



**RIGEL MEDICAL**  
GMC-INSTRUMENTS GROUP

## What is patient simulation?

The primary vital signs are clinical measurements that are displayed and recorded across the biomedical field; predominantly on patient monitors. Patient simulation provides accurate mimicking of physiological vital signs to calibrate and test these devices, ensuring patient safety. There are five crucial vital signs that are regularly simulated:

- Blood pressure
- Oxygen saturation
- Heart rhythm
- Respiratory rate
- Temperature

Patient simulation is a fundamental part of service tests for patient monitors, which are required at regular service intervals. Service testing consists of a wide range of checks for each function or parameter.

The first tests are usually visual and electrical safety tests. This is followed by performance testing and includes:

- Integrity testing (Leak checks, over pressure testing)
- Performance accuracy (Patient simulation)
- Printer checks (Speed, amplitude)
- Alarm checks (Pitch, frequency, volume)
- Physiological simulations (Patient simulation)

If you require more help, please contact us at

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