

# **eX** AusHSI Health Statistics Refresher

This short course will cover many of the common mistakes in statistical practice in health and medical research.

Many health and medical researchers use experiments in their research to improve treatments and patient care.

These experiments rely on researchers collecting high quality data and understanding what statistical methods

Sadly, many researchers have only had rudimentary training in statistics and often this training comes from nonstatisticians. Bad practice has been cemented by journals that rarely use statistical reviewers.

Professor Barnett has extensive experience with the most common issues in "bad statistics" and has designed this one-day course to bust many of the myths in statistical practice.





**Duration: 1 Day** 



Certificate of Attendance



Cost: From \$550

## **Apply Now**

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Blog: blogs.qut.edu.au/qutex

#### **Evolve with QUTeX**

This is an interactive day with lectures and tutorials. Tutorials are done in groups with overall discussion. No prior reading is expected. Topics to be covered include:

- common mistakes in study designs and statistical analyses;
- sample size:
- statistical significance (p<0.05) and confidence intervals;
- non-parametric versus parametric tests;
- the Normal assumption;
- the basics of causal diagrams;
- randomised controlled trials;
- intention-to-treat;
- pre-post designs (before and after studies).

This short course is proudly delivered by The Australian Centre for Health Services Innovation (AusHSI).



#### Who should participate?

This one-day statistics refresher course is for people who have had some practical experience with statistics or some undergraduate statistics training. The course focuses on simple study designs and some common mistakes, with a range of practical exercises throughout the day. This course is designed for healthcare professionals (all levels of experience and background are welcome), policy makers, academics, and students.

Prof. Barnett regularly receives positive feedback from clinical researchers on how the training has led to permanent changes in their research practice.

Please note: Participants are required to bring their own fully-charged laptop.

#### **Core concepts**

By undertaking this 1-day course, students will:

- Understand and repeat a sample size calculation;
- Understand the mean of p-values and confidence intervals;
- Understand the normal assumption and where it needs to be applied;
- Understand the value of randomised controlled trials;
- · Understand the value of pre-post designs.

### Your expert facilitator

Professor Adrian Barnett graduated from University College London with a BSc in Statistics in 1994. After that he worked for SmithKline Beecham and the Medical Research Council as a statistician before coming to Australia to do a PhD. He completed his PhD in Mathematics in 2002.

His research interests include: meta-research; research funding; data sharing; peer review; reducing research waste.

He is the past president of the Statistical Society of Australia. His main interest is how to increase the value of health and medical research.

#### Cost

Standard registration (closes 3 days prior to course) \$550 (GST included) QUT Alumni / Staff registration \$412.50 (GST included) Group registration (3 or more) \$495 (GST included) per person

Fees include course materials, morning tea, lunch and afternoon tea.