



PSMMC chose Bizagi because of its ease of use and integration



Customer:

Prince Sultan Military
Medical City

Industry:

Healthcare

Location:

Saudi Arabia

Having successfully completed **the end-to-end patients' care automation** for 2,000 outpatients' unit, PSMMC deployed Bizagi to **improve patients' registration and security** for it's 1,400 bed hospital.

By integrating Bizagi with biometric technologies, the patients were properly identified, the right treatment was offered to the right patient and identification fraud and misuse of medical services was prevented.

Objectives

- ✓ Identify the right patient and provide the right treatment
- ✓ Prevent identity theft of eligible patients
- ✓ Ensure seamless connection between Bizagi and HIS (Legacy System)
- ✓ Integrate Bizagi with Ministry of Interior's National Information Center
- ✓ Improve the quality of the patient data stored in HIS

Achievements

- ✓ Deliver patient-centric solution and become clinician-led
- ✓ Make diagnosis evidence based
- ✓ Take advantage of integrated applications
- ✓ Utilize tightly controlled workflows
- ✓ Actively embark on the Process Improvement Program
- ✓ Registration time reduced by 50%
- ✓ New patient registration cases increased by 50%
- ✓ Human errors decreased by 80%
- ✓ Staff productivity increased by 60%



Bizagi BPM helped Prince Sultan Military Medical City to become a flagship hospital in Saudi Arabia, often used as an example for delivering the highest quality patients' care"

DR. Adnan Al-Tunisi, CIO, PSMMC

Overview & Challenges

Prince Sultan Military Medical City (PSMMC) formerly known The Riyadh Military Hospital (RMH) is considered as one of the most advanced medical centres in the Middle East. The hospital has a capacity of more than 1,400 beds and employs over 12,000 staff.

Key challenges faced by the hospital's Patient Affairs unit were related to safety. When an unregistered patient visits the hospital they get registered through the Registration Department to receive the Medical Card required to claim service benefits. Legacy-based Hospital Information System (HIS) did not offer proper validation options during the registration leading to fraud and misinformation of patients. The system was also prone to user input errors, had no process support and a weak data consistency.

The BPM Solution

Migrating from the legacy platform to a new process oriented solution was a huge leap for the hospital. A robust process for registering patients was established with clearly defined roles and responsibilities for the clerks and managers of the department. With the powerful process analytics tool, it was possible for the management to audit the activities performed by the clerks, analyze the trends and foresee the requirements of the medical city in ways never done before.

The registration process used to be a fairly simple task which involved entering patient data into HIS and printing a card for the patient to identify themselves for treatment purposes. This task was made more reliable with Bizagi. Apart from entering the patient's demographic data, the BPM solution allows this data to be embedded in the Patient Card (on a chip). As an add-on, a Palm sensor captures the palm information of the patient for identification purpose. This significant improvement helped to meet the goals of the Patient Safety requirements.

The Palm data is also stored on the Patient Card. Palm Identification devices and Smart Card readers were introduced at various locations (nursing stations and point of care), to rightly verify the patient and to provide the right care to the right patient.

Results

The BPM initiative delivered 13 key processes to automate the patient care at the 1,400 bed hospital. The innovations related to two types of cases, Medical Card Exchange and New Registration, include creation of 8 new cases for card exchange, per hour, per work station. As 10 work stations were set up around the hospital to swap the old for new cards, the hospital handles 400 to 600 Card Exchange cases per day. While, on average there are over 600 Registration cases created each month.

From an organization perspective, the project has been a major success. A process oriented work culture is introduced and adopted at the Patient Affairs department. There is more clarity about the tasks that are assigned to the clerks, while all stakeholders are more efficient and productive, as they handle less paperwork. In addition, all steps are achieved in a structured manner and there is more control and visibility over the whole operation, which leads to increased compliance with healthcare auditing policies.

The Bizagi system supports the continuous improvement and optimization of registration processes. Costs were also reduced by removing all mundane, manual activities and paperwork as well as introducing better ways of deploying resources and people. New standardized processes, transparency, better control and easy access to all related information helps to deliver traceability and auditability at any stage required.

The effective interaction and collaboration between healthcare providers and other personnel helped Patient Affairs to deliver high-quality patient-care resulting in decreased patient waiting times, faster completion of procedures, shorter treatment times and quicker activity planning.

Both the hospital and physicians qualify for recognition as high-quality care providers which leads to pay-for-performance. The BPM solution makes it relatively simple to submit large volumes of sample data showing that they meet established treatment performance thresholds.

Best Practice

- ✓ Integration with legacy system is always a big challenge, so a well prepared approach is advised to face the worst case scenarios.
- ✓ Initiate a change management program involving all stakeholders and senior management at the early phases to encourage acceptance and knowledge transfer.
- ✓ Encourage end users to visualize and simulate the process activities from their perspective at an early stage; this will help with the training and cultural acceptance after project Go Live.
- ✓ Consider project development and Go Live delivered in phases.
- ✓ Capture feedback from all stakeholders from the very beginning of the BPM initiative.
- ✓ Define clear & realistic expectations for end users.
- ✓ Avoid problem solving and taking late feedback on board during advanced stages of the project. Try to look at all possible scenarios during the definition and design phase.