



# CallMeSmart Clinical Communication

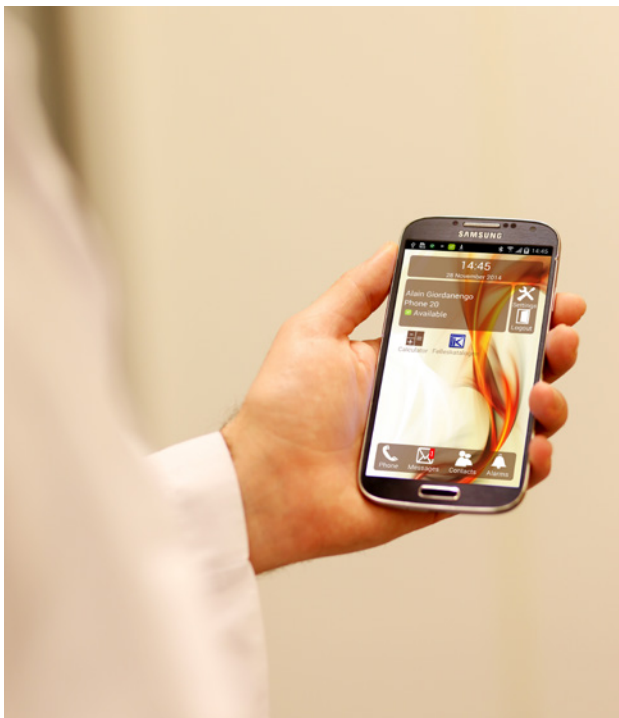
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CallMeSmart (CMS) is an intelligent smartphone communication system for high data security and operationally complex working environments such as hospitals and clinics.

The system was designed to tackle the challenges faced by healthcare practitioners and hospital ICT providers, in dealing with data security and the growing time pressure demands and expectations of real-time data access, since the introduction of smart technology and smartphones.

CMS is a communication solution built upon an understanding of the actual clinical needs with a



CallMeSmart. Photo: Jarl-Stian Olsen, Norwegian Centre for E-healthresearch.

*Secure unified communications platform with flexibility and integration potential.*

- Complete Unified Communications platform
- Closed loop VLAN network
- All data and user profiles stored on a CMS server
- Phones connect only through the CMS server and not external servers such as Google
- Phones store no data and the user profile is removed when leaving the CMS Wi-Fi network or violating security settings
- Integration with PBX for telecoms and pagers

contextual rule framework that enhances reachability and decreases the number of interruptions experienced by clinicians. Through CMS, the process of getting the right message/call to the right person at the right time is automated, improving communications in complex operational environments.

CMS is built on top of an android based smartphone, a proprietary unified communications platform, providing secure voice over Wi-Fi communications and an intelligent rules-based communications manager, controlling communications flow behind the scenes.

The system can be installed on any android based device, meaning it can be used on both smartphones and tablets.

The system is designed as a standalone end-to-end communications system with a secure closed loop network. Equally, it integrates seamlessly with and operates alongside existing hospital infrastructure such as fixed-line telecoms, pagers and alarm management systems.



## Main features

### Android based smartphone device

- User friendly and intuitive smartphone interface with a platform for native applications such as medical calculator and encyclopaedia at your fingertips.
- Devices is only allowed to communicate through the CMS server and not external servers such as Google.
- User profiles and all data are stored in the server and accessed when logging in at the start of the shift.
- Users are logged out when leaving the CMS network or violating any of the security settings, clearing the phone of sensitive information. Secure calls and messaging between CallMeSmart devices, allowing for transfer of sensitive patient data securely.

### Availability management

- Phonebook with visible availability status for all employees, or filtered by department.
- Automated availability status linked to task allocation and user-based manual override

### Feedback system and communications log

- Feedback on status provided to the communications initiator is provided automatically by the system.
- All calls, messages, pages and alarm handlings are logged in the CallMeSmart server and can be analysed through the Administration Portal.

### Intelligent communications manager

CMS has a built in intelligent, "context aware", communications manager in the back end, routing all communications, in real-time to the most appropriate person, based on availability and suitability.

By using context data about end users, such as their Job title, Roles and Responsibilities, and Department,

the system is able to decide who is the most suitable person to receive a particular communications event, when the intended user is not available.

The system cross-references details of the communication event, such as location, caller ID and urgency, with the status and context details of the intended recipient, plus, the configuration settings of the hospital or department, to ensure the right message/call reaches the right person at the right time. The CMS solution prevents unnecessary alarming, calls and messaging, to avoid interruption of important work and contact with patients.

- Redirecting calls to an equivalent level of expertise if the colleague is busy
- Silent messaging to busy colleagues
- Automated busy state in a certain time period after acknowledged alarm
- Manual busy state that is easy to set when required by the situation
- The expiration time of the busy state can be personalized
- Important calls can be forced through, based on the judgment of the calling par
- Context data is easily uploaded and rules configured in the Administration Portal
- Customization for each organizational structure at department and team level

### Administration Portal

The system is easily configurable to any clinical setup, of any size, and easily managed by the hospital administration through the Administration Portal, which is accessible through a web browser of machines with access to the CMS network.

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