

- Cayir, S., and Nuri Basoglu, A. (2008). Information technology interoperability awareness: A taxonomy model based on information requirements and business needs. In: *Portland International Conference on Management of Engineering Technology, 2008, PICMET 2008*. (pp. 846–855).
- Chandler, D. (1994). *The transmission model of communication*. [Online] available at: <http://www.aber.ac.uk/media/Documents/short/trans.html>. [18/02/2013].
- Chang, S.C., and Tung, F.C. (2008). An empirical investigation of students' behavioural intentions to use the online learning course websites. *British Journal of Educational Technology*, 39(1), 71-83.
- Chapman, C.S., and Kihn, L.A. (2009). Information system integration, enabling control and performance. *Accounting, organizations and society*, 34(2), 151-169.
- Chapman, R., and Slaymaker, T. (2003). Beyond the digital divide: harnessing ICTs for rural development. *Working paper 192*, London: Overseas Development Institute.
- Chiasson, M.W., and Davidson, E. (2004). Pushing the contextual envelope: Developing and diffusing IS theory for health information systems research. *Information and Organization*, 14(3), 155-188.
- Cho, I., Staggers, N., and Park, I. (2010). Nurses' responses to differing amounts and information content in a diagnostic computer-based decision support application. *Computers, Informatics, Nursing: CIN*, 28(2), 95-102.
- Cilliers, L., and Flowerday, S.V. (2013). Health information systems to improve health care: A telemedicine case study. *SA Journal of Information Management*, 15(1), 1-5.
- Cipolat, C., and Geiges, M. (2002). The history of telemedicine. *Current Problems in Dermatology*, 32, 6-11.
- Clifford, G.D., Blaya, J.A., Hall-Clifford, R., and Fraser, H.S.F. (2008). Medical information systems: A foundation for healthcare technologies in developing countries. *Biomedical Engineering Online*, 7(18), 1–8.
- Cline, G.B., and Luiz, J.M. (2013). Information technology systems in public sector health facilities in developing countries: The case of South Africa. *BMC Medical Informatics and Decision Making*, 13(1), 13.
- Cohn, K.H., Berma, J., Chaiken, B., Green, D., Green, M., Morrison, D., and Scherger J.E. (2009). Engaging physicians to adopt healthcare information technology. *Journal of Healthcare Management*, 54(5), 291-300.
- Coiera, E. (2003). *A guide to health informatics* (2nd Ed.). London: Arnold.
- Collis, J., and Hussey, R. (2009). *Business research: A practical guide for undergraduate and postgraduate students*. Johannesburg: Palgrave Macmillan.
- Conrick, M., and Newell, C. (2006). Issues of Ethics and Law. In: M. Conrick (Ed.), *Health Informatics: Transforming Healthcare with Technology*. Melbourne: Thompson Social Science Press.
- Cooper, D.R., and Schindler, P.S. (2003). *Business research methods* (8th ed.). New York: McGraw Hill/Irwin.
- Coovadia, H., Jewkes, R., Barron, P., Sanders, D., and McIntyre, D. (2009). The health and health system of South Africa: Historical roots of current public health challenges. *The Lancet*, 374(9692), 817–834.
- Crabtree, B.F., and Miller, W.L. (1999). *Doing Qualitative Research*, 2nd Edition. Newbury Park, CA: Sage Publications.
- Creswell, J.W., and Miller, D.L. (2000). Determining Validity in Qualitative Inquiry. *Theory into Practice*, 39(3): 124-130.
- Creswell, J.W. (2007). *Social research*. London: Sage Publications.
- Davidson, E.J., and Chismar, W.G. (2007). The interaction of institutionally triggered and technology-triggered social structure change: An investigation of computerized physician order entry. *MIS Quarterly*, 31(4), 739-758.

- Davidson, S.M., and Heineke, J. (2007). Toward an effective strategy for the diffusion and use of clinical information systems. *Journal of the American Medical Informatics Association*, 14(3), 361-367.
- Davis, F.D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-339.
- Davis, F.D., Bagozzi, R.P., and Warshaw, P.R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of applied social psychology*, 22(14), 1111-1132.
- De Vaus, D.A. (2007). *Analyzing social science data*. London: Sage Publications.
- De Veer, A.J.E., and Francke, A.L. (2010). Attitudes of nursing staff towards electronic patient records: A questionnaire survey. *International Journal of Nursing Studies*, 47, 846-854.
- de Vos, A.S., Strydom, H., Fouche, C.B., and Delport, C.S.L. (2007). *Research at grassroots for the social sciences and human service professions*. (3rd Ed). Van Shaik Publishers: Pretoria.
- Denscombe, S.M. (2005). *The good research guide for small-scale social research projects*. Milton Keynes, UK: Open University Press.
- Department of Health (DOH). (2007). *1st Draft White Paper on E-Health*. [Online] available at: <http://www.doh.gov.za/28/05/2013>].
- Department of Health (DOH). (2013). *National Health Insurance (NHI):- The first eighteen months*. [Online] available at: http://www.doh.gov.za/docs/policy/2013/NHI_1st_eighteen_months.pdf. [26/08/2013].
- Department of Health (DOH). (2011). *National Health Insurance in South Africa: Policy Paper*. [Online] available at: <http://www.bowman.co.za/NewLegislation/NHI/NHI.pdf>. [23/03/2012].
- Dravis, F. (2004). Data Quality Strategy: A step-by-step approach. *Proceedings of the 9th international conference on Information Quality (ICQ-04)*, MIT.
- Dretske, F. (1981). *Knowledge and the Flow of Information*, M.I.T. Press, Cambridge Mass. (Reprinted: Dretske, F. 1999, *Knowledge and the Flow of Information*, CSLI, Stanford).
- Düker, I., and Elsner, P. (2002). Dermatologie in der Telemedizin. *Hautarzt*, 53, 11-17.
- Duncombe, R., and Heeks, R. (2005). Information & communication technologies (ICTs), poverty reduction and micro, small & medium-scale enterprises (MSMEs): A framework for understanding ICT applications for MSMEs in developing countries. *Institute for Development Policy and Management (IDPM). The University of Manchester*.
- Duncombe, R., and Molla, A. (2009). Formalisation of Information Systems in sub-Saharan African Small and Medium Enterprises: Case of Botswana. *The African Journal of Information Systems*, 1(2), 1-29.
- Easterby-Smith, M., Thorpe, R., and Lowe, A. (1991). *Management research: An introduction* Sage. Beverly Hills, CA.
- English, R., Masilela, T., Barron, P., and Schönfeldt, A. (2011). Health information systems in South Africa. *South African Health Review*, 81-90.
- Erdal, S., Catalyurek, U., Payne, P., Saltz, J., Kamal, J., and Gurcan, M. (2009). A knowledge-anchored integrative image search and retrieval system. *Journal of Digital Imaging: the official Journal of the Society for Computer Applications in Radiology*, 22(2), 166-182.
- Fagan, M.H., Neill, S., and Wooldridge, B.R. (2008). Exploring the intention to use computers: An empirical investigation of the role of intrinsic motivation, extrinsic motivation, and perceived ease of use. *Journal of Computer Information Systems*, 48(3), 31-37.
- Ferrara, G., Argenziano, G., Piccolo, D., Zalaudek, I., and De Rosa, G. (2004). Tele-education in dermatopathology of pigmented lesions: Is dermoscopy a valuable tool? *Journal of Telemedicine & Telecare*, 10(3), 183.

- Field, A. (2005). *Discovering Statistics Using SPSS*. 2nd Ed. London: Sage Publications.
- Fiol, C.M., and O'Connor, E.J. (2006). Stuff matters: Artifacts, identity and legitimacy in the U.S. medical profession. In A. Rafaeli & M. Pratt (Eds.), *Artifacts and organizations: Beyond mere symbolism*. Mahwah, NJ: Erlbaum, pp. 241- 257.
- Fishbein, M., and Ajzen, I. (1975). *Belief, attitude, intention, and behaviour: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Flores, A. (2010). *Secure exchange of information in electronic health records*. Unpublished doctoral thesis, School of Information Systems and Technology, University of Wollongong: Australia.
- Funke, O. (2008). *Electronic medical records and privacy: purpose, benefits and problems*. Environmental Protection Agency, Association for Politics and the Life Sciences Biopolicy Panel.
- Furuholt, B., and Kristiansen, S. (2007). A rural-urban digital divide? Regional aspects of internet use in Tanzania. *Proceedings of the Ninth International Conference on Social Implications of Computers in Developing Countries*. São Paulo, Brazil.
- Gagnon, M., Desmartis, M., Labrecque, M., Legare, F., Lamothe, L., Fortin, J-P., Rancourt, J-F., and Duplantie, J. (2010). Implementation of an electronic medical record in family practice: A case study. *Informatics in Primary Care*, 18(1), 31-40.
- Garrib, A., Stoops, N., McKenzie, A., Dlamini, L., Govender, T., Rohde, J., and Herbst, K. (2008). An evaluation of the District Health Information System in rural South Africa. *South African Medical Journal*, 98, 549–522.
- Gater, L. (2005). CPOE uncertainty. *For the record*, 17, 25-28.
- Gates, P., and Urquhart, J. (2007). The electronic paperless medical office; has it arrived? *Internal Medicine Journal*, 3(2), 108-111.
- Gertholtz, T., Van Heerden, M.V., and Vine, D.G. (2007). Electronic medical records: Why should you consider implementing an EMR? *Continuing Medical Education*, 25(1), 24–28.
- Gerster, R., and Zimmermann, S. (2003). *Information and communication technologies (ICTs) for poverty reduction*. Swiss Agency for Development and Cooperation Discussion Paper. [Online] available at: [http://www.gersterconsulting.ch/docs/ICT for Poverty Reduction.pdf](http://www.gersterconsulting.ch/docs/ICT_for_Poverty_Reduction.pdf). [29/04/2013].
- Gibbs, G.R. (2007). *Analyzing qualitative data*. London: Sage Publications Ltd.
- Giddens, A. (1976). *New Rules of Sociological Method*. Basic Books, New York.
- Ginsburg, M. (2007). Paediatric electronic health record interface design: The pedone system. In *40th annual Hawaii international conference on system sciences, 2007, HICSS 2007* (pp. 139).
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4), 597-606.
- Govender, M., Letshekogohla, M.E., and Basu, D. (2010). Health technology assessment: A new initiative in South Africa. *South African Medical Journal*, 100(6), 334.
- Govender, M., Mueller, D.B., and Basu, D. (2011). Purchasing of medical equipment in public hospitals: The mini-HTA tool. *South African Medical Journal*, 101(11), 807–808.
- Graneheim, U.H., and Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse education today*, 24(2), 105-112.
- Greenberg, A. (2005). *ICTs for poverty alleviation: Basic tool and enabling sector*. Stockholm: SIDA.

Greenhalgh, T., Potts, H.W.W., Wong, G., Bark, P., and Swinglehurst, D. (2009). Tensions and Paradoxes in Electronic Patient Record Research: A Systematic Literature Review Using the Meta-narrative Method. *The Milbank Quarterly*, 87(4), 729-788.

Greenhalgh, T., Stramer, K., Bratan, T., Byrne, E., Mohammad, Y., and Russell, J. (2008). Introduction of shared electronic records: multi-site case study using diffusion of innovation theory. *BMJ: British Medical Journal*, 337(1786), 1-10.

Gregor, S. (2002). A theory of theories in information systems. In S. Gregor and D. Hart (Eds.), *Information Systems Foundations: Building the Theoretical Base*. Australian National University, Canberra, pp. 1-20.

Greiver, M., Barnsley, J., Glazier, R.H., Moineddin, R., and Harvey, B.J. (2011). Implementation of electronic medical records: Theory-informed qualitative study. *Canadian Family Physician*, 57(10), 390-397.

Griffiths, F., Lindenmeyer, A., Powell, J., Lowe, P., and Thorogood, M. (2006). Why are health care interventions delivered over the internet? A systematic review of the published literature. *Journal of Medical Internet Research*, 8(2).

Groves, R.M., Fowler Jr, F.J., Couper, M.P., Lepkowski, J.M., Singer, E., and Tourangeau, R. (2009). *Survey Methodology* (2nd Ed.), New Jersey: John Wiley.

Gunter, T.D., and Terry, N.P. (2005). The Emergence of National Electronic Health Record Architectures in the United States and Australia: Models, Costs, and Questions. *Journal of Medical Internet Research*, 7(1), 1-8.

Gurvirender, T., Dhillon, G., and Chin, A.G. (2005). *Data Quality Dimensions for IS Security: A Theoretical Exposition*. 1st IFIP Joint Working Conference on Security Management, Integrity, and Internal Control in Information Systems (pp 21-39). Fairfax, Virginia.

Hamidfar, M. (2008). *Adoption of electronic patient records by Iranian hospitals' staff*. Unpublished master's thesis, Lulea University of Technology: Sweden.

Hanseth, O. (2007). Integration-Complexity-Risk: The Making of Information Systems Out-of-Control. In *Risk, Complexity and ICT*, edited by C.U. Ciborra and O. Hanseth, pp.1-22. Oslo: Edward Elgar.

Hartmann, D., and Sooklal, S. (2012). The pen is mightier than the scalpel: The case for Electronic Medical Records. *South African Journal of Industrial Engineering*, 23(2), 191-201.

Hatton, J.D., Schmidt, T.M., and Jelen, J. (2012). Adoption of Electronic Health Care Records: Physician Heuristics and Hesitancy. *Procedia Technology*, 5, 706-715.

Haux, R. (2006a). Health information system - past, present, future. *International Journal for Medical informatics*, 75(3-4), 268-281.

Haux, R. (2006b). Individualization, globalization and health – about sustainable information technologies and the aim of medical informatics. *International Journal for Medical informatics*, 75(12), 795-808.

Hawkins, R.C. (2007). Laboratory Turnaround Time. *The Clinical Biochemist Reviews*, 28, 179-194.

Hayrinen, K., Saranto, K., and Nykanen, P. (2008). Definition, structure, content, use and impacts of electronic health records: A review of the research literature. *International Journal of Medical Informatics*, 77, 291-304.

Health Information Systems Programme (HISP). (2009). *East London: HISP SA*. [Online] available at: <http://www.hisp.org> . [15/12/2009].

Heard, S. (2006). Electronic Health Records. In: M. Conrick (Ed.), *Health Informatics: Transforming Healthcare with Technology* (pp. 222-332). Melbourne: Thompson Social Science Press.

Heeks, R. (1999). Information and Communication Technologies, Poverty and Development. *IDPM Development Informatics Working Paper Series, Paper No 5*. University of Manchester, UK.

Heeks, R. (2005). Foundations of ICTs in Development: The Information Chain, *Development Informatics eDevelopment Briefing No.3*, University of Manchester, UK.

Hersh, W. (2009). A stimulus to define informatics and health information technology. *BMC Medical Informatics and Decision Making*, 9(1), 24.

Hillestad, R., Bigelow, J., Bower, A., Girosi, F., Meili, R., Scoville, R., and Taylor, R. (2005). Can electronic medical record systems transform health care? Potential health benefits, savings and costs. *Health Affairs*, 24(5), 1103-1117.

Holden, R.J., and Karsh, B.T. (2010). The technology acceptance model: its past and its future in health care. *Journal of biomedical informatics*, 43(1), 159-172.

Hsieh, C-H., Tsai, H-H., Yin, J-W., Chen, C.Y., Yang, J-S., and Jeng, S-F. (2004). Teleconsultation with the mobile camera-phone in digital soft-tissue injury: A feasibility study. *Plastic and Reconstructive Surgery*, 114, 1776-1782.

Hsieh, H.F., and Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277-1288.

Hunt, E.C., Breckenridge-Sproat, S., and Kitzmiller, R.R. (2004). *The Nursing Informatics Implementation Guide*. Springer-Verlag, New York, USA.

Hussey, J., and Hussey, R. (1997). *Business research: a practical guide for undergraduate and postgraduate students*. London: Macmillan Press.

Huston, J.L. (2004). The need for mandatory clinical recording standards. *Clinical Medicine*, 4(3), 255-257.

Ilie, V., Courtney, J.F., and Van Slyke, C. (2007). Paper versus electronic. Challenges associated with physicians' usage of electronic medical records. *Proceedings of the 40th Hawaii International Conference on Information System Sciences*. Hawaii, HI.

Ilie, V., Van Slyke, C., Parikh, M.A., and Courtney, J.F. (2009). Paper Versus Electronic Medical Records: The Effects of Access on Physicians' Decisions to Use Complex Information Technologies. *Decision Sciences*, 40(2), 213-241.

Institute of Medicine. (2009). *Health and Human Sciences in the 21st Century: Charting a New Course for a Healthier America*. New York: National Academies Press.

International Standard Organisation (ISO). (2003). *Health Informatics – Electronic Health Record – Definition, Scope, and Context*. [Online] available at: http://www.providersedge.com/ehdocs/ehr_articles/Electronic_Health_Record-Definition_Scope_and_Context.pdf. [31/05/2013].

Jacobs, S.J., and Herselman, M.E. (2005). An ICT-Hub model for rural communities. *International Journal of Education and Development using Information and Communication Technology*, 1(3), 57-93.

Jacobs, S.J., and Herselman, M.E. (2006). Information access for development: a case study at a rural community centre in South Africa. *Issues in Informing Science and Information Technology*, 3, 295-306.

Jacono, J.C., Brown, A., and Holtham, C. (2011). The use of the Case Study Method in Theory Testing: The Example of Steel eMarketplaces. *The Electronic Journal of Business Research Methods*, 9(1), 57-65.

Jacucci, E., Shaw, V., and Braa, J.R. (2006). Standardization of health information systems in South Africa: The challenge of local sustainability. *Information Technology for Development*, 12(3), 225-239.

James, M.W., and Pascale, C. (2009). Health IT systems: From tasks to processes - the case for changing health information technology to improve health care. *Health Affairs*, 28, 2467-2477.

Jaspers, M.W., Knaup, P., and Schmidt, D. (2006). The computerized patient record: Where do we stand? *Methods of Information Medicine*, 45(Suppl. 1), 29-39.

- Jian, W-S., Syed-Abdul, S., Sood, S.P., Lee, P., Hsu, M-H., Ho, C-H., Li, Y-C., and Wen, H-C. (2012). Factors influencing consumer adoption of USB-based Personal Health Records in Taiwan. *BMC Health Services Research*, 12, 277-285.
- Jones, A., Henwood, F., and Hart, A. (2005). Factors facilitating effective use of electronic patient record systems for clinical audit and research in the UK maternity services. *Clinical Governance: An International Journal*, 10(2), 126-138.
- Jordan, K., Porcheret, M., and Croft, P. (2004). Quality of morbidity coding in general practice computerized medical records: A systematic review. *Family Practice*, 21, 396-412.
- Kaminski, J. (2011). Diffusion of Innovation Theory: Theory in Nursing Informatics. *Canadian Journal of Nursing Informatics*, 6(2), 1-6.
- Karahoca, A., Bayraktar, E., Tatoglu, E., and Karahoca, D. (2010). Information system design for a hospital emergency department: A usability analysis of software prototypes. *Journal of Biomedical Informatics*, 43(2), 224-232.
- Kerry, T.P. (2006). Improving the use of patient-held records in the Emtshezi Subdistrict. *South African Family Practice*, 48(1), 16-23.
- Kierkegaard, P. (2011). Electronic health record: Wiring Europe's healthcare. *Computer Law and Security Review*, 27, 503-515.
- Kifor, T., Varga, L., Álvarez, S., Vázquez-Salceda, J., and Willmott, S. (2006). Privacy issues of provenance in electronic healthcare record systems. *Proceedings of the First International Workshop on Privacy and Security in Agent-based Collaborative Environments (PSACE 2006)*.
- Kirkley, D., and Rewick, D. (2003). Evaluating clinical information systems. *Journal of Nursing Administration*, 33(12), 643-651.
- Koch, S. (2005). Home telehealth: Current state and future trends. *International Journal of Medical Informatics*, 75, 565-576.
- Koerber, A., and McMichael, L. (2008). Qualitative Sampling Methods A Primer for Technical Communicators. *Journal of business and technical communication*, 22(4), 454-473.
- Koivunen, M. (2009). Acceptance and use of information technology among nurses in psychiatric hospitals. Unpublished thesis, University of Turku, Finland.
- Kortteisto, T., Kaila, M., Komulainen, J., Mäntyranta, T., and Rissanen, P. (2010). Research article Healthcare professionals' intentions to use clinical guidelines: a survey using the theory of planned behaviour. *Implementation Science*, 5, 51-61.
- Kossmann, S.P. (2006). Perceptions of impact of electronic health records on nurses' work. *Studies in health technology and informatics*, 122, 337-341.
- Kowalski, G.J., and Maybury, M.T. (2002). *Information storage and retrieval systems: Theory and implementation*. (2nd Ed.). Kluwer Academic Publishers: New York.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *American journal of occupational therapy*, 45(3), 214-222.
- Kreps, D., and Richardson, H. (2007). IT Success and Failure: The Problem of Scale. *Political Quarterly*, 78(3), 439-446.
- Kumalo, F. (2006) *Health management information systems*. Cape Town: Health Systems Trust.
- Kutney-Lee, A., and Kelly, D. (2011). The effect of hospital electronic health record adoption on nurse-assessed quality of care and patient safety. *Journal of Nursing Administration*, 41(11), 466-472.
- Lærum, H., and Faxvaag, A. (2004). Task-oriented evaluation of electronic medical records systems: development and validation of a questionnaire for physicians. *BMC medical informatics and decision making*, 4(1), 1.

- Lahteenmaki, H., Leppanen, J., and Kaijanranta, J. (2009). Interoperability of personal health records. In *Conference proceedings: Annual international conference of the IEEE Engineering in Medicine and Biology Society. IEEE engineering in medicine and biology society conference* (p. 1726-1729).
- Lapointe, L., and Rivard, S. (2005). A multilevel model of resistance to information technology implementation. *MIS Quarterly*, 29(3), 461-491.
- Lapointe, L., and Rivard, S. (2006). Getting physicians to accept new information technology: insights from case studies. *Canadian Medical Association Journal*, 174(11), 1573-1578.
- Lather, P. (1992). Critical frames in educational research: Feminist and post-structural perspectives. *Theory into Practice*, 31(2), 87-99.
- Lee, M.K., Cheung, C.M., and Chen, Z. (2005). Acceptance of Internet-based learning medium: the role of extrinsic and intrinsic motivation. *Information & Management*, 42(8), 1095-1104.
- Leedy, P.D., and Ormrod, J.E. (2014). *Practical Research*. 10th Ed. Essex: Pearson Education Limited.
- Leeuw, E.D., Hox, J.J., and Dillman, D.A. (2008). *International handbook of survey methodology*. New York, NY: Erlbaum.
- Leon, A.C., Davis, L.L., and Kraemer, H.C. (2011). The Role and Interpretation of Pilot Studies in Clinical Research. *Journal of Psychiatric Research*, 45(5), 626-629.
- Li, D., and Korniewicz, D.M. (2013). Determination of the effectiveness of electronic health records to document pressure ulcers. *Medsurg Nursing*, 22(1), 17.
- Lim, A.C., Egerton, I.B., and Shumack, S.P. (2000). Australian tele dermatology: The patient, the doctor and their government. *Australasian Journal of Dermatology*, 41, 8-13.
- Lin, A., and Chen, N.C. (2012). Cloud computing as an innovation: Perception, attitude, and adoption. *International Journal of Information Management*, 32(6), 533-540.
- Littlejohns, P., Wyatt, J., and Garvica, L. (2003). Evaluating computerised health information systems: Hard lessons still to be learnt. *BMJ*, 326, 860-863.
- Lium, J.T., Tjora, A., and Faxvaag, A. (2008). No paper, but the same routines: a qualitative exploration of experiences in two Norwegian hospitals deprived of the paper-based medical record. *BMC Medical Informatics & Decision Making*, 8(2), 1-12.
- Lombardi, O. (2005). Dretske, Shannon's theory and the interpretation of information. *Synthese*, 144, 23-39.
- Long, J., Seko, C., Robertson, C., and Morrison, L.J. (2004). Where to start? A preliminary data quality checklist for emergency medical services data. *Proceedings of the 2004 International Conference on Information Quality (MIT IQ Conference)* (p. 197).
- López-Nicolás, C., Molina-Castillo, F.J., and Bouwman, H. (2008). An assessment of advanced mobile services acceptance: Contributions from TAM and diffusion theory models. *Information & Management*, 45(6), 359-364.
- Maass, M., and Eriksson, O. (2006). Challenges in the adoption of medical information systems. *Proceedings of 39th Hawaii International Conference on Systems Research*. IEEE.
- Madnick, S.E., Lee, Y.W., Wang, R.Y., and Zhu, H. (2009). Overview and framework for data and information quality research. *ACM Journal of Data and Information Quality*, 1(1), 1-22.
- Malamateniou, F., and Vassilacopoulos, G. (2003). Developing a virtual patient record using XML and web-based workflow technologies. *International Journal of Medical Informatics*, 70, 131-139.

Matshidze, P., and Hanmer, L. (2007). Health information systems in the private health sector. *South African Health Review*, 89–102.

Mbananga, N., Madale, R., and Becker, P. (2002). *Evaluation of hospital information system in the Northern Province in South Africa*. Report prepared for the Health Systems Trust.

Mea, V.D. (2006). Pre-recorded telemedicine. In *Introduction to telemedicine*. 2nd Ed. Wooton, R., Craig, J. & Patterson, V. (Eds.). London: RSM Press.

Mehra, B. (2002). Bias in Qualitative Research: Voices from an Online Classroom. *The Qualitative Report*, 7(1), 1-19.

Menachemi, N. (2006). Barriers to ambulatory EHR: Who are ‘imminent adopters’ and how do they differ from other physicians? *Informatics in Primary Care*, 14(2), 101-108.

Michiels, S.I., and Van Crowder, L. (2001). *Discovering the magic box: Local appropriation of information and communication technologies (ICTs)*. Rome: SDRE, FAO.

Middleton, B., Hammond, W.E., Brennan, P.F., and Cooper, G.F. (2005). Accelerating U.S. EHR adoption: How to get there from here. Recommendations based on the 2004 ACMI retreat. *Journal of the American Medical Informatics Association*, 12(1), 13-19.

Miller, R.H., and Sim, I. (2004). Physicians' use of electronic medical records: barriers and solutions - A survey of physician practices shows slow but steady progress in adopting this new technology. *Health Affairs*, 23, 116-126.

Modimogale, L., and Kroeze, J.H. (2011). The role of ICT within small and medium enterprises in Gauteng. *Communications of the IBIMA*, 1, 1–13.

Montano, D.E., and Kasprzyk, D. (2008). Theory of reasoned action, theory of planned behaviour, and the integrated behavioural model. *Health behaviour and health education: Theory, research, and practice*, 4, 67-95.

Moon, J.W., and Kim, Y.G. (2001). Extending the TAM for a World-Wide-Web context. *Information & Management*, 38(4), 217-230.

Morton, M.E. (2008). *Use and Acceptance of an Electronic Health Record: Factors Affecting Physician Attitudes*. Unpublished doctoral thesis, Drexel University: Philadelphia, USA.

Mostert-Phipps, N., Pottas, D., and Korpela, M. (2012). Improving continuity of care through the use of electronic records: A South African perspective. *South African Family Practice*, 54(4), 326–331.

Mostert-Phipps, N., Pottas, D., and Korpela, M. (2013). A South African perspective on factors that impact on the adoption and meaningful use of health information technologies. *South African Family Practice*, 55(6), 545-554.

Mouton, J. (2005). *How to succeed in your masters and doctoral studies: A South African guide and resource book*. Pretoria: Van Schaik.

Musoke, M.G.N. (2002). Simple ICTs reduce maternal mortality in rural Uganda: A telemedicine case study. *Bulletin of Medicus Mundi Switzerland*, No. 85. [Online] available at: <http://www.medicusmundi.ch/mms/services/bulletin/bulletin200202/kap04/16musoke.html>. [24/01/2013].

Myers, B., and Burnett, M. (2004). End users creating effective software. Conference on Human Factors in Computing Systems. In: *CHI '04 Extended Abstracts on Human Factors in Computing Systems*. ACM, New York, NY.1592-1593.

Nagy, M., Preckova, P., Seidl, L., and Zvarova, J. (2010). Challenges of interoperability using hl7 v3 in Czech healthcare. *Studies in Health Technology and Informatics*, 155, 122-128.

Naicker, V. (2010). *The use of computers among secondary school educators in the Western Cape central metropole*. Unpublished Doctoral dissertation, University of the Western Cape: Cape Town.

- Nikula, R.E. (2005). A study of the adoption and definition of electronic patient record by clinicians. *5th European Conference of ACENDIO*. Sweden.
- Novak, K. (2005). Reducing costs through electronic health records and services. *Benefits and Compensation Digest*, 42(10), 40.
- Nunnally, J. (1978). *Psychometric Theory*. 2nd edition. New York: McGraw-Hill Book Company.
- Oates, S. (2006). *Introduction to media and politics*. University of Michigan: Sage.
- Odhiambo-Otieno, G.W. (2005). Evaluation of existing district health management information systems a case study of the district health systems in Kenya. *International Journal of Medical Information*, 74(9), 733-744.
- Oh, H., Rizo, C., Enkin, M., and Jadad, A. (2005). What is eHealth? a systematic review of published definitions. *World Hospitals and Health Services*, 41(1), 32-40.
- Olivier, M.S. (2004). *Information technology research: A practical guide for computer science and informatics* (2nd Ed.). Pretoria: Van Schaik.
- O'Mahony, D. (2009). Implementing an electronic medical record system in a rural general practice. *South African Family Practice*, 51(4), 346-347.
- Onwuegbuzie, A.J., and Leech, N.L. (2007). Validity and qualitative research: An oxymoron? *Quality & Quantity*, 41(2), 233-249.
- Orlikowski, W.J., and Robey, D. (1991). Information Technology and the Structuring of Organisations. *Information Systems Research* 2(2), 143-169.
- Ouma, S., Herselman, M.E., and Van Greunen, D. (2009). Implementing Successful E-health Implementations within Developing Countries. *5th Annual International Conference on Computing and ICT Research (ICCIR'09)*. Kampala, Uganda, pp. 118-134.
- Oyadonghan, J.C. (2010). Information Flow Patterns in Organisations: The Library in Focus. *Library Philosophy and Practice*, 504, 1-4.
- Parker, M., Stofberg, C., De la Harpe, R., Venter, I., and Wills, G. (2006). Data quality: How the flow of data influences data quality in a small to medium medical practice. In *Proceedings of Community informatics for developing countries: Understanding and organising for a participatory future information society*, Cape Town, South Africa.
- Peh, L.C., and Low, S.P. (2013). *Organization Design for International Themeion Business*. Berlin: Springer Berlin Heidelberg.
- Pillay, R. (2008). Work satisfaction of medical doctors in the South African private health sector. *Journal of Health Organisation and Management*, 22(3), 254-268.
- Poon, E.G., Wright, A., Simon, S.R., Jenter, C.A., Kaushal, R., Volk, L.A., Cleary, P.D., Singer, J.A., Tumolo, A.Z., and Bates, D.W. (2010). Relationship between use of electronic health record features and health care quality: results of a state-wide survey. *Medical Care*, 48(3), 203-209.
- Porter, C.E., and Donthu, N. (2006). Using the technology acceptance model to explain how attitudes determine Internet usage: The role of perceived access barriers and demographics. *Journal of Business Research*, 59(9), 999-1007.
- Premkumar, G., Ramamurthy, K., and Liu, H.N. (2008). Internet messaging: An examination of the impact of attitudinal, normative, and control belief systems. *Information & Management*, 45(7), 451-457.
- Presidential National Commission on Information Society and Development (PNC). (2006). *e-Health*. [Online] available at: http://www.pnc.gov.za/index.php?option=com_contentandtask=viewandid=92andItemid=70. [13/08/2007].

Pung, H.K., Gu, T., Xue, W., Palmes, P.P., Zhu, J., Ng, W.L., Tang, C.W., and Chung, N.H. (2009). Context-aware middleware for pervasive elderly homecare. *IEEE Journal on Selected Areas in communications*, Institute of Electrical and Electronics Engineers Inc., The 27, pp. 510-524.

Republic of South Africa. (2003). *National Health Bill*. [Online] available at: http://www.pub.ac.za/pdfs/national_health_bill.pdf. [21/03/2012].

Rippen, H.E., and Yasnoff, W.A. (2004). Building the national health information infrastructure. *Journal of the American Health Information Management Association*, 75(5), 21-24.

Rispel, L.C., and Barron, P. (2010). Can disease control priorities improve health systems performance in South Africa? *SAMJ: South African Medical Journal*, 100(12), 801–806.

Ritchie, B., and Brindley, C. (2005). ICT adoption by SMEs: Implications for relationships and management. *New Technology, Work and Employment*, 20(3), 205–217.

Robottom, I., and Hart, P. (1993). Towards a meta-research agenda in science and environmental education. *International Journal of Science Education*, 15(5), 591-605.

Rogers, E.M. (1995). *Diffusion of Innovations*. 4th Ed. New York: Free Press.

Rohde, J.E., Shaw, V., Hedberg, C., Stoops, N., Venter, S., Venter, R., and Matshisi, L. (2008). Information for Primary Health Care: Primary Health Care: systems support. In *Barron P, Roma-Reardon J, editors. South African Health Review 2008*. Durban: Health Systems Trust; pp. 195-210.

Rosenbloom, S.T., Denny, J.C., Xu, H., Lorenzi, N., Stead, W.W., and Johnson, K.B. (2011). Data from clinical notes: a perspective on the tension between structure and flexible documentation. *Journal of the American Medical Informatics Association*, 18(2), 181-186.

Rowe, M. (2008). Information and Communication Technology in health: A review of the literature. *Journal of Community and Health Sciences*, 3(1), 68-77.

Rowe, M., and Struthers, P. (2009). The use of information and communication technology by South African physiotherapy students. *South African Journal of Physiotherapy*, 65(3), 32-37.

Royal Australian College of General Practitioners (RACGP). (2007). *Curriculum Statement: Health Informatics*. [Online] available at: <http://www.racgp.org.au/scriptcontent/curriculum/pdf/informatics.pdf>. [19/03/2012].

Ruxwana, N.L., Herselman, M.E., and Conradie, P.D. (2010). ICT applications as e-health solutions in rural healthcare in the Eastern Cape Province of South Africa. *Health Information Management Journal*, 39(1), 1833–3583.

Ruxwana, N.L. (2009). *Technology assessment of rural hospitals in the Eastern Cape Province: knowledge adoption, access and availability of e-health solutions for improved health care services delivery in rural hospitals*. Saarbrücken, Germany: vdm Verlag Dr. Müller.

Ruxwana, N.L. (2010). *The adoption of Quality Assurance in eHealth acquisition for rural hospitals in the Eastern Cape Province*. Unpublished doctoral thesis, Nelson Mandela Metropolitan University, South Africa.

Saadé, R., and Bahli, B. (2005). The impact of cognitive absorption on perceived usefulness and perceived ease of use in on-line learning: an extension of the technology acceptance model. *Information & Management*, 42(2), 317-327.

Sadler, G.R., Lee, H.C., Lim, R.S.H., and Fullerton, J. (2010). Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing & Health sciences*, 12(3), 369-374.

Safran, C., Bloomrosen, M., Hammond, W.E., Labkoff, S., Markel-Fox, S., Tang, P.C., Detmer, D.E., and the Expert panel. (2007). Toward a National Framework for the Secondary Use of Health Data: An American Medical Informatics Association White Paper. *Journal of the American Medical Informatics Association*, 14(1), 1-9.

- Samake, K.B., and Mbarika, V.W.A. (2007). *Ehealth in Africa: A vision for healthier African. HELINA 2007 scientific programme*. [Online] available at: <http://www.sim.hcuge.ch/helina/22.pdf>. [25/01/2013].
- Samore, M.H., Evans, R.S., Lassen, A., Gould, P., Lloyd, J., Gardner, R.M., Abouzelof, R., Taylor, C., Woodbury, D.A., Willy, M., and Bright, R.A. (2004). Surveillance of medical device-related hazards and adverse events in hospitalized patients. *The Journal of the American Medical Association*, 291(3), 325-334.
- Samoutis, G., Soteriades, E.S., Kounalakis, D.K., Zachariadou, T., Philalithis, A., and Lionis, C. (2007). Implementation of an electronic medical record system in previously computer-naive primary care centres: a pilot study from Cyprus. *Informatics in primary care*, 15(4), 207.
- Sanson-Fisher, R.W. (2004). Diffusion of innovation theory for clinical change. *Medical Journal of Australia*, 180(6), 55-56.
- Saunders, M., Lewis, P., and Thornhill, A. (2003). *Research methods for business students*. 3rd Ed. Prentice Hall, Essex: Pearson.
- Saunders, M., Lewis, P., and Thornhill, A. (2009). *Research methods for business students*, 5th Ed. Prentice Hall, Essex: Pearson.
- Scharpey-Schafer, K., and Suleman, H. (2008). *Evaluating health information systems for developing countries using simulation*. [Online] available at: <http://www.IST-Africa.org/Conference2008>. [29/04/2013].
- Schleyer, T., Spallek, H., and Hernández, P. (2007). A qualitative investigation of the content of dental paper-based and computer-based patient record formats. *Journal of the American Medical Informatics Association*, 14(4), 515-526.
- Schmid-Grendelmeier, P., Masenga, E.J., Haeffner, A., and Burg, G. (2000). Tele dermatology as a new tool in sub-Saharan Africa: An experience from Tanzania. *Journal of American Academy of Dermatology*, 42(5), 833-835.
- Schoen, C., Osborn, R., Huynk, P.T., Doty, M., Peugh, J., and Zapert, K. (2006). On the Front Lines of Care: Primary Care Doctors' Office Systems, Experiences, and Views in Seven Countries. *Health Affairs*, 25, 555-571.
- Scott, J.T., Rundall, T.G., Vogt, T.M., and Hsu, J. (2005). Kaiser Permanente's experience of implementing an electronic medical record: a qualitative study. *BMJ*, 331, 1313-1316.
- Sekaran, U. (2003). *Research methods for business: a skill-building approach*. 4th Ed. Hoboken: John Wiley & Sons.
- Sekaran, U., and Bougie, R. (2010). *Research methods for business: a skill-building approach*. 5th Ed. West Sussex: John Wiley & Sons.
- Shabbir, S.A., Ahmed, L.A., Sudhir, R.R., Scholl, J., Li, Y.C., and Liou, D.M. (2010). Comparison of documentation time between an electronic and a paper-based record system by optometrists at an eye hospital in south India: A time-motion study. *Computer methods and programs in biomedicine*, 100(3), 283-288.
- Shank, G.D. (2006). *Qualitative research a personal skills approach*. New Jersey: Pearson.
- Shannon, C. (1948). The Mathematical Theory of Communication. *Bell System Technical Journal*, vol. 27: 379-423 (Reprinted: Shannon, C. and W. Weaver: 1998, The Mathematical Theory of Communication, with a foreword by R. E. Blahut and B. Hajek, University of Illinois Press, Urbana and Chicago).
- Shannon, C.E., and Weaver, W. (1949). *A Mathematical Model of Communication*, Urbana, IL: University of Illinois Press.
- Shaw, V. (2005). Health information system reform in South Africa: Developing an essential data set. *Bulletin of the World Health Organisation*, 83(8), 632-636.
- Shekelle, P.G., Morton, S.C., and Keeler, E.B. (2006). *Costs and benefits of health information technology. Evidence Report/Technology Assessment No. 132*. Rockville, MD: U.S. Agency for Healthcare Research and Quality. (AHRQ Publication No. 06-E006).

- Shih, Y-Y., and Fang, K. (2004). The use of a decomposed theory of planned behaviour to study Internet banking in Taiwan. *Internet Research*, 14(3), 213–223.
- Simon, S.R., McCarthy, M.L., Kaushal, R., and Jenter, C.A. (2008). Electronic health records: Which practices have them, and how are clinicians using them? *Journal of Evaluation in Clinical Practice*, 14(1), 43-47.
- Singh, R., Lichter, M.I., Danzo, A., Taylor, J., and Rosenthal, T. (2012). The Adoption and Use of Health Information Technology in Rural Areas: Results of a National Survey. *The Journal of Rural Health*, 28, 16-27.
- Smallbone, D., North, D., Roper, S., and Vickers, I. (2003). Innovation and the use of technology in manufacturing plants and SMEs: an interregional comparison. *Environment and Planning C: Government and Policy*, 21(1), 37-52.
- Smelcer, J.B., Miller-Jacobs, H., and Kantrovic, L. (2009). Usability of Electronic Medical Records, *Journal of Usability Studies*, 4(2), 70-84.
- Smit, B., and de la Harpe, R. (2008). Pharmacy Informatics: Paper-based versus Electronic Information Systems. In *Information Research Cases and Projects, BTech IT Project IV, 2007*. Eds Mlitwa, N., Parker, M., Ockards, M. & Dlab, S. Cape Peninsula University of Technology, Cape Town.
- Smith, H., Bukirwa, H., Mukasa, O., Snell, P., Akeh-Nsoh, S., Mbuyita, S., Honorati, M., Orji, B., and Garner, P. (2007). Access to electronic health knowledge in five countries in Africa: A descriptive study. *BMC Health Services Research*, 7, 72.
- Sørensen, T., Rivett, U., and Fortuin, J. (2008). A review of ICT systems for HIV/AIDS and anti-retroviral treatment management in South Africa. *Journal of Telemedicine and Telecare*, 14, 37-41.
- Sowetan, The. (2012). *Motsoaledi says there is no turning back on NHI*. [Online] available at: <http://www.sowetanlive.co.za/news/2012/03/23/motsoaledi-says-there-is-no-turning-back-on-nhi>. [23/03/2012].
- Springmann, M., Bischofs, L., Fischer, P.M., Schek, H.J., Schuldt, H., Steffens, U., and Vogl, R. (2007). Management of and access to virtual electronic health records. In *Digital libraries: the research and development* (pp. 338–347). Berlin: Springer.
- Stair, R., and Reynolds, G. (2009). *Principles of Information Systems: A managerial approach* (9th Ed.). Boston: Thomson/Course Technology.
- Stake, R.E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Stanberry, B. (2000). Telemedicine: Barriers and opportunities in the 21st century. *Journal of Internal Medicine*, 247, 615-628.
- Stevenson, J.E., Nilsson, G.C., Petersson, G.I., and Johansson, P.E. (2010). Nurses' experience of using electronic patient records in everyday practice in acute/inpatient ward settings: A literature review. *Health Informatics Journal*, 16, 63-72.
- Stoops, N., Williamson, L., and Braa, J. (2003). Using health information for local action: Facilitating organisational change in South Africa. In S. Krishna, and S. Madon (Eds), *The digital challenge: Information technology in the development context*. Gateshead: Atheneum Press.
- Tang, P.C., Ash, J.S., Bates, D.W., Overhage, J.M., and Sands, D.Z. (2006). Personal health records: Definitions, benefits and strategies for overcoming barriers to adoption. *Journal of the American Medical Informatics Association*, 13(2), 121-126.
- Teddle, C., and Yu, F. (2007). Mixed methods sampling a typology with examples. *Journal of Mixed Methods Research*, 1(1), 77-100.
- Teo, T. (2010). Examining the influence of subjective norm and facilitating conditions on the intention to use technology among pre-service teachers: a structural equation modelling of an extended technology acceptance model. *Asia Pacific Education Review*, 11(2), 253-262.

Thompson, R.L., Higgins, C.A., and Howell, J.M. (1991). Personal computing: toward a conceptual model of utilization. *MIS quarterly*, 15(1), 125-143.

Thorne, S. (2000). Data analysis in qualitative research. *Evidence Based Nursing*, 3(3), 68-70.

Trimmer, K., Beachboard, J., Wiggins, C., and Woodhouse, W. (2008). Electronic medical records use: An examination of resident physician intentions. *Proceedings of the 41st Annual Meeting of the Hawaii International Conference on System Sciences*. Waikoloa, HI, 249-259.

Tung, F.C., Chang, S.C., and Chou, C.M. (2008). An extension of trust and TAM model with IDT in the adoption of the electronic logistics information system in HIS in the medical industry. *International Journal of Medical Informatics*, 77(5), 324-335.

Uren, S.C., Kirkman, M.B., Dalton, B.S., and Zalcborg, J.R. (2013). Reducing Clinical Trial Monitoring Resource Allocation and Costs Through Remote Access to Electronic Medical Records. *Journal of Oncology Practice*, 9(1), 13-16.

Uslu, A.M., and Stausberg, J. (2008). Value of the electronic patient record: an analysis of the literature. *Journal of Biomedical Informatics*, 41(4), 675-682.

Van der Haak, M., Wolff, A.C., Brandner, R., Drings, P., Wannemacher, M., and Wetter, T.H. (2003). Data security and protection in cross-institutional electronic patient records. *International Journal of Medical Informatics*, 70, 117-130.

Van der Linden, H., Kalra, D., Hasman, A., and Talmon, J. (2009). Inter-organisational future proof EHR systems: A review of the security and privacy related issues. *International Journal of Medical Informatics*, 78(3), 141-160.

Venkatesh, V., Morris, M.G., Davis, G.B., and Davis, F.D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.

Venkatesh, V., Thong, J., and Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157-178.

Vishwanath, A., Singh, S., and Winkelstein, P. (2010). The impact of electronic medical record systems on outpatient workflows: A longitudinal evaluation of its workflow effects. *International Journal of Medical Informatics*, 79(11), 778-791.

Wee, M.C., and Zaitun, A.B. (2006). Obstacles towards the use of ICT tools in teaching and learning of information systems in Malaysian universities. *International Arab Journal of Information Technology*, 3(3), 203-209.

Weeks, R.V. (2013). Electronic health records: Managing the transformation from a paper-based to an electronic system. *Journal of Contemporary Management*, 10, 135-155.

Weiner, M.G., and Embi, P.J. (2009). Toward reuse of clinical data for research and quality improvement: the end of the beginning? *Annals of Internal Medicine*, 151, 359-360.

Weiskopf, N.G., and Weng, C. (2013). Methods and dimensions of electronic health record data quality assessment: enabling reuse for clinical research. *Journal of the American Medical Informatics Association*, 20, 144-151.

Western Cape Government. (2015). *Tygerberg hospital: Overview*. (Online) available from https://www.westerncape.gov.za/your_gov/153. (accessed 13 July 2015)

Wigand, R.T. (1997). Electronic commerce: Definition, theory, and context. *The Information Society*, 13(1), 1-16.

Wilkinson, D., and Birmingham, P. (2003). *Using research instruments: A guide for researchers*. Routledge.

Williams, M.D., Dwivedi, Y.K., Lal, B., and Schwarz, A. (2009). Contemporary trends and issues in IT adoption and diffusion research. *Journal of Information Technology*, 24(1), 1-10.

Williamson, L., and Stoops, N. (2001). Using information for health. In P. Ijumba (Ed.), *South African Health Review 2001* (pp. 101–116). Durban: Health Systems Trust.

Wilson, E.V., and Lankton, N.K. (2004). Modelling patients' acceptance of provider-delivered e-health. *Journal of the American Medical Informatics Association*, 11(4), 241-248.

Wooton, R.J., Craig, C., and Patterson, V. (Eds.). (2006). *Introduction to Telemedicine*. London: The Royal Society and Medicine Press.

World Health Organization (WHO). (2003). *World Cancer Report*. [Online] available at: <http://www.who.int/cancer/>. [03/01/2013].

Wu, J.H., Tennyson, R.D., and Hsia, T.L. (2010). A study of student satisfaction in a blended e-learning system environment. *Computers & Education*, 55(1), 155-164.

Wurm, E.M.T., Hofmann-Wellenhof, R., Wurm, R., and Soyer, H.P. (2008). Telemedicine and teledermatology: Past, present and future. *Journal of the German Society of Dermatology*, 6(2), 106-112.

Wyatt, J.C., and Sullivan, F. (2005). e-Health and the future: Promise or peril? *BMJ*, 331, 1391–1393.

Xierali, I.M., Hsiao, C-J., Puffer, J.C., Green, L.A., Rinaldo, J.C.B., Bazemore, A.W., Burke, M.T., and Phillips, R.L. (2013). The rise of electronic health record adoption among family physicians. *Annals of Family Medicine*, 11, 14-19.

Yang, H.D., and Yoo, Y. (2004). It's all about attitude: revisiting the technology acceptance model. *Decision Support Systems*, 38(1), 19-31.

Yang, Y. (2001). *ICT and information flow theory*. [Online] available at: <http://ssrn.com/abstract=613781>. [11/12/2009].

Yarbrough, A.K., and Smith, T.B. (2007). Technology Acceptance among Physicians A New Take on TAM. *Medical Care Research and Review*, 64(6), 650-672.

Yin, R.K. (2003). *Case study research: Design and methods* (3rd Ed.). Thousand Oaks, CA: Sage.

Yin, R.K. (2011). *Qualitative research from start to finish*. New York: The Guilford Press.

Zhou, Y. (2008). Voluntary adopters versus forced adopters: integrating the diffusion of innovation theory and the technology acceptance model to study intra-organizational adoption. *New Media & Society*, 10(3), 475-496.

APPENDICES

Appendix A – University ethics clearance



UNIVERSITY of the
WESTERN CAPE

OFFICE OF THE DEAN
DEPARTMENT OF RESEARCH DEVELOPMENT

14 February 2014

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:
Mr T Tokosi (School of Business and Finance)

Research Project: Electronic patient record (EPR) system in South Africa: Information, storage, retrieval and share amongst clinicians.

Registration no: 14/1/24

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

A handwritten signature in black ink, appearing to read 'Josias'.

*Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape*

Private Bag X17, Bellville 7535, South Africa
T: +27 21 959 2988/2948 . F: +27 21 959 3170
E: pjosias@uwc.ac.za
www.uwc.ac.za

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to action through knowledge

Appendix B – Mitchells Plain hospital (MPH) approval letter



STRATEGY & HEALTH SUPPORT

Health.Research@westerncape.gov.za
tel: +27 21 483 6857; fax: +27 21 483 9895
5th Floor, Norton Rose House,, 8 Riebeeck Street, Cape Town, 8001
www.capegateway.gov.za

REFERENCE: 2014RP132
ENQUIRIES: Ms Charlene Roderick

**Robert Sobukwe Road
Private Bag X17
Bellville
7535
Republic of South Africa**

For attention: **Mr Temitope Oluwaseyi Tokosi and Prof Visvanathan Naicker**

Re: ELECTRONIC PATIENT RECORD (EPR) SYSTEM IN SOUTH AFRICA: INFORMATION, STORAGE, RETRIEVAL AND SHARE AMONGST CLINICIANS.

Thank you for submitting your proposal to undertake the above-mentioned study. We are pleased to inform you that the department has granted you approval for your research. Please contact the following people to assist you with any further enquiries in accessing the following sites:

Mitchell's Plain Hospital

H Human

Contact No. 021 360 4676

Kindly ensure that the following are adhered to:

1. Arrangements can be made with managers, providing that normal activities at requested facilities are not interrupted.
2. Researchers, in accessing provincial health facilities, are expressing consent to provide the department with an electronic copy of the final report within six months of completion of research. This can be submitted to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
3. The reference number above should be quoted in all future correspondence.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Dr A Hawkrige'.

**DR A HAWKRIDGE
DIRECTOR: HEALTH IMPACT ASSESSMENT**

**DATE: 13/4/2015.
CC P OLCKERS**

DIRECTOR: MITCHELL'S PLAIN / KLIPFONTEIN

Appendix C – Tygerberg hospital (TBH) approval letter



Tygerberg Hospital

REFERENCE: Research Projects
ENQUIRIES: Dr G G Marinus
TELEPHONE: 021 938-6267

ETHICS NO: 14/1/24

Electronic patient record (EPR) system in South Africa: Information, storage, retrieval and share amongst clinicians.

Dear Mr Tokosi



PERMISSION TO CONDUCT YOUR RESEARCH AT TYGERBERG HOSPITAL

In accordance with the Provincial Research Policy and Tygerberg Hospital Notice No 40/2009, permission is hereby granted for you to conduct the above-mentioned research here at Tygerberg Hospital.

Please note, that the Pilot Study is hereby approved and that you are responsible for administrative logistics of your research project.

A handwritten signature in black ink, consisting of a large, stylized 'D' followed by a horizontal line extending to the right.

DR D ERASMUS
CHIEF EXECUTIVE OFFICER

Date: 13 July 2015

Appendix D – University permission letter to conduct pilot study



UNIVERSITY of the
WESTERN CAPE

OFFICE OF THE REGISTRAR

18 May 2015

Mr. TO Tokosi
St No 9914091

Dear TO Tokosi

PERMISSION TO CONDUCT RESEARCH AT UWC

Electronic patient record (EPR) system in South Africa: Information, storage, retrieval and share amongst clinicians.

Thank you for complying with our requirements for obtaining permission to do research at the University of the Western Cape.

I hereby grant permission for you to pilot your online survey questionnaire to UWC academic staff at the school of Nursing, Pharmacy and Dentistry.

You may contact the following staff members to assist you further;

Pharmacy – Benita van Rooyen Tel 9593667 or email- bljohnson@uwc.ac.za or Room K2 Level 1 Pharmacy Building.

Dentistry – Zulfa Smith Tel 937 3184 or email zsmith@uwc.ac.za or Dentistry Faculty on the Tygerberg campus, please call her for directions.

Nursing – N Johannes Tel 9593482 or email njohannes@uwc.ac.za or Nursing Department, Senate Building: second floor room G6.

Your research will make an important contribution to our knowledge base and I wish you every success with the completion of the study.

Yours sincerely

Nita Lawton-Misra
REGISTRAR

Private Bag 617, Bellville 7535,
South Africa T: +27 21 9592111.
registrar@uwc.ac.za www.uwc.ac.za

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Appendix E – Final questionnaire

CLINICIANS QUESTIONNAIRE

A. Age, gender and work

Age	Gender	Occupation (clinicians only)	Work experience (yrs)
(Type age here)	<input type="checkbox"/> Female <input type="checkbox"/> Male	(Type occupation here)	(Type total work experience at <u>this</u> facility)
Race	Highest education	Disability	
(Type race here)	(Type education here)	(If yes, type name of disability here)	
<p>A clinician is any health professional whose practice is based on direct observation and treatment of a patient at a healthcare facility.</p>			

B. Ability to use computer Yes No

(Check like this: or)

	Very good	Good	Fair	Not good	Poor
1. What is your level of ability to use a computer?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C. About the availability of the computers at your working place at the hospital

(Check like this: or)

	Yes	No
--	------------	-----------

1. Do you have a computer in your office? (answer no If you have no office at all)		<input type="checkbox"/>	<input type="checkbox"/>			
2. Concerning other rooms you use for clinical work, (e.g. ward, outpatient clinic offices, investigation rooms)						
a. Are there any computers available for you here?		<input type="checkbox"/>	<input type="checkbox"/>			
b. <u>If yes</u> , do you use these computers?		<input type="checkbox"/>	<input type="checkbox"/>			
<i>If you responded "no" to both questions 1 and 2a, you do not have to fill out the rest of the questionnaire</i>						
3. About the computers installed in the ward, at the outpatient clinic offices, investigation rooms and so on.						
		Never	Rarely	Monthly	Weekly	Daily
	a. How often are you prevented from using the computers because others are using them?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b. How often are you prevented from using them because of computer errors, forgotten passwords or other machine-related problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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D. About your use of Personal Computers (PC) for clinical tasks in the hospitals

(Check like this: or)

How often do you use a personal computer (PC) to assist you with the following tasks:						
	Never/ almost never	Never/ almost	Seldom	About half of the time	Most of the time	Always/ almost always
	1	2	3	4	5	
1. Review the patients problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Seek out specific information from patient records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Follow the results of a particular test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Obtain the results from new tests or investigations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

5. Enter daily notes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Obtain information on investigation or treatment procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Answer questions concerning general medical knowledge (e.g. concerning treatment, symptoms, complications and so on.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Produce data reviews for specific patient groups (e.g. complication rate, diagnosis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Order clinical biochemical laboratory analyses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Obtain the results from clinical biochemical laboratory analyses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Order X-ray, ultrasound, CT investigations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Obtain the results from X-ray, ultrasound, CT investigations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Order other supplementary investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Obtain the results from other supplementary investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Refer the patient to other departments or specialist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Order treatment directly (e.g. medicines and so on.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Write prescriptions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Write sick leave notes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Collect patient information for various medical declarations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Give written individual information to patients e.g. about medications, disease status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Give written general medical information to patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Collect patient info for discharge reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Check and sign typed dictations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Other (specify).					

What is the name of the system you use at work?

E. About your choices or reasons to use EPR* at work

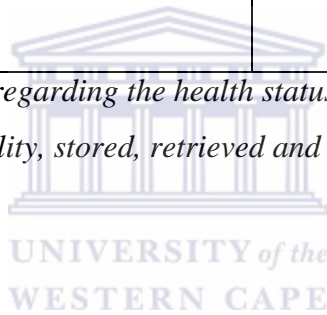
How many years (or months) of experience do you have using an EPR system?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
	5	4	3	2	1
1. Perceived usefulness					
a. Using the system improves my performance in my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Using the system enhances my effectiveness on the job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I find the system to be useful in my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Using the system in my job increases my productivity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Relative advantage					
a. Using the system enables me to accomplish tasks more quickly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Using the system enables me improve the quality of the work I do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Using EPR increases my productivity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Job-fit					
a. Use of the system will have no effect on the performance of my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Use of the system can decrease the time needed for my					

<p>important job responsibilities.</p> <p>c. Use of the system can significantly increase the quality of output on my job.</p> <p>d. Use of the system can increase the effectiveness of performing job tasks</p> <p>e. The system can increase the quantity of output for same amount of effort</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>4. Perceived ease of use</p> <p>a. My interaction with the system is clear and understandable.</p> <p>b. I find the system to be easy to use.</p> <p>c. I find it easy to get the system to do what I want it to do.</p> <p>d. interacting with the system does not require a lot of my mental effort.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>5. Complexity</p> <p>a. Using the system takes too much time from my normal duties.</p> <p>b. Working with the system is so complicated; it is difficult to understand what is going on.</p> <p>c. Using the system involves too much time doing mechanical operations (e.g., data input).</p> <p>d. It takes too long to learn how to use the system to make it worth the effort.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>6. Affect</p> <p>a. The system makes work more interesting.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

b. Working with the system is fun.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The system is okay for some jobs, but not the kind of job I want.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Facilitating conditions					
a. A specific person (or group) is available for assistance with software difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Specialised instruction concerning the popular software is available to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A specific person (or group) is available for assistance with hardware difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Guidance is available to me in the selection of hardware and software.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**EPR is a repository of information regarding the health status of a subject of care in a computer processable form within a health facility, stored, retrieved and transmitted securely, and accessible by multiple authorised users*



F. About the satisfaction of the EPR functions

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
	5	4	3	2	1
1. Storage					
a. I have the ability to use the system to store information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I know how to use the system to store information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I know how to operate the system to store my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I can store my work on the computer system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Retrieval					
a. I have the ability to use the system to retrieve information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I know how to use the system to retrieve information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The information I retrieve is exactly how I want it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. The information I retrieve is exactly how I stored it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Share					
a. I have the ability to use the system to share information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I know how to use the system to share information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I can share information with colleagues in my hospital using the system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I can share information with other hospitals using the system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

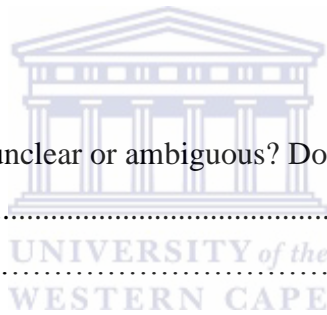
G. Global assessment of the EPR installed in your department

1. How much do you agree with the following statement about the EPR system:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. The EPR is worth the time and effort required to use it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. All considered, how would you rate your satisfaction	Non-existent	Poor	Fair	Good	Excellent
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

with the EPR installed in your department?					
3. All considered, how would you rate the success of the EPR installed in your department?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. All considered, to what extent has the system changed these two aspects of <u>your own</u> department?					
	Significantly Decreased	Decreased	No Change	Increased	Significantly Increased
a. Ease of performing our department's work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Quality of our department's work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

H. Comments

E.g. Were parts of the questionnaire unclear or ambiguous? Do you have any suggestions to the improvements of the EPR system?



.....

Can the researcher do a follow-up, i.e. a one-to-one interview or focus group interviews with you at a later stage? If yes, provide contact details here.....

.....

Appendix F – Interview questions

CLINICIANS INTERVIEW QUESTIONNAIRE

1. In your own words, what do you understand by electronic patient record system?
2. Do you have access to the hospitals electronic record system? How? Egg password and so on.
 - a. Do you have one access code to all systems or multiple access codes? Describe
3. What is the name of the system you currently use at work?
 - a. What other systems do you use at work other than ECM?
4. What do you use the system for? Explain.

Review the patients problems

Check and sign typed dictations

Collect patient info for discharge reports

Enter daily notes

Follow the results of a particular test

Give written individual information to patients e.g. about medications, disease status

Obtain information on investigation or treatment procedures

Obtain the results from new tests or investigations

Obtain the results from X-ray, ultrasound, CT investigations

Order clinical biochemical laboratory analyses

Order treatment directly (e.g. medicines and so on.)

Refer the patient to other departments or specialist

Write prescriptions

Write sick leave notes



5. What are your opinions/views about the EPR system when it comes to:
- a) Usefulness? e.g. do you find it useful in your job? Explain?
 - b) Relative advantage? e.g. using it enables you improve the quality of the work over paper.
How?
 - c) Job-fit? e.g. Can the system improve the quantity of output for same amount of effort?
How? Does the ECM fit into the kind of job you do??
 - d) Ease of use? e.g. do you find it easy to get the system to do what you want? Example.
 - e) Complexity? e.g. is it difficult to understand the system & how it works? Explain?
 - f) Affect? e.g. the system makes work more interesting. Explain? Do you find ECM interesting or fun?
 - g) Facilitating condition? e.g. are specific support staffs available for assistance with difficulties? Explain?
 - h) Storage? e.g. do you know how to use the system to store information? Explain?
 - i) Retrieval? e.g. do you know how to use the system to retrieve information? Example. Will patient information be in the same format stored with no alterations when retrieved?
 - j) Share? a. Can you share information with colleagues in the hospital using ECM? If so how/
 - b. What about sharing information with other hospitals?
 - i. In general, what is your general view of the EPR?
 - a. Is it worth the time and effort required to use it?
 - b. What is your satisfaction level with the system installed at your hospital between 1 and 10? Why?
 - c. Any other information you want to share with me?

Appendix G – Interview guideline and consent form

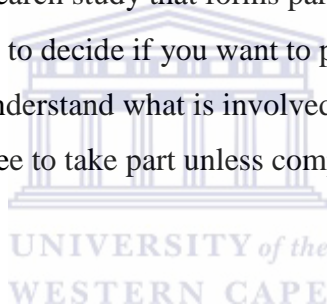
Project title: Electronic Patient Record (EPR) system in South Africa: information storage, retrieval and share amongst clinicians

Primary investigator: Mr. Temitope O. Tokosi, PhD scholar, UWC

Primary supervisor: Prof. Visvanathan Naicker, UNISA

Dear Research participant,

You are invited to participate in a research study that forms part of my formal PhD research study. This information leaflet will help you to decide if you want to participate in this study. Before you agree to take part, you should fully understand what is involved and what is expected of you as the study participant. You should not agree to take part unless completely satisfied with all aspects of the study.



What is the study all about?

Patient record used in hospital by hospital staffs especially clinicians is important to improve information flow process in order to strengthen healthcare capacities. By this an Electronic Patient Record (EPR) system is necessary to cater for patient record because of its capacity to store, retrieve and share patient information. An appropriate EPR definition for this study is, *‘a repository of information regarding the health status of a subject of care in a computer processable form within a health facility, stored, retrieved and transmitted securely, and accessible by multiple authorised users’*.

Additional information

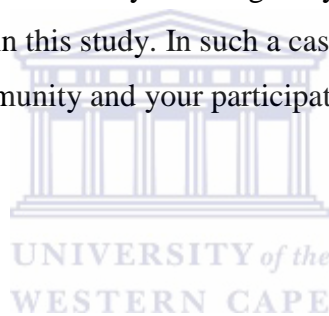
1. There is **no** financial compensation or reward for participation in this study.
2. Your participation in this study is entirely voluntary.

3. The results of the study can only be made available to the participant upon written request stating reasons for its access.
4. Your answers will be totally anonymous and your identity will never be revealed under any circumstance. Also nobody outside the study panel will have access to your answers with intent to connect you to the study.
5. Your co-operation and participation in this study will be greatly appreciated.
6. The primary investigator, Mr Temitope O. Tokosi, can be contacted during office hours at telephone (021) 959 3682, or on his cellular phone at 076 047 1328, e-mail: toksymoore@gmail.com. The study leader, Prof. Visvanathan Naicker, can be contacted during office hours at telephone (011) 652 0223 and by e-mail: naickv@unisa.ac.za.

A final word:

Your co-operation and participation in this study will be greatly appreciated. Please sign the informed consent form if you agree to partake in this study. In such a case, you will greatly be contributing towards the development of our community and your participation is highly appreciated.

Thank you.



INFORMED CONSENT FORM

I hereby confirm that I have been adequately informed by the researcher about the nature, conduct, benefits and risks of the study. I have also received, read and understood the above written information. I am aware that the results of the study, including personal details will be anonymously processed into a research report or other research outputs. I understand that my participation is voluntary and that I may, at any stage, without prejudice, withdraw my consent and participation in the study. I had sufficient opportunity to ask questions and of my own free will declare myself prepared to participate in the study.

Participant's name _____ **(Please print)**

Participant's contact _____ **Email** _____



Participant's signature _____ **Date** _____

Researcher's name Temitope O. Tokosi

Researcher's signature _____ **Date** _____