





# Integrated platform allows hospital to provide free communications services to patients.

Spital Limmattal in Schlieren (Zurich Canton) secures the extended basic care of over 77,000 patients annually in the Swiss regions of Limmattal and Furttal. It offers high-end medical services and is positioning itself in the market as one of Switzerland's most patient-friendly hospitals.

In recent years, the hospital has made massive investments in new systems and in a new building with state-of-the-art medical facilities. To guarantee optimal workflows for employees and the best possible care of patients, the hospital wanted to install a platform for internal and external staff communications and an information and entertainment system for patients in the new building.

"To date we had used different channels for our internal and external communications," explains Roman Plattner, Director ICT at Spital Limmattal. "Pagers, telephones, e-mail and other media were deployed in parallel but were often not compatible or efficient. In addition, our provision to patients of communication media such as telephone, television, radio and internet was no longer up to date. The establishment of an integrated, modern communications platform was one of our key projects when it came to the technical fit-out of the new hospital building."

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The tender for the system included the following specifications:

- Complete integration of all communications channels (fixed line telephony, VOIP, mobile telephony, internet, etc.).
- Ensure availability of all patients and staff by means of a dedicated, device-independent telephone number.
- Individual selection and allocation of required communications channels for different workflows and needs (e.g. for medical personnel, administration personnel, patients, and family members).
- · Maximum operational reliability.
- Reliable data protection.
- · Cost efficiency.
- · Flexibility for future expansions.
- · Installation and commissioning within a short space of time.

Spital Limmattal contracted Damovo Schweiz AG to devise the communications platform. Damovo recommended Avaya IX Digital Contact Center, Avaya IX Digital Workplace with Avaya IX Calling as well as Avaya IX Meetings and Avaya IX $^{\text{TM}}$  Wireless Handsets for the implementation.

Spital Limmattal's communications infrastructure had become increasingly complex over the years. Doctors were alerted via pagers, for example, communicated via fixed-line telephone, cell phones and e-mail, and went online or retrieved data stored internally using mobile or stationery computers. During the admission process, patients had to apply for telephone cards, a TV, and internet access; they were usually dependent on stationary devices, and had to pay a significant share of the costs themselves. Taken as a whole, a confusing and out-of-date system landscape had evolved that was both labor-intensive and expensive, despite being of limited benefit.

#### Challenges

- Complete integration of all communication channels (fixed line telephony, VOIP, mobile telephony, internet, etc.)
- Ensure availability of all players by means of a dedicated, device-independent telephone number
- Individual selection and allocation of required communication channels for different workflows and needs
- Maximum operational reliability
- Reliable data protection
- Cost efficiency
- Flexibility for future expansions
- Installation and commissioning within a short space of time

Damovo is an Avaya Edge Diamond Partner, has comprehensive know-how about all Avaya components, and can precisely assess their performance and the ways they can be deployed. Spital Limmattal accepted the recommendation and chose Avaya as its system provider.

#### **Solutions**

Damovo devised a fully integrated communications platform with the following components

- Unified Communications Avaya Aura Core (System Manager, Session Manager, Device Service, etc.)
- Avaya IX™ Contact Center
- LAN/VLAN infrastructure and WLAN
- Managed Service
- · Avaya Aura 7.1, highly available, virtualized across two data centers
- Avaya IX™ Workplace Attendant, 4 units
- Alarm server (from third-party provider), firewall inclusive of guest access and patient terminal
- Alerting highly available, virtualized across two data centers
- CTI Equinox, WLAN & IP DECT incl. alerts with 3735 Handsets, GSM Client and Alarm apps
- "Bring-your-own-device" solution (BYOD) for patients via Wi-Fi inclusive of TV / radio (third-party provider).
- Avaya Breeze® for admission, office check-in/check-out and patient information.
- Alarm and evacuation with reanimation alarm across 24,000 datapoints.

To guarantee the necessary operational reliability combined with maximum flexibility, and to reduce internal efforts to a minimum, Spital Limmattal also contracted Damovo to operate the communications infrastructure for the hospital as a managed service.

"Damovo has proved to be the ideal partner for the realization and operation of the communications structure in our new hospital building. The experts' technical knowledge and commitment has allowed them to develop a powerful and future-proof solution that is tailored to our needs. It was put into place with Avaya technology in a short space of time and since then, it has met all our expectations. From the first, preliminary talks to ongoing operation, we are entirely satisfied with the advice and support we have received from Damovo," Roman Plattner emphasizes.

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#### Benefits achieved

- Increased comfort, greater efficiency, and acceleration of workflows thanks to the integration of all communications channels into one network, and by making all employees reachable on a dedicated, deviceindependent number.
- Cost savings through the integration of communications channels into one network and by removing the need to administer and invoice hired devices, along with telephony and internet services for patients.

One of the requirements was that the system should be installed and available within the shortest possible time. This was impressively achieved: Installation was concluded within just a few weeks and, as soon as the necessary prerequisites such as electrical supply or wiring had been put in place, all components worked straight away. Once the new building was occupied, the platform was immediately put to active use and was officially approved by Spital Limmattal a few days later.

"The smooth installation of the entire infrastructure and the problem-free commissioning bore out our choice of Avaya and Damovo," says Roman Plattner. "Both collaboration within the team and the selected Avaya technology worked excellently. The system is scalable at any time and will be able to meet every conceivable requirement for years to come. And Damovo's management of the entire service guarantees maximum reliability and manageable costs."

#### Mission completed

Thanks to state-of-the-art technology, the new communications infrastructure meets all of Spital Limmattal's requirements with ease, and even significantly exceeds them in important areas.

The platform integrates all communications channels such as fixed lined telephony, Voice over Internet Protocol (VOIP), mobile telephone, internet and more. Each employee can be reached on all devices that he/she uses via one and the same, device-independent number.

The communications channels are networked as needed, and protected by a zone firewall. Employees and patients only have access to those data that they actually need. This means that all data protection requirements are met, various data inventories are shielded, and the hospital's IT systems are protected.



- Maximum availability, operational security, and flexibility through managed service, doubly redundant design, and the use of sophisticated, robust, and technically compatible components.
- Improvement of patient service thanks to comprehensive and free communications services and the opportunity given to patients to use and/or book communications and other hospital services with their own end devices
- Employee workload reduced through individual selection of communications channels depending on their duties and responsibilities

The entire communications system is designed to be doubly redundant and is operated in two separate server rooms. Even in the event of malfunction, the functional capability of this potentially vital platform is guaranteed.

Thanks to Avaya's innovative technology, Spital Limmattal is the first hospital in Switzerland to offer its patients the opportunity to use their own mobile end devices (e.g. cell phones or tablets) within the hospital's network. At the same time, the part of the network that patients can access is strictly separated from internal areas so that access to the hospital's internal data is ruled out. The hospital now only needs to issue its own devices to patients in exceptional cases and, apart from a noticeable increase in patient comfort, has also achieved significant savings. Issuing, retrieving and servicing devices, together with access and invoicing systems are now almost entirely a thing of the past—as are the associated labor, costs, and necessary storage space.

The integration of all communications into a single data network has led to a high two-digit percentage reduction of line costs. Together with further savings, total costs for the communications platform are now only around one third of those that were incurred previously, after deduction of the patients' contribution. As a result, Spital Limmattal can offer its patients telephone, TV and radio services as well as WiFi internet access, all free of charge—a huge boost for service quality.

The admission process for new hospital patients is now comparable to a hotel check-in. Once their details have been noted, they are assigned a patient number for the duration of their stay. This number enables them to access the services offered by the hospital such as TV, WiFi, internet and telephony via their own end devices. The lobby of the new building no longer houses chip card and pay machines—previously indispensable features in hospitals.

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- Compliance with all data protection requirements through the separation and shielding of individual areas of the network and individual access rights.
- Smooth installation and commissioning of the entire platform within the shortest possible time thanks to detailed preliminary planning, compatible components, and the implementation partner's expert know-how.

## Smooth and fast commissioning

The installation and commissioning of the new IT infrastructure inclusive of the communications platform for employees and patients was completed very rapidly, as planned, after a lead time of around six weeks. It was only isolated delays in the construction of the building that made a few changes to the plan necessary. The actual move to the new building was organized in an exemplary fashion. For instance, the first child was born in the new delivery room only a few hours after the last birth in the old hospital.

"The components delivered by Avaya enabled a generational leap in our communications technology and made a significant contribution to the exceptional quality of service at our hospital," says Roman Plattner, summing up the project. "We are now working even more efficiently. The quality of care we offer our patients and their comfort have been considerably increased. The hospital is saving money and benefits from the flexible, future-proof technology. Collaboration with our suppliers and consultants was relaxed and professional at all times."

Roger Peter, Manager Director Sales, Damovo Schweiz AG, adds: "With the system we installed, Spital Limmattal has achieved substantial improvements with regard to service and costs. As we expected, we were able to install all of the Avaya components without problems and on schedule. Meanwhile the innovative technology and operation as a managed service ensure the highest degree of reliability, as well as maximum flexibility and expandability now and in the future."

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## **Avaya products**

- Avaya IX™ Contact Center
- Avaya IX<sup>™</sup> Workplace
  - Avaya IX™ Calling
  - Avaya IX™ Meetings
- Avaya IX™ Wireless Handsets
- Avaya Breeze®
- Avaya IX<sup>™</sup> Workplace Attendant

### **About Spital Limmattal**

Top-class medicine. Personal. Individual.

As an important specialist hospital with an extensive commitment to training, Spital Limmattal offers basic medical care to over 77,000 patients per year. It also provides top-class medicine and profound expert knowledge in numerous surgical and medical specialist areas. The hospital has 188 beds for acute care patients, 126 beds for long-term care, eight operating theaters and eight intensive care beds. There are also 10 beds in the day-care center, and emergency care is available around the clock. Over 1,470 employees from 50 countries provide high-quality, diverse services every day. The new building has been operating since the end of October 2018. Spital Limmattal is run by an association which is sponsored by 11 Limmattal and Furttal municipalities.

You will find more information about Spital Limmattal at www.spital-limmattal.ch.



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## **About Avaya**

Businesses are built on the experiences they provide and every day millions of those experiences are built by Avaya (NYSE:AVYA). For over one hundred years, we've enabled organizations around the globe to win—by creating intelligent communications experiences for customers and employees. Avaya builds open, converged and innovative solutions to enhance and simplify communications and collaboration—in the cloud, on premise, or a hybrid of both. To grow your business, we're committed to innovation, partnership, and a relentless focus on what's next. We're the technology company you trust to help you deliver Experiences that Matter. Visit us at www.avaya.com.

