

**The evidence is in the details: Seven outcomes highlight improvement in quality and patient safety at Wockhardt Hospital in Mumbai, India**

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**Objective:**

Implementing a transparent model for performance improvement with measurable outcomes in a health care organization

**Methods:**

Wockhardt Hospitals Ltd., manages 8 hospitals with a total of 1500 beds in Mumbai, Bangalore, Calcutta, Hyderabad and Nagpur. In 2000, Wockhardt began its association with Harvard Medical International (HMI), a not-for-profit subsidiary of Harvard Medical School, located in Boston, Massachusetts. Wockhardt worked closely with HMI to design its 230-bed, multi-specialty Wockhardt Hospital, located in the eastern suburbs of Mumbai that opened in 2002. Subsequently, a major goal of this cooperative effort was to establish a strategic, organization-wide model for managing and measuring quality and safety.

Wockhardt Hospital Mumbai implemented HMI's International Quality Model and a 3-year Performance Improvement Plan (PIP) for 2002-2005. This plan focused on an evidence-based Structure, Process, Outcome, and Peer Review Model with the aim to achieve sustainable quality improvement. To drive the quality effort the hospital leadership created a Quality Council of clinicians, nurses, administrators, and HMI representatives. The model was used as the basis for more specific management and systems design that would result in specific outcomes by 2005. Based on the model, a medical committee structure was established and included seven committees: medical staff executive, operating theatre, emergency preparedness, pharmacy and therapeutics, patient and employee safety, infection control, and information management. In addition, each department of the hospital developed policies, procedures, and documentation standards with oversight by the Quality Council. A measurement system comprised of several key indicators was put in place and reporting systems were created to evaluate and manage the implementation of the plan. A peer review process was also developed that included procedures for credentialing, privileging, and morbidity and mortality review.

**Results:**

During 2005, Wockhardt Hospital Mumbai realized several positive outcomes in the areas of quality, safety, and patient satisfaction. From a baseline in 2004, the hospital's Ventilator Associated Pneumonia (VAP) rate decreased by 65%; Patient satisfaction improved 18.6% from 2003 to 2004; Clinical laboratory report turnaround time improved from 9% of reports delayed in 2004 to 0.4% in 2005; Patient discharge time decreased by 38%; and the number of incident reports increased by over 100%. In addition, the hospital's emphasis on patient safety led it to improve its disaster response capability. Its preparedness was tested during the severe flooding that occurred in Mumbai in July 2005 that claimed 400 lives in the city. The hospital was one of the few in the city that continued operations without flooding, loss of electricity or patient harm. Finally and perhaps one of the most reaffirming outcomes of the three year effort was the hospital's receiving Joint Commission International accreditation in August 2005 – the second hospital in India to receive this distinction.

**Conclusions:**

Wockhardt Hospital Mumbai has developed a quality program worthy of international accreditation in three years. The basis of the successful outcomes of the hospital's quality efforts were the implementation of a structured process, the critical importance of leadership by a committed and multidisciplinary team of physicians, nurses, and administrators, and unit-based teams empowered to make change. In addition, accreditation served as a motivating factor and affirmation for this HCO. For the future, Wockhardt has adopted the Quality Model, the PIP, and outcome measures as a corporate wide quality program to be implemented at its Bangalore Hospital in 2006 and at other hospitals in the Wockhardt network as they are developed.