

4300 Class Example – Strategic Management Portfolio Case Study

Modified from: Gapenski, L. C. (2010). Cases in healthcare finance (4ed). Chicago, IL: Association of University Programs in Health Administration.

Riverview Community Hospital

Riverview C community Hospital is a 210-bed, not-for-profit, acute care hospital with a long-standing reputation for providing quality healthcare services to a growing service area. Riverview competes with three other hospitals in its metropolitan statistical area (MSA)—two not-for-profit and one for-profit. It is the smallest of the four but has traditionally been ranked highest in patient satisfaction polls.

The Joint Commission, an independent not-for-profit organization whose mission is to improve the safety, accredits hospitals and quality of healthcare provided to the public through accreditation and related services. (For more information on the Joint Commission, visit their website at www.jointcommission.org.) Although accreditation is optional for hospitals, it is generally required to qualify for governmental (Medicare and Medicaid) reimbursement, and hence the vast majority of hospitals apply for accreditation. Riverview passed its latest Joint Commission accreditation with “flying colors,” receiving full accreditation, the highest of the accreditation categories.

In recent years, competition among the four hospitals in Riverview’s service area has been keen but friendly. However, a large for-profit chain recently purchased the for-profit hospital, which has resulted in some anxiety among the managers of the other three hospitals because of the chain’s reputation for aggressively increasing market share in the markets they serve. Due to these changes, Riverview has decided to complete a strategic management analysis.

Relevant financial and operating data for Riverview are contained in Exhibits 1.1 through 1.4, and selected industry data are contained in Exhibits 1.5 and 1.6. (Note that the industry data given in the case are for illustrative purposes only and do not represent actual data for the years specified. For a better idea of the type of comparative data actually available for hospitals, see the Ingenix website at www.hospitalbenchmarks.com.)

In addition to the data in the exhibits, the following information was extracted from the notes section of Riverview’s 2009 Annual Report. A significant portion of the hospital’s net patient service revenue was generated by patients who are covered by either Medicare, Medicaid, or other government programs or by various private plans, including managed care plans, that have contracts with the hospital that specify discounts from charges. In general, the proportional amount of deductions is similar between inpatients and outpatients. The gross/net revenue breakdown for both inpatient and outpatient services is as follows (in millions of dollars):

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	2005	2006	2007	2008	2009
Gross patient service revenue					
Inpatient	\$25.161	\$25.275	\$26.117	\$29.148	\$33.216
Outpatient	<u>4.748</u>	<u>5.969</u>	<u>6.535</u>	<u>9.130</u>	<u>11.912</u>
Gross patient revenue	<u>\$29.909</u>	<u>\$31.244</u>	<u>\$32.652</u>	<u>\$38.278</u>	<u>\$45.128</u>
Revenue deductions					
Contractual allowances	\$ 2.489	\$ 2.053	\$ 1.729	\$ 5.196	\$ 7.516
Charity care	<u>1.759</u>	<u>1.955</u>	<u>2.127</u>	<u>2.506</u>	<u>3.030</u>
Total deductions	<u>\$ 4.248</u>	<u>\$ 4.008</u>	<u>\$ 3.856</u>	<u>\$ 7.702</u>	<u>\$10.546</u>
Net patient service revenue	<u><u>\$25.661</u></u>	<u><u>\$27.236</u></u>	<u><u>\$28.796</u></u>	<u><u>\$30.576</u></u>	<u><u>\$34.582</u></u>

Assume that you have been hired as a consultant for Riverview Community Hospital to assist the CEO with the strategic management analysis. On your first day on the job, the CEO, Melissa Randolph, stated that the best way to get to know the condition of the hospital is to conduct a thorough strategic analysis consisting of a mission, vision, and value evaluation, followed by a strength, weakness, opportunities, and threats (SWOT) analysis, a competitive analysis, development of action items, and tracked by a scorecard you create; thus, she assigned you the task.

She has already scheduled a strategic management analysis presentation at the next board of trustees meeting in 3 months. Summarize your evaluation of the hospital's condition. Present your specific strategic views on the potential underlying economic and managerial factors that might have caused any problems that surfaced in the analysis. Make any recommendations that you believe the hospital should follow to ensure future financial soundness.

In preparing for the presentation, several relevant factors came to light. First, in reviewing the policy decisions made by Riverview's board of trustees over the past decade, you found out that in 2004 the board made the decision to significantly expand the hospital's outpatient services. The rationale was that many procedures that historically were done on an inpatient basis were now being done in an outpatient setting, and if Riverview did not offer such services it would lose the patients to other providers.

You know that many healthcare providers are now using dashboards to focus on key performance indicators (KPIs). A dashboard is nothing more than a way to summarize an organization's financial and operating performance. Of course, the name stems from an automobile's dashboard, which contains gauges that give

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drivers essential information about the car's performance and operating condition. Thus, you plan to develop one dashboard containing no more than five strategic KPIs. The dashboard will use financial ratios to focus on financial performance, while the other will use operating indicator ratios to focus on operating performance. You plan to present your recommendations for the contents of these dashboards, along with the rationale for the ratios chosen, at the board meeting. Your ultimate goal is to create a basis for performance discussion at future board meetings with a limited discussion of the KPIs.

EXHIBIT 1.1
Riverview Community Hospital: Statements of Operations (millions of dollars)

	2005	2006	2007	2008	2009
<i>Revenues</i>					
Net patient service revenue	\$25.661	\$27.236	\$28.796	\$30.576	\$34.582
Other revenue	1.305	1.261	1.237	1.853	1.834
Total revenues	<u>\$26.966</u>	<u>\$28.497</u>	<u>\$30.033</u>	<u>\$32.429</u>	<u>\$36.416</u>
<i>Expenses</i>					
Salaries and wages	\$10.829	\$11.135	\$12.245	\$12.468	\$13.994
Fringe benefits	1.496	1.731	1.830	2.408	2.568
Interest expense	1.341	1.305	1.181	1.598	1.776
Depreciation	1.708	1.977	2.350	2.658	2.778
Provision for bad debts	0.546	0.589	0.622	0.655	0.776
Professional liability	0.102	0.157	0.140	0.201	0.218
Other	7874	8.389	9.036	10.339	11.848
Total expenses	<u>\$23.896</u>	<u>\$25.283</u>	<u>\$27.404</u>	<u>\$30.327</u>	<u>\$33.958</u>
Excess of revenues over expenses	<u>\$ 3.070</u>	<u>\$ 3.214</u>	<u>\$ 2.629</u>	<u>\$ 2.102</u>	<u>\$ 2.458</u>

EXHIBIT 1.2
Riverview Community Hospital: Balance Sheets (millions of dollars)

	2005	2006	2007	2008	2009
<i>Assets</i>					
Cash and investments	\$ 3.513	\$ 5.799	\$ 4.673	\$ 5.069	\$ 2.795
Accounts receivable (net)	5.915	4.832	4.359	5.674	7.413
Inventories	0.338	0.403	0.432	0.523	0.601
Other current assets	0.693	0.294	0.308	0.703	0.923
Total current assets	<u>\$10.459</u>	<u>\$11.328</u>	<u>\$ 9.772</u>	<u>\$11.969</u>	<u>\$11.732</u>
Gross plant and equipment	\$37.999	\$42.005	\$47.786	\$55.333	\$59.552
Accumulated depreciation	8.831	10.092	11.820	14.338	17.009
Net plant and equipment	<u>\$29.168</u>	<u>\$31.913</u>	<u>\$35.966</u>	<u>\$40.995</u>	<u>\$42.543</u>
Total assets	<u>\$39.627</u>	<u>\$43.241</u>	<u>\$45.738</u>	<u>\$52.964</u>	<u>\$54.275</u>
<i>Liabilities and Net Assets</i>					
Accounts payable	\$ 1.068	\$ 1.273	\$ 0.928	\$ 1.253	\$ 1.760
Accruals	0.692	0.942	1.460	1.503	1.176
Current portion of LT debt	0.136	0.290	0.110	1.341	1.465
Total current liabilities	<u>\$ 1.896</u>	<u>\$ 2.505</u>	<u>\$ 2.498</u>	<u>\$ 4.097</u>	<u>\$ 4.401</u>
Long-term debt	15.959	15.775	15.673	19.222	17.795
Net assets	<u>21.772</u>	<u>24.961</u>	<u>27.567</u>	<u>29.645</u>	<u>32.079</u>
Total liabilities and net assets	<u>\$39.627</u>	<u>\$43.241</u>	<u>\$45.738</u>	<u>\$52.964</u>	<u>\$54.275</u>

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EXHIBIT 1.3
Riverview Community
Hospital: Statements
of Cash Flows
 (millions of dollars)

	2006	2007	2008	2009
<i>Cash Flows from Operating Activities</i>				
Income from operations	\$3.214	\$2.629	\$2.102	\$2.458
Noncash expenses	1.952	2.326	2.633	2.756
Change in accounts receivable	1.083	0.473	(1.315)	(1.739)
Change in inventories	(0.065)	(0.029)	(0.091)	(0.078)
Change in other current assets	0.399	(0.014)	(0.395)	(0.220)
Change in accounts payable	0.205	(0.345)	0.325	0.507
Change in accruals	0.250	0.518	0.043	(0.327)
Change in current portion of LT debt	<u>0.154</u>	<u>(0.180)</u>	<u>1.231</u>	<u>0.124</u>
Net cash flow from operations	<u>\$7.192</u>	<u>\$5.378</u>	<u>\$4.533</u>	<u>\$3.481</u>
<i>Cash Flows from Investing Activities</i>				
Fixed asset acquisitions	<u>(\$4.722)</u>	<u>(\$6.402)</u>	<u>(\$7.686)</u>	<u>(\$4.328)</u>
<i>Cash Flows from Financing Activities</i>				
Increase (decrease) in LT debt	<u>(\$0.184)</u>	<u>(\$0.102)</u>	<u>\$3.549</u>	<u>(\$1.427)</u>
Net increase (decrease) in cash	<u>\$2.286</u>	<u>(\$1.126)</u>	<u>\$0.396</u>	<u>(\$2.274)</u>
Beginning cash and investments	<u>\$3.513</u>	<u>\$5.799</u>	<u>\$4.673</u>	<u>\$5.069</u>
Ending cash and investments	<u>\$5.799</u>	<u>\$4.673</u>	<u>\$5.069</u>	<u>\$2.795</u>

LT: long term

Note: The noncash expenses and fixed asset acquisitions data in the statements of cash flows are somewhat different than they would be if calculated directly from the other financial statements because of asset revaluations.

EXHIBIT 1.4
Riverview Community
Hospital: Selected
Operating Data

	2005	2006	2007	2008	2009
Medicare discharges	3,008	2,960	2,721	2,860	2,741
Total discharges	9,680	9,311	8,784	8,318	8,576
Outpatient visits	30,754	31,960	32,285	32,878	36,796
Licensed beds	210	210	210	210	210
Staffed beds	192	196	193	197	178
Patient days	45,296	45,983	44,085	42,434	40,062
Case mix index	1.2531	1.2674	1.2869	1.2993	1.3161
Full-time equivalents	604.5	618.1	610.8	625.8	619.3

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	<i>+Quartile</i>	<i>Median</i>	<i>–Quartile</i>
<i>Profitability Ratios</i>			
Deductible ratio*	0.34	0.26	0.18
Profit (total) margin	5.58%	3.48%	0.53%
Return on assets	5.80%	3.10%	0.40%
Return on equity	15.66%	6.01%	0.62%
<i>Liquidity Ratios</i>			
Current ratio	2.53	1.99	1.48
Days cash on hand	32.35	15.89	6.24
<i>Debt Management Ratios</i>			
Debt ratio	62.90%	48.40%	35.20%
LT debt to equity	127.00%	64.70%	26.90%
Times interest earned	4.29	2.23	1.14
Fixed charge coverage	2.18	1.35	1.02
Cash flow coverage	5.32	3.22	1.76
<i>Asset Management Ratios</i>			
Inventory turnover	98.68	63.95	43.99
Current asset turnover	3.94	3.38	2.88
Fixed asset turnover	2.20	1.76	1.49
Total asset turnover	1.04	0.89	0.75
Average collection period (days)	87.53	75.67	63.33
Average payment period (days)	71.24	56.52	45.84
<i>Other Ratios</i>			
Average age of plant (years)	8.86	7.39	6.14

EXHIBIT 1.5 2009 Selected Industry Financial Data (200–299 Beds)

*Deductions/Gross patient service revenue

LT: long term

Notes: 1. The industry data shown here are for illustrative purposes only and hence should not be used outside this case.

2. The upper quartile is based on the higher numerical value for the ratio and the lower quartile on the lower numerical value, regardless of whether a high value is good or bad. The interpretation is left to the analyst.

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EXHIBIT 1.6
2009 Selected Industry
Operating Data
(200–299 Beds)

	<i>+Quartile</i>	<i>Median</i>	<i>–Quartile</i>
<i>Profit Indicators</i>			
Profit per discharge ^a	\$89.04	(\$21.30)	(\$120.08)
Profit per visit ^b	\$ 6.22	\$ 0.66	(\$ 7.01)
<i>Net Price Indicators</i>			
Net price per discharge	\$4,091	\$3,411	\$ 2,815
Net price per visit	\$ 201	\$ 139	\$ 98
Medicare payment percentage	43.47%	36.60%	31.25%
Bad debt/charity percentage ^c	7.89%	4.76%	2.97%
Contractual allowance % ^d	25.27%	20.02%	12.12%
Outpatient revenue %	25.26%	21.03%	17.44%
<i>Volume Indicators</i>			
Occupancy rate	67.12%	58.10%	47.84%
Average daily census ^e	173.23	144.73	114.39
<i>Length of Stay Indicators</i>			
Average length of stay (days)	6.80	6.07	5.41
Adjusted length of stay ^f	6.48	5.36	4.52
<i>Intensity of Service Indicators</i>			
Cost per discharge	\$ 3,937	\$ 3,392	\$ 2,972
Adjusted cost per discharge ^g	\$ 3,417	\$ 2,924	\$ 2,572
Cost per visit ^h	\$202.23	\$141.97	\$111.53
Case mix index	1.2795	1.1756	1.0259
<i>Efficiency Indicators</i>			
FTEs per occupied bed	4.59	4.15	3.77
Outpatient man-hours per visit ⁱ	4.68	5.84	8.66
<i>Unit Cost Indicators</i>			
Salary per FTE ^j	\$24,447	\$22,517	\$20,347
Employee benefits percentage ^k	19.58%	17.04%	15.18%
Liability costs per discharge ^l	\$ 80.94	\$ 42.05	\$ 18.31

^a(Net inpatient revenue – Inpatient cost)/Total discharges

^b(Net outpatient revenue – Outpatient cost)/Total visits

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EXHIBIT 1.6 (continued) Selected Industry Operating Data

^c(Bad debt + Charity care)/Gross patient revenue
^dContractual allowances/Gross patient revenue
^ePatient days/365
^fAverage length of stay/Case mix index
^gCost per discharge/Case mix index
^hTotal outpatient expenses/Total outpatient visits
(Outpatient FTEs x 2,080)/Total visits
ⁱTotal salaries/FTEs
^jFringe benefit costs/Total salaries
^kInpatient professional liability costs/Total discharges

FTE: full-time equivalent

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2. The upper quartile is based on the higher numerical value for the ratio and the lower quartile on the lower numerical value, regardless of whether a high value is good or bad. The interpretation is left to the analyst.
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