

# 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). <https://doi.org/10.1136/bmj.g3725>.

4.

Read: How to Read a Paper.

5.

Gosall, N.K., Gosall, G.S.: *The doctor's guide to critical appraisal*. PasTest, Knutsford, Cheshire (2015).

6.

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

7.

Costa, M.L., Achten, J., Bruce, J., Tutton, E., Petrou, S., Lamb, S.E., Parsons, N.R.: 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). <https://doi.org/10.1001/jama.2018.6452>.

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). <https://doi.org/10.1186/cc8220>.

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. Wiley-Blackwell, Chichester, West Sussex (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, London (1989).

20.

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

21.

Haynes, R.B.: Clinical epidemiology: how to do clinical practice research. Lippincott Williams & Wilkins, Philadelphia (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). [https://doi.org/10.1016/S0140-6736\(02\)07283-5](https://doi.org/10.1016/S0140-6736(02)07283-5).

24.

Livingston, E.H.: Introducing the JAMA Guide to Statistics and Methods. JAMA. 312, (2014). <https://doi.org/10.1001/jama.2014.7991>.

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, Knutsford, Cheshire (2015).

27.

Akobeng, A.K.: Understanding measures of treatment effect in clinical trials. Archives of Disease in Childhood. 90, 54–56 (2005). <https://doi.org/10.1136/adc.2004.052233>.

28.

Akobeng, A.K.: Understanding randomised controlled trials. Archives of Disease in Childhood. 90, 840–844 (2005). <https://doi.org/10.1136/adc.2004.058222>.

29.

Planning and improving research - Health Research Authority HRA 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). <https://doi.org/10.1136/emj.2005.024588>.

32.

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

33.

Hosmer, D.W., Lemeshow, S., Sturdivant, R.X.: *Applied logistic regression*. Wiley, Hoboken, New Jersey (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., Mumma, S., Satterwhite, A., Haas, T., Arthur, A.O., Todd, K.H., Mace, S., Diercks, D.B., Pollack, C.V.: 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). <https://doi.org/10.1016/j.jemermed.2015.05.036>.

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). <https://doi.org/10.1093/humrep/deu127>.

38.

Cochrane Collaboration: *Cochrane handbook for systematic reviews of interventions*. Wiley-Blackwell, Chichester, England.

39.

Fowler, A.J., Ahmad, T., Phull, M.K., Allard, S., Gillies, M.A., Pearse, R.M.: Meta-analysis of the association between preoperative anaemia and mortality after surgery. *British Journal of Surgery*. 102, 1314–1324 (2015). <https://doi.org/10.1002/bjs.9861>.

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). <https://doi.org/10.1136/bmjqs.2009.037895>.

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). <https://doi.org/10.1371/journal.pone.0113825>.

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). <https://doi.org/10.1136/bmjqs-2011-000760>.

43.

Ogrinc, G., Davies, L., Goodman, D., Batalden, P., Davidoff, F., Stevens, D.: SQUIRE 2.0 ( : revised publication guidelines from a detailed consensus process: Table 1. *BMJ Quality & Safety*. 25, 986–992 (2016). <https://doi.org/10.1136/bmjqs-2015-004411>.

44.

Chalmers, I., Glasziou, P.: Avoidable waste in the production and reporting of research evidence. *The Lancet*. 374, 86–89 (2009). [https://doi.org/10.1016/S0140-6736\(09\)60329-9](https://doi.org/10.1016/S0140-6736(09)60329-9).

45.

Glasziou, P., Altman, D.G., Bossuyt, P., Boutron, I., Clarke, M., Julious, S., Michie, S., Moher, D., Wager, E.: Reducing waste from incomplete or unusable reports of biomedical research. *The Lancet*. 383, 267–276 (2014). [https://doi.org/10.1016/S0140-6736\(13\)62228-X](https://doi.org/10.1016/S0140-6736(13)62228-X).

46.

Chan, A.-W., Song, F., Vickers, A., Jefferson, T., Dickersin, K., Gøtzsche, P.C., Krumholz, H.M., Gherzi, D., van der Worp, H.B.: Increasing value and reducing waste: addressing inaccessible research. *The Lancet*. 383, 257–266 (2014). [https://doi.org/10.1016/S0140-6736\(13\)62296-5](https://doi.org/10.1016/S0140-6736(13)62296-5).

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, <https://www.bma.org.uk/advice/employment/ethics/social-media-guidance-for-doctors>.

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). <https://doi.org/10.4037/ajcc2016622>.

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/>.