

# Pre-Operative PSG assessment of cardiac surgery inpatients

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## Challenge/Problem:

Undiagnosed Sleep Disordered Breathing complicates surgical procedures and can lead to serious post-op complications that compromise quality of care and increase health care costs. A convenient and cost effective way to conduct sleep studies on the ward preoperatively does not exist. Currently, patients are discharged to a sleep lab for evaluation.

## Current/Near Term Products:

The current product is a wearable telemetry-based 14 channel PSG system that is easy to deploy in the hospital room quickly. Data can be transmitted from anywhere in the hospital room to the nurse's station or to a distant sleep lab.

## Approach:

Conduct sleep studies in the hospital room before surgeries and provide the results in a timely manner to the surgical crew to prepare their perioperative care.

## Future Plans:

Extend the technology to real time monitoring from the home (patients do not have to be in the hospital for this test).  
Extend the technology to post-op care, which should help in faster initiation of CPAP on the ward.

## Business Name and Point of Contact:

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## Collaboration/Partnering Opportunities:

We are interested in partnering with companies who distribute to hospitals and whose future plans include promoting new patient monitors for the assessment of breathing instability on the ward.

Keywords: sleep disorders, telemetry, monitoring, hospital room, complications