Home > Journal > Business & Economics > IB

Indexing   View Papers   Aims & Scope   Editorial Board   Guideline   Article Processing Charges

IB> Vol.3 No.2, June 2011

OPEN ACCESS

Development of Embedded Personal Health CareRecord System

Author(s)

Ruba Alawneh, Aism El Sheikh, Raid Kanaan

ABSTRACT

Various systems, methods and techniques are in use by patients and medical centers to provide the necessary information and to serve medical profession including hospital information systems. One of the most important services is Personal Health care Record (PHR) portability and management. This problem has become out of history of paper records kept separately by physicians, clinics, hospitals, pharmacies, insurance companies and patients themselves. Many approaches were implemented to improve and manage the PHR including portability solution. These approaches were based on implementing portable memory device such as flash memory and Smart Cards. In this work an embedded PHR system was developed. The developed system allows operating and managing PHR by the help of standalone system.

KEYWORDS

Cite this paper

R. Alawneh, A. Sheikh and R. Kanaan, "Development of Embedded Personal Health CareRecord System," *iBusiness*, Vol. 3 No. 2, 2011, pp. 178-183. doi: 10.4236/ib.2011.32024.

References

[1]   R. Shetty, " Portable Digital Personal Health Record: To Bridge the Digital Gap in Medical Information Storage of Individuals with Personal Health Records in Flash Drives," The Internet Journal of Health, Vol. 5, No. 2, 2007.

[2]   L. Moreno, S. Peterson, A. Bagchi and R. af Ursin, " Personal Health Records: What Do Underserved Consumers Want?" Mathematica policy research, No. 4, May 2007.

[3]   USA Patent, " Method and Apparatus for Accessing a Portable Personal Database as for a hospital Environment," Patent Number: 5291399, 27 July 1990.

[4]   R. Agarwal and C. M. Angst, " Technology-Enabled Transformations in U. S. Health Care: Early Findings on Personal Health Records and Individual Use" , In: G. Galletta and P. Zhang Eds., Human-Computer Interaction and Management Information Systems: Applications, M.E. Sharpe, Inc., NewYork, Vol. 5, 2006, pp. 357-378.

[5]   D. Lewis, G. Eysenbach, R. Kukafka, P. Z. Stavri and H. Jimison, " Consumer Health Informatics: Informing Consumers and Improving Health Care," Springer, New York, 2005.

[6]   W. S. Tuil, A. J. ten Hoopen, D. D. M. Braat, P. F. de Vries Robbe and J. A. M. Kremer, " Patient-Centred Care: Using Online Personal Medical Records in IVF Practice," Human Reproduction, Vol. 21, No. 11, 1 November 2006; pp. 2955-2959. doi:10.1093/humrep/del214

[7]   D. E. Detmer and M. Bloomrosen, B. Raymond and P. Tang, " Integrated Personal Health Records, Transformative Tools for Consumer-Centric Care," BMC Medical Informatics and Decision Making, Vol. 8, 2008, pp. 45-72. doi:10.1186/1472-6947-8-45.

[8]   A. Hassol, J. M. Walker, D. Kidder, K. Rokita, D. Young, S. Pierdon, D. Deitz, S. Kuck and E. Ortiz,

“ Patient Experiences and Attitudes about Access to a Patient Electronic Health Care Record and Linked Web Messaging,” Journal of the American Medical Informatics Association, Vol. 11, No. 6, 2004, pp. 505-513. doi:10.1197/jamia.M1593

[9]   C. Cronin, “ Personal Health Records: An Overview of What Is Available To the public,” American Association of Retired Persons, 2006. http://www.aarp.org/ research/ health/carequality/2006_11_phr.html

[10]   M. I. Kim, K. B. Johnson, “ Personal Health Records: Evaluation of Functionality and Utility,” Journal of the American Medical Informatics Association, Vol. 9, No. 2, 2002, pp. 171-80. doi:10.1197/jamia.M0978

[11]   P. C. Tang and D. Lansky, “ The Missing Link: Bridging the Patient-Provider Health Information Gap,” Health Affairs, Vol. 24, No. 5, 2005, pp. 1290-1295. doi:10.1377/hlthaff.24.5.1290

[12]   Institute of Medicine, “ The Computer-Based Patient Record,” National Academy Press, Washington, D.C., 1991.

[13]   P. Szolovits, “ A Revolution in Electronic Medical Record Systems Via the World Wide Web,” International Conference on the Use of Internet and WWW for Telematics in Healthcare, Geneva, 6-8 September 1995.

[14]   J. Ganssle, “ The Art of Designing Embedded Systems,” Elsevier, Linacre House, Oxford, 2008.

[15]   D. Budgen, M. Rigby, P. Brereton and M. Turner, “ A Data Integration Broker for Healthcare Systems,” IEEE Computer, Vol. 40, No. 4, 2007, pp. 34-41.