The Maccabi experience

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Clicks© Case Study
Maccabi – Medical Care and Health Fund

With over 1,800,000 members, 160 self owned, multi-disciplinary regional centres nation wide, its own hospitalisation facilities and more than 1,500 private physicians rendering primary care and specialist services, Maccabi is the second largest health Maintenance in Israel. **Clicks©**, in a joint **Roshtov** -Maccabi project, started in 1990, 20 years later manages all the clinical, medical and administrative data at Maccabi.

Before this project started, physicians used to report quarterly to the Maccabi national centre using hand or type-written forms that included only minimal information, with similar forms obtained from pharmacies and other offices supplying various diagnostic services. Accounting and medical auditing then took place at Maccabi centre on the basis of these forms. Needless to say, even after tedious compiling, sorting and cross-referencing, Maccabi was left with incomplete, non-inclusive and at times inaccurate information.

With growing membership and the desire to take the organization into the 21st century, Maccabi searched for a new way. In view of the distribution of service locations throughout the country, the management was looking for a solution that would facilitate implemention and monitoring of global policies, and improve the control and medical auditing channels. At the same time, they wanted a cost effective, integrated solution that would improve medical data documentation and workflow, while enhancing the quality of care.

Maccabi chose **Roshtov Software Industries** as its strategic alliance partner for creating its computerized clinical information system. The **Clicks©** software was selected as the vehicle to carry out the task. The overall goal of the **Clicks©**-Maccabi project is to completely computerize all the HMO's medical activities: First, to provide answers to multi- disciplinary medical environments by designing specific medical applications for universal use by all the physicians in the same field. Second, to create the mechanisms for reporting all the information relevant to accounting and medical auditing through communication lines or on electromagnetic media.

The process started with a Maccabi representative advising **Roshtov** system development teams, then continued with implementation in Maccabi facilities. Mutual feedback channels established throughout the process, ensured periodic changes and modifications to adapt to changing circumstances and requirements of the organisation.

Today, all Maccabi's physicians are using the **Clicks**© system as a standard environment. Besides family care, applications today include specific medical records for paediatrics, gynaecology, general surgery, orthopaedic surgery, ophthalmology, ENT, dermatology and gastroenterology and more.

The system is used in all Maccabi facilities as well as by the consultants and physicians in private offices and group facilities. In private offices physicians enjoy the privilege of working within a custom designed patient record. A slightly different approach is used in the Maccabi regional centres, where a unified patient record is implemented. With access restrictions built into the **Clicks**© system through various view port strategies, physicians can have access to different parts of the unified record. Because of the immediate link that can be established between different parts of the record relating to different medical specialties, great improvement in the quality of medical care can be achieved.

A standard feature of all Maccabi systems, are basic administrative procedures integral across all applications and practice sites. For example, checking membership and insurance cover is performed online through direct communication to the Maccabi data centre. Quarterly reports are done on magnetic media and are designed to handle the complexity of all Maccabi-physicians arrangements as described above. These reports now include comprehensive information, simplifying and making medical auditing and accounting fast and efficient. Example for reports: date and diagnosis per visit, procedures in relation to diagnosis (IUD, Pap's smear etc.); lab orders in relation to diagnostic procedures or, prescriptions against visits or diagnosis and the forms issued per visit (sick leave etc).

The Clicks-Maccabi project is unique and unprecedented in scope. This is true with regard to variety of medical applications, facilities and locations, as to number of physicians using the system on a day-to-day basis as a sole, online medical information system.

The system is updated periodically through auto-update on floppy that are sent to Maccabi physicians and facilities. Medication files, diagnosis, classification methods may be modified, as well as individual fields within the patient record. Conferences with Maccabi physicians often lead to additions and changes in the structure of the patient record. New medical and administrative guidelines are implemented in coordination with physicians and proper medical authorities. For example, using Clicks Data Collection Algorithm techniques, guidelines regarding the most advanced medical procedures can easily be incorporated into the patient record.

While these techniques enhance communication between the organization and the physicians in the field, they also help to establish the highest medical standards universally throughout the system. The vast amounts of data created in the medical

system are readily available for further analysis and processing. An efficient Clicks reporting module with a rich query language enables any kind of report, including statistical analysis of medical information. At the organization and management levels, administrative information concerning membership, medications, number of visits per physician can be easily obtained. Thus, by making it possible for the first time for management levels to understand the interrelations between the elements that make up the medical process, Clicks will lead Maccabi to better and more efficient medical services.

Embedded connectivity takes care of communication to Maccabi central system for verification of memberhip and for daily and periodic reports for both medical and administrative purposes. While relieving physicians of paperwork previously required of them, these channels also enable each level at Maccabi administration to obtain those sections of the database relevant to performing their share of the organization's tasks.

After nearly ten years of the **Roshtov** - Maccabi alliance, the **Clicks**© systems can boast thousands of installations and practicing physicians in nearly every medical field. It has been a long-term commitment with a major healthcare provider and proven physician satisfaction.