

An objective approach to selecting a referral laboratory

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With a wide array of sophisticated laboratory procedures continually emerging, clinicians are provided with increasing choices of laboratory tests. Pressure to provide quality services while operating cost-effectively makes performing all requested testing in-house unfeasible. As a result, primary laboratories refer selected tests to secondary laboratories — also known as referral laboratories.

Determining which tests should be performed in-house and which are better referred is an important decision. Rigorous make-versus-buy analyses should inform this decision.¹ In-house costs per test may be compared with the fee charged by the best referral laboratory available to determine the more financially prudent option.¹ The laboratory director, in consultation with each institution's medical staff, should decide which tests to perform in-house and which to refer.² The College of American Pathologists (CAP) Standards for Laboratory Accreditation state that the laboratory director must "select and monitor all reference laboratories for quality of service."³

Selection of a suitable referral laboratory should not be based on cost alone but also on a laboratory's reputation and quality.⁴ Therefore, developing effective processes and procedures for selecting and utilizing the services of a referral lab is essential.

Primary laboratories often use multiple referral laboratories. Although defensible in some contexts, this practice may result in additional costs, including increased shipping and handling costs, likely paying list price, chaotic specimen tracking, and confirming multiple laboratory accreditations. Moreover, results-reporting methods for referral laboratories will vary (e.g., mail, fax), requiring the primary laboratory to incur the added costs of linking the referral test results to patient records in the laboratory information system (LIS).

Calgary Laboratory Services

Calgary Laboratory Services (CLS) is a multidisciplinary medical diagnostic laboratory performing approximately 20 million tests for more than 1 million Calgary Health Region patients annually. Considering the volume of testing performed at CLS, only a small portion of requested tests are referred. Most of the referral laboratories are out-of-province, with many even out-of-country. Despite the small percentage of referral tests, CLS uses approximately 38 different referral laboratories. Consolidation was intuitive.

In addition to meeting quality standards, it is possible that consolidation of referral tests to one or two laboratories, instead of the vast variety of laboratories like CLS currently

uses, would benefit the laboratory in several different ways. Consolidating most, if not all, of a primary laboratory's referred testing to a single referral laboratory can afford benefits, including economies of scale, building critical masses of expertise in sub-specialty areas, "one-stop shopping," one bill, and the potential to implement an electronic order/results interface with the consolidating referral laboratory. Consolidation also may result in a reduction in errors and lost specimens, and the potential of a computer interface.

Owing to the increasingly esoteric nature of referral testing, consolidating all referral testing to one or two referral laboratories is likely unattainable.

Dealing with a smaller selection of referral laboratories also will help with the chore of ensuring the referral laboratories' accreditation standards are regularly maintained. Whatever the choice, this is, of course, an individual determination. A full analysis of this issue should determine if the benefits of consolidation outweigh the potential disadvantages.

The expected benefits of consolidating referral testing led CLS to develop a request for proposal (RFP) for selecting a primary referral laboratory that could provide a comprehensive test menu, volume discounts, and electronic order/results interfacing. Objective evaluation criteria were developed to help select a winning bidder.

RFP criteria

Referral laboratory selection criteria have previously been discussed by Baer⁴ and Blum.⁵ This work served as the starting point for developing CLS' RFP evaluation criteria. Clinical and Laboratory Standards Institute's recommendations for selecting a referral laboratory,⁶ local College of Physicians and Surgeons of Alberta's laboratory accreditation requirements,⁷ and internal policies were used to shape the evaluation criteria. Referral laboratory selection standards discussed by the CAP³ and the International Standards Organization 15189 were also incorporated.⁸

The RFP requirements can be broken down into three components: mandatory requirements, weighted questions, and costing information. Bidding laboratories not meeting all of the mandatory requirements are not given further consideration. Qualifying bidders are then evaluated using weighted questions, and on cost per test based on the RFP test menu. Submitting extensive documentation is required to verify the responses to the weighted questions.

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Once primary scoring (weighted questions and costing) has been completed, top bidding laboratories are short-listed. The short-listed laboratories undergo an on-site audit by a selection committee, and then a final score is calculated. The bidding laboratory with the highest combined on-site inspection and primary evaluation scores would be the laboratory with which CLS would enter into contract negotiations. See Table 1 for the evaluation criteria weighting.

Weighted questions

Each quality and service criterion has been assigned a score used to compare facilities. Due to the subjective nature of a 1- to 5-point scale, the questions in the RFP have as many yes/no answers as possible.

Weighted questions evaluate the laboratories based on their capabilities, efficiency of service, and quality-management system, with the three categories making up 15%, 20%, and 20% of the primary score respectively. Bidding laboratories are also required to provide client contact information, which is used to conduct three client surveys and make up 15% of the primary score (5% each). Cost factors are 30% of the preliminary score and are based on the primary and secondary test menus.

Test menu

As outlined by Baer,⁴ to ensure every bidding laboratory presents comparable cost data, each is asked to present the price

EVALUATION CRITERIA WEIGHTING

WEIGHTED RESPONSES			
Respondent capabilities		15.00%	Results
1.1	General	6.00%	
1.2	Interfacing	4.00%	
1.3	Finances	5.00%	
Efficiency of referral services		20.00%	
2.1	General	8.00%	
2.2	Operational systems	7.00%	
2.3	Testing referred to subcontractors	5.00%	
Quality management		20.00%	
3.1	Quality management system	8.00%	
3.2	Internal quality control	2.00%	
3.3	External quality control	1.50%	
3.4	Privacy and information management	8.50%	
Cost		30.00%	
4.1	General	5.00%	
4.2	Operational systems	20.00%	
4.3	Testing referred to subcontractors	5.00%	
Client survey #1		5.00%	
5.1	General	3.00%	
5.2	Interfacing	0.80%	
5.3	Overall	1.20%	
Client survey #2		5.00%	
6.1	General	3.00%	
6.2	Interfacing	0.80%	
6.3	Overall	1.20%	
Client survey #3		5.00%	
7.1	General	3.00%	
7.2	Interfacing	0.80%	
7.3	Overall	1.20%	
Total Phase 1 evaluation score		100.00%	
Total Score		100.00%	
70% of total score		70.00%	

Table 1: Summary of the evaluation criteria used in the RFP for consolidation of referral testing at Calgary Laboratory Services. This table provides the section weightings to be used for the evaluation of bidding referral laboratories. Due to the length and complex nature of the evaluation criteria, the full list of questions and test menus is not included. Please contact the corresponding author for information regarding the full RFP evaluation.

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for a specific test based on the actual numbers of tests ordered the previous year. Two different test menus were developed for the RFP that incorporated all of CLS' referral tests.

The primary test menu includes CLS' highest cost and volume tests based on referral data from the previous year. Bidders are required to submit pricing information for the tests on this menu. A score for a bidding lab is calculated for the primary menu based on a calculation that determines the cost difference of each test, and the overall percentage savings to CLS.

The secondary test menu includes CLS' low-volume referral tests. The secondary test list is similar to Baer's "percent-off list." Evaluation of the secondary test menu is determined using a formula that calculates the percent of tests quoted, and the price of the individual tests relative to what CLS currently pays. Since this secondary test menu is optional for laboratories to bid on, Baer had difficulty evaluating

it.⁴ The percentage-weighted formula used in the RFP is designed to reduce this complication and allow a score to be calculated for this menu.

Selection of a suitable referral laboratory should not be based on cost alone but also on a laboratory's reputation and quality.

The primary test menu score makes up 20% of the preliminary score (or 66% of the cost score), while the secondary test menu score makes up 5% (or 15% of the cost score). The remaining 5% is made up of general cost questions.

Service and quality are important characteristics of any laboratory and, accordingly, are major determining factors in awarding a contract.⁵ Cost accounts for 30% of the preliminary score, making it a significant, but not the predominant, component of selecting a referral laboratory. Cost becomes a determining factor only when all the bidding laboratories are relatively equal in quality.

On-site inspection and lab selection

On-site inspections provide insight into the operation of a referral laboratory to which a primary laboratory is considering sending tests.² Through direct observation, a primary laboratory is able to obtain a great deal of information unavailable in any other way. Therefore, the RFP evaluation committee conducts on-site inspections for each of the short-listed bidding laboratories.

Satisfactory results from the on-site audit are critical for a bidding laboratory to receive further consideration. The on-site evaluation score makes up 30% of the final score, with the remaining 70% carried over from the preliminary score. The winning bidder would be the laboratory with the highest final score.

Choosing a referral laboratory can be tedious, time consuming, and difficult, but as laboratory accreditation bodies adopt more stringent standards for referred testing, primary laboratories must develop processes to follow when

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selecting and utilizing referral laboratories; service and quality need to be major determining factors.

Evaluation of referral laboratories must be an ongoing process. The primary laboratory, therefore, should set up meetings at regular intervals with the referral laboratory.⁹ Dealing with a smaller selection of referral laboratories permits regular assessment of their standards. To maintain accreditation standards, it is not essential that CLS assess each of the referral laboratories' member institutions or referral laboratories individually, provided that the referral laboratories have policies to ensure up-to-date accreditation and proficiency testing.

Owing to the increasingly esoteric nature of referral testing, consolidating all referral testing to one or two referral laboratories may be unattainable. Establishing internal procedures for determining where to send esoteric tests and criteria for their approval injects efficiency and clarity into what, otherwise, would be an irregular and chaotic process.

Additional areas that a primary laboratory should address before developing an RFP for consolidating referred testing include operating regular make-versus-buy analyses, developing a rational and defensible list of standard patient-pay tests, and establishing reflex rules for referral tests, especially to prevent unnecessary repeat testing. In addition, a method for ensuring that the primary laboratory is reimbursed for all third-party tests performed should be established.

Despite the small percentage of referral tests, Calgary Laboratory Services uses approximately 38 different referral laboratories.

The true effectiveness of the comprehensive RFP evaluation criteria developed by CLS has not yet been tested. Due to province-wide restructuring of the health services board in Alberta,

CLS was unable to send the RFP out for tender prior to the publication of this article. It is believed, however, that these evaluation criteria can provide objective guidance to any laboratory wanting to consolidate the majority of its referral testing.

By taking the time to construct an appropriate request for proposal listing objective evaluation criteria, any laboratory can move through the sometimes complicated process of coming to a decision regarding the selection of a referral partner. The full list of questions and test menus are not included here, but information regarding the full RFP evaluation can be obtained by contacting Gareth Lewis at Calgary Laboratory Services. □

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