



## MedStorm PainSensor to tailor the need of analgesia and sedatives

**MedStorm offers a unique solution to improve the quality of pain management.**

The real-time PainSensor is based on skin conductance changes to accurately and objectively detect pain. The PainSensor integrates with existing monitoring systems (Philips, Masimo, Mindray,...)

**MedStorm's PainSensor tailors the need of analgesia and hypnotics, reduce side-effects of over- and undersedation, and reduce the lengths of stay and costs in the hospitals.**



In intensive care units  
(ICU)



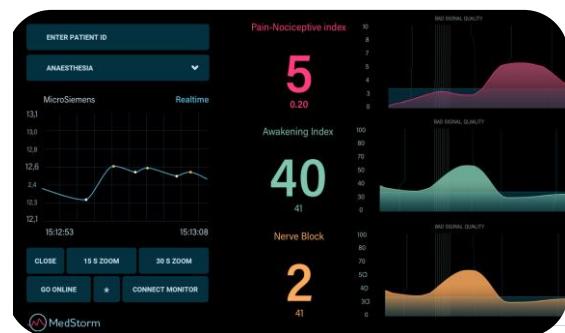
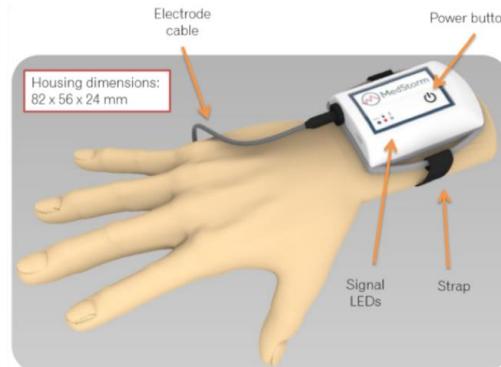
Post-operative



In operation room / Anaesthesia  
and regional nerve block



In neonatal intensive care units  
(NICU) and paediatrics



**MedStorm's PainSensor has indices to assess:**



Pain Index



Awakening Index



Nerveblock Index

**MedStorm's PainSensor addresses the challenges of pain in the hospitals:**



Delirium



Hemodynamic instability



Agitation and anxiety



Gut problems



Chronic postoperative pain



Opioid epidemic



Inability to verbally communicate pain



Suffering and social ills during and after hospital stay



Low return on investment (ROI) – staff time and longer stay

Worldwide  
**+1.5 billion**  
Individuals lives affected  
by pain

Pain is the focus in  
**50%**  
of doctors visits

US have reached  
**600 billion**  
USD in pain associated  
healthcare costs anually

Pain is present in  
**50%**  
of ICU patients<sub>1</sub>

Severe pain is  
experienced by  
**63%**  
of surgical patients<sub>2</sub>

Every  
**7th**  
Minute a US patient is  
dying due to opioid use

*Pain is recognized as the fifth vital sign. There is an unmet, mandatory need for consistent and quantifiable pain assessment.*

## Feedback from first users:



Johan Ræder, Chief consultant and Professor,  
Dept of Anaesthesiology, Oslo University  
hospital:

*“The PainMonitor is a unique and very promising tool for evaluation and objective (quantitative) measurement of nociceptive stimulation, which is reported as pain in the awake patient”*

## About Us:

MedStorm Innovation is a medical technology company pioneering in pain assessment based on skin conductance. Based on 20 years of medical research, MedStorm's technology has more than 70 supportive validation studies and 3 theses.

## Background

All the studies show that the Skin Conductance Algesimeter Index increases during pain and nociceptive stimuli, and may predict painful events more sensitively and specifically than other available tools in all age groups. Moreover, the index decreases when analgesia is given. The index reacts within seconds, has low variation between and within individuals, and has higher accuracy to assess pain responses as compared to current methods. The PainSensor assesses skin sympathetic nerve activity where acetylcholine works on muscarinic receptors, our technology is therefore not influenced by respiratory and hemodynamic instability.



Are you interested in more information, a demo, or our offers? Do not hesitate to contact us!



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