In our model, we've modeled multiple situations involving multiple patients. Since the basic information about them are set (such as their age and sex), then there is no room for belief revision there. That is a known fact.

The problem with the basic information section of our code is that we only work with patients who are already registered with the doctor. It does not really simulate a real life situation where we have new patients with new basic information. Basically, we cannot diagnose patients outside our current patient records. Another limitation is that we cannot consider other heart related issues and diagnose to see if the patient actually has CAD or another related disease. Because CAD and other heart disease have very similar symptoms, in an ideal situation, the test result would enable the doctor to presume a different disease instead of letting the patient know their test does not show they have CAD. It's like "oh you are sick, it is not CAD though but you should definitely see a doctor about that" when we are simulating what a doctor-patient situation would look like. We can update what the doctor would believe, what heart disease a patient might have based on test results and how many positive test results are returned. Although we have a belief revision section for new symptoms, we could also have a belief revision section for different heart diseases. It would only further diagnose and treat CAD since that is our main idea. For instance heart arrhythmias have similar symptoms to CAD but the difference between both is slow or irregular heart rhythm.

Something we would add to our model would be a treatment section to better simulate an ideal cognitive model for a medical diagnosis situation. We just diagnose but do not offer a treatment, so it covers the model to a certain extent.

I believe that our computation model could be useful in specific situations, ie diagnosing coronary heart disease. We tried to imitate a patient's real-life visit to a doctor, but their interactions are fairly limited. When trying to examine the patient, the doctor only asks yes or no questions about symptoms that are specific for coronary heart disease. The patient can only answer yes/no to those questions. In reality, such examinations are more complicated than that. A patient would most likely explain more about their specific situation. The doctor might also use those to see whether or not the patient might have other diseases outside of CAD, whereas our model only checks if the patient has CAD or not. As such, if we had to change anything, then we would make the interaction more natural. Perhaps ask about their symptoms in general, instead of asking yes/no questions about symptoms that are specific to CAD. For each symptom, diagnose a disease and update the disease based on every new symptom added to the patient's record. The problem we face here is in order to diagnose CAD we need the test section and the type of test. We would therefore have to add a series of tests carried out for different heart diseases.

I do believe our model is useful as a cognitive model because it covers the basics of such a model. It collects previous data about a patient so we can update their diagnoses, change previous information collected and collect more symptoms related to CAD to better diagnose. We have our initial examination section which checks for CAD related symptoms. If a patient has more than one symptom and has chest pain, we can go ahead and order a test. The order test section covers the type of test conducted for a patient a doctor would suspect to have CAD. If the test results are above the normal range then we make our diagnosis. While making our diagnosis we can also examine other factors like age. Using our diagnosis, we can then infer the CAD risk of a patient. Some patients encounter other symptoms which we may not be aware of, so we included a section for new symptoms. So new symptoms means that we would have to order new tests for our patient because now they have more related symptoms.