The CPMS Ten Simple Rules for Credibility in Models and Simulations in Health Care

#	Ten Simple Rules	Definition
1	Define context clearly	Develop and document the subject, application, purpose, and intended use(s) of the model or simulation
2	Use appropriate data	Employ relevant and traceable information in the development or operation of a model or simulation
3	Evaluate within context	Verification, validation, uncertainty quantification, and sensitivity analysis of the model or simulation are accomplished with respect to the reality of interest and intended use(s) of the model or simulation
4	List limitations explicitly	Restrictions, constraints, or qualifications for, or on the use of the model or simulation are available for consideration by the users or customers of a model or simulation
5	Use version control	Implement a system to trace the time history of M&S activities including delineation of contributors' efforts
6	Document adequately	Maintain up-to-date informative records of all M&S activities, including simulation code, model markup, scope and intended use of M&S activities, as well as users' and developers' guides
7	Disseminate broadly	Disseminate appropriate components of M&S activities, including simulation software, models, simulation scenarios and results.
8	Get independent reviews	Have the M&S activity reviewed by nonpartisan third-party users and developers
9	Test competing implementations	Use contrasting M&S execution strategies to check the conclusions of the different execution strategies against each other
10	Conform to standards	Adopt and promote generally applicable and discipline specific operating procedures, guidelines, and regulations accepted as best practices

CPMS utilized the following review scoring rubric relating the communication of content in each TSR factor:

- *Sufficiently Described* - Path toward evidence of this factor/rule appears to be sufficient
- *Insufficiently Described* - Path toward evidence of this factor/rule appears to be insufficient
- *Not Available* - No path toward evidence is described or an argument is made that the credibility factor did not apply to this model