

Framework Hallmark Valid Serious Games

	<i>Category</i>	<i>Item</i>	<i>Question</i>
Game description	Meta-data	Operating System	On what operating system(s) does the game run?
		General description	Version
		Web-link	What is the web-link for the game?
		Category: Commercial project, non-commercial ;	How would you categorize this game?
		Access	Please specify access to the game? Why did you choose this type of access?
	Developer, Owner/Distributor	Information about the manufacturer	Please fill out Name, address, webpage, contact person(s), email address, phone and fax number of the manufacturer
		Information about the owner/distributor	Please fill out Name, address, webpage, contact person(s), email address, phone and fax number of the owner/distributor of the game
	Sponsoring / Advertising	Information about the funding acquired for the de	Please fill out funding sources, name of companies and organisations
		Advertisements	Is the game free of commercial pop-ups and/or advertisements? If not what is advertised? What is the rationale for using advertisements?
		Sources of owner/distributor's income	Is the game free for users? Is it a pay-per download ? Please specify Are there sources of income within the game? What are the sources of income of the owner/distributor?
Conflicts of interest	Affiliations of owner/distributor	What affiliations do the publishers have that could influence content or user group? What interests do the publishers have that could influence content or user group?	
	Disclosure	Are conflicts of interest disclosed ? If yes, do people have to accept the disclosure before they can play the game ? What is (are) the purpose(s) of the game? Please describe the goal outside the game in one sentence	
Rationale	Purpose	Goal or purpose	Is (are) the purpose(s) disclosed to user? Is the serious game a medical device, or not? If yes, which class? If yes, does it comply to the necessary requirements (FDA-approval, CE-mark?). Please upload necessary information.
		Medical device	
		User group	Please state the intended user group. And specify for each user group the applicable disease/condition of healthcare profession Please specify within the user group the demographic variables important to the game, like gender, age range, or other relevant descriptive items?
		Setting	is the game used in research/ patient care/ training courses - if so specify
Functionality	Purposes / didactic features	<i>For every purpose of the game:</i>	
		Learning	What will the player learn? Describe the learning or behavioral objectives of the game How are these objectives translated into gameplay and functionality of the game?
		Instruction	Are there any in-game instructions, tutorials? If so, please specify.
		Assessment (progress) in game	What parameters are used to measure/follow progress or learning effects? What kind of feedback is provided to players?
	Restrictions and limits	Restrictions and limits of the serious game	Every serious game has restrictions and limits. In your opinion what content on the subject is NOT covered by the game
		Potential undesirable effects	Please state potential undesirable effects. This does not include "gaming the game" (cheating), but effects of negative transfer of learning.
		Disclosure	Is this disclosed to the user? Please state measures taken to prevent undesirable effects

Validity	Design process	Design process	Were medical/content/ educational experts involved in the design process from the start? Please specify how? Also add documentation showing this involvement
		User testing	Were representatives of the user group involved in the design process from the start? Please specify how? Also add documentation showing this involvement Did user testing take place? What were the results, and how were these incorporated in the design? Please add documentation (reports, articles e.g.)
	Stability	Stability	Does the game produce the same results on different platforms?
		Content validity	Were relevant experts involved in the validation of the content of the game validated? Please add documentation/reports/articles
		Concurrent validity	How does learning outcome compare to other methods assessing the same construct. Please add documentation/reports/articles
		Predictive validity	Is this game able to predict improvements of skills? Was this game for the target group validated in a RCT? Has the the study been published in a peer-reviewed journal? Please add documentation/ reports/ articles
	Data protection	Data protection and privacy	Data processing
Patient/ player privacy			Are patient-specific data stored by the game? If yes, are patient informed consent criteria met according to laws in countries stated above? How is informed consent acquired?
Data storage and protection			Who owns and stores the data resulting from play? During what period are the data stored? Can user delete data temporarily and/or permanently? Is data stored and managed in compliance with the privacy laws of the relevant countries? Please specify
Disclosure			Are the abovementioned items on data privacy disclosed to the user?