Poster Presentations

Abstract PS1-01

The 21st Century Research Library: An Evolutionary Model for the Diffusion of Knowledge

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Background/Aims: The past decade has been a time of tremendous social, economic, and institutional change for the research community. Transformations in libraries mirror these transitions as libraries embrace new technologies and adjust to the shifting priorities of parent institutions. In the process, research libraries are becoming more committed to the creation and dissemination of knowledge through collaborative development, interdisciplinary scholarly alliances, open access measures, and user participation, reflecting a reversal from traditional proprietary operations. Through this evolutionary path, research libraries are emerging as more effective agents for the diffusion of knowledge in the research community. **Methods:** Within the changing environment of the 21st century, research libraries are seeking to understand the new ways in which clients search for and use information. Emerging web technologies and digital information resources have created an expanding base of users and have generated new service demands. Libraries are facing these challenges through more efficient resource sharing arrangements and by targeting and creating new user groups via digitalized content and electronic services. **Results:** Significant change and innovation are occurring in research libraries of all sizes and characteristics. These transformations can be summarized as: the expansion of electronic resources and Web 2.0 technologies; a redefinition of collection development; the development of tools to enhance user access; reconfiguration of library space to support learning and research; an emphasis on instructional technology services and information literacy; and the assumption of leadership in scholarly communication and publication issues. **Conclusions:** The extraordinary pace of the information technology evolution is likely to continue and accelerate, resulting in new opportunities for information dissemination. The research community will benefit from an awareness of and support for the library's innovative efforts.

Abstract PS1-02

A Database-Driven Approach to Producing PHS-398/2590 Other Support and Biosketch Research Support

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Background: Preparation of timely and accurate PHS-398/2590 Other Support (OS) and the Research Support component (Section C) of the PHS-398 biosketch can be challenging. Project information for investigators needs constant updating as projects are funded and completed. Responsibility for creating and maintaining Other Support and Research Support information typically spans multiple individuals and departments, including the investigator, administrative and project support staff, and business services, and generally no one has all the required information. Although there are commonalities between Other Support and Research Support, there are also significant differences and the two are not directly interchangeable. **Methods:** Center for Health Research (CHR) enhanced an existing Microsoft Access database used for project lifecycle tracking to collect the common elements for investigator Other Support and Research Support. The enhanced database includes: PI, project title and alias, funder, grant number, a concise project description, annual project dates and direct costs, roles and yearly FTE for key personnel associated with the project, and overlap statements. Also included is an entry screen that captures and allows editing required information, and queries to produce formatted MS Word output for Other Support and Research Support. **Results:** CHR will make available a CD-ROM version of the database preloaded with sample data, entry screen, queries, and examples of formatted output to HMORN members. A summary discussion of NIH policy and guidelines for Other Support and biosketches, along with use of tools such as the eRA Commons, CRISP, and the Notice of Grant Award to populate fields will also be presented. **Conclusions:** A database-driven strategy allows key project information to be entered and

maintained in a single location. Accurate and correctly formatted Other Support and biosketch Research Support can then be generated for multiple investigators with a touch of a button. Programming logic separates projects as active, pending, or completed within 3 years of the query date. MS Access and MS Word are common business tools at most sites, so this system is essentially cost-free and can easily be maintained and modified by persons without extensive programming expertise. After an initial time investment in populating the database, significant labor savings and an increase in accuracy can be expected compared to a manual system.

Abstract PS1-07

A Laboratorian's Lamentations Over LOINC

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Background: The increasing need to transfer data from the performing laboratory to hospitals, clinics, utilization management reviewers, clinical researchers, public health workers and others that use laboratory data requires a level of standardization that is inherent in neither data traditionally produced by the laboratory nor reporting information system. Portability and merge-ability of the data is essential to conduct multi-site clinical trials and epidemiological studies. Comparing or combining lab results performed in different laboratories, which is integral to the Virtual Data Warehouse (VDW) of the Cancer Research Network (CRN), is challenging. Barriers include locally defined test codes. Most codes are easily recognized, such as K+ for potassium, others are less intuitive. It is also common to find normal ranges of different labs to be significantly different. This creates difficulties when trying to combine into one dataset for analysis as the values are not necessarily equivalent. This was historically addressed by using indirect criteria to compare data from different sites instead of absolute criteria. The INR for prothrombin time (PT) is an exception as the World Health Organization directed a massive standardization effort for PT in 1983. LOINC was designed to address these relational issues. The feasibility of using LOINC for the standardization of lab tests in the VDW is being explored. This report describes the strengths and limitations of using LOINC at Henry Ford Health System (HFHS). **Methods:** Regenstrief Institute's RELMA program was used on lab data to test LOINC implementation. The process of mapping test code to LOINC was manual and iterative, but the resulting file contains sufficient detail to create a one-to-one relationship between data sources. **Results:** The introduction of LOINC to laboratory databases allows the known methodological nuances to become part of the reported lab result. Nearly 31,000 of the 41,000 LOINC observation codes pertain to laboratory testing. **Conclusions:** It is advantageous to model the VDW databases to conform to LOINC in structure and nomenclature. Designing our data to universal standards will facilitate use in healthcare informatics. This process will require a person with considerable laboratory knowledge to accomplish accurate LOINC implementation. Coding complexities and redundancies require thorough investigation to determine appropriate LOINC codes are selected for data retrieval.

Abstract PS1-08

Using the Virtual Data Warehouse for a Multi-Site Study to Examine the Association Between Chemotherapy and Stroke

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Background: The Cancer Research Network (CRN) developed the Virtual Data Warehouse (VDW), a locally maintained dataset with consistent data content and structure across the CRN member sites. The VDW was used to conduct the multi-site study, 'Is Stroke a Late Effect of Chemotherapy?' The administrative and data extraction processes used to conduct the study are described. **Methods:** Four CRN sites participated in this 'data-only' study: Henry Ford Health System (HFHS) in Detroit, MI, Group Health Cooperative (GHC) based in Seattle, WA, Kaiser Permanente Colorado (KPCO) in Denver, CO, and Kaiser Permanente Northern California, with overall efforts led by a non-CRN site, Wake Forest University in Winston-Salem, NC. Four sites contributed data, HFHS served as the programming site, and WFU