

# Ascom silent medical alarm solution for acute care

It's all about better outcomes





The Ascom silent medical alarm solution eliminates audible bedside alarms from selected medical devices (infusion pumps, ventilators etc.), while helping to ensure the alarm notifications are distributed to designated recipients via smart devices.

Silent medical alarm notifications can contribute to a quieter healing environment this could have a positive impact on patients who are at risk of delirum<sup>2</sup>. This also can be beneficial to clinicians, as they only receive targeted alerts for the patients under their care, straight from the patients' bedside. The World Health Organisation recommends that noise levels should not be higher than 35 dB at night and 40 dB during the day, but a UK study found levels can far exceed these levels<sup>1</sup>.

# Key benefits

The solution eliminates the audible alerts generated at patients' bedsides by medical devices such as infusion pumps. The alarm notifications are distributed to designated recipients, and appear as audio and visual alerts on handsets, PC monitors or wall-mounted dashboards. When using a handset such as the Ascom Myco 3 smartphone, clinicians can also use the device to initiate actions, coordinate with colleagues and share near-real-time clinical data.

- Patients benefit from a quieter healing environment - while clinicians can be confident they receive all appropriate alarm notifications, even while doors are closed

- Fewer audible alerts can help reduce the potential for cognitive overload among frontline clinicians<sup>3</sup>
- Reliable alarm distribution system that sends notifications to the correct clinician via a distributed alarm system (DAS)
- A silent medical alarm regime can contribute to improved patient outcomes, including but not limited to shorter stays in ICUs/HDUs<sup>4</sup>
- A calmer working environment, combined with the ability to access and share near-real-time data, can optimise clinical workflows

# Always on your terms

The Ascom silent medical alarms solution can be configurable for a specific hospital site. Whatever the needs of your hospital, we ensure the solution is interoperable with your existing clinical systems and infrastructure.

# Solution components

An Ascom silent medical alarm solution includes modules from our software suite, as well as enterprise-grade handsets that include the Android Enterprise Recommended\* Myco smartphone.

# Workflow example - single-family room NICU





# Your challenges

The Ascom silent medical alarm solution solves key challenges across the hospital, such as how to reduce alarm-related noise while at the same time ensuring alarm notifications are transmitted to, and acted upon, by the appropriate recipients at the right time.

- Clinicians are naturally concerned about missing an alarm notification. With the Ascom silent medical alarm solution, all medical device-generated alerts are transmitted to designated personnel for the appropriate response and processing
- Further peace of mind is provided by an automated reversion to audible alarms at the bedside, if a fault appears in the Distributed Alarm System
- The ability to share context-rich, near-real-time clinical data with colleagues via handsets, PC monitors and dashboards can help optimise workflows for staff

# Key features

- Fully open and vendor-neutral, making it interoperable with most medical devices and healthcare communication systems on the market
- A complete end-to-end solution, which includes everything from initial assessment with Ascom Clinical Consultants to customised Solution Lifecycle Plans (SLP) and training
- Easily scalable, from specialist clinics to multi-site hospitals
- Alarm system supervises distribution of alarm notification from alarm source through to the clinician. Detects and delivers notification of failure in the event of a faulty device
- Connects to central technology surveillance systems for quicker notification in the event of device failure

\*Android is a registered trademark of Google PLC. Microsoft Windows® is a registered trademark of Microsoft Corporation

1 National Library of Medicine (2013) An investigation of sound levels on intensive care units with reference to the WHO guidelines. [online] Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4056361/#:~:text=Patients%20 in%20intensive%20care%20units%20%28ICUs%29%20suffer%20from,dB%20 with%20a%20maximum%20of%2040%20dB%20overnight

2 Xie H, Kang J, Mills GH. "Clinical Review: The Impact of Noise on Patients' sleep and the Effectiveness of Noise Reduction Strategies in Intensive Care Units". Crit Care. 2009;13(2):208. doi: 10.1186/cc7154. Epub 2009 Mar 9.

3 Puolitaival A, Savola M, Tuomainen P, Asseburg C, Lundström T, Soini E. "Advantages in Management and Remote Monitoring of Intravenous Therapy: Exploratory Survey and Economic Evaluation of Gravity-Based Infusions in Finland" [published online ahead of print, 2022 Mar 14]. Adv Ther. 2022;1-13. doi: 10.1007/s12325-022-02093-6

4 Pradhan, A., Reynolds, E., Sweyer, B., & J.Schlesinger, J. "SLAAP: Silencing Loud Alarms to Attenuate PTSD: Frequency- Selective Silencing Device for Digital Filtering of Alarm Sounds to Enhance ICU Patient Recovery. In M. B. Alonso, & E. Ozcan (Eds.), Proceedings of the Conference on Design and Semantics of Form and Movement - Sense and Sensitivity, DeSForM 2017. IntechOpen. https://doi.org/10.5772/intechopen.71112



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## About Ascom

Ascom is a global solutions provider focused on healthcare ICT and mobile workflow solutions. The vision of Ascom is to close digital information gaps allowing for the best possible decisions – anytime and anywhere. Ascom's mission is to provide mission-critical, near-real-time solutions for highly mobile, ad hoc, and time-sensitive environments. Ascom uses its unique product and solutions portfolio and software architecture capabilities to devise integration and mobilisation solutions that provide truly smooth, complete, and efficient workflows for healthcare as well as for industry and retail sectors.

Ascom is headquartered in Baar (Switzerland), has operating businesses in 18 countries and employs around 1,300 people worldwide. Ascom registered shares (ASCN) are listed on the SIX Swiss Exchange in Zurich.