

## **ANVITA HEALTH PARTNERS WITH BETH ISRAEL DEACONESS MEDICAL CENTER PHYSICIANS FOR DIAGNOSTIC IMAGING CLINICAL DECISION SUPPORT**

### **CHALLENGE**

Being one of the foremost U.S. hospitals and a teaching institution for Harvard Medical School, the Beth Israel Deaconess Medical Center (BIDMC) faced a number of challenges related to its growing imaging services in early 2005.

The staff felt the need for a clinical decision support (CDS) tool capable of providing real-time clinical answers in order to identify the most appropriate imaging test for a specific patient. Physicians in their physician organization had the capability to select from 2,000 orderable radiological studies, many of which were state of the art technologies. However, the abundance of such options also resulted in potentially inappropriate testing, false positives, and potential risk to patients (e.g., contrast injections, interventional procedures, and radiation exposure). Furthermore, insurers had just mandated pre-authorization of all high tech imaging using a phone and paper based process, an archaic system that caused delays and frustration for both patients and doctors. A better system was desired.

### **SOLUTION**

Beth Israel Deaconess Physician Organization (BIDPO), an organization of physicians affiliated with BIDMC, established a partnership with Anvita Health to deliver an advanced CDS system with computerized provider order entry (CPOE) and real-time insurer authorization. Anvita Health and BIDPO joined forces to enhance the Anvita Health imaging implementation to create a natural language ordering vocabulary. A web-based, physician-designed user interface for Anvita Health's imaging implementation was then seamlessly integrated into BIDMC's existing EMR.

### **RESULTS**

#### **Increased Efficacy**

- Anvita Health's CDS positively influenced up to 35% of all ordering decisions, and up to 10% of high-tech radiology decisions were changed due to the CDS system
- Anvita Health also decreased inappropriate imaging, helping physicians select the best imaging test, for a specific patient, the first time

#### **Streamlined Workflow**

- Increased speed and conserved time was realized, as Anvita Health Imaging achieved nearly 100% compliance by 1,300 BIDPO-affiliated physicians at BIDMC
- Seamless integration of Anvita Health's plug-and-play solution into BIDMC's existing EMR platform
- Real-time insurer authorization increased efficiency, reduced frustrations, and saved time for physicians and hospital staff that no longer needed telephonic approvals

## Reduced Costs

- CDS decreased inappropriate imaging, which reduced overall cost trends for the hospital, patients, and the healthplan while increasing quality
- BIDPO physicians beat network trend in their region enabling the organization to successfully reach 100% of their P4P goals with their largest healthplan

## Improved Patient Care

- Anvita Health CDS identified testing contraindications (e.g., contrast dye use) in patients at high risk for adverse reactions
- Anvita Health identified and enabled comparative guidance into testing options based radiation dose to the patient
- Anvita Health identified and suggested alternative modalities more likely to yield a diagnosis for a specific clinical presentation (e.g., CT vs. MRI vs. nuclear study)

### *RICHARD PARKER, M.D., MEDICAL DIRECTOR OF BIDPO, ON ANVITA HEALTH*

“Anvita Health is providing a breakthrough CDS solution to help confront a major challenge facing physicians today – the abundance of a bewildering number of high tech imaging choices, some of which are extremely powerful, and others which are expensive and risky, yet may not yield a rapid diagnosis. Anvita Health provides guidance to help physicians and hospitals perform the right tests at the right time based on the medical profile of each patient, and couples this with real-time authorization by the insurer. It’s a superior model for all the stakeholders.”

### *ABOUT BIDPO*

BIDPO has more than 1,300 participating providers including physicians, podiatrists, and psychologists, who are affiliated with the Beth Israel Deaconess Medical Center (BIDMC). The Beth Israel Deaconess Physician Organization, LLC (BIDPO) promotes the highest quality of coordinated patient care, patient safety, and cost effective care among its participating providers through its integrated and coordinated managed care contracts and related medical management programs.

### *ABOUT ANVITA INSIGHT™ ANALYSIS ENGINE*

In this implementation, the Anvita Insight analysis engine automatically identifies the safest, most effective, and most affordable radiology tests that are most likely to yield an accurate diagnosis for a specific patient. The system is built upon Anvita Health’s proprietary engine that instantly personalizes, prioritizes, and identifies treatment options to help doctors and patients make better medical decisions. The system also enables pre-authorization of imaging tests, thereby eliminating time-consuming and inefficient administrative processes associated with telephone-based systems currently in use today.

### *ABOUT ANVITA HEALTH*

Founded by physicians in 2000, Anvita Health provides innovative health care analytics to its customers who, in aggregate, manage more than 50 million lives. Anvita Health’s analysis engine and custom analytics solutions are used by point-of-care information technology systems, health plans, pharmacy benefit managers, disease management companies, personal health record providers, and ambulatory care providers. The company is privately held with

corporate headquarters located in San Diego. For more information, visit [www.anvitahealth.com](http://www.anvitahealth.com).