

INTRODUCTION

650,000

Cardiac arrests
each year

38,000

Temporary
pacemaker
implanted annually

>80%

Nurses feel unprepared
handling pacemaker
post-orientation

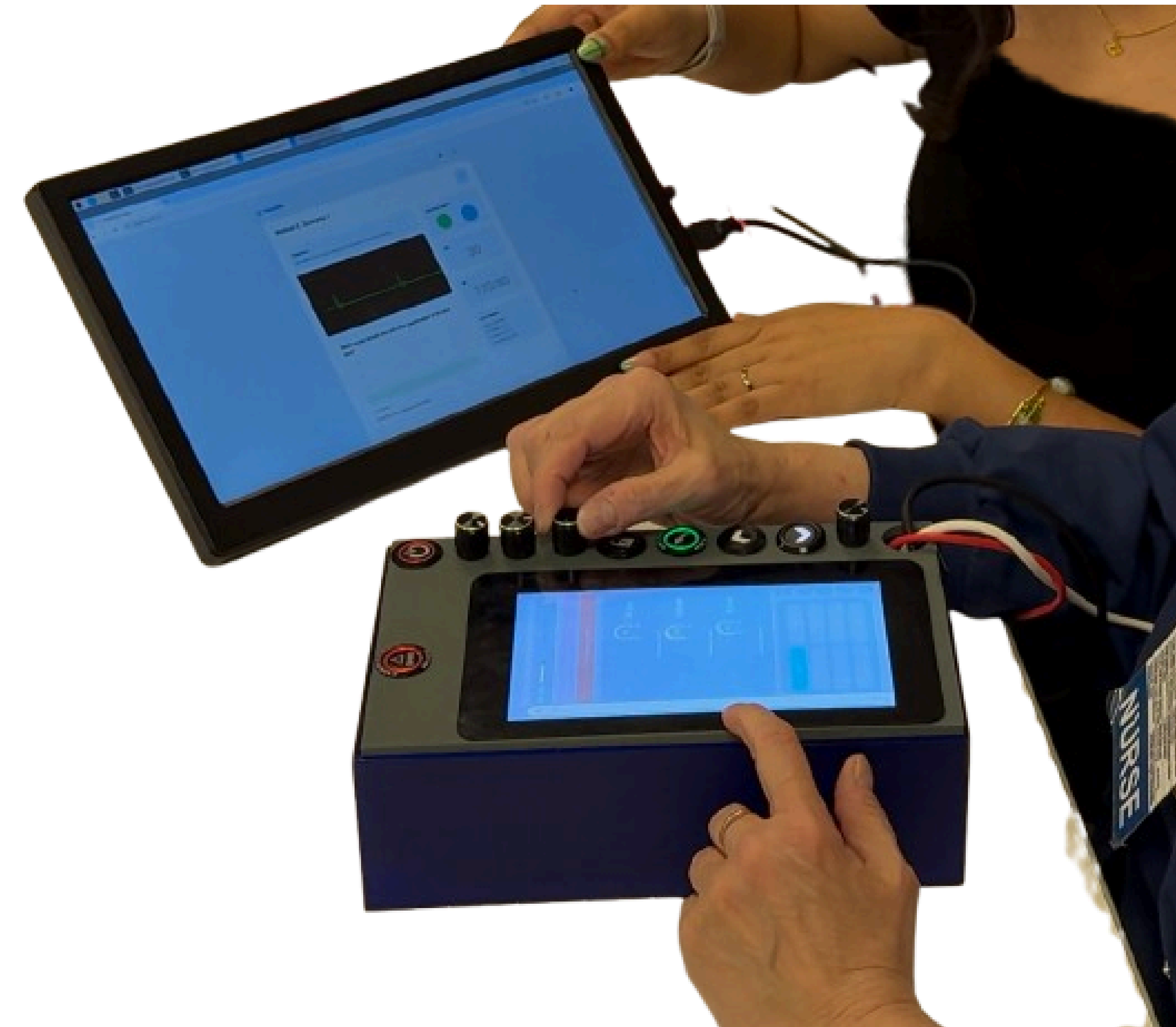
NEED CRITERIA

- Hands-on pacemaker simulation
- Realistic pacemaker interactions
- Assesses nurse competency
- Provides post-evaluation feedback
- Simulates various cardiac scenarios

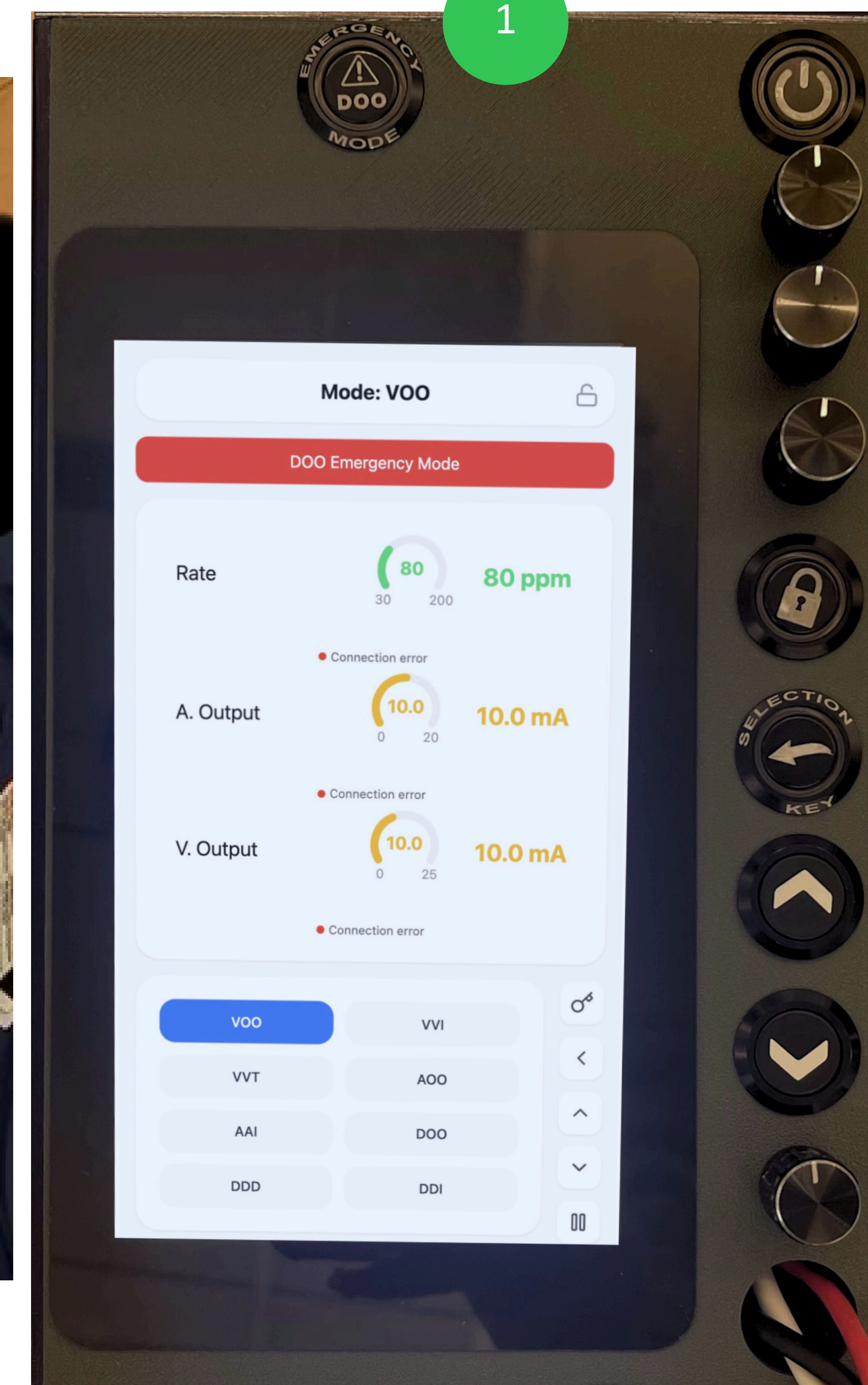
Nursing managers need a way to simulate external pacemaker use so that they can train and evaluate nurses to proficiently handle patient care scenarios.

SOLUTION

HARDWARE



Isometric View of Pacemaker Device



Top-Facing View of Pacemaker Device

Interactive Buttons

1. DDO Emergency
2. Power On/Off
3. Lock Dials/Mode
4. Select
5. Up
6. Down

Functional Dials

- A. Rate Control
- B. Atrial Output
- C. Ventricular Output
- D. Sensitivity
 - Atrial or Ventricular depending on mode

Hardware Usage Notes

1. Supports standard pacing modes: VVI, DDD, DDO
2. Hardware inputs instantly reflect in software (under 1 second)
3. Simulates 71% of key external pacemaker functions

SOFTWARE PROCESS FLOW



- Simulates 71% of key external pacemaker functions
- Replicates realistic device size for hands-on familiarity (2.5*5*1 inch)
- Includes 4 functional dials and 7 interactive buttons
- Supports standard pacing modes: VVI, DDD, DDO
- Enables realistic calibration and adjustment practice
- Hardware inputs instantly reflect in software (under 1 second)
- Designed for intuitive use by nurses with limited experience
- Durable build for repeated training sessions