

Strength of evidence

A few weeks ago we decided to have strength of evidence as an attribute of a guideline step. Elmer and I came across the following example .

The specific example of the cough guideline says: "Cough due to cigarette smoking or ACEIs should substantially improve or disappear within 4 weeks of cessation of smoking or discontinuation of the ACEI. Therefore, **in the absence of an abnormal chest radiograph, no additional laboratory tests should be ordered until the response to cessation of smoking (Grade II) or discontinuation of the ACEI (Grade I) for 4 weeks has been assessed.**"

This is a very complex example. Grade II evidence should be attached to a relationship among normal chest X-ray, patient was a smoker, and further tests. Similarly, Grade I evidence should be attached to a relationship among normal chest X-ray, patient was on ACEI, and further tests.

We (Ronilda and I) think that although it is possible to define a new structure in GLIF that will model such relationships, or group them into a subguideline, just for the purpose of attaching an attribute of strength of evidence to this relationship is not justified. We think that in such cases we should use a comment. In this example, the comment (supplemental material) can reside in the patient state "further tests can be ordered".

Qing suggested that eventually we may "tag" supplemental material so that we know, for example, that a certain supplemental material deals with strength of evidence.

I think that we can still keep the strength of evidence as a structured attribute of a guideline step for the simple cases. We'll encode more guidelines and see if this is appropriate.