

Discussion Points for Diagnostic testing

- Joseph et al 1995: First paper in the area, will go over in some detail to gain insight into how all models work. All other papers are just extensions and slight variations.
- Ladouceur et al 2006: Detailed example of what happens if one does not consider adjusting for imperfect information in the RAMQ data base.
- Dendukuri et al 2001: Extension to account for correlated tests through both fixed and random effects models.
 - Conditional independence definition.
- Dendukuri et al 2004: Taking this area of diagnostic testing and combining it with Bayesian sample size methods. Interesting problem, since for one and two tests the problem is non-identifiable, hence the possibility that even infinite sample sizes will be insufficient.
- Weichenthal et al 2010: All of the above are for dichotomous tests, this paper provides an extension to continuous values tests. Otherwise, similar methods. Rather than sensitivity and specificity, get ROC curves.
- Software is available to accompany all of these papers. Some in R, some in WinBUGS, some are super-user-friendly Windows packages that hide all programming through fill-in-the-blanks user interfaces.