

ICM7067 Fundamentals of Research

This module is designed to give students a basic grounding in academic medicine, in preparation for the more detailed and specialist modules that follow.

View Online



1.

Rothwell, Peter M.1 peter.rothwell@clneuro.ox.ac.uk. External validity of randomised controlled trials: 'To whom do the results of this trial apply?'. *Lancet* **365**, 82–93 (2005).

2.

Robin Harbour and Juliet Miller. A New System For Grading Recommendations In Evidence Based Guidelines. *BMJ: British Medical Journal* **323**, 334–336 (2001).

3.

Greenhalgh, T., Howick, J. & Maskrey, N. Evidence based medicine: a movement in crisis? *BMJ* **348**, g3725–g3725 (2014).

4.

Read: How to Read a Paper.

5.

Gosall, N. K. & Gosall, G. S. The doctor's guide to critical appraisal. (PasTest, 2015).

6.

American Medical Association. Users' guides to the medical literature: A manual for evidence-based clinical practice. (McGraw-Hill Education Medical, 2015).

7.

Costa, M. L. et al. Effect of Negative Pressure Wound Therapy vs Standard Wound Management on 12-Month Disability Among Adults With Severe Open Fracture of the Lower Limb. JAMA **319**, (2018).

8.

Health Research Authority - Protecting and promoting the interests of patients and the public in health research. <http://www.hra.nhs.uk/>.

9.

Home - Getting the best from IRAS.
<https://www.myresearchproject.org.uk/ELearning/index.html>.

10.

Research governance framework for health and social care: second edition - GOV.UK.
<https://www.gov.uk/government/publications/research-governance-framework-for-health-and-social-care-second-edition>.

11.

Research Governance Frameworks - Health Research Authority.
<http://www.hra.nhs.uk/resources/research-legislation-and-governance/research-governance-frameworks/>.

12.

Data protection: The Data Protection Act - GOV.UK.
<https://www.gov.uk/data-protection/the-data-protection-act>.

13.

Sinclair, H. L. & Andrews, P. J. Bench-to-bedside review: Hypothermia in traumatic brain injury. Critical Care **14**, (2010).

14.

RDS London - Research design service. <https://www.rds-london.nihr.ac.uk/>.

15.

The CRASH-2 trial: a randomised controlled trial and economic evaluation of the effects of tranexamic acid on death, vascular occlusive events and transfusion requirement in bleeding trauma patients. <https://www.journalslibrary.nihr.ac.uk/hta/hta17100/#/abstract>.

16.

Harris, M. Medical Statistics Made Easy.

17.

Petrie, A. & Sabin, C. Medical statistics at a glance. vol. The at a glance series (Wiley-Blackwell, 2013).

18.

Read An introduction to medical statistics at VLeBooks.com.

19.

Gardner, M. J., Altman, D. G., & British medical journal. Statistics with confidence: confidence intervals and statistical guidelines. (British Medical Journal, 1989).

20.

Hulley, S. B. Designing clinical research: an epidemiologic approach. (Lippincott Williams & Wilkins, 2001).

21.

Haynes, R. B. Clinical epidemiology: how to do clinical practice research. (Lippincott Williams & Wilkins, 2006).

22.

Kenneth F. Schulz, Douglas G. Altman, David Moher and Kenneth Schulz. CONSORT 2010 Statement: updated guidelines for reporting parallel group randomised trials. BMJ: British Medical Journal **340**, 698–702 (2010).

23.

Grimes, D. A. & Schulz, K. F. An overview of clinical research: the lay of the land. The Lancet **359**, 57–61 (2002).

24.

Livingston, E. H. Introducing the JAMA Guide to Statistics and Methods. JAMA **312**, (2014).

25.

Statistics notes | The BMJ. <http://www.bmj.com/specialties/statistics-notes>.

26.

Gosall, N. K. & Gosall, G. S. The doctor's guide to critical appraisal. (PasTest, 2015).

27.

Akobeng, A. K. Understanding measures of treatment effect in clinical trials. Archives of Disease in Childhood **90**, 54–56 (2005).

28.

Akobeng, A. K. Understanding randomised controlled trials. Archives of Disease in Childhood **90**, 840–844 (2005).

29.

Planning and improving research - Health Research AuthorityHRA Health Research Authority. <https://www.hra.nhs.uk/planning-and-improving-research/>.

30.

Mental Capacity Act 2005.

31.

Coats, T. J. Consent in emergency research: new regulations. *Emergency Medicine Journal* **22**, 683–685 (2005).

32.

Rothman, K. J., Greenland, S. & Lash, T. L. *Modern epidemiology*. (Wolters Kluwer Health/Lippincott Williams & Wilkins, 2008).

33.

Hosmer, D. W., Lemeshow, S. & Sturdivant, R. X. *Applied logistic regression*. vol. Wiley series in probability and statistics (Wiley, 2013).

34.

Does more intensive treatment of acute myocardial infarction in the elderly reduce mortality? Analysis using instrumental variables. - PubMed - NCBI.

35.

Thomas, S. H. et al. Variation Between Physicians and Mid-level Providers in Opioid Treatment for Musculoskeletal Pain in the Emergency Department. *The Journal of Emergency Medicine* **49**, 415–423 (2015).

36.

Cochrane Handbook for Systematic Reviews of Interventions | Cochrane Training.

<http://training.cochrane.org/handbook>.

37.

van Wely, M. The good, the bad and the ugly: meta-analyses. *Human Reproduction* **29**, 1622–1626 (2014).

38.

Cochrane Collaboration. *Cochrane handbook for systematic reviews of interventions*. (Wiley-Blackwell).

39.

Fowler, A. J. et al. Meta-analysis of the association between preoperative anaemia and mortality after surgery. *British Journal of Surgery* **102**, 1314–1324 (2015).

40.

Perla, R. J., Provost, L. P. & Murray, S. K. The run chart: a simple analytical tool for learning from variation in healthcare processes. *BMJ Quality & Safety* **20**, 46–51 (2011).

41.

Anhøj, J. & Olesen, A. V. Run Charts Revisited: A Simulation Study of Run Chart Rules for Detection of Non-Random Variation in Health Care Processes. *PLoS ONE* **9**, (2014).

42.

Dixon-Woods, M., McNicol, S. & Martin, G. Ten challenges in improving quality in healthcare: lessons from the Health Foundation's programme evaluations and relevant literature: Table 1. *BMJ Quality & Safety* **21**, 876–884 (2012).

43.

Ogrinc, G. et al. SQUIRE 2.0 (: revised publication guidelines from a detailed consensus process: Table 1. *BMJ Quality & Safety* **25**, 986–992 (2016).

44.

Chalmers, I. & Glasziou, P. Avoidable waste in the production and reporting of research evidence. *The Lancet* **374**, 86–89 (2009).

45.

Glasziou, P. et al. Reducing waste from incomplete or unusable reports of biomedical research. *The Lancet* **383**, 267–276 (2014).

46.

Chan, A.-W. et al. Increasing value and reducing waste: addressing inaccessible research. *The Lancet* **383**, 257–266 (2014).

47.

Doctors' use of social media (2013).

48.

Making and using visual and audio recordings of patients.

49.

British Medical Association: Social media practical guidance and best practice.

50.

MDU guide for consultants - Guide to social media - The MDU.
<https://www.themdu.com/guidance-and-advice/guides/consultant-pack/guide-to-social-media>.

51.

Carroll, C. L., Bruno, K. & vonTschudi, M. Social Media and Free Open Access Medical

Education: The Future of Medical and Nursing Education? American Journal of Critical Care **25**, 93–96 (2016).

52.

LITFL □ Life in the Fast Lane Medical Blog. <https://lifeinthefastlane.com/>.

53.

EMCrit Blog - Emergency Department Critical Care & Resuscitation. <https://emcrit.org/>.

54.

BoringEM | Bringing the boring to emergency medicine. <https://boringem.wordpress.com/>.

55.

ICU Podcasts - Intensive Care Network.
<http://intensivecarenetwork.com/media/podcasts/icu-podcasts/>.

56.

Toxbase Welcome. <https://www.toxbase.org/>.

57.

Prehospital and Retrieval Medicine - THE PHARM dedicated to the memory of Dr John Hinds. <https://prehospitalmed.com/>.

58.

St.Emlyn's - Emergency Medicine #FOAMed. <http://stemlynsblog.org/>.

59.

pulmcrit - EMCrit. <https://emcrit.org/category/pulmcrit/>.

60.

STARD initiative. <http://ibooked.no/stard-statement.html>.

61.

ARRIVE guidelines | NC3Rs. <https://www.nc3rs.org.uk/arrive-guidelines>.

62.

NUEM Blog. <http://www.nuemblog.com/>.