

Countrywide implementation of Patient Appointment Reservation System in Lithuania

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Abstract and Objective

20 project partners – the major Lithuanian Hospitals and Primary Care Centers - implemented European Union Structural Funds supported Electronic Patient Appointment Reservation Project (budget of 2.1 million EURO). The EU support was used for developing and adding new features to the Patient Appointment Reservation System of Vilnius University Hospital and spreading it nationwide. The System is based on modern Mobile and Information technologies, such as SMS, Mobile Sync, web services etc. The main objective was achieved - the System enables Patient to reserve an appointment to the GP and all level specialists. GP or any specialist can assist Patient and choose the best suitable consultant and book an appointment for his Patient at any participating institution.

Keywords:

Appointments, Online health services, Mobile technologies.

Introduction

The project was initiated after successful implementation of Patient Appointment Booking System in Vilnius University Hospital in 2004.

VU Hospital Santariskiu Klinikos took the leadership and organized 20 largest Lithuanian Health Care Institutions - 2 University Hospitals, 6 Regional Hospitals, 3 City Hospitals and 9 Polyclinics (Primary and Secondary Outpatient Care Centers), and all together prepared a Feasibility Study and presented Electronic Patient Appointment Reservation System Project for the first call for the EU support aiming at the development of Information Society (September 2004).

The EU Structural Funds support was used for developing and adding new features to the Patient Appointment Reservation System of Vilnius University Hospital and spreading it nationwide. For the effective functionality of the System, 580 patient registration and outpatient physician offices were equipped with modern computers, Virtual Private Network (VPN) connection is established between 20 health care institutions – Project partners.

Methods

The Electronic Patient Appointment Reservation System is based on modern Mobile and Information technologies (SMS – for the confirmation of the appointment, reminder a day before visit, calendar update (outlook and mobile sync) for doctors, SSL for external (internet) access to the system, VPN connection for the internal (institutional) use of the system, user (patient) identification using various methods like banking authentication, digital mobile signature and less secure but more simple and more suitable for majority of patients – identification using patients mobile phone number and temporally password sent by SMS). System is also prepared for use of qualified signature.

The Information System enables Patient to reserve an appointment to the Primary Care Physician and all level specialists. General Practitioner can assist Patient and choose the best suitable consultant and book an appointment for his Patient. Confirmation of successful reservation and reminder a day before the visit is received by Patient via SMS and email. System provides possibility for feedback from providers to patients, effectively informs patients about changes in schedules, physician's illness and other important issues.

Results

The Project improved the national health care system in Lithuania with the greatest direct impact on patient comfort and accessibility of health care services. Appointment reservation became more transparent, more effective.

Patients are satisfied using all possibilities of appointment reservation: Internet, mobile or wired phone, as well as using medical staff assistance.

Over 3 million appointments were registered in the System since it's introducing in 2008. Internet use of the system is growing and reaches 15% (up to 30% in some institutions).