A System in Action – King County Asthma Program
Connecting to the System

Key Drivers of Program Effectiveness:
- Strong Community Ties
- Integrated Health Care Services
- Tailored Environmental Interventions
- Committed Leaders & Champions
- High Performing Collaborations

Building the System

Getting Results

Evaluating the System

Sustaining the System
What: Delivering Comprehensive High-Quality Asthma Care

Integrated Health Care Services
- Physician champions
- Guidelines-based care
- Robust patient-clinician interactions
- Asthma education and action plans
- Community-wide coordination of care

Tailored Environmental Interventions
- Clinical assessment of triggers
- Individually tailored counseling & education
- Environmental management support
- Trigger control at home, school, and work
How: Through an Integrated, Collaborative, Community-Based System
Who: Champions and Leaders of Community Asthma Assets

Community Assets

Collaborations

Integrated Health Care Services

Tailored Environmental Interventions

Non-Profits
Service Providers
Coalitions
Health Plans
Funders

Schools
Public Housing
State Agencies
Public Officials
Local Environmental

Target Population

Community Partnerships

Target Population
How: Through an Integrated, Collaborative, Community-Based System

- Build
- Evaluate
- Sustain

- Non-Profits
- Service Providers
- Coalitions
- Health Plans
- Funders

- Schools
- Public Housing
- State Agencies
- Public Officials
- Local

- Integrated Health Care Services
- Tailored Environmental Interventions
How to Listen

- What elements of this System are emerging in this program’s story?
- What am I hearing that resonates with me?
- What can I take away to use in my work?
King County Asthma Program

Chronic Disease and Injury Prevention Section, Public Health Seattle and King County

Dr. Jim Krieger
King County Asthma Program - Overview

- Location: Seattle/King County, Washington
- Type of Program: City Public Health Department
- Service Area: King County
- Target Population: Low-income people with asthma
KCAP’s Bold Goals

The King County Asthma Program will support every person with asthma in King County in leading a full and active life, free of limitations from asthma, especially low-income people and people of color who bear a disproportionate burden of disease.
Long Term Impacts and Outcomes

• The long-term impacts we target include:
  – Symptom-free days
  – Quality of life
  – Urgent health care utilization

• The outcomes we track include:
  – Medication technique and adherence
  – Trigger reduction behaviors
  – Action plan use
  – Self-efficacy
Activities and Outcomes

• The major activities we pursue to drive towards target outcomes include:
  – Home visits for self-management support
  – Improving quality of clinical care
  – Improving housing quality
  – Asthma education in community settings
  – Supporting asthma-friendly childcare
  – Integration of asthma activities across sectors
Collaborations and Partnerships

- Healthy Homes (1997 – present)
- King County Asthma Forum (1998-2004)
- Steps to Health (2003-2008)
- Washington Asthma Initiative (1997 – present)
We Focus on Key Tasks...

- Making the diagnosis
- Assessing severity
- Using appropriate medications
- Reducing exposure to triggers
- Supporting self-management
- Reducing disparities
…Across Multiple Levels

Management by Patient
Home Environment
Social Relationships
Medical Care
Childcare, School and Work
Community Awareness and Support
Outdoor Environment

policies

services
Self-Management
Community Asthma Classes

- **ACT (Asthma Care Training)**
  - 3 educational sessions
  - Children with asthma between 7 and 12 and their caregivers
  - Held at community clinics or community-based organizations

- **Wee Wheezers**
  - 4 small group sessions
  - Parents of young children under the age of seven
  - Held at community clinics or community-based organizations
Healthy Homes: Home Visits for Asthma
Overview

• Home visits by Community Health Workers
• Healthy Homes I
  – RCT of 274 low-income households with children with asthma
  – Focus on home environmental triggers
• Healthy Homes II
  – RCT of 309 low-income households with children with persistent/poorly controlled asthma
  – Focus on self-management of medical and environmental aspects of asthma control
  – Compare clinic-based education by nurse to CHW home visits
Home Visits

- CHW makes 3-5 visits over one year
- Asthma self-management skills
  - Medication use
  - Self monitoring
  - Action plan use
- Home environment assessment and trigger reduction
- Provide asthma trigger control resources (bedding covers, vacuum, door mat, cleaning supplies)
- Asthma Control Plan
- Provider-patient communication
- Health system navigation
- Social support
- Advocacy/referral (housing, food, furniture, jobs, etc.)
Patient’s Perspective

Success Story
- Josc Gets Well

When community health worker, Maria, first met one year old Jose, he had been hospitalized as well as treated in the emergency room for severe asthma symptoms. His asthma symptoms woke him up at night constantly. He was sleeping on the floor, surrounded by stuffed animals. His home contained lots of clutter that encouraged the presence of dust, dust mites and roaches. Jose’s mother was confused about how to give him his medications and she used undiluted bleach to clean the home.

Maria worked with Jose’s mother to help her understand that Jose’s asthma was triggered by dust mites, roaches and bleach. She helped the mother learn to give Jose’s asthma medications correctly, assisted the family with the roach abatement process and helped her substitute other cleaning agents for the bleach she had been using. Two months from Jose’s enrollment in the Medicaid Asthma Program, he had improved so much that he had not suffered from any asthma symptoms.
Breathe Easy Homes

Old Housing

New Breathe Easy Home
Build 60 Breathe Easy units for children with asthma at High Point Public Housing site.
Medical Care
The “Collaborative” Method

• 4 clinics participated in a quality improvement, shared learning project

• Components
  • Asthma champions
  • Teams to improve quality of care using Chronic Care Model
  • Measurable goals
    • e.g., all patients with persistent asthma will use inhaled steroids
  • Registry
  • Small cycles of change (PDSA), then spread
Example: Columbia Health Center

- Health Department Pediatric Clinic
- Multidisciplinary team
Asthma Week Planned Visits

• Assessment of control
• Visit with provider to tailor medications as needed
• Update of action plan
• Review of MDI/diskus technique by pharmacist or RN
• Session with asthma educator, including home self-management goals
• School coordination and/or referral to outside resources if applicable
• Flu shot
Link to Community Resources

• Linked more than 200 patients with community resources
• Improved communication with school and childcare
• Medication and action plan availability at school regularly reviewed and updated
Registry

- Registry with over 850 patients
- Functions
  - Yearly planned visits for ALL asthmatics
  - Flu shot recall
  - Document and monitor quality of care
  - Feedback on individual patients to providers
Asthma Severity Classification

Goal: 95% of asthma visits will have documented asthma severity

- Spread

Initial chart review: Percent visits with severity classification compared to Target.
Emergency Department Visits

- Reduction in ED visits for asthma patients by 66% (n=186 patients)
PACE: Physician Asthma Care Education

• Directed at primary care providers
• Focuses on compliance with NHLBI guidelines
• Seminars include 8 to 12 clinicians
• Interactive adult learning
  – Case presentations
  – Communication and teaching skills
  – Coding and reimbursement
• RCT: decreased hospitalization and ED use

(NM Clark, 2000)
Childcare and School
Childcare

• Childcare provider training
  – CE credits
  – On-site and central locations
  – Well attended and well received
• Checklists
• Action plans
• Site visits and audits
• Needs evaluation
Schools

- Asthma education (OAS)
- School siting relative to sources of exposure
- Idling policies
- Team Asthma Goes to School
Increasing Asthma Awareness

• Asthma triage line for referral to programs in English, Spanish, Vietnamese
• Website
• Media
• Community Events
  — Health Fairs
  — Asthma Play
  — Asthma Summits
Integration: Where We Started...

- Clinics
- Hospitals
- Emergency Departments
- Schools
- Childcare Providers
- Home Visiting Support
- Community Based Organizations
- Environmental Health
- Health Plans
- Public Health
Where We Want to Be…

- Hospitals
- Emergency Departments
- Schools
- Clinics
- Health Plans
- Childcare Providers
- Home Visiting Support
- Community Based Organizations
- Environmental Health
- Public Health
Integrating Care For Individuals

• Community Health Workers
  – Link families with schools, childcare, health providers, public housing

• Care Coordinators

• Shared Asthma Action Plans
  – Provider
  – School/childcare
  – Home visitors

• Triage Line (CHWs)
Integration Across Organizations

• Common tools, guidelines and messaging
  – Shared educational resources and programs
  – Consistent asthma control protocols and guidelines
  – Consistent key asthma messages
• Inter-organizational cross-referral mechanisms
What Did We Accomplish?
## What Has Worked? What is the Evidence?

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Lessons

• Control of asthma is complex and must address medical, environmental and social issues
• Allow 18-24 months for developing and initiating a complex action plan
• Champions greatly accelerate change
• Partners and communities must be ready to act
• Multi-sector collaborations bring needed expertise and resources
Lessons

• Take simpler and smaller steps rather than do it all at once

• Focus intensively on small, well-defined communities

• Policy change may be more resource-effective than services
  – Direct services and events reach limited numbers
  – Policy change affects populations
Lessons

- Use evidence-based strategies when available
- Use and evaluate innovative strategies when not available
- Think integration
- Pilot and develop infrastructure before taking to scale
Lessons Learned: Coalition Development

- Hire paid coalition staff
- Engage diverse, committed leaders from several organizations
- Define structure and governance and modify over time
- Distribute equitably opportunities for resources and recognition
- Value respectful communication
- Praise altruism, but also recognize the power of self-interest
The End...Thanks
Question: Which of these areas of the System surface most strongly for you in the King County story?

1. Collaborations and Partnerships
2. Integrated Health Care Services
3. Tailored Environmental Interventions
4. Strong Community Ties
5. Community Leaders and Program Champions
6. Using Evaluation and Data
Tailored Environmental Interventions

• Strategies for Action:
  – Educate care teams to deliver environmental trigger assessment and management
  – Assess trigger sensitivity and exposure in clinical interviews
  – Provide tailored education and counseling during clinical visits
  – Make environmental management a reality at home, school and work
**Question:** For your program, rate the strength of your environmental intervention component.

1. No significant effort
2. Small effort
3. Moderate effort
4. Significant, growing
5. Large scale, aggressive, well funded
Integrated Health Care Services

• Strategies for Action:
  – Educate and support clinical care teams to facilitate consistent, high-quality care
  – Support continuous clinical improvement
  – Promote robust patient/provider interaction
  – Facilitate communication across the care team
Question: For your program, rate the strength of your Integrated Health Care Services component.

1. No significant effort
2. Small effort
3. Moderate effort
4. Significant, growing
5. Large scale, aggressive, well funded
High-Performing Collaborations

- Strategies for Action:
  - Build on what works: partner with collaborators active in your target community
  - Collaborate to build credibility
**Question:** For your program, rate the strength of your High-Performing Collaborations.

1. No significant effort
2. Small effort
3. Moderate effort
4. Significant, growing
5. Large scale, aggressive, well funded
Strong Community Ties

• Strategies for Action:
  – Include your community in program planning
  – Engage your community ‘where it lives’
  – Make it easy to accept services
Question: For your program, rate the strength of your Strong Community Ties.

1. No significant effort
2. Small effort
3. Moderate effort
4. Significant, growing
5. Large scale, aggressive, well funded
Committed Leaders and Champions

• Strategies for Action:
  – Use outcomes data to promote change
  – Institutionalize the focus on outcomes
  – Create program champions
Question: For your program, rate the strength of your efforts to have Committed Leaders and Program Champions.

1. No significant effort
2. Small effort
3. Moderate effort
4. Significant, growing
5. Large scale, aggressive, well funded
Question: Does your program have an evaluation component?

1. Don’t have it
2. Under development
3. In place, adequate
4. Very well developed, a model for others
5. N/A
On what areas of the System are you now excited to take action?
Question: Which of these areas do I feel ready to take action on and want to learn more about?

1. Collaborations and Partnerships
2. Integrated Health Care Services
3. Tailored Environmental Interventions
4. Strong Community Ties
5. Community Leaders and Program Champions
6. Using Evaluation and Data