

MHB - A Many-Headed Bridge between Guideline Representations

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Introduction

- Clinical guidelines are important
 - Improve quality of care
- Computer-processable representations are important
 - To cope with the complexity
- Modeling is difficult
 - Requires medical and knowledge modeling skills

Our Solution

- A Many-Headed Bridge between Informal and Formal Representation
 - Not just English and Asbru
- Information structured in chunks
 - I.e., one statement
- Aspects of chunks structured in dimensions
 - Control, data, time, evidence, background information, resources, patient aspects, document structure

Example

In women who, preoperatively, have a higher risk of requiring postoperative radiotherapy, the increased risk of complications should be considered when deciding whether to carry out primary or secondary reconstruction.

control	decomposition	parent-task	deciding whether to carry out primary or secondary reconstruction
		child-task(s)	consider the increased risk of complications
	if-then	condition	higher risk of requiring postoperative radiotherapy
		result	consider the increased risk of complications
		degree-of-certainty	should
data	usage	name	is there higher risk of requiring postoperative radiotherapy
structure		status	recommendations

First Results

- Easier to learn, use, read
 - Compared to formal representation
- Useful intermediate modeling step
 - Easier to create MHB than Asbru based on original text
 - Easier to Asbru based on MHB
- Advantages justify additional modeling step