Building
Tomorrow's Enterprise

Case Study

Leveraging Technology for Successful Patient Relationship Management

Infosys helped thousands of patients improve their health through its Patient Relationship Management tool deployed for a large Pharma company across twenty countries in Europe.

Oct 2008

Leveraging IT for patient self-care and paving the rapid pace to wellness

The healthcare systems readiness to accept Patient Relationship Management for managing its overall business is a well known fact. With this background, a major pharmaceutical company wanted to launch patient self-control cure/medication programs for a de-addiction syndrome. Knowing the pervasive and ubiquity of technological tools like the cell phone and the internet, the pharmaceutical major wanted these to be stitched together as part of technology integration with the PRM system.

It has been one of the most spectacular turnaround in the PRM space where most patient care lifecycle touch points were integrated together and made on an online platform – for the touch points that existed before, during and after the episode of care.

Client Overview

The client is a leading global pharmaceuticals company operating from over 100 countries with more than 100,000 staff and a dedicated research team of about 12,000 scientists. It is well-known for its openness in using IT integrated systems and frameworks for bettering the business model and also to improve the patient care engagement.

Business Need

The ubiquity of technology and the openness in sharing and gathering knowledge has brought in a drastic change in the way patients view disease management. Patients are becoming more proactive in managing their health and are making use of technology to know more about their disease, diagnostic and therapy options. For addressing the new role of patients, the client wanted a comprehensive IT solution for managing patient loyalty programs, learn deep patients needs, create clusters based on patient profiles, and bring upon a model of physician – patient care for de-tox and de-addiction programs. The client wanted to deploy this model for care programs where patient self-control, motivation and determination is required along with physician interventions for appropriate treatment recommendations, monitoring treatment compliance, tracking outcome of treatment, and assert the efficacy of drugs used.

The client wanted IT interventions for supporting a complete interactive health experience to its patients across various communication channels for the program. A good doctor-patient relationship is the key to success for patients undergoing de-addiction but there was also a need for supporting patient self-help initiatives. The process to be followed ideally according to this model was - brief consultation from a health practitioner; administration of a self-help smoking cessation advice; and an online support system platform. The client wanted the online communication platform as the main hub of this care model. The success of this model was dependent on a system that provided a brief consultation from a health practitioner; administration of self-help smoking cessation messages and care instructions through various channels like a web portal, email, SMS, and offline track supported by a call center. The channel support was required for:

- Reducing non-adherent behavior by providing various care instruction channels
- Increasing patient engagement apart from the doctor-patient real-time visits and consultation

The Infosys Approach

Infosys approached the client requirement with the following framework:

- It planned for building a multi-channel, interactive, personalized patient programs / campaigns with a focus on chronic disease management for multiple markets.
- Content management to address core functionality
- Standard components, rules, templates and frameworks to accelerate solution deployment
- Wide spectrum of service offerings from program management & consulting to application development and hosting

The Challenge

In building the patient relationship program involving various components to address the needs of different user segments through various channels, Infosys faced a wide array of challenges:

- Work with an external creative team to come up with a CRM model for off-track call intervention between the patients and the care giving specialists

- Negotiate with Cell phone operators for SMS support and logistics that was part of the platform package
- A tight schedule to ensure the delivery on time for the block buster market launch
- Solution had to be developed on a platform which would be flexible enough to support the channels that they chose to deploy based on their budgets
- Support personalization and rich interactions
- Communication management archived and supported by robust content management systems

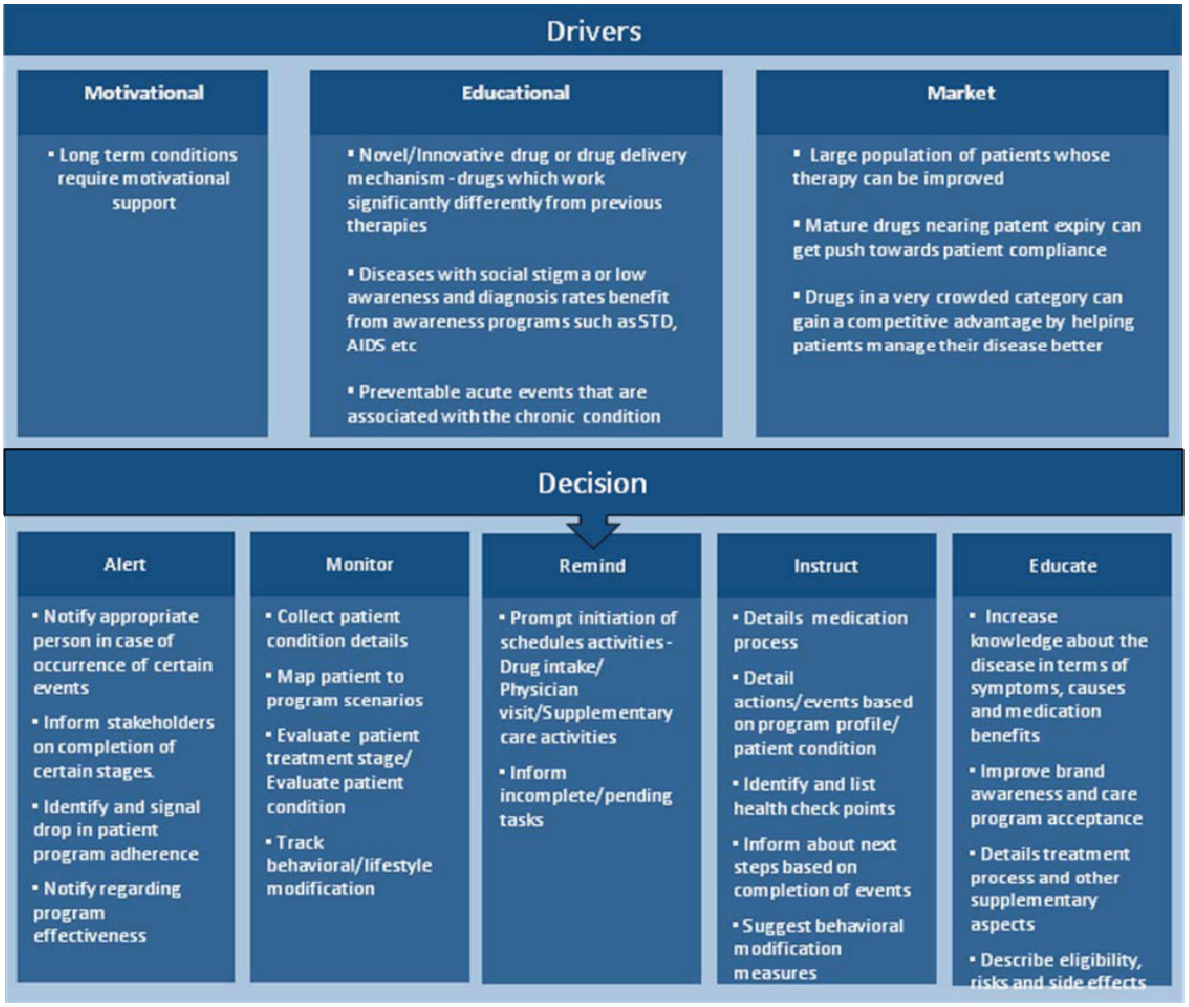
Infosys Solution

The solution offered by Infosys was a tightly integrated channel support for patients, physicians and care specialists via the call center. It offered a unique synergy across various players and successfully engaged all of them through the rich features support provided in the platform.

Infosys partnered with multiple vendors in making that vision a reality, delivering robust and truly useful IT systems to help management identify business problems, take informed decisions, cut down on losses and improve operational efficiency. The major benefits of this model are:

- Support long-term use of the drugs prescribed for patients Disease Management
- Help patients remain compliant with their treatment regime
- Understand efficacy of drug delivery
- Get personalized reminders through channels like SMS, email, etc

Infosys Patient Relationship Management model is based on the following requirement-solution model:



The Infosys Advantage

Infosys has developed accelerators to enable quick and effective development of patient programs based on best practices and experience gained in this space. The following are the accelerators identified and provided by Infosys for spearheading the solution development and deployment:

Frameworks	Standard Components	Standard Rules	Standard Templates	Basic Data Structure
• Pipeline analysis • Business case • Program plan • Product Evaluation • Business requirements • Measuring Program Success/ROI • Review workflows involving legal, medical & brand teams • Evaluate processes for outsourcing	• Registration • Bar code validation • Segmentation • Profiling • Channel Integration (SMS, IVR, email etc.) • Fulfillment • External agency interfaces: Call center, Content developer • Analysis package • Secure HCP registration	• Content display on • based of program day • Content display based on user input • Reminder rules • Alert rules • Profile based display	• Login • Bar code validation • Terms & conditions • Condition History • Communication preferences • Program start confirmation • Calendar, Diary • Opt out • Goal setting • Exercise planner & tracker • Compliance input & tracker • Test results entry & tracker • Call center login • User search • Fulfillment scheduler • Mailing status • Emails: user name confirmation, forgot password, opt-out, auto-reply and standard day or profile based emails • Reports – Program uptake, usage, profile, success	• Patient profile • Program type • User inputs • Survey response • Aggregate calculations • Fulfillment • Call center activity

Providing room for customization depending on cost benefits and geographic requirements has given Infosys an additional edge. This has increased capabilities and know-how in extending the model to apply to various other scenarios and domains. Infosys can recommend and develop analysis packages to provide program-level insights as well as cross-campaign and cross-channel views for the following scenarios:

Program Uptake
- By country
- By age group
- By language
- By track
- By channel and age group
- By track and age group
- By track and channel

Program Usage
- Web page hits
- PDF page hits
- No of SMS messages
- Popular navigation paths
- Channel usage
- Duration on pages

User Profile
- Attitudinal parameters
- Condition History
- Medication history

Program Regularity
- Website Login frequency
- SMS/IVR response frequency

Program Success
- Compliance rate
- Opt out rate
- Trends in other key defined parameters

Cross-Program
- Program uptake
- User profile
- Completion ratios
- By countries

Cross-Channel
- By age group, gender
- By demographic profile
- By uptake rates
- By completion rates

Cross-Product
- Comparison by program uptake ratios
- Comparison by completion ratios
- Comparison by impact ratios

Based on market research/3rd party data
- %patients on program
- %physicians recommending to patients
- impact of campaigns on prescription sales

Benefits

Infosys has developed the PRM package that has a common architecture and reusable components. These can be used by the any pharmaceutical company for implementing patient care relationship programs and derive significant cost savings.

It creates new opportunities and roles in the pharma and patient programs by creating more space through:

- Improved customer service
- Reduced medical errors
- Better productivity
- Cost savings
- Improved health outcomes
- Greater anticipation of customer needs and wants
- Pervasive communication channels
- Capturing tacit patient information more effectively
- Deploy the healthcare home model thus setting up environments where the patient is in complete control of his/her disease management

In the particular client engagement, the smoking cessation program was the pilot for deploying the Infosys PRM model. Market research has indicated several positive impacts of the program including:

- Great value in the process of quitting smoking
- Encouragement to stay on treatment for longer
- Motivation to take pills every day

The excellent feedback made the pharmaceutical company acknowledge that Infosys's PRM was a 'total treatment solution' that helped patients achieve better therapeutic outcomes by mirroring the drug prescription and care model with pervasive care The excellent feedback made the pharmaceutical company acknowledge that Infosys's PRM was a 'total treatment solution' that helped patients achieve better therapeutic outcomes by mirroring the drug prescription and care model with pervasive care engagements.

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For more information, contact askus@infosys.com

About Infosys

Many of the world's most successful organizations rely on Infosys to deliver measurable business value. Infosys provides business consulting, technology, engineering and outsourcing services to help clients in over 30 countries build tomorrow's enterprise.

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