3.3, which contains mandatory, recommended and optional requirements for building and evaluating the architecture of an EHR system. A guideline for test scripts implementation has been provided by the Operational Manual of Tests and Analysis version 1.2. (www.bluetooth.org)

Objectives: To evaluate a comprehensive electronic health record system, locally developed at a university medical center, using the SBIS/CFM EHR certification process.

Methods: SBIS manuals have been used as a guideline for the EHR assessment. The study was conducted over five modules of the EHR system of the Medical Center at School of Medicine of Ribeirão Preto at University of São Paulo: user register and access control, hospital information system; patient electronic health record; information printing module; and menu system access. Level 1 security (NGSI1) and structure, content and functionality assistance (ECFA) requirements were verified. A total of 77 requirements associated with 83 scripts were checked.

Results: It was found that 43% of the evaluated requirements were in compliance with SBIS certification process. Partially-compliance was found for 15% and non-compliance for 2% of the evaluated requirements. A total of 10% of SBIS requirements were not applicable for the Medical Center EHR system.

Conclusions: Results have shown that the application of the SBIS certification process can detect deficiencies in EHR systems. It was evident that the evaluated system offers better performance on ECFA than on NGSI1 requirements. Improvements raised during testing should be implemented and a new cycle of evaluation must be satisfied to ensure full compliance with requirements proposed by SBIS/CFM EHR certification process.

P9-10 DIY HEALTHCARE: LEVERAGING CONSUMERS’ USE OF TECHNOLOGIES FOR THEIR HEALTH AND HEALTH CARE TOWARDS SHARED DECISION MAKING AND EVIDENCE-BASED HEALTH CARE

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There is a growing trend in do-it-yourself health care (DIY Healthcare), the use of digital health applications and point-of-care-testing devices that allow individuals to monitor and manage their health. This has been facilitated by improvements in technologies, as well as by active information seeking by health care consumers. Indeed, this rise epitomizes the broader trajectory of widening access to health services and increased consumer empowerment. We aim to summarize the advances that have enabled the dawn of DIY Healthcare; assess patterns of its use, patterns of health information seeking and the current evidence base behind DIY Healthcare; and discuss how adopting DIY Healthcare tools contributes to improving the effectiveness and efficiency of health care.

Technologies used by health care consumers allow patients to generate health information themselves. These data can be used by the patient or together with health care professionals to aid reaching desired health outcomes. In the process of engaging in DIY Healthcare, consumers are empowered as they gain more control over their experiences of health or illness and take on more (pro)active relationships within health care. Institutional innovation in health systems enables DIY Healthcare to contribute to sustainability, facilitating the reengineering of health promotion into the health care system. In the context of prevention, notably for cardiovascular disease, adopting DIY Healthcare and the use of technologies at the hands of consumers could provide more cost-effective prevention. This may be an area which offers great potential to reap the benefits of DIY Healthcare.

P9-11 CLINICAL AND ECONOMIC BURDEN IN PATIENTS WITH PERIPHERAL ARTERIAL DISEASE IN JAPAN

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Objective: Peripheral arterial disease (PAD) is a precursor for such health outcomes as critical limb ischemia, myocardial infarction (MI), and stroke. This study is to evaluate the clinical and economic burden of patients with PAD in Japan.

Methods: We identified a patient cohort with PAD older than 18 years of age and a comparison cohort without PAD, matching age, gender and co-morbidities before the diagnosis of PAD, from the Japanese Medical Data Center (JMDC) database between 2005 and 2011. We evaluated number of hospital admissions, co-morbidities after PAD diagnosis, rate of cardiovascular events and health care costs between the two cohorts. Co-morbidities were assessed using the Charlson co-morbidity index (CCI) and summarizing the burden over one, two, and three years after the diagnosis of PAD, respectively.

Results: The two matched cohorts had a mean age of 49 years with 45% women. The PAD group had a higher co-morbidity burden than the non-PAD group, with a one-year CCI of 1.87 vs 1.01, two-year CCI of 2.64 vs 1.41, and three-year CCI of 3.20 vs 1.59, respectively. The top 3 comorbidities in the PAD group included diabetes mellitus (38.7%), hypertension (33.4%) and allergic rhinitis (32.9%) in comparison with allergic rhinitis (26.8%), acute bronchitis (24.7%) and myopic astigmatism (17.5%) in the non-PAD group as assessed one year after PAD diagnosis. The PAD group had a much higher one-year event rate of MI (4.2%) and stroke (9.3%) relative to the non-PAD group (0.5% for MI and 2.8% for stroke). The PAD group incurred twice as many clinic visits than the non-PAD group. Annual costs for total health care were substantially higher in the PAD as opposed to the non-PAD group over time: ¥173,610 vs ¥33,870 in first year, ¥152,210 vs ¥32,470, and ¥162,065 vs ¥30,060 in third year, respectively, after the diagnosis of PAD.

Conclusion: This study indicates that PAD represents a substantial clinical and economic burden for the patients and for the Japanese society. Stroke and MI are two major health events in patients with PAD and may lead to severe health outcomes or pre-mature death. Early detection and treatment of PAD may possibly delay or prevent those severe health outcomes; hence reduce overall healthcare costs for the society.

P9-12 TRENDS IN USE OF HEALTH ECONOMIC EVIDENCE FOR DEVELOPING CLINICAL GUIDELINES

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OBJECTIVES: The recent reforms and policy changes have increased the cost pressures on all healthcare stakeholders, including clinical experts. In the past, clinical guidelines were developed independent of cost or economic considerations. However, increasingly, more clinical guidelines are mentioning cost concerns and referring to economic data in new recommendations. The objective of this study was to analyze trends in the use of health economic information for developing clinical guidelines. METHODS: To understand trends in use of health economic information we conducted targeted search for clinical guidelines, expert recommendations, and consensus statements with specific mention of "cost" or "economic" or related terms. A systematic literature search was undertaken for the databases PubMed, Google Scholar and Cochrane. The guidelines published between 2003-2012 were included. For guidelines which met the search criteria, data was collected for the name of the authors, indication, year of publication, country/region, and context of use of cost/economic evidence. RESULTS: Sixteen clinical guidelines published between 2003-2012 met the inclusion criteria for specific mention of cost/economic evidence. More than 50% of these guidelines were published between 2008-2012. For indication, 3 out of 16 guidelines were for diabetes, while the rest were for different indications. In these guidelines "cost effectiveness" was mentioned 14 times, either referencing cost-effectiveness data or to mention the importance of such data for selecting treatment options. The guidelines commonly cite high cost of disease or high economic burden as one of the considerations for developing new recommendations (11 out of 16). Another term that was commonly used by these guidelines was "cost-benefit," which was mentioned 5 times in these guidelines. Notably, QALY was rarely mentioned (1 out of 16 times) in these guidelines. CONCLUSIONS: This analysis suggests that some clinical experts groups are increasingly showing willingness to use and incorporate health economic information for developing new recommendations.

P9-13 SUSTAINABILITY OF HEALTHCARE QUALITY: A STUDY FOR EMERGENCY MEDICAL SERVICES OF A STATE OWNED TERTIARY CARE HOSPITAL

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This study explores the hotly debated issue of sustainability of quality improvement efforts in state owned tertiary care hospitals. The study analyses the dynamics of different factors in achieving sustainability in terms of organizational (operational), financial and quality improvement activities. Nonetheless, the study also examines the impact of an uprising on the