DIAGNOSIS WORKSHEET

Citation:

Are the results of this diagnostic study valid?	
Was there an independent, "blind" comparison with a reference (gold) standard of diagnosis?	
Was the diagnostic test evaluated in an appropriate spectrum of patients (like those in whom it would be used in practice)?	
Was the reference standard applied regardless of the diagnostic test result?	
Was the test (or cluster of tests) validated in a second, independent group of patients?	

Are the valid results of this diagnostic study important?

		Target Disorder		Totals
		Present	Absent	
Diagnostic Test Result	Positive	a	b	a+b
	Negative	c	d	c+d
	Totals	a+c	b+d	a+b+c+d

Sensitivity = a/(a+c)
Specificity = d/(b+d)
Likelihood Ratio for a positive test result = LR+=sens/(1-spec)
Likelihood Ratio for a negative test result=LR-=(1-sens)/spec
Positive Predictive Value = a/(a+b)
Negative Predictive Value = d/(c+d)
Pre-test Probability (prevalence) = (a+c)/(a+b+c+d)
Pre-test-odds = prevalence/(1-prevalence)
Post-test odds = Pre-test odds x Likelihood Ratio
Post-test Probability = Post-test odds/(Post-test odds + 1)

Can we apply this valid, important evidence about a diagnostic test in caring for our patient?

Is the diagnostic test available, affordable, accurate, and precise in your setting?	

Can you generate a clinically sensible estimate of your patient's pre-test probability (from personal experience, prevalence statistics, or primary studies)? • Are the study patients similar to our own? • Is it unlikely that the disease possibilities or probabilities have changed since this evidence was gathered?	
Will the resulting post-test probabilities affect our management and help our patient? • Could it move you across a test-treatment threshold? • Would your patient be a willing partner in carrying it out?	

Additional Notes: