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e-Consent: The design and implementation of consumer consent mechanisms in an electronic environment.
J Am Med Inform Assoc 2004 Mar-Apr;11(2):129-40.
- 236 Lukowicz P, Kirstein T, Troster G.
Wearable systems for health care applications.
Methods Inf Med. 2004;43(3):232-8.
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J Telemed Telecare 2003;9:67-71.
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Br J Psychiatry. 2003 Jul;183:57-65.

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Computer physician order entry: benefits, costs, and issues.
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Does the physician order-entry system increase the revenue of a general hospital?
Int J Med Inform 2003;71(1):25-32.
- 280 Ruland CM, Ravn IH.
Usefulness and effects on costs and staff management of a nursing resource management information system.
J Nurs Manag 2003;11(3):208-15.
- 288 Samore MH, Evans RS, Lassen A, Gould P, Lloyd J, Gardner RM, Abouzelof R, Taylor C, Woodbury DA, Willy M, Bright RA.
Surveillance of medical device-related hazards and adverse events in hospitalized patients.
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The electronic patient record in primary care—regression or progression? A cross sectional study.
BMJ 2003;326(7404):1439-43.
- 310 Nilsson G, Ahlfeldt H, Strender LE.
Textual content, health problems and diagnostic codes in electronic patient records in general practice.
Scand J Prim Health Care 2003;21(1):33-6.
- 314 Rotich JK, Hannan TJ, Smith FE, Bii J, Odero WW, Vu N, Mamlin BW, Mamlin JJ, Einterz RM, Tierney WM.
Installing and implementing a computer-based patient record system in sub-Saharan Africa: the Mosoriot Medical Record System.
J Am Med Inform Assoc 2003;10(4):295-303.
- 323 Wang SJ, Middleton B, Prosser LA, Bardon CG, Spurr CD, Carchidi PJ, Kittler AF, Goldszer RC, Fairchild DG, Sussman AJ, Kuperman GJ, Bates DW.
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Virtual outreach: economic evaluation of joint teleconsultations for patients referred by their general practitioner for a specialist opinion. *BMJ* 2003;327(7406):84.
- 344 Tsui FC, Espino JU, Dato VM, Gesteland PH, Hutman J, Wagner MM.
Technical description of RODS: a real-time public health surveillance system. *J Am Med Inform Assoc* 2003;10(5):399-408.
- 354 van Der Meijden MJ, Tange HJ, Troost J, Hasman A.
Determinants of success of inpatient clinical information systems: a literature review. *J Am Med Inform Assoc* 2003;10(3):235-43.
- 363 Winter A, Brigl B, Wendt T.
Modeling hospital information systems. Part 1: The revised three-layer graph-based meta model 3LGM². *Methods Inf Med* 2003;42(5):544-51.

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A primal sketch of the cortex mean curvature: a morphogenesis based approach to study the variability of the folding patterns. *IEEE Trans Med Imaging* 2003;22(6):754-65.
- 400 Chabanas M, Luboz V, Payan Y.
Patient specific finite element model of the face soft tissues for computer-assisted maxillofacial surgery. *Med Image Anal.* 2003 Jun;7(2):131-51.
- 421 Ganser KA, Dickhaus H, Metzner R, Wirtz CR.
A deformable digital brain atlas system according to Talairach and Tournoux. *Med Image Anal.* 2004 Mar;8(1):3-22.
- 441 Tilg B, Fischer G, Modre R, Hanser F, Messnarz B, Roithinger FX.
Electrocardiographic imaging of atrial and ventricular electrical activation. *Med Image Anal.* 2003 Sep;7(3):391-8.

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The medical office of the 21st century (MOXXI): effectiveness of computerized decision-making support in reducing inappropriate prescribing in primary care.
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- 518 Liu CT, Yeh YT, Chiang IJ, Chen HY, Lee TI, Chiu WT.
Development and evaluation of an integrated pharmaceutical education system.
Int J Med Inform 2004;73(4):383-9.
- 525 Palermo TM, Valenzuela D, Stork PP.
A randomized trial of electronic versus paper pain diaries in children: impact on compliance, accuracy, and acceptability.
Pain 2004;107(3):213-9.

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Bioinformatics 2003;19(18):2404-12.
- 547 Lambrix P, Habbouche M, Perez M.
Evaluation of ontology development tools for bioinformatics.
Bioinformatics 2003;19(12):1564-71.
- 555 Martin-Sanchez F, Iakovidis I, Norager S, Maojo V, de Groen P, Van
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Synergy between medical informatics and bioinformatics: facilitating
genomic medicine for future health care.
J Biomed Inform 2004;37(1):30-42.
- 568 Mitchell JA, McCray AT, Bodenreider O.
From phenotype to genotype: issues in navigating the available
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JAMA: The Journal of the American Medical Association

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