

References

Chapter 45

- 1 Wang H, Dwyer-Lindgren L, Lofgren KT, Rajaratnam JK, Marcus JR, Levin-Rector A, et al. Age-specific and sex-specific mortality in 187 countries, 1970-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 2012;**380**(9859):2071–94.
- 2 Hallas J, Worm J, Beck-Nielsen J, Gram LF, Grodum E, Damsbo N, Broesen K. Drug related events and drug utilization in patients admitted to a geriatric hospital department. *Danish Medical Bulletin*. 1991;**38**(5):417–20.
- 3 Wilson RM, Runciman WB, Gibberd RW, Harrison BT, Newby L, Hamilton JD. The Quality in Australian Health Care Study. *Medical Journal of Australia*. 1995;**163**:458–71.
- 4 Lazarou J, Pomeranz BH, Corey PN. Incidence of adverse drug reactions in hospitalized patients: a meta-analysis of prospective studies. *Journal of the American Medical Association*. 1998;**279**:1200–5.
- 5 UK Department of Health. An Organisation with a Memory: Report of an Expert Group on Learning from Adverse Events in the NHS. Chaired by the Chief Medical Officer. Available from: <https://www.aagbi.org/sites/default/files/An%20organisation%20with%20a%20memory.pdf> (last accessed 18 November 2015).
- 6 Kohn LT, Corrigan JM, Donaldson MS, eds. *To Err is Human: Building a Safer Health System*. Washington, DC, National Academy Press, 1999.
- 7 Pirmohamed M, James S, Meakin S, Green C, Scott AK, Walley TJ, et al. Adverse drug reactions as cause of admission to hospital: prospective analysis of 18 820 patients. *British Medical Journal*. 2004;**329**(7456):15–19.
- 8 Hilmer SN, Mager DE, Simonsick EM, Cao Y, Ling SM, Windham G, et al. A drug burden index to define the functional burden of medications in older people. *Archives of Internal Medicine*. 2007;**167**:781–7.
- 9 Australian Commission on Safety and Quality in Health Care. Literature Review: Medication Safety in Australia. Available from: <http://www.safeyandquality.gov.au/wp-content/uploads/2014/02/Literature-Review-Medication-Safety-in-Australia-2013.pdf> (last accessed 18 November 2015).
- 10 Dukes MNG, ed. Drug Utilization Studies: Methods and Uses. Available from: <http://apps.who.int/medicinedocs/documents/s21868en/s21868en.pdf> (last accessed 18 November 2015).
- 11 Bergman U, Sjöqvist F. Measurement of drug utilization in Sweden: methodological and clinical implications. *Acta Medica Scandinavica*. 1984;**Suppl. 683**:15–22.
- 12 World Health Organization. Introduction to Drug Utilization Research. Available from: <http://apps.who.int/medicinedocs/en/d/Js4876e/> (last accessed 18 November 2015).
- 13 Wensing M, van der WT, Grol R. Implementing guidelines and innovations in general practice: which interventions are effective? *British Journal of General Practice*. 1998;**48**(427):991–7.
- 14 Davis DA, Thomson M, Oxman AD, Haynes R. Changing Physician Performance: A Systematic Review of the Effect of Continuing Medical Education Strategies. *Journal of the American Medical Association*. 1995;**274**(9):700–5.
- 15 Eccles M, Mittman B. Welcome to Implementation Science [editorial]. *Implementation Science*. 2006;**1**:1.
- 16 Grimshaw JM, Thomas RE, MacLennan G, Fraser C, Ramsay CR, Vale L, et al. Effectiveness and efficiency of guideline dissemination and implementation strategies. *Health Technology Assessment*. 2004;**8**(6):iii–iv, 1–72.
- 17 Bloom BS. Effects of continuing medical education on improving physician clinical care and patient

- health: a review of systematic reviews. *International Journal of Technology Assessment in Health Care*. 2005;**21**(3):380–5.
- 18 O'Brien MA, Rogers S, Jamtvedt G, Oxman AD, Odgaard-Jensen J, Kristoffersen DT, et al. Educational outreach visits: effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews*. 2007;**4**:CD000409.
- 19 Ivers N, Jamtvedt G, Flottorp S, Young JM, Odgaard-Jensen J, French SD, et al. Audit and feedback: effects on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*. 2012;**6**:CD000259.
- 20 Squires JE, Sullivan K, Eccles MP, Worswick J, Grimshaw JM. Are multifaceted interventions more effective than single-component interventions in changing health-care professionals' behaviours? An overview of systematic reviews. *Implementation Science*. 2014;**9**:152.
- 21 Hrisos S, Eccles M, Johnston M, Francis J, Kaner EFS, Steen N, Grimshaw J. Developing the content of two behavioural interventions: using theory-based interventions to promote GP management of upper respiratory tract infection without prescribing antibiotics. *BMC Health Services Research*. 2008;**8**:11.
- 22 Ivers NM, Sales A, Colquhoun H, Michie S, Foy R, Francis JJ, Grimshaw JM. No more 'business as usual' with audit and feedback interventions: towards an agenda for a reinvigorated intervention. *Implementation Science*. 2014;**9**:14.
- 23 The Improved Clinical Effectiveness through Behavioural Research Group. Designing theoretically-informed implementation interventions. *Implementation Science*. 2006;**1**(1):4.
- 24 Abraham C, Michie S. A taxonomy of behavior change techniques used in interventions. *Health Psychology*. 2008;**27**(3):379–87.
- 25 Schulz R, Czaja SJ, McKay JR, Ory MG, Belle SH. Intervention taxonomy (ITAX): describing essential features of interventions. *American Journal of Health Behavior*. 2010;**34**(6):811–21.
- 26 Michie S, Johnston M. Changing clinical behaviour by making guidelines specific. *British Medical Journal*. 2004;**328**:343–5.
- 27 Michie S, van Stralen MM, West R. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation Science*. 2011;**6**:42.
- 28 Michie S, Richardson M, Johnston M, Abraham C, Francis J, Hardeman W, et al. The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: building an international consensus for the reporting of behavior change interventions. *Annals of Behavioral Medicine*. 2013;**46**(1):81–95.
- 29 Colquhoun H, Leeman J, Michie S, Lokker C, Bragge P, Hempel S, et al. Towards a common terminology: a simplified framework of interventions to promote and integrate evidence into health practices, systems, and policies. *Implementation Science*. 2014;**9**:51. Erratum in: *Implementation Science*. 2014;**9**:154.
- 30 Cane J, Richardson M, Johnston M, Ladha R, Michie S. From lists of behaviour change techniques (BCTs) to structured hierarchies: comparison of two methods of developing a hierarchy of BCTs. *British Journal of Health Psychology*. 2015;**20**(1):130–50.
- 31 Cochrane Effective Practice and Organisation of Care Group. EPOC-specific resources for review authors. Available from: <http://epoc.cochrane.org/epoc-specific-resources-review-authors> (last accessed 18 November 2015).
- 32 Grigoryan L, Burgerhof JGM, Degener JE, Deschepper R, Lundborg CS, Monnet DL, et al. Determinants of self-medication with antibiotics in Europe: the impact of beliefs, country wealth and the healthcare system. *Journal of Antimicrobial Chemotherapy*. 2008;**61**(5):1172–9.
- 33 Godman B, Shrank W, Andersen M, Berg C, Bishop I, Burkhardt T, et al. Policies to enhance prescribing efficiency in Europe: findings and future implications. *Frontiers in Pharmacology*. 2011;**1**:141.
- 34 Laing R, Hogerzeil H, Ross-Degnan D. Ten recommendations to improve use of medicines in developing countries. *Health Policy Planning*. 2001;**16**(1):13–20.
- 35 Grimshaw JM, Shirran L, Thomas RE, Mowatt G, Fraser C, Bero L, et al. Changing provider behavior: an overview of systematic reviews of interventions. *Medical Care*. 2001;**39**:II2–45.
- 36 Ross S, Loke YK. Do educational interventions improve prescribing by medical students and junior doctors? A systematic review. *British Journal of Clinical Pharmacology*. 2009;**67**:662–70.
- 37 Ostini R, Hegney D, Jackson C, Williamson M, Mackson JM, Gurman K, et al. Systematic Review

- of interventions to improve prescribing. *Annals of Pharmacotherapy*. 2009;**43**(3):502–13.
- 38** Brennan N, Mattick K. A systematic review of educational interventions to change behaviour of prescribers in hospital settings, with a particular emphasis on new prescribers. *British Journal of Clinical Pharmacology*. 2012;**75**(2):359–72.
- 39** GroL R, Wensing M, Eccles M, eds. *Improving Patient Care: The Implementation of Change in Clinical Practice*. Oxford, Elsevier, 2005.
- 40** Wettermark B, Godman B, Jacobsson B, Haaijer-Ruskamp F. Soft regulations in pharmaceutical policymaking – an overview of current approaches and their consequences. *Applied Health Economics and Health Policy*. 2009;**7**:137–47.
- 41** Canadian Agency for Drugs and Technology in Health. Rx for Change Interventions Database. Available from: <https://www.cadth.ca/rx-change> (last accessed 18 November 2015).
- 42** GroL R. Beliefs and evidence in changing clinical practice. *British Medical Journal*. 1997;**315**:418–21.
- 43** Hunt G, Barker JC. Drug treatment in contemporary anthropology and sociology. *European Addiction Research*. 1999;**5**(3):126–32.
- 44** Effective Practice and Organisation of Care. EPOC Taxonomy. Available from: <https://epoc.cochrane.org/epoc-taxonomy> (last accessed 18 November 2015).
- 45** Figueiras A, Sastre I, Gestal-Otero JJ. Effectiveness of educational interventions on the improvement of drug prescription in primary care: a critical literature review. *Journal of Evaluation in Clinical Practice*. 2001;**7**(2):223–41.
- 46** Davey P, Brown E, Charani E, Fenelon L, Gould IM, Holmes A, et al. Interventions to improve antibiotic prescribing practices for hospital inpatients. *Cochrane Database of Systematic Reviews*. 2013;**4**:CD003543.
- 47** Giguère A, Légaré F, Grimshaw J, Turcotte S, Fiander M, Grudniewicz A, et al. Printed educational materials: effects on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*. 2012;**10**:CD004398.
- 48** Zwarenstein M, Shiller SK, Croxford R, Grimshaw JM, Kelsall D, Paterson JM, et al. Printed educational messages aimed at family practitioners fail to increase retinal screening among their patients with diabetes: a pragmatic cluster randomized controlled trial. *Implementation Science*. 2014;**9**:87.
- 49** Ivers NM, Grimsham JM, Jamtvedt G, Flottorp S, O'Brien MA, French SD, et al. Growing literature, stagnant science? Systematic review, meta-regression and cumulative analysis of audit and feedback interventions in health care. *Journal of General Internal Medicine*. 2014;**29**(11):1534–41.
- 50** Søndergaard J, Andersen M, Kragstrup J, Hansen P, Freng Gram L. Why has postal prescriber feedback no substantial impact on general practitioners' prescribing practice? A qualitative study. *European Journal of Clinical Pharmacology*. 2002;**58**(2):133–6.
- 51** Schroll H, Christensen RD, Thomsen JL, Andersen M, Friberg S, Søndergaard J. The Danish model for improvement of diabetes care in general practice: impact of automated collection and feedback of patient data. *International Journal of Family Medicine*. 2012;**2012**:208123.
- 52** O'Connell DL, Henry D, Tomson G. Randomised controlled trial of effect of feedback on general practitioners prescribing in Australia. *British Medical Journal*. 1999;**318**:507–11.
- 53** Roughead E, Pratt N, Peck R, Gilbert A. Improving medication safety: influence of a patient-specific prescriber feedback program on rate of medication reviews performed by Australian general medical practitioners. *Pharmacoepidemiology & Drug Safety*. 2007;**16**(7):797–803.
- 54** Balas EA, Weingarten S, Garb CT, Blumenthal D, Boren SA, Brown GD. Improving preventive care by prompting physicians. *Archives of Internal Medicine*. 2000;**160**(3):301–8.
- 55** Buntinx F, Winkens R, GroL R, Knottnerus JA. Influencing diagnostic and preventive performance in ambulatory care by feedback and reminders. A review. *Family Practice*. 1993;**10**(2):219–28.
- 56** Kawamoto K, Houlihan CA, Balas EA, Lobach DF. Improving clinical practice using clinical decision support systems: a systematic review of trials to identify features critical to success. *British Medical Journal*. 2005;**330**(7494):765.
- 57** Mandelblatt J, Kanetsky PA. Effectiveness of interventions to enhance physician screening for breast cancer. *Journal of Family Practice*. 1995;**40**(2):162–71.
- 58** Shea S, DuMouchel W, Bahamonde L. A meta-analysis of 16 randomized controlled trials to evaluate computer-based clinical reminder systems for preventive care in the ambulatory setting. *Jour-*

- nal of the American Medical Information Association*. 1996;**3**(6):399–409.
- 59 Wensing M, Grol R. Single and combined strategies for implementing changes in primary care: a literature review. *International Journal for Quality in Health Care*. 1994;**6**(2):115–32.
- 60 Moja L, Kwag KH, Lytras T, Bertizzolo L, Brandt L, Pecoraro V, et al. Effectiveness of computerized decision support systems linked to electronic health records: a systematic review and meta-analysis. *American Journal of Public Health*. 2014;**104**(12):e12–22.
- 61 Avorn J, Soumerai SB. Improving drug-therapy decisions through educational outreach. A randomized controlled trial of academically based ‘detailing’. *New England Journal of Medicine*. 1983;**308**(24):1457–63.
- 62 Soumerai SB, Avorn J. Principles of educational outreach (‘academic detailing’) to improve clinical decision making. *Journal of the American Medical Association*. 1990;**263**(4):549–56.
- 63 Scott I. Errors in clinical reasoning: causes and remedial strategies. *British Medical Journal*. 2009;**338**:b1860.
- 64 Croskerry P, Singhal G, Mamede S. Cognitive debiasing 2: impediments to and strategies for change. *British Medical Journal Quality & Safety*. 2013;**22**:ii65–72.
- 65 Kotler P. *Marketing for Nonprofit Organizations*. Englewood Cliffs, NJ, Prentice-Hall, 1975.
- 66 Andreasen AR. *Marketing Social Change: Changing Behavior to Promote Health, Social Development and the Environment*. San Francisco, CA, Jossey-Bass, 1995.
- 67 May F, Simpson D, Hart L, Rowett D, Perrier D. Experience with academic detailing services for quality improvement in primary care practice. *Quality & Safety in Health Care*. 2009;**18**(3):225–31.
- 68 Pond CD, Mant A, Kehoe L, Hewitt H, Brodaty H. General practitioner diagnosis of depression and dementia in the elderly: can academic detailing make a difference? *Family Practice*. 1994;**11**(2):141–7.
- 69 Allen M, Ferrier S, O’Connor N, Fleming I. Family physicians’ perceptions of academic detailing: a quantitative and qualitative study. *BMC Medical Education*. 2007;**7**:36.
- 70 May FW, Rowett DS, Gilbert AL, McNeece JJ, Hurley E. Outcomes of an educational-outreach service for community medical practitioners: non-steroidal anti-inflammatory drugs. *Medical Journal of Australia*. 1999;**170**:471–4.
- 71 Freemantle N, Nazareth I, Eccles M, Wood J, Haines A. A randomised controlled trial of the effect of educational outreach by community pharmacists on prescribing in UK general practice. *British Journal of General Practice*. 2002;**52**(477):290–5.
- 72 Jin M, Naumann T, Regier L, Bugden S, Allen M, Salach L, et al. A brief overview of academic detailing in Canada: another role for pharmacists. *Canadian Pharmacists Journal*. 2012;**145**(3):142–6.
- 73 Granados A, Jonsson E, Banta HD, Bero L, Bonair A, Cochet C, et al. EUR ASSESS Project subgroup report on dissemination and impact. *International Journal of Technology Assessment in Health Care*. 1997;**13**(2):220–86.
- 74 Mason J, Freemantle N, Nazareth I, Eccles M, Haines A, Drummond M. When is it cost-effective to change the behavior of health professionals? *Journal of the American Medical Association*. 2001;**286**(23):2988–92.
- 75 Soumerai SB, Avorn J. Economic and policy analysis of university-based drug ‘detailing’. *Medical Care*. 1986;**24**(4):313–31.
- 76 Naughton C, Feely J, Bennett K. A RCT evaluating the effectiveness and cost-effectiveness of academic detailing versus postal prescribing feedback in changing GP antibiotic prescribing. *Journal of Evaluation in Clinical Practice*. 2009;**15**(5):807–12.
- 77 World Health Organization. Guide to Good Prescribing: A Practical Manual. Available from: <http://apps.who.int/medicinedocs/pdf/whozip23e/whozip23e.pdf> (last accessed 18 November 2015).
- 78 Kamarudin G, Penm J, Chaar B, Moles R. Educational interventions to improve prescribing competency: a systematic review. *British Medical Journal Open*. 2013;**3**(8):e003291.
- 79 National Prescribing Service. Competencies Required to Prescribe Medicines: Putting Quality Use of Medicines into Practice. Available from: http://www.nps.org.au/__data/assets/pdf_file/0004/149719/Prescribing_Compencies_Framework.pdf (last accessed 18 November 2015).
- 80 Lum E, Mitchell C, Coombes I. The competent prescriber: 12 core competencies for safe prescribing. *Australian Prescriber*. 2013;**36**:13–16.
- 81 Spinewine A, Schmader KE, Barber N, Hughes C, Lapane KL, Swine C, Hanlon JT.

- Appropriate prescribing in elderly people: how well can it be measured and optimised? *Lancet*. 2007;**370**(9582):173–84.
- 82** Denig P, Haaijer-Ruskamp FM, Zijsling DH. How physicians choose drugs. *Social Science & Medicine*. 1988;**27**(12):1381–6.
- 83** Rothwell C, Burford B, Morrison J, Morrow G, Allen M, Davies C, et al. Junior doctors prescribing: enhancing their learning in practice. *British Journal of Clinical Pharmacology*. 2012;**73**(2):194–202.
- 84** Schwartz RK, Soumerai SB, Avorn J. Physician motivations for nonscientific drug prescribing. *Social Science & Medicine*. 1989;**28**(6):577–82.
- 85** Barber N. What constitutes good prescribing? *British Medical Journal*. 1995;**310**:923–5.
- 86** Robertson N, Baker R, Hearnshaw H. Changing the clinical behaviour of doctors: a psychological framework. *Quality in Health Care*. 1995;**5**:51–4.
- 87** Guthrie B, Payne K, Alderson P, McMurdo ME, Mercer SW. Adapting clinical guidelines to take account of multimorbidity *British Medical Journal*. 2012;**345**:e6341.
- 88** Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *Lancet*. 2012;**380**:37–43.
- 89** Dumbreck S, Flynn A, Nairn M, Wilson, Treweek S, Mercer, et al. Drug-disease and drug-drug interactions: systematic examination of recommendations in 12 UK national clinical guidelines. *British Medical Journal*. 2015;**350**:h949.
- 90** Knight A. Patient-centred prescribing. *Australian Prescriber*. 2013;**36**:199–201.
- 91** Sinnott SJ, Buckley C, O’Riordan D, Bradley C, Whelton H. The effect of copayments for prescriptions on adherence to prescription medicines in publicly insured populations; a systematic review and meta-analysis. *PLoS ONE*. 2013;**8**(5):e64914.
- 92** Bennie M, Godman B, Bishop I, Campbell S. Multiple initiatives continue to enhance the prescribing efficiency for the proton pump inhibitors and statins in Scotland. *Expert Review of Pharmacoeconomics & Outcomes Research*. 2012;**12**(1):125–30.
- 93** Bjerrum L, Munck A, Gahrn-Hansen B, Hansen MP, Jarbol DE, Cordoba G, et al. Health Alliance for prudent antibiotic prescribing in patients with respiratory tract infections (HAPPY AUDIT) – impact of a non-randomised multifaceted intervention programme. *BMC Family Practice*. 2011;**12**:52.
- 94** Pedersen KM, Andersen JS, Søndergaard J. General practice and primary health care in Denmark. *Journal of the American Board of Family Medicine*. 2012;**25**(Suppl. 1):S34–8.