Asthma Coalition
Improving Population Health

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Manager Clinical Practice

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St. Luke’s Cornwall Hospital
Who We Are

- SLCH is a 345 bed licensed acute care not-for-profit community hospital
- A member of the Montefiore Healthcare System
- Main campuses in Newburgh & Cornwall
- 2016 SLCH provided services to over 250,000 people
- Designated as a medically underserved area (MUA)
- Primary Service Area, includes the city of Newburgh- 1,500 people per square mile
Newburgh, NY has by far the highest asthma-related Emergency Department visit rate among adults in Orange County and the second highest ED visit rate among children ages 0-17. Newburgh also leads Orange County with the highest rate of asthma-related hospitalizations among children ages 12-17.

NYSDOH, SPARCS data ED and Hospitalizations 2010-2012
Patient Population

Social Determinants

- Lack of quality healthcare
- Old and substandard housing
- Exposure to environmental hazards and pollutants
- Poverty
- Unemployment

ASTHMA
Hudson Valley Asthma Coalition

- Hudson Valley Asthma Coalition is a division of the American Lung Association in New York State and made possible by a grant from the New York State Department of Health. They serve Dutchess, Orange, Sullivan, and Westchester counties in the Hudson Valley, NY.

- Their mission is to work in partnership with health care hospitals, to enhance evidence-based asthma education and treatment to improve asthma outcomes.

Achieving and maintaining asthma control requires:
• Providing appropriate medications
• Addressing environmental factors
• Helping patients learn self management skills
• Monitoring to assess control and adjust therapy accordingly
Aim Statement

From April 1, 2015 to March 31, 2016 the Hudson Valley Asthma Coalition partnered with St. Luke's Cornwall Hospital Emergency Department in Newburgh using a systems approach to incorporate the EPR-3 Asthma Guidelines into care for patients with asthma with an initial focus on 53 asthma patients, ages 5-30, who were seen in the ED two or more times in the past year. We aimed to reduce the number of patients who visit the ED two or more times in the past year by 15%.
Collaborate with our community partners to enhance management of asthma in an outpatient primary care setting to decrease the number of patients who seek care in the ED setting.
St. Luke’s Cornwall Hospital enjoys a robust Asthma Team that includes participation from:

- Emergency Department
- Quality Management
- Clinical Practice
- Case Management
- Care Transitions
- Information Technology
- Respiratory Therapy
- Administration
Asthma Coalition Team Members

**St. Luke’s Cornwall Hospital**
- Susanne Curry, Clinical Educator
- Margaret Deyo-Allers, VP & CNO
- Scot Hill, Medical Director, ED
- Renee Feenaghty, Director Case Mgt
- Mary Kelley, VP QM
- Kathy Liston-Scott, Care Transition RN
- Kathryn Mason, Director Education
- Liza Mecca, Manager Respiratory
- Maureen Monahan, Care Transition RN
- Matthew Ocasio, Coord. Respiratory
- Kathleen Sheehan, Director ED
- Sandy Waters, IT

**Cornerstone Family Healthcare**
- Thomas Frederick
- Nicole Harris
- Christine LaPlante, Director Care Management
- Jessica Miles, Care Coordinator, Pediatrics
- Stephanie Zambrano, Care Coordinator

**Orange County Department of Health**
- Ann Craig, Division of Intervention Services
- Sue Chernek, RN
- Bob Deitrich
- Theresa Einertz, Supervising Public Health Nurse
- Linda Jansen, Acting Public Health Educator
- Mary Marsh, Director of Patient Services
- Heidi Meehan
- Eileen Reilly
- Maureen Sailer, Asst Director - Community Health Outreach

**Hudson Valley Asthma Coalition**
- Melesha Brissett, Program Manager
- Jacque Rubino, Director
Staff Education

- Two day Asthma Educator’s Exam prep course
  - Sponsored by the Hudson Valley Asthma Coalition
  - 10 Hospital staff participated in the course
  - Six / Ten have been successful in passing the National Asthma Educator’s Certification Exam (AE-C)

- Education for all ED Nursing Staff and Respiratory staff

- Education for our Emergency Department doctors provided by guest lectures supported by the Hudson Valley Asthma Coalition
**Patient Education**

**Asthma Action Plan**

**Use of Controller (Daily) Meds**

**Use of quick relief or rescue meds**

**Emergency Actions**

**Follow-up care**

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### Asthma Action Plan

#### Triggers: Things that make asthma worse
- Animal dander
- Dust mites
- Cockroaches
- Indoor mold
- Pollen and outdoor mold
- Tobacco smoke, smoke, strong odors, sprays
- Vacuum cleaning, sulfites, cold air, other medicines

#### The Colors of a traffic light will help you use your asthma medicines.
- Green means Go Zone!
  - Use preventive medicine.
- Yellow Means Caution Zone!
  - Add quick-relief medicine.
- Red means Danger Zone!
  - Call your primary care provider

#### GO

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<tr>
<th>Medicine</th>
<th>How Much</th>
<th>How Often/When</th>
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#### USE THESE DAILY PREVENTIVE ANTI-INFLAMMATORY MEDICINES:

**For asthma with exercise, take:**

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#### CAUTION

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#### CONTINUE WITH GREEN MEDICINES AND ADD:

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#### DANGER

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<th>How Often/When</th>
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### CALL YOUR PRIMARY CARE PROVIDER

### TAKE THESE QUICK RELIEF MEDICATIONS AND CALL YOUR DOCTOR NOW!

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### Your asthma is getting worse fast:
- Medicine is not helping
- Breathing is hard and fast
- Nose opens wide
- Ribs show
- Can’t talk well

### GET HELP FROM A DOCTOR NOW! Do not be afraid of causing a fuss. Your doctor will want to see you right away. If you cannot contact your doctor, go directly to the emergency room or call 911. DO NOT WAIT.

Make an appointment with your primary care provider within two days of an ED visit or hospitalization.
Collaborative Process

ED Visit - Primary Diagnosis of Asthma

- Tx & Ed provided by MD, nurse, respiratory
- AAP Provided to Patient
- Follow-up appt made
- AAP scanned to Care Transition
- Follow up phone call
- Referral to Cornerstone Family Health Center
- Referral to NYSDOH Visiting Nurse
- Referral to Orange County DOH Home Health Worker
Process Measures

Percent Patients Receiving an Inhaled Corticosteroid

- Q3 2015: 10%
- Q4 2015: 22%
- Q1 2016: 39%
- Q2 2016: 83%
Process Measures

Percent Patients Receiving Asthma Education

- Q3 2015: 27%
- Q4 2015: 78%
- Q1 2016: 83%
- Q2 2016: 94%
Percent Patients Receiving an Asthma Action Plan

Q3 2015: 25%
Q4 2015: 88%
Q1 2016: 73%
Q2 2016: 83%
Outcomes

53 Cohort Patients
Number of Patients with 2 or More ED Visits

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<th>Time Period</th>
<th>Number of Patients</th>
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<tr>
<td>1/1/14- 11/30/14</td>
<td>53</td>
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<tr>
<td>7/1/2015- 6/30/2016</td>
<td>8</td>
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85% ↓
Outcomes

53 Cohort Asthma Patients
Number of ED Visits

1/1/14-11/30/14: 150
7/1/15-6/30/16: 15

90% ↓
Outcomes

Number of ED Visits
All Patients with Asthma

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<tr>
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<th>2015</th>
<th>2016</th>
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<td>Jan-Mar</td>
<td>371</td>
<td>151</td>
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<tr>
<td>Apr-Jun</td>
<td>282</td>
<td>159</td>
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**Change:**
- Jan-Mar: 59% decrease
- Apr-Jun: 44% decrease
Looking Back….

• By providing knowledge and tools to empower our staff to educate our patients and families we have created a process for how our asthma care is delivered.

• We have created a comprehensive program that extends to our community partners.

• Hardwiring the processes (which continues in some areas) requires time, collaboration, and leadership support.
Next Steps….

Beginning September 1\textsuperscript{st}, 2016 we have expanded the work of the Asthma Coalition to the inpatient setting to meet the requirements of Electronic Clinical Quality Measures (eCQM), Meaningful Use, and the Delivery System Reform Incentive Payment Program (DSRIP).