private insurance annual cost is higher than the assumed 12,500 RMB inpatient costs at 20,500 RMB, it will result in a small market size, sensitized as such:

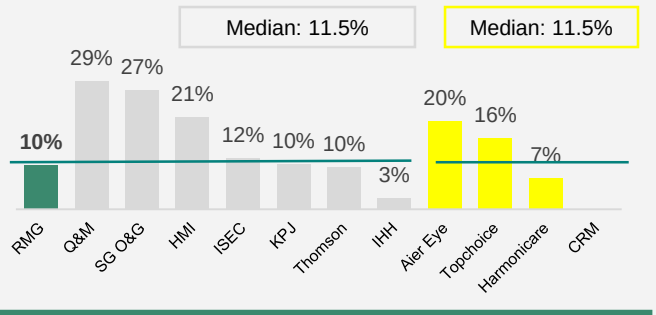
% of Income on Healthcare Expenditure	Discount to Healthcare Cost 0%	10%	20%	30%	40%
7.00%	6,596,455	7,509,490	8,458,585	18,118,766	29,270,626
7.50%	6,152,347	4,928,915	13,449,798	23,109,979	25,234,736
8.00%	8,560,751	9,597,883	18,118,766	27,778,946	34,868,349
8.50%	6,361,514	13,983,704	22,504,587	20,907,790	43,917,738
9.00%	10,496,576	18,118,766	26,639,649	29,439,780	52,449,729

Appendix 35: Financial Analysis Ratios Against Peers

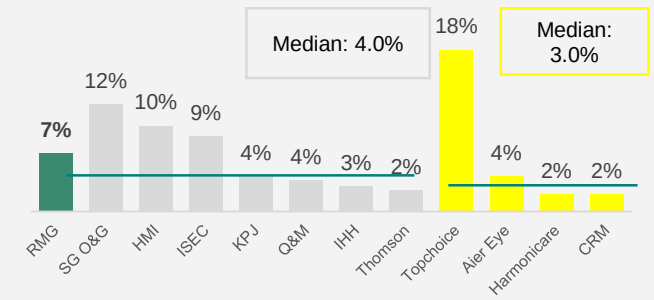
Singapore & Malaysia	China	Singapore & Malaysia	China

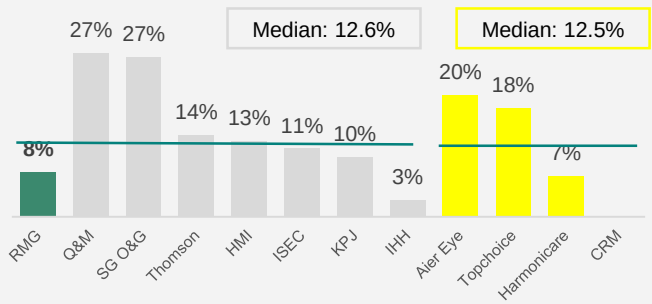
ROE % (2017, 2016)



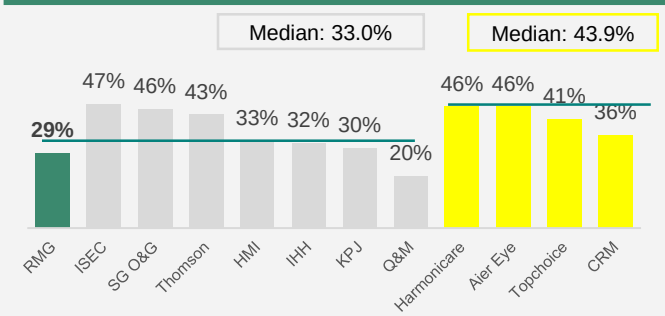


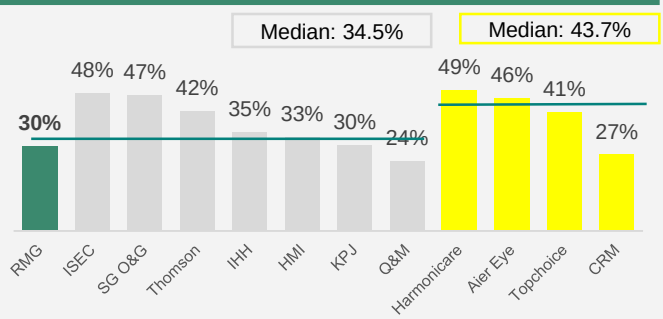
ROA % (2017, 2016)



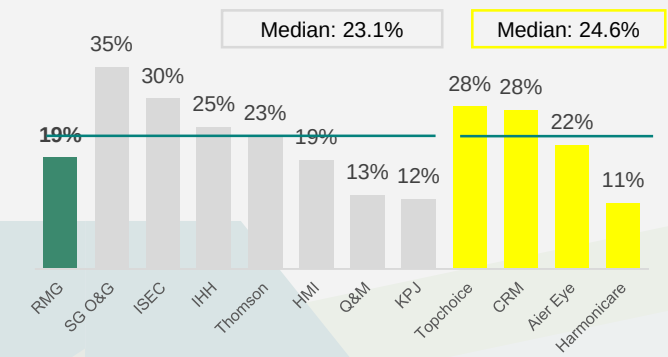


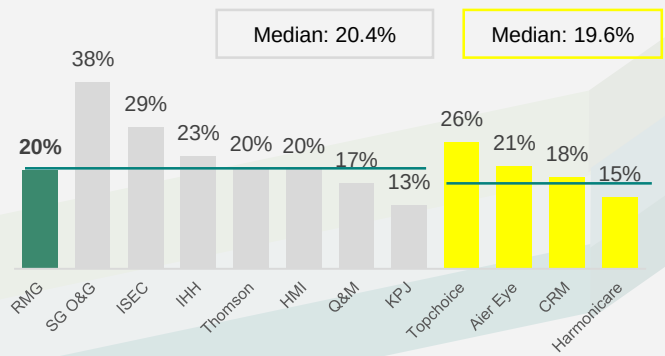
GPM % (2017, 2016)



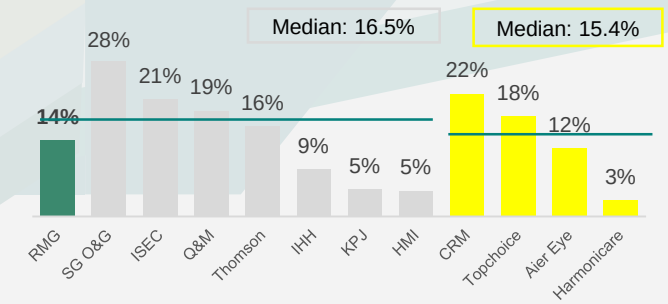


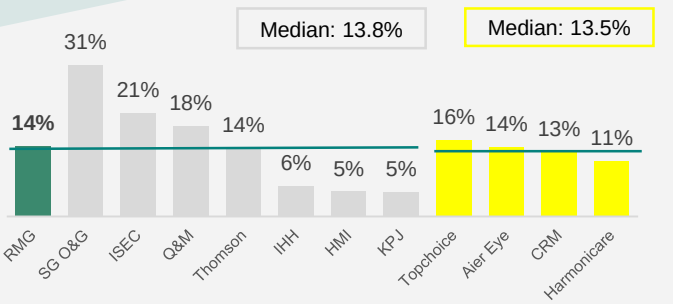
EBITDA Margin % (2017, 2016)





Net Margin % (2017, 2016)





Appendix 36: Key Management Personnel

Choon Yong Loo	Chairman Founder CEO Controlling Shareholder	Dr. Loo cofounded the Group in 1976 and was appointed to his current position in 1997 when the Group was listed on the Singapore Stock Exchange. He is also holding the role of (i) Chairman of the Asian Medical Foundation Ltd, (ii) Chairman of Raffles Health Insurance Pte Ltd and (iii) Director of International SOS (MC Holdings) Pte Ltd. Apart from this role, he holds/held leading positions in both the public and private sector, such as: • Chairman of JTC Corporation • Chairman of Sentosa Development Corporation and Sentosa Golf Club • Nominated Member of Parliament – 2005 to 2006, 2007 to 2009 • Board of Trustees of Singapore Management University (SMU) – 2000 to 2014. • Deputy Chairman of the Action Committee for Entrepreneurship (ACE) • Chairman of ERC's Healthcare Services Working Group (HSWG) • Chairman of National Council Against Drug Abuse (NCADA) • President of Singapore Anti-Narcotic Association (SANA)
Ann Nee Goh	CFO	Ms Goh Ann Nee joined Raffles Medical Group as Chief Financial Officer in February 2016. Prior to her appointment, Ms Goh held roles as: (i) Chief Financial Officer of City Developments Limited and (ii) Vice President (Finance) at Millennium & Copthorne International Limited.
Kah Ling Teo	CIO	Mr Teo has 15 years of experience in the healthcare industry. Mr Teo previously was the Head Systems Services and Principal Enterprise Architect of Integrated Health Information Systems.
Christine Cheu	GM for Raffles Health Insurance	Ms Christine Cheu joined in January 2017. She has 23 years of experience in Life & Health and Reinsurance sectors. Prior roles include Chief Operating Officer of Hong Leong Assurance.and Chief Marketing Officer of Zurich Insurance Malaysia.
Hau-Tek Koh	GM for Raffles Medical, China	Prior to joining Raffles Medical in January 2017, he has worked previously in other major medical groups in Singapore and the Republic of Ireland, and has been a practicing physician for over 17 years. Dr Koh has sat on and presided over Medical Boards and Clinical Governance committees in several medical groups, including Parkway Shenton and Healthway Medical Group. Dr Koh, however, does not seem to have much experience working in the medical industry in China.
Andrew Wong	GM, IndoChina, Special Businesses and Japanese Clinic	Mr Andrew has about 13 years of experience in the healthcare industry. Prior to joining Raffles Medical Group in May 2017, he was the President of Healthway Medical Corporation Ltd in 2016, and Chief Executive Officer of Pacific Healthcare Holdings Ltd from 2014 to 2016. Mr Wong ran a healthcare consultancy advising private equity clients looking at healthcare acquisitions in Asia from 2009 to 2013. He was also Group Vice President, Business Development and Strategy at Parkway Holdings Ltd from 2007 to 2009.
Kenneth Wu	GM, Raffles Hospital	Dr Kenneth Wu is the General Manager of Raffles Hospital and is responsible for the operations and facilities management of Raffles Hospital. He joined the Group in 1997 as a family physician and subsequently took on management roles in Raffles Medical and thereafter, Raffles Hospital.
Yih Ming Yong	GM, Raffles Medical	Mr Yong Yih Ming is responsible for developing the Group's corporate businesses, and managing the primary care network of clinics and health screening centres in Singapore. He joined the Group in 2007 and has served as Director, Operations and Director, Corporate Services. Mr Yong has 14 years of experience in the healthcare industry. He previously held management positions in ambulatory operations, operational support services and business development in Alexandra Hospital before joining the Group.
Kimmy Goh	Group Financial Controller	Mrs Kimmy Goh joined Raffles Medical Group in 1992 and holds the responsibilities of Group Financial Controller since 2005.. Prior to joining the Group, Mrs Goh had about eight years of audit experience with two international public accounting firms.
Soo Nan Tan	Non-Independent, Executive Director	Mr Tan Soo Nan currently serves on the Boards of public listed and private companies including Raffles Medical Group Ltd, SATS Ltd, Raffles Health Insurance Pte Ltd, ICE Futures Singapore Pte Ltd, ICE Clear Singapore Pte Ltd, and ICE Singapore Holdings Pte Ltd. Mr Tan previously held the positions of Chief Executive Officer at Singapore Pools (Private) Limited, Singapore Totalisator Board, and Temasek Capital (Private) Limited as well as Senior Managing Director of DBS Bank.
Lawrence Lim	Director, Corporate Development	Mr Lawrence Lim is responsible for healthcare facility and institutional development projects. He has been here since its inception in 2000.. Prior to this role, he was the Chief Executive Officer of the Singapore General Hospital from 1992 to 2000, and Chief Executive Officer responsible for restructuring the Toa Payoh Hospital from 1990 to 1992.
Soon Neo Tan	Director – Group Commercial	Ms Jessica Tan joined the organisation in June 2017 as Director, Group Commercial. Her role includes leveraging Raffles Medical Group's integrated healthcare system to lead and support the growth strategies for Raffles Medical Group in Singapore and the region. Ms Tan has over 27 years in the IT industry, 13 years with Microsoft and 14 years with IBM.
Choy Siong Wu	Director – Raffles Medical International	Ms Wu is the director of Raffles Medical International responsible for the business operations in Hong Kong and developmental projects in China.. She joined the Group in 2012 as Director of Raffles Medical clinics. Prior to joining the Group, she was the Chief Operating Officer of Maccine Pte Ltd, a biomedical contract research organisation in Singapore.

Source: Company Disclosure, Bloomberg, Reuters