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Best paper selection

Content summaries of*:


Tan E, Yung A, Jameson M, Oakley A, Rademaker M. Successful triage of patients referred to a skin lesion clinic using telerdoscopy (IMAGE IT trial). Br J Dermatol 2010;162:803-11


Section 2: Human Factors and Organizational Issues

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A Biomedical Informatics Perspective on Human Factors - How Human Factors Influence Information Technology Adoption

Best paper selection

Content summaries of*:


Palm J-M, Dart T, Dupuis I, Leneveut L, Degoulet P. Clinical Information System Post-Adoption Evaluation at the Georges Pompidou University Hospital. AMIA 2010 Symposium Proceedings: 582-6


Section 3: Health Information Systems

Working Group Contributions

T. Karopka, H. Schmuhl, A. Marcelo, J. Dal Molin, G. Wright

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The introduction of a diagnostic decision support system (Diagnosis Map) into the workflow of a teaching hospital service can decrease the cost of service for diagnostically challenging Diagnostic Related Groups (DRGs). Int J Med Inform 2010;11(79):772-7

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Section 6: Knowledge Representation and Management

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Content summaries of*:

Bui QC, Nuallain BO, Boucher CA, Sloot PM. Extracting causal relations on HIV drug resistance from literature. BMC Bioinformatics 2010;11:101


---

Section 7: Education and Consumer Informatics

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Consumer Informatics: Control or Making the Most of Health Internet Websites

Content summaries of*:


Lewis S, Thomas SL, Blood RW, Castle D, Hyde J, Komesaroff PA. “I’m searching for solutions”: why are obese individuals turning to the Internet for help and support with “being fat”? Health Expect 2010 Dec

Lunt N, Hardey M, Mannion R. Nip, Tuck and Click: Medical Tourism and the Emergency of Web-Based Health Information. Open Med Inform J 2010 Feb 12;4:1-1


Best Paper Selection


Lewis S, Thomas SL, Blood RW, Castle D, Hyde J, Komesaroff PA. “I’m searching for solutions”: why are obese individuals turning to the Internet for help and support with “being fat”? Health Expect 2010 Dec

Lunt N, Hardey M, Mannion R. Nip, Tuck and Click: Medical Tourism and the Emergency of Web-Based Health Information. Open Med Inform J 2010 Feb 12;4:1-1


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