

## Radiology Update

### **Transcript of first 10 minutes of presentation**

First few minutes of video not recorded, then the intro was transcribed, but again, just a blank screen which fortunately was transcribed on video clip. This is that transcript:

So I'm going to be introducing our afternoon speakers, so I know I think there's only one listed on the thing, but there are three of them. So I get to actually get introduce all three of them.

So thank everyone for coming to listen to us. Notice that in our BIOS, Emily and I had much less hobbies.

That's because we're residents, so we don't get that as much time off. Frank's got a lot of hobbies.

All right. So to start off disclosures, we don't have any financial relationships, nothing conflict of interest related to this talk.

And for some general objectives.

Like Frank said, we're going to be covering a very large, broad topic.

We're not going to be able to hit every single point.

We're not going to be able to hit every single clinical question with every single modality, but we're going to try to provide at least some of the tools and some basic concepts in order to help you and any of your colleagues in order to order the right image.

To answer a specific question for first, we'll talk about just general imaging trends that continue to rise as well as some of the risks. And the cost that sometimes we don't necessarily consider all the time. Then we'll differentiate some of the strengths and limitations of different modalities commonly. I don't typically like to break things down by modality. I like to break things down more by what is the presenting symptom? And then what's the right test? But nevertheless, there's some broad concepts that each modality might be really suited for. Then we'll talk about one of the biggest things I want to hit, and that's the ACR appropriate is.

Appropriateness criteria, which is a tool that anyone can use. It's free to use in order to figure out what may be the, the next or most appropriate imaging study is for a given clinical question. We'll also talk about some specific clinical scenarios towards the middle of the talk. And talk about what sort of images you should be looking to to order for those specific scenarios.

Then again, we'll talk about some other things related to imaging in regard to contrast specific protocols and things to consider and why we might not be able to answer certain questions in a specific scenario, OK.

So as far as imaging trends, non surprisingly continues to rise. This report here at the Journal of American College of Radiology reported that utilization is expected to increase up to 25 percent 26.9%, I think. The workforce of these rises is largely the CT. If you look also on this graph, you also see nuclear medicine NM and you can guess it's probably pet scans that are expected to increase. Even at MUSC, I know where we work.

We're really growing our our nuclear medicine division just given the overall demand and even as residents, we get monthly meetings about how just general projections of what's going on and every single time we meet, we say, hey, we actually had X number more than we expected when. It comes to the number of images that are typical compared to the year before. So just anecdotally, I can see that imaging has continued to rise and then one of the things that we'll talk about is that, you know, it's important to order the right image and frequently what we find is that there are orders or specific types of modalities or studies that have low value many times when we open a study, first thing I look is an indication. It always breaks my heart to say I I'm not going to be able to answer that question based on this study. And again, that just contributes to overall increases in medical costs that many of you are aware of. So when it comes to low value imaging, essentially what that is defined as, specifically in this study, is they looked at.

Studies that provided little to no clinical impact or would not be able to necessarily answer a specific question, and they projected that about \$12 billion is related to those specific types of studies. And they saw about 20 to 50% of overall examinations were considered this low value or inappropriate.