

As seen in:

Visit us at
www.strategichealthcare.com

VOL. 20 NO. 2
FEBRUARY 2003

Strategic Health Care Marketing

Strategic Business Development and Marketing for Health Care Executives



Feasibility Studies: The Key to Evaluating Expansion Opportunities

by Phillip Laux

Feasibility studies are considered among the most powerful yet underutilized tools to test planning assumptions and substantiate a hospital's case for expanding services. A feasibility study can be used to solicit board approval, secure financing, and meet certificate of need (CON) application requirements. It also serves as the foundation for the final business plan. The typical time commitment to conduct a comprehensive feasibility study ranges from 75 to 120 days, depending on the availability of financial and market information.

Community hospital case study

Faced with financial challenges and significant out-migration of the cardiovascular patient population, administrators of a 150-bed community hospital conducted a comprehensive cardiovascular feasibility study. "We kept seeing increased need and unmet demand. Diagnostic catheterizations have been offered here for nearly 10 years, but patients had to leave the community to access advanced cardiovascular care," they said.

The feasibility study had a four-pronged purpose:

1. Determine whether to enter the open-heart surgery market.
2. Support a CON application.
3. Test financing and bond issuance potential.
4. Provide the foundation for a business plan.

Executives communicated the strategic goals and necessity of the feasibility study to key medical staff leaders and members of a selected project team. The project team included representatives of core hospital departments. The team's mission was to discuss the timeline and project scope as well as to review information on medical admissions and market need statistics. Information was gathered on market share, procedure volumes, and capital and operational requirements. Support and direction from key managers were critical to the success of the project, which was one of the biggest investments in the organization's history.

Market analysis

As part of the market assessment, hospital managers

and other key stakeholders were interviewed to assist in an analysis of the organization's strengths, weaknesses, opportunities, and threats in respect to the proposed cardiovascular services expansion. National, regional, and local trends for cardiac-specific procedures were studied. Mortality rates, out-migration for advanced cardiac care, cardiac patient transfers to competitors, market population demographics, and procedure use rates were also analyzed. These factors assisted in defining the hospital's Total Cardiac Target Market™ or TCTM. The TCTM is the geographic area from which the hospital could expect to draw patients for advanced cardiovascular care.

Demand projections, incorporating all the various statistics and analyses, were subsequently developed and reviewed with senior management. The following shows projections for open-heart surgeries within the TCTM. In calculating volumes, historical open-heart surgery (OHS) utilization rates were applied to the specific TCTM population.

TCTM Service Area	Population	OHS Utilization Rate Per 1,000	TCTM Projected Volume
Primary TCTM™	211,012	2.76	582
Secondary TCTM™	76,088	3.22	245

Utilization rates can differ by service area. They can be obtained through most state health care agencies or reports from third-party data collection companies.

Operational considerations

Following a thorough market assessment, a cardiovascular operational review provided senior management with a detailed summary of current clinical area capabilities and expansion requirements. The operational analysis reviewed existing equipment, ancillary services capacity, staffing, and work-flow processes. In addition, future cardiac expansion needs were identified in a facility plan designed to provide a clinically and technically advanced program. The facility chose a state-of-the-art design, One Stop Post Op,™ to offer a new approach to post-surgery care and a distinct competitive advantage. The One Stop Post Op model allows the cardiovascular patient to remain in the same room from admission to discharge. The nursing care level adapts to accommodate changing patient needs.

Financial analysis

The next step was to develop an accurate financial assessment of the proposed expansion. The financial assessment was developed with historical information sources and included sensitivity of the financials to

various key assumptions. The finance department provided information on payer mix, reimbursement, salary, supply and indirect expense, capital investment, and projected facility expansion costs.

Profitability and return on investment were determined for a five-year period for various cardiac expansion scenarios. The financial summary projected a five-year average ROI of 20.4 percent and a payback period of 5.61 years.

The financial summary is shown opposite. Operating expenses include salary and benefits, supply costs, purchased services, marketing, medical coverage, recruitment and training, indirect allocation, and specific start-up items. Various factors such as reimbursement or salaries, which are regionally different, can dramatically affect the bottom line and are hospital-specific.

Results

The cardiovascular expansion feasibility study provided senior management with a concise overview of the

needs of patients and the community. Medical staff guidance was solicited and considered before a decision was made to proceed, as physician support and acceptance were vital to program success.

The community hospital's board approved the cardiovascular expansion project, and the hospital used the feasibility study in multiple ways. It was able to document need and identify an underserved population to support a CON application. The feasibility study pro-

vided the documentation necessary to secure financing and served as a road map for implementation of the project. The study was often used as a guide during preplanning and start-up phases. After interventional cardiology and OHS programs were launched, it was used as a benchmark for review against actual program performance.

Phillip Laux (plaux@hcvconsult.com) is a finance manager with Health Care Visions, Ltd., a cardiovascular consulting firm based in Pittsburgh. ■

CARDIAC EXPANSION FINANCIAL SUMMARY

	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Net patient service revenue		15,367,559	18,033,845	21,520,216	24,075,199	26,686,509
Operating expenses before depreciation and interest		<u>10,223,437</u>	<u>11,906,966</u>	<u>14,407,584</u>	<u>16,573,904</u>	<u>18,631,604</u>
Income from operations before depreciation and interest		<u>5,144,122</u>	<u>6,126,879</u>	<u>7,112,632</u>	<u>7,501,295</u>	<u>8,054,905</u>
Income after depreciation and interest		<u>2,518,833</u>	<u>3,557,531</u>	<u>4,413,753</u>	<u>4,879,251</u>	<u>5,515,250</u>
Equipment, renovation, and construction	<u>19,792,442</u>	<u>0</u>	<u>0</u>	<u>1,000,000</u>	<u>0</u>	<u>0</u>
Return on investment		<u>12.7%</u>	<u>18.0%</u>	<u>21.2%</u>	<u>23.5%</u>	<u>26.5%</u>
Average return on investment	20.4%					
Income from operations before depreciation	<u>(430,000)</u>	<u>3,783,166</u>	<u>4,821,864</u>	<u>5,803,086</u>	<u>6,268,584</u>	<u>6,904,583</u>
Net present value	<u>(430,000)</u>	<u>3,548,936</u>	<u>4,523,324</u>	<u>5,106,750</u>	<u>5,174,851</u>	<u>5,346,981</u>
Equipment, renovation, and construction	<u>19,792,442</u>	<u>0</u>	<u>0</u>	<u>1,000,000</u>	<u>0</u>	<u>0</u>
Payback period (years)	<u>5.61</u>					