



Student Working Group News

American Medical Informatics Association

<https://www.amia.org/working-group/student>

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From The Chair

Greetings ST-WG members and supporters!

With many thanks to all those who contributed to the current newsletter, and most especially the editorial team for putting together another great issue, I am happy to present to you the November 2010 AMIA ST-WG newsletter.

Since the year is ending and it is a time of transitions, I would like to take a few moments to reflect on some of our achievements during the year. As you know from our newsletters earlier this year, we have been working in committees: communications, national meetings and nominations. I feel that this structure has proven to be beneficial because the members have been able to focus on their areas of interest and expertise. We had great contributions from volunteers (student working group members) for the committees and we have made steady progress. I feel that the team very successfully carried the flag that was given to us by the previous ST-WG executive board team! Thanks all!!

Our Communications Committee has been busy improving the way we communicate including the optimal use of online platforms. The Nominations Committee did a great job organizing the elections for 2011 members-at-large. The National Meetings Committee has been wonderful in putting together a great career panel for the 2010 Fall Symposium, business meeting and networking events. More information about the schedule for these events is in this issue. Hope to see all of you at these events.

I would like to thank the ST-WG board and volunteer members who served during 2010 and are planning to transition to other roles in 2011.

Additionally, I would like to thank the AMIA staff for supporting our activities and patiently dealing with our requirements. I will be transitioning to the immediate-past chair position for 2011. My best wishes to Paulina Sockolow as the ST-WG Chair for 2011 and the rest of the team!

I would especially like to thank Intelligent Medical Objects (IMO) for sponsoring ST-WG events at the 2010 Annual Symposium in Washington, DC. Some information about IMO activities during AMIA are in this issue.

Thanks all for supporting the AMIA ST-WG, and helping me through out the year!

Regards,

Muzna

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Sponsor for AMIA 2010 Annual Symposium ST-WG Events



<http://imo-online.com/>

The AMIA Working Group News is published 3-4 times a year by the Student Working Group of the American Medical Informatics Association. Visit our web site for more information or to learn how to get involved.

<https://www.amia.org/working-group/student>

Chair.....Muzna Mirza
Chair-Elect.....Paulina Sockolow
Past-Chair.....David Kaelber

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Member at Large.....Matthew Scotch
Member at Large.....Faisal Vali
Member at LargeAndrew Nguyen
Member at LargeSupachai (Kid) Parchariyanon
ST-Rep to AMIA Board of Directors.....David Kaelber
Editor-in-chief.....Kevin Chang
Deputy EditorMustafa Ozkaynak

Member Contributions

Attracting Medical Students to Primary Care – Direct Pay Practice and Technology

By now it is common knowledge that primary care is becoming less and less desirable for newly graduating medical professionals. Additionally, many current primary care physicians are closing shop and are either entering early retirement or seeking non-clinical professions. According to the American Academy of Family Physicians, the 2010 Residency Match showed that 1,184 medical school graduates in the U.S. chose Family Medicine, filling less than half of the available positions (aafp.org Match 2010). As the downfalls of practicing family medicine continue to escalate (e.g. low salary, minimum time per patient, significant paperwork and insurance headaches), residencies in this field become less desirable. In light of the decreasing interest in primary care careers, I would like to discuss a tangible alternative for practicing primary care: a direct-pay practice utilizing web based technology.

About three years ago I learned of a primary care physician who implemented such practice. Dr. Jay Parkinson had just completed his residency, moved to Brooklyn, New York and realized that many of his friends did not have health insurance, and that he did not want to start or join yet another typical practice that most of us visit. So he took an innovative approach by creating a direct-pay clinic managed entirely by web-based technology. In doing so, Dr. Parkinson obviated the need for administrator staff and nurses, ended waiting lines and said goodbye to insurance. More importantly, the patients received dedicated physician face time, web scheduling, email access, video chat access, and a Personal Health Record (PHR) - all through a sleek web portal. Since 2007, the HelloHealth based direct-pay model has been adopted by hundreds of doctors across the country.

In June of this year I met with the first doctor in Philadelphia to implement HelloHealth –Bruce Hopper Jr. MD. He was a physician on the hamster wheel, churning through over 40 patients a day while seeing his annual income

decline and burn out set in. Instead of abandoning medicine, he adopted the HelloHealth direct-pay model. Since June I have worked closely with Dr. Hopper learning the ins and outs of his practice and I will continue my work as I begin my clinical rotation with him. The following describes just a few aspects of a HelloHealth managed direct-pay practice.

The office staff includes only a physician; there are no nurses or administrators, as all organizational aspects of the practice are managed via the HelloHealth Portal. Additionally, all scheduling, billing, and medical information also resides on the remotely hosted, HIPAA certified HelloHealth servers. Patients sign up for HelloHealth online, then add Dr. Hopper as their doctor. As an official member, patients can set up in-person appointments, video chat appointments, send email, and instant message with Dr. Hopper. In addition, all patient medical records (labs, medicines, diagnoses, imaging) are easily accessible, printable and synchronizable with other PHR providers like GoogleHealth. The HelloHealth practice management portal is intuitive, web 2.0 based, and the way medical management should be in 2010. With decreased overhead burdens and flexibility of this model, it is not uncommon to find Dr. Hopper making house or office visits and managing follow-ups by video or email. More importantly the new model allows Dr. Hopper to continue his passion for modern medicine and building meaningful patient relationships.

The big question for many medical students is the expected annual income for a doctor who adopts this model. Based on the Bureau of Labor 2009 Statistics, the median wage for a Family Physician was \$160,530; based on modest cost and revenue figures, income for a direct-pay model will be at least double that amount.

Instead of waiting for medical reform legislation or other top down intervention we have HelloHealth as the grassroots alternative that is here to stay. And to any medical student or new graduate that brushed off primary care, I suggest to please reconsider. Our country needs a new wave of medical students/professionals interested in front-line positions – and I strongly

believe the technology-supported direct-pay approach is a major leap in that direction.

Disclaimer – The author is neither affiliated with nor sponsored by any person or company mentioned.

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Applying Web 2.0 Technology to Healthcare

The Institute of Electrical and Electronics Engineers or IEEE (read I-Triple-E) is an international non-profit, professional organization for the advancement of technology. The IEEE Computer Society sponsors a monthly journal called “Computer”. Carl K. Chang is the Editor-in-Chief. “Computer” publishes peer-reviewed articles written for and by professionals, representing the full spectrum of computing technology from hardware to software, and from current research to new applications. According to its homepage “Computer” provides more technical substance than trade magazines and more practical ideas than research journals.

The July 2010 issue of “Computer” was dedicated to e-health. Mark Weitzel, Andy Smith, Scott de Deugd, and Robert Yates from IBM authored an article entitled “A Web 2.0 Model for patient-Centered Health Informatics Applications”.

The authors discussed that online communities (social networks) provide informal mechanisms for running medical protocols. They proposed applying open, standards-based Web 2.0 technologies to encapsulate a medical protocol as a distributed software component in ways that can adapt and adjust to the needs of health care professionals, be easily accessible with a Web browser, and leverage the context of the website in which they are embedded. The authors give a scenario that uses Web 2.0 programming conventions and standards, including REST, OpenSocial, and Open Authentication (Oauth). For this scenario, they introduced the following actors and services. Jane is a 52-year-old patient with no pre-existing conditions. Over the past several weeks, she

has developed a persistent cough. John is Jane’s primary physician and works for a large healthcare provider with several remote clinics. The healthcare provider owns and operates clinics that use cutting-edge technology to improve the delivery of care through dashboards, integrated healthcare records, and collaborative tools. Similar to a homepage server, the physician dashboard provides physicians at the healthcare provider’s clinics with a consolidated view of a patient’s healthcare records via an OpenSocial container and gadget component model. A cloud protocol provider is an organization that hosts a clearing house service for the delivery of medical protocols as gadgets, including a chronic cough protocol, through a Web 2.0 application model. The protocol providers could be a research university, a nonprofit care provider, or a for-profit medical informatics company.

The model proposed in the paper potentially offers the means to further improve care quality and lower costs. Web 2.0 technologies can assist in keeping the patient in the loop and provide clinicians computational and communication power to intervene more efficiently. However, widely active use of Web 2.0 technologies by the professionals as described in this paper does not seem quite possible in the near future. National administrators, researchers, health care institutions have spent significant amount of resources to establish a national and regional health information exchange infra- and super-structures. Although there is some progress, the current situation is far from what has been imagined. Inadequacy of technology may be a reason for the slow progress. Web 2.0 can contribute to the technology aspect of the EHRs by introducing open technologies. However, the electronic medical record products that are currently in service are closed architectures that may not embrace the open technologies quickly, and interoperability is still a concern.

I argue that non-technology related reasons may be a more important bottleneck, than technology reasons, in the development of health information technologies. For example, a tested, robust business model is not available to support large scale HIE systems. An appropriate business model is a prerequisite to ensure sustainability.

Although Web 2.0 technologies may not boost the EHRs used by professionals in the short term, personal health records (PHRs) which are recently being developed and still looking for a

solid ground can better benefit from these technologies. An ideal PHR would provide a complete and accurate summary of the health history of an individual by gathering data from many sources. Web 2.0 technologies provide the means to iteratively develop and distribute applications that empower diverse networks, interactions, and effective collaboration around the world.



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AMIA 2010 Annual Symposium

We are all excited about it. The symposium, as one of the world's most comprehensive annual meetings on biomedical and health informatics, provides a wide range of formats for education and discussion. Student working group members can find detailed information on the education and networking sessions and create a personal itinerary by visiting <http://amiaannual2010.abstractcentral.com/login>.

The student working group executive board members worked hard to put a number of events together for the group members. These events are tailored for the needs of the group members and to make the symposium even more beneficial for them. An overview of all the events is available below.



As always, this year the business meeting has a great agenda as you can see below.

2010 Fall Symposium ST-WG Business Meeting Agenda

7:30-7:35 Welcome and Introductions

7:35-7:45 Chair Report – State of the Working Group (Muzna Mirza)

7:45-7:50 Report from Student representative to the AMIA Board (David Kaelber)

7:50-8:05 Committee Reports

- Nominating Committee - Muzna Mirza
- National Meetings Committee - Paulina Sockolow
- Communications Committee - Andrew Nguyen

8:05-8:10 Overview of AMIA for Students with testimonials from couple of ST-WG members regarding their involvement in other WGs

8:10-8:15 “A few words from our sponsor ...”

8:15-8:45 Break for Networking and reception (with cash bar)

8:45-9:30 Follow up to last year's ‘ST-WG Needs Assessment’ Brainstorming Session (Paulina Sockolow, Muzna Mirza, and everyone)

9:30-9:45 ST-WG newsletter discussion (Mustafa, Kevin, Rupa)

9:45-10:00 ST-WG research ideas (Saif and Muzna)

As the editorial team, we encourage student working group members to write and submit articles about the Symposium sessions they attend for the next issue of this newsletter. Also bring your cameras and capture memorable moments at AMIA! We can post the pictures here.

The Editors

Student Working Group AMIA 2010 Annual Symposium Meetings and Events

Event	Date	Time and Location
Student Working Group Business Meeting (Reception with cash bar – Sponsor: Intelligent Medical Objects (IMO)	Sunday November 14, 2010	7:30-10:00pm Jefferson East
Student Working Group networking lunch	Monday, November 15,2010	12:00-1:30pm 12 noon: Meet at the registration desk area 12:05 depart to find a place to eat (pay for your own meal plan)
Mentorship Meet-up	Monday November, 15, 2010	5:00-6:00pm Morgan Room
Panel: Careers in Informatics: Perspectives from Graduates of Various Educational and Training Programs on How to Make Your “Career Dream” Come True?	Tuesday November 16, 2010	10:30am-12:00 pm Jefferson East

From our Sponsor

Intelligent Medical Objects (IMO) is sponsoring the student working group events at the 2010 Symposium. IMO will also be sponsoring two thought provoking focus groups at AMIA 2010 that should be of interest to student attendees.

The first, titled, “Procedure Vocabularies and Meaningful Use” will focus on procedure vocabulary. SNOMED CT is established as a regulatory requirement for diagnosis coding for meaningful use criteria, but has made less inroads for procedure coding. Meanwhile, many of the quality measures cited in the CMS Meaningful Use Final Rule define procedure criteria based on SNOMED CT. We expect this session should generate an interesting dialog around the use of SNOMED CT as a viable alternative for procedure coding. Session will be conducted in Independence room, Lobby Level on Tuesday, November 15 from 5:00 p.m. – 6:30 p.m. Wine and Cheese will be served.

The second session, titled “Clinical Reference Sources at the Point of Care, Has the Dream been realized?” will explore 1) what types of reference links might be useful for practicing clinicians and/or students, 2) would differential diagnosis tools be helpful and, 3) what specific information within a health record, at what point in clinician’s workflow would be most useful.

Session will be conducted in Kalorama room, Lobby Level on Wednesday, November 17 from 7:00 a.m. – 8:30 a.m. Coffee and Bagels will be served.

Founded in 1994, Chicago-based Intelligent Medical Objects (IMO) combines cutting-edge computer science with medical expertise to help clinicians, HIM professionals, and patients gather, organize, and retrieve relevant health information quickly and easily. The clinical terminologies and applications of IMO connect clinicians with reimbursement, decision support, patient education, and research.



<http://imo-online.com/>

AMIA Educational Meetings and Events 2010 and Beyond

2011 ACMI Winter Symposium

<https://www.amia.org/college/symposium.asp>
February 3-6, 2011
Hyatt Regency Coconut Point Resort and Spa
Bonita Springs, Florida

Joint Summits on Translational Science: TBI/CRI 2011

<https://www.amia.org/2011jointsummits>
March 7-11, 2011
Parc 55 San Francisco
San Francisco, California

PHI 2011: Setting the Next Informatics Agenda for Public Health

May 25-27, 2011
Walt Disney World Swan & Dolphin
Orlando, Florida

AMIA 2011 Annual Symposium

October 22-26, 2011
Hilton Washington & Towers
Washington, District of Columbia

NI 2012

<http://www.ni2012.org/>
June 23-27, 2012
Hilton Montreal Bonaventure
Montreal, Canada

AMIA 2012 Annual Symposium

November 3-7, 2012
Hilton Chicago
Chicago, Illinois



Transitions in the AMIA ST-WG Newsletter and the Editorial Board

We are proud to announce that the AMIA ST-WG newsletter has continued to receive widespread recognition, and has recently attracted sponsorship for our Working Group! In this issue we give thanks to *Intelligent Medical Objects (IMO)* as they will be sponsoring the AMIA ST-WG events at this year's November 2010 Annual Symposium. We look forward to working with them further as we continue to expand the presence and readership of the AMIA ST-WG and the newsletter.

From an editorial standpoint, Kevin Chang, who has been the Editor-in-Chief since November 2008, is turning the position over to Mustafa Ozkaynak who is currently the deputy editor. The new deputy editor assisting Mustafa will be Edmond Ramly. Mustafa can be reached at mozkaynak@gmail.com and Edmond can be reached at ramly@wisc.edu. The editorial board always needs more volunteer editors. To volunteer, please contact Mustafa.

From the Outgoing Editor-in-Chief

To the AMIA Student Working Group and all of our dear readers, it has been a pleasure to be your editor-in-chief and a pleasure working with all of the great people in the AMIA ST-WG. Time has flown by and I can't believe all of the progress we have made, to the point of having ST-WG sponsorship! I believe Mustafa and Edmond will make a great team to continue bringing you high quality newsletters, please remember to send them your contributions so that they can share your experiences and ideas with the rest of the readership!

I'm excited to stay involved with the AMIA ST-WG and hope to hear from many of you as we move forward.



Keep in touch,
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