Introducing evidence reference in decision trees

Introduction

OncoLogiK is a Semantic Wiki which houses 144 oncology related clinical practice guidelines, which are sets of statements that provide healthcare professionals with assistance for treatment methodology. The Semantic Wiki is a plugin for MediaWiki by the same name, Semantic MediaWiki that enables semantic markup, which is essentially descriptive metadata that describes information and its relationship to other bits of data. MediaWiki is a software package that underlies most wiki software, and is produced by the Wikimedia Foundation. The Semantic wiki is maintained by Oncolor, the regional oncology network in Lorraine, whose purpose is to improve areas of care, prevention, awareness and also training. The network is connected to the needs of children, families and caregivers. It aims to provide a community and also quality when it comes to care.

Objective

Provide a way KcatoS could have connections to external evidence and information, providing more to physicians in the context of knowledge, articles, URL’s. This is added functionality that would extend the trees but also maintaining simple representation that would be understandable to physicians.

Current Work

KcatoS provides the ability to create decision trees that present medical situations as well as recommendations to these situations. KcatoS also allows providing questions and links to other decision trees that may be related. KcatoS represents answers by simple arrows and options by dashed arrows. In this area of Evidence-based Medicine the need for more evidence and knowledge is important. KcatoS is another way to provide this knowledge and making medical decisions not as difficult. The project was to look into potential opportunities for KcatoS to have extended functionality in terms of representing itself with more evidence and knowledge.

1) Attach URL Feature
2) Hyperlink in Text Area
3) URL Bank Manage / Organize
4) KcatoS Key By Type

These bulleted features are the added functionality proposed, this would provide physicians more evidence to the topic areas, making it easier to understand concepts and have the ability to provide patients with more knowledge in addition. KcatoS is already a simple tool, but any changes with the added functionality should be minimal. There is no reason for KcatoS or anything it is connected with to be ambiguous or excessively difficult to use. The added functionality provided in the project time are shown being in connection to tools and features that are already existing within KcatoS

Discussion

The project was interesting as well as fulfilling, while there was not enough time for implementation, the prototype images provided are a great contribution to everything existing. Knowledge about the tool was slim, but having spent a lot of time reading and testing and looking at the tools provided to me helped create a solid background to the functionality.

The project was to look at potential ways that KcatoS could have added functionality in providing evidence and outside knowledge. This is very interesting topic because of the context and relation that everything had. OncoLogiK provided Clinical Practice Guidelines that contained decision trees created with KcatoS, which provided recommendations and actions for patients. Where would this evidence come from? How would it be represented within KcatoS? Would the addition of outside knowledge be useful? These are the type of questions that needed to be thought of when looking into this concept.

When working with this topic area the concepts and design are the most important. Implementation can come at any time, making the ideas for how to address this project the main goal. If the concepts and design is provided there is the ability to get more people involved in the functionality which in turn makes this is unified approach.

Conclusion

KcatoS has a collection of elements that suggests high efficiency as well as usability. While it is not a complete tool, the addition of functionality suggested from the project could aid in its overall expansion. KcatoS has the potential to become a very effective tool that will enhance the area of Evidence-based medicine.