

# Influencing Healthcare Worker Behavior to Improve Infection Control

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## Appropriate Technology

Rosenberg T. The human incubator. The New York Times, December 13, 2010

Schumacher EF. Small is Beautiful: Economics as if People Mattered. Harper Perennial, 2010

## Design and Human Factors

The Fred Dust TED x Berkeley talk about design thinking in healthcare:

<http://tedxberkeley.org/media/fred-dust/>

Anderson J, Gosbee LL, Bessesen M, Williams L. Using human factors engineering to improve the effectiveness of infection prevention and control. Crit Care Med 2010 Vol. 38, No. 8 (Suppl.)

## Hand Hygiene Promotion

Gurses AP, Murphy DJ, Martinez EA, Berenholtz SM, Pronovost PJ. A practical tool to identify and eliminate barriers to compliance with evidence-based guidelines. Jt Comm J Qual Patient Saf. 2009 Oct;35(10):526-32, 485

Sax H, Allegranzi B, Larson E, Boyce J, Pittet D. My five moments for hand hygiene – design of new a user-centred approach to understand, train, monitor and report hand hygiene. J Hosp Infect 2007;67;9-21

Sax H, Uçkay I, Richet H, Allegranzi B, Pittet D. Determinants of good hand hygiene behavior among healthcare workers in a setting with long campaign exposure. Infect Control Hosp Epidemiol 2007;28:1267-74

Allegranzi B, Sax H, Bengaly L, Richet H, Minta DK, Chraïti MN, Sokona FM, Bonnabry P, Pittet D. Successful implementation of the World Health Organization hand hygiene improvement strategy in a referral hospital in Mali, Africa. Infect Control Hosp Epidemiol 2010;31:133-41

Longtin Y, Sax H, Allegranzi B, Hugonnet S, Pittet D. Patients' beliefs and perceptions of their participation to increase healthcare worker compliance with hand hygiene. Infect Control Hosp Epidemiol 2009 Sep;30(9):830-9

The University of Geneva Hospitals hand hygiene dance video available at: [www.vigigerme.org](http://www.vigigerme.org)

MW Mah, YC Tam, S Deshpande. Social marketing analysis of 20 [corrected] years of hand hygiene promotion. Infection Control and Hospital Epidemiology 2008;29(3):262-70

## Implementation Science & Large-Scale Change

Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implement Sci 2009 Aug 7;4:50

Benning A, Ghaleb M, Suokas A, Dixon-Woods M, Dawson J, Barber N, Franklin BD, Girling A, Hemming K, Carmalt M, Rudge G, Naicker T, Nwulu U, Choudhury S, Lilford R. Large scale organisational intervention to improve patient safety in four UK hospitals: mixed method evaluation. BMJ 2011;342:d195

McCannon CJ, Berwick DM, Massoud MR. The science of large-scale change in global health. JAMA 2007; 298(16):1937-9

Yamey G. Scaling up global health interventions: a proposed framework for success. PLoS Medicine 2011;8(6):e1001049

## Marketing

Vargo SL and Lusch RF. Evolving to a New Dominant Logic for Marketing. Journal of Marketing 2004;68:1-17

Mah MW, Deshpande S, Rothschild ML. Social marketing: a behavior change technology for infection control. American Journal of Infection Control 2006;34(7):452-7

Mah MW. Social marketing in healthcare. In: Dwivedi A. (editor). The Handbook of Research on Information Technology Management and Clinical Data Administration in Healthcare. Hershey, Pennsylvania: IGI Global, ISBN 1-60566-356-5; 2009:662-673

## Miscellaneous

Mah MW, Meyers G. Toward a socioethical approach to behavior change. Am J of Infect Control 2005;33(4):73-9

Harter JK, Schmidt FL, Killham EA, Agrawal S. Q12 Meta-analysis: the relationship between engagement at work and organizational outcomes. Gallup, 2009

Collins J. Good to great and the social sectors. Monograph. [www.jimcollins.com](http://www.jimcollins.com)

Martin RL. The Opposable Mind: Winning through Integrative Thinking. Harvard Business Press, 2009

Benkler Y. The unselfish gene. Harvard Business Review, July, 2011

Forman J, Creswell JW, Damschroder L, Kowalski CP, Krein SL. Qualitative research methods: key features and insights gained from use in infection prevention research. Am J Infect Control. 2008 Dec;36(10):764-71. Epub 2008 Oct 3

Bjork RA. Memory and metamemory considerations in the training of human beings. In: Metcalfe J and Shimamura A, editors. Metacognition: Knowing About Knowing. MIT Press, 1994

## Positive Deviance

Marsh DR, Schroeder DG, Dearden KA et al. The power of positive deviance. BMJ 2008; 329:1177-9

Buscell P. More we than me: how the fight against MRSA led to a new way of collaborating at Albert Einstein Medical Center. Deeper Learning 2008; 1(5):1-16