

Hays County IDS

by
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Your IDS

It is December, 2016, and you have just accepted the CFO position at Hays County Integrated Delivery System (IDS)[hereinafter referred to as County]. You will be reporting to Mr. Salter, County's chief executive officer, a retired schoolteacher who was hired last year. Also reporting to Mr. Salter are Mr. Wannabe, County's chief operating officer, Dr. Spok, County's medical director, and Ms. Patty Care, County's director of nursing. When announcing your appointment, Mr. Salter stated that your primary objective in the coming year (2017) would be to reverse the ominous financial trend that began in 2015 with an operating loss and continued in 2016. Previous operating losses were funded with investment income (investment income was \$200,000 in 2016) from unrestricted net assets; however, your board recently passed a resolution discontinuing that practice and restricting investment income to capital expenditures.

County is a not-for-profit county-owned corporation and includes a 120-bed acute care hospital, a 25-bed skilled nursing facility, a 15-bed rehab facility, a home healthcare agency, and an outpatient clinic, and a 40-member medical staff that bills independently. The hospital, Hays County Hospital (HCH), is one of two hospitals in the county (population is 175,000) and the only hospital in San Marcos, Texas, with population of 50,000. St. Teresa's, a not-for-profit Catholic-owned hospital is the only other hospital in Hays County is about 25 miles from Hays County IDS.

In order to acquire background information, you decide to meet with each member of the executive team first, then selected members of senior management.

Meeting with Dr. Spok

Dr. Spok, hospital medical director, told you:

Most doctors have been on the medical staff for at least ten years. There is little loyalty to the hospital and most doctors also have admitting privileges at St. Teresa's, a newer hospital with better facilities 25 miles away. While it is a hassle for the doctors to drive from San Marcos to St. Teresa's to see patients, there are few good reasons for the doctors to admit their patients to St. Teresa's. St. Teresa's has a hospitalist and pays physicians for menial service assignments like committee work (a practice that County has refused to implement).

Meeting with Mr. Salter

Mr. Salter, chief executive officer, stated:

I just don't understand why we are losing money. I spent a considerable amount of time recruiting new doctors while keeping the existing doctors happy. The new, younger doctors just don't seem to have a sense of loyalty to . Furthermore, I've tried to establish a "family atmosphere" for our employees that stresses getting along well with others in return for job security. Everyone seems happy. Everyone except Ms. Fi Nance Myway, whom you'll be replacing. She and I both started January of 2014 and she seemed increasingly frustrated with the way I do things here--she just didn't fit in. I tried to accommodate her by implementing some of her recommendations, even though they were against my better judgment--like charging visitors for parking which generated \$100,000 in other operating revenue in 2015, but I have discontinued the practice in 2016 because no other organization in San Marcos, other than the University, charges for parking. And when I announced that I was bringing in more business to the hospital by entering into a two-year capitated managed care agreement with the city (it expires this month)--we get \$250 per month per family for taking care of the 300 city employees and their families, whether they're sick or not, Ms. Myway threw a fit at an executive team meeting. She claimed that my decisions were driving County deeper into the red and as a result, I had to show Ms. Myway the highway for insubordination. That happened last month.

Mr. Salter has asked you to do the following:

- 1) I would like you to make a fifteen-minute, 50 PowerPoint slide presentation during our board strategic planning retreat regarding financial challenges you see for County during the next 15 years.
- 2&3) Develop a statement of operations and balance sheet for 2016 (you can assume the format and numbers are correct on the 2015 balance sheet, and you can further assume that all balances on the 2015 balance sheet carry forward to the 2016 balance sheet, with the exception of accounting for the profit or loss on the 2016 statement of operations).
- 4) Analyze 2016's financial statements using ratio analysis and identify strengths, weaknesses and recommendations for improvement.
- 5) What is the best ratio for measuring accounts receivable performance? What are the best ways to improve accounts receivable performance?
- 6) Dr. Garcia is thinking about retiring this year and has asked us if we would like to buy her practice. She would like annual income of \$250,000 for the next 30 years. If we can put the purchase price in an annuity that earns 4 percent per year compounded annually, what is the purchase price? What other factors should we consider before buying a physician practice? What is your recommendation?

- 7) Calculate the financial impact of buying a CT unit that would cost \$3.0 million, would have a five-year useful life, would have a 10 percent salvage value, would have a profit per procedure of \$400, and would generate an estimated volume of 450 procedures per year. The bank tells me the discount rate should be 10 percent. If the project loses money, let me know how many procedures in addition to the 450 projected per year we would need to generate in order to break-even.

Our long-term debt represents the remaining balance on a 30 year loan taken out in 1996 at 7% with options to refinance every 10 years. If we refinance for the remaining 10 years at 3%, how much interest expense will we save over the remainder of the loan?

- 8) For the CT unit in #7, evaluate the various types of financing?
- 9) Analyze my capitated managed care agreement with the city. Using differential cost analysis for 2016 data, tell me the full cost profit/loss and the differential cost profit/loss. Should we renew the contract for next year at present rates, or should we ask for a rate increase and if so, how much rate increase do we need to cover our full cost? to cover our differential cost?
- 10) For 2017, develop a statistical budget; then develop a revenue budget (using a financial model, determine whether to increase rates and if so, how much) and an expense budget in statement of operations format including detailed footnotes explaining any changes in the numbers.

I would like to see at least four different expense scenarios:

- 1) maintain expenses at 2016 levels after adjusting for volumes and mandated expenditures identified in earlier steps;
 - 2) maintain expenses at 2016 levels after adjusting for volumes and mandated expenditures identified in earlier steps and **honoring all requests (i.e., raises, additional personnel, etc);**
 - 3) cut expenses (from expense scenario #1) in order to break-even in 2017;
 - 4) cut expenses (from expense scenario #1) in order to break-even in 2017 **and recover FY 2012 losses.**
- 11) I would like to empower the department heads with more authority for their departments (right now they are responsible for the direct costs associated with labor and supplies). What additional authority can we delegate to the department managers and what additional training and training costs will that entail?
- 12&13) Please prepare a fifteen-minute, 50 slide PowerPoint presentation for our board on cost shifting at our hospital and explain how emerging reimbursement methods are making cost shifting harder.
- 14) Please give me your thoughts on the operational and financial implications of ACA of 2010 and MACRA of 2015 on our hospital.

Meeting with Mr. Operator

Mr. Operator, chief operating officer and a recent graduate from a program in health care administration, expressed the following concerns regarding the hospital:

It's easy to understand how we lost money last year--Mr. Salter just won't say "no" to the doctors..., or the nurses, for that matter. Our revenue is down for a variety of reasons and our expenses continue to increase. I don't know why the board ever picked a school teacher to run a healthcare system.

Meeting with Ms. Pincher

Ms. Penny Pincher, County's controller, in answer to your question regarding last year's loss, believes the following:

While acute care days are flat and SNF and rehab days and outpatient visits are up, our real financial problems involve our patient mix by financial class--commercial and self-pay continue to decline and fixed payment and capitation continue to increase, and our board won't approve more than a 2% rate increase for 2017 (which affects collections for only commercial and managed care with discount--you need to make assumptions regarding Medicare and Medicaid collections).

2016 Collections/Discharge

	<u>Acute</u>	<u>SNF</u>	<u>Rehab</u>	<u>Home</u>	<u>ER</u>	<u>Out</u>
Medicare	12,800	8,000	16,000	280	700	380
Medicaid	12,400	8,600	16,600	240	960	360
Commercial	19,200	10,400	20,000	500	1,600	400

Managed Care
w/40% discount*

Managed Care
w/capitation**

*Managed Care contracts with discounts call for an additional 1% discount for every 1% increase in rates.

**Managed Care contract with capitation includes only the agreement with the city.

Meeting with Ms. Care

Ms. Patty Care, director of nursing, seeks your support in the following proposal:

While our financial loss is serious; most of it is attributable to low rates--we need to increase our rates to reflect our quality services. Our nurses are overworked and underpaid. I've been working on two solutions that I would like your support on. First, I believe strongly in primary care nursing and as a result, 90 percent of the nursing staff is RN's. RN's can perform more tasks than LPN's and nursing assistants and therefore, are more efficient. This can be further justified by the acuity of our patients. Using the DRG scale as a severity index, our patients are sicker than the average hospital. However, I am having some difficulty getting the RN's to administer meds, empty bed pans, and feed patients. Therefore, I have developed a TQM program designed to convince the RN's that all their tasks are important. All RN's are required to attend 5 hours of TQM training each week. Even though patient days are down, I would like to hire ten more RN's to help cover the floors when the other RN's are in training. In order to recruit these RN's in light of the nursing shortage, we need to increase their average hourly rate to \$50.00, which is competitive with County Hospital (see Table VI-A). This, of course, would be in addition to the cost of living raises already announced by the personnel director. I also would like for you to include a doctorally-prepared entry level nurse in our strategic plan for ten years from now.

Meeting with Ms. Personal

Ms. Personal, personnel director, reluctantly admits the following to you.

Hospital practice in the past has been to give the employees a cost of living raise equal to the previous year's percent increase in the CPI. Also, historically, we have allocated 5% of total wages to a merit pool to be awarded to meritorious employees based on their annual evaluations. Because Mr. Salter treats the employees like family, virtually everyone gets the raise. Because of shortages in nursing, I am recommending a market raise of 3%, in addition to the above raises, to keep us competitive.

Here is a wage comparison to the facilities that we compete with for new hires (see Table VI-A). Mr. Salter asked us not to announce raises until your financial analysis is complete.

Meeting with Mr. Materials

Mr. Materials, materials manager, reports the following information to you.

I am projecting a 3% increase in supply and food prices for 2017 and a 5% increase in all other prices.

Table I

**Hays County IDS Balance Sheet
as of December 31, 2015
Assets**

	<u>2015</u>
<u>Current Assets</u>	
Cash and cash equivalents	\$ 178,750
Marketable securities	1,100,500
Accounts receivable less allowances	11,250,000
Inventories at cost	3,368,000
Other current assets	<u>992,500</u>
Total Current Assets	16,889,750
Land and improvements	3,250,000
Buildings	36,485,750
Fixed equipment	8,063,250
Moveable equipment	<u>4,466,750</u>
Property, Plant & Equipment	52,265,750
Less accumulated depreciation	(18,080,750)
Total Property, Plant & Equipment	34,185,000
TOTAL ASSETS	\$ <u>51,074,750</u>
<u>Current Liabilities</u>	
Current portion of long-term debt	\$ 2,151,000
Accounts payable & accrued expenses	5,400,000
Estimated amounts due to third-party payors	1,423,750
Other current liabilities	<u>1,500,000</u>
Total Current Liabilities	10,474,750
Long-term debt, net of current portion	<u>37,000,000</u>
TOTAL LIABILITIES	47,474,750
Net Assets	
Unrestricted	2,100,000
Temporarily restricted	1,000,000
Permanently restricted	<u>500,000</u>
TOTAL NET ASSETS	2,500,000
TOTAL LIABILITIES AND NET ASSETS	\$ <u>51,074,750</u>

Table II

**Hays County IDS Actual Expenses
through December 31, 2015**

Wages, Taxes, Benefits	\$	84,000,000
Professional Fees & Commissions		6,000,000
Drugs		7,000,000
Medical and Other Supplies		6,000,000
Food		3,000,000
Purchased Services		3,000,000
Repairs & Maintenance		6,000,000
Utilities		4,000,000
Interest		8,019,000
Depreciation		<u>11,734,120</u>
TOTAL EXPENSES	\$	138,753,120

Table III
Selected Industry Financial & Productivity Ratios
100-199 Beds

<u>Financial Ratios</u>	<u>Optum</u>	<u>Bobcat</u>
Liquidity Ratios		
Current ratio		
Collection period ratio		
Days Cash-on-hand, short-term sources		
Days Cash-on-hand, all sources		
Capital Structure Ratios		
Net asset financing ratio		
Debt service coverage ratio		
Efficiency Ratios		
Total asset turnover ratio		
Age of plant ratio		
Fixed asset turnover ratio		
Current asset turnover ratio		
Inventory turnover ratio		
Profitability Ratios		
Excess margin		
Operating margin		
Return on net assets		
Operating Indicators		
Length of stay		
Occupancy rate		
 <u>Productivity Ratios</u>		
Gross Price per Adjusted Discharge	20,000	
Net Price per Adjusted Discharge	10,000	
Cost per adjusted discharge	8,551	
 Salaries per Adjusted Discharge	 3,127	
Nursing service		
RN's as a percent of total nursing	32.20	
LPN's as a percent of total nursing	21.70	
Full-time equivalent employees		
Per occupied bed	4.90	
Salary per FTE	57,392	

Table IV-A**Hays County IDS Discharges**

<u>Service(LOS)</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Acute(4)	8,000	7,500	7,000	7,000	7,000
SNF(13)	130	132	134	136	138
Rehab(20)	138	140	142	144	146
Home Health	30,000	25,000	20,000	15,000	15,000
Emergency	32,500	35,000	37,500	40,000	42,500
Outpatient	27,500	30,000	32,500	37,500	42,500

**Table IV-B
Percentage of Discharges by Payer**

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Medicare	36	37	38	39	40
Medicaid	14	15	16	17	18
Commercial	9	7	5	3	2
MC--dis	35	35	35	29	28
MC--cap	0	0	0	6	6
Bad Debt	3	3	3	4	3
Charity	3	3	3	2	3

**Table IV-C
2016 Charges per Discharge**

<u>Per Discharge/Visit</u>	<u>Hays</u>	<u>St. Teresa</u>
Acute	\$19,200	\$19,000
SNF	10,400	10,400
Rehab	20,000	19,000
Home Health	500	480
Emergency	1,600	1,500
Outpatient	400	360

Table V**Radiology Department Procedures**

<u>Procedure</u>	<u>Tech Minutes</u>	<u>Supply Expense</u>	<u>Machine Minutes</u>	<u>2017 Volume</u>
Radiology				
Chest 2-view	14	10	10	20,000
Chest 4-view	28	20	10	15,000
Hand	05	05	05	7,000
Arm	10	10	05	4,000
Foot	05	05	05	1,000
Leg	10	10	05	6,000
Flouroscopy	30	30	15	3,000
Ultrasound				
Abdomen	15	10	10	5,000
Other	10	10	10	5,622
Nuclear Medicine				
Scan	60	30	30	2,000
CT				
Head w/o contrast	30	50	30	200
Head w contrast	60	75	45	300
Body w/o contrast	30	75	30	400
Body w contrast	60	100	45	500

Table VI-A

**Salary Survey of Area Hospitals
Average Hourly Rates (without benefits), December, 2016**

<u>Position</u>	<u>Hays</u>	<u>St. Teresa</u>
Head Nurse	\$38.00	\$35.00
Staff RN	33.50	32.00
Staff LPN	26.00	25.00
Nursing Assistant	20.70	18.00
Lab Tech	32.00	30.00
Rad Tech	28.00	25.00
Food Server	18.40	15.00
Housekeeper	18.40	15.00
Accountant	30.00	15.00
Clerk	21.00	10.50

Table VI-B

**Hays County IDS Staffing
as of December 31, 2016**

<u>Department</u>	<u>FTE's</u>
Administration	50
Medical Records	9
Dietary	35
Housekeeping	25
Laundry	*
Physical Plant	9
Nursing**	365
Laboratory	16
Radiology	9
Respiratory Therapy	5
Physical Therapy	*
Emergency Department Physicians	*
KG/EEG	1

*contract

**90% RN's, 10% clerks

Table VII

**San Marcos City and County
Ad Valorem/Property Tax Schedule
per \$100 assessed value**

Aquifer	.00981
County	.35510
City	.47000
ISD	1.23554
Special Roads Project	.06010
Upper Hays River Watershed	.02000
state sales tax	8.25%