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# Room of Errors - Simulation Training for Nursing Education and Increased Patient Safety According to JCI Standards

**Androniki Bibovska, Biljana Dilevska,  
Jelena Zlatić-Stoilov, Robert Eftimovski,  
Magdalena Mitevka and Darko Sazdov**

## *Abstract*

### **Background**

One of the fundamental rights of every patient and employee is the right to safety. During the treatment and care of patients in any hospital facility, mistakes are possible that can affect the health and condition of patients. Activities based on live simulations are effective tools for developing situational awareness and improving patient safety training in healthcare facilities.

### **Purpose**

The purpose of this research is insight into the readiness of the staff to perceive possible irregularities of medical and non-medical nature and improvement of the perception of the medical staff during the treatment and care of patients.

### **Materials and Methods**

A special room has been prepared - a replica of a hospital room, equipped with equipment, materials and phantoms that replace a patient. Several different "scenarios" have been prepared, intended for different categories of medical personnel depending on their working positions.

### **Results**

The results show where the weak points of certain employees are and in which field of work they need to improve their skills. An analysis is made with multiple parameters set (experience, education, age, department) and individual and group results are viewed.

### **Conclusion**

Modern healthcare requires identifying, ranking, and prioritizing all the risks faced by hospitals, finding weak points, and motivating employees to continuously improve their work skills and advance their knowledge.

**Keywords:** medical errors, safety, education, error identification

## Introduction

Acibadem Sistina Hospital Skopje is a medical institution that simultaneously performs educational activities, and since 2016, it has been operating as a hospital accredited according to JCI standards for the safety of patients, employees, and visitors. 396 nurses and technicians work at the hospital, which has a total of 256 beds. Acibadem Sistina has an electronic system for reporting incidents (medical errors), and the analyses from that system show where there are risks for failure in the nurses' work. Creating safe conditions for the stay, treatment, and care of patients depends to a large extent on the readiness of nurses to react quickly and efficiently and to know how to recognize and reduce the possibilities of medical errors. The term incident means an unexpected event related to the safety of any person in the hospital, that is, an unusual or unexpected change that has or may have unwanted consequences.

A patient safety event is any change in health condition that results or may result in harm to the patient. These changes can be the result of faulty system design, processes, equipment, human error, or other unforeseen circumstances. In order to reduce or minimize all errors, and at the same time to improve the perception of nurses and their practical readiness, a special simulation training was prepared. Room of Errors is an exercise that changes training from theoretical to real-time and whose environment is an imitation of a real hospital room. In nursing science, simulation exercises are practiced to improve theoretical and practical skills, as well as quick critical thinking, based on developed practical reflexes and activities. Sometimes, daily practice becomes routine, and errors can be found in basic nursing activities that can jeopardize patient safety.

The Room of Errors presents an opportunity to conduct analyzes regarding the readiness of specific nurses as individuals, groups of nurses, or different departments and units. Through simulation scenarios, the strengths and weaknesses of certain employees can be seen, as well as the topics which require more attention during the educational processes.

The literature points to previous models on this topic in several hospitals and universities for nursing education. Such training methods and analyzes of the perception of nurses are described in the literature, in order to determine how the research will contribute to further development in modern nursing and medicine in general. In the described research, the Rooms of Errors are set up as simulation trainings or as virtual trainings, and the largest number of published papers are positively received by the participants themselves.

## Materials and Methods

The Commission for Ethical Issues at Acibadem Sistina Hospital Skopje approved the request for the implementation of the project “Room with Errors” (archive no. 02-12019/02) and allowed the written participation of the participants.

The research was of the type of critical research, i.e., critical-analytical writing. According to the design, the paper is an exploratory, experimental research, in which monitoring was used as a data collection method. The purpose of the research is causal-explanatory, from the time dimension, it is a transversal study. It is the same in breadth and depth as a statistical study, with simulation as the research environment and the constant routine of the participants.

In the analysis, ordinal data were used; in order to analyze the quantitative data, a data matrix was created in Excel SPSS application, and the respondents' answers were coded.

The questionnaire for the respondents was of the type of self-administered questionnaire (that is, the respondents answered the questionnaire without the presence of a person conducting the examination).

## Preview

In the Room of Errors, participants moved around the simulation room and tried to find as many errors as possible out of a total of 34 given errors according to certain scenarios. The preparation of the Room of Errors lasted 6 weeks, and the simulation training itself took a total of two weeks, from February 19<sup>th</sup>, 2024 to March 1<sup>st</sup>, 2024.

## Equipment

The Room of Errors is a room specially equipped only for simulation exercises and training, but also a part for classical theoretical teaching and education. The room itself is divided into two parts and is a total of 45 square meters, it is equipped with: an LCD monitor, an area with desks for theoretical teaching, a hospital bed with all functions, a phantom doll-mannequin for training, a dressing table and a table for patients, an infusion stand, perfusors and infusomats, infusions, identification bracelets, bedpans, box for sharp objects, food, eating utensils, medicines, drains, intravenous cannulas, catheters. For a better simulation, artificial color (yellow and red) was used to simulate blood and urine.

## Personnel

The following participated in the creation of the Room with Errors: the head nurse of the hospital, the nurse-educators, the head nurses of the departments, the marketing department, the technical affairs department, the human resources department, and the quality department. The education team designed and arranged the space and, according to previously prepared scenarios, marked the mistakes that should be recognized. According to the plan that was made in the project, 309 participants, namely nurses and technicians from polyclinics and hospital departments (Surgery, Thoracic Vascular Surgery, Pediatrics, Neonatology, Neonatal Intensive Care, Cardiac Surgery, Cardiology, Infectious Diseases, Emergency Center, Assisted Reproduction, General Intensive Care Unit, Cardiac Surgery Intensive Care Unit and Anesthesiology, Anesthesiology and Operating Rooms, Oncology and Radiotherapy, Nuclear Medicine, Radiology). Sterilization and instrument nurses were excluded from the exercise, due to the specificity of their work. The total number of participants was 278 nurses and technicians with secondary and higher education. 15 days before the start of the training, a schedule was made of personnel who should attend the exercise in the period from February 19<sup>th</sup>, 2024, to March 1st, 2024, in seven terms per day; the final attendance schedule was made depending on the work shifts of the staff. Each employee received information via email and SMS message about the location of the exercise and instructions on how to participate in the simulation training. A selection of supervisors was made, and a total of four supervisors were selected who constantly followed the process of the exercise and wrote down notes before, during, and after the training.

## Creating the Room of Errors

The education and training team created a plan for the total number of errors (the total number of predicted errors was 34), types of errors according to the principles of the JCI standards and categorized them into seven groups, namely six errors from IPSG (International Patient Safety Goals), 12 errors from COP (Care of patient), one error from GLD (Governance, Leadership and Direction), 14 errors from PCI (Prevention and Control of Infections), two errors from AOP (Assessment of Patients), two errors from FMS (Facility Management and use), one error from MOI (Management of Information). Errors were categorized according to whether they were hazardous to the safety of patients, staff, or visitors, errors related to the patient's environment, errors related to documents, and administrative work.

All names, data, conditions, and numbers were fictitious and do not exist in the electronic patient system. Three different medical histories (general surgical, gynecological-obstetrical, and pediatric) were prepared, and the medical histories were completed with documents according to the hospital history completeness procedure. Each document was labeled with a fictitious first and last name and date of birth, as well as a unique identification number. In each history, there was at least one document with the name and surname of another patient. In the histories, there were laboratory analyses, proof of blood types, results of radiological examinations, consents for intervention and other procedures, anesthesiology lists, and results of pathohistological examinations. Dangerous sharp objects were left on the patient's bed, which according to the procedure must not be in the room, the bedding was painted with a yellow color that simulated urine, inappropriately selected waste was placed in the waste bins, there was food on the feeding table to which the patient is allergic, there were infusions of drugs that the patient is not allowed to receive, the patient received the wrong blood type, the identification bracelets were wrong, etc. Errors are listed for each scenario and grouped according to JCI chapters. The quality department prepared the instructions for participation in simulation training, where the procedure during the training was explained in detail to the participants, then forms for participation in the training were prepared with information related to the education, experience and working position of the participants, as well as a survey questionnaire for assessing satisfaction from the simulation exercise, which was anonymous and was delivered after completion of the training in a box intended for anonymous surveys.

## Implementation

The Room of Errors is complete with all the equipment and materials, a hospital bed, bedding, appliances, medicines, food, food and personal hygiene utensils, phantom doll, patient environment (chair, dressing table, dining table, utility bins) are all set up, as well as and medical waste, isolation type labels, personal protective equipment, disposable gloves, disinfectant. Upon entering the simulation center, participants were given the Participant's Guide again to read and familiarize themselves with how to record errors. In the participation form, each participant recorded their personal data (name, surname, department where they currently work, degree of education, years of working experience in the department and total working experience, health facilities and sectors where they worked during their employment, as well as the categorization according to hospital standards).

The exercise consisted of two parts. In the first part, the participants were recorded, they were assigned a history of illness with a given scenario, that is, a described history of illness and the participants had to read and check the content and completeness of it. The duration of document control was 10 minutes.

The second part of the exercise took place in the simulation center, where the participants had to spot and write down as many mistakes as possible within a given time limit of 15 minutes. When the participants entered the Room of Errors, supervisors recorded the participant's appearance (neatness, personal appearance, uniform), behavior in the Room of Errors and use of personal protective equipment and disinfectant before, during and after the investigation (according to the Procedure for Hand Hygiene and use of Personal Protective Equipment). The participants were forbidden to bring in a mobile device during the training or talk with the other participants or supervisors. After completing the training, each participant was given a questionnaire to assess their satisfaction with the simulation exercise, and was informed where they could submit it.

Each participant received training results via e-mail, and after the overall analysis and evaluation, the three best participants received public recognition, commendations, and a prize from the hospital's management.

## Results

### General Analyses

A total of 278 participants completed the Room of Errors simulation training. Each test was reviewed manually and a group of three supervisors scored the test according to the number of errors given and the number of errors found. Errors were classified into groups according to JCI chapters and all comments from the supervisors were entered in the participation form. The value was expressed as a number and percentage of success. Excel tables were made in which detailed analyzes were made by entering an equation.

A total of 3727 errors were found, which means the overall success of the simulation exercise had a mean value of 39.4%.

Out of a total of 278 tested participants, 159 nurses have secondary education, 17 have Associate's degree and 102 nurses have Bachelor's degree or higher.

Out of the total number of those tested, 255 are nurses, and 23 are medical technicians.

The best test was with 25 errors found, i.e., 74% success rate.

Table 1 provides an overview of the participants' level of education in each category.

**Table 1**

*Type of Education of Nurses According to Categorization*

Education	A	B	C	Total
Secondary	107	36	16	159
Associate's	12	2	3	17
Bachelor's	68	26	8	202

## Analysis by Categorization and Seniority of Nurses/Technicians

Nurses and technicians at Acibadem Sistina Hospital Skopje have an annual evaluation according to which they are divided into categories A, B, and C.

The analyzes showed that nurses who are in category A achieved better results than nurses who are in categories B and C. Nurses with work experience between six and ten years showed greater success in perceiving the set errors and their percentage of success is 43.8%, and the weakest perception was shown by category B nurses with work experience between 21-30 years.

The success of identifying error of the nurses in each category and according experience is analyzed in Tables 2 and 3.

**Table 2**

*Average of Identifying Errors by Categorization*

Work exp. (years)	Category A			Category B			Category C		
	No. of EE	Ident. errors avg.	% of success	No. of EE	Ident. errors avg.	% of success	No. of EE	Ident. errors avg.	% of success
0-5	3	14	41.2%	24	13.5	39.8%	2	12.5	36.9%
6-10	21	14.9	43.8%	20	13.1	38.5%	0	N/A	N/A
11-20	83	14	41.1%	15	11.4	33.5%	4	12.3	36%
21-30	48	13.3	39.1%	5	10	29.4%	1	11	32.4%
over 30	33	13.5	39.6%	0	N/A	N/A	0	N/A	N/A
	Passing average		41%	Passing average		35.3%	Passing average		35.1%

*Note.* A total of 34 errors were set

**Table 3**

*Percentage of Error Detection According to Length of Service of All Categories*

<b>Experience</b>	<b>Cat. A</b>	<b>Cat. B</b>	<b>Cat. C</b>	<b>No. of EE</b>	<b>Errors found</b>	<b>Total errors</b>	<b>Success</b>
0-5 years	3	24	22	49	643	1666	38.6%
6-10 years	21	20	0	41	575	1394	41.2%
11-20 years	83	15	4	102	1379	3468	39.8%
21-30 years	47	5	1	53	686	1802	38.1%
over 30 years	33	0	0	53	444	1122	39.6%
Total	187	64	27	278	3727	9452	39.4%

## Analyses by Position/Department

The analyzes showed that the best results were shown by the nurses working at the newly established infectious disease hospital with 54.2% success, the children's cardiac surgery department 50% success, general intensive care 47.4%, the adult cardiac surgery department 45.8%, the pediatric emergency center 42.3% and the cardiology department 42.1%.

The success of error detection by each department is analyzed in Table 4.

**Table 4**

*Error Detection Percentage by Department*

Exp. (yrs.)	Category A					Category B					Category C					
	0-5	6-10	11-20	21-30	30+	0-5	6-10	11-20	21-30	30+	0-5	6-10	11-20	21-30	30+	μ %
SURG	/	41.2	45.2	40	/	23.5	41.2	44.1	/	/	41.2	/	30.9	/	/	38.4
GYN	/	39.7	33.5	33.3	35.8	38.2	/	29.4	44.1	/	41.2	/	/	/	/	36.9
CS	/	/	51	63.2	/	51.5	50	34.3	35.3	/	39.7	/	41.2	/	/	45.8
TVS	41.2	44.1	51.5	/	44.1	35.3	42.6	32.4	/	/	36	/	/	/	/	40.9
GIC	/	38.2	52.4	58.1	44.1	/	44.1	/	/	/	/	/	/	/	/	47.4
PED	/	38.2	41.2	34.7	30.9	36.8	29.4	/	/	/	/	/	/	/	/	35.2
AMB	/	38.2	37.1	39.2	/	23.5	/	/	8.8	/	14.7	/	/	/	/	26.9
EC	/	41.2	39.7	23.5	/	42.6	19.6	/	/	/	26.5	/	/	/	/	32.2
RAD	/	/	27.9	11.8	20.6	/	23.5	/	/	/	/	/	/	/	/	21
PEC	32.4	55.9	44.1	/	41.2	30.4	/	/	/	/	50	/	/	/	/	42.3



	Category A					Category B					Category C					
CA	/	44.1	37.6	39	45.8	48.5	48.5	/	29.4	/	44.1	/	/	/	/	42.1
NEO	50	47.1	38.7	33.5	26.5	/	36	29.4	/	/	27.9	/	/	/	/	36.1
INF	/	52.9	57.4	61.8	44.9	/	/	/	/	/	/	/	/	/	/	54.2
IVF	/	/	58.8	40.2	35.3	/	/	35.3	/	/	/	/	/	/	/	42.4
PCS	/	46.5	47.6	/	51.5	50	54.4	/	/	/	/	/	/	/	/	50
ANES	/	35.3	36.1	36.8	31.6	/	38.2	30.9	/	/	35.3	/	/	32.4	/	34.6

The results by departments were expected due to the category of nurses working in those departments, that is, they are nurses in category A, with more than 10 years of experience and nurses who have worked in more than one position throughout their career.

## Analysis by Types of Questions

Out of a total of 34 set errors according to the principles of JCI standards, six errors are from IPSG (International Patient Safety Goals), 12 errors from COP (Care of Patient), one error from GLD (Governance, Leadership and Direction), 14 errors from PCI (Prevention and Control of Infections), two errors from AOP (Assessment of Patients), two errors from FMS (Facility Management and Use), one error from MOI (Management of Information).

Analyzes showed that nurses have an excellent perception in terms of completeness and errors in documenting the history of illness 86.7%. They are also excellent in the COP (Care of Patient) chapter 80.6%, and there's a weaker perception in the part related to the patient's environment (FMS chapter).

The success of error detection by question type is analyzed in Table 5.

**Table 5**

*Error Detection Percentage by Question Type*

Question no.	Success	JCI Chapter
1	71.2%	IPSG
2	38.1%	IPSG
3	65.5%	IPSG
4	28.8%	IPSG
5	19.8%	IPSG

Question no.	Success	JCI Chapter
6	2.9%	IPSG
7	80.6%	COP
8	27.7%	COP
9	86.7%	GLD
10	15.5%	PCI
11	51.4%	PCI
12	19.4%	PCI
13	39.6%	PCI
14	48.2%	PCI
15	16.2%	COP
16	26.3%	PCI
17	67.6%	PCI
18	49.3%	PCI
19	53.6%	PCI
20	13.3%	PCI
21	34.9%	PCI
22	42.1%	PCI
23	39.9%	PCI
24	19.1%	COP
25	34.5%	COP
26	45.0%	COP
27	21.9%	COP
28	58.6%	AOP
29	42.8%	AOP
30	52.5%	COP
31	26.6%	FMS
32	1.4%	FMS
33	40.3%	COP
34	59.4%	MOI

## Individual Analyses

Out of a total of 278 nurses and technicians, the largest number of them (35) found 15 errors (44% success rate), 63 had a success rate of over 50%, and two had over 70% success rate. The best result on an individual level is a colleague who found a total of 25 errors (74% success rate). That colleague is a medical technician from the General Intensive Care department, who has previously worked as an anesthesiologist, of category A, with over 25 years of work experience. The weakest result of three correctly perceived mistakes (9% success rate), came from two colleagues who have been in the hospital for one month, that is, in the orientation period. A total of 3727 errors were found, i.e., 12.19 errors per participant. Table 6 and Chart 1 analyze the number of nurses according to their performance.

**Table 6**

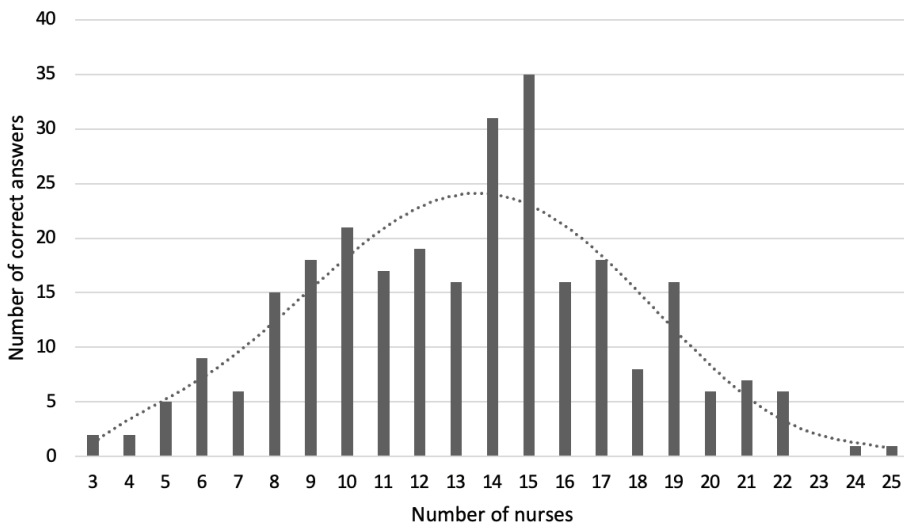
*Number of Nurses According to the Number of Errors Found, i.e. Performance*

No. of correct answers	Success rate	No. of nurses
3	9%	2
4	12%	2
5	15%	5
6	18%	9
7	21%	6
8	24%	15
9	26%	18
10	29%	21
11	32%	17
12	35%	19
13	38%	16
14	41%	31
15	44%	<b>35</b>
16	47%	16
17	50%	18
18	53%	8
19	56%	16
20	59%	6

No. of correct answers	Success rate	No. of nurses
21	62%	7
22	65%	6
23	0%	0
24	71%	1
25	74%	1

### Chart 1

*Graphic Display of the Number of Nurses According to the Number of Errors Found*



## Discussion

The safety of patients in the Acibadem Sistina Hospital is guaranteed by standardized work procedures and procedures that are checked and constantly controlled. The annual reports of the Quality Department show the number and type of reported incidents, and according to them, it organizes appropriate training and re-education of the staff, together with the Education Department. The reported incidents concern the safety of patients, employees, and visitors to the hospital. One of the topics of focus is increasing the perception of nurses regarding possible

threats to patient safety, such as the risk of falls, misidentification, safe surgery, handling of high-risk medications, allergic reactions, occurrence of pressure sores, and possible errors in the documentation. The Room of Errors was designed to test nurses' perception of errors directed directly at the patient, but also at the patient's environment. The Room of Errors proved to be a place for an individual approach to patient care in an entertaining and new way, an approach that allows each participant to see for themselves how routine work leads to a decrease in the perception of certain failures that at times seem minor, but can endanger the patients and their health. The nurses' focus was on those errors that are of high risk to the patient (wrong blood type, wrong therapy, allergens, etc.), and paid less attention to the patient's environment (no bell to call a nurse, "forgotten" bedpan under the bed of the patient, etc.). The employees reacted positively to the new way of education and immediately after the training, they gave remarks about organizing new such trainings with specialized errors specific to certain departments, as well as the possibility of organizing group trainings. The goal of any educational training is to raise employees' awareness of the possible dangers to the safe stay of patients in hospitals and to exercise the perceptive capabilities of each individual who is involved in the treatment and care of patients. Questionnaires that nurses filled out anonymously showed that they support such ways of education and that they need new approaches to additional learning and repetition of work standards.

## Conclusion

The overall analysis of the "Room with Errors" training provided an overview of nursing work in the hospital and showed which aspects are strong and which require more attention when organizing re-educations. Each individual provided ideas about how this way of education can be a regular practice at Acibadem Sistina Hospital. Nursing work requires great responsibility and concentration, and this type of practice, in a relaxed atmosphere, is a good way for self-critical review of each participant and perception of their weaknesses in the work. The education team reviewed the suggestions from the participants in the project, and future education will be specialized for specific departments, and comparative education will also be made for small groups of participants, in order to see the group perception of certain departments.

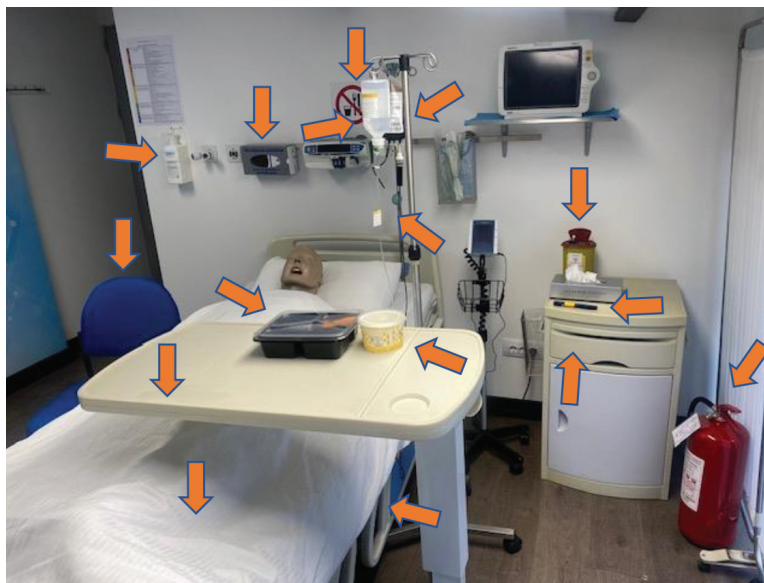
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## Appendix

### Figure 1

*Display of errors in the Room of Errors (1)*



### Figure 2

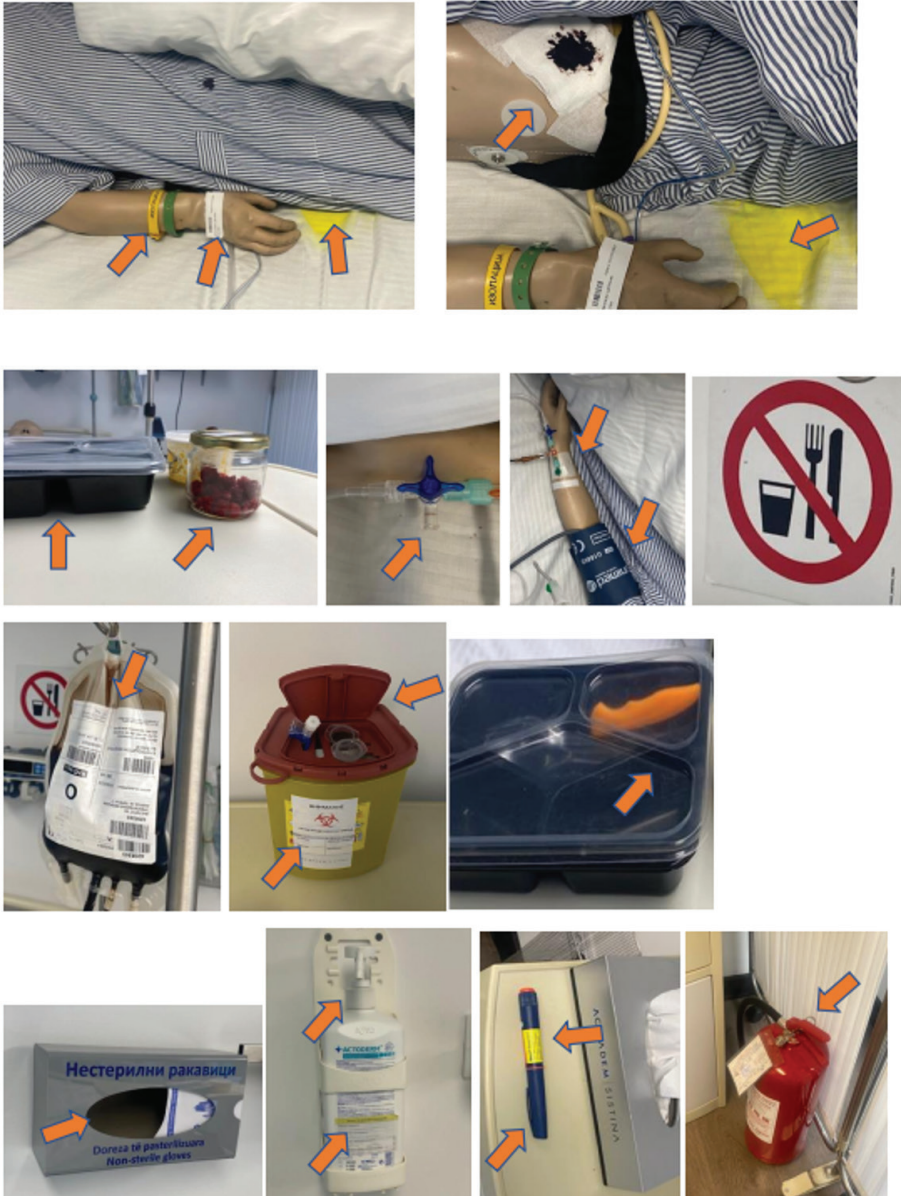
### Display of errors in the Room of Errors (2)





**Figure 3**

*Display of errors in the Room of Errors (3)*





**Table 7**

*Example of set errors by scenario*

<b>No.</b>	<b>Error</b>	<b>Chapter</b>
1	The name Cvetanovska Cvetanka is written on the bracelet	IPSG Misidentification
2	Insulin pen on the table	IPSG, COP high-risk drug
3	The patient does not have a red bracelet	IPSG Patient identification
4	No purple bracelet	IPSG
5	Fall risk, lowered sides	IPSG
6	A chair stands next to the bed	IPSG Fall risk
7	The infusion is labeled as vit B6	Allergy COP
8	The cannula is placed on the left arm	Limitation IPSG, COP
9	No consent signature in the history, incomplete history chart	Reception GLD
10	PPE by type of bacteria	PCI marking on the door
11	Unmarked sharpbox	PCI
12	There is no insulation sign on the door	PCI
13	Dirty bed linen	PCI
14	There is food on the table	PCI
15	There is a knife and fork in the drawer	PCI, COP
16	Empty disinfectant	PCI
17	Overfilled sharpbox	PCI
18	Unprotected three-channel	PCI
19	Dirty wound dressing	PCI, COP
20	There is a bedpan under the bed	PCI
21	Masks out of box (inappropriate place)	PCI
22	Drain bag, catheter on ground	PCI
23	Wrong waste	PCI
24	Ureofix expiry date missing on the label	COP
25	Unlabeled insulin	COP
26	Transfusion expiration label	COP
27	No date label on the cannula	COP
28	Unlabeled infusion system	Transfusion AOP, COP

29	The infusion solution flows in the same line as the transfusion	Transfusion AOP, COP
30	Food/peanut allergy on the table	COP
31	FE in the patient's room	FMS
32	There is no "call nurse" button on the bed	FMS, COP
33	Pressure cuff on the same side	COP
34	Documents from another patient	MOI

**Figure 4**

*Scenario Exercise No. 1*

**Scenario no. 1**

**History of illness (Anamnesis)**

**Main symptom:** Vaginal bleeding

**Current illness:** Stefanovska Stefi, (February 1, 1963) is a 60-year-old patient hospitalized in Acibadem Sistina Hospital in the gynecology department with Dg. Laparoscopic hysterectomy LAVH cum adnexectomy bilateralis. Drainage No I, elective surgery, with general anesthesia, blood type B Rh + (pos). On the first postoperative day, the patient has a drain, a vaginal strip and a urinary catheter. The patient is a type 2 diabetic (on insulin therapy), hypertensive, with chronic therapy. She is allergic to raspberry, kiwi and walnuts and the antibiotic Ceftriaxon and vitamin B6. According to laboratory analyses, she has a severe form of anemia and is currently receiving erythrocytes. On admission, VRE bacteria was isolated and after receiving the microbiological findings, an antibiotic was included.

**Past illnesses:** 3 months ago, she was operated on and a mastectomy was performed on the left side (Op. Mastectomy radicalis lat. sin).

**Family history:** Denies diseases of interest

**Personal history:** Smoker, does not consume alcohol, gives information about allergy to vit B6, kiwi, raspberries and walnuts and antibiotic Ceftriaxon.

**Pharmacological history:** Clexane a 40 mg 2x1, Insulin, Spironalactone, Furosemide

## Figure 5

### Scenario Exercise No. 2

#### Scenario No. 2

##### History of illness (Anamnesis)

**Main symptom:** Abdominal pains

**Current illness:** Nikolovska Nikolina (June 7, 1993) is a 30-year-old patient hospitalized in Acibadem Sistina Hospital in the surgery department with Dg. St. post op. Ca ventriculi (gastric carcinoma), elective surgery, with general anesthesia, epidural catheter placed for anesthesia pre-operatively, blood type AB Rh - (neg.). Fourth postoperative day, MRI with contrast is scheduled for today. The patient is a type 2 diabetic (on insulin therapy), hypertensive, with chronic therapy. She is allergic to strawberries, raspberries and peanuts and the antibiotic Ceftriaxon. According to laboratory tests, she has a severe form of anemia and is currently receiving erythrocytes. On admission, MRSA bacteria was isolated and after obtaining the microbiological findings, an antibiotic was included.

**Past illnesses:** 6 months ago, she was operated on and a mastectomy was performed on the left side (Op. Mastectomia radicalis lat. sin).

**Family history:** Denies diseases of interest

**Personal history:** Non-smoker, does not consume alcohol, gives information about allergy to strawberries, raspberries and peanuts and antibiotic Ceftriaxon.

**Pharmacological history:** Clexane a 40 mg 2x1, tbl. Nolpaza a 40 mg 1x1, Hel-ex a 0.5 mg 1x1, Insulin

## Figure 6

### Scenario Exercise No. 3

#### Scenario No. 3

##### History of illness (Anamnesis)

**Main symptom:** Chest pain

**Current illness:** Nikolovski Nikola, (February 2, 1955) is a 68-year-old patient hospitalized in Acibadem Sistina Hospital in the cardiac surgery department with Dg. Coronary artery disease CABG, elective surgery, planned general anesthesia, blood group B Rh - (neg.). The patient is a type 2 diabetic (on insulin therapy), hypertensive, with chronic therapy. He is allergic to raspberry and the antibiotic Ceftriaxon. According to laboratory analyses, he has a severe form of anemia and is currently receiving erythrocytes. During admission, MRSA bacteria was isolated in the throat and after receiving the microbiological findings, an antibiotic was included.

**Past illnesses:** None

**Family history:** Denies diseases of interest

**Personal history:** Smoker, does not consume alcohol, gives information about raspberry allergy and antibiotic Ceftriaxon.

**Pharmacological history:** Clexane a 40 mg 2x1, Insulin, Spironalactone, Furosemide

**Figure 7**

*Form for Participation in the Simulation Training (in Macedonian)*

ACIBADEM | SISTINA

**ФОРМУЛАР ЗА УЧЕСТВО ВО СИМУЛАЦИСКИ ТРЕНИНГ**

Име и презиме	
Симулациско сценарио бр.	
Оддел	
Работно место	<input type="checkbox"/> Медицинска сестра/техничар <input type="checkbox"/> Акушерка <input type="checkbox"/> Болничар
Степен на образование	<input type="checkbox"/> Средно <input type="checkbox"/> Више <input type="checkbox"/> Високо
Години работен стаж на одделот	<input type="checkbox"/> 0-5 год. <input type="checkbox"/> 6-10 год. <input type="checkbox"/> 11-20 год. <input type="checkbox"/> 21-30 год. <input type="checkbox"/> Над 30 год.
Вкупно години работен стаж	<input type="checkbox"/> 0-5 год. <input type="checkbox"/> 6-10 год. <input type="checkbox"/> 11-20 год. <input type="checkbox"/> 21-30 год. <input type="checkbox"/> Над 30 год.

**Figure 8**

*Satisfaction Assessment Survey Questionnaire (in Macedonian)*

## ACIBADEM | SISTINA

**АНКЕТЕН ПРАШАЛНИК ЗА ПРОЦЕНКА НА СИМУЛАЦИСКА ВЕЖБА "СОБА СО ГРЕШКИ" (Room of errors)**

Почитувани Ви благодариме за покажаниот интерес и учество во симулациската вежба која за прв пат се одржува во КБ Ацибадем Систина

Го цениме Вашето мислење и со пополнување на анкетниот прашалник ќе овозможите сите заедно да бидеме креатори во насока на унапредување на едукативните процеси.

Анкетниот прашалник ќе се одвива во тајност и во истиот нема да бидат внесени вашите лични податоци. Потребно е секое прашање да го оцените со оцена од 1 до 5.

1 Апсолутно не се согласувам  
 2 Не се согласувам  
 3 Не сум сигурен/а  
 4 Се согласувам  
 5 Апсолутно се согласувам

Години на работен стаж на одделот:		Оддел на кој работите:	
Години на предходно работно искуство:		Оддел/и:	
Проценка на категорија	Прашање	Оцена*	
ТРЕНИНГ	Оваа симулација одговара на секојдневната пракса на медицинските сестри/техничари, акушерки		
	Моето претходно искуство и знаење ми овозможија лесно да откривам грешки		
	Овој модел на соба на грешки е релевантна алатка за континуирана обука		
	Симулацијата е покорисен начин на учење отколку „традиционалната“ настава		
	Вкупното времетраење на симулацијата беше соодветно		
	Симулацијата беше добро организирана		
<b>Севкупна проценка на обуката (овој дел го пополнува медицинската сестра за едукација)</b>			
СЦЕНАРИО	Изборот на грешки беше различен и опфаќаше повеќе поглавја од JCI стандардите		
	Нивото на тежина на грешките беше релевантно за моето професионално искуство		
	Сценариото беше реалистично		
	Сценариото беше јасно поставено и лесно разбирливо		
	Сценариото беше соодветно за моето ниво на професионално искуство		
	Времетраењето за читање на сценариото и увид на документацијата беше соодветно		
<b>Севкупна проценка на сценариото (овој дел го пополнува медицинската сестра за едукација)</b>			
ЛИЧНО ЗАДОВОЛСТВО	Симулацискиот тренинг беше корисен за зголемување на моите перцепции		
	Ова искуство ќе ми помогне да ја подобрам мојата секојдневна пракса		
	Ја препорачувам оваа обука на колегите		
	Собата со грешки ми помогна да ги обновам моите знаења		
	Во текот на целата обука имаше убава работна атмосфера		
	Бев соодветно информиран/а за начинот на одвивање на симулацискиот тренинг		
<b>Севкупна проценка на лично задоволство (овој дел го пополнува медицинската сестра за едукација)</b>			
<b>Севкупно задоволство (овој дел го пополнува медицинската сестра за едукација)</b>			
<b>Ваши забелешки/предлози:</b>			

