



HL7 Canada 2002/2003 The Year in Review



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for Health Information
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d'information sur la santé

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The past year has been one of increased activity for HL7 Canada, both for our members and for the Secretariat. This can be seen in the heightened use of the HL7 Canada Technical Committee list serves, which had a 7-fold increase in the number of emails sent when compared to the same time period in the previous year. The number of HL7 Canada members participating at both HL7 Canada and HL7 Inc. meetings continued to grow in 2002/2003, which in turn helped further develop the HL7 family of standards internationally as well as Canadian HL7 Specifications. The HL7 Canada Secretariat has risen to meet these needs through increased coordination of national teleconferences, change proposal submissions and face-to-face meeting time at HL7 Canada Conferences.

The growth of activity in HL7 Canada has not been limited to the development of the HL7 Standards. The HL7 Canada Secretariat introduced a new membership drive and a new fee schedule as part of the continuing strategy to attract new members and promote the use of HL7 in Canada. In an effort to assist our members further, HL7 Canada launched a new website featuring more educational resources, guide books, free software and access to information spanning all aspects of HL7.

Highlights of other HL7 Canada milestones include:

- Creation of the Message Database for Canadian HL7 Message Development Projects;
- Availability of HL7 Version 2.4 on the HL7 Canada Members' website;
- Release of the HL7 Canada Guide to including HL7 in an RFP (Request for Proposal);
- Hosting of 2 HL7 Canada conferences and 1 HL7 training workshop;
- Creation of online membership and conference registration forms;
- Administration of the first HL7 Certification Exam in Canada.

HL7 Canada Director at Large Announced

In August 2002, HL7 Canada held elections for the HL7 Canada Executive Committee position of Director at Large. Guy Paterson was re-elected for another two-year term. HL7 Canada was honored to have two excellent candidates for the position and would like to thank both Michael van Campen and Guy Paterson for volunteering so much time and effort over these past few years. We look forward to working with them in the year's to come.

Updates from the Committees

Both of HL7 Canada's Technical Committees saw an increase in activity over this past year. This growth in activity is a reflection of the recognition of the importance of HL7 as *the* electronic health information communication standard in Canada.

Highlights of the Technical Committee work in 2002/2003 include:

- Implementation of the HL7 Canada change proposal approval process (Design Committee);
- Continuing development of the Pan-Canadian Client Registry Messaging Specification and migration towards HL7 Version 2.6 (Design Committee);
- Recognition and development of new Canadian requirements of the HL7 Standard (Implementation Committee and Design Committee);
- Releasing of the HL7 Canada Guide to including HL7 in Request for Proposals (Implementation Committee);
- Setting processes for HL7 Canada to facilitate local issues with HL7 (Design Committee);
- Increasing enrolment and activity on both the HL7 Canada Design and Implementation Committee list serves.

HL7 Canada Membership

2002/2003 Corporate Members

We would like to thank all of HL7 Canada's members for their contributions this year, with special acknowledgement of our Corporate Members in 2002/2003. Their commitment to HL7 is marked not only by their use of the standard, but also by their valuable input towards its ongoing development.

Table 1. 2002/2003 Corporate Members

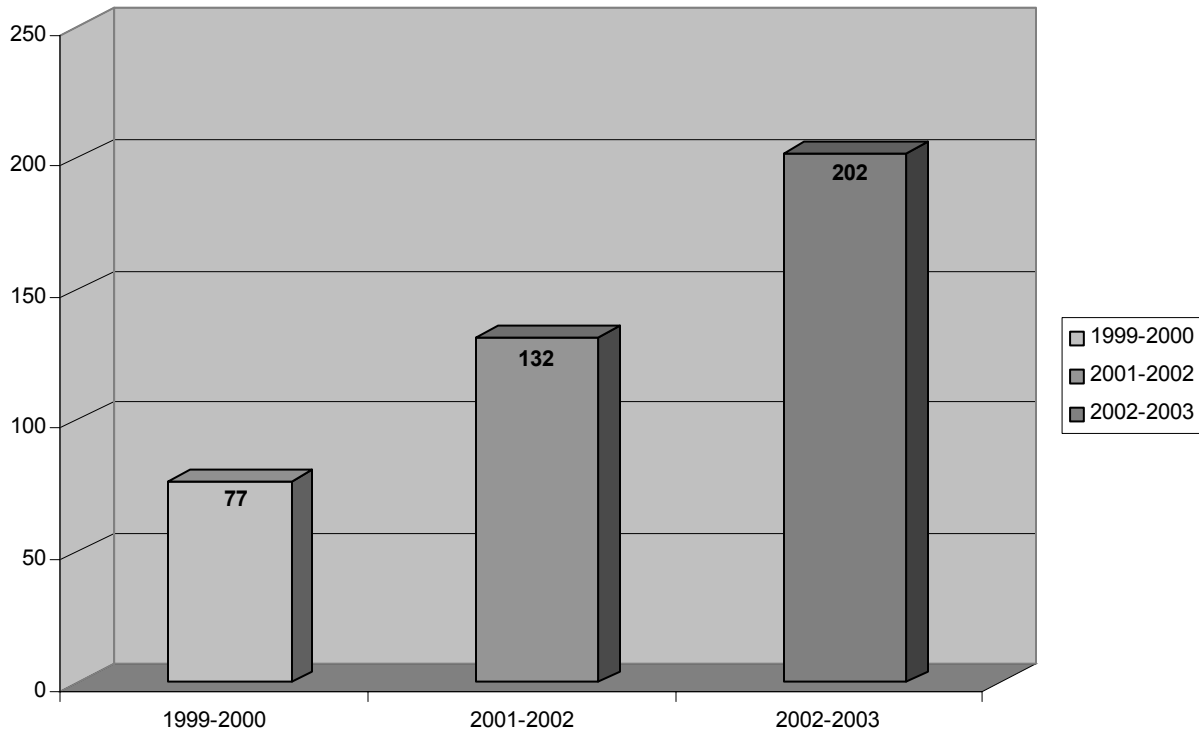
Alberta Blue Cross	Deltaware Systems Inc
Alberta Health and Wellness	DINMAR Consulting Inc.
Alpha Laboratories Inc.	EDS Canada Inc.
Atlantic Blue Cross Care	Electronic Child Health Network /
BC Ministry of Health Services & Health	UNIKOAN
Planning	ESI Canada
BCE Emergis	Fujitsu Consulting (Canada) Inc.
Calgary Health Region	Green Shield Canada
Canadian Dental Association	Health Canada
Centre Hospitalier Universitaire de Quebec	HealthCare Software Inc.
Cerner Corporation	Incana Systems Inc.
CGI Information Systems and	INETCO Systems Ltd.
Management Consultants Inc.	iINTERFACEWARE Corporation
Children and Women's Health Centre of	Killdara Corporation
BC	Le Groupe Jean Coutu, Inc.
CIHI	Logibec Groupe Information
CLINICARE Corporation	Logiclynx Technologies Inc.
COMPETE II Project	Manitoba Health
Courtyard Group Ltd	Manitoba Public Insurance
Dalhousie University	McGill University Health Centre

McKesson Information Solutions, Inc.	Regina Health District
MED2020 Health Care Software Inc.	Regional Health Authority # 6
Medical Pharmacies Group, Inc.	Saskatchewan Health
MediSolutions, Inc.	Sierra Systems Group Inc.
Ministry of Health	Software School Consulting
Momentum Healthware	SOGIQUE
New Brunswick Department of Health and Wellness	St. Michael's Hospital
Newfoundland & Labrador Centre for Health Information	Statistics Canada
Nova Scotia Department of Health	StemSoft Software Inc.
Nutritek Inc.	Synapse Project
Ontario Ministry of Health and Long Term Care	TechRx
Orillia Soldiers' Memorial Hospital	TNT Global
PEI Dept. of Health & Social Services	University Health Network
ProPharm Limited	University of Ottawa Heart Institute
QS/1 Data Systems Ltd.	University of Victoria
Quest Consulting Group, Inc.	Wide Skies Information Technologies
R.A.M.Q.	Workers Compensation board of Manitoba
	Workers' Compensation Board of British Columbia
	WorkGroup Solutions

HL7 Canada Membership Increases

Over the past three years HL7 Canada's membership has steadily increased. This growth represents the increasing use of HL 7 as the defacto standard in the electronic exchange of health information in Canada.

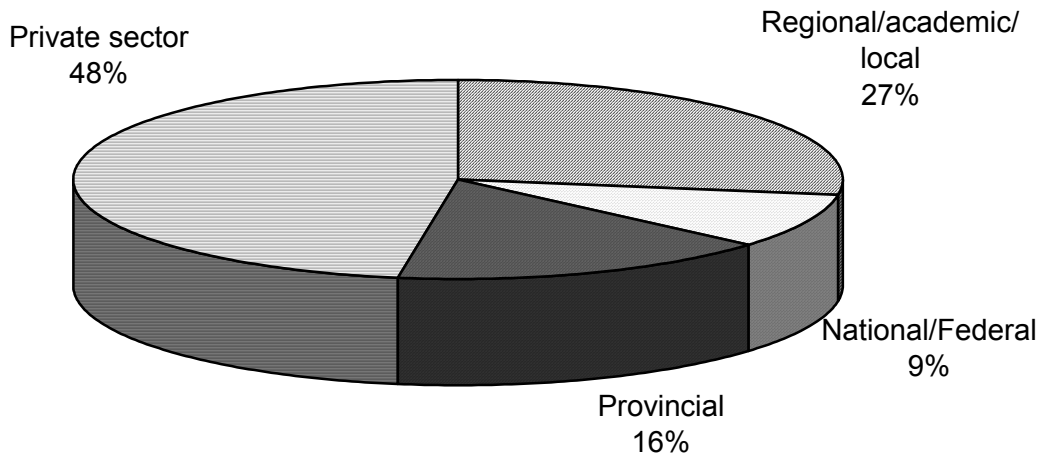
HL7 Canada's Increasing Membership



Our Members' Diversity

HL7 Canada's 202 members represent the interests of diverse organizations, including service providers (and associations), academic institutions, governments, software vendors, and consultants. Correspondingly, HL7 Canada's membership base represents a variety of perspectives and needs within Canadian health care.

**2002-2003 HL7 Canada Membership Breakdown
By Type of Organization**



2002/2003 HL7 Canada Workshops & Conferences

2002/2003 marked the continued success of the semi-annual HL7 Canada Meetings & Tutorials. Held in Québec City and Victoria, the meetings and tutorials were well received and had the highest attendance ever for HL7 Canada events. In addition to the conferences, HL7 Canada hosted a customized workshop by member request.

- **HL7 Version 2 and Version 3 Advanced Training Workshop**

May 13-14, Beaumont, Québec

Facilitator: Helen Stevens, Chair, HL7 Canada Implementation Committee, Chair, HL7 Version 3 Publications Committee

On request from SOGIQUE, HL7 Canada delivered a two day advanced HL7 workshop to an audience of consisting of mostly information modellers. The workshop participants spent one full day learning about HL7 Version 2 with a focus on its core

principles and how to use it. The following day introduced HL7 Version 3 and gave participants a chance to use the HL7 Version 3 tool sets to work through a real life example demonstrating the complete HL7 Version 3 development methodology. The workshop was very well received and we are pleased to note that SOGIQUE became a corporate member shortly thereafter.

- **HL7 Canada Spring Conference**

June 11 and 12, 2002, Québec City, Québec

Conference Highlights

- HL7 Canada's first conference in Québec
- Full day session introducing the HL7 standards aptly titled "Everything You Ever Wanted to Know About HL7 But Were Afraid to Ask"
- Advanced tutorial titled "Managing Diversity within Unity—HL7 Canada's Standards Development Role" introduced the requirement to identify and address Canadian specific needs
- Keynote presentation from Dr. David Markwell on the GP2GP project in the United Kingdom

Presenters at the HL7 Canada Spring 2002 Workshops and Meeting

Everything You Ever Wanted to Know About HL7 But Were Afraid To Ask

- Jim Forbes, Manager, University Health Network
- Helen Stevens, Project Manager, McKesson Information Solutions Inc., Chair, HL7 Canada Implementation Committee, Chair, HL7 Version 3 Publications Committee
- Gavin Tong, Coordinator, CIHI
- Bryan Tripp, Senior Technical Specialist, University Health Network

Managing Diversity within Unity—HL7 Canada's Standards Development Role

- Jane Curry, Senior Consultant, Sierra Systems, Chair, HL7 Canada Design Committee, Co-chair, HL7 Modeling and Methodology Technical Committee
- Ted Klein, President, Klein Engineering Services

Moving Records and Moving Meanings – Rocky Roads and Fragile Semantics

- Dr. David Markwell, Principal Consultant, GP2GP Project

- **HL7 Canada Fall 2002 Conference**
November 19-20, 2002, Victoria, British Columbia

Conference Highlights

- ➔ Repeat of the highly acclaimed HL7 introductory tutorial "Everything You Ever Wanted to Know About HL7 But Were Afraid to Ask"
- ➔ Advanced tutorial demonstrating the use of HL7 tool sets such as the Messaging Workbench for HL7 Version 2 and the Rosetree tool for HL7 Version 3
- ➔ Keynote presentation from HL7 The Netherlands
- ➔ Administration of the first HL7 Certification Exam in Canada
- ➔ Energetic group discussions on HL7 implementation and design issues in Canada

Presenters at the HL7 Canada Fall 2002 Meeting***Everything You Ever Wanted to Know About HL7 But Were Afraid To Ask***

- Jim Forbes, Manager, University Health Network
- Colin King, independent information systems consultant, Vancouver Coastal Health Authority
- Helen Stevens, Project Manager, McKesson Information Solutions Inc., Chair, HL7 Canada Implementation Committee, Chair, HL7 Version 3 Publications Committee
- Gavin Tong, Coordinator, CIHI

Turning the Standard into the Solution

- Jane Curry, Senior Consultant, Sierra Systems, Chair, HL7 Canada Design Committee, Co-chair, HL7 Modeling and Methodology Technical Committee
- Gavin Tong, Coordinator, CIHI
- Michael van Campen, Technical Design Consultant, TNT Global, Co-Chair, HL7 Financial Management Committee

Pan-Canadian Client Registry Workshop

- Shari Dworkin, Consultant, CIHI

National e-Claims Standard Workshop

- Michael van Campen, Technical Design Consultant, TNT Global

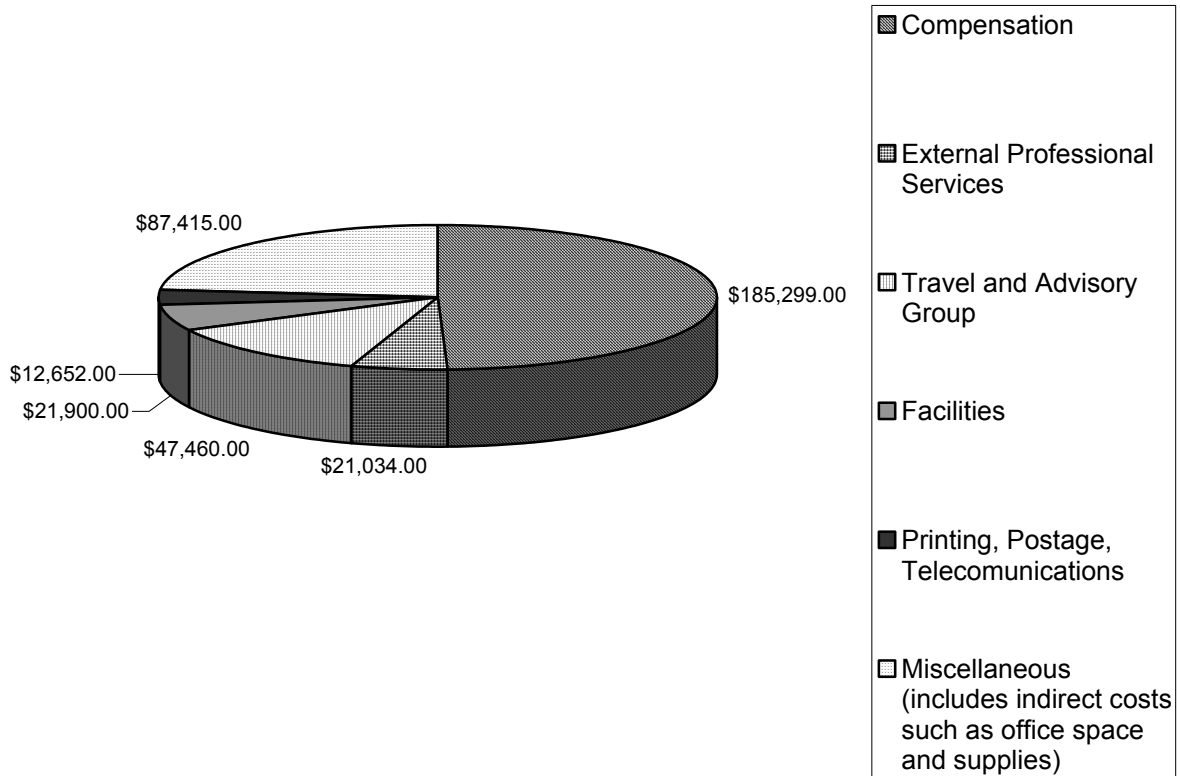
Experiences from The Netherlands

- Bert Kabbes, Chair, HL7 The Netherlands

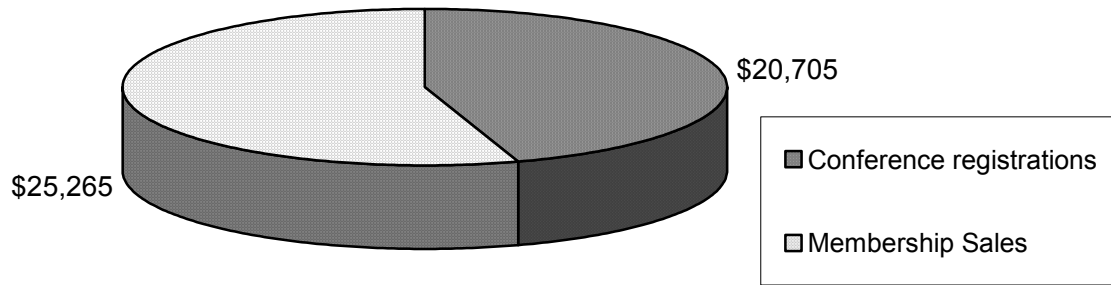
The Financial Picture – HL7 Canada 2002/2003

The total projected cost of running HL7 Canada in 2002/2003 is projected at \$375,760. CIHI's projected contribution to underwriting this cost is \$326,190.

Projected Expenses 2002/2003



Projected Revenue 2002/2003



HL7 Ballots 2002/2003

Over the last year there have been 10 HL7 International Ballots that HL7 Canada members reviewed and commented on. Of these ballots the perhaps the most significant was the HL7 Version 3 committee level ballot.

The ballot review included:

- Version 3.0 Committee Level Ballots:
 - Administrative Management
 - Health and Clinical Management
 - Infrastructure Management
 - XML Implementation Technology Specification
- HL7 Version 2.5 Membership and Committee Level Ballots
- Version 2.x XML Encoding Syntax Membership Level Ballot
- Reference Information Model Committee Level Ballot
- Arden Syntax for Medical Logic Modules Membership Level Ballot
- HL7 XML Schema for CDA Level 1, Release 1, Informative Ballot

Version 3.0 Enhancements:

- Model based (Reference Information Model)
- Rigorous analytic and message building techniques
- Measurable conformance and increased interoperability
- Works great with XML

HL7 Canada Ballots 2002/2003

The Pan-Canadian Client Registry Messaging Specification became an HL7 Canada approved standard in 2001. The Client Registry Messaging Specification addresses the communications issues related to sharing client identification information between registries and other health applications. The Client Registry Messaging Specification continued to evolve in 2002/2003 in an attempt to further align it with the latest changes in HL7 versions. As a result of this work, HL7 Canada had the opportunity to test the processes for approving change proposals. Client Registry Version 1.0 HL7 message profiles and supporting documents are available on the HL7 Canada members' website. Those interested in contributing to the Client Registry Message Specification should join the HL7 Canada Design Committee list serve.

Volunteer Efforts Make it Happen

In 2002/2003 there was a marked increase in the number of volunteer HL7 ballot reviewers. The combined input from our volunteer HL7 ballot reviewers generated over 80 pages of ballot comments. HL7 Canada would like to acknowledge all of our volunteers who reviewed ballots, participated in meetings and teleconferences, and helped further the development of HL7 standards in Canada.

Neal Acharya, *University Health Network*

Fred Agyepong, *Alberta Health and Wellness*

Scott Belfer, *ESI*

Anne Belford, *BCE Emergis*

Garry Cruickshank, *Canadian Pharmacists Association*

Jane Curry, *Sierra Systems*
Autry Dawe, *Canadian Institute for Health Information*
Shari Dworkin, *Canadian Institute for Health Information*
Jim Forbes, *University Health Network*
Alf Goodall, *Manitoba Health*
Bob Grant, *British Columbia Ministry of Health*
Caroline Heick, *Canadian Institute for Health Information*
Jane Howarth, *Canadian Institute for Health Information*
Paul Knapp, *Canadian Dental Association*
Donald Kroetsch, *TNT Global System Services Inc.*
Jan Labovich, *Manitoba Health*
Derrick Leung, *University Health Network*
Joginder Madra, *Alberta Blue Cross*
Roy Marsh, *University of Ottawa Heart Institute*
Lloyd McKenzie, *IBM*
Betty Miller, *Manitoba Health*
Ron Parker, *AdActus Care Technologies*
Grace Paterson, *Dalhousie University*
Guy Paterson, *Saskatoon District Health*
Jim Phillips, *Canadian Institute for Health Information*
Julie Richards, *Canadian Institute for Health Information*
Helen Stevens, *McKesson Information Solutions*
Bryan Tripp, *University Health Network*
Gavin Tong, *Canadian Institute for Health Information*
Michael van Campen, *TNT Global System Services Inc.*

On the International Front...

HL7 Milestones 2002/2003

- HL7 Version 2.5 released for membership level ballot
- First ever Clinical Document Architecture conference held in Berlin
- HL7 welcomes HL7 Croatia and HL7 Brazil as the newest International Affiliates
- Third International Affiliates Meeting in Melbourne, Australia
- HL7 Standards used in counter-terrorism strategy at 2002 Winter Olympics
- Creation of the new Genomics Special Interest Group
- Emphasis on Electronic Health Records (EHR) in HL7 through creation of EHR SIG and inclusion of EHR in HL7's mission statement

Two New HL7 International Affiliates Join HL7

Brazil and Croatia now have HL7 International Affiliate status, helping expand HL7's use to six continents. Outlined below are the new and established international affiliates for 2002/2003.

New International Affiliates

- Brazil
- Croatia

Established International Affiliates

- | | |
|-------------|-------------------|
| • Argentina | • Korea |
| • Australia | • Netherlands |
| • Canada | • New Zealand |
| • China | • Southern Africa |
| • Finland | • Switzerland |
| • Germany | • Taiwan |
| • India | • United Kingdom |
| • Italy | • Czech Republic |
| • Japan | • Lithuania |
| | • Turkey |

Canadians are Recognized

HAPI Freely Available

HL7 Inc. acknowledged the work done by Bryan Tripp and his colleagues at the University Health Network (UHN) both in public statements and in print. The recognition came as a result of UHN's development of an open source, Java-based HL7 Version 2.x parser and encoder. The product, called HAPI, (HL7 Application Programming Interface), verifies correct Version 2.x message structure, making it easier to design and implement Java-based systems that use HL7.

HAPI works by defining Java classes for every HL7 Version 2.x data type, segment and message. Prior to HAPI, the group had used extremely generic objects-often no more specific than "Message" or "Segment"-to parse HL7 messages. The generic nature of these objects meant that programmers often had to dig through the HL7 specification manually in order to ensure messages were valid. This made development slow and labour-intensive. HAPI eliminates the need for manual verification of errors that would result in invalid messages.

As an open source project, HAPI is available to everyone at no charge. Any programmer can read, use, redistribute, and modify the source code for HAPI and/or incorporate it into their product. The open source model encourages a collaborative rather than commercial or proprietary approach to software development.¹

¹ HAPI is licensed as an open source product under both the Mozilla Public License and GNU Public License. (See www.opensource.org for more information)

For more information on the HAPI project, please visit the HL7 Canada software resources page or visit <http://hl7api.sourceforge.net>. For more information on joining the HAPI collaboration, please contact Bryan Tripp (bryan.tripp@uhn.on.ca)

National e-Claims Standard (NeCST) Accelerates V3

The objective of NeCST is to develop an electronic standard for the exchange of health claims information between providers and payers. The NeCST project has been developing HL7 Version 3 claims and reimbursement messages for use in Canada but has also been working closely with the HL7 Patient Administration and Financial Management Committee to submit the Canadian content into the International Standard. In January 2002 the sheer volume of work submitted by the NeCST project resulted in the split of the HL7 Patient Administration and Financial Management Committee so that a Financial Management Committee could be created with the sole focus of reviewing and developing financial messages.

In 2002/2003 the NeCST project was given accolades by the HL7 Publication Committee not only for the quantity of work they contributed to the Financial Claims and Reimbursement chapter of the Version 3 Ballot but also the quality. The calibre of the NeCST work can best be seen in the large decrease of negative ballot comments received during the HL7 Version 3 ballot in August 2002. This decrease has instilled confidence in many that the Version 3 Claims and Reimbursement Chapter will be one of the first Version 3 chapters to pass Committee Level Balloting. The NeCST project has also received recognition from International Affiliates who are using the NeCST work in their own countries. HL7 The Netherlands will be using the NeCST V3 messages in future projects and HL7 Taiwan will be using the NeCST models and concepts to develop HL7 Version 2.4 claims messages.

HL7 Assists Counter-Terrorism Strategy at Winter Olympics 2002

Michael Wagner, a leading researcher in the field of early outbreak detection, spoke at the HL7 Plenary Meeting in Baltimore on September 30, 2002 about the use of HL7 to help detect outbreaks caused by the use of biochemical weapons. The initiative was based on the Real-Time Outbreak and Disease Surveillance System (RODS), an ongoing research project performing surveillance on Pennsylvania and Utah. RODS collects data from hospital labs and emergency departments using HL7 messages sent securely over the Internet, plots occurrence data geographically, applies Bayesian natural language processing on textual reports, employs an experimental list of early detection statistical tests, and provides drill-down data for the epidemiology team.

The RODS Laboratory was able to add six counties in Utah in only six weeks, primarily because of the existing HL7 infrastructure in place among the treatment facilities there. According to Wagner, of the six weeks spent connecting the systems, only one week was

required to resolve technical issues related to HL7. Data was sent to RODS through interface engines from two health systems in Utah. The existing infrastructure of HL7 usage in labs and care delivery organizations is a “national resource” in the early detection of the outbreaks of disease according to Michael Wagner, M.D., Ph.D.

HL7 Expands its Working Group

HL7 International is active in a number of subject areas within health informatics. Special Interest Groups (SIGs), comprised of authorities in their respective fields, work in conjunction with Technical Committees to advance the development of the HL7 standard. Below is a listing of HL7 Technical Committees and Special Interest Groups (SIGs). Each committee and group has a website and list server to promote discussion and ongoing work between meetings. If you are interested in any of the SIGs or technical committees you may wish to join one of the email list servers using the sign-up instructions at www.hl7.org.

HL7 Technical Committees:

- Technical Steering Committee
- Architectural Review Board
- CCOW (Clinical Context Management)
- Clinical Decision Support
- Control/Query
- Education
- Financial Management
- International Affiliates
- Marketing
- Medical Records/Information Management
- Modeling and Methodology
- Orders/Observations
- Patient Administration
- Patient Care
- Personnel Management
- Publishing
- Scheduling and Logistics
- Structured Documents
- Vocabulary

HL7 Special Interest Groups (SIGs):

- Arden Syntax
- Attachments
- Blood Bank
- Clinical Genomics - **New**
- Clinical Guidelines
- Clinical Trials
- Community Based Health Services
- Conformance
- Electronic Health Records
- Government Project
- Imaging Integration
- Laboratory, Automated, and Testing
- Medication
- Security and Accountability
- Template
- XML

Upcoming HL7 Events

Note: HL7 Canada members are entitled to discounted registration rates for events in both Canada and the USA.

- HL7 Canada Spring 2003 Tutorials and Meeting, April 7-8, 2003 Sheraton Ottawa Hotel, Ottawa, Ontario
- HL7 Working Group Meeting, April 28 - May 2, 2003, Renaissance Cleveland Hotel, Cleveland, Ohio
- HL7 Fall Working Group Meeting, September 8-12, 2003, The Peabody Memphis, Memphis, Tennessee
- HL7 Canada Fall 2003 Tutorials and Meeting, (Date and location to be determined)

The 2002/2003 HL7 Canada Secretariat
Caroline Heick, *Director*
Gavin Tong, *Coordinator*
Beverly Walters, *Administrator*

For More Information:

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