

Every year, the Biel Hospital Centre (SZB) treats about 72,000 patients in the Biel-Seeland-Berner Jura region and within close proximity, and around the clock, 365 days a year.

Whether it is a heart attack, a stroke or cancer, whether it is a birth, a dialysis or a surgical procedure: as a central hospital, the Biel Hospital Centre offers high-quality medicine and treats almost all diseases and injuries. A hospital centre for all, at any point in time and for each stage of life; from birth to old age, for women and men, as well as for children and teens.

Starting position and project goals

In 2017, the Biel Hospital Centre launched a project to introduce a centralised and hospital-wide dictation and speech recognition solution. Various digital and also partly analogue dictation systems were used in the past and could no longer meet the growing requirements in terms of efficiency, security, multilingualism and integration. There was a need for the assessment of a uniform solution for digital dictation and speech recognition in German, French and English. In total, 290 doctors had to work with the new product every day. "We expected most of all an optimal process support, statistical evaluation features for increased efficiency as well as greater security without loss of dictation. Moreover, the speech recognition should offer the highest levels of recognition accuracy both in German and in French, which was not the case with the previous system", explains Didier Brêchet, Project Manager and Applications Manager at the Hospital Centre.

Biel Hospital Centre www.hospital centre-biel.ch

Objective

Introduction of a multilingual, central dictation and speech recognition solution for all departments, process optimisation for medical documentation.

Solution

Winscribe dictation software

Dragon Medical speech recognition software

Voicepoint Importer

Voicepoint Device Administrator

Voicepoint Spark Vocabularies

Philips Digital Pocket Memo 8000 dictation devices

Philips SpeechMike Premium 3500/3700 dictation microphones



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Dr med. Jérôme Mathis,

Head Physician at the Clinic for Gynaecology and Obstetrics

Successful rollout

The pilot installation closely supported by Voicepoint was a complete success for the doctors, medical secretariat and IT managers alike. Winscribe and Dragon Medical met all requirements, leading to the Biel Hospital Centre to decide on the definitive introduction of the solution, including the connection to the existing KIS and RIS. In the last 18 months, the doctors of the SZB have generated about 700 hours in dictation volume. In addition to digital dictation management with Winscribe, doctors also worked with the speech recognition Dragon Medical system in several departments. Since the reports could be generated and completed in real time, users saved even more time: "Thanks to Dragon Medical, I was able to significantly free up my working day, I saved actually 45 minutes per day", says Jérôme Mathis, Head Physician at the Clinic for Gynaecology and Obstetrics at the SZB. "I can dictate before my patients in real time, thus improving the quality of the conversation and enabling to record information even more accurately. All the data is immediately available in the system and colleagues can access complete patient and case data at once. Moreover, the system also facilitates my daily correspondence: since I can use speech recognition not only in KIS but also in all office applications, I also generate emails much faster than before.

The Voicepoint Device Administrator guarantees all

dictation devices are efficiently managed. New or existing dictation devices can be configured and assigned to a user with just a few clicks via the web-based software module, either by the IT department or by an authorised superuser depending on the model that has been selected. It is always possible to see which devices are being used where and when they connect to a workstation. The SZB relies on mobile dictation devices DPM 8100 from Philips, which score with crystal clear audio quality and intuitive operation. As for speech recognition, the hospital uses the Philips SpeechMike 3500 and 3700 dictation microphones. Thanks to the Voicepoint Firebox software module, these integrate perfectly into Dragon Medical and the buttons can be configured quickly and intuitively.

Result and value added

Thanks to Winscribe and Dragon Medical, the Biel Hospital Centre has significantly improved its documentation processes. With the new complete solution so far, 12,500 reports have been generated and speech recognition has been used every day by users, of which 75 percent are German speakers and 25 percent French speakers. Didier Brêchet adds: "Our doctors are very happy with the new system, because it lets them organise their workflow in a more efficient manner and saves more time for patients. As a result from the new system, we have been able to offer 1,000 consultations more in the last six months at the Clinic for Gynaecology and Obstetrics: an outstanding figure for us". According to Didier Brêchet, the amount of time saved at secretariat level is also impressive, since employees can quickly reassign dictations in the event of unforeseen absence and workloads can be regularly organised.

The people in charge at the Biel Hospital Centre still have plans for scalable solutions from Voicepoint. The introduction of the speech recognition Dragon Medical Direct system in the paediatrics department is also planned for the near future. This server-based version from Dragon Medical, that Voicepoint also offers an option in the Swiss Cloud, provides the greatest levels of flexibility and performance in use as well as scientific terminology that can adapted at organisational, departmental or user level.



Philips SpeechMike Microphone for stationary dictation

