

Invest in an evolving global hospital market

Highlights

In this newsletter, we feature investment ideas arising from evolving hospital M&A trends across a variety of markets.

- **United States:** Hot M&A trend to persist; invest in physicians
- **China:** Improving investment prospects; bring quality care to China's rising middle class
- **Spain:** Hospital operating environment getting tougher; time is ripe for service-oriented Public-Private Partnerships (PPPs)

Executive summary:

Welcome to the first quarter 2012 edition of our Global Healthcare Deals Quarterly newsletter.

Global deals activity has had a slow start in 2012. M&A trend remained depressed during 1Q 2012, reflecting continued economic uncertainty in global markets. Our analysis of Dealogic M&A data finds global middle market M&A values and volumes down 26% and 8%, respectively, during the first quarter of 2012, as compared with the same period in 2011. Contributing factors include lower risk tolerance driving more cash to the sidelines, smaller deal sizes, fewer European deals, and a decline in private equity participation.

1Q 2012 has seen fewer and smaller healthcare deals. Although volume declines are more moderate in healthcare than the global trend, median deal size is down more sharply, reflecting a 16% contraction from the prior two years. Healthcare-specific factors driving down deal size likely include risk aversion ahead of the uncertain impact of health reform initiatives in the United States and United Kingdom; the cooling impact of lower value assigned to incremental innovation in the Medtech sector; and conservatism ahead of a coming patent cliff in the Pharmaceutical sector.

Although recovery may be slow, we maintain an improving outlook as strong corporate balance sheets amidst historically low returns on cash support **a rebound in M&A activity in 2012.**

While still early, we view recent **strength in Russian healthcare M&A and weakness in the United Kingdom** as likely to persist due to fundamentals underlying those two deal markets.

Our 1Q 2012 edition focuses on three regions of the world with accelerating hospital M&A trends, and suggests a variety of opportunities for corporate and financial investors seeking to **participate in the evolution of the global hospital industry.**



Welcome

Welcome to the 1Q 2012 edition of the Global Healthcare Deals Quarterly

PwC's Global Healthcare Deals Quarterly newsletter provides perspectives on recent trends and expected developments in the global healthcare M&A market, including insights into emerging investment opportunities for strategic and financial investors. Our 1Q 2012 edition focuses on investments in the evolving global hospital sector.

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Universal themes drive healthcare markets globally. Although individual health systems have unique challenges and characteristics, each is searching for the best way to finance and deliver healthcare with the right balance of quality, cost, and access. These shared priorities lead to faster, better, and cheaper solutions that transcend borders and cultures. In a word, healthcare is becoming more globalised.

In the M&A marketplace, we see these same trends driving attractive growth opportunities in the coming years.

PwC is a network of firms in 158 countries. By leveraging the expertise of our more than 10,000 health policy, pharmaceutical and life sciences, payer, and provider health professionals, PwC is a leading healthcare professional services firm.

In addition, our deals network of 9,500 experienced professionals includes the leading global transaction services business and the largest international middle market corporate finance business. We advise corporate management teams, private equity funds, and the public sector, with a proven track record in healthcare mid-market transactions. We help clients minimise their risks, progress with the right deals, and capture value at the deal table and after the deal closes.

“We’ve heard ‘the math doesn’t work’ in hospital infrastructure investment: small-scale platforms, long lock-up periods, and modest returns insufficient to offset risk. But today, cost pressures have driven the industry to a tipping point. Investors are able to negotiate innovative reimbursement methodologies, lower cost structures, shift risk, draw from a growing pool of public sector assets in play, and leverage flexible financing solutions to change the math of investment returns. At the same time, reform initiatives are opening new markets to foreign investment, creating an exciting time for hospital M&A investors.”

Dr. David Levy

PwC Global Leader, Healthcare

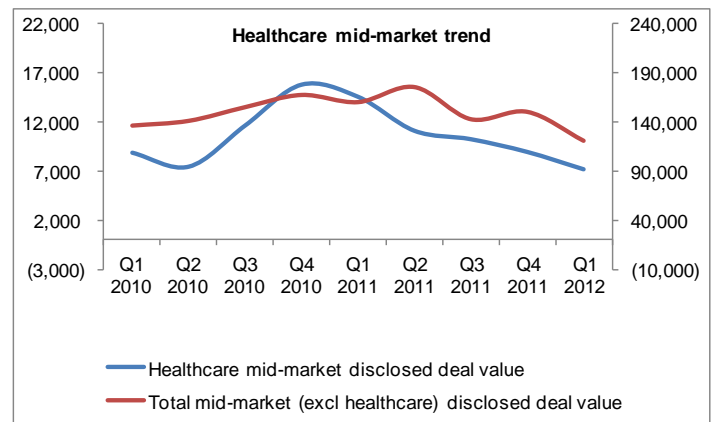
M&A update: Global M&A off to a slow start in 2012

Fewer and smaller healthcare deals in 1Q 2012

The global M&A trend remained depressed during 1Q 2012, reflecting continued economic uncertainty in global markets. Our analysis of Dealogic M&A data finds global middle market M&A¹ values and volumes down 26% and 8%, respectively, during the first quarter of 2012, as compared with the same period in 2011. Contributing factors include lower risk tolerance driving more cash to the sidelines, smaller deal sizes, a decline in private equity participation, and fewer European deals getting done due in part to challenges in obtaining debt financing as banks reduce balance sheets to improve capital and liquidity ratios.

First-quarter trends were generally weak, though vary in degree across industry sectors, as shown below. As compared with deal activity in 1Q 2011, healthcare deal volume contracted more slowly than the underlying global mid-market trend. However, disclosed M&A value contracted more sharply in healthcare than any of the other top 10 ranked industry sectors, falling by over 50% from 1Q 2011. Stronger M&A statistics in global energy and natural resources sectors displaced healthcare from third to sixth highest-ranking sector by deal value during 1Q 2012.

The global financial crisis has created volatile deal markets in recent years, and deal flow trends should be evaluated across a broader time horizon. As shown in the table below, the recent decline in disclosed healthcare deal value trend is actually more gradual than global mid-market trend when compared on a sequential basis.



Source: Dealogic

So while the decline in healthcare deal value may not be as abrupt as it initially appeared, a longer term trend towards smaller deal size may indeed be emerging. During 1Q 2012, healthcare's announced deal value decline reflects both fewer deals disclosing deal value and a 16% reduction in median deal size as compared to the prior two years' first quarter results.

Top 10 target industries	1Q 2012		1Q 2011		Deal value % change 2011-2012	No. % change 2011-2012
	Deal value USD million	No.	Deal value USD million	No.		
Computers & Electronics	14,127	772	14,802	708	-5%	9%
Finance	12,347	376	21,522	509	-43%	-26%
Oil & Gas	10,794	120	9,506	140	14%	-14%
Mining	7,933	88	6,220	152	28%	-42%
Utility & Energy	7,277	129	10,596	173	-31%	-25%
Healthcare	7,191	279	14,575	293	-51%	-5%
Telecomm	7,136	135	9,666	145	-26%	-7%
Metal & Steel	6,346	131	4,583	132	38%	-1%
Real Estate	6,290	157	11,166	194	-44%	-19%
Construction	5,477	348	8,426	345	-35%	1%
Other	43,427	2603	63,319	2764	-31%	-6%
Total	128,346	5,138	174,382	5,555	-26%	-8%

Source: Dealogic

Healthcare mid-market M&A	1Q 2010	1Q 2011	Prior two-year average	1Q 2012
Disclosed deal value (USD million)	\$8,878	\$14,575	\$11,726	\$7,191
total deals	242	293	268	279
deals with disclosed value	42	60	51	40
% disclosed	17%	20%	19%	14%
Median disclosed deal value	\$121	\$129	\$125	\$105
Change from prior two years				-16%

Source: Dealogic

¹We define middle market to include deal value between USD 50 million and USD 750 million; and M&A to exclude acquisition of assets, repurchases, spin-offs, and split-offs.

M&A update: Global M&A off to a slow start in 2012

Fewer and smaller healthcare deals in 1Q 2012

The trend towards smaller deals in healthcare is directionally consistent with macro trends helping to shape today's global deals environment, as described above. Healthcare-specific factors driving down deal size include risk aversion ahead of the uncertain impact of health reform initiatives in the major traditional healthcare deals markets, including the United States and United Kingdom; the cooling impact of lower value assigned to incremental innovation in the Medical Devices sector; and conservatism ahead of a coming patent cliff. Looking ahead, we see a growing appetite for small-scale investment in growth economies, which could drive average global healthcare deal size lower still. However, for now, the mix of cross-border healthcare deals during 1Q 2012 remains in line with the prior two years' 25% average.

Target nation ranking reflects strength in Russia, weakness in United Kingdom

During 1Q 2012, the United States remained the most frequent target nation for mid-market healthcare M&A activity by a wide margin. According to Dealogic, 327 US healthcare deals from 1 January through 10 April, 2012 represent the second fastest pace on record (behind 346 deals during the same period in 2010). However, consistent with global trend mentioned above, US healthcare deal volume has declined 21% on year-to-date deal value, as smaller deals are getting done.

Despite lower overall deal flow in Europe, Russia has moved into the top 10 global rankings. According to Anna Tololeva, who leads healthcare pursuits for PwC's Russia Corporate Finance practice, high growth rates and significant market potential attract both strategic and financial buyers to Russia's Pharmaceutical sector. A strong push from the local government to localise pharmaceutical production has raised additional interest in Pharmaceutical M&A, although a limited number of suitable targets has pushed many to pursue greenfield opportunities. In the services sectors, deal activity is also picking up: Russian Direct Investment Fund (RDIF) and a private equity partner intend to invest about USD 200 million in a medical clinic network in Moscow, incorporating assets from private chain MEDSI and the City of Moscow. The total value of the future clinics' network is estimated at USD 800 million. M&A activity in the services sector has continued into 2Q 2012 with Baring Vostok's USD 100 million minority stake in Moscow private clinic chain European Medical Center. Private investment into the sector is also stimulated by government led Public-Private partnerships (PPPs), such as the medical facility in the Skolkovo Innovation Center initiated by the Skolkovo Fund.

Hong Kong, Israel, and Canada have similarly seen increased deal activity, moving up in the rankings for 2012. Time will tell whether the brisk early start to the year will be maintained.

Meanwhile, the United Kingdom (UK) is notably missing from the top ranks. According to Neal Ransome, head of PwC's European Healthcare Corporate Finance practice, factors hampering UK healthcare deal flow include heavy debt burdens, especially on private equity sponsored businesses, limiting M&A activity in favour of debt pay down; and material uncertainty over the future structure of the public healthcare system pending implementation of the new Health Act.

Mid-market deal trends by target nation are shown in the table below.

Mid-market healthcare M&A by target nation

Target nation	1Q 2012			2011		
	Rank	Deal value USD million	No.	Rank	Deal value USD million	No.
United States	1	4,104	142	1	25,597	524
China	2	1,033	17	2	3,709	54
Israel	3	617	3	16	412	6
Spain	4	471	3	17	404	35
Canada	5	404	7	7	1,110	37
Australia	6	394	4	4	1,683	18
Hong Kong	7	239	1	25	126	3
India	8	203	10	8	741	29
Russia	9	185	7	30	60	20
Japan	10	116	28	15	422	43
United Kingdom	16	0	11	3	1,944	47

Source: Dealogic

“During the first quarter, we saw fewer large, transformational deals; instead, companies are folding in more of what they're already good at in this risk-averse market.”

Chris Hemmings

PwC Global Leader, Corporate Finance

M&A update: Strong incentives to invest

Expect an uptick in M&A during 2012

Looking ahead, we continue to expect an uptick in M&A activity during 2012, with strong corporate balance sheets and significant private equity dry powder supporting our improving M&A outlook.

In a low-interest-rate environment, the absence of real income from cash (whose purchasing power erodes quarter after quarter) creates a strong incentive for corporate management teams to invest.

According to FactSet, aggregate cash balances from the S&P 500 index have grown to more than USD 1.4 trillion, 25% above the past 10 years' average, reflecting consistent year-over-year increases since 2009 as cash inflows have exceeded reinvestments and distributions². Strong corporate balance sheets amidst historically low returns on cash support our view that corporate management teams will more actively seek accretive acquisitions to boost shareholder returns in the coming quarters.

Meanwhile, we continue to expect a rebound in private equity activity, which constitutes roughly 20% of the M&A market. Vintage 2007 and 2008 private equity buyout funds are nearing the end of their five-year investment periods. According to Preqin, these funds have approximately USD 337 billion in capital invested globally, and USD 130 billion in dry powder available for investment as of March 2012³. With mega funds (those worth USD 4.5 billion or more) accounting for roughly half of dry powder reserves, we find support that uncommitted capital will be invested even in a skittish market.

That said, nothing on the immediate horizon indicates a resurgence in deal activity is close at hand. Recovery may be slow, **but we ultimately expect an uptick in M&A activity during 2012.**

The absence of real income from cash creates a strong incentive for corporate management teams to invest. Recovery may be slow, but we ultimately expect an uptick in M&A activity during 2012.

² FactSet: "Cash and equivalents for the S&P 500 are steady for the second consecutive quarter," http://www.factset.com/insider/2012/1/cashinvestment_1.12.12, accessed April 23, 2012

³ Preqin: "The Preqin Quarterly: Private Equity Q1 2012," April 2012

Hospital deals on the global horizon: Investment opportunities across three continents

Historically, mature hospital assets have tended to attract the bulk of investor interest, given opportunities to create value by enhancing the existing structure, building additional capacity, or improving efficiency. Attractive M&A opportunities for mid-market investors are likely to diminish as the industry consolidates and assets are restructured or pass into the hands of larger groups. Case in point: Khazanah's USD 2 billion January 2012 purchase of Acibadem, one of Turkey's privately held, high-quality, large urban hospital systems, reflected a 17X EBITDA multiple following a competitive bidding process. The next big wave of M&A activity is likely in exits, with deal size appreciating away from many mid-market investors.

Meanwhile, hospital investors' longstanding profit maximising strategy of building scale and market presence to drive higher utilisation at richer rates is at risk as governments around the world are experimenting with risk sharing models to reduce total healthcare expenditures.

At PwC, we see new investment opportunities arising in alternative structures that seek to provide higher quality care at equal or lower cost to government payers.

Each of the investment ideas we're featuring in the 1Q 2012 newsletter capitalises on this theme.

Underlying market dynamics vary widely, as shown in the chart below; as do the investment angles.

- In the mature United States (US) hospital market, we find physicians at the heart of hospital sector evolution. Integrating hospitals with physicians will be a necessity. In this section, we propose setting up an independent physician practice management entity which creates value through managing population health.
- Meanwhile, in China, we expect the private sector will take on an increasing role in advancing health reform. We see opportunity in bringing high-quality private services to China's rising middle class.
- Finally, in Spain, an innovative public-private partnership (PPP) model is likely to resonate with the Spanish government as it seeks to lower healthcare costs amidst pressure to narrow a gaping budget deficit.

Economic, health, and operating statistics overview	United States	China	Spain
GDP ⁽¹⁾	15,495 B	7,744 B	1,575 B
Projected 2012 GDP growth	1.8%	8.2%	-1.7%
GDP per capita ⁽²⁾	49,055	5,716	34,051
Unemployment rate	8%	7%	24%
Total expenditure on health as % of GDP	18%	5%	10%
Per capita expenditure on health	7,960	265	3,067
Life expectancy at birth (years)	78	75	81
Number of hospitals	4,985	13,000	287
For-profit (FP) hospital market share	20%	10%	40%

Notes

⁽¹⁾ Gross Domestic Product projected for 2012 at current prices in USD billions

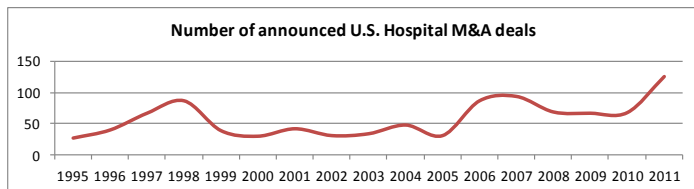
⁽²⁾ Gross Domestic Product at current prices in USD

Source: Dealogic

Dr. Simon Samaha, a principal focused on PwC's Europe, MENA, and India Healthcare practices, sees dramatic changes coming: "Around the world, hospital business models must evolve away from the industry's long-term focus on maximising occupancy. A holistic approach to controlling utilisation will become the new normal, but it will take time."

United States: Hot M&A trend to persist; Invest in physicians

For decades, the United States' extensive and mature hospital industry has seen more M&A deals than any other country in the world. And last year, deal trend accelerated, as shown in the exhibit below. According to our analysis of Dealogic data, 2011 saw 156 hospital and clinic deals, a greater than 50% increase from the prior five years' average volume. In addition to incremental consolidation, a host of new buyers — from private equity firms to commercial insurers — have driven up demand.



Source: Dealogic

Despite a recent uptick in deal flow, the industry remains highly fragmented, with fewer than one-third of United States (US) community hospitals participating in a coordinated delivery network.

We expect a brisk M&A pace will be sustained over the medium term: a confluence of disruptive payment and coverage reforms, cost pressures, and capital needs will stress and transform the US hospital sector. Ultimately, we expect the emergence of larger, integrated systems that can more efficiently manage population health. Drivers of future hospital M&A activity may include:

1. **Pricing pressure:** Federal and state budgetary pressures, coding adjustments, and mandated health reform discounts will result in rate updates trailing annual cost inflation, pressuring the margin on roughly 50% of hospitals' total book of business. Lower payments for poor quality scores present additional risk. Hospitals unable to weather lower reimbursement may be absorbed by stronger systems.
2. **The pursuit of merger synergies:** In a tougher reimbursement environment, we expect hospital management teams will consolidate in pursuit of revenue and cost synergies to maintain margins and cash flow. Larger regional systems benefit primarily from stronger commercial pricing. In addition, operating costs may be reduced incrementally through reduced overhead and labour efficiencies.
3. **Payer-provider integration:** The Affordable Care Act has given rise to a number of accountable-care and bundled-payment pilots, replacing volume with quality outcomes as the key determinant of hospital reimbursement. In this environment, payers offer risk management capabilities unmatched across the

delivery system. In the past year, health insurers have committed more than USD 2 billion to acquire or align with physician groups, clinics, and hospitals, according to PwC estimates, a trend we expect to gain momentum in the coming years.

4. **Capital needs:** We expect undercapitalised hospitals will increasingly seek capital partners to meet vast deferred capex spending on infrastructure, fund mandated healthcare information technology upgrades, fund pension obligations, and build acquisition capital.
5. **Shifting risk model:** Hospitals and other provider organisations may need to merge in order to provide critical services and/or cover geography necessary for at-risk contracting.
6. **Population health evolution:** Fiscal pressures are driving care from community providers to large, integrated provider/payer the coordinated care organisations, leaving fewer opportunities for community hospitals to provide value.

There are numerous opportunities for foreign and domestic, strategic, and financial investors to participate in the US hospital sector's transformation — via evolving delivery models, risk management information technology, payer diversification, and many others.

In this section, we focus on investing in physicians. As the managers of clinical care and drivers of the majority of cost, physicians will play an essential role in transforming the US healthcare system towards an outcomes-based orientation. The most likely means to income preservation may reside in shared savings from payers. These won't be realised without a closely aligned medical staff; the need for physician integration is clear. While many hospitals continue to favour the (expensive) employment model, **an emerging trend in separating the management infrastructure of physician practices may present a compelling new investment opportunity.**

Background: Physician employment can achieve integration, but at a cost

Across the US, hospitals are rapidly acquiring physician practices and employing physicians across a broad range of specialities, from family practice to cardiology and general surgery. Industry group HFMA estimates one-third of active US physicians are currently employed by a hospital or health system. Motivations vary; some hospitals seek closely aligned partnerships for participation in Accountable Care Organisations (ACOs) and other bundled-payment arrangements. Others acquire a practice sought by a competitor in order to expand or maintain market share.

United States: Hot M&A trend to persist; Invest in physicians

Many healthcare systems seek alignment to reduce 'never events', hospital-acquired infections, and re-admissions in an increasingly at-risk reimbursement environment.

Acquiring physician practices, however, is a costly endeavour. According to Brett Hickman, PwC's US Physician Practice leader, acquisition and ramp-up costs can total to USD 500,000 to 1 million per newly employed physician.

And, as practice acquisition activity intensifies, hospitals face diminishing return prospects. Physicians are able to negotiate richer compensation terms than the employment model can support. According to Rick Carter, CEO of physician advisory firm Equation Consulting, many **hospitals find themselves losing USD 100,000 to 200,000 annually, on an ongoing basis, per newly employed physician.**

Here's why:

A variety of factors contributing to the operating loss generated by employed physicians are addressable and include a decline in productivity, higher staffing costs, and inefficient professional fee coding practices. However, **physician fee schedule pricing**, one of the most significant drivers of losses, is more complicated to resolve. By way of background, physicians considering a hospital's employment in today's marketplace often demand a 'fair value' market salary based on the top quartile set by national benchmarking groups such as MGMA. According to our analysis, in order for hospitals to break even under these terms, the physicians' fee schedule will have to exceed the usual and customary rates hospitals negotiate for professional fees. Depending on the specialty, cost, and commercial-to-Medicare and Medicaid ratio, these rates may have to exceed 175% or even 200% of Medicare. By way of comparison, most practices of fewer than 25 physicians set pricing at or below parity with Medicare, while those with 25 or more are generally able to negotiate rates closer to 130%. Hospitals with a small number of employed physicians have not focused historically on physician fee schedule rates, and similarly often price at or below Medicare.

Raising commercial physician fee schedule rates can help stem losses. However, to justify premium rates, physicians must offer something to the payers in return: cost reduction, namely through reduced hospital utilisation. Yet a voluntary reduction in volume presents risk to hospitals in an environment where fee-for-service still drives the bulk of hospital revenues, and volume maximisation underlies longstanding hospital operational strategy. A holistic approach to cost management and at-risk contracting can help offset reduced volumes, although

these changes require significant shifts in strategy that many management teams are not yet willing to make. As a result, many hospitals are willing to bear the operating losses in order to gain the alignment necessary to transition towards risk-based contracting. Furthermore, many providers recognise that legacy physician fee-for-service payment systems are falling to the way side as focus shifts towards value from quantity of services delivered. Nonetheless, many see operating losses mounting, challenging near-term financial flexibility.

Investment Opportunity: Separate the physician practice management infrastructure

Some hospital management teams have found the right balance in employing and integrating physicians. However, many others struggle to employ — and employ enough — physicians to pursue their strategic initiatives. **Setting up an independent physician practice management entity coupled with a strong clinical integration and alignment model can be an alternative or complementary strategy to employment.**

A carve-out, or entrepreneurial joint venture, to manage physician practices can relieve hospital management of the burden of hefty physician salaries, staff expense, and professional fee billing. The benefits of close physician integration, including a stable referral base and a strategic partnership to pursue higher-quality and lower-cost outcomes, can be preserved with the appropriate clinical integration model. Meanwhile, to help limit the risk of unwelcome acquisition of the independent entity by competitors, corporate governance can be structured to include hospital management participation on the Board and to restrict change in ownership or capital structure.

When structured appropriately, the independent physician management entity can generate healthy economic returns for physician, hospital, and equity investors, while mitigating hospitals' risk exposure.

Value drivers

- **Value is created in scale:** Large, independent multi-specialty physician groups (in the range of 100 physicians treating 100,000 patients) should be able to command stronger commercial pricing upwards of 170% of Medicare in return for lowering overall patient treatment costs. Once pricing is negotiated in a range to generate profits, the practice can afford to grow, adding more physicians able to treat an ever-larger patient population, improving value creation potential in an at-risk or population health reimbursement environment.

United States: Hot M&A trend to persist; Invest in physicians

- Additional benefits of scale include lower medical malpractice claims expense due to a larger population base; operating leverage on recruiting and credentialing infrastructure; and standardised coding, billing, and collection processes.
- Hospitals can preserve the benefits of physician integration, including a stable referral base and partnering to achieve higher-quality and lower-cost outcomes, through clinical and operational integration, which may include ensuring ease of admission, coordinated discharge planning, integrating clinical services through medical directorships, lower-cost ancillary services, and extending hospital IT infrastructure to the physician practice.
- As independent physician practice groups get larger, they are in fact harder to translocate, helping to stabilise their relationship with hospital partners.
- Higher-margin, higher-growth physician management companies may attract growth capital from payers and/or equity investors.
- Wealth creation in the healthcare segment is going to be heavily centred on organisations that create value through the creation of systems of care capable of managing populations of patients whether defined geographically or by disease. The business model we envision becomes the platform for shared risk and true clinical integration if structured carefully to align the financial and clinical incentives around improving population health management.

Physician practice market overview: The US physician practice market is highly fragmented. Of the approximately 200,000 physician practices in the United States, most are small; we estimate only 2,000 practices are made up of 20 or more physicians. In a recent PwC survey of more than 1,000 physicians, we found the largest pools of physicians are either currently employed by the hospital or have low or no integration⁴. The historical all-or-nothing approach supports our view that substantial acquisition and integration opportunities remain. In fact, we found the majority, 58% of physicians surveyed, said they were interested in closer hospital alignment. Top reasons physicians want closer alignment include work-life balance, competitive benefits, job satisfaction, and increased or stable annual income. In addition to hospital employment, alignment can be achieved through hospital-physician joint venture, co-management agreements, directorships, and other structures.

Key investor considerations

The Federal Trade Commission (FTC) monitors hospital and physician alignment strategies to prevent situations that could lead to anti-competitive behaviour towards commercial payers. Employing diligence early in the process can help identify opportunities most likely to meet with FTC approval.

Hospitals with a well-aligned physician base are more likely to pursue at-risk contracting with payers. Many readers will recall capitation was a failed experiment in the United States during the 1990s. This failure can be traced to asymmetry of information with payers, poor integration, and a lack of understanding of cost drivers and an inability to control them. These risks remain today. However, we believe today's physician integration strategies have the ability to drive down cost and at the same time deliver profits to payers and providers, due in part to mandated IT integration. At PwC, we believe a well-aligned operational model is critical to success, incorporating payer-provider collaboration early in the design process.

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⁴ PwC Health Research Institute, "From courtship to marriage, Part I: Why health reform is driving physicians and hospitals closer together", April 2011.

China: Investment prospects improving; Bring quality care to China's rising middle class

In 2011 for the first time, China ranked in the top 10 hospital M&A markets in the world based on number of deals. However, deal volume and average deal size remain low relative to China's potential market size, with the majority of activity taking place between domestic groups. We expect that to change.

China hospital M&A	2006	2007	2008	2009	2010	2011
Number of hospital/ clinic deals	1	4	6	2	6	9
Disclosed deal value (USD million)	\$0	\$102	\$189	\$0	\$49	\$256

Source: Dealogic

Background: A variety of factors have contributed to China's sluggish hospital M&A market to date, including limited private sector participation, restricted foreign investment, a challenging regulatory environment, and unclear investment return drivers. In recent years, foreign private investors have been permitted to participate in Chinese healthcare joint ventures (albeit limited to 70% stake prior to a December 2010 full ownership authorisation). However, until recently the investment case has often not been compelling. Historically, China's large and inefficient public hospital sector was closed off to financial investors. Meanwhile, the smaller private sector, which makes up roughly 10% of China's hospital beds, has been more fruitful for selective investment into niche specialties, although private facilities' limited access to high-quality physicians has been a key obstacle to growth.

Given the complexities of cross-border investment into China, foreign investors have been playing it safe, testing the waters with small investments in familiar territory. Recent notable inbound deals have targeted operators with American ties offering Western-style treatment and quality standards. For example, in February the International Finance Corporation (IFC, a member of the World Bank Group) invested USD 20 million to help upgrade and expand operations of Asia Pacific Medical Group, an entity founded by US physicians and surgeons with two decades of public hospital operating experience in China. In early 2011, a US private equity firm took a minority stake in Advanced China Healthcare, a multi-disciplinary outpatient clinic operator in China similarly founded by American physicians. Meanwhile, domestic activity has been dominated by private sector investment into high-end specialty providers, including eye, orthopaedic, aesthetics, and maternal & infants services.

More recently, however, we find the economics of investing in China's hospital market improving, and foreign investment restrictions loosening, implying a likely uptick in inbound cross-border deal flow across a wider range of provider types over the medium term.

What's changed? Loosening of foreign ownership restrictions, new health reform initiatives, and national economic priorities are creating new opportunities for foreign and private capital in China's healthcare sector.

Recent developments⁵ supporting our view include:

- **Full foreign ownership now allowed:** China's ruling in late 2010 permitted the establishment of entirely foreign-owned private healthcare entities for the first time, and allowed public hospitals to collaborate with the private sector. Under the new policy, the limit on the proportion of foreign ownership will be gradually lifted; pilot projects to set up wholly foreign-owned healthcare facilities in China will be introduced first.
- **New investment opportunities signalled by national economic priorities:** Improving China's healthcare system has become a national priority as China's leaders seek to address socio-political tensions and inequalities created by decades of rapid but uneven economic growth. Increasing the well-being of its population is viewed as instrumental to establishing domestic consumption as a pillar of future economic growth. Moreover, as urbanisation remains a national priority, higher-quality healthcare services are viewed as a means to draw migrant workers to China's small and mid-sized cities. As described in a recent PwC report⁶, in order to meet these objectives, the new rural cooperative medical care system will be raised

⁵ This section incorporates content provided by Eurasia Group. Eurasia Group is a leading political risk research and advisory firm, specialising in the emerging and frontier markets of Europe and Eurasia, Latin America, the Middle East, Africa, and Asia.

⁶ PwC 10Minutes: Commentary on Premier Wen Jiabao's 2012 Government Work Report, March 2012.

China: Improving investment prospects likely to attract foreign capital; Bring quality care to China's rising middle class

to 240 yuan per person each year during 2012. The 12th Five Year Plan's Health Reform Implementation Plan updates reform targets to include universal healthcare coverage (from 95% currently), drug pricing reform, and public hospital reform. The government is willing to spend to achieve these goals: appropriation for healthcare has increased by 16% to over 200 billion yuan (USD 32 billion) in 2012. However, recognition that public hospital system structural reforms could be stalled by entrenched interests and by a lack of public sector implementation capacity support our expectations of an increasing role for the private sector.

- **Measured approach to incentivise the private sector:** The Chinese government has been advocating for a reduction in bureaucracy and allowing the market to determine resource allocation⁷. Recent developments encouraging private sector participation include approval of government reimbursement for nationally insured patients treated in private hospitals. This action significantly levels the playing field between public and private hospitals, as social health insurance is the largest national medical insurance system, covering more than 400 million individuals in China's urban population alone. Also, in March, the Beijing municipal government announced that private medical institutions will receive preferential tax, land-use, and energy consumption; other tier 1 cities may soon adopt similar policies.

Investment opportunity: High-quality private care for a rising middle class

China's healthcare economy is growing rapidly (according to the World Bank, per capita spend on healthcare has grown 23% for the four years ending 2009), driven by government spending on health reform initiatives such as insurance coverage and expanded access; demographics, including an ageing population and increased incidence of chronic disease, driving secular growth in healthcare service consumption; and strong underlying economic growth fuelling increasing disposable income and a growing demand for higher-quality healthcare.

Foreign investors have long sought entry into China, the fastest growing major economy in the world, but the healthcare sector remains largely untapped due in part to a highly complex local regulatory environment. Health reform initiatives and the increasing role of the private sector are creating many new market entry strategies, drawing the attention of foreign investors. We see some of the greatest investment return prospects in partnering with a local Chinese provider to bring higher-quality services to China's rising middle class.

The model we advocate combines sophisticated management skills, transparent physician employment arrangements, and international clinical quality and customer service standards with an efficient, lower-cost operating model that caters to China's local population. This model draws on principles employed by a number of new ventures such as the US invested privately held CHC Healthcare and the Angel Women & Children's Hospital in Chengdu.

Innovative approaches include:

- **Physician staffing:** Employing high-quality (although not necessarily top-tier) local Chinese physicians on a full-time basis and structuring salary packages to eliminate the need for additional 'under the table' payments while rewarding productivity presents a transparent approach to controlling the cost of medical staffing. Full-time employment also gets around restrictions that limit Chinese physicians from practicing outside their primary hospital affiliation⁸.
- **Design:** Best practice design principles can enhance operating efficiencies compared to existing Chinese hospital stock, improve patient flows and service, and enable better clinical quality. Privately invested Chinese hospitals targeting the rising middle class should maintain a high proportion of general (versus VIP) beds to cater to patients covered by social insurance schemes; however, designing for efficiency will allow better care within controlled levels of capital expenditure.

⁸ Medical practice liberalisation initiatives have recently introduced pilots in China's largest cities allowing physicians to practice in one or two locations in addition to their primary hospital affiliation. However, a lack of adequate incentives presents near-term execution challenges, and we advocate full-time employment over strategies that seek to align with physicians affiliated with other institutions.

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- **Equipment:** Careful selection of equipment, including use of lower cost domestically made medical equipment to avoid the overcapitalisation which has occurred in some top tier public hospitals, will also allow private competitors to compete with a cost effective yet high quality model.
 - **Processes:** Management processes and controls supported by a carefully designed IT system are a potential source of significant competitive advantage for new private entrants in China, given the weak systems in place in current public and incumbent private hospitals. This may require bringing in foreign management teams and incorporating benchmarks such as JCI standards (Joint Commission International) to implement best practice approaches in a Chinese environment.

China: Improving investment prospects likely to attract foreign capital; Bring quality care to China's rising middle class

Value drivers

1. High-quality, transparent, and efficient private sector hospitals operating on a contained cost base will be able to target China's large middle classes, who currently lack options for high quality yet cost effective care.
2. A highly scalable model can replicate management systems across multiple facilities offering significant operational leverage through purchasing economies of scale and corporatized training and development.
3. Building a private healthcare brand which can provide Chinese patients with an assurance of quality will differentiate the business model from existing private providers.
4. A variety of high quality private operator models exist beyond greenfield development including government hospital privatisations and management contracts to run existing hospitals which may provide higher returns on equity.

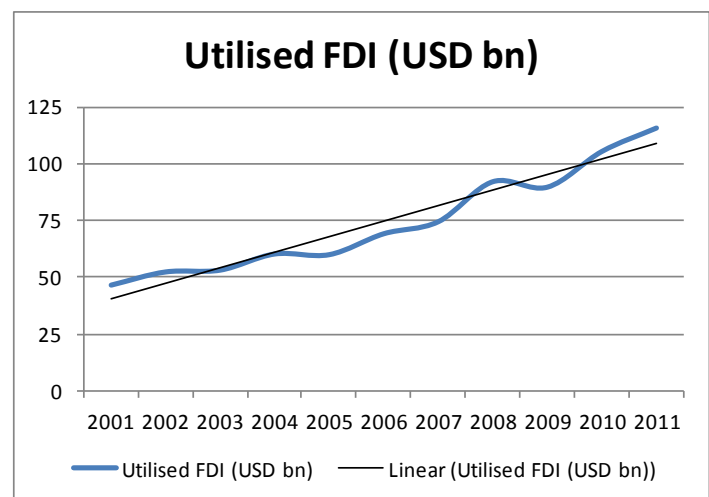
Key investor considerations

Despite China's recent authorisation of 100% foreign ownership, we view partnering with a local Chinese operator as essential to foreign investors' success. The right local partner can help obtain licenses and permits and effectively navigate the local regulatory environment while also ensuring the venture incorporates service and design considerations to draw the local population.

Finding high quality management teams is challenging given the early stage of development of China's private healthcare sector. However, higher quality groups are emerging.

Western and Chinese deal environments are very different. Summarising a recent PwC report⁹, valuation expectations run high among Chinese sellers accustomed to relatively closed capital markets and rich P/E multiples (currently in the range of 35X, down from year-ago levels near 50X). Also, regulatory enforcement is becoming more rigorous, but interpretations vary across provinces. Buy-side diligence should go well beyond traditional search and screen capabilities to include financial projection assessment, market appropriate valuation, and strategic fit for foreign investors seeking a common platform for growth and governance.

China is a carefully managed economy. Despite incremental loosening of restrictions, foreign direct investment (FDI) into China has grown at a steady 9% over the past decade, as shown below, largely in-line with the overall economy, with no meaningful upward inflection in recent years. While segments of the economy are now more open, restriction on foreign ownership in sectors such as aerospace, defence, telcos, and finance remain; and each individual investment requires local or Beijing approval. We expect China's overall FDI trajectory to remain largely linear, though with a modestly accelerated flow of foreign funds into the healthcare facilities sector driven by reform initiatives. Meanwhile, trends in origins of FDI remain largely unchanged in recent years as many overseas investors continue to invest in China through a tax-efficient Hong Kong holding company structure.



Source: PRC Ministry of Commerce (MOFCOM)

⁹ PwC 10Minutes on Doing Deals in China, May 2011

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Due in part to incremental reforms under the 12th Five Year Plan, healthcare facility operating margins may be pressured by a rising minimum wage, improving benefits, and rising input costs. Offset against these risks is the margin improvement potential implied by robust organic growth and economies of scale in consolidating private hospital speciality chains. Given the range of operation outcomes in a dynamic environment, profit and loss sensitivities should span a range of scenarios.

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Spain: Time is ripe for service-oriented PPPs

A steady pace of deal flow has driven Spain to rank consistently among the top 10 global hospital M&A markets over the past five years, with disclosed deal value averaging roughly USD 200 million annually.

The healthy pace of deal flow reflects incremental consolidation of Spain's highly fragmented hospital sector. Market share distribution by ownership type is shown in the exhibit below.

Hospital ownership	Number of hospitals	Market share by number of beds	Average bed size
For-profit hospital groups	42	19%	125
Insurance companies	25	9%	95
For-profit hospitals	156	40%	75
Not-for-profit private centres	64	32%	133
Total	287		

Recent notable cross-border transactions include the purchase of a private and highly specialised clinic based in Barcelona, by a British healthcare provider; and the purchase of a women & infants health centre by a Swedish-based private equity fund. However, the bulk of Spain's hospital acquirers have been domestic hospital operators and private equity houses generally targeting high-margin specialty providers.

Looking ahead, we expect consolidation of hospital market power will be the main driver of M&A trend. Bigger is better as hospitals seek to maintain or improve commercial pricing from Spain's increasingly powerful health insurance companies (HICs). Recent merger activity in that sector has resulted in a highly concentrated HIC market, with the top nine payers in Spain accounting for nearly 80% of the market. (In contrast, the private hospital market is highly fragmented with the top seven hospital operators accounting for only 30% of market share.)

Despite growing market power, Spain's HICs have seen their medical loss ratio expand by over 600 basis points (from 74.1% to 80.2%) over the past five years due to two key trends: 1) increasing penetration of lower-priced corporate health insurance, which diluted revenues; and 2) complex and costly procedures that had traditionally been performed in public sector facilities began to move into the private hospital sector, which drove up costs.

As a result, today we see payers taking more aggressive actions in contracting with hospitals, including transitioning to prospective, fixed rates for service; and directing insured volumes to lower-priced hospital systems.

In this environment, large sophisticated hospital systems are better positioned to take market share: a more efficient cost structure supports a competitive pricing strategy to attract insured volumes, fuelling the ongoing trend towards consolidation.

In addition to the benefit of greater purchasing power in negotiating with private insurance companies, synergies from consolidating operations of several hospital assets could also include a reduction in management salary expense, a reduction in back-office and shared services, and economies of scale in purchasing supplies and medical technologies.

We note that private hospitals in Spain with strong brands, leading market share, high occupancy, a high mix of self-pay patients, and a high mix of higher-margin outpatient revenues can generate EBITDAR margins upwards of 20% to 30%, well above the typical industry range of 8% to 13%. Meanwhile, margins of smaller hospital systems are likely to come under pressure as volumes migrate to the lower cost, larger providers, further fuelling the pace of consolidation.

While M&A may help to consolidate the sector, efficiency gains will accrue to the private sector, leaving pressures in the much larger public sector unaddressed. According to the latest reports available from the WHO, Spain's national health system, which provides regionally based care for free at the point of access and is funded through general taxation, accounts for over 70% of all healthcare expenditure.

We expect PPPs will gain traction as the regional governments of Spain seek greater efficiency in the healthcare system.

Spain: Time is ripe for service-oriented PPPs

Spain's political environment and economic pressures invite growing private sector participation¹⁰.

According to the Eurasia Group, Spain's new Popular Party centre-right government, led by Mariano Rajoy, has maintained its strength and popularity in spite of the implementation of austerity measures to narrow a budget deficit created by the recent financial crisis. Despite rising unemployment, a worsening economy, and increasing social unrest, Rajoy has continued to push for fiscal consolidation and for the implementation of structural reforms. The Eurasia Group views fiscal discipline across these regions as achievable with the Popular Party now controlling the majority (11 of 17) of the regional governments.

Healthcare cuts are expected: the Spanish government announced on 9 April, 2012 its intention to save at least EUR 10 billion of public spending by rationalising health and education through improving efficiency in public service.

The Spanish government is motivated to pursue innovative and more efficient models of healthcare delivery and investment in these difficult economic times. We expect PPPs, which focus on the provision of not just infrastructure services but also clinical services, will gain the widest acceptance among new private sector ventures on the table, due to the high-profile success of the Alzira PPP model in Valencia and the flexibility of the PPP structure to distribute financial risk in the current environment.

Investment opportunity: Share risk through an innovative PPP model

Investors looking to participate in Spain's active hospital M&A market may choose to acquire hospital assets and act as an industry consolidator. However, we find that recent multiple compression (8-10X EBITDA from prior levels near 12X) is modest relative to the increasing challenges of operating hospitals in Spain.

Rather, we see a more compelling angle through introducing a sustainable and scalable innovative PPP model.

A recent PwC report¹¹ describes select healthcare service PPP success stories, including Spain's Alzira partnership in

Valencia which saved the regional government 25% of the cost of providing primary and hospital care while generating health outcomes equal to or better than the public-sector-run facilities. The 15-year management concession formed an integrated partnership between the Valencia government and a private consortium which incorporated bank, provider, health insurer, and construction expertise to design, build, and provide clinical and non-clinical services to the 250,000 residents of the Alzira district. The integrated system offered services from prevention through tertiary care through a central university hospital, district health network, and primary care centres. This kind of integrated service offering is key to the success of such a capitated payment structure.

To incentivise quality and patient satisfaction, money followed the patient: the consortium bore the cost of members seeking care at facilities outside the network, and received additional funds for patients it attracted from other catchment areas that migrated into the network. Provider payments were linked with internationally recognised quality and performance standards, which drove higher-quality outcomes despite lower costs. Since launching the Alzira PPP in 1997, the government of Valencia has granted four additional management concessions in Torrevieja, Dénia, Manises, and Elche-Crevillente¹².

We believe the success of the Alzira model can be exported across Spain's autonomous regions and provide one of the tools to achieve higher-quality care at lower costs to regional governments. Where these structures also require substantial capital investment, financing needs careful consideration because, in the current environment, traditional project finance banks have little appetite for financing risk associated with the complexities of clinical service provision. As a result, we expect some modifications to the Alzira model will be needed if it is to ultimately gain traction. One potential solution that has been successfully implemented in other international projects is to provide a degree of separation, known as ring fencing, between the clinical operations and the infrastructure investment.

Over the near term, given the financial pressures to score immediate cost savings and raise capital, we expect Spain's regional governments will seek purely service concessions to manage the operations of existing facilities through concession-based contracts. This structure may require innovative financing of the clinical operators where substantial capital investment is required.

¹⁰ Incorporating content provided by Eurasia Group. Eurasia Group is a leading political risk research and advisory firm, specialising in the emerging and frontier markets of Europe and Eurasia, Latin America, the Middle East, Africa, and Asia.

¹¹ PwC: "Build and Beyond: Build and Beyond: The (r)evolution of healthcare PPPs", December 2010.

¹² The Global Health Group, University of California, San Francisco: "Public-Private Investment Partnerships for Health: An Atlas of Innovation", August 2010.

Spain: Time is ripe for service-oriented PPPs

Value drivers

- Employ transparent and efficient procurement structures, partnership protocols, open book accounting policies, joint risk management, and shared governance to forge a successful partnership benefiting all parties.
- Export the PPP model to construct or upgrade facilities, add needed capacity, raise quality, and fund a broad range of clinical services to meet the growing demands of economies across Europe and around the world.
- Ensure a level playing field between providers to provide a true comparison and to attract private operators.

Key investor considerations

Some regions in Spain will be challenged to overcome scepticism of private sector involvement in healthcare. Capping private sector profit margins may help improve public acceptance. In addition, market assessments can help to define PPPs' role in serving health policy goals while ensuring excess capacity is not created.

Ongoing macro pressures, including a 24% unemployment rate and declining GDP, present risk of a slower-than-anticipated economic recovery in Spain, which could hamper investment activity over the near term. However, in this challenging environment, we expect well-capitalised buyers prepared to deploy cash will find attractive opportunities in a less competitive marketplace.

The Spanish insurance market is concentrated, as mentioned above. Penetration varies by region and tends to be higher in large urban areas. Some payers own their own hospitals, mainly in Madrid and Catalonia, to help control costs. The presence of an integrated payer-provider network could limit upside from market share expansion in some markets. Financial projections of target PPP opportunities should span a range of scenarios incorporating HIC dynamics of specific markets.

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