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| **1-4: Verification stages of the compartmentalized modules**  **(Follow these steps for all the identified calculations in stages 1-4 )** | **Pre-requisite for conducting verification tests:**  Locating the calculations in the model and the explanation of the calculations in the report. Assess the appropriateness of the methods. Check the *completeness and consistency* of the calculations in the model   * (Report the sheets/ranges/coding lines where the corresponding calculations are carried out in the electronic model, report any provided justification for the methods/ assumptions used. Assess if these are appropriate with respect to the published methodological guidelines. Document the consistency checks that are conducted)   **Verification tests after the pre-requisite steps are complete:**  **C**heck if the implementation of these calculations is correct using *black-box type, white-box type* and *replication-based* tests, in a consecutive order, following the hierarchical order in Figure 3 under a time constraint.   * (Report all the necessary details of any test conducted, so that it can be reproduced by another reviewer, for each of the identified calculations in the electronic model.) | **1- Model input (pre-analysis) calculations: this verification stage checks the pre-analysis calculations that yield direct model inputs (e.g. transition probabilities, cycle-based or event-based costs and utilities) from reference source inputs** |
| **2- Event/state calculations: this verification stage checks the event/state calculations that determine the patient flow/disease progression stage as well as the assignment of costs/QALYs or other relevant health/economic outcomes at a given cycle/time** |
| **3- Result calculations: this verification stage checks the result calculations that yield the undiscounted/ discounted total and incremental results (e.g. costs, QALYs, other relevant health or economic outcomes and ICER)** |
| **4- Uncertainty analysis: this verification stage checks the uncertainty analysis calculations (e.g. one-way, multi-way, probabilistic sensitivity, value of information and scenario analyses)** |
| **5- Overall tests (validation or other supplementary tests): these tests include validation efforts from other sources and tests that are applied to the whole model and efforts that do not specifically belong to one of the compartmentalized modules** | | |
| * Compare the model outcomes with clinical inputs used in the model, findings from the literature, clinical expert knowledge and other model outcomes (Outline the conducted comparisons between the electronic model and the other sources and report if there is any inconsistency) * Check the other aspects of model implementation that does not fall under the scope of the other stages, such as the interface, programming and data storage efficiency, etc. (Report all the necessary details of any test conducted, so that it can be reproduced by another reviewer) | | |