



NEC iCall:

Smart Healthcare Communications

Why telephony and
nurse call should
be one system



Struggle For Life

Mixing different technologies

Healthcare communications is focused on the patient or resident and the nursing staff. In all healthcare environments, numerous technologies are mixed into one system, or at least, connected together.

In most cases, different technologies are supplied by different suppliers. Sometimes connected to each other but mostly not integrated. Everybody is depending on different suppliers for one integrated solution. So who's taking responsibility for the performance of all these systems tied together?

The challenge is to find a real one-stop-solution for the complete care communication system, including nurse call, notification and telephony.

How quickly do you know the reason of a room call?

Nursing staff are focused on giving care to the patient or resident. Unfortunately, the average time spent giving care is only around 22% of their working time. After a nurse call is received, the staff needs to walk to the room in order to understand why the nurse call was made. This is time consuming for the staff, and frustrating for the patient since the average time of nurse's response is above expectations. Furthermore, there's a struggle out there to find good people for the job.

Infrastructural changes

The renewal of a nurse call system in an existing environment frequently demands the replacement of all cable infrastructure, not only in common areas, but also inside the rooms which are occupied. Heavy infrastructural adaptations disturb residents in their living areas or patients in their recovery time. Furthermore, any care facility in a retrofit process will perform the transition step by step, while complete nurse call systems need to be replaced in one time. The true cost of a retrofit project will be at least double of the new nurse call system.

What if you could immediately know the reason of the room call?

The Challenges In Healthcare



Make sure patient and nurse communication is guaranteed

Whenever there's a resident or patient that makes a call, the nurse staff needs to be alerted as soon as possible. It is crucial that the complete communication chain between the patients or residents and the nurse staff is under control.

No one wants to rely on different suppliers for one solution. Prevent a back-and-forth game between suppliers about who's taking responsibility if any technical problems arise.



Make sure your customers are satisfied

Any customer in healthcare, whether it's a resident in senior care environment or a patient in a hospital, wants to stay in a nice environment with the least disturbances and the best comfort.

But most of all, they need to get attention from the nurse staff. Any improvement of staff performance will increase the attention for customers. Satisfied customers provide the best image for healthcare facilities.



Make sure technology and infrastructure costs are under control

Efficiency improvement very often requires investment in new technology. Every implementation of new technology, in new or existing buildings, requires investments in infrastructure like data network cabling or new signalling cabling for nurse call. The cost of infrastructure often beats the cost of the technology investment.



Make sure personnel costs are under control

Hidden costs are the true enemy of any healthcare facility; nurse staff losing time at non-care tasks, no adequate personnel available at the required moment, or too much staff available for the ongoing requirements, the right balance in personnel occupation – from staff to surgeons – is a real challenge.

Time for a new approach: **One Stop Shop**



One integrated solution... from A to Z

NEC's iCall provides a complete healthcare communication solution for the patients, residents and nurses. Integrating nurse call, nurse notification and telephony applications offer a one-stop-solution for every healthcare facility in Acute Care and Care, Long-Term Care and Assisted Living.

The infrastructure: iCall is designed in open standards

The nurse iCall call is designed in open standards according to the German VDE 834.1 and 834.2 standards, offering very flexible integration capabilities over IP. So any other application which can benefit from information out of the nurse call, can be integrated. Furthermore, iCall is able to interact with applications coming from other systems, like fire alarm systems, localisation systems and more.

The infrastructure: iCall offers full-IP-to-the-room nurse call

Whenever Ethernet intelligence is available inside the room, the complete nurse call system can be built using this standard technology. Huge cost savings on wiring and Ethernet components are the results.

The infrastructure: iCall can re-use existing wiring, with any topology and cable section

In retrofit situations with standardised nurse call needs, super intelligent call units can be connected over any 4-wire cable in any topology: bus-, star-, or a combination of both. In cases, iCall can be built on existing wiring from your old nurse call system.

The security: iCall is based on a distributed architecture

Because every intelligence moved to the IP-units, which can serve one or more rooms, there is no single point of failure, as in all other vendor's systems. For high risk environments, every iCall IP-unit can register to two notification gateways. So whenever one gateway should go down, the other can take over seamlessly in order to guarantee the required notification.

The call: iCall offers a broad range of call units, wired or wireless

From basic call points, over intelligent supervised LocalBus call units to the most extended room unit with touch screen and task registration, iCall combines any type of wired and wireless call units in one system for your specific needs. Furthermore, all wireless pendants with or without localisation and/or wanderer detection are fully integrated in one system.

The notification: Alert any nurse, anywhere

Speed of reaction time is very important. iCall offers a broad range of nurse desk units using IP-touch units, touch-screen PC's or corridor displays. Through the messaging solution notification server, any nurse can be alerted anywhere on any device, according to the time and day.



The notification: Extend the nurse's desk

Nurses are moving around the premises constantly. Since the speed of reaction time after a nurse call is the highest priority, NEC equips the nursing staff with wireless DECT handsets offering full capability of call overview:

- Different alert tones according to the type of nurse call or other alarm call
- Extended display information with room call details
- Different notification rules depending on time and type of day
- Emergency button to alert staff colleagues immediately for assistance
- Combination DECT/WiFi in one handset available for extended feature capabilities

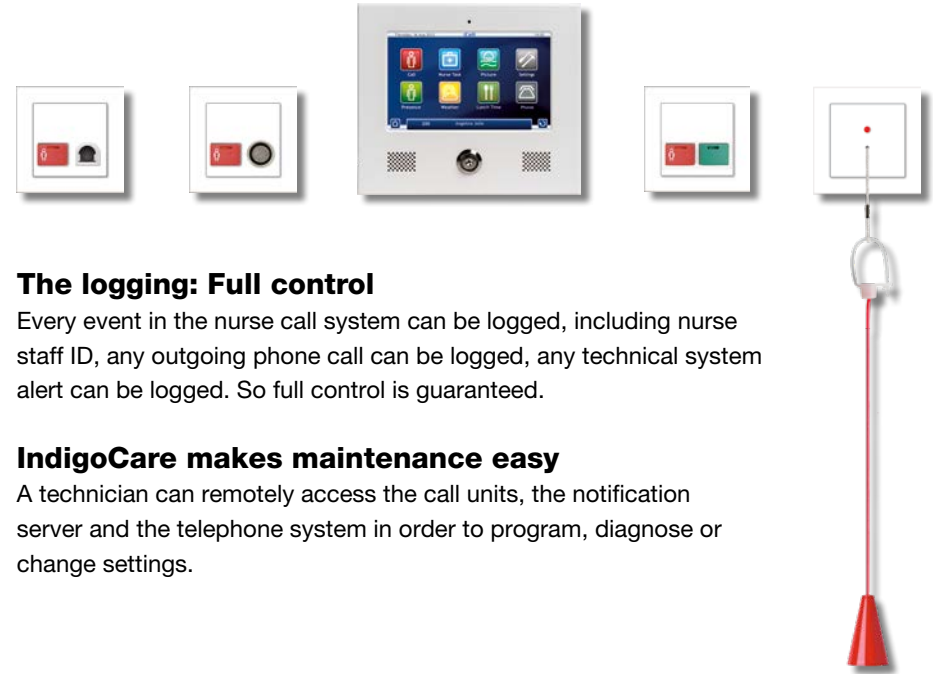
The reaction: Nurse's response in one touch

In combination with an NEC VoIP digital handset in patient- or resident rooms, nurses can immediately know the reason of the room call, using only one touch command on their DECT.

The patient's handset: All healthcare features come standard

All NEC handsets are ideal for healthcare in-room environments over a VoIP or digital connection. In a retrofit environment, a single pair cabling offers the full functionality including handsfree-answerback intercom after a room nurse call:

- VoIP or digital
- Very clear display
- Keypad with enough space between keys for use by elderly persons
- Handsfree answerback after room nurse call without any command by the patient or resident
- Page to multiple stations to make announcements
- Background music with priority for intercom and page calls



The logging: Full control

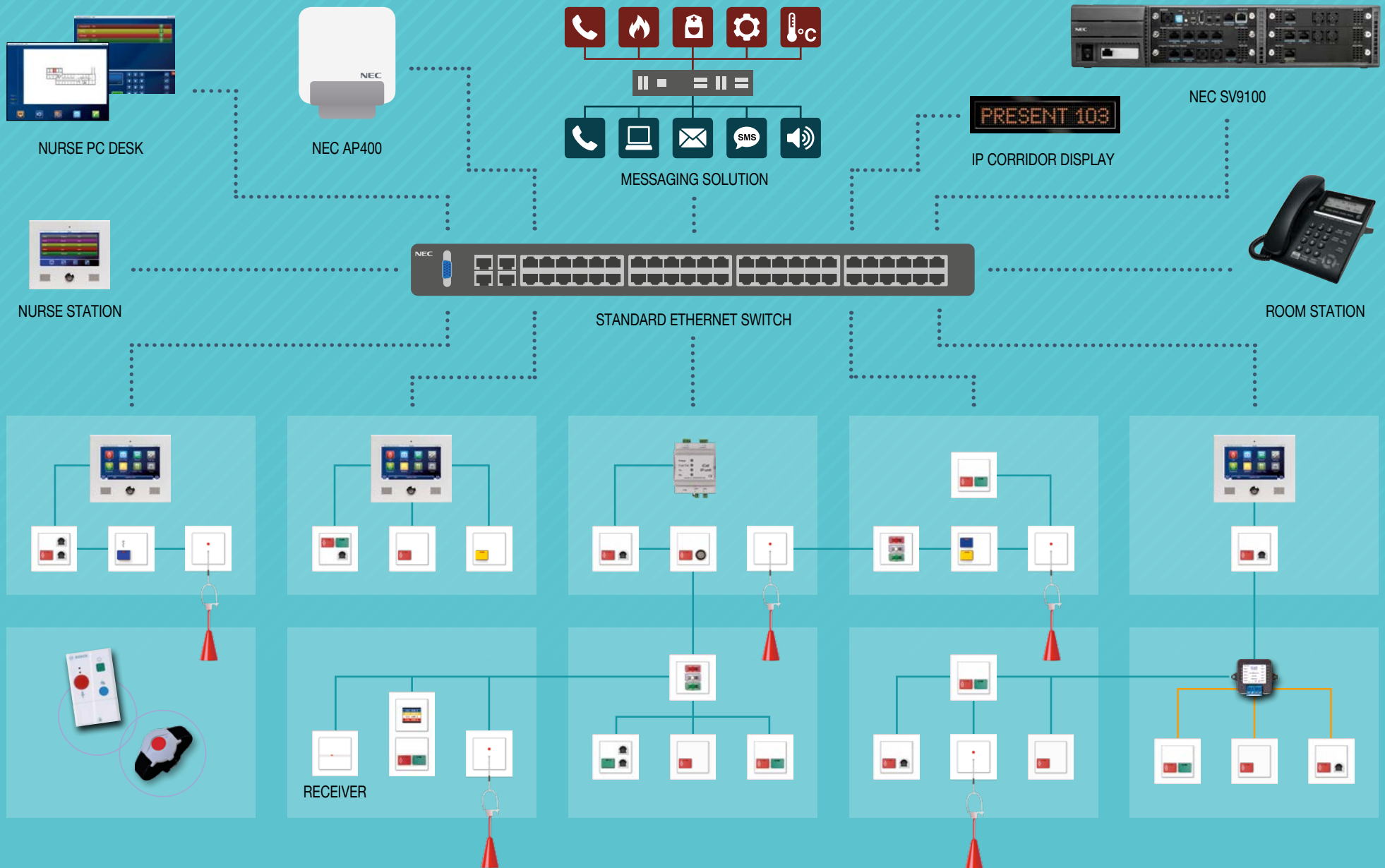
Every event in the nurse call system can be logged, including nurse staff ID, any outgoing phone call can be logged, any technical system alert can be logged. So full control is guaranteed.


IndigoCare makes maintenance easy

A technician can remotely access the call units, the notification server and the telephone system in order to program, diagnose or change settings.



Suits Every Environment and Combination





What if you could immediately know the reason of the room call?

NEC iCall:

Smart Healthcare Communications

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NEC Corporation

www.nec.com

EMEA (Europe, Middle East, Africa)

NEC Enterprise Solutions

www.nec-enterprise.com

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