

LABORATORY MEDICINE PROGRAM
HEALTH CARE CORPORATION OF ST. JOHN'S

QUALITY INITIATIVES REPORT

April 1, 1999 - March 31, 2000

Submitted by:

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LABORATORY MEDICINE PROGRAM
QUALITY INITIATIVES REPORT 1999-2000

EXECUTIVE SUMMARY

The Laboratory Program is one of three clinical support programs. Laboratory Medicine is a field of medical science that encompasses several specialized scientific disciplines. These disciplines determine the program divisions. The Laboratory Program is also the reference laboratory for the Province of Newfoundland.

The Laboratory Medicine Program is committed to providing the highest standard of laboratory services within its available resources.

Dr. D. Haegert, Clinical Chief, is on sabbatical and Dr. D. Cook was appointed Clinical Chief Acting (July 1, 1999 - July 1, 2000).

Resignations were received during the year from Dr. V. Prabhakaran, Chief of Biochemistry, Dr. M. Khalifa, Site Chief, Anatomical Pathology, The General Hospital, and Dr. R. MacIntosh, Chief of Cytology. Dr. E. Randell was appointed Chief of Biochemistry and Dr. P. Wadden was appointed Site Chief Acting, Anatomical Pathology, The General Hospital until 2000 04 30. Dr. S. Parai is the permanent Site Chief, Anatomical Pathology, The General Hospital, effective 2000 05 01. The Chief of Cytology is still vacant. The Division of Anatomical Pathology received resignations from six pathologists (approximately 1/3 of total pathologist manpower). All positions have been successfully filled.

Significant improvements were achieved in the continued standardization of testing and reporting procedures over the past year. This is an ongoing activity and will be completed after site closures.

The overexpenditure in our proposed budget was the result of :

- (a) Approximately \$100,000 for purchase of HLA typing trays that were previously supplied by the Canadian Red Cross gratis but the Canadian Blood Services discontinued this service. Approval was received but no budget adjustment received.
- (b) Approximately \$45,000 (\$90,000/year) for the introduction of a new test for cardiac markers that was approved but no budget adjustment received.
- (c) \$200,000 expenditure that occurred in 1998-99 but not billed until 1999-2000. This resulted in a \$200,000 shortfall in actual for 1999-2000.
- (d) Extra supplies associated with dramatic increases in the utilization of testing associated with cancer markers. PSA testing is responsible for most of this increased expenditure.

It should be noted that there were also significant increases in revenue.

The extraordinary amount of effort spent in ensuring Y2K compliance resulted in absolutely no problems encountered as a result of the date change.

Worker safety is ongoing and we are working closely with Occupational Health to address certain issues. The immediate issue is in acquiring an appropriate body lift in the morgue.

There are tremendous demands for increased testing in Genetic Services and a report was prepared for government outlining our concerns. This will be an area where there will continue to be increased demands.

The Laboratory continues to work closely with the Canadian Blood Services regarding the issuing of blood and blood products and a considerable amount of resources are still required for follow up from products that were issued in the past.

Job reclassification results for managers were received over the past year and this resulted in some appeals that are ongoing. There are still many outstanding staff reclassification requests.

During the past year, the Laboratory Program continued to implement changes that were part of the overall consolidation plans. Changes of such magnitude always cause stress among staff, however, the final plan has now been accepted by all and the Program is actively implementing the final stages. This will be an ongoing major issue for the next year or more.

ACHIEVEMENTS

- ◆ One corporate model for the Hospital Information System
- ◆ All equipment is Y2K compliant
- ◆ Human resources plan finalized
- ◆ Continued standardization of policies and procedures (ongoing)
- ◆ Acquisition of new capital equipment
- ◆ Implementation of new tests for cardiac and cancer markers
- ◆ Staff training for WHMIS
- ◆ Renovations at Waterford for an off site collection center
- ◆ Funding for new technology in Cytogenetics (FISH)
- ◆ Several staff successful in earning Baccalaureates program from evening classes

CHALLENGES

- ◆ Our greatest challenge was to bring the service together on two sites and contend with the challenges of bringing staff together.
- ◆ To offer new procedures that are constantly being developed in the field of Laboratory Medicine within our existing human and financial resources.
- ◆ To adequately address the issues associated with utilization.
- ◆ To address attendance management issues.
- ◆ To offer blood collection services at St. Clare's out of hours.
- ◆ To keep up with requests on the use of blood and blood products from years ago.
- ◆ Maintaining staff morale.
- ◆ To plan and implement the move to two sites in an effective efficient manner.
- ◆ To integrate fully hospital and university based laboratory physicians.
- ◆ To maintain effective lines of communication and liaison with other programs.
- ◆ To facilitate lines of communication with laboratory physicians and laboratory technologists.

FUTURE INITIATIVES

- ◆ To permit physicians to access reports from office computer.
- ◆ To further develop our Genetics service.
- ◆ To offer new appropriate testing.
- ◆ To offer Pathology consultations using internet technology.
- ◆ To work with staff to improve job satisfaction and staff morale.
- ◆ To successfully complete the move to two sites.
- ◆ To expand our blood collection services including a new off site center located at the Waterford.
- ◆ To establish a computer reporting system with hospitals referring services to the HCCSJ.
- ◆ Expanded role in point of care testing to include all blood gas systems within the HCCSJ.
- ◆ Further consolidate urinalysis testing between Microbiology and Biochemistry.
- ◆ To further address utilization issues.

Balanced Scorecard		GOALS			
Laboratory Program		To provide a comprehensive quality service of the highest standard within available resources	To achieve optimal use of existing resources.	To monitor/improve quality of work life.	To support and encourage education and research activities.
P E R S P E C T I V E S	CUSTOMER	<ul style="list-style-type: none"> * Quick turn around times for reports * # Complaints * # Compliments 	<ul style="list-style-type: none"> * # Units * # In Patients * # Out Patients * No duplication of specialized testing 	* User Satisfaction Survey	<ul style="list-style-type: none"> * Support research studies * Partner with colleges * High school co-op program * Lab newsletter (2 issues)
	INNOVATION & LEARNING	<ul style="list-style-type: none"> * Implement clinical practice guidelines * Staff credentials * Staff recruitment * External Proficiency Tests * New procedures 	<ul style="list-style-type: none"> * Standardization * Consolidation * Reduction of duplication * Equipment improvements * Standard computer * Changes in staff schedules 	* Continuing Education	<ul style="list-style-type: none"> * Teleconferences * Staff enrolled in baccalaureates program * Attendance at conferences * Frontline management * Focus group for Genetics * Partner with Michener Institute in Toronto for training site for Genetics students
	FINANCIAL	<ul style="list-style-type: none"> * Total Budget * Cost per unit * Revenue generated 	<ul style="list-style-type: none"> * Budget variances * Work/paid hour * Cost per test * Overtime costs 	<ul style="list-style-type: none"> * WCC claims * Sick leave costs * Orientation costs 	* Education budget
	INTERNAL BUSINESS	<ul style="list-style-type: none"> * Staff training * New equipment purchased * Performance evaluation * Attendance management * Adequate staffing levels 	<ul style="list-style-type: none"> * Workload statistics * Avoidance of duplication * Upgrade equipment * Centralized testing 	<ul style="list-style-type: none"> * Staff injuries * Grievances * Grievances settled * Healthy work safe environment 	<ul style="list-style-type: none"> * Fire safety * WHMIS training * In house education * Workshops/seminars * Conference attendance

Customer (how the consumer views us)	97/98	98/99	99/00	Internal Business (can we continue to improve)	97/98	98/99	99/00
◆ Total Workload Units	22,385,642	22,043,632	21,082,822	◆ Total Occurrences	NA	NA	26
◆ % Workload In Patients	23	22	22	◆ Total Grievances	19	15	7
◆ % Workload Out Patients	61	61	62	◆ Grievances Settled	NA	NA	5
◆ Total Tests Performed	5,968,284	5,998,296	6,142,703	◆ % Staff Evaluations	0	0	10
◆ Total Patient Blood Tests	306,482	298,799	334,352	◆ % Staff WHMIS Training	0	0	90
◆ Total Out Patient Blood Tests	176,509	172,420	173,285	◆ SL Hours/FTE		79	84.4
◆ Complaints	4		4	◆ WCC Hours/FTE		13	14
◆ Compliments	7		4	◆ Worksafe Audits	0	4	4
◆ User Satisfaction Survey	0	3	0	◆ External Inspections	1	1	1
◆ Co-op Students	NA	NA	2				
◆ College of the North Atlantic Students	10	10	10				
Innovation & Learning (where we must excel)	97/98	98/99	99/00	Financial (how we look to the board and public)	97/98	98/99	99/00
◆ External Proficiency Survey	4	4	3	◆ Total Budget	14,763,617	15,175,433	15,281,830
◆ % Proficiency Survey Passed	99	99	99	◆ Actual Budget		15,167,193	15,951,313
◆ # Tests in Proficiency Survey	1,072	1,072	804	◆ % Variance		-0.05	+4.2
◆ New Procedures	Yes	Yes	Yes	◆ % of Budget Salary	70	73	73
◆ % Staff Credentials (technical)	100	100	100	◆ % of Budget Supplies	27	27	27
◆ Frontline leadership	NA	NA	3	◆ Total Revenue	245,988	171,783	459,987
				◆ Avg. Cost/Test	2.47	2.53	2.49
				◆ Avg. Cost/Unit	0.66	0.69	0.72
				◆ FTE	252.5	252.5	252.5
				◆ Total Paid Hours	492,283	489,011	NA

NA - indicates data not available.

EXPLANATION OF BALANCED SCORECARD FINDINGS

Many of these statistics are taken from the first year after the implementation of a standard Hospital Information System. This could account for slight variances in statistics from other years.

The following information is intended to provide a more detailed explanation of the four quadrants of the scorecard.

CUSTOMER PERSPECTIVE

The reduction in total workload units is a result of three changes:

- (a) results of consolidation of testing
- (b) standardization in the collection of units
- (c) reduced unit values due to the use of more efficient equipment

The increase in the number of tests and number of blood samples collected confirms the increase in workload the laboratory is experiencing.

The high percentage of work accredited to out patients reflects:

- (a) specimens referred in from other centers (we are the provincial reference lab)
- (b) out patient clinics including Emergency Department
- (c) walk in patients from community physicians

These statistics show that the greatest portion of our workload is not related to in patients, therefore, bed closures, etc., have little effect on overall laboratory workload.

Turn around times for reporting of routine laboratory results is not usually an issue, since with the exception of specialized testing most routine specimens are reported within 24 hours. Turn around times depend mainly upon the test being performed. The Laboratory time frame for Stat requests is less than one hour and the time frame for Urgent requests is less than three hours. 62% of pathology specimens are reported in 3 working days and 81% are reported in 4 working days. Guidelines of the American Directors of Surgical Pathologists states that 80% of the surgical pathology cases are signed out in 4 days or less. We exceed these guidelines.

The number of complaints and compliments remains about the same. The complaints were mostly concerning physicians not receiving reports and compliments mostly had to do with how helpful and considerate our staff were.

The last user satisfaction survey (patients, nurses, physicians) was in March, 1999, and another survey will be done after consolidation. On a scale of 1 to 5 (1 being very unsatisfactory and 5 being very satisfactory), the previous rating from patient, nursing, and physician satisfaction surveys was an average of 4.1.

INNOVATION & LEARNING

The Laboratory Program subscribes to several external proficiency surveys. These cover every discipline and all sites. These proficiency surveys consist of unknown samples that are sent to our laboratory by The College of American Pathologists. We analyze and report these samples and our results are graded, rated, and compared to many other laboratories across North America. The Laboratory continues to excel in each

survey. The reason for fewer number of tests in 1999/2000 than in previous years is because the College of American Pathologists reduced the surveys from 4 times a year to 3 times a year.

Many of our technical staff are enrolled in night courses to earn a baccalaureate degree in technology. Each year we have several students graduate and the number of staff enrolled should ensure this trend continues.

New laboratory procedures are being developed all the time and we continue to offer the appropriate new procedures that our resources permit. This past year new cardiac markers, cancer markers, and genetic testing were introduced. The costs of these tests, although encountered in the Laboratory, should result in significant savings in other areas. For example, the new cancer marker HER-2neu may cost the laboratory \$300 to perform, but the result could mean a savings of up to \$35,000 in the course of treatment as well as avoiding unnecessary side effects of drugs that would be ineffective for the patient.

Cardiac markers also result in significant savings by assisting the physician in determining if a cardiac patient should be admitted.

Significant capital equipment purchases were made this past year. The funds were from three sources:

- (a) Government or Board Capital Equipment Funds
- (b) Janeway Foundation
- (c) Site Consolidation Funds

An agreement was entered into with the Michener Institute in Toronto for the HCCSJ to be a training site for genetic technologists enrolled in the Clinical Genetics Program at Michener. We currently have two students enrolled in this program. If there were no students from Newfoundland enrolled in the Genetics Program at Michener, we are certified to accept and train students from other provinces.

A special Laboratory Focus Group was struck to prepare a report for the government to map the development in the rapidly expanding field of Genetics. This report has been forwarded to government.

Over the past year enormous amounts of energy was dedicated to three significant areas dealing with:

- (a) consolidation
- (b) Y2K compliance
- (c) a single standard Hospital Information System

The results of these efforts have been very positive with relation to streamlining, efficiency, cost effectiveness and communications.

INTERNAL BUSINESS

Despite the anxieties and stress among the staff associated with consolidation and site closure, the number of grievances (LX) decreased significantly. Over the year, many meetings were held with the union to address transition issues.

Managers are now in the process of conducting staff evaluations.

The total number of hours for continuing education is not available, however, staff attended provincial and national conferences. Many of our staff participated in short courses offered by the Staff Development and Training Department of Human Resources. A Train the Trainer Program for WHMIS instruction was instituted this past year.

The Department of Labour conducted worksafe audits of all sites and made recommendations. Recommendations were in the areas dealing with storage of chemicals.

The Atomic Energy Control Board did an inspection and found no major deficiencies.

The number of sick leave hours per FTE increased by 5.4 hours per year. This is still approximately 20 hours less than the corporate average. A new attendance management and employee counseling program has been implemented.

FINANCIAL

The actual budget was 4.2% greater than budgeted, however, the approved budget did not reflect extra money that was approved for new procedures. The approved budget was also deficient by a \$200,000 expenditure that occurred in 1998-99, but was not billed until 1999-2000.

The increase in total revenue reflects a better computerized system for the capturing of revenue.

WCC hours for the Laboratory is approximately 14 hours per FTE per year versus a corporate average of approximately 44 hours per FTE per year.

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LABORATORY MEDICINE PROGRAM
QUALITY INITIATIVES REPORT 2000 - 2001

EXECUTIVE SUMMARY

The Laboratory Medicine Program encompasses specific divisions each committed to providing the highest standard of services. The divisions and their percentage of resources of the total Program are as follows: Biochemistry (32.6), Haematology (18.9), Specimen Collection (10.2), Pathology (10.1), Microbiology (9.5), Immunology (9.2), Cytology (5.3), Clerical and Administration (4.2).

This past year saw many changes in the Laboratory. This year long term plans began to come together. With the closing of the Grace, the Laboratory services from the Grace were incorporated into The General Hospital and St. Clare's at roughly a 60:40 ratio. The loss of the out patient blood collection area at the Grace created a need for another out patient blood collection area and gave us the opportunity to open up a new out patient blood collection center at the Waterford site. This site was planned to accommodate up to 200 patients per day. For the first few months, many positive comments were received from clients, but within ten months of opening, the volumes of patients had reached the maximum and now plans will have to start either to expand this center or open another center.

The Janeway site also closed this past year and that resulted in all Laboratory services being incorporated at The General Hospital site. This presented us with many far greater challenges related to the offering of pediatric services. With the exception of a

small stat laboratory staffed by one staff member 24 hours a day, the complete Laboratory services were consolidated into The General Hospital's Laboratories.

Original plans called for renovations to The General Hospital to be completed before the Janeway move, but at present, these are still not completed and this is a source of great frustration. Renovations were also undertaken at the St. Clare's site and are still not completed.

Approval was received for the Laboratory component of the Autologous Stem Cell Transplant Program and a staff member (1 Laboratory Technologist III) was hired and received training in the procedure. It is hoped that the program will actually start as soon as renovations are completed.

It was hoped that our services in Cytogenetics and Molecular Genetics would have been improved, but financial issues have delayed the expansion of this service. We currently have students in training at the Michener Institute, but financial constraints make their future uncertain.

During this reporting period, the Laboratory was faced with two separate strikes, an illegal seven day wildcat walk out during October, 2000, and a legal 5 day strike in April, 2001. Although the Laboratory was supplied with essential services by the union, there was a major disruption in the quantity of services offered. As a result of the illegal strike, there were 8,090 hours of suspensions handed out to our staff. The serving of these suspensions is a major challenge to the Laboratory. In addition to the suspensions by the employer, the courts also fined the workers with court sentences. Needless to say, this created more problems.

The illegal strike in October, 2000, ended with a commitment by government for an occupational review. The review resulted in an increase of two pay ranges for most employees, but as yet individual results have not been received.

Dr. Haegert returned from sabbatical and resumed his role as Clinical Chief in August, 2000. The Program wishes to thank Dr. Cook for his guidance and leadership during Dr. Haegert's absence.

Resignations were received from two long time managers in the Program, Elizabeth Rogers in Haematology (September, 2000) and John Martin in Microbiology (June, 2001) and both positions were made redundant. Both of these divisions will now be served by only one manager. The Program wishes to thank both Ms. Rogers and Mr. Martin for their dedicated capable leadership over the past years.

Four technical staff retired and another senior technical staff member with 30 years of service is retiring this month for a total of more than 170 years of experience. Retirements of senior staff will be common for the next few years. At present, there are no shortages of trained staff in Newfoundland, but with increasing numbers of staff retiring and the reduction of trained graduates, we anticipate difficulty in recruiting new staff in a year or two. The Human Resources plan for the Laboratory is almost complete and this has resulted in most of our temporary staff positions being made permanent.

The Divisional Chief position for Cytology was filled with Dr. K. Laurence and Dr. G. Rasty being appointed as Co-Chiefs.

Other achievements related to pathologists were that four of our Residents, Dr. N. Denic, Dr. K. Laurence, Dr. F. Elms and Dr. N. Ismael were successful in passing their FRCPC exams. Congratulations are extended to all four.

Three pathologists were also successful in obtaining external grants. Dr. D. Haegert received a grant to further his research in Multiple Sclerosis. Dr. D. Robb received a grant to research colon/rectal cancer. Dr. S. Vasdev received a grant to further his studies in hypertension. These three staff members have cross appointments with Memorial University. One of our staff, Marie Hawco, received a Bravo award and Dr. L. Whitman was appointed Chair of MAC.

Our major capital equipment purchases for the past year were:

- (a) a video retrieval system at St. Clare's (funds donated by St. Clare's Foundation and from breast cancer resources)
- (b) ergonomic microscopes
- (c) karyotyping workstation for Genetics

The Program continued to implement changes that were part of the overall consolidation plans. These changes have been stressful among the staff, however, the end is now in sight. There will, however, continue to be some changes in the Laboratory as we continue to strive to improve quality, efficiency, keep up with changing times, and refine or adjust to the major moves that occurred this past year.

ACHIEVEMENTS

- Completed upgrade of computer revision 4.71
- Standardized to one requisition for out patients
- Opened new off site blood collection at Waterford Site
- Consolidated Grace Labs into General and St. Clare's Site
- Consolidated Janeway Labs into General Site
- Moved Genetics Lab from Janeway Apartments to new Janeway/General Hospital Site
- Renovations commenced for General Hospital Labs
- Renovations to St. Clare's Laboratory
- Provided adequate service to clients during two strikes
- Completed a Registered Users List of physicians using the Laboratories at the HCCSJ
- Acquired a new karyotyping system for Genetics Laboratory
- Acquired a video retrieval system at St. Clare's to allow images to be transported over the internet
- Converted most of the temporary/casual positions to permanent
- Several staff members were successful in earning baccalaureates degrees during evening hours
- Four Residents in Pathology successful in passing their FRCPC exams
- Division of Pathology successful in obtaining three external grants

CHALLENGES

- Consolidation of staff and Laboratory from Grace
- Continued consolidation of equipment and procedures
- Conversion of casual positions to permanent and all the associated staff movements
- Ongoing renovations at General Site and St. Clare's Site
- Illegal Strike, October, 2000
- Serving of 8,090 hours of suspensions to staff
- Legal Strike, April, 2001
- Continuation of full range of services in lieu of budget restraints
- Adequately address utilization issues
- Keep up with demands for new testing especially in the field of Molecular and Cytogenetic testing
- Staff morale
- Capital equipment funding
- Long lineups at our out patient blood collection areas

KEY DIRECTIONS/OBJECTIVES

- Electronic reporting to physicians' offices and other hospitals
- To expand Genetics services
- To expand off site blood collection services
- To further consolidate testing
- To explore preanalyzing instrumentation opportunity
- Laboratory control for point of care testing across all programs
- To continue to improve staff morale, job satisfaction, and recruitment of staff
- To expand utilization issues
- To pursue external proficiency opportunities with other provinces

Balanced Scorecard		GOALS			
Laboratory Program		To provide a comprehensive quality service of the highest standard within available resources	To achieve optimal use of existing resources	To monitor/improve quality of work life	To support and encourage education and research activities
P E R S P E C T I V E S	CUSTOMER	<ul style="list-style-type: none"> * Quick turn around times for reports * # Complaints * # Compliments 	<ul style="list-style-type: none"> * # Units * # In Patients * # Out Patients * No duplication of specialized testing 	* User Satisfaction Survey	<ul style="list-style-type: none"> * Support research studies * Partner with colleges * High school co-op program * Lab newsletter (2 issues)
	INNOVATION & LEARNING	<ul style="list-style-type: none"> * Implement clinical practice guidelines * Staff credentials * Staff recruitment * External Proficiency Tests * New procedures 	<ul style="list-style-type: none"> * Standardization * Consolidation * Reduction of duplication * Equipment improvements * Standard computer * Changes in staff schedules 	* Continuing Education	<ul style="list-style-type: none"> * Teleconferences * Staff enrolled in baccalaureates program * Attendance at conferences * Frontline management * Focus group for Genetics * Partner with Michener Institute in Toronto for training site for Genetics students
	FINANCIAL	<ul style="list-style-type: none"> * Total Budget * Cost per unit * Revenue generated 	<ul style="list-style-type: none"> * Budget variances * Work/paid hour * Cost per test * Overtime costs * Total service cost/weighted case * Total worked hours/weighted case 	<ul style="list-style-type: none"> * WCC claims * Sick leave costs * Orientation costs 	* Education budget
	INTERNAL BUSINESS	<ul style="list-style-type: none"> * Staff training * New equipment purchased * Performance evaluation * Attendance management * Adequate staffing levels 	<ul style="list-style-type: none"> * Workload statistics * Avoidance of duplication * Upgrade equipment * Centralized testing 	<ul style="list-style-type: none"> * Staff injuries * Grievances * Grievances settled * Healthy work safe environment 	<ul style="list-style-type: none"> * Fire safety * WHMIS training * In house education * Workshops/seminars * Conference attendance

Customer (how the consumer views us)	98/99	99/00	00/01	Internal Business (can we continue to improve)	98/99	99/00	00/01
◆ Total Workload Units	22,043,632	21,082,822	21,099,960	◆ Total Occurrences	NA	26	57
◆ % Workload In Patients	22	22	21	◆ Total Grievances	15	7	65
◆ % Workload Out Patients	61	62	63	◆ Grievances Settled	NA	5	4
◆ Total Tests Performed	5,998,296	6,142,703	6,172,535	◆ % Staff Evaluations	0	10	22
◆ Total Patient Blood Tests	298,799	334,352	269,310	◆ SL Hours/FTE	79	84.4	82.83
◆ Total Out Patient Blood Tests	172,420	173,285	182,433	◆ WCC Hours/FTE	13	14	20.91
◆ Complaints		4	3	◆ Worksafe Audits	4	4	2
◆ Compliments		4	2	◆ External Inspections	1	1	0
◆ User Satisfaction Survey	3	0	0	◆ # Staff Suspended			216
◆ College of the North Atlantic Students	10	10	20	◆ Hours of Suspensions owed			8,090
				◆ Hours of Suspensions served (May)			5,749
Innovation & Learning (where we must excel)	98/99	99/00	00/01	Financial (how we look to the board and public)	98/99	99/00	00/01
◆ External Proficiency Survey	4	3	4	◆ Total Budget	15,175,433	15,281,830	15,909,066
◆ % Proficiency Survey Passed	99	99	99	◆ Actual Budget	15,167,193	15,951,313	16,228,178
◆ # Tests in Proficiency Survey	1,072	804	804	◆ % Variance	-0.05	+4.2	+2
◆ New Procedures	Yes	Yes	Yes	◆ % of Budget Salary	73	73	73
◆ % Staff Credentials (technical)	100	100	100	◆ % of Budget Supplies	27	27	27
◆ Frontline leadership (management training sessions - HR)	NA	3	14	◆ Total Revenue	171,783	459,987	514,580
◆ Technical staff enrolled in development			32	◆ Avg. Cost/Test	2.53	2.49	2.63
				◆ Avg. Cost/Unit	0.69	0.72	0.77
				◆ FTE	252.5	252.5	250.3
				◆ Total Paid Hours	489,011	NA	475,209
				◆ % Worked to Paid Hours			80.3
				◆ Total Worked Hours/weighted case, adult			1.93
				◆ Total Service Costs/weighted case, adult			\$77.01

NA - indicates data not available

EXPLANATION OF BALANCED SCORECARD FINDINGS

It should be noted that this reporting period includes a seven day illegal wildcat strike. During this period, workloads were reduced to emergencies and in most cases no testing whatsoever. This will be reflected in various indicators.

CUSTOMER PERSPECTIVE

Workload Units

This is the second year since unit collection procedures were standardized allowing for meaningful comparisons to the previous year.

Despite a seven day illegal strike, we still experienced a slight increase in total Laboratory units. All Divisions of the Laboratory did not experience growth at the same rate, some showed increases and some were relatively constant.

The percentage of out patient to in patient workload remained about the same as other years. It showed that only 21% of our total workload is from in patients. The high out patient percentage is due to:

1. Specimens referred from other centers across the province
2. Out patients from clinics at the HCCSJ
3. Walk in patients from community physicians

All aspects related to the recording of turn around times are captured on the HIS system. Times vary with the test being requested. Turn around times are well within the accepted ranges.

This year we received three official written complaints, two had to do with out patient blood collection issues and one had to do with a delay in reporting.

With the opening of an off site blood collection center at the Waterford Site, we received many positive calls mainly through the hot line, but after nine months of operation, the tone of the phone calls is changing. This change is because of longer lineups and cramped space. This is a general complaint at our three adult out patient blood collection centers. The need for expanded out patient blood collection areas is a major priority.

This past year saw many major changes such as the closing of the Grace, the moving of the Janeway, and the opening of the Waterford blood collection center. It was decided not to do a user satisfaction survey until all consolidation is completed.

The Program continues to partner with the College of the North Atlantic and this year, in addition to our regular rotations for Medical Laboratory Technology students, two orientations were held for electronic students.

INNOVATION & LEARNING

The Laboratory continues to subscribe to several external proficiency surveys covering all disciplines. These surveys provide unknown samples that are sent to our Laboratory for analysis. The tests are reported and our Laboratory is graded and compared to Laboratories all across North America. The Laboratory continues to excel and our overall pass rate exceeds 99%.

This past year many of our management and technical staff attended seminars, workshops, etc., to upgrade their skills. Examples of these were:

- a) Cytology Seminar - in Grand Falls, attended by 8 staff

- b) Management Development Sessions - 11 sessions attended by Laboratory Managers
- c) Registered Technologists (5) enrolled in evening courses for baccalaureate degree
- (d) Students (2) enrolled in Clinical Genetics Program at Michener Institute in Toronto
- (e) Senior staff member (1) attended training session at Michener Institute on Genetic teaching
- (f) Technologist (1) received training in Stem Cell procedures
- (g) Technologist (1) attended conference on Transfusion Medicine
- (h) Technologist (1) attended conference on Medical Microbiology and Infectious Diseases
- (i) Staff (2) received training in fertility

This past year saw the introduction of several new tests. Testing this year was offered on FK506, a new drug to monitor patients who have undergone organ transplants. **New money for new development is a major problem.** In Biochemistry, a new policy was implemented requiring written justification by the physician for low volume expensive tests.

The capital equipment money available for this year was spent in the following areas:

- (1) Microscopes for Pathologists

- (2) Genetic Karyotyping equipment
- (3) Ultra cold freezer for Stem Cell Transplant

At present, a tender has gone out for equipment to report maternal serum triple screen testing. This capital spending will result in improved services for the Program.

INTERNAL BUSINESS

There are significant increases this past year in the number of occurrences and grievances. The increase in occurrences is probably the result of the standardization of policies across sites. In the past, the protocol for the reporting of occurrences differed from site to site particularly the reporting of occurrences in relation to mislabeled specimens. The increased number of grievances is due to several reasons:

- (1) The result of many suspensions as a result of the illegal strike
- (2) The result of increased observation by the union
- (3) Activities related to recruitment

Staff evaluations are ongoing and to date 22% of the total staff are completed.

The number of sick leave hours and WCC hours per full time equivalent is still less than the corporate average.

This year excess demands were made on the Laboratory to accommodate the many suspension hours that were given to staff as a result of actions associated with the illegal strike. There were 8,090 suspension hours given in the form of a reprimand from the corporation. In addition, staff were given fines by the court. Needless to say, this has caused a lot of hard feelings on the part of the staff.

FINANCIAL

The actual budget was 2.0% greater than budgeted. Much of this could be accounted for by the delay in the closing of the Janeway.

Total revenue increased from \$90,600 to \$514,580.

Two new benchmarking comparisons of Canadian hospitals conducted by the Hay Group showed favorable results regarding the efficiency of Laboratory resources when compared to other Canadian centers per weighted case. These were:

- (1) Services, total cost per weighted case, Adult \$77.01, Canadian average \$125.13
- (2) Services, total cost per weighted case, Pediatric \$91.44, lowest in Canada
- (3) Teaching hospital 75th percentile, \$101.10
- (4) Total worked hours per weighted case (acute procedures), Adult 1.93 hours, Canadian average 2.8
- (5) Total worked hours per weighted case (acute procedures), Pediatric 2.46 hours

These figures compare very favorably to other centers across Canada.

The present FTE is 250.3 which is 2.2 FTE less than last year. However, this includes 5.5 new positions that were approved, 4.5 blood collectors to offer 24 hour blood collection at St. Clare's and 1 new Stem Cell Technologist. The total number of redundancies last year was 7.7 FTE.

LABORATORY MEDICINE PROGRAM
HEALTH CARE CORPORATION OF ST. JOHN'S

QUALITY INITIATIVES REPORT

April 1, 2001 - March 31, 2002

Submitted by: Terry Gulliver
Program Director

LABORATORY MEDICINE PROGRAM
QUALITY INITIATIVES REPORT 2001 – 2002

EXECUTIVE SUMMARY

The Laboratory Medicine Program is one of the large clinical programs within the Health Care Corporation of St. John's with approximately 265 staff that includes Laboratory Physicians, Technologists, Technicians, Assistants, and Clerical Support.

The Program is structured to provide services based upon Laboratory Medicine disciplines resulting in seven major divisions. The approximately \$19 million in annual budget of the program is allocated to each division to provide the most efficient and the highest quality of laboratory services. The following is a breakdown of the seven divisions and the approximate percentage each division is allocated of the laboratory budget:

Biochemistry	32%
Haematology	19%
Anatomical Pathology	10%
Specimen Collection	10%
Microbiology	10%
Immunology/Genetics	9%
Cytology	5%
Clerical Administration	5%

The past fiscal year saw many changes and challenges within the Program. This is no different than in other years as Laboratory Medicine is an ever changing profession.

The first challenge of the year was on April 1, 2001, there was a strike by all NAPE employees. This meant that laboratory services were reduced to only emergency requests for the period of the strike. The Laboratory Managers along with essential staff provided by the union ensured that patients received emergency laboratory services.

After several years of planning, the Janeway Child Health Centre moved in May, 2001, and therefore all laboratory services from the former Janeway site were brought into the General site. While most of the laboratory services from the Janeway were integrated into existing laboratories at the General site, there were several exceptions:

- Maintained separate pediatric blood collection unit
- Maintained stat lab in Janeway Neonatal ICU
- Created Biochemical Genetics Unit
- Created new Clinical Genetics Laboratory (Cytogenetics and Molecular Genetics)

Program leadership changes occurred in September, 2001. The Program Director (Vern Whelan) retired and was replaced with one of the existing Laboratory Managers (Terry Gulliver). In addition, a number of management positions were made redundant. The above changes resulted in the Program reducing from nine Division Managers to seven and each Division Manager now has corporate wide responsibilities.

Early 2002, the Director received the report from the HAY Management Group specific to the Program. This report initially presented a major challenge as the statistics used by the HAY Group were not reflective of the Program's actual statistical workload. The majority of the recommendations from the HAY report are currently in the planning stages and will be reflected in next year's annual QI Report.

The following outlines two of the areas of the program that had significant challenges or changes in the past year:

- New Stem Cell Transplant Lab opened
- Awarded tender for new Biochemistry equipment corporate wide including equipment for pre-analytical automation of specimen processing

CHALLENGES

- Strike - April, 2001
- Consolidation of staff/services from Janeway to General site
- Planning for major renovations of Laboratory at General site
- Providing high quality laboratory services within existing resources
- Change in program leadership/restructuring
- Dealing with labor management issues
- Keeping abreast with new technology/equipment within capital equipment budget
- Overcrowding in our Out Patient Specimen Collection Departments
- Quality of work life issues for staff
- Demands for new laboratory services/testing
- HAY Operational Report
- CCHSA
- Properly labeled specimens
- Meeting service expectations of Child Health (timely specimen collection and transport)

ACHIEVEMENTS

- Provided essential services during Strike - April, 2001
- Smooth transition of staff services from Janeway to General site
- Renovations, after a long delay, have finally started at the General site
- Funding for two Genetics Technologists positions
- Successfully reorganized program management structure and recruited new Pathology Manager and Immunology/Genetics Manager
- Awarded Biochemistry tender to upgrade Biochemistry Laboratories at the General, St. Clare's and Bell Island
- Purchased pre-analytical power processor for specimen sorting section (implementation August, 2002)
- Upgraded several Pathologists' microscopes
- Upgraded DNA Gel Documentation System
- Successful Accreditation
- Detailed response to HAY Operational Report
- Updated several Laboratory Policies
- Provided professional development for staff
- Successful evaluation of electronic reporting to physician's offices
- Dedicated Transfusion Safety Officer position implemented
- Successful opening of Stem Cell Transplant Lab
- Inservice of nursing units at General site regarding transfusion reaction issues

KEY DIRECTIVES/OBJECTIVES

- Develop “Program First” philosophy within laboratory management team
- Improve operational efficiency of the program by:
 - Improve equipment technology in specimen sorting
 - Lease new flow cytometer for Immunology
 - Purchase tandem mass spectrometer for Biochemistry
 - Purchase/lease automated blood banking system
 - Implementing HAY productivity recommendations
 - Consolidate Microbiology services
 - Initial planning for core laboratory at St. Clare’s
 - Reduce patient waiting times in OPD specimen collection area
 - Implement Medinet link with other health care regions
 - Consolidate/realign laboratory testing
- Oversee laboratory renovations at General site
- Meet budget targets for 2002/03
- Reroute Waterford specimens directly to General site bypassing St. Clare’s
- Obtain funding for one additional Genetics Technologist

Balanced Scorecard		GOALS		
Laboratory Program		To provide quality care service to clients of Laboratory Program.	To use resources efficiently and effectively.	To provide a positive work environment to staff.
P E R S P E C T I V E S	CUSTOMER	<ul style="list-style-type: none"> * Quick turn around times for reports * # Complaints * # Compliments 	<ul style="list-style-type: none"> * # Units * # In Patients * # Out Patients * No duplication of specialized testing 	<ul style="list-style-type: none"> * User Satisfaction Survey * Support research studies * Partner with colleges * High school co-op program
	INTERNAL BUSINESS	<ul style="list-style-type: none"> * Staff training * New equipment purchased * Performance evaluation * Attendance management * Adequate staffing levels 	<ul style="list-style-type: none"> * Workload statistics * Avoidance of duplication * Upgrade equipment * Centralized testing 	<ul style="list-style-type: none"> * Staff injuries * Grievances * Grievances settled * Healthy work safe environment * Fire safety * WHMIS training
	FINANCIAL	<ul style="list-style-type: none"> * Total Budget * Cost per unit * Revenue generated 	<ul style="list-style-type: none"> * Budget variances * Overtime costs * Productivity statistics 	<ul style="list-style-type: none"> * WCC claims * Sick leave costs * Orientation costs * Education budget
	INNOVATION & LEARNING	<ul style="list-style-type: none"> * Implement clinical practice guidelines * Staff credentials * Staff recruitment * External Proficiency Tests * New procedures 	<ul style="list-style-type: none"> * Standardization * Consolidation * Reduction of duplication * Equipment improvements * Standard computer * Changes in staff schedules * Managers receive program information 	<ul style="list-style-type: none"> * Continuing Education * Teleconferences * Staff enrolled in baccalaureates program * Attendance at conferences * Frontline management * Partner with Michener Institute as a training site for Genetics students

Customer (how the consumer views us)	99/00	00/01	01/02	Internal Business (can we continue to improve)	99/00	00/01	01/02
◆ Complaints	4	3	24	◆ Total Workload Units	21,082,822	21,099,960	21,526,411
◆ Compliments	4	2	5	◆ Total Pt Care Units	NA	NA	20,307,552
◆ User Satisfaction Survey	No	No	No	◆ % Workload In Patients	22	21	21
◆ College of the North Atlantic Students	10	20	10	◆ % Workload Out Pts	62	63	63
◆ Genetics Students	0	4	4	◆ Total Tests Performed	6,142,703	6,172,535	6,308,460
				◆ Total Pt Blood Tests	334,352	269,310	278,727
				◆ Total Occurrences	26	57	71
				◆ Total Grievances	7	65	15
				◆ Grievances Settled	5	4	5
				◆ % Staff Evaluations	10	22	10
				◆ Worksafe Audits	4	2	2
				◆ External Inspections	1	0	2
Innovation & Learning (where we must excel)	99/00	00/01	01/02	Financial (how we look to the board and public)	99/00	00/01	01/02
◆ External Proficiency Survey	3	4	4	◆ Total Budget	15,281,830	15,909,066	18,574,950
◆ % Proficiency Survey Passed	99	99	99	◆ Actual Budget	15,951,313	16,228,178	18,633,446
◆ # Tests in Proficiency Survey	804	804	804	◆ % Variance	+4.2	+2	+0.3
◆ New Procedures	Yes	Yes	Yes	◆ % of Budget Salary	73	73	74
◆ % Staff Credentials (technical)	100	100	100	◆ % of Budget Supplies	27	27	26
◆ Management/Leadership Training	3	14	3	◆ Total Revenue	459,987	514,580	551,943
◆ Technical staff enrolled in development	NA	32	50	◆ Avg. Cost/Unit	0.72	0.77	0.87
◆ Education Hours	NA	NA	1,395.5	◆ FTE	252.5	250.3	240.7
				◆ Total Paid Hours	NA	475,209	492,557
				◆ Total Worked Hours	NA	NA	397,056
				◆ % Worked to Paid Hours		80.3	81
				◆ Worked Hous/Patient Care Workload Unit	NA	NA	0.0196
				◆ SL Hours/FTE	84.4	82.83	78.12
				◆ WCC Hours/FTE	14	20.91	11.17

NA - indicates data not available

EXPLANATION OF BALANCED SCORECARD FINDINGS

Customer Perspective

- While the number of complaints greatly increased, our compliments also increased. The vast majority of complaints are generally due to long wait times for blood collection in our out patient areas.
- Turn around times are within accepted ranges.
- The Program continued its partnership with both the College of the North Atlantic and the Michener Institute for technologists clinical training.

Internal Business

- Total Laboratory workload units and number of tests performed increased by approximately 2% while the percentage of in patient versus out patient workload remained the same.
- The General site receives a large amount of referred work from other Health Care Boards as we are the provincial reference center.
- Approximately 10% of staff had performance evaluations completed. Each employee should have an evaluation once every three years so approximately half of staff have had evaluations in the past three years.
- The Program continues to follow fire safety regulations, WHMIS regulations and to provide a safe work environment for its employees.
- The Program continues to assess testing methods and centralize testing where possible.
- The number of occurrences increased from 57 to 71 and of those 20 required minor intervention. Considering that the Program interacted with over 278,000 patients and performed more than 6 million tests, this number of 71 is still very small.
- The total number of grievances drastically reduced from 65 to 15 and of those 15, 5 have been settled.

Innovation & Learning

- The Program scored very well in its participation of several external proficiency programs that cover all disciplines.
- Several new procedures were added to our Genetics Laboratory, Pathology, and Haematology.
- All technical staff are credentialed by the CSMLS.
- The Program provided staff with support for professional development. In addition to in house education sessions, the program supported approximately 50 staff to attend the CSMLS National Congress held in St. John's, June 2001.
- The Program leased new Biochemistry equipment that should improve the laboratory's performance.

- The Program continues to adjust staff schedules to use resources as efficiently as possible.
- In order to address issues of specimen labeling, program staff are working with QI and IM&T to explore bedside labeling devices.

Financial

- The number of sick leave hours and WCC hours decreased from the previous year. The Program continues to be below the HCCSJ average for both indicators.
- The Program overspent by 0.3% and this occurred in the last month of the fiscal year as we signed a new reagent lease for our Biochemistry Departments.
- The total Program budget increased by over \$2 million, however, most of this was for salaries as laboratory staff signed a new collective agreement and received substantial increases due to an occupational review.
- Cost per test increased, however, this is to be expected as salaries increased by an average of 13%.
- Worked hours per patient care workload unit were below the HAY benchmark.
- Number of FTE's decreased as both management positions and several technical positions were eliminated.
- Laboratory revenue increased again this year.

LABORATORY MEDICINE PROGRAM
HEALTH CARE CORPORATION OF ST. JOHN'S

QUALITY INITIATIVES REPORT

April 1, 2002 - March 31, 2003

Submitted by: Terry Gulliver
Program Director

LABORATORY MEDICINE PROGRAM
QUALITY INITIATIVES REPORT 2002 – 2003

EXECUTIVE SUMMARY

The Laboratory Medicine Program is one of the support clinical programs with approximately 265 staff including Laboratory Physicians.

The Program is structured to provide services based upon Laboratory Medicine disciplines resulting in seven major divisions. The Program budget is approximately \$19 million and produces approximately 23 million workload units. The budget and workload are allocated as follows:

<u>Division</u>	<u>% Budget</u>	<u>% Workload</u>
Biochemistry	32.3	31.7
Haematology	17.8	16.0
Anatomical Pathology	9.3	10.4
Specimen Collection	12.0	14.7
Microbiology	8.6	8.3
Immunology/Genetics	10.6	11.7
Cytology	5.7	4.7
Clerical Administration	3.3	3.1

A large percentage of the Program's workload is comprised of specialized laboratory procedures that are only performed by the HCCSJ for the province. As the provincial referral center, this provides many challenges and opportunities for the Program.

Early in the year, the HAY Operational Report was released which included recommendations for the program. The Program implemented several of the recommendations throughout the year, however, it was recognized that some of the major recommendations would require in depth planning and implementation would take up to

two to three years. Consequently, a great deal of time and effort was dedicated during the year to formulate a three-year Laboratory Strategic Plan. This was completed in March and includes detailed plans to implement the approved recommendations from the HAY Report and several other major objectives for the Program.

The three-year plan is both realistic and achievable and will ensure that the Program is a recognized leader within Canada. The Program continued to build on its strengths last year and will do so in the next 3 years.

- Efficient organizational structure
- Highly productive service
- Advanced technology
- Comprehensive scope of testing
- Efficient use of resources
- Support of Executive Management

CHALLENGES

- Ongoing renovations of Laboratory at General site
- Providing high quality laboratory services within existing resources
- Dealing with labor management issues
- Keeping abreast with new technology/equipment within capital equipment budget
- Implementing and training staff on new technology
- Overcrowding in our Out Patient Specimen Collection Departments
- Quality of work life issues for staff
- Demands for new laboratory services/testing
- Implementation of HAY Operational Report recommendations
- Meeting service expectations of Child Health (timely specimen collection and transport)
- Recruitment/retention of staff
- Post-physician strike

ACHIEVEMENTS

- Decreased paid hours by 10,000
- Increased workload by 7%
- Implemented capture of non-patient care workload
- Formal evaluation of goals and objectives with Managers
- Upgrade of Laboratory Information System

ACHIEVEMENTS (cont'd)

- Planning for Medinet link with Public Health Lab
- Completed Phase 1 and 2 of Laboratory renovations at the General
- Increased Genetics Technologists positions
- Updated Laboratory Policies
- Provided professional development for staff
- Implementation of electronic reporting to physician's offices
- Implementation of corporate-wide recall of staff
- Significant decrease in grievances filed
- Change over of most Biochemistry equipment to new technology
- Redirected patients for adult blood collection to Janeway/Pre-Admission Clinic
- Added new tests for osteoporosis and breast cancer markers
- Expanded Laboratory services for Bell Island
- Acquired the following new and/or upgraded technology:
 - 2 DNA Sequencers
 - 1 Robotic Microplate System
 - Tandem Mass Spectrometer
 - Automated Blood Bank System
 - Platelet Function Analyzer
 - Automated Flow Cytometry System
 - New Allergy/Autoimmune Testing Equipment
 - Automated Pre-Analytical Testing with Power Processor
 - Upgraded several Microscopes

KEY DIRECTIVES/OBJECTIVES

- Improve operational efficiencies within the program:
 - Consolidate Microbiology services
 - Consolidate technical Pathology services
 - Initial planning for core Haematology/Biochemistry Laboratory at St. Clare's
 - Reduce patient waiting times in OPD specimen collection areas
 - Proposal for consolidated adult walk-in specimen collection to a new off-site center
 - Implement Medinet link with other health care regions
 - Implement Medinet link with Public Health Lab
 - Consolidate/realign laboratory testing within the Program
 - Reroute Waterford specimens directly to General site bypassing St. Clare's
- Oversee continued laboratory renovations at General site
- Meet budget targets for 2003/04

KEY DIRECTIVES/OBJECTIVES (cont'd)

- Increase staff for Genetics service
- Maintain HAY productivity benchmarks
- Standardize specimen collection services within the HCCSJ
- Provide new and/or in-province testing
 - Alcohol Fetal Syndrome (new)
 - Trace metal testing (in-province)
 - Anti-rejection drug testing (in-province)
 - Expand breast cancer markers (in-province)
 - DNA sequencing (in-province)
 - Identification of unusual organisms (in-province)
- Provide on-site diagnostic Cytology services for the HSC
- Acquire and/or update laboratory technology
 - New Haematology/Coagulation reagent contract for all sites
 - Atomic Absorption Spec for trace metal testing
 - Upgrade protein electrophoresis technology
 - Upgrade St. Clare's blood banking system
 - Replace Gas Chromatograph
 - New automated pap smear screener
 - Replace microscopes in several divisions
 - New real time PCR for DNA testing
 - Upgrade fertility technology

Balanced Scorecard		GOALS		
Laboratory Program				
P E R S P E C T I V E S		To provide quality care service to clients of Laboratory Program.	To use resources efficiently and effectively.	To provide a positive work environment to staff.
	CUSTOMER	<ul style="list-style-type: none"> * Quick turn around times for reports * # Complaints * # Compliments * # Occurrences 	<ul style="list-style-type: none"> * # Workload Units * % In Patients * % Out Patients 	<ul style="list-style-type: none"> * User Satisfaction Survey * Support research studies * Partner with colleges * High school co-op program
	INTERNAL BUSINESS	<ul style="list-style-type: none"> * Properly trained staff * Current technology * Adequate staffing levels * Sufficient resources 	<ul style="list-style-type: none"> * Workload statistics * Upgrade and/or acquire latest equipment * Centralized testing where possible * Reallocate resources within Program * Top quartile productivity ranking 	<ul style="list-style-type: none"> * Provide Safe Work Environment * WCC claims * Fire Safety Training * WHMIS training * TDG training * Performance evaluation * Grievances/Labour relations
	FINANCIAL	<ul style="list-style-type: none"> * Adequate Budget * Revenue generated 	<ul style="list-style-type: none"> * Monitor monthly variances * Productivity statistics * Cost per workload unit * Proper staffing levels 	<ul style="list-style-type: none"> * Staff relief costs * Orientation costs * Education costs * Monitor attendance
	INNOVATION & LEARNING	<ul style="list-style-type: none"> * Clinical practice guidelines * Staff credentials * Staff recruitment/retention * External Proficiency Testing * New testing 	<ul style="list-style-type: none"> * Standardization of services * Consolidation where possible * Upgrade LIS * New Medinet links * Acquire latest technology 	<ul style="list-style-type: none"> * Support professional development * Teleconferences * Continuing education programs * Attendance at conferences * Frontline leadership * Partner with Michener Institute as a training site for Genetics students

Customer (how the consumer views us)	00/01	01/02	02/03	Internal Business (can we continue to improve)	00/01	01/02	02/03
◆ Complaints	3	24	15	◆ Total Workload Units	21,099,960	21,526,411	23,005,116
◆ Compliments	2	5	20	◆ Total Pt Care Units	NA	20,307,552	21,465,972
◆ User Satisfaction Survey	No	No	No	◆ % Workload In Patients	21	21	21
◆ College of the North Atlantic Students	20	10	10	◆ % Workload Out Pts	63	63	65
◆ Genetics Students	4	4	2	◆ Total Tests Performed	6,172,535	6,308,460	6,615,061
◆ Occurrences	57	71	44	◆ Total Pt Blood Tests	269,310	278,727	293,571
				◆ Total Grievances Filed	65	15	6
				◆ % Staff Evaluations	22	10	10
				◆ Worksafe Audits	2	2	2
				◆ External Inspections	0	2	1
Innovation & Learning (where we must excel)	00/01	01/02	02/03	Financial (how we look to the board and public)	00/01	01/02	02/03
◆ External Proficiency Survey	4	4	5	◆ Total Budget	15,909,066	18,574,950	18,609,488
◆ % Proficiency Survey Passed	99	99	99	◆ Actual Budget	16,228,178	18,633,446	18,817,112
◆ # Tests in Proficiency Survey	804	804	812	◆ % Variance	+2	+0.3	+1.1
◆ New Procedures	Yes	Yes	Yes	◆ % of Budget Salary	73	74	73
◆ % Staff Credentials (technical)	100	100	100	◆ % of Budget Supplies	27	26	27
◆ Management/Leadership Training	14	3	4	◆ Total Revenue	514,580	551,943	610,678
◆ Technical staff enrolled in development	32	50	10	◆ Avg. Cost/Unit	0.77	0.87	0.82
◆ Education Hours	NA	1,395.5	2,277 9.4/FTE	◆ FTE	250.3	240.7	241.65
				◆ Total Paid Hours	475,209	492,557	482,373
				◆ Total Worked Hours	NA	397,056	391,830
				◆ % Worked to Paid Hours	80.3	81	81.5
				◆ Worked Hours/Patient Care Workload Unit	NA	0.0196	0.0183
				◆ SL Hours/FTE	82.83	78.12	81.54
				◆ WCC Hours/FTE	20.91	11.17	10.07

NA - indicates data not available

EXPLANATION OF BALANCED SCORECARD FINDINGS

Customer Perspective

- The number of complaints decreased. The vast majority of complaints are generally due to long wait times for blood collection in our out patient areas.
- The number of compliments increased.
- Turn around times are within accepted ranges and are improving.
- The Program continued its partnership with both the College of the North Atlantic and the Michener Institute for technologists clinical training.
- Occurrences decreased.

Internal Business

- Total Laboratory workload units increased 7%.
- Patient care workload increased 5.5%.
- The General site receives a large amount of referred work from other Health Care Boards as we are the provincial reference center. This is reflected in the high percentage of overall out patient work.
- Approximately 10% of staff had performance evaluations completed.
- The Program continues to follow fire safety regulations, WHMIS regulations and to provide a safe work environment for its employees.
- The Program continues to centralize testing where possible.
- 15,000 additional blood collections
- Grievances filed further reduced.

Innovation & Learning

- The Program scored very well in its participation of several external proficiency programs that cover all disciplines.
- New procedures were added, osteoporosis and breast cancer markers.
- All technical staff are credentialed by the CSMLS.
- The Program continues to provide staff with significant support for professional development.
- New technology acquired by several divisions.

Financial

- The Program continues to be below the HCCSJ average for attendance indicators.
- Workload increased 7%, total paid hours decreased by 10,000.
- Budget overspent by 1.1%.
- Revenue increased by \$60,000.
- Cost per test decreased by 5%.
- Maintained top quartile productivity ranking.

LABORATORY MEDICINE PROGRAM
HEALTH CARE CORPORATION OF ST. JOHN'S

QUALITY INITIATIVES REPORT

April 1, 2003 - March 31, 2004

Submitted by: Terry Gulliver
Program Director

LABORATORY MEDICINE PROGRAM
QUALITY INITIATIVES REPORT 2003 – 2004

EXECUTIVE SUMMARY

The Program is structured to provide services based upon Laboratory Medicine disciplines resulting in seven major divisions with approximately 300 staff and physicians. The budget is \$19 million and produces 24 million workload units. The budget and workload are allocated as follows:

<u>Division</u>	<u>% Budget</u>	<u>% Workload</u>
Biochemistry	31%	33%
Haematology	18%	17%
Anatomical Pathology	10%	10%
Specimen Collection	12%	12%
Microbiology	9%	8%
Immunology/Genetics	11%	11%
Cytology	6%	5%
Clerical Administration	3%	3%

A large percentage of the Program's workload is comprised of specialized laboratory procedures that are only performed by the HCCSJ for the province. As the provincial referral center, this provides many challenges and opportunities.

The Program is currently in the second year of our three-year strategic plan and continues to build on its strengths as outlined below:

- Efficient organizational structure
- Highly productive service
- Advanced technology
- Comprehensive scope of testing
- Efficient use of resources
- Support of Executive Management

CHALLENGES

- Ongoing renovations of Laboratory at General site
- Providing high quality laboratory services within existing resources
- Dealing with labor management issues
- Keeping abreast with new technology/equipment within capital equipment budget
- Implementing and training staff on new technology
- Overcrowding in our Out Patient Specimen Collection Departments
- Quality of work life issues for staff
- Demands for new laboratory services/testing
- Implementation of HAY Operational Report recommendations and Program's three-year strategic plan
- Meeting service expectations of Child Health (timely specimen collection and transport)
- Recruitment/retention of staff

ACHIEVEMENTS

- Increased workload by 5%, increased productivity, maintained cost/workload unit
- Ranked in top quartile for productivity
- Formal evaluation of goals and objectives with Managers
- Implemented Medinet link with Public Health Lab
- Provided professional development for staff
- Continued implementation of electronic reporting to physician's offices
- Significant decrease in grievances filed
- Consolidated Microbiology services to the HSC
- Reallocated resources to improve Specimen Collection services
- Rerouted all specimens from the Waterford Collection Centre to the HSC for testing
- Operation of tandem mass spec technology for anti-rejection drug testing
- Automated fertility testing and also able to provide semen storage for cancer patients
- Reduced turn around times for most Haematology/Chemistry tests and reduced turn around times for Pathology reports.
- Improved technology/equipment through capital purchases and/or negotiated reagent leases
- Increased Laboratory revenue
- Conducted a survey of 500 patients in regards to blood collection services
- Conducted a staff empowerment survey to assess management/employee relationships
- Provided funding for several Lab Assistants to write national certification exams

KEY DIRECTIVES/OBJECTIVES

- Continue to improve operational efficiencies within the program:
 - Consolidate technical Pathology services
 - Planning for core Haematology/Biochemistry Laboratory at St. Clare's
 - Reduce patient waiting times in OPD specimen collection areas
 - Presented formal proposal for consolidated adult walk-in specimen collection to a new off-site center
 - Implement Medinet link with other health care regions
 - Continue to consolidate/realign laboratory testing within the Program
- Oversee continued laboratory renovations at General site
- Meet budget targets for 2004/05
- Seek funding for Genetics service
- Maintain HAY productivity benchmarks
- Standardize specimen collection services within the HCCSJ
- Provide new and/or in-province testing
 - Trace metal testing
 - Anti-rejection drug testing by tandem mass spec
 - Provide breast cancer screening for Her-2 Neu and FISH testing
 - Identification of unusual organisms with operation of new gas chromatograph
- Provide on-site diagnostic Cytology services for the HSC
- Prepare proposal on province-wide pap smear screening service
- Monitor utilization of Laboratory services to ensure proper use by physicians
- Acquire and/or update laboratory technology as identified in the Program's five year capital equipment plan

EXPLANATION OF BALANCED SCORECARD FINDINGS

Customer Perspective

- The vast majority of complaints are generally due to long wait times for blood collection in our out patient areas.
- The number of compliments increased.
- Turn around times are within accepted ranges and are improving.
- The Program continued its partnership with both the College of the North Atlantic and the Michener Institute for technologists clinical training.
- Conducted a patient survey in regards to out patient blood collection services and views on a consolidated off-site collection center.

Internal Business

- Total Laboratory workload units increased 5%, number of tests increased 8%.
- The General site receives a large amount of referred work from other Health Care Boards as we are the provincial reference center. This is reflected in the high percentage of overall out patient work.
- Approximately 10% of staff including all managers had performance evaluations completed.
- The Program continues to follow fire safety regulations, WHMIS regulations and to provide a safe work environment for its employees.
- The Program continues to centralize testing where possible.
- Good relationship between union/management continues as indicated by the low number of grievances filed.
- Conducted a comprehensive staff empowerment survey and results were shared with each manager as a part of their evaluation.

Innovation & Learning

- The Program scored very well in its participation of several external proficiency programs that cover all disciplines.
- Supported Lab Assistants in writing national certification exams.
- All technical staff are credentialed by the CSMLS.
- The Program continues to provide staff with significant support for professional development as 20 staff attended National Lab Congress in Quebec City and 55 staff attended Provincial Lab Congress in Corner Brook.
- New technology acquired by several divisions.

Financial

- Sick Leave/FTE decreased and is below the HCCSJ average.
- Budget overspent by 3.2%, some of which were unanticipated costs.
- Revenue increased.
- Maintained cost/test even with negotiated increased compensation costs.
- Further improved productivity ranking.

Balanced Scorecard		GOALS		
Laboratory Program		To provide quality care service to clients of Laboratory Program.	To use resources efficiently and effectively.	To provide a positive work environment to staff.
P E R S P E C T I V E S	CUSTOMER	<ul style="list-style-type: none"> * Quick turn around times for reports * # Complaints * # Compliments * # Occurrences 	<ul style="list-style-type: none"> * # Workload Units * % In Patients * % Out Patients 	<ul style="list-style-type: none"> * Satisfaction Survey * Support research studies * Partner with colleges * High school co-op program * Staff Empowerment Survey
	INTERNAL BUSINESS	<ul style="list-style-type: none"> * Properly trained staff * Current technology * Adequate staffing levels * Sufficient resources 	<ul style="list-style-type: none"> * Workload statistics * Upgrade and/or acquire latest equipment * Centralized testing where possible * Reallocate resources within Program * Top quartile productivity ranking 	<ul style="list-style-type: none"> * Provide Safe Work Environment * WCC claims * Fire Safety Training * WHMIS training * TDG training * Performance evaluation * Grievances/Labour relations
	FINANCIAL	<ul style="list-style-type: none"> * Adequate Budget * Revenue generated 	<ul style="list-style-type: none"> * Monitor monthly variances * Productivity statistics * Cost per workload unit * Proper staffing levels 	<ul style="list-style-type: none"> * Staff relief costs * Orientation costs * Education costs * Monitor attendance
	INNOVATION & LEARNING	<ul style="list-style-type: none"> * Clinical practice guidelines * Staff credentials * Staff recruitment/retention * External Proficiency Testing * New testing 	<ul style="list-style-type: none"> * Standardization of services * Consolidation where possible * LIS * New Medinet links * Acquire latest technology 	<ul style="list-style-type: none"> * Support professional development * Teleconferences * Continuing education programs * Attendance at conferences * Frontline leadership * Partner with Michener Institute as a training site for Genetics students

Customer (how the consumer views us)	01/02	02/03	03/04	Internal Business (can we continue to improve)	01/02	02/03	03/04
◆ Complaints	24	15	~100	◆ Total Workload Units	21,526,411	23,005,116	24,244,109
◆ Compliments	5	20	30	◆ Total Pt Care Units	20,307,552	21,465,972	22,134,755
◆ Satisfaction Survey	No	No	Yes	◆ % Workload In Patients	21	21	21
◆ College of the North Atlantic Students	10	10	10	◆ % Workload Out Pts	63	65	64
◆ Genetics Students	4	2	4	◆ Total Tests Performed	6,308,460	6,615,061	7,177,723
◆ Occurrences	71	44		◆ Total Pt Blood Tests	278,727	293,571	287,830
				◆ Total Grievances Filed	15	6	4
				◆ % Staff Evaluations	10	10	10
				◆ Worksafe Audits	2	2	2
				◆ External Inspections	2	1	1
				◆ Staff Empowerment Survey			Yes
Innovation & Learning (where we must excel)	01/02	02/03	03/04	Financial (how we look to the board and public)	01/02	02/03	03/04
◆ External Proficiency Survey	4	5	6	◆ Total Budget	18,574,950	18,609,488	19,345,660
◆ % Proficiency Survey Passed	99	99	99	◆ Actual Budget	18,633,446	18,817,112	19,955,118
◆ # Tests in Proficiency Survey	804	812	820	◆ % Variance	+0.3	+1.1	+3.2
◆ New Procedures	Yes	Yes	Yes	◆ % of Budget Salary	74	73	74
◆ % Staff Credentials (technical)	100	100	100	◆ % of Budget Supplies	26	27	26
◆ Management/Leadership Training	3	4	5	◆ Total Revenue	551,943	610,678	627,605
◆ Technical staff enrolled in development	50	10	90	◆ Avg. Cost/Unit	0.87	0.82	0.82
◆ Education Hours	1,395.5	2,277 9.4/FTE	2,730 10.2/FTE	◆ Total Paid Hours	492,557	482,373	491,794
				◆ Total Worked Hours	397,056	391,830	397,478
				◆ % Worked to Paid Hours	81	81.5	80.8
				◆ Worked Hours/Patient Care Workload Unit	0.0196	0.0183	0.0178
				◆ SL Hours/FTE	78.12	81.54	76.37
				◆ WCC Hours/FTE	11.17	10.07	7.1

NA - indicates data not available

LABORATORY MEDICINE PROGRAM
HEALTH CARE CORPORATION OF ST. JOHN'S

QUALITY INITIATIVES REPORT

April 1, 2004 - March 31, 2005

Submitted by: Terry Gulliver
Program Director

LABORATORY MEDICINE PROGRAM
QUALITY INITIATIVES REPORT 2004 – 2005

EXECUTIVE SUMMARY

The Program is structured to provide services based upon Laboratory Medicine disciplines resulting in seven major divisions with approximately 300 staff and physicians. The budget is \$19 million and produces 23 million workload units. The budget and workload are allocated as follows:

<u>Division</u>	<u>% Budget</u>	<u>% Workload</u>
Biochemistry	31%	34%
Haematology	17%	17%
Anatomical Pathology	10%	10%
Specimen Collection	12%	13%
Microbiology	8%	7%
Immunology/Genetics	12%	10%
Cytology	6%	5%
Clerical Administration	4%	3%

A large percentage of the Program's workload is comprised of specialized laboratory procedures that are only performed by the HCCSJ for the province. As the provincial referral center, this provides many challenges and opportunities.

The Program is currently in the third year of our three-year strategic plan and continues to build on its strengths as outlined below:

- Efficient organizational structure
- Highly productive service
- Advanced technology
- Comprehensive scope of testing
- Efficient use of resources
- Support of Executive Management

CHALLENGES

- Providing services during strike of April, 2004
- November, 2004, 3 Labs at General site were flooded, however. services continued to be provided with minimal disruption
- Ongoing renovations of Laboratory at General site
- Providing high quality laboratory services within existing resources
- Dealing with labor management issues
- Keeping abreast with new technology/equipment within capital equipment budget
- Implementing and training staff on new technology
- Overcrowding in our Out Patient Specimen Collection Departments
- Demands for new laboratory services/testing
- Implementation of Program's three-year strategic plan
- Recruitment/retention of staff

ACHIEVEMENTS

- Reduced Program deficit by \$500,000 from 2003/04 to 2004/05
- Workload decreased by 4% (impact of strike)
- Increased productivity and continues to be ranked in top quartile in Canada
- Formal evaluation of goals and objectives with Managers and also completed approximately 60 performance evaluations on permanent staff
- Implemented Medinet link with Carbonear Laboratory
- Provided professional development for staff
- Continued implementation of electronic reporting to physician's offices
- Improved technology/equipment through capital purchases and/or negotiated reagent leases (automated blood banking, Tissue Tek Xpress, automated plater)
- Increased Laboratory revenue
- Conducted a staff empowerment survey to assess management/employee relationships
- Provided funding for several Lab Assistants to write national certification exams
- Increased testing by providing in-province trace metal analysis and methadone testing for Oxycontin Clinic
- Approval to switch non-GYN Cytology to a liquid based system, thereby improving quality and diagnosis
- Realigned B12, Folate, Ferritin testing from Coagulation to Biochemistry

KEY DIRECTIVES/OBJECTIVES

- Assume responsibility for blood/blood products being transferred from Canadian Blood Services
- Continue to improve operational efficiencies within the program:
 - Consolidate technical Pathology services

- Planning for core Haematology/Biochemistry Laboratory at St. Clare's
- Reduce patient waiting times in OPD specimen collection areas
- Implement Medinet link with other health care regions
- Continue to consolidate/realign laboratory testing within the Program (allergy/Elisa testing to be moved from Immunology to Renal Lab)
- Submit a plan to expand St. Clare's for adult walk-in blood collection services
- Oversee continued laboratory renovations at General site
- Meet budget targets for 2005/06
- Seek funding for Genetics service to provide a Developmental Scientist for the Laboratory
- Maintain HAY productivity benchmarks
- Prepare proposal on province-wide pap smear screening service
- Monitor utilization of Laboratory services to ensure proper use by physicians
- Acquire and/or update laboratory technology as identified in the Program's five year capital equipment plan
- Implement autoverification of routine Biochemistry/Haematology test results

EXPLANATION OF BALANCED SCORECARD FINDINGS

Customer Perspective

- The vast majority of complaints are generally due to long wait times for blood collection in our out patient areas, however, staff do receive many compliments for the service they provide.
- Turn around times are within accepted ranges and are improving.
- The Program continued its partnership with both the College of the North Atlantic and the Michener Institute for technologists clinical training.

Internal Business

- Total Laboratory workload units decreased by 4%, however, the number of tests decreased by 3% (effected by month long strike).
- The General site receives a large amount of referred work from other Health Care Boards as we are the provincial reference center. This is reflected in the high percentage of overall out patient work.
- Approximately 20% of staff including all managers had performance evaluations.
- The Program continues to follow fire safety regulations, WHMIS regulations and to provide a safe work environment for its employees.
- The Program continues to centralize testing where possible.
- Good relationship between union/management continues as indicated by the low number of grievances filed.
- Conducted a comprehensive staff empowerment survey and results were shared with each manager as a part of their evaluation.

Innovation & Learning

- Participated in Hospital Accreditation with no recommendations for Lab services.
- The Program scored very well in its participation of several external proficiency programs that cover all disciplines.
- Supported Lab Assistants in writing national certification exams.
- All technical staff are credentialed by the CSMLS.
- The Program continues to provide staff with significant support for professional development as 80 staff attended Provincial Lab Congress in St. John's.
- New technology acquired by several divisions.

Financial

- Sick Leave/FTE is below the HCCSJ average.
- Budget was over by 0.7%, however, significant improvement over 2003/04.
- Revenue increased and actual was \$665,000.
- Further improved productivity ranking.

Balanced Scorecard		GOALS		
Laboratory Program				
P E R S P E C T I V E S		To provide quality care service to clients of Laboratory Program.	To use resources efficiently and effectively.	To provide a positive work environment to staff.
	CUSTOMER	<ul style="list-style-type: none"> * Quick turn around times for reports * # Complaints * # Compliments * # Occurrences 	<ul style="list-style-type: none"> * # Workload Units * % In Patients * % Out Patients 	<ul style="list-style-type: none"> * Support research studies * Partner with colleges * High school co-op program * Staff Empowerment Survey
	INTERNAL BUSINESS	<ul style="list-style-type: none"> * Properly trained staff * Current technology * Adequate staffing levels * Sufficient resources 	<ul style="list-style-type: none"> * Workload statistics * Upgrade and/or acquire latest equipment * Centralized testing where possible * Reallocate resources within Program * Top quartile productivity ranking 	<ul style="list-style-type: none"> * Provide Safe Work Environment * WCC claims * Fire Safety Training * WHMIS training * TDG training * Performance evaluation * Grievances/Labour relations
	FINANCIAL	<ul style="list-style-type: none"> * Adequate Budget * Revenue generated 	<ul style="list-style-type: none"> * Monitor monthly variances * Productivity statistics * Cost per workload unit * Proper staffing levels 	<ul style="list-style-type: none"> * Staff relief costs * Orientation costs * Education costs * Monitor attendance
	INNOVATION & LEARNING	<ul style="list-style-type: none"> * Accreditation * Clinical practice guidelines * Staff credentials * Staff recruitment/retention * External Proficiency Testing * New testing 	<ul style="list-style-type: none"> * Standardization of services * Consolidation where possible * LIS * New Medinet links * Acquire latest technology 	<ul style="list-style-type: none"> * Support professional development * Teleconferences * Continuing education programs * Attendance at conferences * Frontline leadership * Partner with Michener Institute as a training site for Genetics students

Customer (how the consumer views us)	02/03	03/04	04/05	Internal Business (can we continue to improve)	02/03	03/04	04/05
◆ Complaints	15	~100	~50	◆ Total Workload Units	23,005,116	24,244,109	23,100,298
◆ Compliments	20	30	25	◆ Total Pt Care Units	21,465,972	22,134,755	21,192,308
◆ Satisfaction Survey	No	Yes	Yes	◆ % Workload In Patients	21	21	20
◆ College of the North Atlantic Students	10	10	11	◆ % Workload Out Pts	65	64	66
◆ Genetics Students	2	4	2	◆ Total Tests Performed	6,615,061	7,177,723	6,944,473
◆ Occurrences	44	46	51	◆ Total Pt Blood Tests	293,571	287,830	269,877
				◆ Total Grievances Filed	6	4	3
				◆ % Staff Evaluations	10	10	15
				◆ Worksafe Audits	2	2	10
				◆ External Inspections	1	1	2
				◆ Staff Empowerment Survey		Yes	Yes
Innovation & Learning (where we must excel)	02/03	03/04	04/05	Financial (how we look to the board and public)	02/03	03/04	04/05
◆ External Proficiency Survey	5	6	8	◆ Total Budget	18,609,488	19,345,660	19,133,648
◆ % Proficiency Survey Passed	99	99	99	◆ Actual Budget	18,817,112	19,955,118	19,335,470
◆ # Tests in Proficiency Survey	812	820	950	◆ % Variance	+1.1	+3.2	+1.1
◆ New Procedures	Yes	Yes	Yes	◆ % of Budget Salary	73	74	72
◆ % Staff Credentials (technical)	100	100	100	◆ % of Budget Supplies	27	26	28
◆ Management/Leadership Training	4	5	6	◆ Total Revenue	610,678	627,605	665,048
◆ Technical staff enrolled in development	10	90	100	◆ Avg. Cost/Unit	0.82	0.82	0.84
◆ Education Hours	2,277	2,730	2,597	◆ Total Paid Hours	482,373	491,794	449,745
	9.4/FTE	10.2/FTE	10.8/FTE	◆ Total Worked Hours	391,830	397,478	359,198
				◆ % Worked to Paid Hours	81.5	80.8	79.9
				◆ Worked Hours/Patient Care Workload Unit	0.0183	0.0178	0.0168
				◆ SL Hours/FTE	81.54	76.37	76.40
				◆ WCC Hours/FTE	10.07	7.1	12.31

NA - indicates data not available