


**Six months to Develop, Implement and Evaluate a Mobile Integrated Health Model that Fulfills the IHI Triple Aim**



Presented to:  
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Community Paramedicine

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**The new rules of health care**

The IHI Triple Aim encourages healthcare delivery models that:

- Improve healthcare quality and patient satisfaction
- Improve the health of populations
- Reduce per capita cost of healthcare



IHI recommends that new programs:

- Identify target populations
- Define system goals
- Develop projects strong enough to create system-wide results
- Allow for rapid testing and scale up adapted to local needs and conditions

<http://www.ihi.org/offerings/initiatives/TripleAIM/Pages/default.aspx>

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**Overview - Treat the Streets:  
Prehospital pediatric asthma intervention model to improve child health outcomes**

**Goals**



- Preventing ED and Hospital Readmission
- Improving Health Care Access
- Developing the paramedic workforce
- Research, data analysis, and dissemination
- Fiscal & operational sustainability

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## Patient Needs



Local hospitalization frequency and cost (2013)

- 15,000 (11%) children, age 5-17, in Indianapolis, have asthma
- Average asthma-related hospital stay in Indy = \$13,597
- Nearly 60% of these hospital stays were paid for by publically funded programs
- As much as 25% will readmit within a month of discharge

County Health Rankings & Roadmaps University of Wisconsin, Population Health Institute 2013 (March 18, 2013). Available from: <http://www.countyhealthrankings.org/>

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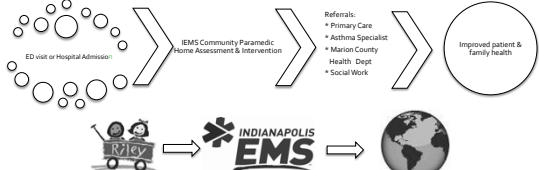
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## Methods



Paramedics provide post-discharge in-home visits to pediatric asthma patients (2-17 yrs old) who have been:

- Identified as high-risk AND
- Discharged from an observation or inpatient hospital stay OR
- Referred by ED physicians




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## Community paramedic asthma home visits provide:

Clinical assessment and medical interventions 

 Medication reconciliation

Asthma and medication education 

 Environmental assessment

Referrals to appropriate medical & social services 

- PCP
- Health dept / pest control / housing / legal assistance

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## Planning & Development

**Program plan contents**

- Target population
- System goals & objectives
- Evidence of need
- Organizational capacity
- Available community resources
- Strengths & roles of key personnel
- Organizational relationships
- Project design
- Outline of operational plan
- Data collection, analysis & distribution methods
- Evaluation methods
- Timeline

**This plan creates**

- projects strong enough to create system-wide results
- rapid testing and scale-up ability, adapted to local needs and conditions




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## Program Development Timeline

March-April 2013	Sept 1 <sup>st</sup> , 2013	Oct 2013	Nov-Dec 2013
<ul style="list-style-type: none"> <li>Program plan developed/ grant written</li> </ul>	<ul style="list-style-type: none"> <li>Grant awarded</li> <li>Curriculum &amp; protocols developed</li> </ul>	<ul style="list-style-type: none"> <li>Program manager &amp; community paramedics hired</li> </ul>	<ul style="list-style-type: none"> <li>Community Paramedics receive 12 hours classroom training &amp; 180 clinical hours of CE</li> <li>Global training to all EMT &amp; Medics on CP &amp; grant</li> <li>Riley staff trained on patient enrollment, qualifications &amp; scheduling process</li> </ul>




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## Implementation Timeline

January 2014	July 2014	September 2014
<ul style="list-style-type: none"> <li>1<sup>st</sup> patient visit</li> <li>Ensure that existing IU Health/Riley infrastructure can accept 2-3 patients/wk who need follow-up care</li> </ul>	<ul style="list-style-type: none"> <li>Develop pediatric asthma registry</li> <li>Share preliminary results with partners</li> <li>Data collection &amp; analysis process complete and refined</li> </ul>	<ul style="list-style-type: none"> <li>Patient/family satisfaction survey established</li> </ul>

Visit avg of 12 patients/week




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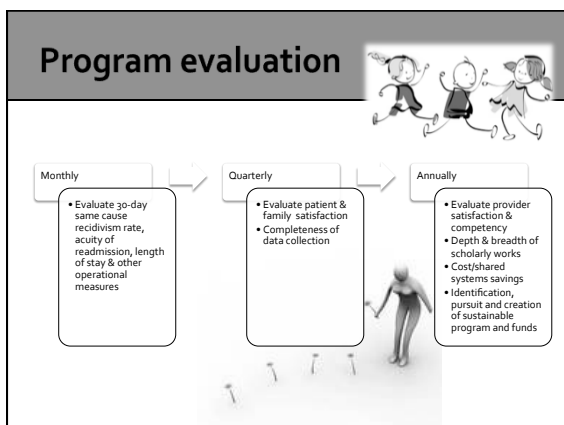
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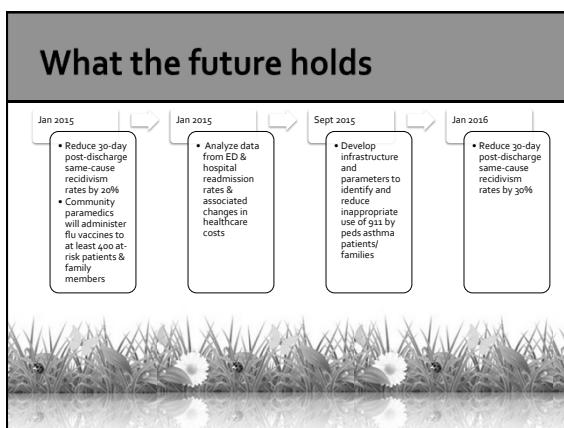
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## Preliminary results

- Preventing ED and Hospital Readmission
  - Improve healthcare quality and patient satisfaction
  - Improve the health of populations
  - Reduce per capita cost of healthcare
    - Visited 200+ patients
- Improving Health Care Access
  - Data not yet available
- Developing the paramedic workforce
  - Community paramedics are confident & competent in their new skill set
  - Eligible for Asthma Educator certification from the Nat. Asthma Education Certification Board (NAECB)
- Research, data analysis, and dissemination
  - Data collection 85% complete
  - 3 press articles, 3 presentations
- Fiscal sustainability
  - Currently discussing partnerships & reimbursement strategies with medicaid vendors & private payors

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## Pediatric grant, with family focused interventions



Kids lack the decision making authority and control of many lifestyle choices that affect their health.

### Goals

- Slow and prevent chronic disease progression
- Educate and empower patients and families
- Decrease non-compliance and increase self care
- Improving healthcare access
- Remove barriers to effective treatment

Our most frequent interventions involve the caregivers or the whole family.

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## Strengths



- Robust medical direction
- Key decision makers were vested and a portion of their time/effort was purchased
- Buy-in from key stakeholders in area hospitals, the ambulance service & community partners
- Open communication between project managers at Riley & IEMS
- We have wonderful medics

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## If we had to do it all over again...

- Involve your IT and clinical decision making teams early and often



<http://www.comicmix.com/2013/03/05/marc-alan-fishman-and-the-geek-shall-inherit-the-earth/>

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Thank you!

For more information, visit:  
**INDIANAEMSC.ORG/ASTHMA**

Questions? Contact Kacy Allgood at [allgoodk@iu.edu](mailto:allgoodk@iu.edu)

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