



**ST. JOHN'S RIVERSIDE HOSPITAL**  
**YONKERS, NY**  
December 2004

**Executive Summary:**

St. John's Riverside Hospital was experiencing a high rate of children presenting in the emergency room for asthma episodes. A large percentage of the children were from minorities. This led the hospital to consider developing a community asthma intervention and education program. However, when a young boy died from a severe asthma attack while playing basketball in an after-school program, the hospital dedicated itself instead to creating a comprehensive approach to caring for asthmatic children. The hospital partnered with the school district to establish a school-based asthma program that allowed nurses to administer treatment to children suffering from asthma attacks at school. The hospital donated compressors, nebulizers, medication, and other supplies necessary for treatment and educated the school nurses about how to use the supplies, as well as about asthma in general.

Each of the school nurses maintained a log of the children with asthma-related visits, revealing that in the first year the nurses administered 937 nebulizer treatments, resulting in 95 percent of the students returning to class and reducing student asthma-related emergency room visits by 80 percent. Since the program's inception, the school-based asthma program has grown from the 55 original schools to 277 schools in the region, with support and grants from the state of New York.

**Organization Size:** 407 acute beds, 120 skilled nursing beds (8 ventilator beds)

**Program/Initiative Description:**

**School-Based Asthma Program:** St. John's Riverside Hospital established a partnership with 55 schools in the local school district to create an asthma intervention program. Using a \$15,000 grant, the hospital donated compressors, nebulizers, medication, and other supplies necessary to care for students suffering from asthma episodes. The hospital and school leadership together established the program procedures, allowing the school nurse in each of the 55 schools to administer treatment to patients suffering from an asthma attack at school, based on a doctor's orders. The New York State Education Department assured the hospital that the program was legal because the nurses were following doctors' orders, and encouraged the hospital to move forward with program.

Before beginning the program St. John's Riverside Hospital provided its nurses with training and education about how to use the medication and equipment as well as general education about the disease. The nurses keep a log of children they treat for asthma-related visits and the outcomes of the treatment. At the end of each year the hospital compiles the data and creates a report that is sent to each of the nurses in the program, the New York Department of Education, hospital administrative staff, and the school superintendent. The annual reports demonstrate the great need for the program and its success, and helped the program to receive over \$1 million in grants to continue and expand the program. In addition, the New York State Department of Health learned of the program and has adopted the concept as a pilot model for the entire state of New York.

**Establishment of Program/Initiative:** Established in fall 1998, expanded in July 2000

**Racial or Ethnic Disparities Problem the Program/Initiative Was Designed to Address:**

- The school district's population is 45 percent Hispanic, 31 percent African American, 19 percent Caucasian, and 5 percent Asian and other nationalities, resulting in highly disparate health care needs.
- Between 11 and 12 percent of all the children in the area have a history of suffering from asthma.
- St. John's Riverside Hospital was experiencing a high rate of children presenting in the emergency room with asthma.
- The 55 schools in the school district are poor, and needed the hospital's help to create an asthma-related intervention.

**Major Objectives:**

- Reduce morbidity, health complications, and emergency room visits from children suffering from asthma
- Create a more efficient care system for asthmatic children, allowing children suffering from asthma attacks to return to school, enable the children's parents to remain at work unless there is a true emergency, and minimize unnecessary health care costs

**Significant Results:**

- Nurses in the asthma program maintain a log of children with asthma-related visits; at the end of the first year, 937 nebulizer treatments were given, resulting in 95 percent of the students returning to class. This reduced student asthma-related emergency room visits by 80 percent.
- The asthma program has grown from the 55 original schools to 277 schools in the region. Data shows that 95 percent of the students suffering from an asthma attack continue to return to school after receiving treatment from the school nurse, resulting in significantly fewer emergency room visits, reduced ambulance costs and unscheduled physician visits, and reduced need for schools to call parents to leave work to pick up their child.
- The asthma program recently received the JCAHO Codman Award in 2001, and received the Hospital Association of New York State's 2003 Community Health Service Award.

**External Partners in the Program/Initiative:**

- Local school districts
- New York State Education Department
- New York State Department of Health

**Limitations or Problems Encountered:** When the program was first implemented, several school nurses were concerned about providing the care required, either for liability reasons or because the care was out of their scope of practice or experience; however, once the nurses understood that they were following a doctor's prescription, and that providing the care was legal, this barrier was eliminated.

**Estimated Cost of the Program, To Date:** New York State provided a grant for \$200,000 per year for the first three years; the funding has recently been reduced to

\$182,000 per year; the hospital funds the additional costs, currently an estimated \$40,000 - \$50,000 per year.

**Advice to Other Organizations That May Want to Start a Similar Program:**

- The asthma program can be replicated anywhere; it is a simple intervention, but it takes commitment and the initiative to start and to maintain it.
- Intervention in schools must be established as a clear partnership, working together with each school and ensuring they are kept “in the loop” with new data and information.

**Contact Name:** Jeff Byrne

**Title:** Asthma Program Director

**Email address:** [jbyrne@riversidehealth.org](mailto:jbyrne@riversidehealth.org)

**Telephone:** (914) 964-4312

**Fax:** (914) 964-4598