

BPM BASED MEDICAL CALL-OUT SYSTEMS

CASE STUDY MEDICAL SERVICE COMPANY FOCUS GHENT

Facts

- Need for Financial Efficiency
- No Central Control Available
- Need for Compliance
- Severe Time Constraints
- Budgets based on Call-outs
- Need for Audit Trails (to receive subsidies)

Background

Call-out systems used in the medical industry have historically centered around traditional communication systems, ranging from public and private telephony systems, through trunked networked systems, pagers, cell phones, and most recently to more digital based systems.

All these systems have one thing in common: the key focus is on the communication part, which is understandable as this is by far their most important function.

One of the biggest disadvantages of such systems, though, is that at the very best they provide only limited management functions. So access to overviews of previous and current interventions, central measurability, central intervention control, automated escalation, is rarely available.

Today, the medical sector is under increased financial pressure. It is being asked to stretch existing resources in order to treat more and more patients. At the same time, it has to demonstrate ever-improving levels of service. Against this background, the need for call-out systems that provide more measurability, objective audit trails and a central overview is rapidly increasing.

BPM based call-out systems

Business Process Management (BPM) is one solution to that need. It is now possible to install the communication layer on top of a business process management layer. This means that every communication, whatever it's type, is logged and is fundamentally part of an agreed process. Such a process could be the call-out from a patient for an emergency intervention or a request for a routine intervention.

Today, there is little measurable data available from the systems on why, when, by whom, or for what reason a call was placed and subsequently actioned. Unless the users have recorded this information in another off-line file, in parallel with the primary patient care activity, no evidence of such interventions can ever be traced.

With BPM based call-out systems, all information that is captured during and after an intervention is immediately stored in a central BPM repository – valuable information such as time, responsibilities, intervention status, calling person and called person, identification details and so on is held automatically for instant retrieval. All conceivable types of information can be stored in a properly configured BPM system.

BPM based call-out systems are typically accessed on PDA (hand-held) types of devices by the people carrying out the intervention. This allows people to perform data and voice related manipulations simultaneously, and provide a very functional user interface during the intervention.

The communication between the people performing the intervention and the BPM based call system is usually based on an IP layer and more specifically a wireless IP layer, as this is the most flexible solution for most situations (involving multiple parties in multiple off site locations).

“ORMcenter’s automated Business Process Management (BPM) functions not only reduce the costs of operations, they reduce errors, and provide a transparency of process, which aids customer confidence.”

Butler Group, December 2003

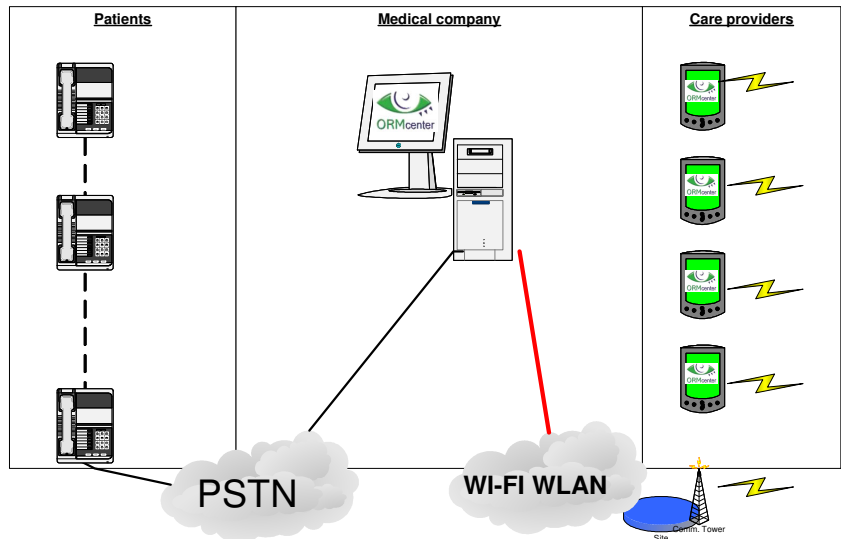
Project Description

ORMvision has installed a BPM based call-out system for Focus, a medical service company located in Ghent, Belgium. It provides local services to a community of people requiring follow up and support, housed in different buildings on the same campus. Budgeting input was previously taken from random samples of intervention call-outs, which did not provide the correct level of accuracy.

Based on its flagship BPM technology, ORMcenter, an intervention management call-out system was installed providing service to a medico-social environment where the number of interventions performed and the types of interventions are the key inputs into the budget of the company. In some countries or regions it is even mandatory to have this kind of evidence trail in order to receive subsidies from the government.

ORMcenter creates an audit trail, capturing all essential data about interventions, which means that the input into the budget will now be accurate and available on-line. This also means that an overview is available at all times of which types of interventions are active, resulting in better management and distribution of the available resources.

The call-out system links customers (using public telephone services) to medical personnel with PDA access over a wireless meshed network provided by ORMvision's partner Hopling Technologies covering 3 buildings with 7 floors each.



Three types of intervention processes are identified: Emergency Call, Comfort Call, and Night call.

Each of these intervention process types uses an "intervention object" that describes which service has been requested. When a customer requests an intervention using the public telephony network (PSTN), this call is recognized by an IVR (Intelligent Voice Response) card in the ORMcenter server. The system then initiates an intervention process, automatically calling out the right care provider using the wireless equipment from Hopling Technologies and providing them with access to all of the information they need through their PDAs. The same system can be used off-campus through GPRS or 3G service connections.

Benefits to Focus Ghent

Improved customer satisfaction	Increased operational efficiency	Lower total cost of Ownership
<ul style="list-style-type: none"> • Enables delivery and tracking of customer commitments • Improves visibility of service quality • Provides accurate budget information. 	<ul style="list-style-type: none"> • Centralises operations for intervention call-out management, significantly reducing the number of resources used • Leverages ROI-based Opex model 	<ul style="list-style-type: none"> • Eliminates expensive IT operational costs • Enables service-driven use of application services • Yields ROI within 6 months • "Lightens" Integration through loose coupling techniques based on XML, SOAP, and Web services

“With this innovative means of addressing a long-standing issue in the medical sector, ORMvision has demonstrated once again its unique ability to deliver solutions to real problems.” Phil Church, CEO, ORMvision.