

## Figure Legends

### **Figure 1. Symmetrical ROC curve (weighted mean DOR) for the average junior doctor.**

Weighted mean DOR (36.4) was derived from weighting model estimates of DORs for high prevalence population (37.3) and low prevalence population (36.1). Point estimates of sensitivity and 1- specificity for both populations are also given.

### **Figure 2. Distribution of x-rays with a normal diagnosis in the two populations: high prevalence (red), low prevalence (blue)**

Shown are the percentage of normal x-rays in each population (high or low prevalence) which are of a particular type. For example 10% of x-rays diagnosed normal in the high prevalence (red) population were of elbows. Differences in the distributions between the high and low prevalence populations could potentially account for differences in the **specificity** between the respective populations. Note, the normal diagnosis refers to the reference standard diagnosis. Abbreviation T & L = thoracic and lumbar.

### **Figure 3. Distribution of x-rays with an abnormal diagnosis in the two populations: high prevalence (red), low prevalence (blue)**

Shown are the percentage of abnormal x-rays in each population (high or low prevalence) which are of a particular type. For example 10.5% of x-rays diagnosed abnormal in the high prevalence (red) population were of ankles. Differences in the distributions between the high and low prevalence populations could potentially account for differences in the **sensitivity** between the respective populations. Note, the abnormal diagnosis refers to the reference standard diagnosis. Abbreviation T & L refers to thoracic and lumbar