Providing Wi-Fi for Regional Hospital No.1 of the Tyumen Region

Customer profile:

Company: Regional Hospital No.1

Sector: Healthcare

Location: Tyumen, Russia

INTRODUCTION

Regional hospital No.1 of Tyumen was founded in 1944. Currently it is a major diagnostic and treatment center for children and adults, which ranks among the best Russian clinics in different fields and successfully combines professionalism of the medical staff, cutting-edge technologies and high-quality service.

The hospital also accommodates the biggest clinical diagnostic laboratory in Tyumen region. PCR-based diagnostics, cytogenetic assays and immunology researches are conducted there. Furthermore, medical tourism has recently gained momentum, which also resulted in intensive development of high-end aid and purchase of the newest equipment.

CHALLENGE

Currently the Smart-medicine gets actively introduced into healthcare institutions of the Tyumen region: centralized databases of patients and clinical records are formed, staff mobility and efficiency increases, as well as solution making and quality of the rendered medical services. These changes require stable and high-speed access to IT systems, including Wi-Fi.

In this regard, hospital management faced challenge to integrate Wi-Fi network, which would implement Smart-medicine strategies and provide Internet access to the patients.

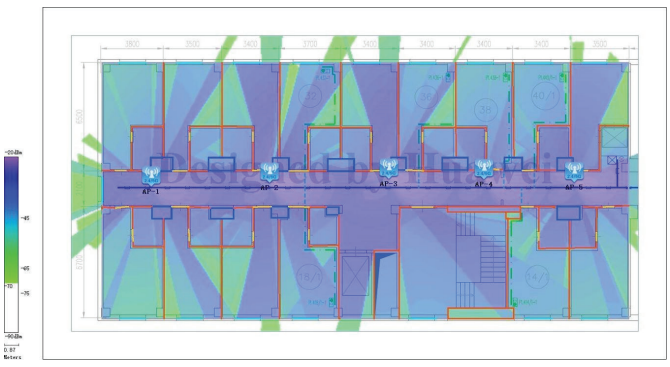
SOLUTION

During the project several difficulties arose, which included in-situ design of the hospital buildings. Bandwidth of radiowaves was significantly reduced and the project budget did not allow solving this problem by installing more access points.

Our partner, “Pervy integrator”, conducted a radio survey. After a detailed coverage plan was drawn, the necessary calculations made, and the solution was offered within the required price segment.

It was decided to use the following TP-Link equipment: Wi-Fi controller AC50, which allows to centrally manage and monitor all the access points in the hospital and the APs CAP1200, providing the Wi-Fi network coverage in set with the controller.

Installed Wi-Fi access point in the unit of Regional Hospital No. 1



Scheme for Wi-Fi coverage in the unit of Regional Hospital No. 1

RESULT

The Fast roaming technology should also be noted – it allowed the medical staff to switch automatically between the access points with the best signal when examining patients in different hospital wards.
MU-MIMO technology provided data transfer rates of up to 1200 Mbps simultaneously to multiple users.

TP-Link Wi-Fi solution provided the Regional Hospital No.1 with Internet access for the patients, as well as enterprise Wi-Fi network to facilitate the Smart-medicine concept.
The solution, offered by the partner “First integrator”, is easily scalable and allows integration in other hospital units in the long term.
Separate authentification has also been implemented for the staff and patients, which is required according to the Decree of the Russian Government.

Gigabit Ceiling mount CAP1200

Wi-Fi controller AC50

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