[89] Cybermed.it, the new medical-scientific portal in Europe dedicated to the medical profession

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Introduction: There are more than one million customers who have been able free of charge to appreciate the great services offered to all medical professionals from Cybermed.it, the new European portal for medical-scientific information, on the net since June 2002. Cybermed.it has become an instrument of fundamental importance to the work of medical staff due to the ability to retrieve information quickly and clearly. The philosophy that supports this organization is that "The best prevention is information", and the continuous development in the medical field, is not only a necessity but above all a duty.

Objectives: The scope of the Cybermed plan is to realise the European information portal for medicalscientific research and prevention, with various services for families, companies, doctors, nurses, psychologists, pharmacists and veterinarians. The portal www.cybermed.it makes available web services to access information and resources on the world of medicine and health such as: A search engine that already comprises four thousand categories; but the plan is to add to these categories providing the most complete search engine possible and to be able to continuously update it with the collaboration of other medical-scientific information portals in Europe; 150 discussion topics in the forum, with the ability to allow the exchange of medical information and opinions; the possibility for registered medical professionals to create a personal homepage and email address; To hear radio stations; To watch some television channels; To download software packages; Audiovisual information transmissions; Technological communication of conferences, courses, and scientific information; Rapid technical assistance; A chat room; An up to date flow of news always updated that comes from reliable medical and media sources aimed at the specialist practitioner. An instructive section dedicated to the history of medicine; A dedicated section of light relief including biorhythms, Satire and humour where stories and vignettes consider the ludicrous aspects of medicine.

Another part of the Cybermed plan is to create an online data bank for donations of human organs and a directory of donors of so-called rare blood groups. Moreover a center to request and offer services for the disabled, to acquire satellite access for transmissions of medical-scientific research and prevention, the possibility to transmit via the Internet streamed television transmissions on medicine and to transmit directly or as requested via the Internet, surgical conferences, interviews, surgical procedures, first aid demonstrations.

Results: Cybermed.it, has in it's total of two and a half million pages on the net; published in little more than a year over three thousand articles reaching a total of one million three hundred thousand visitors (approximately seven thousand visitors a day) with 70 per cent of visitors from Italy, 9 per cent of visitors from the USA and 5.84 per cent from the United Kingdom. Acknowledgment of the work Cybermed.it has done has come from a range of media sources such as: – Adnkronos – Aspitalia – Clarence – Chlorophyll – Federfarma – Fullpress – Infermiere oggi- Libero – the Nordest news – Yahoo news (Italy).

Moreover the portal has obtained the acknowledgment of Hon Code with inclusion in the principles of the Health on The Net Foundation that guarantees that all health advice provided and hosted on this site will only be given by medically trained and qualified professionals. Another acknowledgment is that of the Golden Web Awards 2003/2004 given by the International Association of Webmasters and Designers, who recognise sites whose web design, originality and content have achieved levels of excellence deserving of recognition.

Conclusions: Within the community of health portals, Cybermed.it is progressively consolidating its position; providing a relevant tool for doctors and researchers, a showcase for firms, nursing homes and hospitals that is also a useful source of information for families.

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Open Source E-learning Software for Medical Education

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Introduction: Several open source e-learning initiatives have been started around the world to support learning in higher education, including medicine. Typically software has been developed to suit local needs and only later has the software been adapted to a broader perspective. Various software solutions also reflect diversity in the number of elements of distributed learning and/or collaborative learning. There are important differences in the technical platforms used that will often affect the possibilities for interchange with other IT on-campus solutions. As a consequence many decision makers find it difficult to select between the various software solutions. Aim The aim of the workshop is to give an overview of some of the most commonly used open source e-learning platforms and to present there strengths and weaknesses. The workshop will deal with Claroline (http://www.claroline.net/), DOTLrn (http://www.dotlrn.org); BSCW (http://bscw.gmd.de/); Mimerdesk (www.mimerdesk.org) and others. Participants who know of and recommend other open source e-learning platforms are encouraged to join in and share experiences.

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Workshop and Tutorial on the Use of Open-Source Software in HealthCare Applications

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What is Open-Source Software? What is the Open-Source Landscape in Healthcare Applications? The Authors will give a short Overview on the General Scope of Open-Source Software and will then show the landscape of actual open-source Software in HealthCare Applications.

Legal Aspects on Open-Source in HealthCare. The Authors will give an overview on actual legal aspects on the use of Open-Source Software.

Instant Linux – Hands-on with Your own Laptop. Linux is the most used platform for Open-Source Products and is itself a Open-Source Project. The Authors will provide a simple Linux-Bootable CD-ROM. Attendees with their own Laptop and CD-ROM and Diskette-Drive will be able to join the hands on Part with "Instant Linux" with some simple steps to use Linux on their own.

Open-Source vs. Commercial Software. How can You make the decision between Open-Source and Commercial Software? The Authors will give a short Overview on Decision criterias and hope to have a precious discussion with the audience on the use of Open-Source Software vs. Commercial Software.

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Featured Project: Open Source in Clinical Trials. The Authors will explain a hands-on Project on the Use of Open-Source Software in Clinical Trials.

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Seeking new applications for existing drugs by a collaborative physicians' network

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Pharmacovigilance is aimed to ensure that serious or previously unknown side effects are detected as soon as possible, through a mandatory but spontaneous notification network. Serendica's aim is to implement a pluri-National notification system, mainly using the Internet, in which any practicing physician could notify any unexpected improvement in a symptom or disease, happening while or after the patient's exposition to an exogenous agent, specially drugs.

By using methods similar to pharmacovigilance but enhanced with other tools and computer-based signal detection, Serendica will compare the expected and observed frequencies of each couple "drug-improved disease or symptom". This system should be able to help detection of previously unknown applications of existing drugs. Some of these new applications could be of public health interest. The presentation can be made in an "oral presentation" or in a "workshop", depending on the interest. In a workshop the presentation can contain also: – An overview of drug discovery process in medical chemistry – A presentation of the various existing methods for data management – A presentation of the results of an Internet-based survey made in July 2003 with physicians in France about this network – Some examples of possible discoveries

[93] Care2x an OPEN SOURCE hospital information system

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Abstract: CARE2x solves the problems inherent in a network of multiple programs that are no compatible with each other. It can integrate almost any type of services, systems, departments, clinic, processes, data, communication, etc. that exist in a hospital. Its design can even handle non-medical services or functions like security, maintenance, etc. It is modular and highly scalable. CARE2x uses a standard SQL database format for storing and retrieving data. The use of a single data format solves the problem of data redundancy. When configured accordingly, it can support multiple database configurations to enhance data security and integrity. It is a web-based software and all its functions can be accessed with a common web browser thus there is no need for a special user interface software. All program modules are processed on the server side. Module updates and extensions do not require changes on the browsers thus there are no network interruptions and downtimes. Its design supports multiple server configurations to distribute traffic and improve speed and efficiency. CARE2x is authored by Elpidio Latorilla. As an open source development (OSD) project, it is written and distributed under the GNU General Public License, which means that its source code is freely-distributed and available to the general public.

The workshop includes: 1. Presentation of Care2x (download here: http://prdownloads.sourceforge. net/care2002/care_ppt.zip?download) 2. In the Workshop we will show how to install Care2x on a linux and windows machine. 3. How to use Care2x for different medical organisations or personal use.

[94] Conducting an Effective privacy and security assessment of protected health information

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The creation, transmission and storage of health information is being facilitated by many technological advances and enablers. Many of the enablers were non-existent, unheard of and/or not publicly available just five to ten years ago. Concerns for the privacy of the information being transmitted via technology enablers have become increasingly important as the mis-acquisition and misuse of this type of information has resulted in negative and embarrassing experiences for some patients; your health information and that of patients has become more easily exploitable. As technology continues to enable the immediate and instantaneous sharing of private health information, security measures must be implemented to safeguard the privacy of the information, whether it is in transit or at rest. Security, unfortunately, is usually an after thought of a technology solution acquisition and implementation. Unfortunately, an event, such as a known breach of the health information is the first time an organization takes the time to examine their vulnerabilities and implement measures to minimize and/or eliminate the breach from occurring again. This reactive, "band-aid" approach to securing the information proves to be quite costly as time, personnel and resources are expended in an after-the-fact manner. Patient trust and confidence with providing specific health information using technology enablers continues to be weakened and eroded with each and every new headline broadcasting yet the latest compromise to a patient's "private and secure" medical data.

This workshop will address the benefits of conducting and effective privacy and security assessment of electronic protected health information (ePHI) (PHI as defined by health organizations in the US and EC).

Topics to be presented and discussed during the workshop are:

- Electronic Protected Health Information (ePHI) What is it?
 Where is it?
 How is it transmitted?
 Why?
- The difference between privacy and security and conceptual cross-overs
- Prominent regulatory and compliance initiatives mandating safeguard solutions for PHI
- Practical privacy and security assessment methodologies and approaches
- Assessment Scope, Goals & Objectives and Planning
- Interviews

Policy and Procedure Review

Administrative, Physical and Technical environment evaluation (to include wireless considerations) Risk Identification and Analysis (Risk = Asset + Threat + Vulnerability + Loss + Safeguard) Business operations and impact analysis considerations

- Strategic and tactical privacy and security remediation planning and implementation solutions
- When technology fails (HF) >>>> the human factor)

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Empowering Parents of Premature Infants through 24/7/365 Internet Access to Infants

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The authors designed and implemented an inexpensive, HIPAA-compliant method for parents of premature infants to to be able to view their infants in the neonatal intensive care unit (NICU) 24 hours per day, 7 days/week, 365 days/year. BonSecoursNICU.net was designed and implemented to be available to up to 20 parents at a time at a total project cost of under \$100,000 US and carried to fruition in under nine months. Information about the system can be viewed at http://bonsecours.com/highrisk_bs4w/nicunet.htm. Using computer imaging, mothers who are too ill to visit the NICU can see their baby or babies from the mother's bed, and parents can see babies 24/7 from home. There is no charge for this service.

The Bon Secours Richmond hospitals are the first in Virginia, and among the first in the country, to encourage parents to monitor their children from the mother's hospital room or from home with computers and video cameras. The response has been overwhelming. Parents, physicians and nurses alike say the project has dramatically improved parent communication, satisfaction and confidence in their own capability to care for their new babies at home. The Bon Secours program uses a dedicated, secure URL to connect parents. If a hospitalized mother cannot physically be with her NICU baby or babies, she is given a laptop computer at her bedside. After she goes home, the hospital signs out a computer for the parents to use at home. In either case, a tiny video camera at the baby's bedside transmits an image to the parents anytime they request it, 24 hours a day. Parents understand that the camera may occasionally be turned off when their baby, or one nearby, is receiving treatments. The pilot project has resulted in unprecedented satisfaction and utilization.