

# The WHO-SSC (surgical safety checklist) videogame utility

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<b>Registration date</b> 01/08/2014	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 01/08/2014	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

The World Health Organization (WHO) surgical safety checklist (SSC) was introduced to improve the safety of surgical procedures. A worldwide study published in 2009 showed that it reduced the number of surgical complications and in hospital death by about one third. SSC can make sure that the correct standards of care are being made and improve teamwork in the operating theatre. However, this depends on how well checks are performed. Health professionals would benefit from some introductory instruction on SSC; the aim of which would be to improve their knowledge, perception and performance. For this purpose, many descriptive videos have been launched. We think an interactive videogame would add benefit to the existing materials on this topic. We have developed a game-like simulation where the operating theatre environment is reproduced using pictures and short videos. In the game, nurses, anesthesiologists and surgeons can choose their role and are shown how to follow the SSC through two simulated surgical cases. For this study, we want to see how this tool performs when tested with health professionals.

### Who can participate?

Nurses, anaesthesiologists and surgeons, of any age and both genders, with experience in the operating room, from the investigators hospitals (Hospital Universitario Doce de Octubre and Hospital Universitario Clínico San Carlos) plus other hospitals of the Autonomous Community of Madrid (Hospital Universitario Puerta de Hierro, Hospital Universitario Santa Cristina and Hospital Universitario de Fuenlabrada)

### What does the study involve?

All volunteer nurses, anaesthesiologists and surgeons fill in a questionnaire before and after playing the game. Questionnaires include a series of items related to SSC such as knowledge about WHO SSC, their thoughts on patient safety and their experiences from working at their own institutions.

### What are the possible benefits and risks of participating?

Participants gain knowledge on SSC. All participants are given a DVD with the game plus a diploma as accreditation of their voluntary participation. There are no risks of participating.

Where is the study run from?  
The five participating hospitals above.

When is the study starting and how long is it expected to run for?  
July 2013 to July 2014

Who is funding the study?  
1. Complutense University of Madrid (PIMCDs 2013-101 and 2014-161) (Madrid)  
2. The Department of Surgery, School of Medicine, Complutense University of Madrid (Madrid)

Who is the main contact?  
Dr Manuel Giner  
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## Contact information

**Type(s)**  
Scientific

**Contact name**  
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## Additional identifiers

**Protocol serial number**  
N/A

## Study information

**Scientific Title**  
Validation of a videogame to increase WHO surgical safety checklist effectiveness

**Study objectives**  
Some introductory instructions on SSC would efficiently improve knowledge, perception and performance of health professionals.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Ethics approval not required.

Health professionals participation is entirely voluntary and performed with the informed consent of the participants. Participants are orally informed about the nature of the study in which a new instructional method is investigated to the benefit of the health professionals prior to its routine deployment. The intervention of the study (game playing and filling in a questionnaire) is not part of any has no consequences. The ethics committee at our institution reviewed the project and concluded that a full formal ethics committee statement was not required, due to the educational nature of the study. Data analysis is anonymous. With the participation in the study, the participants agree on the anonymously analysis of their data. Participants who do not like to participate can chose to deny participation without further consequences. Anonymous participation is document of the oral agreement of the participants. This type of orally agreement employed in our study was discussed with the ethics committee which agreed on it. Due to practical reasons, a formal written consent prior to the study was not feasible.

**Study design**

Observational

**Primary study design**

Observational

**Study type(s)**

Screening

**Health condition(s) or problem(s) studied**

Difficulties in effectively implement the WHO-SSC

**Interventions**

Comparing knowledge and perception of the same professionals before and after playing the SSC videogame. The total duration of observation was around one hour.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

1. Perceived usefulness of the SSC
2. Effort expectancy
3. Knowledge about the SSC

**Key secondary outcome(s)**

General opinion of the tool (videogame)

All outcome measures (primary and secondary) are measured via answers to two questionnaires filled in on the same day, before and after the participants videogame experience

**Completion date**

31/07/2014

# Eligibility

## Key inclusion criteria

Nurses, anaesthesiologists and surgeons with more than three years experience in operating room.

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Adult

## Sex

All

## Key exclusion criteria

Same personnel with shorter experience

## Date of first enrolment

01/07/2013

## Date of final enrolment

31/07/2014

# Locations

## Countries of recruitment

Spain

## Study participating centre

C/ Fernando Garrido, 11, bjo. A

Madrid

Spain

28015

# Sponsor information

## Organisation

Complutense University of Madrid (Spain)

## ROR

<https://ror.org/02p0gd045>

# Funder(s)

## Funder type

University/education

## Funder Name

Complutense University of Madrid (PIMCDs 2013-101 and 2014-161) (Madrid)

## Alternative Name(s)

Complutense University of Madrid, UCM

## Funding Body Type

Private sector organisation

## Funding Body Subtype

Universities (academic only)

## Location

Spain

## Funder Name

The Department of Surgery, School of Medicine, Complutense University of Madrid (Madrid)

# Results and Publications

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes