3 Mission and Vision

4-5 Chair Report

6-8 CEO Report

9 Organizations with which HL7 Collaborates

10-12 CTO Report

13 2012 Board of Directors

14-15 Treasurer Report

16-18 Executive Director Report

19 HL7 Affiliates

20-21 2012 Standards Snapshot

22 Work Groups
HL7® Vision
To create the best and most widely used standards in healthcare.

HL7® Mission
HL7 provides standards for interoperability that improve care delivery, optimize workflow, reduce ambiguity and enhance knowledge transfer among all of our stakeholders, including healthcare providers, government agencies, the vendor community, fellow SDOs and patients. In all of our processes we exhibit timeliness, scientific rigor and technical expertise without compromising transparency, accountability, practicality, or our willingness to put the needs of our stakeholders first.
Dear Colleagues,

I am deeply honored to have served as Chair of HL7 in 2012. As you may recall, I outlined four essential principles and priorities for 2012: relevance, change, growth, and unity. I am pleased to report that we have made significant advancements in many of these areas.

**Relevance – Key to HL7’s Growth**

The most significant, of course, is the announcement that HL7 will make its licensed standards and selected intellectual property available to the industry at no cost by the end of first quarter of 2013, pending assessment of the impact on HL7 finances and membership. That announcement has been extremely well received by the healthcare industry. It has reduced barriers of adoption, enabled some governments to specify HL7 standards for their countries without imposing a financial burden on their constituents, increased HL7’s visibility in the healthcare industry, and enhanced the industry’s perception of HL7. “Free IP” has greatly increased HL7’s relevance in the industry.

As you are aware, HL7 has grappled with the question of whether to license its standards free of charge for years. In 2012, the board worked long and hard, and carefully considered a lot of difficult and intertwining factors before it made this momentous decision. The board is to be commended for having the courage to make a decision that will spur the transformation of HL7.

**Change**

The decision to license HL7 standards and selected IP freely available is inextricably tied to our business model and membership structure. Under the excellent guidance from HL7’s Chief Executive Officer, a Membership Task Force (MTF) was formed to revise the current membership structure. While a revised membership structure will not be decided upon until sometime in 2013, it is exciting to know that the membership structure emphasizes increased value to the members, equity, and transforming HL7 into a truly international organization.

I thank our CEO and the MTF who sorted through some long standing and complex issues. Their delineation of the issues will result in the board’s careful deliberations from which another transformative decision will be made. Thanks are also extended to the 2011 board appointed Business Model Task Force and the International Membership and Affiliates Task Force of the International Council. Their work, which identified important factors to consider and useful ways to address those factors, served as a useful precursor to the MTF.

**Growth**

HL7 grew in a number of areas important to its mission, the healthcare industry, as well as to HL7’s members. We launched a new healthcare professional membership effort, seeking to engage clinicians at their level. We also launched the Mobile Health and Clinical Quality Information Work Groups. These 3 actions increased our relevance and, in the case of the Mobile Health Work Group, our membership.
What’s in Store for 2013—Customer Focus and Customer Satisfaction and New Areas of Relevant Growth and Change

For 2013, I’d like to add another principle: an increase on our focus on customer satisfaction. Increasing our focus in this area means that a lot of action needs to take place in 2013—tools for implementers so that they can embed HL7 standards into their software products faster, easier, and cheaper; increased implementer participation so that we can more efficiently build standards that immediately suit their needs; increased non-technical healthcare professionals participation so that we can more effectively gather clinical and business requirements, and at the same time, help them better understand the benefits of standards.

We also need to build on the progress we’ve made in relevant growth and change. Just as we launched the Mobile Health and Clinical Quality Information Work Groups in 2012, there are other areas in which the industry needs standards in 2013 that fit within HL7’s mission. Usability and standards for data collected at the front end (i.e., data defined in a more granular way, independent of messaging and documents) are two such areas.

Unity

Some long standing and complex issues were addressed in 2012—and even more of these difficult issues will be addressed in 2013. I sincerely appreciate the support, collaboration, and professionalism you’ve shown as we all work together to transform HL7. 2013 will be another exciting year for HL7. Thanks to all of you for supporting these efforts. We still have a long way to go, but we are making terrific strides to get there.

“Free IP” has greatly increased HL7’s relevance in the industry.
Freely Available Standards: HL7 Delivers on Its Mission

Early last summer, after years of discussion and debate, the HL7 International Board made a decision that will forever change one fundamental business principle of the organization: HL7 standards are to become freely available.

Around the world, the announcement was met with broad approval and praise. For many, it was simply the right thing to do. For others, it removed one of the last barriers to global adoption. Low- and middle-income countries applauded. Government agencies and charitable benefactors alike rushed to commend the decision.

In various quarters, concerns were raised that HL7 would be poised to lose member organizations that found legal access to copyrighted material as the sole purpose for membership. On the contrary, electronic record vendor organizations, academic centers, implementation bodies and government agencies embraced the change and echoed even greater support.

For many, Health Level Seven is much more than the global leader in healthcare IT standards development. It is the definitive place to share ideas and knowledge, to cultivate innovative products and services, and to be a part of a much larger community. Rather than contract, many supporters voiced the notion that this would be a springboard for much greater growth.

Embracing Innovation and Change

Certainly, HL7 is already growing around the world. An ever-increasing number of national health bodies have specified HL7 standards among their requirements for electronic health record keeping. In addition, new and innovative approaches to long-standing HL7 standards have been developed and successfully deployed. Among the most widely recognized of these specifications is the HL7 Clinical Document Architecture (CDA®). The advantages that CDA afforded for ease of adoption and reuse of its templates made it a natural for implementation in both long-standing and “green field” environments. The European Commission chose CDA for its epSOS project to enable cross-border sharing of clinical summaries and electronic prescriptions among 27 member nations. CDA was praised for its ability to exchange Public Health data and to enable finite measurement of healthcare delivery quality. In the US, one constraint on CDA, the Consolidated-CDA, is to become one of the cornerstones of Meaningful Use requirements for electronic medical records.

Other innovative methodologies for standards development have recently sprung from the creative challenge of the HL7 Fresh Look program. One such effort, the Clinical Information Modeling Initiative (CIMI), has been embraced by other standards development organizations and by government agencies and academic centers worldwide.

At the same time, a very different approach to standards development is the FHIR® (Fast Healthcare Interoperability Resources) project. This effort, which promises to greatly accelerate standards development, while hiding much of the complexity of the information model, has generated enormous global interest and participation. During the very first FHIR Connectathon, held at the HL7 Working Group meeting in September, developers were able to create specifications and exchange data at a rate that impressed even its most ardent advocates.
In parallel, HL7 was growing its membership base. 2012 witnessed the advent of new membership categories and new contributors to the development process. Healthcare Professional members, comprised of nurses, physicians, pharmacists, therapists and others, joined the ranks. They brought with them unique domain expertise, and began to focus on issues such as workflow and business case requirements, practice demands, and usability. Of course, the collaboration among these professionals brought a heightened appreciation of the healthcare and wellness continuum.

There was also a growing interest in evidence-based practice, personalized medicine, and the incorporation of pre-clinical data. With it came newly identified members of the community of developers of drugs and biologics. The sciences of genetics and genomics were brought into greater focus, and with that interest, came the scientists in need of the standards to support their work.

In addition, new work groups were formed and began to tackle previously unrecognized challenges and create new and innovative opportunities. One such work group rapidly began to investigate the needs of mobile health and the diverse community that it serves. Among the high priority for the Mobile Health Work Group leadership was collaboration with existing organizations focused on mobile health, including mHIMSS and others. In quite a different arena, the Clinical Quality Information Work Group was spun off from the Structured Documents Work Group, in order to address the growing demands for data to support health delivery quality and, in the US, accountable care.

Collaboration Across the Globe

Collaboration continues to be a cornerstone for the continued adoption and implementation of HL7 standards. Amongst the global community of standards development organizations, the Joint Initiative Council (JIC), has grown from its original four members (HL7, ISO, and CEN) to include CDISC, GS1, IHTSDO, and most recently, IHE. For its part, IHE has embraced a foundational collaborative initiative with HL7, and will begin to ballot its implementation guides within HL7. Amongst a growing community of clinical research scientists, there has been a global demand of increased collaboration between CDISC and HL7, particularly in the effort to seamlessly exchange data between the patient care and research environments.

Global participation in HL7 grew at a remarkable rate. Founded less than two years ago, the HL7 Europe Office, headquartered in Brussels and chartered there as the HL7 Foundation, assumed new roles in a host of diverse eHealth initiatives with the European Union. As participation grew, so did the assumption of leadership roles. So, too, did HL7 activities grow within the European Federation of Medical Informatics (EFMI). To the credit of its highly dedicated leadership, HL7 Asia was also born. Headquartered in Tokyo, the organization will focus on education and collaboration amongst a growing list of nations that have embraced HL7 standardization.

The Evolution of HL7 Membership

At the same time, the Board empowered a new task force, challenged with the work of redefining the benefits of HL7 membership. For many, this group achieved far more than was envisioned. Comprised of thought leaders from industry, including individuals from organizations representing the complex payment systems,
academia, and technology implementers, the group revised existing membership schema, devised new and innovative approaches, and created a family of membership benefits for every category. The task force, which included contributors from four continents, was sensitive to fiscal requirements and to the unique characteristics of national bodies and provincial customs and regulations.

The list of potential new benefits and potential new beneficiaries is impressive. Some represent expansion of existing programs and current projects. In 2012, the roles of education and training grew dramatically. The highly successful eLearning Program (now known as the HL7 Fundamentals Course), originally developed in Argentina, has blossomed into a world-wide phenomenon. In order to accommodate the growing needs and demands of the students, a portion of the program was automated and, as a result, can now accommodate up to 500 students per session, up from a previous limit of 100. The uniquely praised Ambassador Program provides free education on a broad range of topics to a diverse audience. Likewise, these freely available Webinar programs have been designed to share insights into the new challenges of healthcare information exchange and interoperability. With new alliances and new collaborations, including educational programs with AMIA (American Medical Informatics Association) and its expanded 10x10 Certificate and Degree Programs, education will become a significant part of the HL7 benefit package. Under the leadership of a newly created position of Director of Education, the emphasis on the HL7 role in training will become paramount.

For each category of HL7 membership, the task force has identified a significant array of potential new benefits. While these benefits have not yet been finalized, they are expected to drive membership in 2013 and beyond.

- Access to newly developed HL7 conformance testing programs
- One-on-one sessions with HL7 thought leaders and technical experts
- Members-only briefings on policy and planning strategies for standards development
- Members-only technical webinars
- Newly designed HL7 certification for developers and implementers
- Enhanced discounts to HL7 education and training programs
- Participation in newly created HL7 connectathons
- Access to newly developed HL7 Help Desk, created to solve technical and implementation questions
- Certification as an HL7 trainer and participation in HL7 workshops and educational summits
- Display of the HL7 logo on websites, software and show banners
- Recognition as an HL7 Gold Supporter and Benefactor

When Clayton Christensen first coined the term disruptive innovation, the focus of many industries shifted to the highest tiers of adoption and implementation. In fact, he was referring to the changes at the most fundamental strata of development. By making our standards freely available, we believe that the evolution will begin at the very basic levels of health information exchange and ultimately impact our global view of wellness and healthcare delivery.
HL7 formally collaborates with many organizations across the industry. The organization currently holds formal agreements with the following groups:

- Accredited Standards Committee X12 - ASC-X12
- America's Health Insurance Plans (AHIP)
- American Dental Association (ADA)
- American Society for Testing Materials (ASTM)
- BioPharma Association Associate - SAFE
- CEN/TC 251 (European Committee for Standardization)
- California HealthCare Foundation
- Cientis Technologies Inc.
- Clinical and Laboratory Standards Institute (CLSI)
- Clinical Data Interchange Standards Consortium (CDISC)
- Continua Health Alliance (CHA)
- Digital Imaging and Communication in Medicine (DICOM)
- GS1
- Implementation of Regulatory Information Submission Standards (IRISS)
- Institute for Electrical and Electronic Engineers (IEEE)
- Integrating the Healthcare Enterprise (IHE)
- International Health Terminology Standards Development Organisation (IHTSDO)
- International Organization for Standardization (ISO)
- Joint Initiative Council (JIC)
- Logical Observation Identifiers Names and Codes (LOINC)
- National Council for Prescription Drug Program (NCPDP)
- Object Management Group (OMG)
- Smart Open Services for European Patients (epSOS) – European eHealth Project
- The Health Story Project
- Workgroup for Electronic Data Interchange (WEDI)
Technical Architecture

During 2012 a significant effort was made to define and support the emerging HL7 Business Architecture Model (BAM). The term “business architecture model” includes the identification of the key concepts, relationships, and processes that collectively define the “business organization” that is HL7. Core organizing principles to guide the overall structure include organization around product lines, such as Version 3, Version 2, CDA®, etc.; and separation of governance, management, and methodology activities, responsibilities, and deliverables. The BAM will focus on incorporating constructs from the SAIF CD Governance Framework as they apply to the HL7 BAM. Several events precipitated the drive for this major change:

1. The donation of the Fast Healthcare Interoperability Resources (FHIR®) specification and associated tooling to HL7 by its author Grahame Grieve
2. The change to the membership model for HL7 to license its standards with no fee
3. The Board direction to the TSC to plan for and implement a formal product line and product family structures for HL7 products

The effect of each of these events is described below:

1. Fast Healthcare Interoperability Resources (FHIR®)

The establishment of the FHIR product line included the creation of a FHIR Governance Board (FGB), the FHIR Management Group (FMG), and the assignment of methodology responsibility for FHIR to the Modeling and Methodology Work Group (MnM). The creation of the FGB, FMG and MnM connection is consistent with the new HL7 product line architecture’s governance and management structures.

The first hands-on FHIR connectathon was conducted at the Working Group Meeting (WGM) in September 2012 and met with success. A similar connectathon was also scheduled for the January 2013 WGM.

2. Membership Model and Tooling

The overall effects of the change to the membership model on funding for HL7 is unknown at this time. HL7’s primary source of revenue that supports publication and tooling development has historically been from membership dues. HL7’s tooling development, which enables our users to more easily use our standards, is considered a high priority expense. Our newly developed tooling strategy will be used along with our understanding of available resources to restructure our tooling plan after our new membership model is finalized and announced in 2013.

3. Product Line Structure

This product line architecture instantiates the governance, management and methodology described in the SAIF CD (Services Aware Interoperability Framework Canonical Definition), which had its second release published as a DSTU in 2012. FHIR, as described above, is designated as the prototype of a new product line. This has also revealed the need for a new tooling strategy to align with the TSC product strategy.
Significant Events and Decisions

HL7 specifications have been advanced internationally. The following standards advanced to the International Organization for Standardization (ISO) TC215 during 2012:

- Electronic Health Record System (EHR-S) Functional Model, Release 2
- Individual Case Safety Report (ICSR)
- Reference Information Model (new revision update to ISO)
- Identification of Medicinal Products (IDMP)

ONC adopted HL7 standards as part of Meaningful Use (2.1, 2.1.5), including:

- Laboratory observation
- Laboratory orders (immunization)
- Consolidated CDA* for movement of patient centric clinical information
- Blood bank implementation specification

Key standards and related balloted artifacts (DSTUs, implementation guides and likely companion guides) have been developed (and continue to be developed) for ONC’s use of our standards for Meaningful Use. Current versions of these documents are available on the HL7 website [www.HL7.org](http://www.HL7.org).

Backwards compatibility issues that were addressed to the Board yielded a decision by the TSC that allows for a specific community—Structured Product Labeling (SPL)—to use a version of the datatypes that are not compliant with the ISO-Harmonized Datatypes (R2). R2 has already passed ballot and will be published pending Board approval.

CIMI

HL7 continues to support the Clinical Information Modeling Initiative (CIMI). CIMI meetings have been co-located with HL7 meetings as well as other venues.

2012 Tooling Report

The HL7 Tooling Work Group has promoted the use of the US National Library of Medicine (NLM) Vocabulary management tool for HL7 Vocabulary management. This will advance HL7’s adoption of the IHTSDO workbench software by specifying an appropriate alignment between HL7’s existing model and the workbench’s data model.

HL7 is participating in the Open Health Tools (OHT) HingX project to assess the suitability of HingX as the HL7 Shared Artifact Repository. Learn more at [www.HingX.org](http://www.HingX.org).

The first Tooling Challenge was initiated in 2012. The Tooling Work Group defined the contest objective, established a communications plan and the contest infrastructure, and identified judges. Thus far, nine competitors have declared their intent to participate. Interested parties can still declare their interest in entering this contest until May 5, 2013. See more details at [www.hl7.org/events/toolingchallenge.cfm](http://www.hl7.org/events/toolingchallenge.cfm).

Contenders have until July 1, 2013 to submit their tool entry. A winner of $4,000 USD will be announced at the HL7 2013 plenary meeting September 22-27, 2013 in Cambridge, MA.
HL7 accepted and announced the release of the Trifolia Workbench, HL7 Web Edition. The Trifolia Workbench supports standards authors, developers and implementers in reviewing HL7 Clinical Document Architecture (CDA®) templates. It contains the full set of CDA templates balloted through HL7, including the HL7/IHE Health Story Consolidation Project. The project harmonized health information exchange specifications for Meaningful Use of EHR technology including the HL7 Continuity of Care Document (CCD®) and the Health Story implementation guides for discharge summary and other types of common clinical documents. The tool will help developers and implementers localize and publish their own CDA templates.

Sponsorship of the development of an EHR-S profile designer was awarded by contract exercising the new Tooling Project Selection and Prioritization Process. Deliverables to generate EHR-S FM XML, create a UML version of the EHR-S FM in Sparx Systems’ Enterprise Architecture (EA), and to complete work on an internal validation and produce a validation report were submitted.

In 2012, a group of interested HL7 members led by Lenel James also developed a tool for the conversion of a Continuity of Care Document to the US Department of Personnel Management’s Blue Button Format.

2013-2016 Tooling Strategy

As of press time for this report, there are four goals addressed in the Draft Tooling Strategy by the HL7 International Tooling Work Group (each goal has multiple objectives, performance measures and actions):

- **Goal #1**: Provide HL7 developers and implementers with robust tools to develop, publish, ballot and ease implementation of all HL7 standards.

- **Goal #2**: Create greater awareness and adoption of HL7 tooling in the development and implementation of all HL7 standards.

- **Goal #3**: Enable an environment where individuals and organizations are increasing their participation in the development and support of tools used to design, publish and implement HL7 standards.

- **Goal #4**: Provide a mechanism by which open source tools can be certified to legally hold HL7 intellectual property. The mechanism will allow members to acquire an open source tool with HL7’s recognition of its usability and endorsement.
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RTI International

Vice Chair  
Robert Dolin, MD  
Lantana Consulting Group

Treasurer  
Michael van Campen  
Gordon Point Informatics Ltd.

Secretary  
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College of American Pathologists

Technical Steering  
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Science Application International Corporation (SAIC)

Chair Emeritus  
and Director-at-Large  
W. Edward Hammond PhD  
Duke University

Director-at-Large  
Keith Boone  
GE Healthcare

Director-at-Large  
James Ferguson  
Kaiser Permanente

Director-at-Large  
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Office of the National Coordinator for Health IT

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Director-at-Large  
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Clinical Data Interchange Standards Consortium

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Affiliate Director  
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John Quinn  
Health Level Seven International

Advisory Council Chair  
(Non-Voting)  
Richard Dixon-Hughes  
DH4 Pty Ltd

HL7 Australia
During 2012, HL7 International enjoyed strong growth in new organizational membership and increases in Affiliate dues, while maintaining a strong and vigilant handle on expenses. This has allowed the organization to be in a solid financial position as evidenced by 11.59 months of cash reserves at the beginning of the year. This figured increased to 15.11 months at the end of the year, which equates to a net increase of 3.52 months of cash reserves.

Since the announcement of releasing HL7 IP free of charge for standards and related materials just prior to the September Working Group Meeting, there has been a drop in membership renewal rates. This is being closely monitored by the Finance Committee to ensure the organization can react accordingly to the net changes as a result of the IP announcement. To that end, the HL7 International organization initiated a Membership Task Force to identify new value propositions and service offerings to retain existing members and entice non-members to join HL7. The effects of the recommendations and actions arising from the MTF and further actions undertaken by the HL7 Board will be reviewed throughout 2013.

A few notes:

- Only selected and significant revenues and expenses are noted in the tables below
- All figures are as of December 31, 2012 and are not yet audited
- All figures are in US dollars
- All figures reflect HL7 International budgets and expenses only; Affiliate budgets and expenses are not included, other than the Affiliate Dues that Affiliates pay HL7 International as part of fulfilling the Affiliate Agreement

### 2012 Revenues

<table>
<thead>
<tr>
<th>Budget</th>
<th>Actuals</th>
<th>Difference</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership Dues</td>
<td>$3.177M</td>
<td>+$467K</td>
<td>+17%</td>
</tr>
<tr>
<td>Affiliate Dues</td>
<td>$212K</td>
<td>+$29K</td>
<td>+14%</td>
</tr>
<tr>
<td>Working Group Meetings</td>
<td>$930K</td>
<td>+$19K</td>
<td>+2.1%</td>
</tr>
<tr>
<td>Education Summits</td>
<td>$300K</td>
<td>-$59K</td>
<td>-19.5%</td>
</tr>
<tr>
<td>e-Learning</td>
<td>$200K</td>
<td>+$60K</td>
<td>+30%</td>
</tr>
<tr>
<td>Revenue Summary</td>
<td>$4,565M</td>
<td>+$612K</td>
<td>+13.4%</td>
</tr>
</tbody>
</table>

Michael van Campen  
HL7 International Board Treasurer
HL7 enjoyed strong growth in new organizational membership and increases in Affiliate dues, while maintaining a strong and vigilant handle on expenses.

2012 Expenses

<table>
<thead>
<tr>
<th>Budget</th>
<th>Actuals</th>
<th>% Difference</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff (including CEO/CTO &amp; attributable expenses)</td>
<td>$2.296M</td>
<td>$2.347M</td>
<td>+$51K</td>
</tr>
<tr>
<td>Tooling</td>
<td>$250K</td>
<td>$78K</td>
<td>-$172K</td>
</tr>
<tr>
<td>Investment / R&amp;D / Innovation / Professional Membership Pilot</td>
<td>$150K</td>
<td>$43K</td>
<td>-$106K</td>
</tr>
<tr>
<td>Working Group Meetings</td>
<td>$870K</td>
<td>$823K</td>
<td>-$47K</td>
</tr>
<tr>
<td>Education Summits</td>
<td>$135K</td>
<td>$113K</td>
<td>-$21K</td>
</tr>
<tr>
<td>eLearning</td>
<td>$65K</td>
<td>$122K</td>
<td>+$57K</td>
</tr>
<tr>
<td>Off-Site Workshop / Certification Testing</td>
<td>$37K</td>
<td>$60K</td>
<td>+$23K</td>
</tr>
<tr>
<td>Other Events (e.g. HIMSS, MIE, Board Retreat, etc.)</td>
<td>$176K</td>
<td>$173K</td>
<td>-$3K</td>
</tr>
<tr>
<td>Revenue Summary</td>
<td>$4.869M</td>
<td>$4.559M</td>
<td>-$310K</td>
</tr>
</tbody>
</table>

2012 Net Income and Cash Reserves

HL7 International maintains a policy of retaining a six month cash reserve to cover operations of the organization. At the end of 2012, the pre-audited cash reserves were as follows.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Actuals</th>
<th>% Difference</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-$304K</td>
<td>+$619K</td>
<td>+$923K</td>
<td>+303%</td>
</tr>
<tr>
<td>Cash Reserves</td>
<td>11.59 months</td>
<td>15.11 months</td>
<td>3.52 months</td>
</tr>
</tbody>
</table>

2013 Budget Preview

In light of the IP announcement, the HL7 International 2013 budget has projected a reduction in cash reserves of approximately 2 months, drawn primarily from reduced membership revenues for HL7 International members, as well as Affiliate dues.
Membership Report

HL7 had 2,401 members on December 31, 2012, as compared to 2,429 one year earlier. This equates to a net reduction of 28 total members. We currently have 25 Benefactors and 20 Supporters. Although HL7 attracted no new Benefactors, we did gain 14 new Supporters. The number of new organizational memberships in 2012 remained higher than 2011.

Individual Memberships

As of December 31, 2012, HL7 had a total of 342 individual members. This total reflects 269 new members joining or being re-instated during 2012, as compared to 276 new members joining during 2011. For the 2012 year, there was a net loss of 88 members, as compared to a net loss of 21 in 2011. Fifteen of these individual members cancelled or upgraded to organizational memberships in 2012.

Organizational Memberships

There were a total of 796 organizational member firms on December 31, 2012. For organizational members in 2012, we had 442 new organizations joining or being re-instated as compared to 455 in 2011. For the year, there was a net increase in organizational memberships of 27, which compares to an increase of 173 members during 2011.

International Council Memberships

During 2012, there were 36 countries with active HL7 affiliates, including Argentina, Australia, Austria, Bosnia & Herzegovina, Brazil, Canada, China, Colombia, Croatia, Czech Republic, Finland, France, Germany, Greece, Hong Kong, India, Italy, Japan, Korea, Luxembourg, Mexico, The Netherlands, New Zealand, Norway, Pakistan, Puerto Rico, Romania, Russia, Singapore, Spain, Sweden, Switzerland, Taiwan, Turkey, United Kingdom, and Uruguay. Bosnia & Herzegovina and Mexico were added in 2012. Chile is currently in a lapsed status.

Membership Recognition

HL7 has been very fortunate to repeatedly attract incredibly talented and dedicated volunteers. In an attempt to recognize some of these dedicated individuals, during HL7’s 26th Annual Plenary and Working Group Meeting in September, the 16th Annual W. Edward Hammond, PhD HL7 Volunteer of the Year Awards were presented to these well-deserving individuals:

Keith Boone  Grahame Grieve

HL7 also announced the names of the 2012 Class of HL7 Fellows. The HL7 Fellowship program recognizes individuals who have contributed significantly to HL7 and have held at least 15 years of continuous HL7 membership. HL7 is pleased to recognize and congratulate the following individuals as the 2012 class of HL7 Fellows:

Joseph Baptist  Gunther Schadow, MD, PhD
Kai Heitmann, MD  Abdul Mail Shakir
Mike Henderson  Mark Tucker
Tony Julian  Klaus Veil
Frank Oemig
**Ambassador Webinar Report**

The HL7 Ambassador Program had a successful year with its Ambassador Webinar Series. Twelve webinars were produced in 2012 on an array of topics, such as: meaningful use and HL7 standards, quality reporting for meaningful use, clinical decision support standards, Clinical Document Architecture (CDA®) and the Continuity of Care Document (CCD®), clinical genomics, the EHR and PHR System Functional Models, the S&I Laboratory Results Interface Implementation Guide, Version 3 and Fast Healthcare Interoperability Resources (FHIR). The 2012 Ambassador webinars attracted 5,268 registrants, with an actual attendance of 3,219 for the live webinars. This equates to a 60% attendance rate, which is an impressive figure for webinars that are free of charge. The average number of participants per webinar was 268. Each webinar was also recorded live and posted to the HL7.org website for anyone to download at their convenience.

**Meetings Report**

**January Meeting in San Antonio, Texas**

HL7 convened the January 2012 Working Group Meeting in San Antonio. The meeting was productive for its 401 attendees who participated in almost 60 work groups meeting, of which 29 work groups conducted co-chair elections for 42 positions. Attendees also took advantage of 30 tutorials that week.

**May Meeting in Vancouver, BC, Canada**

HL7 convened the May 2012 Working Group Meeting in beautiful Vancouver. The meeting was productive for its 346 attendees with 30 tutorials and 60 work groups meeting.

**26th Annual Plenary Meeting in Baltimore, Maryland**

HL7’s 26th Annual Plenary and Working Group meeting convened September at the Hyatt Regency Hotel in Baltimore, Maryland. The 507 attendees participated in a week filled with the plenary meeting, 62 work groups meeting, and 24 educational tutorials.

The theme for HL7’s 26th annual Plenary Meeting was HL7 in the Era of Patient Empowerment. Presentations covered a wide range of topics, such as: Engaging Patients with Standards; Consumer Empowerment, The Rise of e-Patients, and a panel discussion on the future of mobile health and HL7’s role in this evolving arena.

I would like to extend a special thanks to all of our speakers for their role in making HL7’s 26th Annual Plenary Meeting one of our finest programs of all time. Keynote speakers included: Leslie Kelly Hall, Senior Vice President, Healthwise; Lee Rainie, Director, Pew Research Center’s Internet & American Life Project; and Elaine Blechman, PhD, Professor Emeria University of Colorado at Boulder and President of Prosocial Applications.

The panel discussion was hosted by Doug Fridsma, MD, PhD, Director, Office of Standards and Interoperability, Office of the National Coordinator for Health IT and included the following panelists; Chuck Parker, President, Continua Health Alliance; Christoph Lehmann, MD, Professor of Pediatrics and Biomedical Informatics, Vanderbilt University; Jim St. Clair, Senior Director, Interoperability and

**HL7 has been very fortunate**

_to repeatedly attract incredibly talented and dedicated volunteers._
Standards, HIMSS; Lonnie Smith, Policy Analyst, US Food and Drug Administration; and Heather Grain, Standards Australia.

The week of our 26th Annual Plenary Meeting also included a successful data segmentation for privacy pilot demonstration that was produced by the Standards and Interoperability Framework in collaboration with HL7. The purpose of the privacy pilot demo was to enable the sharing of patient data in compliance with policy, regulation and patient consent through a technology framework applying HL7 vocabulary to segment certain data perceived as undesirable to share.

Educational Summits

HL7 also produces intensive training via our educational summits, where our expert instructors provide high quality training in a small classroom setting. This concentrated two-day format provides maximum training with minimal time investment. During 2012, 184 individuals attended one of three educational summits we produced in Atlanta, St. Louis, and San Francisco. HL7 also provided on-site training to 311 people via 14 customized on-site training programs at members’ offices during 2012.

Remote/Distance e-Learning

The HL7 e-Learning Course (Now known as the Fundamentals Course) is a web-based workshop which includes a set of guided exercises that teaches by practice and example, not by exposition. During 2012, HL7 produced ten courses around the world that served 688 students. These courses were produced by HL7 International, HL7 Argentina and HL7 India, HL7 Romania, HL7 Austria, HL7 Canada, and HL7 Pakistan. Historically, the courses are so effective and popular that they often sell out within days of being announced. With added functionality incorporated, HL7 has been able to increase the limit of students from 100 to several hundred per course.

Certification Testing Report for 2012

HL7’s popular certification program continues to attract hundreds of individuals from around the globe each year. During 2012, 438 individuals passed the exam to become HL7 certified specialists. The worldwide number of Certified HL7 specialists by type of exam is provided below.

<table>
<thead>
<tr>
<th>Certification Exam</th>
<th># Certified in 2012</th>
<th>Total # Certified</th>
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<tbody>
<tr>
<td>Version 2</td>
<td>269</td>
<td>2,834</td>
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<tr>
<td>Clinical Document Architecture</td>
<td>133</td>
<td>504</td>
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<tr>
<td>Version 3 Reference Information Model (RIM)</td>
<td>36</td>
<td>326</td>
</tr>
<tr>
<td>Total Certified HL7 Specialists</td>
<td>438</td>
<td>3,664</td>
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Mark McDougall
HL7 International Executive Director
COUNTRIES WITH HL7 AFFILIATES

HL7 International
HL7 Standards Receiving ANSI Approval in 2012

  Date Approved: 1/31/2012

  Date Approved: 1/31/2012

- HL7 Version 3 Standard: Core Principles and Properties of Version 3 Models, Release 1
  Date Approved: 3/1/2012

- Health Level Seven Arden Syntax for Medical Logic Systems, Version 2.8
  Date Approved: 3/13/2012

- HL7 EHR-System Pharmacist/Pharmacy Provider Functional Profile, Release 1 - US Realm
  Date Approved: 3/14/2012

- HL7 Version Standard: Pharmacy; Medication Dispense and Supply Event, Release 1
  Date Approved: 3/19/2012

- HL7 Version 3 Standard: Data Types – Abstract Specification, Release 2
  Date Approved: 3/19/2012

- HL7 Version 3 Standard: Reference Information Model, Release 4
  Date Approved: 4/23/2012

- HL7 Version 3 Standard: Transport Specification - ebXML Using eb MS2.0, Release 1
  Date Approved: 5/31/2012

- HL7 Version 2: XML Encoding Rules, Release 2
  Date Approved: 6/19/2012

- Health Level Seven Standard Version 2.7.1 - An Application Protocol for Electronic Data Exchange in Healthcare Environments
  Date Approved: 7/9/2012

- HL7 EHR System Functional Model, Release 1.1
  Date Approved: 7/18/2012

- HL7 Version 3 Standard: Medication; Knowledge-Based Query, Release 1
  Date Approved: 12/28/2012
HL7 Draft Standards for Trial Use (DSTUs)
Published in 2012

- HL7 Version 3 Specification: hData Record Format, Release 1
- HL7 Version 3 Domain Analysis Model: Security, Release 1
- HL7 Version 3 Implementation Guide: Virtual Medical Record for Clinical Decision Support (vMR-CDS) for GELLO, Release 1
- HL7 Service-Aware Interoperability Framework: Canonical Definition Specification, Release 2
- HL7 Version 2.5.1 Implementation Guide: S&I Framework Lab Results Interface, Release 1 - US Realm
- HL7 Implementation Guides for CDA Release 2: IHE Health Story Consolidation, DSTU Release 1.1 - US Realm
- HL7 Version 3 Standard: Clinical Statement Pattern, DSTU Release 2
- HL7 Version 3 Standard: Order Set Publication, Release 1
- XML Implementable Technology Specification – V3 Structures 1.1, Release 1
- HL7 Version 3 Standard: Study Design; Structured Document, DSTU Release 1
- HL7 Version 3 Standard: Regulated Product Submission R2, DSTU Release 2

Informative Documents Published in 2012

- HL7 Additional Information Specification 0009: Patient Information Unspecified Content (PIUC) Attachment, Release 2
- HL7 EHR-S Vital Records Functional Profile
- HL7 Version 3 Domain Analysis Model: Virtual Medical Record for Clinical Decision Support (vMR-CDS), Release 1
- HL7 Version 3 Domain Analysis Model: Immunization, Release 1
- HL7 EHR-System Public Health Functional Profile, Release 1
- HL7 Version 3 Domain Analysis Model: Cardiology, Release 2
- HL7 Version 2.6 Implementation Guide: Blood Bank Donation Services, Release 1

Fast Facts:
13 standards received ANSI approval / 18 DSTUs were published
7 Informative Documents were published
<table>
<thead>
<tr>
<th>Workgroups</th>
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<td>Anatonic Pathology</td>
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<td>Anesthesia</td>
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<td>Architectural review Board</td>
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<td>Arden Syntax</td>
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<td>Attachments</td>
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<td>Child Health</td>
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<td>Clinical Context Object Workgroup</td>
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<td>Clinical Decision Support</td>
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<td>Clinical Genomics</td>
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<td>Clinical Interoperability Council</td>
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<td>Clinical Quality Information</td>
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<td>Clinical Statement</td>
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<td>Community Based Collaborative Care</td>
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<td>Conformance &amp; Guidance for Implementation/Testing</td>
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<td>Education</td>
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<td>Electronic Health Records</td>
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<td>Electronic Services</td>
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<td>Emergency Care</td>
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<td>Financial Management</td>
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<td>Governance and Operations</td>
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<td>Implementable Technology Specifications</td>
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<td>Infrastructure and Messaging</td>
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<td>International Council</td>
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<td>International Mentoring Committee</td>
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<td>Marketing</td>
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<td>Mobile Health</td>
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<td>Modeling and Methodology</td>
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<tr>
<td>Orders and Observations</td>
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<td>Organizational Relations</td>
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<tr>
<td>Outreach Committee for Clinical Research</td>
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<tr>
<td>Patient Administration</td>
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<td>Patient Care</td>
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<td>Patient Safety</td>
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<td>Pharmacy</td>
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<td>Policy Advisory Committee</td>
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<td>Process Improvement</td>
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<td>Project Services</td>
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<tr>
<td>Public Health and Emergency Response</td>
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<tr>
<td>Publishing</td>
</tr>
<tr>
<td>Recognition and Awards</td>
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<tr>
<td>Regulated Clinical Research Information Management</td>
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<td>RIM Based Application Architecture</td>
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<td>Security</td>
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<tr>
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<tr>
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<tr>
<td>Technical Steering Committee</td>
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<tr>
<td>Templates</td>
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<tr>
<td>Tooling</td>
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<td>Vocabulary</td>
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