



Implementation of SIMP in National Health Fund.

A priority is to create in the Central Coordinating Authority (COK) and the Province Coordinating Authority (WOK) a central database of women participating in programs. Fulfilling the tasks of programs shall lead to: the creation of a system that would enable carrying out a many-year, permanent and active screening of breast cancer and cervical cancer in Poland; monitoring patients with detected malignant changes; increasing the number of women participating in prophylactic medical examinations; increasing women's awareness within the scope of breast cancer and cervical cancer prophylaxis. Carrying out these tasks guarantees a maximum and efficient use of financial resources assigned for prophylaxis in these areas in Poland.

On the basis of: web sites of the Ministry of Health [2005] – National Program for fighting against Cancer.

Client's profile.

The National Health Fund is an institution responsible for public health care on the territory of Poland. The statutory tasks of NFZ as an institution comprised of a Head Office and 16 Province Offices, include i.a.:

- management of financial resources
- defining quality and availability and analysis of costs of health care services
- organization of tenders of offers, prognoses and concluding contracts on supplying health care services
- monitoring the performance of contracts and

settling the contracts with parties supplying health care services

- monitoring medical prescriptions
- implementation of and financing health care programs
- introduction of a Central Register of Insured

For these tasks the National Health Fund has annually PLN 50 billion, coming mainly from health insurance premiums.

Company's situation.

two population screening programs (screen tests) for cervical and breast cancers. As the rules of carrying out the screen tests are strictly defined, the National Health Fund faced difficult tasks. It was necessary to define the population covered by these tests, monitor appropriate indicators which would help evaluate the efficiency of the program, oversee the interval of the tests, and, first of all, start the cyclic sending of personal invitations to make tests according to predefined criteria of qualification to a given program.

The previous IT solutions implemented in NFZ did not give access to required functionalities. They were mostly dedicated only to settlement of and control over the supply of services. Therefore, it was decided to build another system dedicated only to this issue and to fulfilling all requirements of screening.

Solution.

The project covered preparation and implementation of an application for IT managing of breast and cervical cancers screening programs on the basis of the following key assumptions:

1. A central system with a central data base
2. Access to the system through the Internet for all entities taking part in the program
3. Link with other key databases of the National Health Fund – i.a. with the Central Register of Insured (CWU) being a database of the population, with the

reporting database (data on settled services) and with a database of contracts with parties rendering health care services, register of basic health care services (POZ)

An additional requirement was creating on the basis of one database separate systems (modules) for individual groups of users having other, specific roles in the program. These are respectively:

1. A system for NFZ for financing performed screening tests, administration, statistical monitoring and quality analysis

2. A system for parties rendering health care services making the screening tests, meant for recording the test results and settlement with the payer
3. A system for cooperating institutions, i.e. the Ministry of Health and Central and Province Coordinating Authorities, meant for overseeing the screening, monitoring the patients with positive results and erroneously negative ones and dispatch of personal invitations.

The application was made as a module for Central Medical Systems (CMS) which constitutes a framework of the application along with an administrative part and allows to develop the system by adding further elements, e.g. a System for Therapeutic Programs Monitoring (SMTP) which was made on the basis of SIMP.

Benefits.

An important benefit is access to key information in real time for all system users. Owing to its structure, SIMP allows full verification of a person (a link with the CWU database) and his/her qualification to become a subject of prophylactic medical examinations (links with settled services database). Due to an expert analysis based on gathered information (inclusive of other services and connections between them), it allows to evaluate the effects of performed screening tests. Thus, the idea of monitoring is not limited only to the area of analysis of execution and results but also allows to evaluate advanced and complex indicators.

SIMP makes comparison and evaluation possible because it gives access to parties supplying health care services – the performers of the program – through communes, districts and provinces, reaching up to the all-Poland level. A strict connection of information with each person allows to evaluate the efficiency of the medical personnel work and to calculate population indicators. Generating a range of statistical and financial reports allows also to “freeze” the program for a given moment.

Additionally, SIMP allows to introduce mailing of personal invitations to take part in screening tests. Previously over 17 million of such invitations were sent and this functionality is being constantly upgraded and developed. One cannot forget about the financial aspect – generating bills directly from the SIMP system guarantees liability and coherence of settlements and allows the National Health Fund to analyze the demand for services, to evaluate the supply of services and appropriate planning of financial resources.

Due to the implementation of the IT Prophylaxis Monitoring System, the users have been given a tool for permanent monitoring and support of performing their tasks. From the moment of introduction, the most important indicator – participation in prophylactic medical examinations – grows in Poland constantly. This is one of the coefficients that is constantly monitored.