Appendix A

Websites and Software

Here we give a selection of sites that currently provide useful material on Bayesian methods applicable to health-care evaluation and lists of links. This list is not exhaustive but should provide some entry into the huge range of material available on the internet. All sites were operational in June 2003. A good search engine is appropriate for specific topics.

A.1 THE SITE FOR THIS BOOK

`http://www.mrc-bsu.cam.ac.uk/bayeseval/`

This page contains downloads for all the examples that use WinBUGS. You can also download the BANDY (*Bayesian Analysis using Normal DYstributions*) program based on Excel, which allows simple analysis of odds-ratio and hazard-ratio data assuming normal priors and likelihoods. Many of the examples in the book are included with BANDY.

A.2 BAYESIAN METHODS IN HEALTH-CARE EVALUATION

`http://www.fda.gov/cdrh/`

This is the home page for the US Food and Drug Administration's Center for Devices and Radiological Health, which contains a number of items relating to Bayesian methods. To identify these use the Search facility with keyword 'Bayesian'.

`http://www.shef.ac.uk/chebs/`

The Centre for Bayesian Statistics in Health Economics (CHEBS) is a research centre in the University of Sheffield, UK, and its site provides recent research reports and news of events.

Bayesian Approaches to Clinical Trials and Health-Care Evaluation D. J. Spiegelhalter, K. R. Abrams and J. P. Myles
 ISBN: 0-471-49975-7

`http://www.bayesian-initiative.com`
The Bayesian Initiative in Health Economics and Outcome Research provides useful background material on Bayesian approaches to pharmacoeconomics, and a Bayesian 'primer' is provided.

`http://lib.stat.cmu.edu/bayesworkshop/2001/BaSis.html`
Provides a draft by the BaSiS group of *Standards for Reporting of Bayesian Analyses in the Scientific Literature*.

`http://www.cochrane.org`
The Cochrane Collaboration is not a Bayesian site, but is useful for its material on 'Preparing, maintaining and promoting the accessibility of systematic reviews of the effects of health care interventions'.

`http://www.campbellcollaboration.org`
The Campbell Collaboration is like the Cochrane Collaboration, but deals with evaluation of social policy.

A.3 BAYESIAN SOFTWARE

`http://www.shef.ac.uk/~st1ao/1b.html`
The First Bayes software is freely available and features good graphical presentation of conjugate analysis of basic data sets. It is suitable for teaching and is strong on predictive distributions.

`http://www.mrc-bsu.cam.ac.uk/bugs/welcome.shtml`
The BUGS software is designed for analysis of complex analysis using Markov chain Monte Carlo methods. The new WinBUGS version features an interface for specifying models as graphs. The software assumes familiarity with Bayesian methods and MCMC computation.

`http://www.med.mcgill.ca/epidemiology/Joseph/software.html`
Lawrence Joseph's Bayesian Software site provides downloadable code for a wide variety of sample-size calculations using prior opinion.

`http://omie.med.jhmi.edu/bayes/`
The Bayesian Communication page is hosted by Harold Lehmann, and features a prototype example in which a Bayesian analysis can be carried out online (Lehmann and Shachter, 1994; Lehmann and Nguyen, 1997).

`http://www.research.att.com/~volinsky/bma.html`
The Bayesian Model Averaging Home Page provides S-Plus and Fortran software for carrying out model averaging, as well as featuring reprints and links.

`http://www.palisade.com/`
The Palisade Corporation markets the @RISK software, which is an add-on to Excel that allows probability distributions to be placed over the inputs to spreadsheets. Predictive distributions over the outputs are then obtained by Monte Carlo simulation. Demonstration versions are available for downloading.

`http://www.decisioneering.com/`
Decisioneering markets the Crystal Ball software, which is also an add-on to Excel and allows Monte Carlo inference using a range of prior distributions. Demonstration downloads are available.

`http://www-math.bgsu.edu/~albert/mini_bayes/info.html`
This site is an adjunct to Jim Albert's (1996) book *Bayesian Computation Using Minitab* and features macros for carrying out a variety of analyses.

A.4 GENERAL BAYESIAN SITES

`http://stat.rutgers.edu/~madigan/bayes_people.html`
The Bayesians Worldwide site has links to the home pages of many researchers in Bayesian methods. These provide a vast array of lecture notes, reprints and slide presentations.

`http://www.bayesian.org/`
The International Society for Bayesian Analysis provides information on its activities and useful links.

`http://www.amstat.org/sections/SBSS/`
The American Statistical Association Section on Bayesian Statistical Sciences (SBSS) has a preprint archive and links to other sites.

`http://www.isds.duke.edu/sites/bayes.html`
This provides a list of Bayesian sites hosted from Duke University.