

SHARING KNOWLEDGE



PARTNERING IN QUALITY



AN ESSENTIAL PART OF ONTARIO'S HEALTHCARE SYSTEM

QMP-LS uses the principles of quality management to ensure that the lab results used to make diagnosis and prognosis are reliable. QMP-LS is dedicated to enhancing the quality of laboratories and other healthcare organizations through ISO 15189-based accreditation services, external quality assessment programs, guideline development, education and innovation. With

over 30 years of experience in designing quality assurance programs for healthcare, QMP-LS has a long-standing tradition of excellence in quality management. QMP-LS is a division of the Ontario Medical Association (OMA) and is a mandatory program for licensed laboratories in Ontario that is funded by the Ministry of Health and Long-Term Care (MOHLTC).

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VISION

To be a world-class provider of accreditation, quality assessment and supports to laboratories and related services for diagnosis and treatment of disease, and the promotion of health.

MISSION

To promote quality improvement of laboratories and other related services for the public good and the benefit of health professionals.

VALUES

- Quality
- Collaboration
- Integrity

MESSAGE

FROM THE MANAGING DIRECTOR



DR. GREGORY FLYNN

In 2009/2010 QMP-LS undertook a review of our strategic plan and as a result, the organization renewed its commitment to continual improvement of the core services provided to laboratory participants in Ontario and to continue to offer programs outside the traditional mandate. This year we also made commitments to two corporate goals. These two goals — 1. To maintain and improve our core services, 2. To deliver expanded quality management services in healthcare — demonstrate our values and the importance of the contributions of our volunteers, consultants and staff.

QMP-LS' partner, the Institute for Quality Management in Healthcare (IQMH), has been established as a non-share capital corporation (not-for-profit), wholly owned by the Ontario Medical Association. With its own board, IQMH is poised to fulfill its mandate in Canada and abroad.

This past year, agreements to provide both accreditation and external quality assessment

A core belief in our work is that accreditation, as an external assessment against established standards, is an important demonstration of an organization's ability and intent to meet and exceed expectations.

programs to other Canadian provinces proved to be challenging in a very competitive market.

The Decoding ISO 15189™ series, an interactive web-based modular series for labs, was released in part, and due to be complete in July of 2010. This series is a good example of how we are both improving our core services by providing an educational tool, while tapping into commercial opportunities as we market the product to other laboratories seeking either specific training on elements of the 15189 program or are preparing for an accreditation visit.

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MESSAGE FROM THE MANAGING DIRECTOR

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A core belief in our work is that accreditation, as an external assessment against established standards, is an important demonstration of an organization's ability and intent to meet and exceed expectations. The 2009/2010 year has been a significant year in our own progress in seeking international recognition for our programs. The EQA program is to be assessed against the new ISO 17043 standard for proficiency testing by the American Association for Laboratory Accreditation (A2LA). The OLA program, likewise, is preparing for a witnessed accreditation against the ISO 17011 standard for conformity testing.

QMP-LS is prepared to operate its programs in accordance with the highest international standards available. We believe that the processes we expect to see in our clients' services should also be reflected in the quality of the EQA and OLA programs. We will stand out internationally as an accredited provider of these services through IQMH.

If quality does depend on standardization, interlaboratory comparisons, education and quality systems, QMP-LS and IQMH are ready to support the pursuit of excellence, here in Ontario and elsewhere.

The healthcare system continues to look to quality as the pathway to better and more efficient care. If quality does depend on standardization, interlaboratory comparisons, education and quality systems, QMP-LS and IQMH are ready to support the pursuit of excellence, here in Ontario and elsewhere. We depend on the efforts and commitment of our entire organization and the many laboratory professionals.

COMMUNITY



PLAYING A CRITICAL ROLE IN PATIENT CARE

Medical laboratories are a critical part of our healthcare system. Over 85 per cent of the diagnosis and prognosis physicians make are based on lab test results. QMP-LS' role is to improve the quality of those results so patients and physicians can count on them.

QMP-LS brings together experts in the field of laboratory medicine in order to raise the standard of excellence. Our scientific committees review the results of over 100 surveys examining almost 200 analytes and samples each year. QMP-LS findings are published in its committee comments, which reveal common errors labs are making. Committee comments also bring to light issues with instruments or methods if a group of labs all using the same kit are experiencing the same errors.

QMP-LS also taps into the expertise of its scientific committees—which are composed of physicians, technologists and scientists—to create best practice guidelines and broadsheets

as well as publish papers in scientific journals in order to share our knowledge with the medical laboratory community.

RAISING THE STANDARDS OF EXCELLENCE

QMP-LS has accredited 219 labs to the OLA 15189Plus™ standard, which is based on a number of rigorous national and international standards, including ISO 15189.

QMP-LS brings the laboratory community together to work as peer assessors for OLA 15189Plus™ accreditation. This allows labs to learn from one another and forge new relationships. Assessors gain insight into how other labs work, develop a detailed understanding of ISO 15189 requirements and help medical labs in Ontario improve their processes and procedures.

In order to help labs prepare for accreditation, QMP-LS also provides education and tips through what-to-look for guidance, articles on preparing for accreditation and avoiding common errors, and good practice guidelines.

PARTNERSHIP



WORKING TOGETHER

QMP–LS’ scientific committees bring together leading medical technologists, physicians and scientists who are experts in their fields. The committees set the standard for the quality of lab work in Ontario by providing guidance on best practices, checking that labs adhere to regulatory requirements and helping laboratory professionals develop their knowledge.

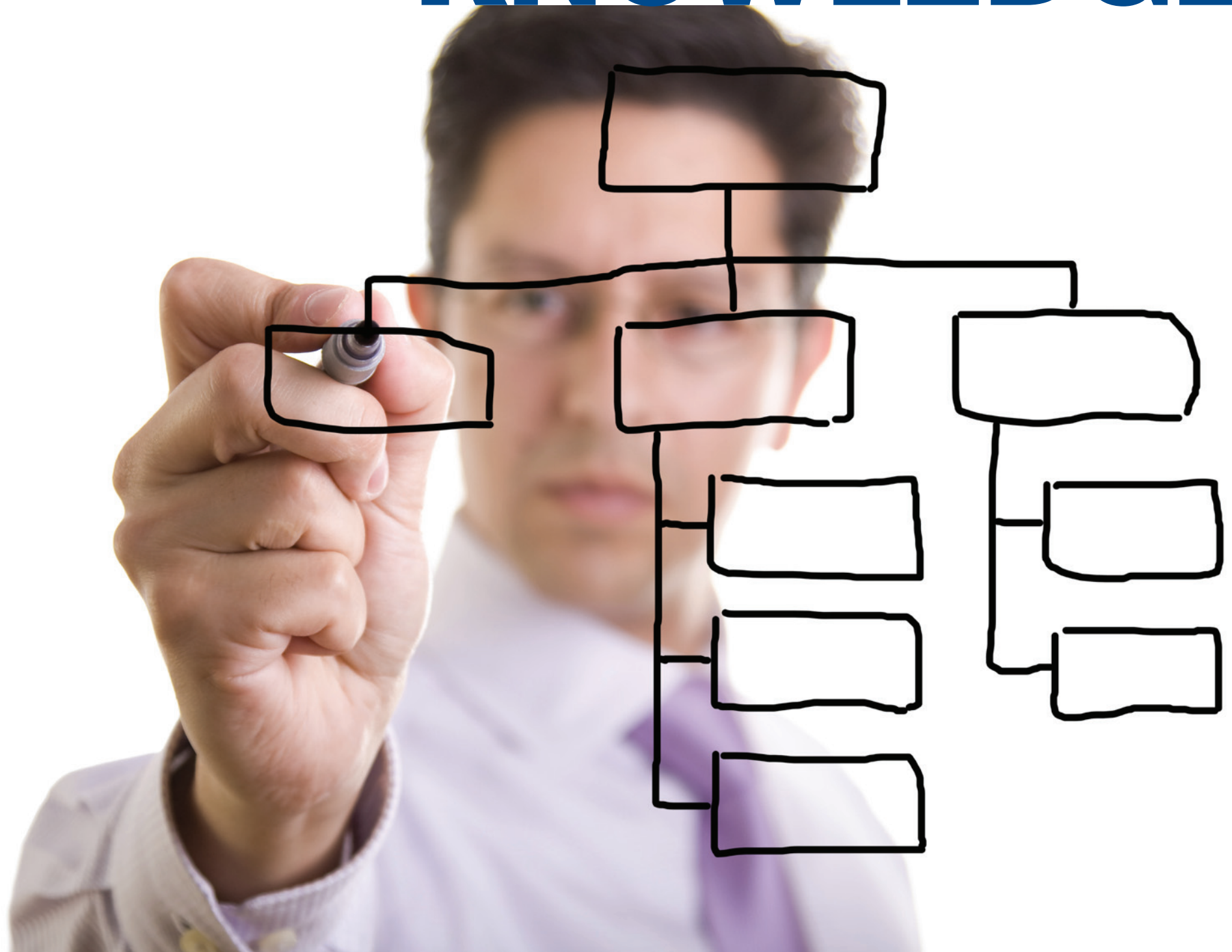
- Conjoint Committee
- Advisory Council
- Professional Advisory Committee
- Ontario Laboratory Accreditation Advisory Panel
- Anatomic Pathology
- Chemistry—General
- Cytology
- Endocrinology, Immunology and Maternal Serum Screening
- Genetics
- Hematology
- Microbiology (Bacteriology and Parasitology)
- Mycology
- Transfusion Medicine
- Virology

PARTNERING IN QUALITY

QMP–LS directors sit on several industry and standards organization committees dedicated to improving the quality of healthcare. These committees examine and set the standards which lab professionals use to create accurate test results and provide guidelines designed to improve the quality of diagnostic medicine and patient safety.

- International Organization for Standardization Technical Committee and Working Group on ISO 15189
- SCC Medical Laboratory Working Group, Partner Advisory Group and Technical Group on Laboratories
- Clinical and Laboratory Standards Institute Subcommittee on Development and Use of Quality Indicators
- Canadian Coalition for Quality in Laboratory Medicine
- Canadian Association for Laboratory Accreditation
- International Laboratory Accreditation Cooperation
- ISO CASCO Working Group 28 on ISO 17043
- Clinical Laboratory Management Association, Trillium Chapter
- CSA Z252 Medical Laboratory Quality Systems committee

KNOWLEDGE





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COMMITTEE COMMENTS

QMP-LS committee comments promote improved patient care and test accuracy by providing a summary and discussion of participant performance, a technical review of the tests performed and results reported. Where applicable, committee comments also include a clinical review of the significance of the case and its findings.

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BEST PRACTICE GUIDELINES & BROADSHEETS

QMP-LS is dedicated to improving the quality of laboratory test results by producing and updating broadsheets and best practice guidelines which are designed to improve the knowledge of its participants and encourage them to follow best practices.

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PRESENTATIONS

QMP-LS directors, consultant technologists and committee members are often invited to share their expertise at industry events through presentations on a variety of quality management and laboratory medicine topics.



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WEBCASTS AND WEBINARS

QMP-LS has created a series of webcasts and webinars to help the laboratory community develop its knowledge and reach a wide audience. QMP-LS' webcasts cover a variety of topics, from scoring systems to insights on validation and verification to recommendations on formalin fixation.

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OLA ACCREDITATION REQUIREMENTS & WHAT-TO-LOOK-FOR GUIDANCE

QMP-LS has incorporated critical requirements from a number of rigorous standards into its requirements document. The requirements are designed to improve the reliability of test results and, as a result, the quality of care in Ontario. The what-to-look-for guidance help labs understand the requirements.

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INTERACTIVE ONLINE EDUCATION

QMP-LS' unique interactive online education series, produced with partner IQMH and available at www.IQMH.org is a 15-part educational tool that includes video coaching tips, dozens of downloadable PDFs, workbooks, templates and samples. The series is designed to help labs prepare for ISO 15189 accreditation

QUALITY



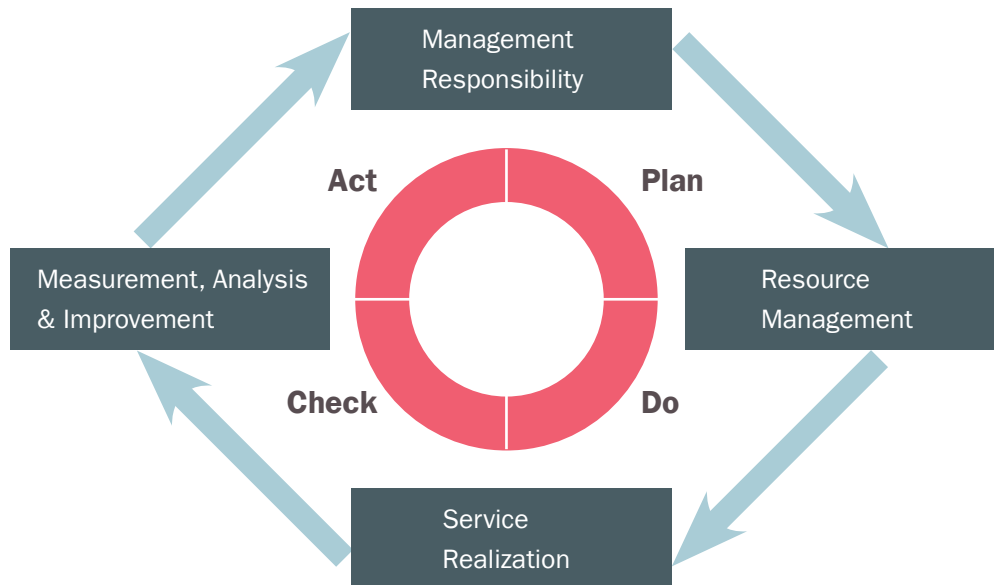
TO ERR IS HUMAN

The seminal 1999 study by the Institute of Medicine, *To Err is Human: Building a Safer Health System*, found that between 44,000 to 98,000 people die each year as a result of preventable medical errors. The study concluded that the problem was not bad people, but good people working in a poor system.

The purpose of quality management systems is to design better processes that make it difficult for people to do the wrong thing and easy to do the right thing.

IMPROVING TEST RESULTS THROUGH QUALITY MANAGEMENT

QMP-LS helps labs apply the principles of quality management to their processes, which helps them improve test results. Labs in Ontario undergo accreditation to the OLA 15189Plus™ standard and as a result must implement a quality management system. Ontario's medical labs must continually evaluate and improve upon their processes. They also participate in external quality assessment and compare the quality of test results with those of their peers and investigate any discordant findings.



COMPONENTS OF A QUALITY MANAGEMENT SYSTEM

Management Responsibility

Management responsibility includes a firm commitment to quality and effective strategic planning for the organization.

Resource Management

Management must allocate and manage the resources needed to implement its plan.

Service Realization

This is the actual service provided by your organization. In a lab, this is the pre-analytical, analytical and post-analytical phases of examination and the associated quality assurance activities.

Measurement, Analysis & Improvement

This is the check phase achieved through implementing processes for continual improvement.

Plan

Establish objectives and processes.

Do

Implement the processes.

Check

Monitor and measure progress.

Act

Take action to continually improve.



EXTERNAL QUALITY ASSESSMENT

The External Quality Assessment division improves the quality of laboratory services through the assessment of laboratory test performance and education. EQA evaluates analytical processes using challenge surveys with fresh and simulated patient samples, while patterns-of-practice surveys and questionnaires address pre- and post-analytical issues. Laboratory results are peer reviewed and examined for reliability.

EQA ensures that the test results physicians use to make diagnosis and prognosis are accurate and reliable. EQA also compares different methods and instruments for the same test. This reveals state-of-the-art practice, facilitates the recommendation of selected methods and assesses standards of participant performance. Unsatisfactory performance in EQA by a single lab may indicate the need for assistance and retraining. Unsatisfactory performance by several labs using the same method may indicate problems with the method or kit. EQA helps manufacturers as well as labs.

Education is also an important component of the EQA program. Along with detailed survey reports, QMP-LS produces educational committee comments, broadsheets (review articles) and best practice guidelines, all crafted to facilitate performance improvement.

The External Quality Assessment division conducts surveys in several disciplines:

- Anatomic pathology
- Chemistry
- Cytology
- Endocrinology
- Cytogenetics
- Hematology
- Immunology
- Bacteriology
- Parasitology
- Mycology
- Transfusion medicine
- Virology
- Point-of-care testing



EXTERNAL QUALITY ASSESSMENT

PRACTICAL

Assessments use real patient material where possible to assess routine practice. EQA provides undisclosed actual or simulated patient material along with patient history.

PEER-BASED

Assessments are performed by peer-based committees consisting of laboratory physicians, scientists and technologists who are experts in their field. EQA has 11 volunteer scientific committees covering all of the major disciplines of laboratory medicine.

TRANSPARENT

Challenge surveys, questionnaires and patterns-of-practice surveys test the proficiency of a laboratory's pre-analytical, analytical and post-analytical processes. Assessments are transparent, objective and capable of distinguishing good and poor performance.

ESSENTIAL

EQA helps improve the accuracy of lab results and works with labs that report discordant findings to perform root cause analysis. Labs that cannot improve their performance receive further assistance through on-site reviews in which experts review all facets of testing and provide recommendations. Those unable to implement corrective action may be considered non-proficient and referred to the MOHLTC for further remedial action that may ultimately include suspension of testing.



ONTARIO LABORATORY ACCREDITATION

The Ontario Laboratory Accreditation (OLA) program provides formal recognition of the competence of a laboratory to perform its scope of testing. It also provides medical laboratories with the tools they need to standardize their processes, address diminishing resources and set a quality benchmark. OLA 15189Plus™ accreditation requirements are based on ISO 15189 and are augmented with international standards for safety and point-of-care testing, national standards for blood safety, government regulation and generally accepted principles of good practice.

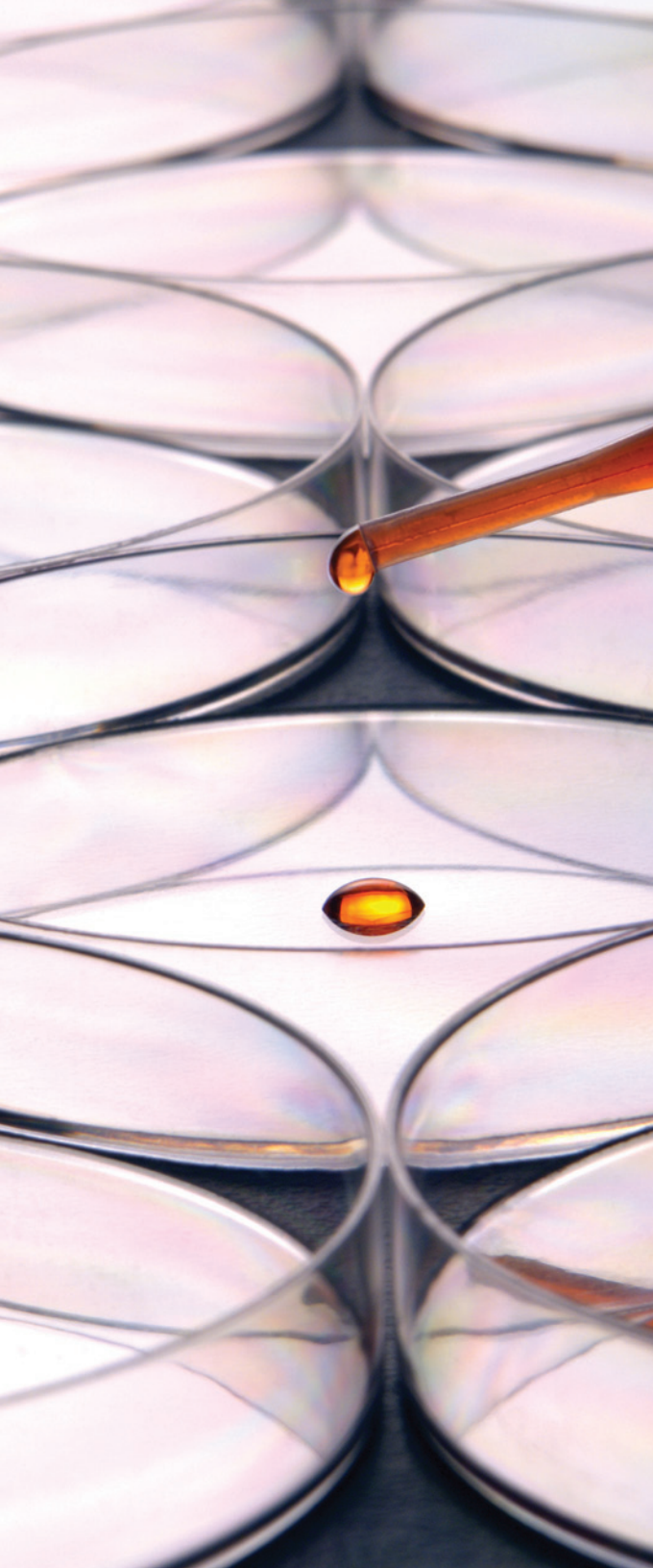
OLA is a partner of Standards Council of Canada, and accredited laboratories may receive an internationally-recognized ISO 15189 certificate. OLA's peer-based, in-depth accreditation process helps laboratories understand ISO 15189 requirements, engage staff, implement best practices and promote patient safety.

To achieve this, a laboratory undergoes an accreditation assessment visit conducted by a team of peers comprised of both quality system

and technical experts carefully tailored to the scope of testing of the laboratory. If areas of non-conformance are cited, the laboratory is expected to take corrective action within 90 days of the visit. A panel determines if the laboratory meets the criteria for an accreditation certificate of either two or four years. Ongoing surveillance that includes a self-assessment mid-cycle, monitoring of proficiency testing/external quality assessment and changes within the laboratory ensures continued competency between assessment visits.

These rigorous standards provide the basis for OLA 15189Plus™ accreditation:

- ISO 15189:2007(E) Medical laboratories—particular requirements for quality and competence
- ISO 15190:2003(E) Medical laboratories—requirements for safety
- ISO 22870:2006(E) Point-of-Care Testing (POCT)—requirements for quality and competence
- CSA Z902-04 Blood and Blood Components March 2004



ONTARIO LABORATORY ACCREDITATION

PURSUING EXCELLENCE

Mandatory accreditation in Ontario has guaranteed that every medical laboratory in the province has a world-class quality management system. Each accredited laboratory has a solid quality base on which to implement further improvements to eliminate waste, address diminishing resources and improve patient safety. A laboratory's accreditation certificate provides recognition that the laboratory's work is important and gives staff and the public confidence that the system will catch mistakes before they affect patient care. Along the way, the process has provided new venues for career advancement in laboratory medicine and pride in the profession by empowering and involving all laboratory professionals.

UPHOLDING VALUES

Assessments are carried out by medical laboratory professionals trained and certified by QMP-LS using International Laboratory Accreditation Cooperation guidelines. Assessors understand and share the challenges that laboratories face on a day-to-day basis. OLA is committed to upholding the following values in the delivery of the accreditation program:

- Responsible
- Objective
- Consistent
- Transparent
- Open-minded
- Respectful

EXTERNAL QUALITY ASSESSMENT REPORT

INTRODUCTION

External Quality Assessment (EQA) survey reports and committee comments are valuable sources of information for quality improvement initiatives. When participants use this information to complement their internal quality initiatives, they can compare themselves to their peers to identify such issues as those associated with quality control, identify method bias or imprecision problems, recognize when kit sensitivity or specificity problems develop, and identify where staff need additional training or when procedures need to be updated. QMP-LS and its scientific committees can use these data to plan future EQA surveys, identify overall trends in performance and develop educational material and activities. Thus EQA is an excellent means for QMP-LS and participants to share knowledge and partner in quality for the overall benefit of our patients. In 2009/2010, we worked hard, specifically to complete projects that ensured better sharing of knowledge.

PERFORMANCE HIGHLIGHTS

In 2009/2010, the EQA division of QMP-LS completed the three major projects initiated in 2007/2008:

- Alignment of QMP-LS EQA surveys with international standards
- Use of information systems applications to create lean EQA operations
- Development of improved EQA information for participants

ALIGNMENT WITH INTERNATIONAL QUALITY STANDARDS

Accreditation against international standards will provide QMP-LS, its participants and their accrediting bodies as well as other stakeholders with external recognition of the competence of its EQA program and appropriateness of the schemes it operates. During 2009/2010, the EQA division underwent its third internal audit which demonstrated its readiness to be accredited against the new standard, ISO/IEC 17043:2010 Conformity Assessment — General requirements for proficiency testing, approved early in 2010. Accreditation will be sought during the first half of 2010/2011.

ONLINE APPLICATIONS CREATE LEAN EQA OPERATIONS

Implementation of the new information processes developed between 2007–09 was completed. These online applications that created lean EQA operations included the use of:

- Computer-assisted performance scores
- A web-based data entry system for discordant finding investigations

As a result of these initiatives, the majority of written communication between QMP-LS and its participants is now conducted online through QView™. Each laboratory has its own secure online directory of folders structure to maintain all of its EQA survey information and associated communications. Both QMP-LS and the laboratory are able to post information to these folders. This includes completed worksheets, survey instructions, provisional and survey reports, committee comments, discordant findings investigations and correspondence. In this way, information posted to these folders, by either QMP-LS or the laboratory is available to either recipient as soon as it is posted.

LEVEL OF IMPROVED EQA INFORMATION FOR PARTICIPANTS

The introduction of performance scores has facilitated provision of prompt information to participants regarding survey performance and need for investigation and/or implementation of corrective action. This information is included in the following reports:

- **Individual survey reports.** These include the

laboratory performance score and cumulative survey reports. The latter also include the laboratory performance score and, if necessary, an action score with instructions for required action by the laboratory. They also graphically track the participant performance scores over time (at least two years). For management and supervisory personnel, there is also a one-page summary of participant performance by action code.

Provision of performance scores, action codes, graphical displays of performance over time and management reports are all quality improvement tools provided by QMP-LS to assist participants in monitoring EQA performance and identifying opportunities for improvement. Use of discordant findings investigations and categorization of corrective actions provide additional information regarding the causes for poor performance and identifies potential opportunities for improvement at any level within the laboratory's quality management system.

Other EQA initiatives during 2009/2010 are outlined below.

IMPROVING EFFECTIVENESS OF EQA TESTING MATERIAL PACKAGING

Since extremes in temperature are experienced in Ontario, the effectiveness of packaging systems on maintaining appropriate temperature of testing material during transportation was subjected

to intense scrutiny and evaluation. This led to the introduction of different packaging systems according to season and use of temperature monitors for ongoing monitoring.

PROVISION OF EQA SURVEY REPORTS TO MANUFACTURERS

Until now, QMP-LS has relied on participants to work with their instrument or kit manufacturers to resolve method issues such as bias or calibrator problems outside of the scope of the participants' influence. However, resolution of such issues has, in the past, taken months or years. QMP-LS has now made EQA general survey reports and committee comments available directly to manufacturers, by purchase, through the IQMH website (www.IQMH.org). It is hoped that this will eventually lead to more rapid resolution of method-related issues identified through QMP-LS EQA surveys.

EQA CORE ACTIVITIES

PROVISION OF EQA SERVICES TO ONTARIO MEDICAL LABORATORIES

Provision of EQA services to Ontario medical laboratories is the primary objective of the EQA division. In 2009/2010, QMP-LS provided 104 challenge surveys, 5 web-based educational surveys, 2 patterns-of-practice surveys and 5 questionnaires. The scope of EQA surveys provided is shown in Table 1. The number and type of laboratory participant are shown in Table 2. The parameters monitored by the surveys

TABLE 1: 2009/2010 EQA SURVEYS FOR ONTARIO

Survey	Challenge	Dry	Patterns of Practice	Questionnaire
Bacteriology	3			1
Acid Fast Stain	2			
<i>C. difficile</i> Assay	2			
Routine Chemistry	12			
Drugs	6			
Enzymes	5			
Lipids	3			
Blood Gases	2			
Cytogenetics	2			
Cytology	2		1	
Routine Hematology	7	1		
Coagulation	10			
Red Cell Disorders	4	1		
Morphology	3	1		1
Bone Marrow	2			
Flow Cytometry	6	1		
Endocrinology	3			
Immunology	3			
Transfusion Medicine	4			
Virology	10	1		1
Mycology	3			1
Intestinal Parasites	2			
Histotechnology	8		1	
Glucometers				
	104	5	2	4

are listed by discipline in [Appendix C](#).

EQA SURVEY HIGHLIGHTS

There was very little change to the testing menu for 2009/2010. See [Appendix C](#) for parameters added to this year's surveys. Information regarding 2009/2010 EQA survey activity is well described in the survey reports and committee comments, available through QMP-LS' password-protected document server, QView™.

PATTERNS-OF-PRACTICE SURVEYS

Two pattern-of-practice surveys were conducted and reported as committee comments:

- Status of cytology practice in Ontario
- Environmental scan of pathology practice in Ontario

TABLE 2: COMPARISON OF TYPES OF ONTARIO LABORATORIES PARTICIPATING IN QMP-LS EQA SURVEYS

Type	EQA and OLA	OLA Only
Hospital Laboratories	171	3
Community Laboratories	29	1
Public Health Laboratories	12	0
Other Laboratories	5	0
All	224	4

QUESTIONNAIRES

The following questionnaires were conducted to understand:

- Antimicrobial resistance in common hospital pathogens in Ontario (Bacteriology)
- Transfusion-related practices in Ontario facilities without laboratories
- Platelet function studies
- Blood film referral in bone marrow investigations

REPORTS TO PARTICIPANTS

Reports provided to participants at the end of each survey include preliminary reports of the assigned values (consensus or reference values), summary information of all participant responses as well as reports of individual laboratory performance. Committee comments provide a narrative report of the survey which includes educational comments provided by the scientific committees. The following reports were provided:

- 107 Provisional Reports
- 127 Survey Reports and 45 concise
- 95 Cumulative Reports
- 115 Committee Comments

LABORATORY PERFORMANCE

Use of performance scores for evaluation of performance was fully implemented for mandatory surveys by the end of 2009/2010 (excluding genetics). For most surveys, scores

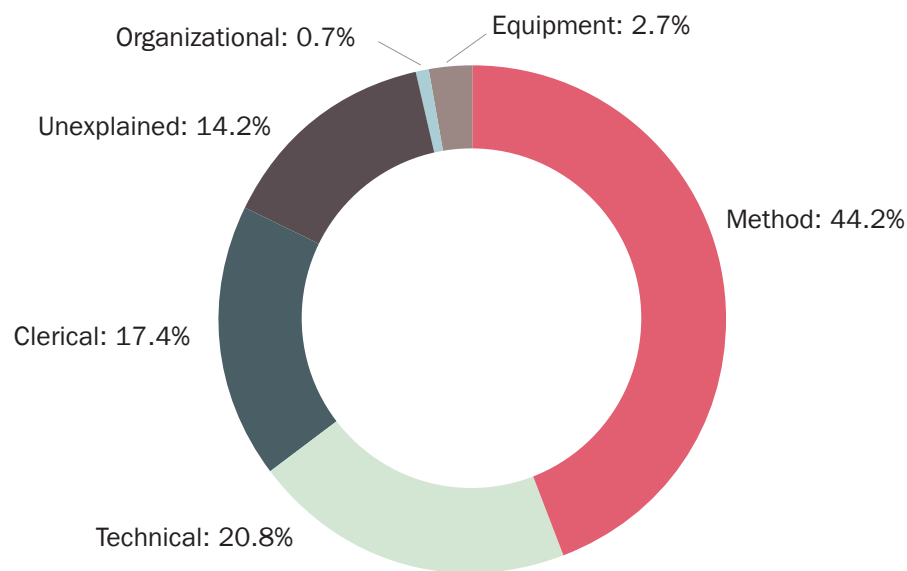
are automatically assigned during computer analysis of data. It was anticipated that use of scores might initially increase the number of discordances due to the automated assignment of scores but this did not prove to be the case. Anecdotal information indicates that where performance scores and action codes are being used by participants as measurement tools to better manage performance and prevent discordances, performance has improved. Evidence to support this will be sought.

Investigation of Discordant Findings

Laboratories reporting discordant results in EQA surveys are required to investigate and report a summary of the investigation and corrective actions to QMP-LS. The overall discordance rate for the 12-month period between April 2009 and March 2010 for the major disciplines (chemistry, hematology and microbiology) was 0.9% compared to 1.2% in 2008/2009. Transfusion medicine, point-of-care testing (glucose meters) and genetics are disciplines that were not previously included in the discordance rate, but introduction of performance scores has facilitated their inclusion. The overall discordance rate is 0.7% when these surveys are included.

Summary information for causes of discordances of the major disciplines is included in Figure 1 and Table 4.

The most common categories of discordance

FIGURE 1: CAUSES OF DISCORDANT FINDINGS IN EQA SURVEYS, 2009/2010

were associated with method-related issues (44.2%), technical causes (20.8%) and clerical causes (17.4%). The vast majority of method-related contributing causes were associated with manufacturer issues this year, followed by accuracy and/or sensitivity/specificity of automated systems and kit methods. Key technological contributing causes included failure to follow written procedures or survey instructions, sample handling issues and failure to correctly interpret results or perform additional testing. The major cause of clerical error was associated with failure by participants to report interpretation of results on worksheets. QMP-LS is investigating this last problem to determine if the worksheets or survey instructions can be

improved to prevent or minimize reoccurrence.

This information is shared with scientific committees to identify opportunities for improvement when planning future surveys and educational activities.

QMP-LS SCIENTIFIC COMMITTEES AND VOLUNTEERS

Eleven scientific committees provide advice and support to the EQA program. In 2009/2010, QMP-LS hosted a total of 53 scientific committee meetings involving 56 laboratory physicians, scientists and medical laboratory technologists. The names of these volunteers are listed in [Appendix B](#). As representatives of the Ontario

laboratory community, scientific committee members provide advice to QMP-LS regarding the fundamental design of EQA surveys and ensure clinically relevant selection of challenges and appropriate performance evaluation. As always, QMP-LS staff members are extremely grateful for the commitment and support of Ontario laboratory professionals and wishes to thank all of those individuals who donate so much of their valuable time and expertise to the program.

SHOWCASING SCIENTIFIC COMMITTEE ACTIVITY

Hematology Committee

In October 2009, the Hematology Committee members planned and participated in the 5th Annual McMaster Update in Thromboembolism conference, held at McMaster University in Hamilton, Ontario. The objective of this symposium was to provide an overview of the management of thromboembolic disorders and discuss the optimal use of antithrombotic therapy and consequences of the treatment of hematologic diseases. The target audience for the two-day event was physicians and laboratory professionals interested in thromboembolic and hematologic disease. During the two days, each scientific committee member gave at least one presentation.

The following presentations are currently available as QMP-LS broadsheets and/or will be available as webcasts in September 2010:

- Who is WHO in 2008 – Hematology Case-Based Discussions – Dr. Ian Chin-Yee
- Best Practice Guidelines for the Investigation of Neoplastic Hematological Disorders – Mr. Michael Keeney
- Erythrocyte Morphology – Terminology and Grading – Dr. Ruth Padmore
- Good Practice Guidelines for the Laboratory Investigation of Hemoglobinopathies – Mr. Andrew McFarlane
- Evaluation of a New Lot Number of PT and APTT Reagent – Ms. Karen Moffat
- Validation of a Hematology Analyser – Ms. Wendy Brown
- Diagnostic Testing for Platelet Function Disorders – Dr. Catherine Hayward

The Hematology Committee is planning a similar event for October 2010.

In addition to the advice and educational input provided as part of the routine EQA committee comments, all scientific committees provide educational feedback in the form of broadsheets and practice guidelines. During 2009/2010, 10 broadsheets and five guidelines were introduced or updated.

LOOKING AHEAD, CONTINUAL IMPROVEMENT

During 2010/2011, QMP-LS will seek accreditation to the ISO standard, ISO/IEC 17043:2010 *Conformity Assessment – General*

TABLE 3: NEW AND UPDATED BROADSHEETS AND GUIDELINES 2009/2010

Broadsheets	
New	Updates
• Recommendations for Formalin Fixation • Biochemical Markers of Acute Coronary Syndrome • GYN Adequacy • APTT Heparin Therapeutic Reference Intervals • Evaluation of a New Lot Number of PT and APTT Reagent • Platelet Function Testing Performed by Light Transmittance Aggregometry • Reference Intervals and Calculation of Mean Values for Coagulation Laboratories • Specific Coagulation Factor Inhibitors	• Laboratory Water • Pipette Calibration Verification
Guidelines	
New	Updates
• Good Practice Guidelines for the Laboratory Investigation of Hemoglobinopathies • Good Practice Guidelines for the Investigation of Malaria • Good Practice Guidelines for Reporting of Smudge Cells • Best Practice Guidelines for the Investigation of Neoplastic Hematological Disorders	• Antimicrobial Susceptibility Reporting

requirements for proficiency. Another major project this year will be to investigate how to consolidate and standardize the production and distribution of EQA testing material. QMP-LS will develop performance scores for the interpretive component of its current surveys to provide additional feedback and improved reports to participants. In addition, now that the major changes to the EQA program are complete, we

will issue a questionnaire to participants to gain an understanding of where opportunities for improvement exist within the new system. Based on feedback, we will review and develop improvement projects. In particular, there will be a focus on improving the QMP-LS website.

TABLE 4: CAUSES OF DISCORDANT FINDINGS IN EQA SURVEYS BY DISCIPLINE, 2009/2010

	Clerical	Technical	Method	Equipment	Organization	Unexplained	TOTAL
ALL	17.4%	20.8%	44.2%	2.7%	0.7%	14.2%	100.0%
CHEM	7.1%	13.2%	58.5%	2.3%	0.0%	18.8%	100.0%
HEMA	29.9%	32.0%	16.0%	10.3%	1.0%	10.8%	100.0%
MICRO	12.1%	39.8%	40.3%	0.0%	2.9%	4.9%	100.0%
TMED	58.3%	25.0%	8.9%	0.0%	1.7%	6.1%	100.0%
POCT	100.0%	0.00%	0.0%	0.0%	0.0%	0.0%	100.0%

ONTARIO LABORATORY ACCREDITATION REPORT

INTRODUCTION

Ontario Laboratory Accreditation (OLA) was conceived in 2000 to recognize medical laboratory quality and competence through a formal accreditation process. Assessments in Ontario began in 2003. Now mandatory for all medical laboratories in the provinces of Ontario and Newfoundland & Labrador, additional laboratories voluntarily participate. OLA has 225 participating laboratories and at the end of fiscal 2009/2010, 219 were holding certificates of accreditation. The requirements for accreditation are comprehensive and the assessment process rigorous. This report highlights OLA's activities during the fiscal year 2009/2010, and focuses on accomplishments that could not have been reached without partnerships — partnerships with regulators, international experts and interested laboratory professionals.

Promoting quality management in medical laboratories is best achieved by sharing expertise and partnering with others. OLA's approach to laboratory accreditation exemplifies this. Achieving laboratory accreditation is a significant accomplishment that is more easily attainable with shared resources.

HIGHLIGHTS

In Ontario, OLA's activities were on a new plane at the beginning of the fiscal year, which was the first operating year where every licensed laboratory held an accreditation certificate and moved into a maintenance mode with the goal of raising the bar on quality and competence.

OLA's accreditation services expanded outside of Ontario's licensed medical laboratory network. During this fiscal year, three additional laboratories applied for accreditation bringing the total number of voluntary participants to five. In addition, negotiations began for provision of accreditation to all medical laboratories in Newfoundland & Labrador.

During the year, significant collaborative efforts were accomplished:

- Full membership in the Asia Pacific Regional Laboratory Cooperation (APLAC) was achieved.
- An agreement was reached with Accreditation Canada that will avoid unnecessary duplication of laboratory assessment during its surveys of Ontario hospital facilities.
- Guidance information on Traceability and Uncertainty of Measurement in Medical Laboratories was published.

- Our position statement on interlaboratory comparison activities was published.
- A new decision flowchart that visualizes the assessment process was created (see [Appendix E](#)).
- A new approach to ensuring the requirements for accreditation are current was implemented with an annual review of all reference sources. All reference sources supporting accreditation requirements were reviewed, updated and the impact of changes on the requirements themselves was evaluated.
- The assessor pool was replenished with 31 new applicants trained and certified. Four face-to-face refresher seminars were offered as an option to the online refresher exercise.
- Three new Staff Technologists and a new Staff Coordinator were trained and oriented.
- All accredited laboratories were published on the [QMP-LS website](#).

Additional quality improvement opportunities were pursued internally through staff lean initiatives, internal and external audits and participant feedback.

THE YEAR IN REVIEW

ONTARIO LABORATORY ACCREDITATION (OLA) ASSESSMENTS

Seeking to ensure its operations comply with ISO 17011:2004 *Conformity assessment — General requirements for accreditation bodies accrediting conformity assessment bodies*, OLA conducts periodic assessment visits to determine if laboratories conform to their accreditation requirements. Accreditation certificates are issued once all major non-conformances are resolved, and minor non-conformances are either resolved or satisfactorily addressed with ongoing action plans. Ongoing surveillance is carried out and laboratories must comply in order to maintain accreditation. Surveillance includes the following activities that may result in a surveillance on-site visit:

- Reviewing conformance in regular self-assessment (half-way between assessment visits)
- Monitoring of participation and satisfactory performance in EQA/PT
- Monitoring changes in laboratory management, location and the scope of testing

Assessment visits are conducted by pre-trained and certified volunteers who are accompanied on-site by a staff technologist. The competence of assessors is evaluated at every assessment, and assessors must do any one of the

following annually in order to maintain active certified status: participate in a minimum of one assessment; complete an online refresher exercise; or participate in a face-to-face refresher exercise. Every assessor is expected to participate in a face-to-face refresher exercise every three to five years. There are 275 active assessors. During 2009/2010, 110 assessors were contracted for 497 assessment days. Fifty-five assessors attended face-to-face refresher seminars, and the remaining assessors recertified using the online refresher exercise. Thirty-one new assessors were trained and certified. Training replenishes the assessor pool and enhances our technical expertise.

OLA began assessing Ontario's licensed medical laboratories in 2003, and under the terms of an agreement with the Ontario Ministry of Health and Long-Term Care (MOHLTC), five-year certificates were initially issued. To meet international standards, assessments are now conducted at minimum once every four years and renewed certificates lasting four years are issued. If a laboratory has outstanding major non-conformances with a satisfactory action plan, a two-year upgradeable certificate may be issued. Additional surveillance activities occur, including a comprehensive self-assessment mid-cycle with the possibility of an on-site visit. The current agreement with Standards Council of Canada (SCC) allows laboratories assessed by OLA to receive an ISO 15189 certificate issued

by SCC but additional conditions apply, including a surveillance visit one year after the initial certificate is issued, and annual maintenance fees. Assessment activity in the past two fiscal years is shown in Tables 1 and 2.

Average laboratory conformance in 2009/2010 was an impressive 94.36%, based on an average of 456 requirements per assessment. At the end of the fiscal year, 219 laboratories were accredited by OLA — 164 five-year certificates, 54 four-year certificates and one two-year certificate.

ACCREDITATION REQUIREMENTS

Requirements for accreditation are based on ISO 15189:2007 *Medical laboratories — Particular requirements for quality and competence*, ISO 15190:2003 *Medical Laboratories — Requirements for safety*, ISO 22870:2006 *Point-of-care testing (POCT) — Requirements for quality and competence*, and CAN/CSA Z902-04 *Blood and Blood Components*. Additional sources are federal and provincial law, Health Canada and other guidelines from consensus bodies that represent principles of good practice. OLA is committed to ensuring its requirements for accreditation reflect current international and national standards and law, plus additional consensus guidelines representing generally accepted principles of good practice. The current Version 4.1 was released in July 2008 and contains 513 requirements plus three good practice recommendations.

TABLE 1: OLA ASSESSMENT VISIT ACTIVITY 2008/2009 AND 2009/2010

Activity	Number 2008/2009	Number 2009/2010
Laboratories Notified of Assessment	Ontario: 55 Other: 1	Ontario: 49 Other: 4
Peer Assessments Conducted	Ontario: 48 full, 3 focused Other: 1 full	Ontario: 53 full Other: 3 full, 2 focused
5-year Certificates Issued	Ontario: 37 Other: 1	0
4-year Certificate Issued	Ontario: 7 Other: 1	Ontario: 48
2-year Certificates Issued	Ontario: 1	Ontario: 1

TABLE 2: OLA SELF-ASSESSMENT ACTIVITY 2008/2009 AND 2009/2010

Activity	Number 2008/2009	Number 2009/2010
Laboratories Notified	Ontario: 49 Other: 1	Ontario: 41 Other: 1
Laboratories Submitting Self-assessment Data	Ontario: 48 Other: 1	Ontario: 41 Other: 3
Summary Reports Issued by OLA	Ontario: 50 Other: 1	Ontario: 38 Other: 3

Formerly, a complete review of all requirements, guidance information and references was conducted every other year. Starting in 2009, a change was introduced. The reference sources supporting all requirements and guidance information are now reviewed every year and changes (such as new or updated sources) shared with participants. There are currently 257 individual reference sources. In addition, the impact changes may have on the wording of requirements and guidance information is assessed by the OLA Advisory Panel to determine if a complete review of requirements and

guidance information is warranted. A new version of the requirements will be released at minimum once every three years.

The 2009 review of reference sources identified 60 new or updated reference sources, and a complete review of the requirements and guidance information commenced in April 2010. A new Version 5 is anticipated for December 2010 release.

PARTNERING IN QUALITY

The OLA Advisory Panel is the management

board for OLA. Its meetings occur periodically with additional conference calls scheduled as required for decision-making, appeals, certificate issue and recommendations for withdrawing or reducing accreditation. Four full teleconference meetings occurred this year. Four additional conference calls were convened, for reviewing laboratory corrective actions and recommending certificate issue or referral to the MOHLTC. OLA staff members meet monthly and the Director discusses operational enhancements with the Senior Management Group. Accreditations are recommended by the Director and certificates signed by the Managing Director, QMP-LS or (for ISO 15189 certificates) by SCC. Reporting to the appropriate regulator (e.g. Ontario MOHLTC) or SCC is the responsibility of the Director.

2009/2010 ACCOMPLISHMENTS

1. Early in 2009, we bid farewell to three Staff Technologists who chose to pursue other career opportunities. Following successful recruitment, three new medical laboratory technologists completed training and orientation during fiscal 2009/2010 before assuming their own workload responsibilities. In January 2010, we welcomed a medical laboratory technologist into the newly created position of Staff Coordinator.
2. To assist laboratory personnel in applying the concepts of traceability and uncertainty of measurement, Advisory Panel member Dr.

Godfrey Moses and Director Linda Crawford wrote a guidance document titled *Traceability and Uncertainty of Measurements for Medical Laboratories*, which was published in April 2009. In November 2010, Dr. Moses and Ms. Crawford both assisted Ontario laboratory personnel in understanding these concepts at two separate symposia sponsored by Bio-Rad and the Ontario Society of Clinical Chemists.

3. In July 2009, all accredited laboratories were published on the QMP-LS website.

Interested parties may visit [QMP-LS](#) to obtain information on the laboratories accredited – laboratory and owner information, certificate issue and expiry dates, and the scope of testing included under accreditation.

4. Information sharing with laboratories through QView™ continues to expand. QView™ provides a secure means of sharing confidential data. Going forward:

- Plans are underway to improve data

collection for surveillance of ongoing competence in accredited laboratories (interlaboratory comparison activities).

- Development continues on a program that allows laboratories to enter their self-assessment findings directly into the database, saving transcription time and reducing the risk of transcription error.
- Educational information such as the guidelines for *Traceability and Uncertainty of Measurements for Medical Laboratories* and the position statement on

POSITION STATEMENT ON INTER-LABORATORY COMPARISON SURVEILLANCE AND PERFORMANCE

MINIMUM COVERAGE REQUIRED FOR PT/EQA

Laboratories holding accreditation certificates must participate in formal inter-laboratory comparison schemes, where available and appropriate, for all examinations included in the scope of accreditation.

When formal inter-laboratory comparison programs are not available, accredited laboratories are expected to find an alternative, such as split sample testing. Examples of alternatives can be obtained in the following Clinical Laboratory Standards Institute document: *Assessment of Laboratory Tests when Proficiency Testing is Not Available*; Approved

Guideline, NCCLS Document GP29-A2 August 2008. Laboratories must also demonstrate that corrective actions identified through these activities are carried out when necessary.

PARTICIPATION IN PT/EQA REQUIRED

Formal inter-laboratory comparison programs shall provide a minimum of four sample challenges in a 12-month period. It is the responsibility of the laboratory director to ensure that the testing schedule adequately challenges test performance, e.g., that testing is spread throughout the year. When formal inter-laboratory comparison programs are not available, the alternative shall occur with the same frequency as inter-laboratory comparisons. In any given period, OLA expects

that a majority of results will be satisfactory. In any given period, OLA expects that a majority of results will be satisfactory.

HOW OLA UTILIZES PT/EQA DATA IN ITS ACCREDITATION DECISION-MAKING PROCESS

Participation in and performance on formal inter-laboratory comparison, i.e., proficiency testing/ external quality assessment (PT/EQA), are monitored on an on-going basis. OLA assesses conformance to PT/EQA participation and performance using its applicable requirements for accreditation every two years — during the review of the laboratory's self-assessment and at the accreditation assessment visit.

Inter-laboratory Comparison Surveillance are available on QView™ and the public QMP–LS website.

5. Collaborating with laboratory personnel to improve their understanding of the accreditation process and requirements was accomplished in two training sessions for 31 new assessor applicants.
6. Working with the EQA division and the Ontario government through the Conjoint Committee, a new decision path was published that both visualizes the assessment process and shows the inter-relationship with the QMP–LS EQA division and other inter-laboratory comparison programs to ensure ongoing competence in accredited laboratories (see [Appendix E](#)).
7. After more than three years of discussion and negotiations, QMP–LS and Accreditation Canada reached an agreement that should avoid duplication of oversight in Ontario’s licensed medical laboratories. Accreditation Canada is a voluntary accreditation program for healthcare facilities, including hospitals with medical laboratories. In 2006, Accreditation Canada released its own laboratory and blood bank standards with the intent of integrating laboratory accreditation within the facility-wide accreditation process. However, with the pre-existence of mandatory

laboratory accreditation programs such as OLA, in 2007, Accreditation Canada agreed to explore mutual reciprocity and recognition with mandated provincial laboratory accreditation bodies. Accreditation Canada has agreed that the comprehensive standards and rigorous assessment process employed by OLA are comparable to its own standards based on ISO 15189 and Z902-04. Starting in 2011, Accreditation Canada will not duplicate the assessment of conformance to these standards in the laboratory. During its survey process, Accreditation Canada will limit its assessment to the integration of the laboratory and blood bank services in the continuum of care within the health system. Ontario facilities may be asked by Accreditation Canada to share a copy of their OLA certificate of accreditation, their most recent assessment visit summary report and possibly the corrective actions submitted to QMP–LS after the previous OLA assessment visit. Laboratories may share these documents with Accreditation Canada in order to avoid a duplicate assessment within the laboratory. The Ontario MOHLTC will continue to require OLA accreditation as a condition of licensure.

8. A partnership with Standards Council of Canada (SCC) has been in place since 2005, in which any laboratory assessed by OLA may apply for recommendation of an ISO 15189

certificate issued by SCC. During this fiscal, seven Ontario licensed laboratories sought this option. In addition, Canadian laboratories in Toronto, Ottawa, Burnaby and Victoria plus a laboratory in St. Augustine, Trinidad have successfully applied for accreditation under this partnership.

Recognizing that an ISO 15189 certificate would be a valuable enhancement to the service provided under our agreement with the Ontario MOHLTC to accredit all of Ontario’s licensed medical laboratories, in February 2010 QMP–LS applied for full member status within the Asia Pacific Region (APLAC) of the International Laboratory Accreditation Cooperation (ILAC). Full member status was achieved in April, and plans are underway to join the mutual recognition agreement that will allow QMP–LS to also issue an ISO 15189 certificate.

9. In 2009/2010, four articles and three editorials appeared in *QMP–LS News* along with 12 “Eye on OLA” columns. The subjects of the articles were surveillance of accredited laboratories, the accomplishments of accredited laboratories, significant contribution from our volunteer assessors, and harmonizing of OLA and Accreditation Canada accreditation. The editorial highlighted key aspects and the rigours of international accreditation. “Eye on OLA”

columns highlighted the application of specific requirements, shared secrets for a successful assessment visit and tips on how to avoid common non-conformances, addressed new legislation, and provided updates on the accreditation process, laboratory conformance.

MEASURING THE QUALITY OF SERVICE PROVISION

OLA has, from its inception, based its requirements for accreditation on the ISO 15189 standard for quality and competence of medical laboratories and designed its operations to comply with ISO 17011:2004 *Conformity assessment—General requirements for accreditation bodies accrediting conformity assessment bodies* and the International Laboratory Accreditation Cooperation (ILAC) guidelines for accreditation bodies. QMP-LS' OLA division conducted its fourth internal audit in January 2010, to ensure its ongoing compliance with the ISO 17011 standard for accreditation bodies. Through a partnership with the Standards Council of Canada (SCC), OLA is recognized both nationally and internationally as a program of the highest standards. Ongoing evaluation by SCC and the Asia Pacific International Laboratory Accreditation Cooperation (APLAC) maintains this recognition. SCC conducts periodic audits with assessment observation to ensure that QMP-LS is in compliance. No external assessment was deemed necessary in 2009/2010.

Collaboration at the international, national and provincial level ensures that QMP-LS stays abreast of new developments and remains a leader in the accreditation of medical laboratories. The OLA Director is chair of the SCC's Medical Laboratory Working Group and a member of its Partner Advisory Group and TG Laboratories committee. The Managing Director, QMP-LS, is a member of the CSA Z252 Medical Laboratory Quality Systems committee. The International Organization for Standardization (ISO) develops standards for the operation of accreditation bodies (17011:2004) and requirements for quality and competence of medical laboratories (15189:2007). The QMP-LS Managing Director is a member of the Canadian delegation to ISO TC/212. The International Laboratory Accreditation Cooperation's committees develop guidance documents to utilize and apply the ISO standards that QMP-LS' operations are based on. The OLA Director is the secretary of its Accreditation Issues Committee and a member of its Proficiency Testing Consultative Group.

The QMP-LS quality system ensures that all processes and procedures are subject to annual review. Feedback is solicited from laboratories and assessors on the assessment process and reviewed on a quarterly basis by staff and the OLA Advisory Panel. All opportunities for improvement are captured using the QMP-LS HelpDesk. In 2009/2010, there were 14 cases related to OLA.

OLA utilizes ongoing performance measures to assess the efficiency of its assessment service. Turnaround times associated with the delivery of assessments are monitored on a quarterly basis, along with the incidence of error-of-fact submissions following assessment visits. These measures determine if OLA staff are meeting targets, if targets are realistic and appropriate, and are used to identify opportunities for improvement. Data for this monitoring is captured and extracted from the OLA database, summarized and reviewed by the Director, OLA, OLA staff and the Quality Manager.

ASSESSMENT VISIT TURNAROUND TIME

The time elapsed over four events during assessment visit follow up is evaluated:

- Visit end date to report issued
- Visit end date to corrective action received
- Corrective action received to certificate issued
- Visit end date to certificate issued

Comparative data for 2008/2009 and 2009/2010 shows improvement (see Table 3). Following assessment visits, laboratories are allowed 90 days to submit corrective actions. The target for issue of certificates is 150 days from the visit, and only 8% exceeded that target because corrective action reviews took longer than expected.

TABLE 3: OLA ASSESSMENT VISIT TURNAROUND TIMES, FISCAL 2008/2009 VS. 2009/2010

	Time from Assessment Visit to Certificate Issue		Time from Corrective Action to Certificate Issue		Time from Assessment Visit to Receipt of Corrective Action		Time from Visit to Issue of Summary Report	
	Target 150 Days		Target 60 Days		Target 90 Days		Target 14 Days	
	2008/2009	2009/2010	2008/2009	2009/2010	2008/2009	2009/2010	2008/2009	2009/2010
Actual Mean (Days)	129	123	58	43	69	78	13	8
Range (Days)	0–299	0–169	0–230	0–79	0–91	0–92	0–29	0–15

TABLE 4: OLA SELF-ASSESSMENT TURNAROUND TIMES, FISCAL 2008/2009 VS. 2009/2010

Time from Receipt from Laboratory to Issue of Summary Report (Target 45 Days)	2008/2008	2009/2010
Actual Mean (Days)	34	25
Actual Median (Days)	41	26
Actual Mode (Days)	42	34

SELF-ASSESSMENT TURNAROUND TIME

The time elapsed from receipt of the laboratory exception report to issue of the self-assessment summary report is evaluated.

The target for completion of the review of laboratories' submitted reports is 45 days

(from receipt to issue of the formal summary report). Comparative data for 2008/2009 and 2009/2010 shows improvement (see Table 4).

ERRORS OF FACT SUBMISSIONS

The number of laboratories who were assessed

during a given period — and who submitted an error of fact — is monitored. There were four errors of fact submitted in 2009/2010, all resulting in revised summary reports. One in 2008/2009 turned out to be a post-visit correction rather than error of fact.

LOOKING AHEAD

OLA is now a mature, internationally respected medical laboratory accreditation program. Our planned future activities will build upon our established partnerships and seek others in the pursuit of sharing our knowledge and expertise.

Plans for fiscal 2010/2011 include:

- Achieve full membership in the Asia Pacific Laboratory Accreditation Cooperation and the International Laboratory Accreditation Cooperation and become signatories to the Mutual Recognition Arrangements.
- Improve customer service with lean initiatives.
- Revamp the OLA pre-visit questionnaire.
- Promote the 15189 certificate program for Ontario's licensed medical laboratories.
- Collaborate with Corporate Services to connect with laboratory personnel regarding the value of accreditation.
- Conduct an internal audit to monitor compliance with ISO 17011 and identify opportunities for operational improvement.
- Collaborate in national and international

initiatives in accreditation with other bodies.

- Publicize program achievements in at least one peer-reviewed journal and maintain regular communication in *QMP-LS News*.
- Improve on our articulation of the accreditation standard by.
- Approving and releasing Version 5 of OLA Requirements.
- Collaborate with Corporate Services to expand the use of QView™ to communicate with volunteers.
- Provide training to new staff, reorientation for EQA and Corporate Services staff, and volunteers.
- Strengthen the assessor pool.
- Develop a formal competency program for OLA staff.

SPECIAL ACKNOWLEDGEMENTS

OLA would like to acknowledge the contributions of Betty Anne Clark, who was contracted from April – June 2009 as a Staff Technologist, Diane Allingham-Hawkins who in May 2009 and Lori-Ann Webster who from October 2009 – January 2010 were both contracted as Technical Specialists, and Jim Moran who helped us conduct OLA assessor training in 2009.

EDUCATION REPORT

QMP–LS’ philosophy is to deliver education within areas identified through our External Quality Assessment (EQA) or Ontario Laboratory Accreditation (OLA) activities. Collaboration and shared experiences continue with partners in healthcare nationally and internationally. In addition, specific educational activities are detailed in the EQA and OLA reports.

In 2009, QMP–LS published four articles on significant developments in the medical and scientific literature, six invited presentations were made at provincial, national and international meetings. Seventeen webinars were conducted (See [Appendix D](#)).

QMP–LS News is our principal communications vehicle and is posted once a month on our website. Additional information on products and services is available through the newsletter, which has a large, international audience, although its target audience is Ontario laboratories. It highlights developments in laboratory medicine, details of QMP–LS operational changes and

provides information on upcoming activities and events. Information is also shared with participants through the website through our secure password-protected access QView™ document server. New tools have been developed to enable web-based communications, including enhancements to QView™, such as electronic submissions and worksheets.

QMP–LS collaborated with other organizations in the development, promulgation and sharing of knowledge:

- 5th Annual McMaster Update in Thromboembolism symposium
- Project to Establish a Quality Management Program for Repatriated Genetic Testing report

PERFORMANCE HIGHLIGHTS

KEY OBJECTIVES

- Provide education for areas identified through EQA or OLA activities:
 - Facilitate virtual microscopy and pathology pilot programs through the Professional

Interpretation and its Quality Management (PIQM) Task Force

- Guideline development
- 5th Annual McMaster Update in Thromboembolism symposium
- Complete the series of Decoding ISO 15189™ modules to aid laboratories in any jurisdiction to prepare for ISO 15189 accreditation.
- Launch the [Institute for Quality Management in Healthcare’s \(IQMH\)](#) website.
- Establish and complete Professional Interpretation and its Quality Management (PIQM) report.

LOOKING AHEAD

In 2010–11, education services, guideline development and special projects for QMP–LS will continue to be delivered through the Knowledge Development division (formerly Knowledge Transfer & Business Development). The provision of EQA and OLA products and services to other jurisdictions and healthcare organizations will continue to be managed through IQMH.

CORPORATE SERVICES REPORT

PERFORMANCE HIGHLIGHTS

INTRODUCTION

In 2009/2010 Corporate Services collaborated with our EQA division to complete the implementation of web-based data collection for EQA surveys and discordant findings. Together with EQA, objective scoring algorithms and cumulative EQA performance reports were also developed and implemented.

In collaboration with our OLA division, results of the OLA process evaluation in the LOLA database was collected, and reporting functionality to allow tracking of performance was developed

We enhanced our knowledge sharing capabilities by implementing the Institute for Quality Management in Healthcare (IQMH) website and the IQMH online store.

GOAL: Improve core services and enhance knowledge transfer to Ontario's medical laboratory community.

KEY OBJECTIVES

- Complete implementation of web-based data collection for EQA surveys and discordant findings.
- Capture the results of the OLA process evaluation in the LOLA Database.

ACTIONS

We completed the implementation of web-based data entry for EQA survey responses and EQA discordant finding forms utilizing QView™, the QMP-LS document and data collection server. We also implemented the web data entry system for processing the OLA process evaluation form in the LOLA database. (See Figures 1 and 2.)

- Implement criteria-based scoring schemes and cumulative performance tracking for objective performance evaluation.

ACTIONS

Scoring algorithms and cumulative performance reports for qualitative EQA surveys were implemented for 2009/2010 surveys (see Figure 3).

GOAL: Deliver expanded quality management services in healthcare

KEY OBJECTIVE

- Provide infrastructure and services to facilitate the operation of IQMH.

ACTIONS

The Institute for Quality Management in Healthcare (IQMH) was incorporated in October,

2009. The [IQMH](#) website was implemented (see Figure 4).

KEY OBJECTIVE

- Implement a registration and receivables process for QMP-LS/IQMH products and services.

ACTIONS

In 2009/2010 Corporate Services undertook a major project to ensure QMP-LS and IQMH are compliant with the payment card industry (PCI) data security standards. In January 2010, the [Institute for Quality Management in Healthcare](#) opened its online store (see Figure 5).

LOOKING AHEAD

In 2010–11 we will complete the implementation of the revised EQA survey administration software application. Our web-based OLA data collection capabilities will be reengineered and enhanced. The QMP-LS website will be revamped, and our webinar and webcast production capabilities will be expanded. A new financial information system will be implemented and our quality system software will be upgraded.

FIGURE 1: EQA DISCORDANT FINDINGS FORM



EXTERNAL QUALITY ASSESSMENT

1519-250 Green Street East
Toronto, ON M4V 1B9
Tel: 416 323 0540
Fax: 416 323 0529

Enzymes

Investigation of Discordant

External Quality Assessment

Finding – Page 1

ENZY 1001

Due at QMP-LS by: **March 1, 2010 Midnight E T**

Help With Forms

A result(s) reported by your laboratory for a recent EQA survey was discordant with the assigned range(s). Please review the survey results, answer the following questions and submit the completed form to QMP-LS.

Your discordant result(s):

Analyte	Val	Your Result	Assigned Value	Acceptable Range	PAD Score	Action Code
Lipase	ENZY 1001-1	147 U/L	109	87 - 131	173	A2
Lipase	ENZY 1001-4	146 U/L	111	89 - 133	159	A2

FIGURE 2: OLA PROCESS EVALUATION FORM



QMP-LS
ONTARIO LABORATORY ACCREDITATION

1510 – 250 Bloor Street East
Toronto, ON M4W 1E6
Tel: 416 323 9540
Fax: 416 323 9324

**Assessment Visit Process
Evaluation: Facility**

Lab Name _____

Lab No: _____

Licence No: _____

Please take 10 minutes to complete this evaluation of your assessment experience. The purpose of this evaluation is to allow participants to comment on how well the assessment team met the OLA program values, and if the team members displayed the required competencies.

[Help With Forms](#)

Date of Assessment Visit	2007/10/15-2007/10/18
---------------------------------	-----------------------

Survey Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
	1	2	3	4
The assessment team based its decisions on factual evidence.	☐	☐	☐	☒
The team kept us informed throughout the visit process.	☐	☐	☒	☐
The team understood our laboratory's unique needs and was open-minded.	☐	☐	☒	☐
The OLA requirements are clear enough to ensure that your expectations matched that of the assessment team.	☐	☐	☒	☐
The size and make-up of the assessment team was appropriate.	☐	☐	☐	☒
The assessment team members conversed with the appropriate staff, and with as many as possible.	☐	☐	☐	☒

FIGURE 3: CUMULATIVE PERFORMANCE REPORT



Cumulative Performance Report CHEM 0805 - 1001

Date Issue: January 28, 2010

Action Report

	CHEM 0805-A	CHEM 0805-B	CHEM 0805-C	CHEM 0810-A	CHEM 0810-B	CHEM 0810-C	CHEM 0901-1	CHEM 0901-2	CHEM 0901-3	CHEM 0905-1	CHEM 0905-2	CHEM 0905-3	CHEM 0910-1	CHEM 0910-2	CHEM 0910-3	CHEM 1001-1	CHEM 1001-2	CHEM 1001-3	Action Rules
Bicarbonate																			
Chloride																			
Sodium																			
Potassium																			
Glucose		+																	
Urea																			
Creatinine (IDMS Std)																-			W1
Creatinine (Not IDMS Std)																			
Calcium, Total																-	-		A2
Phosphate																			
Protein, Total																			
Albumin																			
Urate													+						
Magnesium																			
Total Iron																			
UIBC																		+	W1
TIBC																			
Transferrin Saturation																			
Transferrin																			

FIGURE 4: THE IQMH WEBSITE

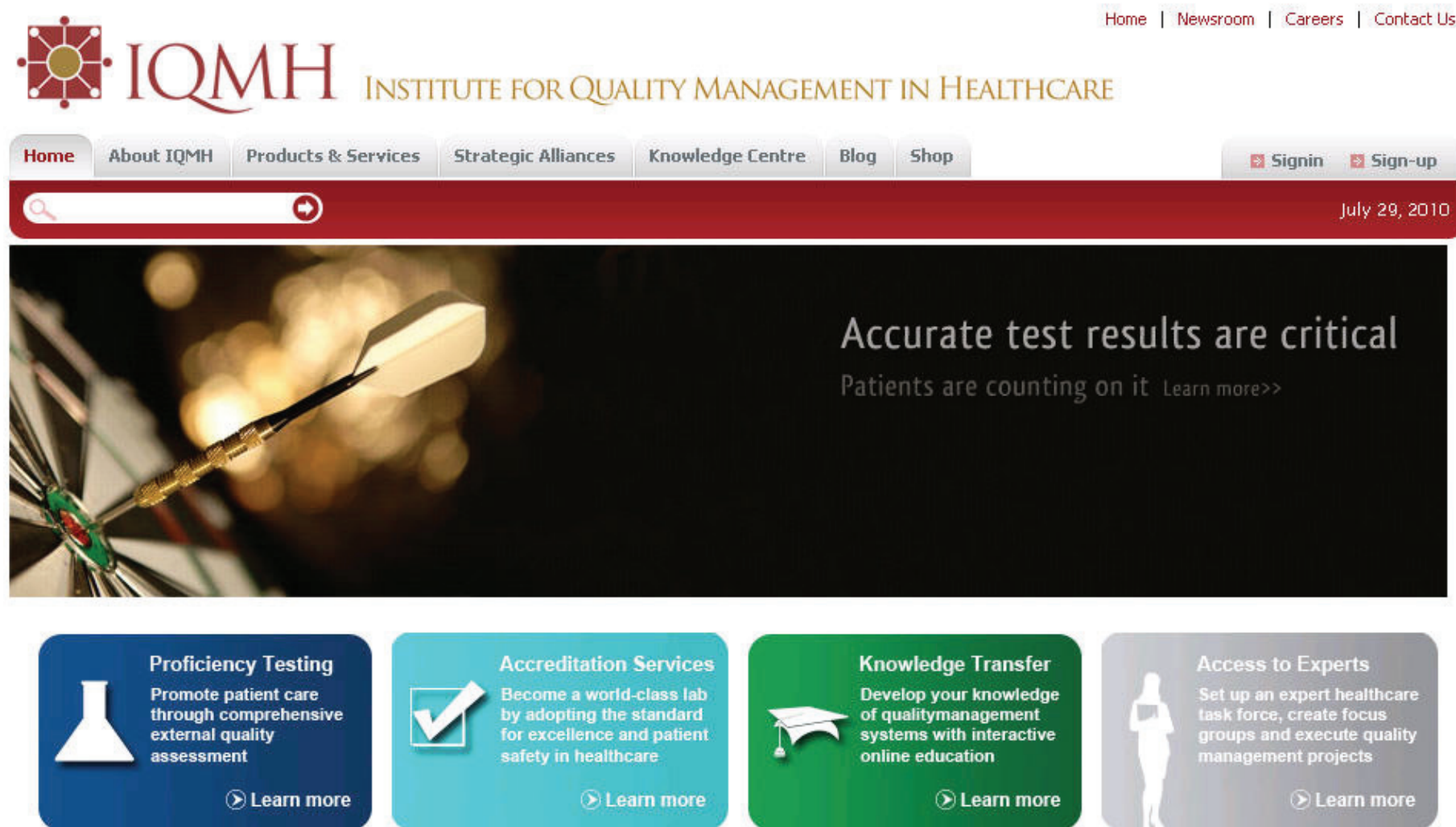


FIGURE 5: THE IQMH ONLINE STORE



Home | Newsroom | Careers | Contact Us

Home About IQMH Products & Services Strategic Alliances Knowledge Centre Blog Shop

Signin Sign-up

July 29, 2010

Checkout

- ▶ Our Return Policy
- ▶ Your Privacy and Security

Continue Shopping... Checkout Now

Shopping Cart

Product	Quantity	Sub Total:
Modules 1 - 15 Premium Subscription SKU: ISOPREMIUM Download	1 Delete	\$3,500.00 (CAD)

Update Cart

Sub Total: \$3,500.00 (CAD)
Tax: Calculated During Checkout

QUALITY MANAGER'S REPORT

Awareness of customer expectations and sharing of knowledge are fundamental principles of our quality management system. Our organization is subject to the same comprehensive quality management system requirements and level of excellence we demand of the laboratories participating in our programs. We have aligned ourselves to ISO 9001:2008 and a number of very specific ISO standards that address our programs. This system is fully matured and has been evaluated under seven separate internal audits, and two external audits

conducted by Standards Council of Canada. We continually strive to take our system to the next level, to keep an ear on the customer “listening posts,” and to remain in touch with their expectations. Along the way, we learn best practices, and that knowledge distills to the laboratories through informal discussions, QMP–LS News, our websites and educational offerings through EQA, OLA and IQMH.

2009/2010 was a year best characterized with the words “listen, engage and be helpful.” Our

quality system is now in a mature state, and we are ready to build off that solid platform and begin to streamline operations through lean principles and to improve delivery of services to our customers. In addition, we have started to dialogue more about ways in which our organization can utilize web 2.0 and web 3.0 functions to engage in more interactive communication with our customers.

The following specific activities occurred in 2009/2010, lead by the Quality Manager:

TABLE 1: QUALITY MANAGEMENT ACTIVITIES 2009/10

Input	Output
Third annual internal audit of the EQA division to measure alignment to ILAC G13:2007.	Identification of 11 non-conformities and one suggestion to meet the international standard and prepare the EQA division for external assessment. We thank Mr. Rob Kerekes for leading our EQA internal audit team.
Fourth annual internal audit of the OLA division to measure alignment to ISO 17011:2004.	Identification of 12 non-conformities and five suggestions to meet the international standard. We thank Ms. Mary Fountas for leading our OLA internal audit team this year.
Management review of the previous fiscal year that encompassed all operations	Defined action plans addressing shortfalls in meeting objectives, resource management, further opportunities arising from the analysis of occurrences and performance monitoring. Eighteen action items were defined and fed into our strategic plans.
All processes and procedures subjected to annual review	Written evidence that processes meet international standards, standardization of processes, clear understanding of what we do. These have proved invaluable to us as we recruit and train new staff.
Ongoing performance measures of efficiency and timeliness of both EQA and accreditation activities	Continual tightening of time lines and expectations for delivery of key information back to our participants.

APPENDIX A: COMMITTEE MEMBERS

Committee membership April 1, 2009 – March 31, 2010

CONJOINT COMMITTEE

Ministry of Health and Long-Term Care

Mr. Tim Burns

Mr. George Clarke

Mr. Leo Tse

Ontario Medical Association/Quality Management Program—Laboratory Services

Dr. Virginia Walley

Dr. Gregory Flynn

Mrs. Linda Crawford

ADVISORY COUNCIL

Ontario Medical Association

Dr. Virginia Walley, Chair

College of Physicians & Surgeons of Ontario

Mr. Dan Faulkner

College of Medical Laboratory Technologists of Ontario

Mrs. Kathy Wilkie

Ontario Society of Clinical Chemists

Dr. Lynn Allen

Ontario Association of Medical Laboratories

Mr. Jeffrey Sumner

Association of Medical Microbiologists of Ontario

Dr. Deborah Yamamura

OMA Section on Laboratory Medicine

Dr. John Doucet

Ontario Association of Pathologists

Dr. Suhas Joshi

Ontario Hospital Association

Dr. Robert Lester

Ontario Society of Medical Technologists

Mrs. Blanca McArthur

Ontario Laboratory Accreditation Advisory Panel, Chair

Ms. Janice Nolan

Professional Advisory Committee, Chair

Mr. Michael Keeney

Ministry of Health and Long-Term Care

Mr. Tim Burns

Mr. Leo Tse

Mr. George Clarke (observer)

Quality Management Program—Laboratory Services

Dr. Gregory Flynn (ex-officio)

Ms. Linda Crawford (observer)

Ms. Jane Gun-Munro (observer)

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APPENDIX B: VOLUNTEERS

EQA VOLUNTEERS

Ms. Laura Baillie
Ms. Wendy Brown
Ms. Debra Browning
Dr. Peter Bunting
Ms. Laura Burton
Ms. Joan Canavan
Ms. Ping Chao
Mrs. Patti Cheatley
Ms. Pam Chedore
Dr. Maureen Clement
Mr. Leio Coloquio
Ms. Judith Cunningham
Ms. Karen DeRuiter
Dr. Denice Feig
Ms. Jacky Fok
Ms. Joy Francis-Everd
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Ms. Esther Geisbrecht
Mr. Ron Giesler
Ms. Anne Hamid-Allie
Mr. Michael Ho
Dr. Jon H. Johnsen
Ms. Jennine Kafka
Mr. Jan Kasperski
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Ms. Leona Kotowich
Ms. Tina Kozlowski
Mr. Ivan Lam
Mr. Scott MacDonald

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Mr. Sam Nagra
Ms. Karen Olech
Dr. Valerie Palda
Mr. Craig Porter
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Dr. Corwyn Rowsell
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Ms. Heather Siebert
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Ms. Carol Swantee
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Dr. Ola Kassim
Mr. Bill Parks
Ms. Susan Seguin
Ms. Laurie Mason
Mr. Bryan Hewlett
Dr. Sharyn Smith
Dr. Susan Robertson
Dr. Roy Wyman

OTHER VOLUNTEERS

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Mrs. Connie Pletch

OLA VOLUNTEER ASSESSORS

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Ms. Marjorie Allen
Ms. Jeanine Baker
Ms. Alison Bear
Mr. Richard Bedard
Mr. Conrad Jr Begin
Ms. Johanne Bietola
Mr. Chris Blagg
Ms. Diana Booth
Ms. Rhonda Borchardt
Ms. Karen Bortolon

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 Ms. Nellie Bradbury
 Ms. Mary Breadner
 Ms. Marjorie Brooks
 Ms. Marie Burelle
 Mr. Len Burger
 Ms. Patricia Burton
 Ms. Pamela Calverley
 Ms. Margaret Cameron
 Ms. Johanna Campbell
 Ms. Vassilici (Bessie) Carydis
 Dr. Peter Catomeris
 Mr. Tom Clancy
 Ms. Betty Anne Clark
 Ms. Brenda Cutting
 Mr. Jeff Davidson
 Ms. Susie Davies
 Ms. Linda Diebold
 Ms. Annamarie Donati
 Ms. Deborah Elliott
 Ms. Denise Evanovitch
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 Ms. Louise Farrar
 Ms. Rosanne Frassetto
 Ms. Suzanne Froment
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 Dr. Douglas Gornall
 Mr. Maurice Goulet
 Ms. Margaret Grabowski

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 Ms. Debbie Harris
 Ms. Laura Harrison
 Ms. Lorraine Hart
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 Ms. Patricia Ludlow
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 Ms. Joanie Mackay
 Ms. Lorraine MacLean
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 Mr. Rick Mancini
 Ms. Lisa Martin
 Ms. Laurie Mason
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 Mr. Les Morgan
 Ms. Donna Murphy
 Ms. Wendy Owens
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 Mr. Patrick Paulusse
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 Ms. Susan Pugh
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 Ms. Corinne Ramey
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 Ms. Susan Randell
 Ms. Anna Robinson
 Ms. Darlene Rosbottom
 Ms. Mary Rozmanc
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 Ms. Sandra Smith
 Dr. Tracy Stockley
 Ms. Laurie Sweeting
 Ms. Joanne Thususka
 Ms. Cathie Trayner
 Ms. Linda Turner-Smith
 Ms. Sylvia Uicich
 Ms. Angella Vanwyck
 Ms. Cheryl Watt
 Ms. Heather Watts
 Mr. Kevin Webb
 Ms. Lori-Ann Webster
 Dr. Deborah Yamamura
 Mr. Greg Young

APPENDIX C: EQA PARAMETERS MONITORED

EQA parameters monitored by QMP–LS by discipline, 2009/2010:

CHEMISTRY

Chemistry-General

Albumin
Urine Albumin:Creatinine Ratio
Bicarbonate
Bilirubin, Total
Blood Gases (pH, pCO₂, pO₂, Na⁺, K⁺, Glucose, Ionized Calcium)
Hb A1c
Calcium, Total
Chloride
Creatinine
Glucose
Magnesium
Phosphate
Potassium
Protein, Total
Sodium
Total Iron, TIBC, UIBC, Transferrin Saturation, Transferrin
Urate
Urea
Urine Chemistry (Quantitative Protein, Sodium, Potassium, Creatinine, Osmolality)

Drug Monitoring

Drugs of Abuse:

Amphetamines
Ecstasy (MDMA/MDA)
Barbiturates
Benzodiazepines
Cannabinoid Metabolites
Cocaine Metabolites
Methadone
Methadone Metabolites (EDDP)
Methamphetamine
Opiates
Oxycodone
Phencyclidine
Tricyclic Antidepressants
Therapeutic Drugs:
Acetaminophen
Carbamazepine
Digoxin
Ethanol
Gentamicin
Lithium
Phenobarbital
Phenytoin
Salicylate
Theophylline
Tobramycin
Valproic Acid
Vancomycin

Endocrinology

Thyroid Stimulating Hormone (TSH)

Free Thyroxine (FT4)
Free Triiodothyronine (FT3)
Vitamin B12
Ferritin
Cortisol
Testosterone
Follicle Stimulating Hormone (FSH)
Luteinizing Hormone (LH)
Parathyroid Hormone (PTH)
Progesterone
Prolactin
Chorionic Gonadotropin (CG)
Alpha Fetoprotein (AFP)
Estradiol
Prostate Specific Antigen (PSA)
Free PSA
Dehydroepiandrosterone sulphate (DHEA-S)
25 Hydroxy Vitamin D

Enzymes, Cardiac Markers & Lipids

Alkaline Phosphatase (ALP)
Alanine Aminotransferase (ALT)
Amylase
Aspartate Aminotransferase (AST)
Gamma Glutamyl Transferase (GGT)
Lactate Dehydrogenase, Total (LD)
Lipase
Total Creatine Kinase (Total CK)
CK-2
Myoglobin

Troponin I
 Troponin T
 Cholesterol
 Triglycerides
 HDL-cholesterol (HDL-C)
 LDL-cholesterol (LDL-C)
 Total Cholesterol (HDL-C Ratio)

Immunology
 Antinuclear Antibody (ANA)
 Rheumatoid Factor (RF)
 High Sensitivity CRP (hsCRP)
 Specific Proteins:
 IgG
 IgA
 IgM
 IgE
 C3
 C4

Protein Electrophoresis (Albumin, Alpha 1, Alpha 2, Beta, Gamma)

Maternal Serum Screening
 Multiple of Median (MoM):
 Alpha Fetoprotein (AFP)
 Human Chorionic Gonadotropin (hCG)
 Unconjugated Estriol (E3)
 Dimeric Inhibin-A (DIA)
 Free beta Human Chorionic Gonadotropin (free -hCG)
 Pregnancy-Associated Plasma Protein A (PAPP-A)

HEMATOLOGY

Bone Marrow

Aspirate and/or Biopsy preparation
 Descriptive Morphology
 Diagnosis

Coagulation
 International Normalized Ratio (INR)
 Activated Partial Thromboplastin Time (APTT)

Fibrinogen
 Thrombin Time
 Heparin Assay

Factor VIII
 Factor IX
 D-dimer

Thrombophilia Investigation:

Activated Protein C (APC) Resistance
 Antithrombin
 Protein C
 Protein S
 Anticardiolipin Antibody (ACA)
 Factor V Leiden

Prothrombin Gene Mutation
 Russell Viper Venom (dilute and confirm)

Flow Cytometry
 Lymphocyte CD3/CD4/CD8 quantitation by immunophenotyping
 Leukocyte Immunophenotyping in the investigation of hematological disorders (lymphoma/leukemia)
 CD34+ Stem Cell Enumeration

Red Cell Disorders
 Hemoglobin S Screen
 Hemoglobin Fraction Quantitation

Morphology
 Peripheral Blood Film:
 Differential Leukocyte Count
 Descriptive Morphology
 Diagnosis

Routine Hematology
 Leukocyte Count
 Erythrocyte Count
 Hemoglobin
 Hematocrit
 Mean Corpuscular Volume
 Thrombocyte Count
 Automated Leukocyte Differential
 Reticulocyte Count
 Manual Body Fluid Cell Count

Transfusion Medicine
 ABO and Rh Grouping and Interpretation
 Antibody Detection
 Antibody Identification
 Direct Antiglobulin Testing (DAT)
 Crossmatching
 Phenotyping
 Antibody Titration

MICROBIOLOGY**Bacteriology**

Isolation and identification
of aerobic/anaerobic organisms from:

- Blood
- Genital specimens
- Throat swabs
- Urine
- Body fluids
- Other swabs/pus
- Sputum
- Stool samples

Quantitative urine cultures

Interpretation and reporting of cultures

Antimicrobial susceptibility testing

Interpretation and reporting of antimicrobial
susceptibility findings

Serological grouping and identification

Gram stain interpretation

Detection of *Clostridium difficile* toxin

Detection of acid-fast bacilli from direct smears

Quantification of acid-fast bacilli

Mycology

Isolation and identification of:

- Dermatophytes
- Moulds
- Yeasts

Wet preparations for fungal elements

Parasitology

Wet preparation examination of stool samples

Preparation of faecal concentrates

Staining of samples for gastrointestinal parasites

Identification and quantification of parasites

Use of special stains

Virology

Antibody detection:

- Hepatitis A, B, and C
- HIV
- Rubella IgG

Antigen Detection:

- Chlamydia trachomatis
- Respiratory Syncytial Virus (RSV)
- Influenza A virus
- Influenza B virus

Parainfluenza virus

GENETICS**Cytogenetics**

- Blood
- Bone Marrow
- Tumour
- Tissue
- Amnion Cells
- Fixed cell culture

ANATOMIC PATHOLOGY**Histopathology****Histotechnology**

- Routine stains
- Special stains
- Immunohistochemistry stains
- Breast cancer markers ER/PR and HER2

Cytopathology

Gynecological

Non-Gynecological

Respiratory:

- Sputum
- Bronchial washings
- Bronchial brushings

Urinary

Body fluids

Fine needle aspiration of breast

Fine needle aspiration of head and neck:

- Thyroid
- Lymph node
- Salivary glands

OTHER**Point-of-Care Testing**

Glucose Meters

APPENDIX D: PUBLICATIONS & EDUCATION

QMP–LS publication and education activity from April 1, 2009 – March 31, 2010.

SCIENTIFIC COMMUNICATIONS

Cuker A, Raby A, Moffat K, Flynn G, Crowther MA. Interlaboratory variation in heparin monitoring: lessons from the Quality Management Program of Ontario coagulation surveys. *Thrombosis and Haemostasis*. 2010 Jul 20;104(4).

Gun-Munro J. Coming Soon - ISO/IEC 17043: Conformity assessment – General requirements for proficiency testing. *EQALM News*. Europe. December 2009.

Moffat KA, Raby A, Crowther M, Flynn G. The prothrombin time and the International Normalized Ratio — What Ontario laboratories should consider. *OSMT Advocate*. Volume 16, Issue 3, Fall 2009.

Allingham-Hawkins D, Casey B, Chitayat D, Knoll H, McGowan-Jordan J, Somerville M, Wayne J, Yawney L, Cooper M, Miyazaki J. A Project to Establish a Quality Management Program for Repatriated Genetic Testing Laboratories in Ontario, Canada. 2010 ACMG Annual Clinical Genetics Meeting on March 24-28 in Albuquerque. March 2009. (Poster with IQMH)

INVITED PRESENTATIONS AND TALKS

Raby A. QMP–LS: A Canadian Regional EQA Program — How Labs get In and Out of Trouble in Ontario. Coagulation Testing Quality Conference and Workshop. Mayo Clinic Divisions of Hematology and Hematopathology, Mayo Medical Laboratories, North American Specialized Coagulation Laboratory Association (NASCOLA). Minneapolis, Minnesota. April 2009.

Raby A. QMP–LS: A Canadian Regional EQA Program — D-Dimer Assay Issues and Standardization: QMP–LS Studies. Coagulation Testing Quality Conference and Workshop. Mayo Clinic Divisions of Hematology and Hematopathology, Mayo Medical Laboratories, North American Specialized Coagulation Laboratory Association (NASCOLA). Minneapolis, Minnesota. April 2009.

Dr. Greg Flynn. “Applying principles of external quality assurance to interpretive quality management (pathology, cytology, diagnostic imaging)”. Canadian Association of Pathologists. Halifax, NS. July 2009.

Linda Crawford. Know Your Standard - Key Differences Between 15189 and 17025. International Laboratory Accreditation Cooperation/International Accreditation Forum

Joint Annual Meeting. Joint Workshop on Medical Laboratory Accreditation in Canada Canadian Association for Laboratory Accreditation and Standards Council of Canada. Vancouver. October 2009.

Linda Crawford. Be Prepared - Key Success Factors in Implementation of an ISO 15189 Accreditation Program. International Laboratory Accreditation Cooperation/International Accreditation Forum Joint Annual Meeting. Joint Workshop on Medical Laboratory Accreditation in Canada Canadian Association for Laboratory Accreditation and Standards Council of Canada. Vancouver. October 2009.

Linda Crawford. Uncertainty of Measurement. Ontario Society of Clinical Chemists Annual Meeting. London, Ontario, November 2009.

Linda Crawford. Uncertainty of Measurement. BIO-RAD Symposium. Toronto. November 2009.

Jane Gun-Munro. Proficiency Testing According to ISO 17043. Assessor Training Workshop. Entidad Mexicana de Acreditación, (EMA). Mexico City. December 2009.

SYMPOSIUM PRESENTATIONS

5h Annual McMaster Update in Thromboembolism. McMaster University, St. Joseph's Healthcare Hamilton Foundation, Hamilton Health Sciences, QMP-LS:

Day One

Dr. Mark Crowther. Thrombophilia Testing: More Questions Than Answers.

Dr. Ian Chin-Yee. Who is WHO in 2008 — Hematology Case-based Discussions.

Dr. Cathy Hayward. New QMP-LS EQA Broadsheet — Diagnostic Testing for Platelet Function Disorders.

Mr. Mike Keeney. Updated QMP-LS EQA Broadsheet – Best Practice Guidelines for the Investigation of Neoplastic Hematological Disorders.

Ms. Wendy Brown. Validating a Hematology Analyser.

Dr. Ruth Padmore. New QMP-LS EQA Broadsheet — Erythrocyte Morphology - Terminology & Grading.

Mr. Andrew McFarlane. Updated QMP-LS EQA Guideline — Good Practice Guidelines for the Laboratory Investigation of Hemoglobinopathies.

Ms. Karen Moffat. New QMP-LS EQA Coagulation Broadsheets – Evaluating a New Reagent Lot Number & Setting Up Factor Assays.

Day Two

Dr. Sara Israels. Plenary: Platelet Disorders – An overview of their causes, prevalence & importance.

Dr. Catherine PM. Hayward. Standardizing the diagnostic assessment for platelet function disorders: What are the challenges?

Dr. Margaret Rand. Platelet secretion & its importance to platelet function.

Dr. Menaka Pai. Lumiaggregometry to assay ATP release using a multicomponent agonist panel: Insights from comparison of data for referred patients & healthy controls.

Dr. Menaka Pai. How to establish valid reference intervals for platelet function tests: Best practices & introduction of a practical tool for your laboratory.

Dr. Margaret Rand. CLSI recommendations on platelet function testing.

Ms. Karen A. Moffat. Diagnostic laboratory practices for aggregometry: Insights from questionnaire surveys.

Ms. Karen A. Moffat. To dilute or not dilute platelet rich plasma for LTA – Does it make a difference when testing for a bleeding disorder? Interim analysis of a prospective study of referred patients & healthy controls.

Dr. Catherine PM. Hayward & Dr. Anthony Guilivi. A standardized approach to platelet function testing for bleeding disorders: Open forum on the opportunities, challenges & merits Background on an Ontario initiative.

WEBINARS

Donna Thompson. Performance Scores (QScores) for VIRO EQA Surveys.

Donna Thompson. Performance Scores (QScores) for VIRO EQA Surveys – Hepatitis B.

Donna Thompson. 2010 – 03 – 31 Performance Scores (QScores) for Mycology Surveys.

Christine Fleming. BACT Q-Scores.

Dan MacFayden. Introduction QView Data Collection.

Dan MacFayden. Help — I forgot my QView Password.

Jane Gun-Munro & Donna Thompson. EQA for HIV POCT.

Jane Gun-Munro. QMP–LS Training of Scientific Committee Members.

Christine Shirripa. New EQA Pathology Model.

Christine Shirripa. Recommendations for Formalin Fixation.

Anne Raby. MORP and RCD QScores.

Jane Gun-Munro. EQA Scoring Webcast.

ONLINE EDUCATION

Coffey J, Crawford L. Decoding ISO 15189™. Institute for Quality Management in Healthcare. 2009. Available from: www.iqmh.org.

Module 1 Introducing ISO 15189: World-Class Excellence.

Module 2 Quality Management: The Essential Cycle.

Module 3 Setting the Stage for Change: The Paradigm Shift.

Module 4 Document Control: Say What You Do

Module 5 The Quality Manual: Your System Roadmap.

Module 6 Process Maps and Procedures: Get the Picture and Develop It.

Module 7 Occurrence Management: The Heart of Quality.

Module 8 Internal Audit & Management Review: Take a Close Look at Yourself.

Module 9 Quality Indicators: Measuring Success.

Module 10 Managing Personnel: The Precious Resource.

Module 11 Laboratory Equipment: The Tools of Our Trade.

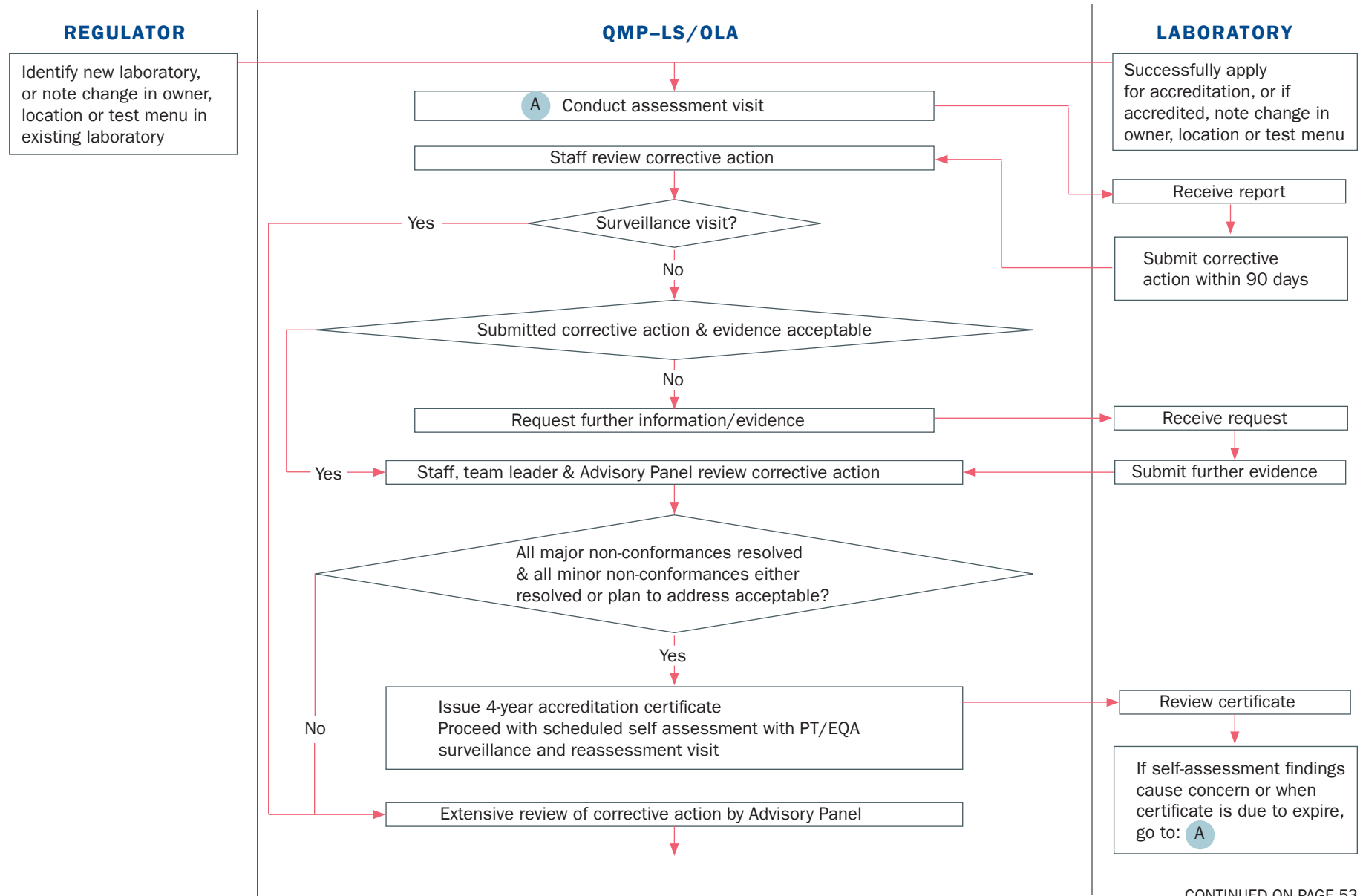
Module 12 Referrals and Contracts: Refer Onto Others.

Module 13 Pre-Examination Process: You Get What They Give.

Module 14 Examination Process: It's What We Do.

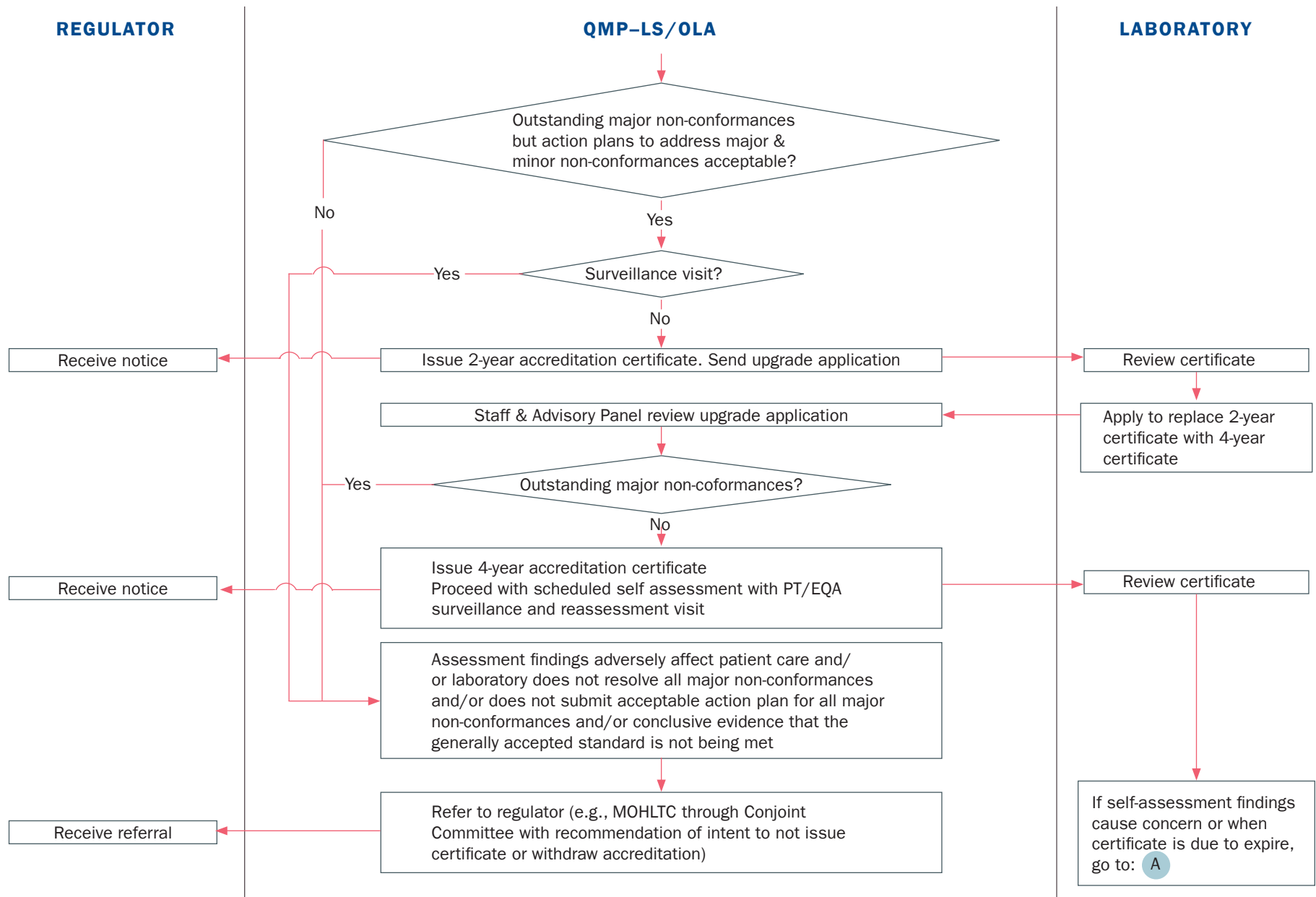
Module 15 Post-Examination Process: They Get What We Give.

APPENDIX E: OLA ACCREDITATION RECOMMENDATION DECISION PATH



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