

BRIDGE-Wiz

BRIDGE-Wiz (Building Recommendations in a Developer's Guideline Editor) is a software assistant for use by guideline authors that is intended to improve clarity, transparency, and implementability. The program is useful to a panel of guideline authors that has completed a literature review, but has not yet propounded a guideline's key action statements. BRIDGE-Wiz sequentially leads a panel of guideline developers through a series of questions intended to populate a model of guideline recommendations. The model requires explicit attention to:

- WHEN –i.e., under what circumstances
- WHO –in the guideline's pre-defined Intended Audience
- OUGHT –with what level of obligation
- To Do WHAT
- To WHOM –in the guideline's predefined Target Population
- HOW and
- WHY

The screenshot shows the 'What' tab of the BRIDGE-Wiz interface. It contains the following elements:

- A dropdown menu for 'What type of activity do you propose?' with 'EDUCATE/COUNSEL' selected and a 'NOT' checkbox.
- A dropdown menu for 'Based on the EDUCATE/COUNSEL action type, select a verb:' with 'recommend' selected and an 'ADD' button.
- A text input field for 'Recommend what?' containing 'diet and exercise'.
- A table with two columns: 'VERB' and 'WHAT'. The first row has 'start' in the VERB column and 'metformin as first-line treatment' in the WHAT column. The second row has 'recommend' in the VERB column and 'diet and exercise' in the WHAT column.
- Buttons for 'AND', 'OR', and 'DEL' are located to the right of each row in the table.

Figure 2. Defining recommended actions in BRIDGE-Wiz.

BRIDGE-Wiz makes use of controlled natural language to focus the authors on clear statements of proposed action [5]. A controlled list of transitive verbs is offered based on a classification of proposed action-type (see Figure 2). BRIDGE-Wiz incorporates tests of decidability and executability of the evolving guideline recommendation. Once a clear action statement is defined, the developer panel is next led through documentation of anticipated benefits, risks, harms, and costs that may be anticipated if the recommendation is followed and judgments about whether there is equilibrium between benefits and harms or a preponderance of one or the other. BRIDGE-Wiz output consists of a natural language recommendation easily translated into IF...THEN format and an evidence profile that summarizes and documents the process of recommendation building [6]. BRIDGE-Wiz has been piloted successfully in 5 guideline development efforts at national professional societies.