



## **MOUNT SAINT JOHN'S MEDICAL CENTER (CASE STUDY)**

### ***SAINT JOHN'S, ANTIGUA, BARBUDA***

Since 2006, AHMC finalized construction of the outdated 120-bed hospital, commissioned the building, staffed the hospital of 150 FTE for full operations, and currently manages and operates the new Mount St. John's Medical Center at 185 beds. The hospital policies and procedures are all managed by AHMC in accordance with the standards required for The Joint Commission International accreditation.

**AHMC has implemented numerous health information management tools to sustain the highest quality of operations that include the Institute Statistical Tracking System that provides for:**

- Readmission Data Base
- Census Tracking
- Surgical Logs
- Incident/Sentinel Event Tracking

#### **Transitioning of Medical Facility and Capabilities:**

- AHMC was called upon to de-commission an existing hospital in Antigua and to move the patients from that facility to a brand new hospital
- AHMC was required to "salvage" as much of the existing equipment and supplies as possible and to determine what was able to be moved to the new facility and utilized without causing patient harm
- This was accomplished in February of 2008 when 77 patients were moved from the "old" hospital to the new one
- Requirements for this aspect of the move also necessitated establishing new operating budgets for cash flow, capital equipment, personnel, training and financial performance

#### **Start-up of New Hospital Systems:**

- All aspects of starting a new hospital were implemented when AHMC initiated its collaboration and involvement with MSJMC
- New computer systems were installed
- A Quality Assurance program was implemented
- Biomedical equipment systems were purchased, installed and implemented
- Personnel training was instituted and is an on-going feature
- A new Medical Records system was initiated
- The hospital has also gone from a total paper system of Medical Records, Financial Records and all documentation to a "state of the art" hospital operating system in two years that utilizes almost no paper

### AN and TCN staffing of Medical Personnel to OCONUS locations:

- AHMC has established linkages with off-island universities, medical groups, and hospitals including University of Miami, Harvard Medical Faculty Physicians, and Jackson Hospital Miami.
- The AHMC team developed training exchange programs with clinicians from these organizations that included on-site instruction and visits by Antiguan nationals to the US.

### Management of Quality of Medical Services to Western and Joint Commission Standards:

- AHMC aligned with strategic partners to refine the QA function, Medical Staff organization, strengthen the nursing corps, and give training to the Board of Directors as to their roles and responsibilities as Trustees of the hospital
- AHMC sent nurses to Boston’s Beth Israel Deaconess Medical Center (BIDMC) for advanced training and Nurses from both BIDMC and Jackson Memorial Hospital in Miami have been on-site in Antigua to train hospital personnel in clinical practice guidelines, patient safety, administrative best business practices, utilization management, risk management and other important topics required for JCI compliance
- AHMC provided systems and procedures for the recruiting, verification, and credentialing of high level medical personnel including physicians, administrators, nurses, and technicians

Challenge	Process	Success
Reducing expenses and meeting hospital needs with major budgetary constraints.	<ul style="list-style-type: none"> <li>-Teaming with purchasing groups that enable best pricing for major expenditures</li> <li>-Exploring other options for obtaining equipment and materials</li> </ul>	<ul style="list-style-type: none"> <li>-Refurbished Defibrilators</li> <li>- 4 anesthesia machines donated from Morocco</li> <li>- Johnson &amp; Johnson donate “Newborn Packages”</li> </ul>
Correcting staffing levels	Using benchmark, staffing skill mix, and actual patient volume data to assess the effectiveness of staffing patterns	<ul style="list-style-type: none"> <li>-Increased RN staff in ER</li> <li>-Hired 12 additional nurses as full time staff.</li> <li>-recruiting experienced Emergency Medicine Physicians to supplement less experienced staff</li> </ul>

## Management Challenges

Challenge	Process	Success
Changing a paper based documentation system to an electronic documentation/medical record system	<ul style="list-style-type: none"> <li>-Holding classes in basic computer skills.</li> <li>-Creating super-users in the existing staff for computer programs to train other staff</li> <li>-Electronic Medical Record implemented in stages</li> </ul>	<ul style="list-style-type: none"> <li>-75% of all staff possess basic computer skills.</li> <li>100% of all clinical staff possess basic computer skills and are utilizing the EMR</li> <li>-75% of all administrative staff have advanced computer skills</li> </ul>
Implementing systems for Quality Assurance and Risk Management	Utilizing an American National who was trained in Quality Assurance and Six Sigma-Lean Initiatives as Director of QA	<ul style="list-style-type: none"> <li>Processes in place for Utilization Review</li> <li>- Root Cause Analysis                             <ul style="list-style-type: none"> <li>- Investigating Sentinel Events</li> <li>- EOC rounds</li> <li>- Patient Tracers</li> </ul> </li> </ul>

### AHMC Antigua- Risks 1

- AHMC manages risk in compliance with the Joint Commission Requirements
- For instance, the “old” hospital was a World War II era system of Quonset huts with very few high tech capabilities. The new hospital was very high tech with CT scan, MRI, and other computer operated equipment along with an IT system of very high standards:
  - The risk was that many of the personnel from the old hospital had never used a computer before and, therefore, required training on the new system in order to achieve our vision for a more advanced and efficient operations
  - The impact of this would be compromised systems, employee ineffectiveness, and the potential of compromised patient care
  - To mitigate this risk, AHMC, through the equipment suppliers, instituted training programs **six months before opening** the hospital on each piece of biomedical equipment for the users and did not allow operators to work the equipment until they had passed manufacturer’s specifications and met our standards of care
  - Additionally, remedial classes on computer use were started and then gradually people were moved onto the learning phases of the Hospital operating system. This was done in conjunction with the IT company

## AHMC Antigua- Risks 2

- Another example of AHMC Managed Risk:
  - Upon opening the new hospital, the Emergency Room (ER) became extremely busy and backups of 6+ hours became common
  - To mitigate the risk of untimely service to ER patients, AHMC brought in nurse consultants with expertise in resolving patient flow issues
  - A Quality Study was instituted to determine what the source of the backups in ER were.
  - After flow charting and interviews with staff, physicians and patients and specific data gathering, it was determined that the triage system needed to be revamped
  - Working with the triage nurses, a new ER/Urgent care system was instituted that put the more serious problems into the exam area with alert to the MD, and the “urgent” care cases on a fast track program

## AHMC Antigua- Success 1

- Under AHMC leadership and management, the hospital has achieved the following:
  - CAMC Accreditation for Internship Program Recognized by the University of the West Indies; Implementations of Multi Phase Electronic Records, order and Billing system; Average Length Of Stay Decreased From 9.5 to 4 days
  - Recruited/ Implemented - Oncology Services, Pediatric Surgeon, General Surgeons, Ophthalmology, Risk Management, Utilization Review, Occupational Health, Nursing Quality, JCI Preparedness
  - Educational Training Topics that include: A Series Pertaining to Epilepsy, Causes of Dizziness, Dialysis Patients / Renal Failure in the Caribbean, Critical Skills Related to Triage, Nursing Protocols, Cancers: Breast, Prostate, Colon including Reconstructive Surgery, Orthopedic, Back Pain, Heart Disease, Glaucoma, Asthma, Hypertension, and Diabetes

## AHMC Antigua- Success 2

- AHMC reduced the anticipated equipment costs from \$16M (Pan American Health Organization projection) to \$5M by leveraging their existing vendor agreements/relationships
- AHMC has a record of reducing expenses in many areas of hospital operations including:
  - Capital expenditures where we team with purchasing groups that enable best pricing for major expenditures
  - Cost of supply items, medications and disposables
- Staffing Levels - AHMC utilizes benchmark data to assess staffing patterns and consistently seek to right-size our FTEs within our facilities to achieve optimal staffing in accordance with our workload

Challenge	Process	Success
Streamlining clinical processes for efficiency and safety	Implementing processes which are successful in US based hospitals	<ul style="list-style-type: none"> <li>-Reduced wait times in the ER</li> <li>-Critical patients no longer left in waiting room</li> <li>-Increased compliance with isolation precautions</li> </ul>
Challenging staff to embrace western standards while maintaining cultural sensitivity	Utilizing evidence based practices and literature reviews along with group discussions of benefits	<ul style="list-style-type: none"> <li>-Actively preparing for JCI accreditation</li> </ul>
Advancing the skills set and knowledge level of the existing clinical and administrative staff	<p>Providing medical and nursing mentors to address areas of concerns</p> <p>Providing educational opportunities</p>	<ul style="list-style-type: none"> <li>-Mentors visited from US Hospitals</li> <li>-Weekly unit based and hospital based educational conferences</li> <li>-Committee meetings</li> <li>-M&amp;M Rounds</li> <li>-Nursing Grand Rounds</li> </ul>