

## CASE MODEL

## EVALUATING CD PRACTICE

Main Hospital is considering purchasing a four-cardiologist/physician professional medical practice (the CD Practice) and is evaluating its finances as part of the due diligence process. Some of the key areas to evaluate are staffing levels, accounts receivable, and productivity per RVU.

Main Hospital analysts undertake financial status benchmarking, expressed as "ratio analysis," as a method of comparing CD Practice to industry standards/norms in order to determine the relative risk of the investment, as well as determining the discount rate/cost of equity. They set out their findings in table format showing a comparison of certain aspects of CD Practice's historical performance and financial position, as measured by financial ratios, and compared against ratios developed from two sources of industry survey data.

## Financial Ratio Analysis

|                         | FSSB (1)       |        |                | RMA (2)        |        |                | CD PRACTICE |
|-------------------------|----------------|--------|----------------|----------------|--------|----------------|-------------|
|                         | Upper Quartile | Median | Lower Quartile | Upper Quartile | Median | Lower Quartile | 12/31/2001  |
| <b>Liquidity Ratios</b> |                |        |                |                |        |                |             |
| Current Ratio           | 4.1            | 1.1    | 0.3            | 1.7            | 0.6    | 0.1            | 1.03        |
| Quick Ratio             | 4.1            | 1.1    | 0.3            | 1.5            | 0.5    | 0.1            | 1.03        |
| <b>Activity Ratios</b>  |                |        |                |                |        |                |             |
| Sales/ Receivables      | 6.7            | 0      | 0              | N/A            | 10.0   | N/A            | 5.42        |
| Sales/Net Fixed Assets  | N/A            | N/A    | N/A            | 48.1           | 18.7   | 6.6            | 14.47       |
| Sales/ Total Assets     | 16.9           | 8.6    | 3.8            | 14.2           | 5.7    | 2.1            | 3.83        |
| <b>Leverage Ratios</b>  |                |        |                |                |        |                |             |
| Fixed/ Worth            | N/A            | N/A    | N/A            | 0.6            | 2.6    | 3.7            | 0.92        |
| Debt/ Worth             | 0              | 0.29   | 1.38           | 1.1            | 5.7    | 6.6            | 2.48        |

| <b>Profitability Ratios</b>        |      |      |       |       |      |      |      |
|------------------------------------|------|------|-------|-------|------|------|------|
| Profits (Pretax)/ Total Assets (%) | 1.08 | 0.13 | -0.01 | 24.6  | 3.8  | -3.4 | 0.02 |
| Profits (Pretax)/ Net Worth (\$)   | 1.60 | 0.21 | -0.03 | 101.2 | 20.8 | -1.0 | 0.08 |

Notes:

<sup>1</sup> Source: *Financial Studies of the Small Business: Physician Services. (1997-1998 – All Sizes)*. 20th Edition. Published by Financial Research Associates.

<sup>2</sup> Source: *Annual Statement Studies (all statements 4/1/98-3/31/99)*. SIC Code #8011 (Offices and Clinics of Doctors of Medicine). Published by Risk Management Association, f/k/a Robert Morris Associates.

N/A = Not Available or Not Applicable.

They then utilize the most recent income statement and balance sheet from CD Practice to illustrate several methods of benchmarking CD Practice's operational performance and financial status.

#### Financial Statement of CD Practice

| <b>REVENUES</b>                                      | <b>CD PRACTICE<br/>2001 (3)</b> |
|--|---------------------------------|
| TOTAL NET REVENUE                                    | \$3,884,098                     |
| <b>OPERATING EXPENSES, NON-MD OWNER COMPENSATION</b> |                                 |
| Staff Payroll & Payroll Taxes                        | \$971,025                       |
| Advertising & Marketing                              | \$11,652                        |
| Ancillary Expense                                    | \$77,682                        |
| Equipment Expense                                    | \$77,682                        |
| Insurance – Liability                                | \$7,768                         |
| Insurance – Malpractice                              | \$46,609                        |
| Professional Fees                                    | \$62,146                        |
| Medical Supplies                                     | \$54,377                        |
| Occupancy Expense                                    | \$213,625                       |
| Office Supplies and Services                         | \$139,828                       |
| Miscellaneous  | \$155,364                       |
| Total Operating Expenses                             | \$1,817,758                     |
| <b>MD OWNER COMPENSATION</b>                         |                                 |
| Total Physician Compensation                         | \$2,042,026                     |
| <b>Net Income before Taxes</b>                       | <b>\$24,314</b>                 |

**Balance Sheet of CD Practice**

|   | <b>CD PRACTICE</b>        |
|---|---------------------------|
|   | <b>12/31/2001</b>         |
| <b>ASSETS:</b>                                      |                           |
| <b>Current Assets:</b>                              |                           |
| Cash  | \$26,335                  |
| Accounts Receivable                                 | \$717,115                 |
| Other Current Assets                                | <u>\$1,013</u>            |
| <b>Total Current Assets</b>                         | \$744,462                 |
| Total Net Fixed and Non-Current Assets              | \$268,412                 |
| <b>TOTAL ASSETS</b>                                 | <b><u>\$1,012,874</u></b> |
| <b>LIABILITIES:</b>                                 |                           |
| Total Current Liabilities                           | \$514,540                 |
| Total Long Term Liabilities:                        | \$207,639                 |
| Total Liabilities                                   | \$722,179                 |
| Total Shareholders' Equity                          | \$290,695                 |
| <b>TOTAL LIABILITIES &amp; SHAREHOLDERS' EQUITY</b> | <b><u>\$1,012,874</u></b> |

With these numbers in hand, the analysts begin their operational performance benchmarking analysis. The first task is comparison of the income statement to industry averages. CD Practice's income statement is compared against industry norms as represented by data derived from the two benchmarking data sources. Often, the use of multiple benchmarking data sources may be appropriate and can, under certain circumstances, support a range of indicators to which the CD Practice can be compared.

Their analysis of CD Practice's income statement indicates that it has a higher payroll than that indicated by the industry survey norms.

### Benchmark Comparison of the Income Statement to INDUSTRY Norms

|  | Industry Survey<br>#1 | Industry Survey<br>#2 | CD<br>PRACTICE    |
|--|-----------------------|-----------------------|-------------------|
| REVENUES   | MGMA (1)              | NAHC (2)              | 2001 (3)          |
| TOTAL REVENUES                                       | 100.0%                | 100.0%                | 100.0%            |
| <b>OPERATING EXPENSES, NON-MD OWNER COMPENSATION</b> |                       |                       |                   |
| Staff Payroll & Payroll Taxes                        | 21.9%                 | 21.8% (9)             | 25.0%             |
| Advertising & Marketing                              | 0.4%                  | 0.2%                  | 0.3%              |
| Ancillary Expense                                    | 4.5% (4)              | 0.3% (10)             | 2.0%              |
| Equipment Expense                                    | 1.4%                  | 2.6%                  | 2.0%              |
| Insurance - Liability                                | 0.2%                  | 0.4%                  | 0.2%              |
| Insurance - Malpractice                              | 1.2%                  | 1.5%                  | 1.2%              |
| Professional Fees                                    | 1.1%                  | 2.2%                  | 1.6%              |
| Medical Supplies                                     | 1.0%                  | 3.2%                  | 1.4%              |
| Occupancy Expense                                    | 4.1%                  | 3.8%                  | 5.5%              |
| Office Supplies and Services                         | 2.8% (5)              | 3.6% (11)             | 3.6%              |
| Miscellaneous  | 4.3% (6)              | 3.0% (12)             | 4.0%              |
| <b>Total Operating Expenses</b>                      | <b>42.9% (7)</b>      | <b>42.6% (13)</b>     | <b>46.8%</b>      |
| <b>Operating Margin</b>                              | <b>57.1% (8)</b>      | <b>57.4% (14)</b>     | <b>53.2% (15)</b> |

Notes:

- <sup>1</sup> Source: Medical Group Management Association (MGMA) 1999 Cost Survey (Based on 1998 Data): Table 10-56 : Operating Cost – Median reported data "Total Support Staff Cost" – Cardiology. Pg. 134.
- <sup>2</sup> Source: National Association of Healthcare Consultants (NAHC), The PM Group, and Society of Medical-Dental Management Consultants Statistics: Medical and Dental Income and Expense Averages 1999 Report (Based on 1998 Data) – Mean reported data - Cardiology (All Regions). Pg. 23.
- <sup>3</sup> Source: CD Practice's 1998 audited income statement
- <sup>4</sup> Includes clinical laboratory, radiology/imaging and other ancillary expenses
- <sup>5</sup> Includes administrative supplies and services and information services
- <sup>6</sup> Includes miscellaneous operating cost (2.0%) and variance between survey total operating cost and sum of survey breakdown (2.3%)
- <sup>7</sup> Total Operating Cost as reported by survey
- <sup>8</sup> Total Revenue less Operating Expenses
- <sup>9</sup> Includes total salaries, fringe benefits, retirement and payroll taxes
- <sup>10</sup> Includes laboratory expenses only
- <sup>11</sup> Includes clerical supplies, telephone, billing service, dues and education.
- <sup>12</sup> Includes other expenses (1.8%), other taxes(.5%) and variance between survey total operating cost and sum of survey breakdown (.7%)
- <sup>13</sup> Total Overhead Expense as reported by survey
- <sup>14</sup> Total Revenue less Operating Expenses
- <sup>15</sup> Total Revenue less Operating Expenses

This prompts the valutors to determine the cause for the above average payroll costs. Several causes may present themselves, including:

- a. Low turnover. High turnover of employees can be common in medical practices. If a practice does not have much turnover of staff, payroll may tend to be higher than the industry; or
- b. Family or friends on staff. It is not uncommon for family members or friends of the owner-physician to be on staff of the practice. Valutors should determine if their services are reimbursed at fair market value and adjustments should then be considered. There are many salary and compensation surveys available to help assist valutors in determining the fair market salary or wage of practice employees.

The analysis of CD Practice's income statement indicates that it has a higher-than-average occupancy cost. This prompts the analysts to determine the cause for the variance from the indicated industry norms. One of the most common reasons for high occupancy cost of a medical practice is the existence of common ownership of both the practice and office building. The owners-physicians of the practice may own the office building under a separate company and set rent at a level that provides tax-related benefits. In those circumstances, the analyst should review the lease to determine if the rent paid by the subject practice is fair market rent relative to the area, and, if not, adjustments should be considered to reflect "economic" rather than "contract" rent.

The indications of above-average staffing and occupancy costs of CD Practice significantly contribute to its above-average operating costs, or overhead. A valuator may take these high overhead costs of CD Practice into consideration when determining the risk and adjustment that would reflect the perception of a typical, knowledgeable investor.

The analysts also compared CD Practice's balance sheet against survey data derived from the industry as represented by the well-known industry benchmarking data source by the Risk Management Associations (RMA).

### Benchmark Comparison CD Practice's Balance Sheet to Industry Averages

|   | Industry       | CD Practice       |
|---|----------------|-------------------|
| <b>ASSETS:</b>                                      | <b>RMA (1)</b> | <b>12/31/2001</b> |
| <b>Current Assets:</b>                              |                |                   |
| Cash  | 19.0%          | 2.6%              |
| Accounts Receivable                                 | 14.3%          | 70.8%             |
| Other Current Assets                                | <u>3.3%</u>    | <u>0.1%</u>       |
| Total Current Assets                                | 36.6%          | 73.5%             |
| Total Net Fixed and Non-Current Assets              | 63.4%          | 26.5%             |
| <b>TOTAL ASSETS</b>                                 | <u>100.0%</u>  | <u>100.0%</u>     |
| <b>LIABILITIES:</b>                                 |                |                   |
| Total Current Liabilities                           | 70.7%          | 50.8%             |
| Total Long Term Liabilities:                        | 37.3%          | 20.5%             |
| Total Liabilities                                   | 108.0%         | 71.3%             |
| Total Shareholders' Equity                          | -8.0%          | 28.7%             |
| <b>TOTAL LIABILITIES &amp; SHAREHOLDERS' EQUITY</b> | <u>100.0%</u>  | <u>100.0%</u>     |

Note:

- <sup>1</sup> Source: *Annual Statement Studies, 2000, 2001 (all statements 4/1/98-3/31/99)*.  
SIC Code #8011 Risk Management Association.

Their analysis indicates that CD Practice has a higher portion of its total assets in accounts receivable than indicated by industry norms. This may indicate the existence of uncollectible accounts, which have not been addressed in the claims resolution process of CD Practice's revenue cycle. Leaving these amounts unadjusted could contribute to a higher-than-average amount of shareholders' equity in CD Practice, as indicated, and should be investigated to determine the cause.

Several reasons may be indicated, including:

1. Contractual discounts and adjustments. Many medical practices have provider service agreements with third-party payors that reimburse professional medical services on a discounted fee-for-service basis. Although the full charge of the service is placed into the practice's accounts receivable once it is billed, the discounted or non-reimbursable portion of the charge may not be entered into the practice's billing system when the explanation of benefits (EOB) is received from the insurance company, or managed care organization (MCO). As a result, it remains in the practice's accounts receivable indefinitely, and distorts an accurate view of the practice's financial condition. The analyst may review the aging of the accounts receivable as a quick check to determine if this condition exists.

2. Payor mix. Reimbursement from certain payors, e.g., worker compensation and related litigation cases, can take years to collect. In addition, self-pay patients are often more difficult to collect accounts from than government payors. The analysts therefore need to review the payor mix of CD Practice, and the collections history of the various payor classifications (e.g., the percentage of patient self-pay receivables that have historically been collected) and make certain adjustments to better reflect the economic value of the accounts receivable.

The analysts also compare the accounts receivable aging to industry averages.

**Benchmark Comparison of Accounts Receivable Aging to Industry Averages**

| <b>Current</b>       | <b>0-30 Days</b> | <b>31-60 Days</b> | <b>61-90 Days</b> | <b>91-120 Days</b> | <b>120+ Days</b> |
|----------------------|------------------|-------------------|-------------------|--------------------|------------------|
| CD PRACTICE          | 46.6%            | 9.2%              | 7.4%              | 4.8%               | 32.0%            |
| INDUSTRY AVERAGE (1) | 45.6%            | 15.8%             | 8.4%              | 5.5%               | 23.9%            |

Note:

1. Source: 1999 Cost Survey (Single Specialty – Cardiology - Median). Medical Group Management Association (MGMA).

The analysis of the aging of the CD Practice's accounts receivable indicates that a large portion of the accounts receivables is over 120 days old. As indicated above, the analysts should review CD Practice's policy with regard to treatment of adjustments for uncollectible accounts.

The analysts then turn their attention to comparison of CD Practice's payor mix to industry averages.

**Benchmark Comparison of CD Practice Payor Mix (%) to Industry Averages**

|                          | <b>MGMA (1)</b> | <b>CD Practice 2001</b> |
|--------------------------|-----------------|-------------------------|
| Medicare fee-for-service | 43.3%           | 42.9%                   |
| Medicaid fee-for-service | 3.0%            | 2.1%                    |
| Commercial and self-pay  | 49.0%           | 53.0%                   |
| Capitation               | 0.0%            | 0.0%                    |
| Charity Care             | 1.0%            | 2.0%                    |

Note:

1. Source: 1999 Cost Survey (Single Specialty – Cardiology - Median). Medical Group Management Association (MGMA).

Other than having a slightly higher amount of commercial and self-pay patients (which may have contributed to the higher amount of accounts receivable), CD Practice's payor mix is generally in line with indicated industry norms.

No review and analysis of CD Practice's financial statements can be complete without considering the productivity and utilization of the physicians. Both the MGMA Cost Survey and the AMGA Survey of Key Medical Management Information provide data provider productivity on the basis of the full-time equivalency (FTE) of physician involvement in practice related activities, as well as on a per relative value unit (RVU) basis.

Utilizing these measures allows the analysts to normalize the data of CD Practice for the purposes of comparison to industry norms. Calculating values on a per FTE physician basis is an adjustment that recognizes that physicians drive production of revenues, as well as expenses in medical practice entities. This basis allows for meaningful benchmarking of these operating performance measures. Reporting the data on a per RVU basis provides a means of normalizing expenses based on the amount of physician work, overhead, and insurance costs (the components of RVUs) that are required to complete medical procedures. This is used to remove the bias of reimbursement yield disparity from the comparison of physician productivity.

The table below provides an analysis of American Medical Association data on patient visits, another measure of physician productivity.

### Benchmark Comparison of Physician Productivity to Industry Averages

|  | AMA (1) | CD Practice<br>2001 (3) | Variance (%) |
|--|---------|-------------------------|--------------|
| Total Patient Visits per Week                | 99.0    | 105.7                   | +6.8%        |
| Total Office Visits per Week                 | 48.1    | 40.5                    | -15.8%       |
| Total Office Visits w/ New Patients per Week | 7.0     | 6.7                     | -4.3%        |
| Total Visits on Hospital Rounds per Week     | 40.7    | 46.7                    | +14.7%       |
| Total Visits in Other Settings               | 11.8    | 18.5                    | +56.8%       |
| Weeks of Practice per Year                   | 47.3    | 48.1                    | +1.7%        |
| Hours in Professional Activities per Week    | 66.4    | 68.7                    | +3.5%        |

|                     | MGMA (2) | CD Practice<br>2001 (3) | Variance (%) |
|---------------------|----------|-------------------------|--------------|
| Physician work RVUs | 6,036    | 6,315                   | +4.6%        |
| Procedures          | 5,866    | 5,673                   | -3.3%        |

Notes:

1. Source: 1997/98 Physician Marketplace Statistics (Cardiovascular Diseases – Mean). American Medical Association (AMA).
2. Source: 1999 Cost Survey (Single Specialty – Cardiology - Median). Medical Group Management Association (MGMA).
3. Per FTE physician.

This comparison of the productivity of the physicians in CD Practice against industry norms indicates that CD Practice physicians provide more services in settings outside the office than indicated in the survey as the norm of cardiologists. This is evidenced further by the fact that CD Practice physicians performed more work providing more RVUs than the mean of cardiologists reported. This may be an indication that the more complicated procedures they prefer may require a hospital or ambulatory care facility for patient treatment.

In summary, then, the sample benchmarking undertaken by Main Hospital analysts has served to facilitate efforts to identify and explain CD Practice's variances from the norm. Their analysis of these variances can assist in Main Hospital in identifying risk factors and suggest adjustments to the rate of return that might be required.

It should be noted that the use of benchmarking results and their incorporation into the valuation model may vary upon the informed, but ultimately subjective, determination of the valuator as to their pertinence to the standard and premise of value, the purpose and use of the valuation, and the level of value sought.

#### KEY INTERPRETIVE ISSUES

- Which of the benchmarks is likely to be the most significant in helping Main Hospital make its investment decision?
- What subjective factors might influence this decision?