All right, SQUIRE?

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Evidence-based practice (EBP) is about bringing together the best evidence, clinical experience and patients' values in order to make the most appropriate decisions about the care of individual patients. The five steps of EBP are as follows.

1. Asking answerable questions (ASK)
2. Searching for the best evidence (ACQUIRE)
3. Critically appraising the evidence (APPRAISE)
4. Applying the evidence (APPLY)
5. Evaluating the outcome (ASSESS)

These were first described in 1992¹ and considered in the Sicily statement on Evidence-based Practice² to be key competencies.

The increased focus that EBP has brought to the appraisal of the healthcare literature, one of these key competencies, has highlighted issues with both the use of appropriate research designs and the quality of reporting of the findings. Unfortunately, all too often good research is undermined by poor quality reporting. This has led to

the development of recommendations for the reporting of different types of study. The first of these was the CONSORT statement in 2001.³ Since then, reporting guidelines have been developed for a range of study designs (see Table 1) and an umbrella organisation has emerged, the EQUATOR Network, which we described

in Evidence-based Dentistry last year.⁴ The network aims to enhance the quality and transparency of health research and its website (www.equator-network.org) has links to other internet resources and references for a wide range of reporting guidelines. Some key examples of the latter are highlighted in Table 1.

Figure 1. The SQUIRE guideline website homepage

Table 1. Key reporting guidelines for different study designs

Study type	Guideline	URL
Experimental studies	CONSORT statement ³ (Consolidated Standards of Reporting Trials)	www.consort-statement.org
Diagnostic accuracy studies	STARD statement ⁵ (Standards for the Reporting of Diagnostic accuracy studies)	www.stard-statement.org/
Observational studies in epidemiology	STROBE statement ⁶ (Strengthening the Reporting of Observational studies in Epidemiology)	www.strobe-statement.org
Systematic reviews and meta-analyses	QUOROM, ⁷ recently renamed PRISMA ⁸ (Quality of Reporting of Meta-analyses; Preferred Reporting Items for Systematic Reviews and Meta-Analyses)	www.consort-statement.org/mod_product/uploads/QUOROM%20Statement%201999.pdf
Meta-analyses of observational studies	MOOSE ⁹ (Meta-analysis Of Observational Studies in Epidemiology)	www.consort-statement.org/mod_product/uploads/MOOSE%20Statement%202000.pdf
Qualitative research	COREQ ¹⁰ (Consolidated criteria for Reporting Qualitative research)	None
Quality improvement studies	SQUIRE ¹¹ (Standards for Quality Improvement Reporting Excellence)	www.squire-statement.org/guidelines_in_use/#journals

These reporting guidelines are not only useful for getting your study published when it is completed but can also be helpful during the initial development stage.

The SQUIRE guidelines,¹¹ which are directed towards improving the standard of reporting of studies that investigate how to improve quality and safety of care. These current guidelines are a refinement of draft guidelines first proposed in 2005¹² and are available from the SQUIRE website (www.squire-statement.org/index.php). The guideline is available on the internet in several formats, including the 19-point checklist and an online resource that provides a detailed overview of the items in the checklist.

Quality improvement is more of an applied science than an academic discipline and consequently the guideline developers have tried to maintain a balance between experimental and pragmatic methods. With significant efforts and funding being

applied to improving quality in healthcare, it is important also to raise standards in and dissemination of published work. A recent review¹³ has shown that the CONSORT statement, the first of these recent reporting guidelines, has resulted in improved reporting of randomised controlled trials. Hopefully the SQUIRE guidelines will have a similar effect.

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