

CONTENTS

Foreword	v
Contributors	ix
Introduction	xiii
1 Reviewing the literature	1
Improving health care delivery	2
Systematic reviews	6
Evidence-based practice	10
2 Planning the study	13
Section 1—Study design	14
Section 2—Random error and bias	61
Section 3—Blinding and allocation concealment	76
3 Choosing the measurements	81
Section 1—Outcome measurements	82
Section 2—Confounders and effect modifiers	90
Section 3—Validity	105
Section 4—Questionnaires and data forms	114
4 Calculating the sample size	127
Section 1—Sample size calculations	128
Section 2—Interim analyses and stopping rules	148
5 Conducting the study	153
Section 1—Project management	154
Section 2—Randomisation methods	159
Section 3—Data management	175
6 Analysing the data	181
Section 1—Planning analyses	182
Section 2—Statistical methods	187
7 Reporting the results	203
Section 1—Repeatability	204
Section 2—Agreement between methods	230
Section 3—Relative risk, odds ratio and number needed to treat	243
Section 4—Matched and paired analyses	254
Section 5—Exact methods	259

Health science research

8 Appraising research protocols	267
Section 1—Designing a study protocol	268
Section 2—Grantsmanship	278
Section 3—Research ethics	283
References	287
Index	302