

Case Study: Assessing the Feasibility of Adding Retina to an ASC

BY BRUCE MALLER



The recent changes in facility reimbursement for retina cases make this an interesting time for retina surgeons and owners of ambulatory surgery centers (ASC). For many surgeons who have been accustomed to performing their surgeries in a hospital setting, considering a business model seems a foreign concept.

In this issue, Bruce Maller contributes the second article in his two-part series. In this second article, he provides information necessary when an ASC owner or partner is considering adding on retina procedures and, conversely, when a retina surgeon is considering moving his or her cases to an ASC environment.

-Pravin U. Dugel, MD

Most retinal surgery cases have historically been performed in the hospital setting; however, many surgeons and ambulatory surgery centers (ASCs) are now considering incorporating retina into their facilities. Over the past few years, there have been dramatic changes in retinal surgery, including the use of topical and sub-Tenon's anesthesia and improvements in surgical instruments, which have made surgeons more efficient, resulting in shorter case time. In addition, with the implementation of the new Medicare ASC payment methodology, there has been a significant increase in facility fee reimbursement for retina procedures. These factors have spurred many retinal surgeons to consider moving their cases to an ASC.

Prior to making a decision to bring retina into the ASC setting, there are several factors that must be considered, including the cost of equipment and supplies, incremental operating expenses, the types of cases to be performed, and the efficiency of the surgeon. The following case study illustrates a process that can be used to analyze necessary factors and make a sound business decision about bringing retina cases into the ASC.

CASE STUDY

Mid-Town Eye Surgery Center is owned by three anterior segment surgeons. The facility has been operational for 3 years and has two fully equipped ORs. The surgeons perform approximately 3,500 cases per year, including 2,400 cataract surgeries. Currently, the facility is open 3.5 days per week, and both ORs are being utilized on those days.

The center owners were recently approached by two community-based retina surgeons who expressed an interest in bringing their cases to the facility. In addition, they were hopeful there might be an opportunity for future ownership in the ASC.

Based on their historical volume and types of cases being performed, the retina surgeons estimated approximately 400 cases could be done in the ASC. Additionally, there was potential to move their laser procedures (430 cases), and they also expressed an interest in doing intravitreal injections in the facility. The owners were interested in pursuing these discussions. They asked the ASC administrator to do some homework and complete a financial assessment in preparation for a follow-up meeting with the retina surgeons. The administrator gathered some preliminary information and contacted a consultant to assist her with the analysis.

TABLE 1. CAPITAL COST ASSUMPTIONS

Equipment	Purchase Price (\$)
Vitrectomy System	45,000
Illuminator and Accessories	15,000
Laser and Accessories	39,000
Sterilization System	50,000
Microscope	15,000
Miscellaneous Equipment	20,000
Equipment Subtotal	184,000
Instruments	25,000
Total Capital Costs	209,000

CAPITAL REQUIREMENTS

The addition of retina would require the center to purchase new equipment and instruments. The administrator contacted several facilities that perform retina cases to identify assumptions for equipment and instruments. Once a list was established, the retina surgeons confirmed what equipment and instruments they felt were necessary, bids were obtained from vendors, and the total estimated capital requirements were determined (Table 1).

It should be pointed out that capital costs will vary depending on the existing facility equipment, whether laser procedures will be performed, and other surgeon requirements.

REVENUE FORECAST

The ASC owners were concerned about the ability to

perform enough retina cases to cover the capital requirements, as well as other direct costs incurred for these cases. With the help of the retina surgeons, the group reviewed the current surgical procedure volume and the types of cases being performed. It was determined that the majority of cases could be done in the ASC, and the more difficult cases would still need to be performed in the hospital outpatient setting.

Using current-year Medicare facility rates and the expected surgery volume by CPT code, a 2-year revenue forecast was completed. It was assumed procedure volume would increase by 3% in year 2 and Medicare fees would be at a higher rate in the second year based on the new ASC payment methodology. It was understood that commercial rates will vary from Medicare; however, for purposes of the analysis, revenue was based solely on Medicare rates. The revenue forecast is shown below in Table 2.

EXPENSE FORECAST

In order to determine the estimated direct costs and incremental operating expenses, the following analysis was performed.

SUPPLY COSTS

This aspect of the assessment proved challenging because the retina surgeons did not have information on supply costs for cases they perform at the hospital. In order to estimate costs, the ASC administrator spoke with colleagues at other facilities performing retinal procedures. This data was compared with cost estimates provided by the consultant, and they determined an

TABLE 2. REVENUE FORECAST

CPT	Description	Year 1 Volume	Medicare Facility Fees (\$)	Total Year 1 Facility Fees (\$)	Year 2 Volume	Medicare Facility Fees (\$)	Total Year 2 Facility Fees (\$)
67036	Vitrectomy Pars Plana	20	1,078	21,560	21	1,332	27,439
67039	Vitrectomy/Memb Peel	10	1,256	12,560	10	1,419	14,616
67040	Vitrectomy/Focal Endo	35	1,256	43,960	36	1,419	51,155
67043	Vitrectomy/PRP	200	1,541	308,200	206	1,576	324,656
67107	Repair of RD	10	1,200	12,000	10	1,353	13,936
67108	Repair RD w/Vitrectomy	50	1,256	62,800	52	1,419	73,079
67112	Repair RD w/Prev Repair	10	1,256	12,560	10	1,419	14,616
	Other (1)	65	600	39,000	67	700	46,865
TOTALS		400		512,640	412		566,361

(1) "Other" represents a mix of retina procedures, and fees are calculated using an average facility fee of \$600.00.

TABLE 3. SUPPLY COSTS

CPT	Description	Volume	Supply Cost/Case (\$)	Total Cost (\$)
67036	Vitrectomy, Pars Plana	20	690	13,800
67039	Vitrectomy/Focal Endolaser	10	690	6,900
67040	Vitrectomy/PRP	35	690	24,150
67043	Vitrectomy/Membrane Peel	200	690	138,000
67107	Repair of RD	10	690	6,900
67108	Repair of RD w/Vitrectomy	50	690	34,500
67112	Repair RD w/Previous Repair	10	690	6,900
	Other	65	180	11,700
TOTALS		400		242,850

TABLE 4. STAFFING COSTS

Staff Position	Hourly Rate	Hrs. Worked per Wk/Retina	Hrs. Worked per Year/Retina	Total Annual Wages/Retina (\$)
Check-in/Check-Out	14	8	384	\$5,376
Pre-Op Nurse	27	8	384	10,368
Pre-Op Nurse	27	8	384	10,368
Circulating RN/Operating Room	27	8	384	10,368
Circulating RN/Operating Room	27	8	384	10,368
Scrub RN Operating Room	27	8	384	10,368
Scrub RN Operating Room	27	8	384	10,368
Surgical Tech	15	8	384	5,760
Surgical Tech	15	8	384	5,760
Post-op RN	27	8	384	10,368
Post-op RN	27	8	384	10,368
RN Float	27	8	384	10,368
TOTALS		96	4,608	110,208
Full-Time Equivalent Employees			2.22	
Payroll Taxes and Benefits: (\$)				
Payroll Taxes: 9% of gross wages				9,919
Health Insurance: \$3,500 per year per employee				7,754
401K Contribution: 5% of gross wages				5,510
TOTAL PAYROLL TAXES AND BENEFITS				23,183
TOTAL STAFFING COSTS				133,391

appropriate average cost per case. Detail regarding the estimated supply costs is provided in Table 3.

STAFFING COSTS

Staffing requirements and related costs were then analyzed. With the additional case volume and the estimated time required to perform these procedures, it

was determined the center would be open one additional day per week. It was estimated that this would result in a total of 4,608 incremental staff hours. The annual total wages, payroll taxes and benefit costs for this added surgical day was \$133,391. Table 4 illustrates the analysis that was completed to determine incremental staffing costs.

TABLE 5. FINANCIAL FEASIBILITY ASSESSMENT

	Year 1 (\$)	% of Rev	Year 2 (\$)	% of Rev
Total Operating Revenue - Retina	512,640	100.00	566,361	100.00
Supply Costs - Retina	242,850	47.40	250,136	44.20
Gross Profit	269,790	52.60	316,225	55.80
Incremental Operating Expenses				
Staff Wages, Payroll Taxes and Benefits	133,391	26.00	137,393	24.30
Depreciation (5-Year Straight Line)	41,800	8.20%	41,800	7.40
Interest Expense	15,440	3.00%	12,501	2.20
Other Expenses	25,632	5.00%	28,318	5.00
Total Incremental Expenses	216,263	42.20	220,012	38.90
Incremental Net Income Before Taxes	53,527	10.40	96,213	16.90
Plus Depreciation	41,800		41,800	
Less Principal Payments	-35,413		-38,352	
Net Cash Flow	59,914		99,661	

OTHER EXPENSES

Additional costs were factored into the assessment for other expenses including instrument repair, staff training, EMR, utilities, office supplies, laundry, and bank charges. These expense items were estimated at 5% of operating revenue based on historical operating expenses of the facility. Interest expense related to the anticipated capital expenditures was also included in the expense forecast. It was assumed 100% of the capital cost would be financed at an interest rate of 8% over a 5-year term.

FINANCIAL FEASIBILITY ASSESSMENT

Once the revenue and expense components were identified, the next step was to complete a feasibility assessment to determine if the estimated retina volume would be sufficient to cover related costs and generate incremental net income to the owners. As shown in Table 5, the projected incremental net income in was \$53,527 year 1 and \$96,213 in year 2. Operating cash flows were also identified for the owners to show the cash available when considering the impact of depreciation expense and repayment of the principal portion of the new debt. The good news was that once all costs were covered, the facility was expected to have incremental cash flow starting in the first year the retina surgeons moved their cases to the facility.

INTRAVITREAL INJECTIONS AND LASER PROCEDURES

The final step in this analysis was to determine the feasibility of performing intravitreal injections and laser procedures in the facility. The retina surgeons had a strong desire to do this because they felt it could enhance their efficiency and allow them to do these procedures

between surgery cases. They also felt it would be a good revenue opportunity for the ASC.

On the surface, this seemed plausible; however, the ASC administrator expressed serious concerns about bringing these patients into the facility. First of all, the surgeons do a high number of injections (approximately 1,500), and she anticipated this would have a significant impact on patient flow. Although the surgeons would spend only a few minutes with the patients, the fact they would be seen in the facility would require them to be managed in the same manner as any surgical patient. Additional staffing time would be required for check-in and check-out, preoperative and postoperative, and chart documentation would be much more cumbersome than if these procedures were performed in the surgeon's office.

INJECTIONS

Despite the opportunity to capture a facility fee, the offsetting costs did not seem to justify performing injections in the facility. Also, the professional fee component for the retina surgeons would be reduced based on Medicare's site-of-service differential.

After completing an assessment of potential facility fee income vs the difference in professional fee reimbursement (Table 6), it was agreed that even though there would be a slight financial gain, it was not sufficient to justify making this change in operations.

LASERS

Regarding laser procedures, the same issues applied regarding the reduction in professional fee income when cases were performed in the ASC vs the clinic. The laser facility fees, however, presented a more favorable outcome for

TABLE 6. ASSESSMENT OF INJECTION REVENUE - ASC VS CLINIC

Total Injections	Prof. Fees - ASC	Prof. Fees - Clinic	Variance ASC vs Clinic	
1,500	202,500	259,500	(57,000)	
		Incremental	Est. Net Facility	
Total Injections	Facility Fees - ASC	Facility Costs ¹	Income - Injections	
1,500	\$129,795	\$69,588	\$60,208	
Net Financial Impact of Injections in the ASC vs Clinic			\$3,208	
1. Calculation for incremental facility costs				
Position	Min. per Patient	Hourly Rate (\$)	Cost per Patient (\$)	Total Cost (\$)
RN (preop, injection, and postop)	55	28.82	26.42	39,628
Check-in/Check-out	10	14.72	2.45	3,680
Billing Office			9.86	14,790
Sub-Total Staffing Costs				58,098
Supplies (chart documents & numbing drops)			7.66	11,490
Total Incremental Costs				69,588

TABLE 7. ASSESSMENT OF LASER REVENUE - ASC VS. CLINIC

TABLE 7: ASSESSMENT OF LASER REVENUE - ASC VS. CLINIC				
Total Lasers	Prof. Fees - ASC	Prof. Fees - Clinic	Variance ASC vs Clinic	
430	\$279,325	\$305,645	(\$26,320)	
Total Lasers	Facility Fees - ASC	Incremental Facility Costs ¹	Est. Net Facility Income - Lasers	
430	\$88,804	\$14,140	\$74,664	
Net Impact of Performing Lasers in the ASC vs Clinic			\$48,344	
1. Calculation for incremental facility costs.				
Position	Min. per Patient	Hourly Rate (\$)	Cost per Patient (\$)	Total Cost (\$)
RN (pre-op & post-op)	30	28.82	14.41	6,196
Check-in/Check-out	10	14.72	2.45	1,055
Billing Office			9.86	4,240
Subtotal Staffing Costs				11,491
Supplies (chart documents)			6.16	2,649
Total Incremental Costs				14,140

the group to consider. When weighing the difference in net facility fee income vs the variance in professional fees, the potential upside for the facility was approximately \$48,000 in year 1 with the opportunity for growth in subsequent years. Further analysis was to be performed by the ASC administrator to determine if the center could accommodate these additional patients from a scheduling standpoint.

Given the results of this analysis, the owners were confident the decision to add retina would enhance the operating performance of the ASC. Longer term, the group expects to achieve greater profitability from these cases and realize a return on their investment through anticipated growth in procedure volume and expected increases in reimbursement.

The key lesson learned from this case study is the

importance of performing the proper analysis before making strategic business decisions. Although there is a fair amount of time involved in performing this type of assessment, business owners can feel more confident in the decisions being made when armed with the appropriate information. ■

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