

(P.2) Hello everyone. We are group four from Taipei Medical University, Soochow University, and Tatung University. Our project is **“How can a board game effectively train medical students’ aseptic techniques and minimally invasive surgical skills in operating rooms.”**

(P.3) **Lack of experience** poses a significant risk in minimally invasive surgery.

(P.4) To address this, we use triple diamond model to analyze , and choose DURING OPERATION as our main focus due to its high cost, complexity, and importance in clinical. We then designed a board game “Operating Room Crisis,” aiming to help medical students practice aseptic techniques, minimally invasive surgery procedures, and clinical decision-making abilities.

(P.5) Our board game consists of two main stages. First, the Preoperative Aseptic Challenge. Second, the Minimally Invasive surgery: laparoscopic cholecystectomy, a surgery that removes the gallbladder. During surgery, unexpected emergencies may occur and students must make the right decisions or face game-over.

(P.6) THis simulates real surgical pressure and teamwork without any risk to patients.

(P.7) Next, let’s watch our overview video.

(P.8-9)These are our game cards and game area.

(P.10) At the beginning of the video, we would use the reusable plastic model for test.

(P.11) We also built in an **assessment** system. Players are evaluated on their medical knowledge, operational proficiency, and teamwork skills. This allows instructors to give personalized feedback and measure learning outcomes.

(P.12) We expect game-based learning may effectively enhance both surgical skills and medical knowledge as the table shows.

(P.13) Compared to traditional surgical training, our game is flexible, low-cost, and easy to adapt.

(P.14) Looking ahead, we hope to expand the game to cover other procedures such as laparoscopic appendectomy. In conclusion, **Operating Room Crisis** is more than just a game. It’s an innovative educational tool that combines knowledge, practice, and teamwork—preparing medical students for the challenges of real surgery.

(P.16) Thank you for your attention!