Case Study – Background Reading – Strategic Management - Banks

The CEO of St. Sebastian Health System, a moderate-sized hospital system in a mid-sized, Midwest city has hired you to help turn things around. The CFO is projecting a $3.7 million operating loss this year, which will be more than offset by non-operating income. However, the board has made it clear that the situation must improve. If the system cannot produce a positive operating margin in 2017, someone else is going to be the CEO. The CEO and CFO have asked you to recommend strategic approaches to selling their services in the community that will help turn the financial ship around.

Your Health System

St. Sebastian is a community-based health system. The senior management team has an average tenure of 17 years. The exception is the Chief Medical Officer (CMO). She has been in her position for two years and is the fourth CMO in that role in the past ten years. The CEO and COO have each been in their current roles for ten years. The system is comprised of the following:

1. Two large, acute care hospitals
2. Two long term care facilities
3. Two skilled nursing facilities
4. One long-term acute-care hospital (LTAC)
5. Four geographically distributed outpatient centers
6. Four Urgent Care Centers
7. Two free-standing ambulatory surgery centers (ASCs)
8. A 400 member employed physician group that includes 180 Primary Care Providers (PCPs). All 28 PCP practices are certified Level III Patient Centered Medical Homes by NCQA.

The remainder of the 1,000 member medical staff is generally comprised of large, independent groups who have varying degrees of 'loyalty' to the system. The Radiology and Emergency groups, for example do 100% of their work at St. Sebastian and have no ownership of any outside facilities. The Gastroenterology group, on the other hand, does work at the hospital, but also owns their own, freestanding endoscopy center. The orthopedic group does 75% of their work at St. Sebastian, but maintains privileges at other facilities. They do not own their own ASC.

In the current year, St. Sebastian is projecting 220,000 patient visits (combined IP and OP) with an average cost per visit of $1,727. They have an average charge per visit of $4,545.

Over the past ten years, St. Sebastian has been active in pursuing a number of different strategic projects including:

1. They have established 'clinical institutes' in cardiovascular, orthopedic, oncology, maternity and neurologic care. Each of these has been built through a co-management agreement between the system and the internal or external physician group who would be most logical. Each institute is led by a dyad of an administrator and medical director.
2. Five years ago, they consolidated maternity programs to one facility, a move that justified investing in a Level III Neonatal Intensive Care Unit (NICU)
3. They have established a research division in the hopes of working with national pharmaceutical companies and/or tertiary care hospitals in the Midwest.
4. They have established a Physician Hospital Organization (PHO) and intend to become an Accountable Care Organization (ACO) that can participate in the Medicare Shared Savings

Program (MSSP) and/or enter into global risk contracts with third party payers. The PHO is currently evaluating whether or not they should purchase an insurance license so that they could offer commercial, Medicare Advantage and Managed Medicaid insurance products.

5. They have established a Business Health division to service the corporate health needs of the employers in the region. This would include things like EAP programs, on-site wellness, drug screening, on-site clinics, etc. This division also recently built two large, full-service fitness centers.

The competition – The community is currently served by three other major health providers:

1. Mercy is the competitor acute care system in town and has two hospitals and various outpatient centers. They have not been active in physician employment – they employ a group of 60 PCPs, but no specialists. Similarly, they have not been engaged in 'branching out' with different strategic initiatives, preferring instead to focus on cost efficient care. They do not have clinical institutes, research divisions, a PHO or a Business Health division. They have 230,000 visits per year, with an average cost of $1,435 per visit and an average charge of $4,348.
2. General Pediatric is a pediatric teaching hospital. Five years ago, they signed an affiliation agreement with Johns Hopkins to gain access to clinical and research capabilities that would have been beyond their reach, given their size. They employee essentially all of the pediatric subspecialists and have a PHO, which includes 75% of the region's primary care pediatricians. They will have 200,000 visits this year, with an average cost of $2,100 per visit and an average charge of $5,000 per visit.
3. General University is an adult teaching hospital affiliated with the local university's medical school. They staff the region's free-care clinics and historically, have been the region's hospital for indigent/uninsured patients. They are the region's Level I trauma center and are well regarded for intensive services like trauma, stroke and cancer care. However, their location and reputation for taking indigent patients means that they are not preferred for 'normal' medical care by commercially insured or Medicare patients. Besides the community health centers, they own an inpatient rehab hospital, but not other facilities. They have explored affiliations with national leaders in academic medicine, but so far have not signed any such agreements. They see 180,000 visits per year with an average cost of $1,833 and an average charge of $5,556 per visit.

There are no other hospitals currently operating, though there are 23 skilled nursing facilities (SNFs) and 3 inpatient rehab facilities throughout the region. They are independent actors and for the most part are struggling to stay profitable. There are several single-specialty physician groups who operate ambulatory surgery centers and one chain of independent diagnostic treatment facilities (IDTFs). Three years ago, there was a significant change in the state government, and that resulted in the long-time Certificate of Need (CON) program being all but scrapped (Skilled Nursing Facilities are still heavily regulated). Several for-profit hospital companies have recently done some analysis around entering your market, but have not done so yet.

The Community – The community is a Midwest city and surrounding suburbs in the midst of a transition from a manufacturing employment base, which unfortunately accelerated with the 2008 economic downturn. The hospitals have seen this over the past several years in a tightening of benefits offered by local employers. Benefits continue to be offered, but increasingly are likely to have a significant deductible associated with them. Unemployment has been above the national average and is projected

to remain that way. This means that the average wage in the region is actually below where it was in 2008, when the last recession hit. The number of Medicare-age residents are projected to rise over the next 10-20 years, while working age patients are projected to stay flat or fall slightly. Similarly, birth rates are expected to fall slightly over the coming decade.

The community is 60 miles south, 45 miles east and 50 miles north of other, similarly sized cities. Until 20 years ago, that made this city effectively an island unto itself. Increasingly, however, the suburbs of each of these communities have become very close to each other. As that has happened, providers in each community have followed and established practice sites and free-standing outpatient centers.

The payers – The community has a normal looking mix of Commercial, Medicare and Medicaid patients. Because the state's governor was fiercely against the Affordable Care Act, the Medicaid expansion that happened in other states hasn't happened here. Thus, the community also has a sizable population without insurance today. As you'd expect, different hospitals see a different mix of these patients. The local health council was able to provide you with the most recent year's payer mix by hospital – below:

Patient visits	**Commercial**	**Medicare**	**Medicaid**	**Uninsured/Self-pay**
Mercy	80,500	105,800	23,000	20,700
St. Sebastian	99,000	101,200	11,000	8,800
Gen. Pediatric	70,000	4,000	110,000	16,000
Gen. University	63,000	45,000	45,000	27,000
Community Total	312,500	256,000	189,000	72,500

Reimbursement – the CFO was able to supply you with their best estimate for what various payers are reimbursing for services. In general, the commercial plans are paying 50% of charges, regardless of location, except at General Pediatric. There, the monopoly on pediatric services has allowed them to negotiate rates of 80% of charge, but only for the commercial plans. Medicare currently pays 30% of charges at all hospitals, and Medicaid pays 25% of charges everywhere. Uninsured patients are generally paying 2% of charges.

Case #1 – A Market on the Move

You've read everything you can about the legislative environment (both regionally and nationally) and spoken to several brokers who together advise most of the local employers in the region. You believe the most important changes that are about to hit this region are the following:

1. As Medicare reduces DSH and other payments, reimbursement from Medicare will drop from 30% of charges to 28%
2. The health exchanges established in the ACA have not been much of a factor in the region so far, but that's about to change. The two largest payers in your state both plan to really step up in the exchanges and market these plans aggressively both to currently un-insured and those with current, but unattractive employer-based coverage. They believe that by 2017, they'll have 25% of all commercially insured patients in exchange-based products.
3. There has been a change in both governor and the makeup of the state legislature, which means your state will engage in Medicaid expansion next year. Thus, more people will have coverage, and the uninsured population will diminish, but not go away entirely. Your best estimate is that uninsured visits community-wide will reduce from 72,500 to 8,300. You estimate that, of the patients who have new coverage, half will be Medicaid recipients and half will enter the commercial plans.

The assignment – as you consider how to guide the CEO, answering the following questions should help:

Part A

1. Using the information provided, estimate total gross and net patient service revenue per hospital currently (2016). What is each hospital's operating margin in terms of dollars and percentage? Based on this, who is doing well, and who is not? Who has the most to gain and lose as the current environment changes?
2. Based on what you know will happen with the next year, re-calculate the estimates from question #1 for 2017. In your estimate, assume that commercial, Medicaid and uninsured patients still pay the same % of charges. As you consider the population that moves into commercial insurance and Medicaid, you can assume that each hospital continues to take the same share of each payer category (in other words, if hospital A had 20% of the commercial visits in 2016, they will have 20% in 2017). You can also assume that total visits and charge and cost per visit numbers will remain as they were in 2017.
3. Based on everything you've read, the payers putting products into the health exchanges want to market these as true, lower cost options. To get there, they will not reimburse as much as other commercial products. In fact, your best estimate is that they will pay 120% of the Medicare reimbursement rate. If that is the case, how does your estimate of 2017 performance change? Is this good or bad? You may want to answer that question from the perspective of the region as a whole and then for each hospital. Assuming it was optional, would you recommend that St. Sebastian participate in the exchange-based products?

Part B

4. In this city, there are two major payers who together cover 85% of the commercial insured lives. They have both approached St. Sebastian about forming narrow networks as a vehicle for selling products in the exchanges. Your hospital has an excellent reputation, and both payers would like to sell a product that features your hospital as the only in-network option for adult care. So, in exchange for agreeing to a reimbursement rate of 120% of Medicare, St. Sebastian would garner 75% of the hospital visits in the exchanges. For the rest, assume Pediatric continues to serve the same number of patients (i.e. same as you've projected for 2017 previously) and the remaining visits are evenly split between Mercy and University. Is this an offer that St. Sebastian should accept?
5. You strongly suspect that both payers also made this offer to your competitor, Mercy. Based only on what you know about the financials, are they likely to accept this deal? If the payers are going to choose only one partner, do you advise your CEO to aggressively pursue a 'first to sign' strategy, or hang back and allow Mercy to act first?
6. Thus far, we've assumed that all costs are variable (i.e. $2,100 per visit for Pediatric), but is that necessarily true? Suppose for a moment that each hospital's cost structure is essentially fixed? How does that change your answers to #2, 3, 4 and 5 above?

Case #2 - Taking Total Cost of Care Risk as an ACO

As we've discussed, the St. Sebastian system is considering becoming certified as an Accountable Care Organization (ACO). A national payor with a Medicare Advantage (MA) plan in your market has recently approached your system with a proposal for a new contract that gives your organization significant financial risk. They have operated an MA product in your market for several years, but recently, the financial performance has worsened. Their projected performance for the current year is shown below.

Revenue	pmpm
CMS Revenue	$ 680.00
Member Premium	$ -
Revenue to be Allocated	**$ 680.00**
Claims	
Inpatient Claims	$ 240.00
Outpatient Claims	$ 125.00
Physician Claims	$ 140.00
Ancillary Claims	$ 15.00
Part D (retail Rx)	$ 105.00
Total Medical Costs	**$ 625.00**
Actual MER	**91.91%**

The plan believes that, to be successful long term, they must achieve a Medical Expense Ratio (MER) of at least 85% (in other words, only 85% of the premium revenue would be spent on medical claims). If they can't fix this, they will most likely leave the market. They believe that their best chance to correct the MER is to engage you, the local IDS in a true risk contract in which they'll share both surpluses and deficits. As you consider whether to accept the deal, assume the following:

1. Assume not all of the hospital spending happens within your hospital.
2. Each year, you can expect a 1% increase in premium revenue from CMS. Likewise, you can expect a 1% rise in Medicare payment rates to hospitals.
3. Your hospital's operating costs are rising at 3% per year (both fixed and variable)
4. The 2016 Membership in this product is 10,000 members. The plan is projecting growth of 2,000 members per year for the next 5 years
5. If you don't sign the deal, the 10,000 members will still use your hospital, but they will revert to Traditional Medicare patients.
6. The revenues coming from CMS are risk-adjusted, with a base premium payment of $850 at a Medicare Risk Adjustment (MRA) score of 1.0. Currently, the average MRA score for this population is 0.80.
7. The risk contract will set a Medical Services 'budget' at 85% of the Premium from CMS. If the MER is below 85%, that will be a surplus to be shared between the plan and IDS. If the MER exceeds 85%, that will be a deficit to be shared. The schedule of risk sharing is as follows:
   Year 1 – 25% IDS; 75% Payer
   Year 2 – 50% IDS; 50% Payer
   Year 3 – 75% IDS; 25% Payer
   Year 4 – 100% IDS; 0% Payer
   Year 5 – 100% IDS; 0% Payer
8. The IDS can invest in people and IT resources to improve the MRA score for the population being managed. You estimate that, for every $500,000 spent per year, you can raise the average

MRA score by 500 basis points (5 percentage points). Assume that once you commit to spending this money, it's in your budget every year.

9. Although the IDS can raise the average MRA score, there is a one year lag between the score being raised and the revenue raising. (hint – this is important since you are bringing in new members each year)
10. The IDS can invest in people and IT systems to reduce costs by reducing utilization of services. For every $500,000 invested per year, we can reduce the utilization of services by 5% vs. the previous year. (Assume the $500k and 5% figures are maximums per year – i.e., you can't spend $1 million to get 10% in one year) Assume that once you commit to spending this money, it's in your budget every year. All inpatient and outpatient services will be reduced by 5%, but NOT physician or drug utilization.
11. Although the plan considers hospital spending a 'cost' your hospitals considers it 'revenue'. A breakdown of the projected actual utilization of services from current year is below. Unless you act to change it, you can expect that the utilization per/1000 will remain same.

Svc Line	Cases	Days	Charges	Payments	Variable Costs	Fixed Costs
IP Total	1,585	7,376	$ 50,400,000	$ 14,400,000	$ 8,594,479	$ 9,772,546
OP Total	30,800		$ 26,250,000	$ 7,500,000	$ 4,085,687	$ 6,484,893
Total MA			$ 76,650,000	$ 21,900,000	$ 12,680,166	$ 16,257,438

The president of your PHO is enthusiastic about the project, since she believes this will be an opportunity for the PHO to shine. The system COO is a long-time hospital administrator and is urging you to reject the deal, since it will reduce hospital admissions at a time when Medicare revenue is already insufficient to meet costs. As CEO, you have to make some decisions. Should you take this deal? If you do, should you invest in people and resources to improve performance? Are you too young to take an early retirement? In order to answer these questions, you should do the following:

Part A

1. Prepare a five year projection of Health Plan Revenues and Expenses under this contract. Be sure to include things like inflation factors and membership growth (current year would be year 0)
2. Prepare a 5-year projection (just Hospital) that assumes you do not sign this contract. (Hint – because you're seeking an apples/apples comparison, the best way to do this is to assume the initial membership of 10,000 grows to 20,000 over 5 years)

Part B

3. Prepare different scenarios that assume that you invest in measures to improve revenues and reduce utilization (prepare one that shows you reducing utilization, one that shows you improving revenue, and a third that shows improvement in both
4. Prepare a five year projection of your Hospital internal Revenues and Expenses (again taking into account inflation and membership growth) that assumes you do take the deal and make improvements. As you model ways to improve Plan performance by reducing utilization, be sure that your hospital revenue/expense model reflects the reduced utilization.

Assuming that the 'right' answer is the one that maximizes net revenue to the IDS, what should you do? Explain why that is your recommendation. Are there any of the assumptions that were made along the way that you'd find fault with? What happens to your modeling if those are wrong?

Case #3 Taking Risk as Providers – Total Joint Case Rate

Your local BC/BS plan has experienced high costs and unpredictable cost increases for total joint replacement cases in recent years. They have approached three competing hospital systems about taking a case rate for total knee replacements. The 'case rate' will cover all diagnostic work, the surgery itself and all rehabilitation needed to get the patient back to full functionality. Last year, BC/BS paid for 1000 total knee replacements in this region, and they project the same volume next year. The working assumption here is that the 'winning' bidder will get 100% of that volume next year.

The current breakdown of BC/BS business at these three facilities is as follows:

	Mercy	**St. Sebastian**	**University**
Total Knee Procedures/ year	500	350	150
Current BC/BS hospital **reimbursement**/case	$22,000	$21,000	$24,500
Allocated overhead cost/case	$7,500	$8,500	$9,000
Implantable device cost/case	$5,000	$5,000	$4,500
Other variable costs/case	$2,500	$2,400	$2,300

In addition to the hospital cost for these procedures, you can assume that BC/BS has also paid the following on average per case:

- Diagnostics (all) - $1,000
- Professional (all) - $2,000
- 30% of patients will require post-acute care at a rehab. facility at a cost of $15,000/case
- 70% of patients will go home with home care and other follow-up at a cost of $1,000/case

Case Questions:

A. Assuming that the cost/case figures above remain constant, what would be the minimum that each system could bid to garner the BC/BS business such that its costs would be covered (i.e., this would not be a money losing venture). What happens to each hospital's total profit if the winning bidder is awarded 100% of the volume?

B. The economic term, "contribution" represents the portion of sales revenue that is not consumed by variable costs and so contributes to the coverage of fixed costs. As an example, a movie ticket costs $10, and we determine that $2 of that goes to variable cost coverage, $6 to fixed cost coverage and $2 to profit. $8, then, would be the 'contribution' towards coverage of non-variable costs. Using the notion of 'contribution', is there a case to be made for one or more of the hospitals to lower their offered price to a level at which they'd receive negative total margin? Thinking in terms of marginal volume gained, what is the lowest each hospital could bid in this scenario?

C. Suppose that a new entrant comes late to the bidding process, and plans a super competitive bid of $13,900 per case. This is a new orthopedic institute that is made up of several orthopedic surgical groups. They have their own diagnostic facilities and can bring all of the rehabilitation assets that they'll need. They also have a direct relationship with a device manufacturer and believe they can cut the cost of devices used down to $2,500 per case. They only thing they lack are the actual surgical facilities. They offer to lease OR time from each of the hospitals at $2,400 per case. Are the hospitals likely to accept that offer? What happens to the economic profit of each hospital if they do/ do not accept the offer?