







## SCAPE ROOM AS A SENSITIZATION AND EDUCATION STRATEGY ABOUT PRESSURE INJURY PREVENTION

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### ABSTRACT

**Objective:** To report the experience of using the escape room as an educational and awareness strategy for the prevention of pressure injuries in the hospital context. **Methods:** This is an experience report about an activity developed in November 2021, with professionals from the multidisciplinary team of a large philanthropic hospital located in the metropolitan region of São Paulo (SP), Brazil. **Results:** The game was played as an educational strategy associated with other initiatives on the issue, during the annual pressure injury prevention campaign. Eighty-two professionals participated in the activity, including nurses, nursing technicians, nutritionists, and physiotherapists. A total of 57 participants (69.5%) managed to unravel the proposed puzzles and leave the escape room in the proposed time. The reaction evaluation showed a high level of satisfaction with the activity, in addition to numerous compliments on the chosen methodology, as well as the creativity in which the topic was approached and developed. **Conclusion:** The use of a methodology based on the interaction of the participants, such as escape rooms, associated with other educational activities seems to be interesting to promote learning and awareness about pressure injury prevention.

**DESCRIPTORS:** Pressure ulcer. Enterostomal therapy. Health education. Interdisciplinary placement.

## SCAPE ROOM COMO ESTRATÉGIA DE SENSIBILIZAÇÃO E EDUCAÇÃO SOBRE PREVENÇÃO DE LESÃO POR PRESSÃO

### RESUMO

**Objetivo:** Relatar a experiência da utilização de sala de escape como estratégia educacional e de sensibilização para prevenção de lesão por pressão no contexto hospitalar. **Métodos:** Trata-se de um relato de experiência decorrente de atividade desenvolvida em novembro de 2021, com profissionais da equipe multiprofissional de um hospital filantrópico de grande porte localizado na região metropolitana de São Paulo (SP), Brasil. **Resultados:** Realizou-se o jogo como estratégia educacional associado a outras iniciativas sobre a temática, durante a campanha anual de prevenção de lesão por pressão. Participaram da atividade 82 profissionais, entre eles, enfermeiros, técnicos em enfermagem, nutricionistas e fisioterapeutas. O total de 57 participantes (69,5%) conseguiram desvendar os enigmas propostos e sair da sala de escape no tempo determinado. A avaliação de reação demonstrou alto nível de satisfação com a atividade, além de inúmeros elogios sobre a metodologia escolhida, bem como a criatividade com que o tema foi abordado e desenvolvido. **Conclusão:** A utilização de uma metodologia baseada na interação dos participantes, como as salas de escape, associada a outras atividades educativas parece ser interessante para promover a aprendizagem e a sensibilização na temática prevenção de lesão por pressão.

**DESCRIPTORES:** Lesão por pressão. Estomaterapia. Educação em saúde. Práticas interdisciplinares.

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# LA SALA DE ESCAPE COMO ESTRATEGIA DE SENSIBILIZACIÓN Y EDUCACIÓN SOBRE LA PREVENCIÓN DE LESIONES POR PRESIÓN

## RESUMEN

**Objetivo:** Reportar la experiencia del uso del escape room como estrategia educativa y de concientización para la prevención de lesiones por presión en el contexto hospitalario. **Métodos:** Este es un relato de experiencia, resultado de una actividad desarrollada en noviembre de 2021, con profesionales del equipo multidisciplinario de un gran hospital filantrópico, ubicado en la región metropolitana de São Paulo, Brasil. **Resultados:** El juego se realizó como una estrategia educativa asociada a otras iniciativas en el tema, durante la campaña anual de prevención de lesiones por presión. Participaron de la actividad 82 profesionales, entre enfermeros, técnicos de enfermería, nutricionistas y fisioterapeutas. Un total de 57 participantes (69,5%) consiguieron desentrañar los puzzles propuestos y salir del escape room en el tiempo propuesto. La evaluación de la reacción mostró un alto nivel de satisfacción con la actividad, además de numerosos elogios sobre la metodología elegida, así como la creatividad con la que se abordó y desarrolló el tema. **Conclusión:** El uso de una metodología basada en la interacción de los participantes, como las salas de escape, asociada a otras actividades educativas, parece interesante para promover el aprendizaje y la sensibilización en el tema de prevención de lesiones por presión.

**DESCRIPTORES:** Úlcera por presión. Estomaterapia. Educación en salud. Prácticas interdisciplinarias.

## INTRODUCTION

The occurrence of pressure injury (PI) in the care setting is considered an adverse event related to health care and has been a topic of discussion in national and international scenarios<sup>1</sup>. According to the American Agency for Healthcare Research and Quality, the occurrence of adverse events in general has been reduced in recent years, with the exception of PUs and surgical site infections<sup>2</sup>.

Studies reveal gaps in nurses' knowledge about PU care and their desire for more education, both in their undergraduate programs and throughout their careers<sup>3,4</sup>. Especially when it comes to PU prevention, it is not enough just to have the knowledge; it is necessary to improve skills and attitudes, which sets up the three major axes of competence—knowing, knowing how to do, and wanting to do<sup>4</sup>.

Given the need for innovative educational approaches that promote the transfer of knowledge, decision making, and the safe execution of care, the use of active educational methodologies has become indispensable in health institutions<sup>5</sup>. It is essential that nurses and the multiprofessional team seek constant improvement of their practices, in order to identify risk factors early and promote the maintenance of the integrity of the patient's skin during hospitalization, thus providing quality care<sup>4,6</sup>.

Considering the constant challenge of promoting an assertive educational process in the corporate environment, games represent a strategy that can enhance the results and optimize the adult learning process. Used with the goals of motivating participants and promoting teamwork and collaboration, critical thinking, and creativity, they have been gaining space in recent years<sup>5-8</sup>.

Among the possibilities of using games, the escape room draws attention by proposing collaborative activities linked to a climate of mystery and challenge. The participants are locked in a room for a predetermined amount of time, and the exit/release is conditioned to the solution of riddles and problem solving in teams. The strategy inspired by videogames has as its theoretical reference the foundations of constructivism and adult learning, in which it is stated that knowledge is built as individuals attribute meaning to experiences, positioning them as protagonists in the learning process<sup>5-9</sup>.

Although no reports of the use of this approach by Brazilian hospital institutions have been located, it is a strategy that has grown in popularity in the corporate, academic, and hospital environment around the world<sup>9,10</sup>.

Based on these findings, this study aimed to report the experience of using an escape room as an educational and awareness-raising strategy for PU prevention in the hospital setting.

## METHODS

This is an experience report on the realization of an escape game as a strategy for sensitization and education on the topic of PU prevention in November 2021, with professionals from the multiprofessional team of a large philanthropic hospital located in the metropolitan area of São Paulo (São Paulo state), Brazil.

The results of the activity were obtained through the organizers' observation of the intervention, as well as through the descriptive analysis of a semi-structured questionnaire applied online, in which the participants voluntarily gave their opinions about their satisfaction in the activity.

The idea of the escape game came from the group of specialists in enterostomal therapy with the care development team, due to the need to engage the care teams on the topics of PU prevention and lack of opportunities to improve the knowledge, skills, and attitudes of professionals, after a long period of restricted classroom activities due to the pandemic caused by the coronavirus. For its realization, some steps were followed, as shown in Fig. 1.

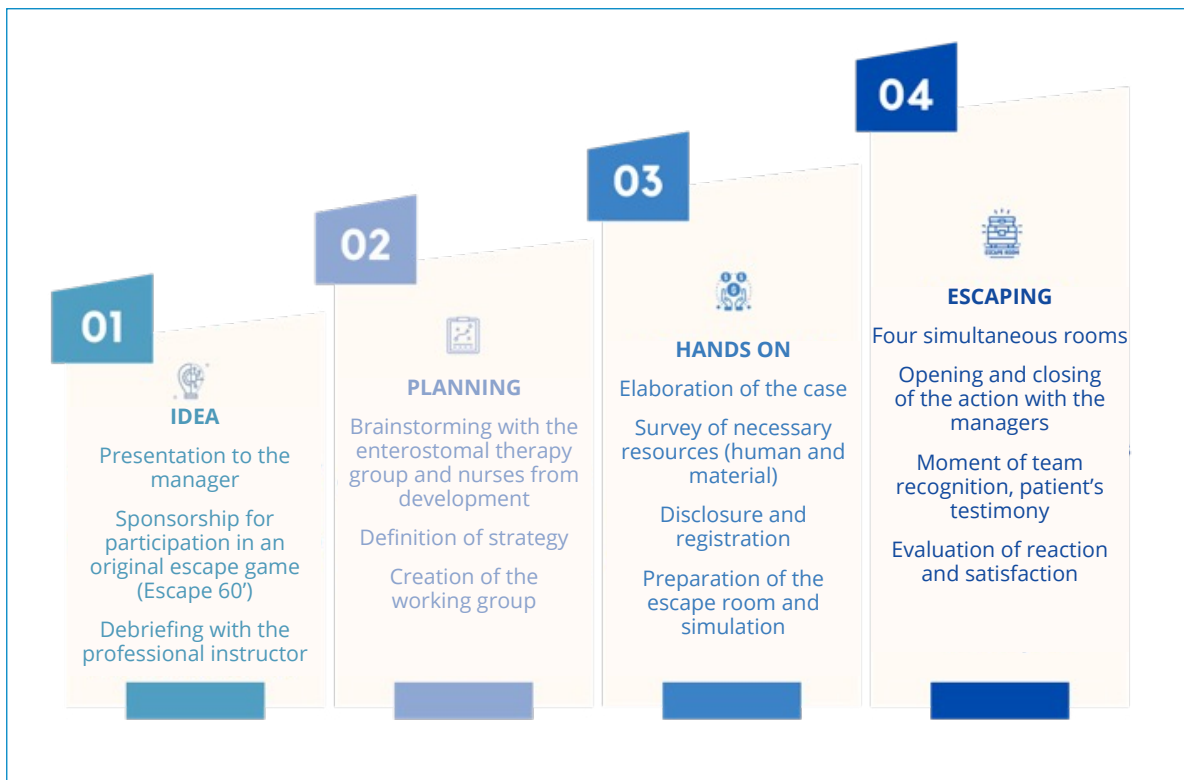


Figure 1. Step-by-step for elaboration of the pressure ulcer escape set. São Paulo (SP), Brazil, 2022.

Source: Elaborated by the authors.

## Ethical aspects

The educational intervention was developed with the sole purpose of promoting the awareness of the multiprofessional team regarding the topic of PU prevention, encouraging the engagement of the care team in the practice of such care. The team's participation in this activity was voluntary. The study was approved by the Research Ethics Committee of the institution, under opinion number 4.5.397.386.

## Action preparation

The presential activity followed a theoretical training program called Prevention in Focus, offered online, with four 1.5-hour meetings and a total workload of 6 hours, in which topics related to the pathophysiology, classification, differential diagnosis, and preventive interventions of PUs were addressed.

The escape room had a restriction on the number of participants, so all members of the multiprofessional PU prevention team, called *Skin Champions*, and the professionals who took the Prevention in Focus course were invited. Participation in the activity was voluntary.

Through the invitation (Fig. 2) sent via corporate email and institutional platform, those interested registered using a pre-structured electronic form. Finally, two different dates were available for choice, in order to favor the participation of employees on different shifts and schedules.



**Figure 2.** Invitation to enroll in the pressure injury escape game. São Paulo (SP), Brazil, 2022.

Source: Elaborated by the authors.

The meetings took place at the hospital's Teaching and Research Institute and were each 2 hours long. Four different spaces/rooms were prepared:

- Room A: General Auditorium. Seating up to 80 people, it housed the opening and closing moments of the event, photo opportunities, gift-giving, and recognition of the professionals;
- Room B: Escape room. Auditorium with division for two simulation scenarios, it housed two groups simultaneously, each with up to eight participants;
- Room C: Station on products for PU prevention standardized in the institution. Reinforcement of the indication and contraindication for use of preventive dressings, workshop on correct application and clarification of doubts;
- Room D: Station on assessment and classification of Pus (use of mannequins, wound prototypes and images for fast staging of PU guided by enterostomal therapists).

For the organization of each scenario, the social distancing recommended by the health organizations for the period was respected, besides the availability of alcohol gel dispensers, positioned at strategic points in the rooms. An ambiance was created in all the spaces, with decoration using posters and specific templates, in order to provide immersion in the theme.

The opening of the activity took place in room A by the enterostomal therapists. After a brief reflection on the theme, the objectives and dynamics of the activities were presented. The participants were identified by colors (sticky labels with three different colors, which were pasted on the badge of the participants) and divided into three subgroups, and each one was assigned to one of the rooms.

The action in each scenario lasted up to 15 minutes, and at the end of this period the groups moved on to the next scenario. The exchange of rooms was done with the help of the organization team, with route definition and signaling, so that the participants would not meet between one activity and another, thus preventing them from sharing what was being discussed in the escape room and keeping the suspenseful atmosphere.

Upon being directed to the escape room, the participants were welcomed in the lobby by the enterostomal therapist, who explained the rules of the game and provided guidance on the activity. The escape room was prepared as a simulation scenario, with the use of educational mannequins, boxes, clues, and puzzles. In addition, the soundtrack, lighting settings, and composition of the scenario with chains and padlocks contributed to the climate proposed for the activity.

The groups were composed of at least one nutritionist, one physiotherapist, one nurse, and one nursing technician, limited to eight participants per group.

Finally, the activity ended with the presentation of a video prepared for this meeting, containing the real testimony of a patient with coronavirus that had been hospitalized for more than 30 days in the intensive care unit and was in the process of rehabilitation, but that, due to the action of the whole team, was discharged from the hospital without having developed any PU.

## Playing Escape

The game began when the door opened to the participants, with the sounds of chains and creaking doors. An instructor (an enterostomal therapist from the institution), called nurse Chloe (dressed in a nurse's uniform and strategically made up with a touch of terrorism), would welcome the participants. At this moment, the participants became the new employees of the Memory Hospital (fictitious name given by the organizers), hired to work in a historical institution known worldwide for the quality of services provided and the rigorousness of nursing.

There, the participants were presented with a challenge: to ensure that no patients developed PUs. To do this, they would need to demonstrate mastery of the prevention protocol and work as a group. A stopwatch on the screen (using customized background for the activity, as shown in Fig. 3, and sound effects for ambiance), 10 minutes to collect all clues, find the numbers that would generate the code to open the padlock and guarantee the hiring of the team from that renowned hospital.



Figure 3: Timer and background of the game presentation. São Paulo (SP), Brazil, 2022.

Source: Elaborated by the authors.

Two simulation scenarios were positioned on opposite and distant sides of the room. The clues and riddles were positioned in different places in each of the scenarios. The challenge was to find the letters of the PU prevention acronym developed by the experts and used in the institution for about three years called *Previna* (prevent in Portuguese), in which each letter represents an intervention:

- P: proper positioning of devices;
- R: repositioning of patient and devices;
- E: eliminating (avoiding) humidity;
- V: verify the appropriate use of the support surface;
- I: inspection of the skin;
- N: nutrition adequacy;
- A: assessment of risk for developing PU.

The letters and numbers found were part of a simple equation, which solution generated three numbers, used as a password to open the padlock, which allowed them to leave the room. Throughout the activity, nurse Chloe gave hints, questioned the participants about the measures to be adopted, and told them how much time remained until the end of the activity.

The atmosphere of mystery, tension, and competitiveness was relieved at the end of the activity, with a moment of pictures with signs saying: *“I came and I loved it”*; *“we managed to escape”*; *“I escaped”*; *“it wasn’t this time”*; and *“I didn’t even want to leave.”*

## RESULTS

In a scenario in which the pathophysiology of the new coronavirus increased the chances of patients developing PU associated with the health crisis established around the world, the incidence of PU has called the attention of health institutions<sup>11</sup>. Such aspects emerged in need of constant updating and strengthening of PU preventive practices in the hospital about which this experience report refers.

From this perspective, the PU escape game took place as one of the awareness-raising actions of the annual PU prevention campaign. Eighty-two professionals participated in the activity, including physiotherapists, nursing technicians, nurses, and nutritionists. Most of the participants, 57 (69.5%), managed to escape from the room in the proposed time.

### Perception of the participants

As an institutional routine, the participants were asked to fill out the reaction evaluation at the end of the activity, using a proper instrument, and all who filled it out evaluated the event as excellent. Moreover, in an open field, some professionals made a point of registering their feedbacks about the activity, as the following statements: *“I loved the methodology, it should expand to the entire hospital”*; *“It was amazing, and I wish everyone had the opportunity to participate in this wonderful event”*; *“Very constructive and enriching, in a playful way, where it gives us a better understanding.”*

That said, the benefits of playful simulation-based activities for corporate and educational activities are many, including reduced stress, increased engagement, identification of participants’ strengths and opportunities. These activities are capable of generating motivation for learning, providing results, continuous feedback, and promoting self-awareness<sup>12</sup>.

Active and dynamic educational actions, such as escape rooms, require more effort for their implementation, as well as physical structure, human resources, and materials. However, for this group of professionals, who aim to promote themselves as agents of change, this methodology seemed to confer a greater sense of value, in addition to ratifying the fundamental role that each team member plays in PU prevention, aspects that we consider essential for the team’s engagement.

We emphasize that the escape room was only one of the strategies used on that day, being combined with other approaches that reinforced the relevance of the theme, as well as the participation of managers and leadership adherence, which attributed recognition and appreciation for all the effort and delivery that the teams offered, especially during dark times of pandemic.

At the end of the activity, the employees were moved when they watched the testimony and thanks of a patient who had been treated at the institution, reiterating the relevance of adopting good practices in health care and the positive impact that preventive interventions to reduce the risk of developing PU promote in the quality of life and rehabilitation of critically ill patients and those who have been hospitalized for a long time.



## Limitations of the study

In addition to the preparation and execution time, the escape game demands adequate infrastructure, as several simultaneous spaces, support professionals to conduct the activities and educational materials were required, which in some situations may incur costs and limit the ability to replicate this model of educational intervention in other settings. In addition, it was not possible to analyze the impact that the intervention promoted in the care practice or how much this knowledge/awareness will reflect in the attitudes taken towards PU prevention at the bedside.

## CONCLUSION

The escape rooms are highly versatile, and can be used to approach several themes related to health education. It is up to the organizers to plan the action in detail, according to the proposed objective, time, number of participants, infrastructure, as well as the human resources and materials available for this activity.

Although it requires significant effort to design and implement, in our experience, the escape room, along with the other campaign activities, provided a light and innovative experience for the participants. The combination of educational interventions with different approaches proved to be interesting both from a learning and engagement point of view, contributing to the awareness of professionals about the relevance of applying evidence-based concepts and recommendations in the implementation of PU prevention practices.

## AUTHORS' CONTRIBUTION

**Conception and design:** Ramalho AO and Camargo JD; **Data collection, analysis and interpretation:** Ramalho AO and Camargo JD; **Article writing:** Ramalho AO and Camargo JD; Mazocoli E and Barbosa CMR; **Critical revision:** Ramalho AO; **Final approval:** Prado NRO and Marin A.

## AVAILABILITY OF RESEARCH DATA

All data were generated or analyzed in the present study.

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