

BAKIRKÖY PROF. DR. MAZHAR OSMAN MENTAL HEALTH and NEUROLOGICAL DISEASES EDUCATION and RESEARCH HOSPITAL (BRSH) PROJECT

Overview

Country: Turkey

City: İstanbul

Type of Institution: The Health
 Ministry, Education and
 Research Hospital

Number of Beds: Allocated 3420,
 Actual 1693

Customer Profile

Bakırköy Prof. Dr. Mazhar Osman
 Mental Health and Neurological
 Diseases Education and Research
 Hospital (BRSH) is the third largest
 hospital in the world in this field.

Requirements

The hospital needed a fully
 integrated, continuously supported
 HBYS solution which
 would meet the challenges of large
 system structures. Their goal was
 to bring the whole
 hospital which was built on a vast
 piece of land completely under
 control, provide easy
 access to its medical services with
 less paperwork, and optimize the
 utilization of
 resources at the hospital.

Solution

The institution which was looking for
 a strong long-term solution
 capable of supporting
 huge system structures, has decided
 to install Bilmedical HBYS in 2005
 after its search in
 the market and evaluation of our
 reference Bilmedical projects.

Advantages

- Fully integrated, centralized
 resource planning and archive
 functions
- Expandable HBYS structure to
 support high numbers of terminal
- Continuous support and updating
- Readily-available system support
 for remote locations

The hospital which in its field is the third largest institution in the world, has brought its huge health facilities under control with Bilmedical HBYS system. While increasing its service quality, it has also started to use its resources more productively.

The foundations of the hospital which has a unique place in the history of healthcare in our country were laid by Prof. Dr. Mazhar Osman with the relocation of Toptaşı Mental Hospital to Reşadiye barracks in 1924. The institution which was opened in 1927, has continued its development ever since to become the third largest hospital in the world today. The hospital is currently serving the public from its 39 independent buildings in the hospital compound. The hospital facilities include 13 Psychiatry, 3 Neurology, and 3 Neurosurgery clinics.

For the efficient control of the hospital which was conducting its services from so many buildings spread over a wide area, implementation of a sound Hospital Information Management System was an absolute necessity. Kurumun uzun araştırmaları sonucunda Bilmedical HBYS'nin kullanılmasına karar verildi.

After long evaluations the institution finally decided to install the Bilmedical HBYS. The implementation of Bilmedical HBYS has clearly increased the productivity of this huge institution. With the complete redesigning of the processes and work flow management at the hospital, daily capacities have gone up together with the quality of services. The productivity increase achieved through better utilization of resources has also improved the revenues of the hospital in a very short period of time.





Serving areas of 39 buildings in BRSH which have the world's third largest serving capabilities is committed to provide all its patients controlling, planning and efficiency with Bilmedical HIMS

Facts and Requirements

Besides its status as an education and research hospital, the institution also serves as a 'branch' hospital set up with all the disciplinary branches and organizational structure of a psychiatric institution. The existence of so many hospital buildings over a wide area has constituted the major difficulty in implementing and running an efficient HBYS system for many years. These physical conditions and complicated processes were indeed taking a lot of time of the staff as well the patients and restricting the daily capacities of the hospital. In view of the unique characteristics and requirements of the hospital the solution had to be unique too, and the hospital was continuing its search for a long-term solution with these considerations in mind.

Çözüm

Following their 4 years of search and evaluations for the right solution in the market, the institution finally decided to implement the Bilmedical HBYS of Bilmed. Bilmed for its part completed all the required pre-analyses, project activities and staff trainings in just 6 months and successfully put Bilmedical HBYS into service. During this phase of the contract, all the fundamental data and existing processes were collected and reviewed and necessary customizations

completed. For special applications such as AMATEM, special solutions were developed and implemented. With the advanced Call Center and Centralized Appointment systems, all telephone/internet/SMS or direct appointments are scheduled from a central pool which helps to optimize the patient traffic according to the special algorithms described into the solution and available resources of the hospital.

With the identification cards distributed to the patients, duplicate recording has been virtually prevented by minimizing the multiple records kept for the same patient, and through the barcode system, activities have gained speed. The ILS module we have installed instead of independent ILS systems is fully integrated and allows online import/export of data between the instruments and the HBYS system. With the test requests now being directly routed to the instrument platforms and the results sent back to the requesting units after approvals, patients are no longer having to rush from one building to the other with the printed forms in their hands. Online recording of patient's medical history, prognosis, diagnosis, the tests requested, the reported results (Lab Results, Radiology and Pathology Reports) provide valuable data for both the treatments and the researches. The top-level confidentiality requested within the scope of the Project was also met with our special system security features.

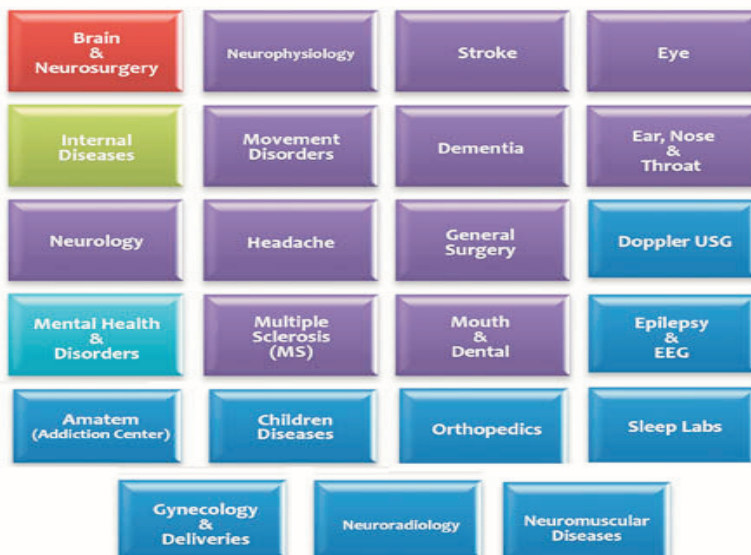
The problems faced in reporting the numbers of beds and patients prior to the automation system are completely solved now thanks to the instant monitoring and scheduling capabilities of our system.

While all the physical file archives have been integrated with the system, the new recording and archiving system also enabled the files of side branches (psychiatry, dementia etc) to be tracked

Benefits

With Bilmedical HBYS the hospital has not only increased the quality of its services and become capable of recording and reporting the detailed medical data of patients in full electronic environment, but also

BRSH Inpatient Branches
Neurology Side-Branches
Outpatient Branches



improved its financial performance significantly.

Epicrisis reports are now generated automatically in preferred formats, and patients are billed with much higher speed and accuracy. This is one of the important factors contributing to the unprecedented increase in revenues. Along with prognosis and diagnosis, the patient's symptoms and history data can also be entered into the system. This data is then retrieved through data mining, analyzed and used as a basis for advanced surveys and researches, and an important guidance for the health policies of the country.

Fully Integrated Centralized Resource Planning and Archive Automation

Fully Integrated Centralized Resource Planning and Archive Automation With the introduction of Bilmedical HBYS appointment system, the patient traffic which previously peaked in certain day and hours of the week was spread homogeneously resulting in the optimal utilization of limited resources and higher total quality. Since the modules are seamlessly integrated with each other, the data in one module is easily matched with the related data in the other preventing duplicate data entries. For example diet lists can now be prepared automatically based on the number and conditions of individual patients, number of attendants/relatives to stay with the patients, and the types of meals to be served. This feature is not only helping to achieve better results but is also minimizing the wasting of resources.

With the integration of LIS (Laboratory Information System) and RIS (Radiology Information System) modules and continuous support and development of the hospital software from a single source (Bilmed), test requests can now be directly routed to the instruments and the results sent back to the requesting units without any compatibility problems.

As a result of archive integration, it is now possible to quickly locate the related physical records of any digital data existing on the system. Electronic archiving is also helping to determine the life cycles of files, automatically identifying the files to be kept or

destroyed during the process.

Integration of purchasing module with the system enables the work flows and approval processes of all purchasing activities, from collection of purchase requests to the receipt of items ordered, to be tracked on the system.

Expandable System Infrastructure to Support High Numbers of Users

In hospital projects of this size, the speed of the system and maintaining this speed all along the processes requires special engineering effort.

This effort must also be continued when new functions and modules are added or modifications made in accordance with changing legislations and regulations. Reporting functions should never cause any slowing down of user screens. With its special database design and high performance coding system Bilmedical HBYS easily meets these requirements and provides opportunities to expand the system.

Continuous Support and Updating

Another factor in the success of Bilmed HBYS is its continuous development and updating from the very first day of system implementations. The business approach of Bilmed teams relies on close collaboration with the institution, fast response to their requests and problems, and continuous development of the program in cooperation with the customer. The strong architecture of Bilmedical HBYS allows fast coding and reporting, and the needs are proactively met well before they emerge in the system.

Infrastructure Ready to Support Remote Locations

Institutions may feel the need to grow and expand in time. Since Bilmedical HBYS is integrated with Terminal Services, the institution's need for extending its services to new remote service units is easily achievable with our system. To provide continuous support to all the service points at the hospital whose buildings are spread over a wide area, is directly related to the success of the system. To cope with this huge task, all support requests received from users are collected at a call center, and from there they are swiftly responded by remote connections. This ensures the continuity of services within short periods of time.



BRSH Special Branch Polyclinics

About Bilmedical

The software as a whole has been developed by a team of Turkish experts and in accordance with the current laws and regulations of our country.

The projects we delivered for the Public and Private sectors allow full traceability of the medical and financial activities of external polyclinics/clinics around the core patient transaction. They also allow telephone/internet/SMS appointments to be made with the hospitals or hospital chains operating through the same call centers.

Our pilot applications include service features such as Web-based GSS – Medula 2 integration processes, SSK (Social Security Fund), Bağ-Kur (Vocational Pension Fund), and Emekli Sandığı (State Pension Fund) “Online Provision” inquiries and MERNIS (Citizens ID Net) inquiry and validations.

HBYS not only supports international code systems like ICD 9 – 10 etc, but can also integrate and use the independent code systems developed in some educational and research institutions with national and/or international systems. ATC (Anatomic, Therapeutic, Chemical Classification System) and EAN barcode systems are among other systems supported by our software.

Bilmedical application projects support the integrated solutions responding to the critical Picture Archiving and Communication System (PACS) and Radiology Information System (RIS) needs of radiology departments. Besides our readily-available solutions, we are also able, through our partner-based teleradiology solutions, to extend the operation of the system to remote locations where no radiologist/expert exists, or design specific solutions for the use of hospital chains wishing to collect and track all its specialized

physicians under a single system.

About Bilmed

Founded in İstanbul in 1989 with the purpose of developing leading edge integrated Automation solutions for all the individuals and institutions using and providing healthcare services in the industry, Bilmed has been successfully supplying its clients with all the required application projects based on its flagship product “Bilmedical Hospital

Information Management System”. Our company which is certified under ISO - 9001 – 2000 Quality Management System is conducting its operations in a positive, hardworking, and shared manner, with absolute respect to labour, know-how, and the rights of all the individuals, service sharers, and partners involved, and in strict compliance with environmental regulations and applicable confidentiality requirements. Bilmed, through the projects it has been implementing at many well-known institutions, and through its outstanding technology, is playing an important role in setting the standards of the industry.

Bilmed Bilgisayar ve Yazılım A.Ş.

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Reference Projects

Public Hospitals:

*Haydarpaşa Numune Hastanesi
İSTANBUL*

Bursa Devlet Hastanesi - BURSA

Metin Sabancı Baltalimanı Kemik Hastalıkları Eğitim ve Araştırma Hastanesi - İSTANBUL

*Gebze Fatih Devlet Hastanesi
KOCAELİ*

Beyoğlu Göz Eğitim ve Araştırma Hastanesi - İSTANBUL

*İstinye Devlet Hastanesi
İSTANBUL*

*Üsküdar Devlet Hastanesi
İSTANBUL*

Özel Hastaneler:

*Memorial Sağlık Grubu
İSTANBUL*

*Şafak Hastanesi - Beşyüzevler
İSTANBUL*

*Şafak Hastanesi - Göztepe
İSTANBUL*

*Şafak Hastanesi
Gaziosmanpaşa - İSTANBUL*

*Medicana Hastanesi - Çamlıca
İSTANBUL*

*Medicana Hastanesi
Bahçelievler - İSTANBUL*

*Medicana Hastanesi - Avcılar
İSTANBUL*

*Hospitalium Çamlıca Hastanesi
İSTANBUL*

*Hospitalium Haznedar Hastanesi
Bahçelievler - İSTANBUL*

*Hospitalium Şişli Hastanesi
İSTANBUL*

*JFK Hastanesi - Bakırköy
İSTANBUL*

Akademi Hastanesi - İZMİT

*Dünya Hastanesi - Sultanbeyli
İSTANBUL*

*Dünya Hastanesi - Maltepe
İSTANBUL*

*Merkez Hastanesi - Gebze
KOCAELİ*

*Özel Yalova Hastanesi
YALOVA*