



**HL7 LATAM NEWS**  
2015, DECEMBER



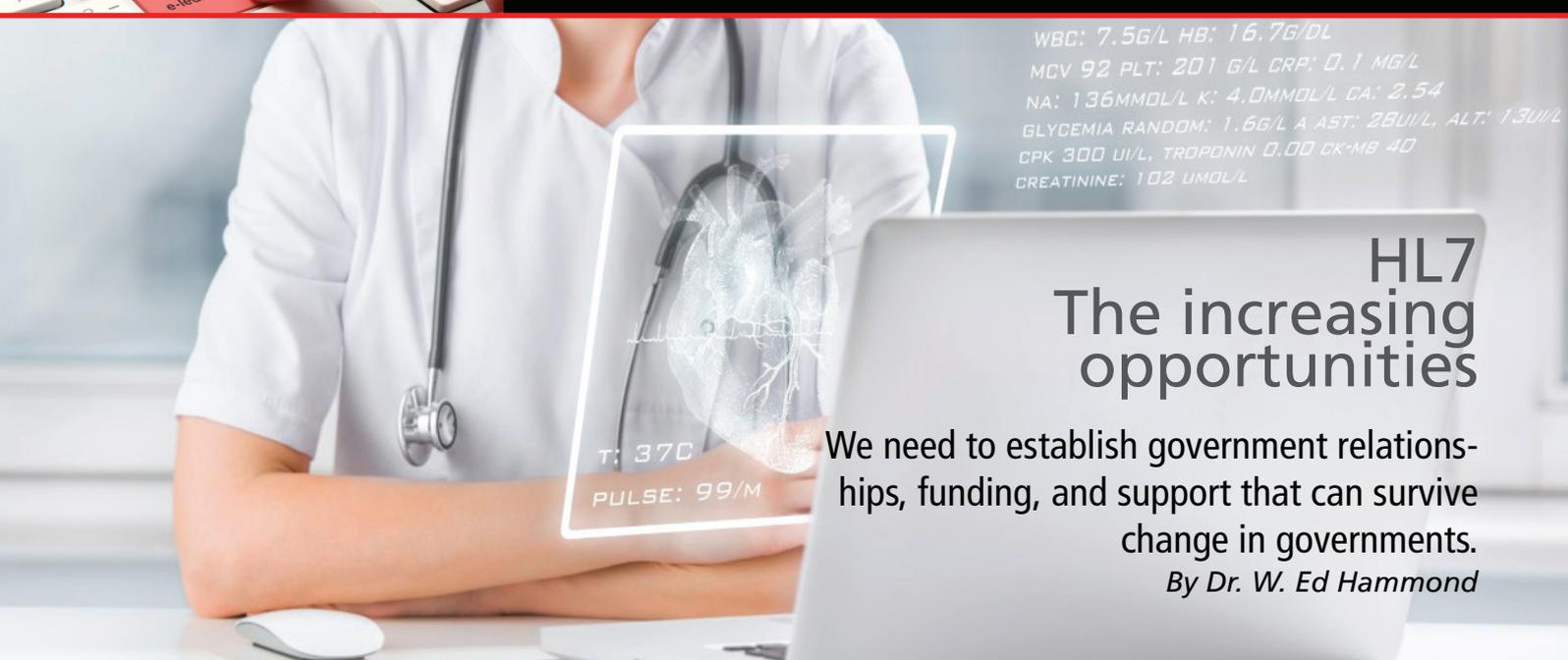
## SOCIAL NETWORKS

How are social networks and portals influencing health care?

*By Humberto Mandirola*



**A course that has made history** *by Fernando Campos*



WBC: 7.56/L HB: 16.76/DL  
MCV 92 PLT: 201 G/L CRP: 0.1 MG/L  
NA: 136MMOL/L K: 4.0MMOL/L CA: 2.54  
GLYCEMIA RANDDM: 1.6G/L A AST: 28U/L, ALT: 13U/L  
CPK 300 U/L, TROPONIN 0.00 CK-MB 40  
CREATININE: 102 UMDL/L

## HL7 The increasing opportunities

We need to establish government relationships, funding, and support that can survive change in governments.

*By Dr. W. Ed Hammond*

## EDITORIAL NOTE

HL7 LATAM News is turning now 5 years old, having launched in October 2011, and in our issues we have shared notes and items of interest by leading international experts from Latin America and around the world relating to health information and technology standards, especially with respect to the development of experiences and initiatives for practical and effective application of different information standards regionally and globally. This new edition is presented as an online e-book, with different versions available for mobile devices and Macs. The various contents offer different perspectives and key topics for implementing information and communication technologies (ICTs) in the health sector, such as the various standards and initiatives currently in use at the national and regional levels, including HL7, SNOMED, IHE, DICOM, LOINC and GS1.

The first of many joint initiatives involving the Latin American chapters of HL7 is the dissemination of the standards in Latin America and the strengthening of the regional HL7 chapters. This editorial effort is the first of many joint initiatives on which the Latin American chapters of HL7 are working.

We invite you to join us and continue growing together on what we consider the right track for the progress of health care. In this day and age, health care cannot exist without information, information cannot exist without systems, and systems cannot work and interoperate properly without standards.

Focusing on HL7 itself, this has been a year of great news that has pleased us immensely. The new HL7 standard, FHIR\*, is growing by leaps and bounds. Although it had been a DSTU, this was clearly a needed change.

Some 20 connectathons have been held, the FHIR Institute was created and the result is evident not only in the Working Groups meeting, where the FHIR tutorials are at full capacity, but also actual implementations being carried out.

Undoubtedly, the high point of the year for HL7 LATAM was MEDINFO. It was the health informatics conference that drew the most Latin American attendees worldwide. Participants not only attended tutorials and presented papers and posters, but also offered them, conducted workshops and took part in panel discussions.

Tutorials and panels were held in Spanish and Portuguese. The high note was a remarkable talk by keynote speaker Dr. Fernán Quirós (Argentina - Hospital Italiano de Buenos Aires), who spoke in Spanish, but displayed his presentation on two different screens, one in Portuguese and the other in English, and included simultaneous translation in both languages for those who wanted it. The convention also brought the HL7 community together thanks to the sponsor, HL7 International, with the participation of affiliate representatives worldwide.

Over time, we will continue working together in the expectation that more and more of our electronic medical records will be interoperable, thus providing quality, security-conscious care for every patient in Latin America and the world.



HL7 Argentina President  
Magister MSC Fernando Campos.



HL7 Argentina Member of Board  
Dr. H.F. Mandirola Brioux.



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Since March 2014, [HL7 Argentina](#) and the [Argentine Normalization and Certification Institute \(IRAM\)](#) have been working together on the study, translation and interpretation of this standard through a [Subcommittee on Health Informatics](#) formed for the purpose.

The great significance of this is that both institutions have committed to provide all assistance necessary to achieve the firm objective of producing a usable standard for our country and to promote its application and adoption, emphasizing the importance of this goal and the multiple ways the correct use of standards will benefit the various actors involved.

Through this relationship, [HL7 Argentina](#) wishes to contribute to the development of clinical documents standardized for sharing, so that on their future adoption all health-care interoperability needs will be met.

#### [What is the process for studying the standard?](#)

The first step was the formation of the [Subcommittee on Health Informatics](#), bringing together a core group representing the sectors involved and establishing as its general objective the study of the standard in the field of health informatics, information technology and communications (ICT) in health care, to promote interoperability between independent systems to facilitate compatibility and consistency of medical information and data, and to reduce duplication of effort and redundancies. The subcommittee participates in ISO TC 215 Health Informatics.

At its regular meetings, this subcommittee begins evaluating the antecedents of [IRAM-ISO/HL7 27932. Health informatics. HL7 Clinical Document Architecture, Release 2 \(CDA 2\)](#), a discussion schema is proposed and is taken up in the technical meetings, and the texts are translated, analyzed and modified. These edited texts give rise to other schemas that are then subjected to discussion until consensus is reached, at which point the document is submitted for public discussion for a period of time, thus adhering to one of the fundamental principles of standardization work, namely that standards be the result

of a participatory democratic process in which everyone can express their opinion.

The public discussion phase is a period of wide diffusion during which these schemas/documents are shared with entities and individuals connected with the topic, who are asked to submit any comments, substantiated and in writing. After the comment period, the schema is again discussed in the subcommittee, together with the submitted remarks.

Once the final consensus is reached, the document is approved as a project and sent to the [General Standards Committee](#), which formally reviews it and refers it to the [Directorate General of IRAM](#) to be sanctioned as the standard.

Within HL7 Argentina, the professional delegation to the working group of the subcommittee answers only to members of the [HL7 Argentina board](#) who actively support this initiative and have committed to attend and participate in the subcommittee's meetings.

#### [HL7 Clinical Document Architecture, Release 2 \(CDA 2\)](#)

##### [What is the standard to be adopted?](#)

The CDA (Clinical Document Architecture) is one of the standards of the HL7 family of protocols approved by the [ISO](#) (International Organization for Standardization) that provides a model for the electronic exchange of clinical documents.

[HL7 CDA](#) is based on XML for document markup, which highlights the structure and semantics of clinical documents to facilitate their exchange in an interoperability environment. This standard uses the elements of HL7 v3 (RIM, data types, XML) to define the structure and semantics of clinical documents.

The use and application of this standard will pave the way for building an electronic health record. By incorporating an XML schema that imparts semantics to the RIM elements and vocabularies used, CDA clinical documents are machine processable, without sacrificing the original

document's user readability.

The same document can be displayed transparently to the user via browsers or mobile devices, completely without regard to content.

CDA was designed according to principles which, from the accumulated experience of HL7's members, were needed to prioritize improving patient care. In particular, it supports the exchange of documents that are legible between users, allowing information to be presented appropriately to users with different requirements and knowledge. It promotes durability, storage and interpretation of information beyond the formats and technologies currently in use. By design, it facilitates a wide range of post-exchange processing, and is easily compatible with many document creation and management applications.

CDA allows the definition of viewing permissions, which means the information contained in the document can be set to be seen only by those with sufficient privileges. The overall degree of confidentiality is established in the header but also can be set at the section level, so that sections with sensitive information can have a higher level of confidentiality than the rest of the document.

The HL7 CDA standard does not specify the document content, simply the structure and semantics necessary for exchange; however, [HL7 Argentina](#) is also committed to helping create implementation profiles that regulate and standardize content by generating templates and documentation delimiting a particular working context.



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## HL7 chapters in the region

Hay capítulos latinoamericanos en otro momento muy activos que han quedado desafiados como el HL7 y esperamos poder brindarles todo nuestro sustento desde la comunidad latinoamericana para poder volver a contar con ellos. Dentro de los capítulos más vinculados a la región no podemos dejar de mencionar a HL7 España, con quien nos une no solo el idioma, si no con el cual mantenemos un permanente contacto y líneas de colaboración.

Argentina	<a href="http://www.hl7.org.ar">www.hl7.org.ar</a>
Brasil	<a href="http://www.hl7brazil.org">www.hl7brazil.org</a>
Chile	<a href="http://www.hl7chile.cl">www.hl7chile.cl</a>
Colombia	<a href="http://www.hl7.org.co">www.hl7.org.co</a>
Uruguay	<a href="http://www.sueiidiss.org/">http://www.sueiidiss.org/</a>

## Discussion forums on social networks

Indudablemente las redes sociales están teniendo un rol fundamental para la comunicación y del desarrollo de actividades de todo tipo incluidas las de salud, tecnológicas y académicas, por tal motivo difundimos las mismas, los invitamos a todos a sumarse y a participar.



## Integrating medical applications with HL7: Lessons learned

There are several things we need to take into account to carry out interoperability between systems. HL7 (Health Level Seven) is a set of standards for the electronic exchange of medical information. One of the first decisions to make is which of these protocols is the most suitable for implementing whichever interface meets my requirements.

To this end, I must analyze and choose among the various protocols in the HL7 family: V2.x messaging if what I require is interoperability between departments within the same institution; V3 messaging if I need to exchange XML-based messages to achieve interoperability with other institutions, supported by a Reference Information Model with different domains; or, finally, if what I need is to exchange clinical documents based on the structures currently used by physicians and other health-care providers -- discharge reports, discharge summaries, consultation notes, test and imaging reports, etc. -- we can choose to use FHIR, the latest HL7 protocol, re-

source-oriented to allow the information to actually be distributed. Message-, document- and resource-oriented protocols are not mutually exclusive, and we should not ask which one is better; instead we must ask when to use which one. While choosing the most suitable protocol is important, we must also work on terminology standards, standardization of databases, unique identifiers, integration engines and above all on defining the implementation profile for the integration we want to carry out. These are not rigid guidelines, but rather ideas to be aware of when documenting an implementation. The main purpose of these guidelines is to "spell out" how we will apply the standard in a particular context, the semantics of each field involved and the controlled vocabularies that will be used.

We must keep in mind that a single software solution provider cannot supply all the needs of a health-care institution; therefore it is important for each application developer to take the stan-



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dards into consideration so their applications will be more useful.

It is imperative that anyone tasked with evaluating and contracting for health-care systems for any type of institution look beyond the internal functionality required (HIS, LIS, RIS, Dentistry or any department) and consider the availability of interfaces with other systems, based on the medical field's widely tested and accepted standards. And having a standard interface is not just a comparative advantage, it is an indispensable minimum requirement.

In recent decades there has been a significant advance in the development of applied information technology in the health-care field. The distinctive characteristics of health-care "business," where most of the strategic decisions are based on information provided by the same professionals who also are responsible for carrying out most of the decisions on the use of diagnostic and therapeutic resources, mean any new clinical

management tool must be recognized and accepted by them in order to be added.

Unique object identifiers (OID) have a key purpose: They allow tracking of an identifier that is used in communication between systems. The OID is issued using a methodology that ensures uniqueness. If an OID is assigned to an object, no other object may be associated with the same OID. Among the issues that have arisen are the problems with using the present OID registration system as a reliable source for the identifier, the confusion that the use of an OID creates in messages, and the redundancy introduced by an OID at the price of a larger message and new content. In promoting clearly defined identifiers for inter-system communication, HL7 developed a standard that requires the use of OID outside of network addressing. This standard and its propagation by others paradoxically may have created more confusion than clarity.

A command of terminology in the context of

International Health Terminology Standards Development Organisation (IHTSO) is essential. Terminology standards represent a key link to realizing interoperability.

Among the most commonly used terminology standards in medicine are (International Classification of Diseases) ICD 9 and ICD 10, maintained by the World Health Organization (WHO); other terminologies are SNOMED and LOINC.

The acronym LOINC stands for Logical Observation Identifiers Names and Codes, and as the name implies, it is an observation-oriented coding. If we consider the diagnosis as a result and the test as a question, terminologies like LOINC are on the question side while other encodings such as ICD-10 and SNOMED are on the answer side. LOINC is the terminology standard originally developed for clinical laboratories and other tests and now also includes clinical terms. It is the standard that best meets the terminology and coding requirements of laboratory tests and is growing more and more widely used. The purpose of LOINC is to assist in the collection and electronic exchange of clinical results (such as laboratory tests, clinical observations, outcomes management and research). LOINC has two main parts: laboratory LOINC and clinical LOINC. Clinical LOINC contains a Document Ontology sub-domain that lists the types of clinical reports and documents.

FHIR is strongly influenced by the philosophy of REST (Representational State Transfer), a Web development architecture completely based on the HTTP standard, which is perfect for mobile communication scenarios. REST is much simpler than other alternatives used in recent years, such as SOAP, and it is estimated that about three-quarters of the world's Web services are now REST. FHIR also represents a change in the way in which standards are defined. It is completely framed within the change in strategy announced by HL7 on open standards, with an open license. This, added to the number of existing sample implementations, makes it much easier to begin to use.

Integration engines like Mirth Connect allow multiplatform HL7 interfaces, which enables bi-directional sending of HL7 messages between systems and applications across multiple available modes of transport.

### **Conclusion:**

The lack of policies on standards increases costs and error in system interoperability processes. So before defining the system to be used, it is necessary to define the frameworks and policies that will enable interoperability of whatever systems are implemented. This includes communications standards, security, semantic exchange (messages, documents and resources), terminology, identifiers, master tables and integration engines.

Another important task associated with the development of interfaces for integrating HL7 medical applications, in addition to proper selection and application of all standards that meet your requirements, is generating a detailed specification of the interfaces, writing a good test plan, spelling out the interface maintenance plan and developing a contingency plan.

These interfaces must be valid with systems that are already interoperating in order to validate both syntactic and semantic interoperability as well as business rules to validate that our development can process the answers to the information we send to other systems, thus closing the circle of information exchange.



## Social Network de HL7 LATAM

**LINKEDIN:** [http://www.linkedin.com/groups/HL7LATAM-4157735?trk=my\\_groups-b-grp-v](http://www.linkedin.com/groups/HL7LATAM-4157735?trk=my_groups-b-grp-v)

**YAHOO:** <http://ar.groups.yahoo.com/group/HL7LATAM/>

**FACEBOOK GROUP:** <http://www.facebook.com/groups/HL7LATAM/>

**FACEBOOK PAGE:** <http://www.facebook.com/hl7latam>

**TWITTER:** <http://twitter.com/HL7LATAM>

**GOOGLE:** <http://groups.google.com/forum/?hl=en#!forum/hl7latam>

**YOUTUBE:** <http://www.youtube.com/user/HL7LATAM>

## Social Network de HL7 México

**FACEBOOK:** <https://www.facebook.com/HealthLevelSevenMexico>

**TWITTER:** <https://twitter.com/hl7mexico>

## Social Network de HL7 Argentina

**FACEBOOK:** <https://www.facebook.com/groups/hl7arg/>

**TWITTER:** <http://twitter.com/HL7ARGENTINA>

## Social Network de HL7 Brasil

**FACEBOOK:** <https://www.facebook.com/pages/Instituto-HL7-Brasil/247731821996356>

## Link importantes

**IMIA-LAC** Federación de Informática Médica para América Latina y el Caribe.

<http://imia-lac.net/wp/conoce-imia-lac/que-es-imia-lac/>

**DICOM**

<http://medical.nema.org/>

**PERFILES IHE**

<http://www.ihe.net/>

**Versión de HL7LATAM NEWS para android**

<http://www.appbrain.com/app/hl7-latam-news/com.appmk.HLSevenNews.AOTLTFZZWKKKWBCIB#descriptionsection>



# SOCIAL NETWORKS

How are social networks and portals influencing health care?

*By Humberto Mandirola*

The Internet has changed people's relationships with information. Doctors, nurses and other health professionals are still the first choice for most people with health problems, but online resources, including the advice of peers, are an important and growing source of health information.

Social networks are playing an increasingly greater role in various branches of health care, influencing the behavior of patients and professionals. Many effects are positive, as with groups of patients seeking to learn more about their illness or support each other. Such is the case with celiac patient networks whose members share health tips or warn each other about products that claim on the label to be gluten-free but in reality are not.

A number of hospitals are working with patient support groups, with individual health portals, tools such as blogs, instant messaging platforms, video chat and social networks, the health-care process is due for a re-engineering that takes doctor-patient interactions into account. Our vision of health care in the next few years must include social networks. Health-care portals that bring physicians and patients together are coming to symbolize modern medicine. (1)

There are several systems of this kind: "Hola Salud" (Hello Health), the health portal of the Hospital Italiano de Buenos Aires, Guía de Salud (Health Guide). The implementation of information and communication technologies (ICT) in patient care remains a major challenge for health-care organizations. (2) These systems are at-

tracting more and more adherents, both professionals and patients. (3)

No one is more interested in taking care of their health than patients themselves, and accessing information and sharing it seems like it would have a positive effect, but this is not always the case. Many times people find out about things they cannot handle properly, receive incorrect information, or misinterpret what they read, and this can have negative effects on their health care.

The impact on the health care of people with access to modern tools is unavoidable, so it is important that health-care systems develop strategies to provide support and guidance in various forums.

Several researchers are studying the effect of these social networking tools and their impact on health care. (4)

Perhaps the greatest impact and the greatest benefits are seen in groups for people with chronic diseases, where patients share their problems with one another and inform themselves about new treatments and care of their illness. (5)

Conclusions: This trend is far too big to ignore, and we increasingly need to view people as managers of their own health. Health-care professionals should assist in this process as guides and counselors, a change from the role we play now. With the proper use of social networks, it is likely that we can achieve better health-care standards.

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T: 37C

PULSE: 99/M

NAME: MR. PATIENT  
AGE: 27 YEARS  
DIAGNOSIS: BROKEN ARM  
REASON OF ADMISSION: ACCIDENT  
CARDIO: REGULAR BEATS, NO MURMUR  
PULMONARY: CLAIR, NO RALES  
ABDOMINAL: SOFT, NO ORGANOMEGALY  
NEUROLOGICAL: NOTHING ABNORMAL



LAB FINDINGS:  
WBC: 7.5G/L HB  
MCV 92 PLT: 20  
NA: 136MMOL/L K  
GLYCEMIA RANDOM  
CPK 300 UI/L, TROP  
CREATININE: 1.02 UM

## HL7 The Increasing Opportunities

We need to establish government relationships, funding, and support that can survive change in governments.

*By Dr. W. Ed Hammond*



The exponential advancements in technology and the recognition of new requirements for the use of that technology in health care provide huge opportunities for expanded implementation of HL7 standards and requirements for new standards. Change is now the new norm. Although these remarks are biased by what is happening in the U.S., I think they apply to the global community.

One of the biggest changes in health care is the recognition that sharing data about patients across all sites of care can significantly increase data for decision making and that the discovery of new knowledge is very important. This sharing is focused in two areas. The first is the aggregation of data for a single patient across all sites of care. Data about a patient is recorded mostly only from a physical encounter and occurs at random intervals. The aggregation of data about a patient – the patient-centric Electronic Health Record (EHR) - fills in the temporal gap and permits better informed decision making. Knowing what has been done elsewhere reduces duplicative tests and provides improved consistency in treatment. Drug-drug interactions are reduced, allergies are documented, and outcomes are better tracked. The second area is the creation of connected networks across large number of sites that permit sharing access to data for purposes of research and knowledge discovery. These two initiatives require interoperability, and interoperability, in turn, requires standards.

Interoperability has been an elusive goal of clinical health information technology since the need to exchange data between two or more groups was recognized. HL7 itself was created as a step toward accomplishing this function. Achieving interoperability in the U.S. has become the focus of HHS, ONC, FDA, and CMS. ONC and HHS have both created roadmaps for achieving this goal over the next ten years. HL7 International standards are mentioned specifically in these roadmaps. What we are trying to achieve, in simplest terms, is the ability to exchange data between heterogeneous systems, and the receiver of the data understands both the meaning and context of the received data. We also need to be able to specify what data is to be sent when. The standards that address these two requirements for interoperability are data transport standards and a common data model that speci-

fies the vocabularies or data elements to be used.

HL7 International has developed different sets of standards, evolving over the years that provide for the transport of data. The first HL7 data exchange standard is v2.n. In the U.S., over 90% of health-care systems use HL7 v2.n, with v2.5.1 being the most common standard deployed. HL7 v3.n standard is based on the Reference Information Model has little penetration in the U.S. market, largely due to its complexity. It has been more widely implemented outside the U.S., particularly in Canada and Australia. The HL7 v3 Clinical Document Architecture (CDA®), however, is seeing widespread international use. Within the U.S., implementations such as the Continuity of Care Document (CCD®) and the Consolidated CCD (C-CCD®) is being increasingly used for patient summaries and test and procedure reports. The C-CCD is recommended by ONC for meeting Meaningful Use Requirements.

A new data exchange standard that addresses the “what to send, how to send, and when to send” requirement is being created within HL7. The evolving standard – the Fast Healthcare Interoperability Resources (FHIR®) has great promise to finally achieve true interoperability. FHIR couples the simplicity of v2 with a more functional model approach. FHIR introduces the creation of reusable Resources that are then used to populate a function-specific profile. FHIR’s great asset appears to be its simplicity and easy understandability by subject matter experts. It is based on RESTful architectural style and leverage across-industry web technologies such as XML, JSON, OAuth, and HTTPS. FHIR provides service-related exchange of data – meaning you can send just what you need to send for any service-oriented event. The Argonaut Group has created a well-funded support organization to accelerate the creation of the FHIR normative standard.

Increasingly, driven by new initiatives in health such as data sharing, big data to knowledge, learning health systems, population health, and precision health, the clinical community is recognizing the need to connect things together, and to more rapidly move new knowledge into routine use. In order to accomplish these goals, the clinical community needs to engage more intimately with the technical community to understand and solve problems. Consequently HL7

is increasing the opportunities for the clinical community to engage with HL7 to identify new needed standards. The challenge is to understand what is required without having the clinical community to fully understand the technology and the technical community to fully understand the clinical. HL7 has created a Learning Health Work Group that will address some of these issues. HL7 is also creating new work projects with clinical specialty groups, such as the American College of Cardiology.

For Latin America, I urge this community to form closer relationships with stakeholder groups within a country and sharing relationships across countries. What is required far surpasses what one group can achieve alone. We need to form new relationships among the many communities. We need to establish government relationships, funding, and support that can survive change in governments. Countries more advanced in the use of HIT need to engage and support countries just beginning the journey.

Latin American has the assets to achieve these goals. You have great leadership. You are establishing momentum. I was impressed with the number of countries represented and the number of attendees at the INFOLAC meeting in Montevideo, Uruguay. The whole is always greater than the sum of the parts.



## A course that has made history

The first online HL7 course is turning 10 years old. In order to provide cost-effective training to IT professionals needing familiarization with the HL7 standard and prepare them to take on interoperability projects, the first HL7 course in Spanish was created in 2006.

This type of training allowed interested parties without the budget or the opportunity to attend tutorials at HL7 Working Groups to engage with the standard in an alternative way that has been shown over time to be as effective as the live classroom method.

The first of the classes in Spanish was held in April 2006, and since then professionals from almost all Latin American countries have attended.

The key to the course is that it is not a lecture-style class in which students read or watch a video about theory, but one where they learn by doing exercises and working through common situations in an interoperability scenario. It is essentially an online workshop, a specially prepared set of exercises that teach through practice.

At the end of the course, students should be able to tackle a project that requires implementing an interoperability framework between different health-care information systems, and know how to read the specifications of the most widely used HL7 standards.

They will also understand the need for controlled vocabularies, master files and entity registries, know how to read and write V2.X. and V3 messages, understand and create CDA R2 documents and know

when to use the most suitable interoperability artifact (messages and/or documents).

Based on the success of the course in Spanish, it was translated into English in 2008 and since then more than 4,500 students have taken the course, subsequently translated into Japanese and Portuguese.

Over time it evolved to keep pace with changes in the standard and the resources. Specific tutorials on each exercise were included. The material was provided in a format for mobile devices. Access to the standard was included in the site, and it currently has four active websites: <http://hl7elc.org>, <http://hl7elcx.org>, <http://hl7fundamentals.org>, <http://hl7.org.ar>.

In 2011, software was created that pre-checks the answer to each exercise. If the answer is correct, it marks it as such, and if it is incorrect, it provides feedback so the student understands the error and has a chance to correct it. If that help is not enough, on the second attempt a tutor reviews the answer and shows the student the solution.

Today, this tool allows us to handle more than 500 students per year with only 14 tutors. In the past, the maximum number of students was 100, which led to waiting lists of more than 300 applicants.

In 2014, the international edition added a unit on FHIR, the new HL7 standard.

By the numbers: 4,554 participants from 97 different countries.



Each time the course is given, it is a challenge to maintain a reasonable response time to students' questions in the forum due to the different time zones they are in. Because of this, the course has more than 20 tutors from different countries. The following map shows the HL7 icon in every city where there is at least one participant in the 2015 edition and the yellow icon for tutors.

The core team in Argentina (HL7 Argentina): Diego Kaminker and Fernando Campos, coordinators.

Spanish language edition: Alfredo Cancio (AR), Daniela Brondino (AR), Gustavo Sosa (AR), Daniel Berreta (Uruguay)

Initial tutors, international edition: Mark Shafarman (US), Gora Datta (US), Virginia Lorenzi (US), Rene Spronk (NL), Mike Henderson (US)

Senior tutors (> 4 editions): Melva Peters (Canada), Iryna Roy (Canada), Xinting Huang (China), Victor Andrade (Canada), Cyr Bakinde (US), Aditya Joshi (India), Ghazaleh Ashayer (Canada).

Current tutors: Gloria Coronado (Mexico), Karen Garcia Salazar (Mexico), Sola Ajiboye (UK), Mohammad Elias Hossain (Bangladesh), Rik Smithies (UK), Keerthi Kiran (Singapore).

In the wake of the popularity of the course organized by HL7 Argentina and HL7 International, HL7 Argentina created a program called "Train the trainers" that prepared every HL7 affiliate requesting it to present its own local version of the course and teach its own students.

Since then, the following members have held their own courses: India, Canada, Austria, Romania, Singa-

pore, Japan (translated), Brazil (translated into Portuguese) and the Czech Republic on their own educational platforms and Pakistan, New Zealand and Italy on Argentina HL7 servers.

Finally, the course aims to reach developing countries that might not have an active HL7 affiliate, yet can still see their way to implementing one or teaching decision-makers and raising their awareness about the benefits of using an interoperability standard.

Thus, for each edition of the course, scholarships are offered for those who want to participate and do not have the means. The award system uses a score based on the applicant's place of residence, occupation (weighted toward government organizations and software vendors) education (educators are favored) and several other CV-related factors.

So, for example, for the second English edition in 2013, with an enrollment of 319, 30 scholarships were awarded to South Asian countries thanks to the Asian e-Health Information Network (AEHIN). Using the same criterion, the Spanish edition beneficiaries were 6 Central American countries and Paraguay.



The course, celebrating its 10th anniversary, will begin in March 2016 with 6 editions during the year: English in March and August, Spanish and Portuguese in April and September.

For more information, visit one of the HL7 sites -- <http://hl7.org>, <http://hl7.org.ar> or <http://www.hl7.com.br> -- or write directly to HL7 Argentina at [info@hl7.org.ar](mailto:info@hl7.org.ar).



HL7 Argentina President  
Magister MSC Fernando Campos.

