Southwestern Ohio Ambulatory Research Network (SOAR-NET)

Greg Eberhart, MD
Meaghan Ebetino
Miryoung Lee, PhD
William Spears, PhD
Agenda

- Introduction to practice-based research:  
  Dr. Spears
- How SOAR-Net Projects are selected:  
  Dr. Eberhart
- Maternal Resource Guide Study:  
  Dr. Lee
- Underinsurance Study:  
  Ms. Ebetino
Collaborative partnership between community physicians and academic investigators with the goal of answering questions that help improve the care provided to patients

Research that is fundamentally built upon, informed by, carried out, and expeditiously applied in community clinician practices
Introduction to Practice-Based Research

- Practice based research started in Europe in the first half of the 20th century
- First regional network was organized in Chicago in 1984 and is still active
Introduction to Practice-Based Research

- Pediatric Research in Office Settings (PROS), a national child health network, was championed by Robert J. Haggerty when he was AAP President in 1985, and is approaching its 25th anniversary
- PROS continues with Maternal and Child Health infrastructure funding as well as funding for specific projects from private foundations and NIH
Introduction to Practice-Based Research

- There are now over one hundred regional primary care practice-based research networks in the United States, many led by family physicians
Introduction to SOAR-Net

- SOAR-Net first met in 2002 and continues as a vibrant network supported by both federal and foundation funding (i.e. Dayton Children’s Research Foundation)
- Collaborates with 14 pediatric and family practice offices locally
- Works with other PBRN networks
  - PRIM-Net - Recruitment and Retention of Minorities in Medical Research
Almost all abstracts submitted have been accepted at national or international meetings. This year SOAR-Net leaders presented at:

- Pediatric Academic Societies’ Annual Meeting, Vancouver
- Agency for Healthcare Research and Quality’s PBRN National Meeting, Bethesda
SOAR-Net Activities

- Also presenting this year at:
  - AAP National Conference & Exhibition (NCE), San Francisco
  - European Academy of Pediatrics, Copenhagen, Denmark
How Research Ideas Are Identified and Implemented in SOAR-Net

Greg Eberhart M.D.
Community Coordinator
SOARNet
SOAR-Net Practices
Top Down

- Leadership Group - Social Capital
- OPRC - Maternal Mental Health
- PRIMENet - Underinsurance
- CPRG - ADHD Collaborative
- Children’s Medical Center - Hypertension
Bottom Up

- Parent Advisory Group - currently developing
- Regular Visits to member practices to survey for ideas
Implementation

- Identifying Practices
- Reviewing logistics with office staff and physicians
- Coordinate timing with workload/staffing at offices
- Coordinate timing with medical students and research assistants
Study Design

- Survey
  - Parent
  - Physician
- Chart Review
- Web-Based
Maternal Mental Health

SOAR-Net Project

Miryong Lee, PhD
Objectives

– To evaluate mothers’ perception of a maternal resource guide

(A Guide for Moms, created by Dr. Amy Heneghan)

– To educate mothers about symptoms of stress and depression
– To encourage mothers to think about mothers’ needs and seek help
– To provide a comprehensive list of community resources
Project outline - continued

- Project PI: Dr. John Pascoe
- Study design: Survey
- Period
  - May 2006 and March 2009
- Survey sites: 11 SOAR-Net practices
- Survey participants
  - 1,282 mothers (refusal rate, 18.2%)
- Survey coordinators and research assistants
A Guide for Moms

Mothers and mothers-to-be could use a helping hand at times. This guide:

- Helps mothers to think about their personal and family needs.
- Gives mothers information about people, services, or resources that may help them through pregnancy and beyond.
- Encourages mothers to seek help when they are struggling or their families need help.

Prepared at Case Western Reserve University under the direction of Amy Heneghan, M.D., with major funding from the Robert Wood Johnson Foundation.

Additional funding was provided by the Cleveland Department of Public Health through the MomsFirst Project, Division of Healthy Start and Perinatal Systems, Maternal and Child Health Bureau, Health Resources and Services Administration, U.S. Department of Health and Human Services.

Collaboration was provided by: The Cleveland Regional Perinatal Network; Rainbow Babies & Children's Hospital; University MacDonald Women's Hospital; University Hospitals of Cleveland; MetroHealth Medical Center and MetroHealth Center for Community Health; Northeast Ohio Neighborhood Health Services, Inc.; and United Way Services' First Call For Help.

For additional copies of this guide or to comment on its content, please call Amy Heneghan, M.D., at 216-844-6243 or The Cleveland Regional Perinatal Network at 216-844-3991.

The format for this guide was inspired by "Your Guide to Mental Health Services in Cleveland," published by The National Alliance for the Mentally Ill of Metro Cleveland (216-491-1616).

This guide provides selected resources for mothers of diverse backgrounds. It is not intended to be a comprehensive guide. Inclusion of resources in this guide is informational only and does not represent an endorsement of specific organizations.

Copyright 2003 Heneghan. Artwork of seated mother used with permission of Victor Rucker.
Research paper


Mothers with positive or negative depression screens evaluate a maternal resource guide. *Journal of Pediatric Health Care, 2010;* doi:10.1016/j.pedhc.2010.04.004
Study aim:
Evaluation of the Guide

- Usefulness of the guide for resources
  - Personal usefulness of the guide
  - Personal usefulness of specific resources
  - Overall quality in design and contents of the guide

- A validated 3-item screening for depressive symptoms (Kemper & Babonis 1992; Pascoe et al., 2006)
Helpfulness of the Guide was asked:
- “This guide is helpful to me personally”
  - More useful (coded ‘1’) – mothers who responded “strongly agree” or “agree”
  - Less useful (coded ‘0’) – mothers who responded “strongly disagree” or “disagree”

Maternal depression screen:
- Positive (coded ‘1’) and negative (coded ‘0’) screen

Other factors (e.g., maternal age, education and types of children’s health insurance)
Participated practices

- Wright-Patterson Medical Center Pediatric Clinic
- Cornerstone Pediatrics
- Ohio Pediatrics Inc.
- Dayton Children's Health Clinic
- Rocking Horse Community Health Center
- South Dayton Pediatrics
- Miami Valley Hospital
- WSU Physicians in Yellow Springs
- PriMed Huber Heights
- Combined Health District of Dayton
Summary of study findings

- 1,048 English speaking mothers
  - Difference in maternal characteristics between civilian and military mothers

- 910 (86.8%) civilian mothers
  - Mean age - 30 years
  - Married – 47%
  - Race/ethnicity – African American – 30%
  - College education – 48%
  - Employed – 58%
  - Public assistance in the past year – 34%
  - Positive depression screen – 28%
## Helpfulness of the Guide: Associated factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Crude Odds Ratio</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not married</td>
<td>4.05</td>
<td>2.77-5.94</td>
</tr>
<tr>
<td>Child’s health insurance – public</td>
<td>3.59</td>
<td>2.39-5.40</td>
</tr>
<tr>
<td>Positive depression screen</td>
<td>3.57</td>
<td>2.13-5.98</td>
</tr>
<tr>
<td>Public assistance</td>
<td>3.03</td>
<td>1.94-4.73</td>
</tr>
<tr>
<td>Race/ethnicity – African American</td>
<td>2.35</td>
<td>1.51-3.65</td>
</tr>
<tr>
<td>Age – less than sample median</td>
<td>2.24</td>
<td>1.57-3.20</td>
</tr>
<tr>
<td>Less than college education</td>
<td>2.09</td>
<td>1.47-2.97</td>
</tr>
</tbody>
</table>
Helpfulness of the Guide: Multiple regression

![Graph showing adjusted odds ratio for positive depression screen versus not married. The positive depression screen has an adjusted odds ratio of 2.68, while not married has an adjusted odds ratio of 2.39.]
Discussion

• Civilian mothers with positive depression screens were approximately 2.7 times more likely to report the helpfulness of the Guide compared with mother with negative depression screens.

• This study provides important implications for the effectiveness of printed maternal resource guides on mothers’ help-seeking behaviors.
Underinsured Children In Pediatric Offices: Parents’ Perceptions of Their Children’s Health Insurance

William Spears, PhD, John Pascoe, MD, MPH, Caroline McNicholas, MA; Miryoung Lee, PhD, Greg Eberhart, MD, Meaghan Ebetino, BS, Jessica Zagory, BS, and Mitali Pakvasa, BS.

Pediatrics, Wright State University Boonschoft School of Medicine, Dayton, OH, United States.
Objective

The objective is to estimate the prevalence of underinsurance among families with children under 18 years old.
Parents were asked whether they delayed or were unable to get care for their child because of an inability to pay in four circumstances:

- fill a recommended prescription,
- see a specialist,
- get a recommended test, or
- get other medical care.
Underinsured

Children unable to receive care because of an inability to pay were identified as underinsured.
Methods

Convenience sample in 13 pediatric SOAR-Net practices

- Parents of the child completed 1,980 of the surveys.
- Cases were excluded because they were of mixed heritage and other races, had two or more missing values for demographic variables, or were either uninsured or only partially insured during the previous year.

This resulted in 1,715 cases that were available for analysis.
### Demographic Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of respondents</strong></td>
<td>1,715</td>
</tr>
<tr>
<td><strong>Child’s Racial Heritage</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>83.0</td>
</tr>
<tr>
<td>Black</td>
<td>17.0</td>
</tr>
<tr>
<td><strong>Child’s Age</strong></td>
<td></td>
</tr>
<tr>
<td>0 to 4</td>
<td>48.4</td>
</tr>
<tr>
<td>5 to 9</td>
<td>23.4</td>
</tr>
<tr>
<td>10 and older</td>
<td>28.2</td>
</tr>
<tr>
<td><strong>Parent’s Education</strong></td>
<td></td>
</tr>
<tr>
<td>High School or less</td>
<td>26.9</td>
</tr>
<tr>
<td>Some College or College Graduate</td>
<td>73.1</td>
</tr>
<tr>
<td><strong>Family Income</strong></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Less than $15,000</td>
<td>16.9</td>
</tr>
<tr>
<td>$15,000 to $34,999</td>
<td>24.7</td>
</tr>
<tr>
<td>$35,000 to $74,999</td>
<td>27.5</td>
</tr>
<tr>
<td>More than $75,000</td>
<td>31.0</td>
</tr>
<tr>
<td><strong>Insurance Type</strong></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>36.0</td>
</tr>
<tr>
<td>Private</td>
<td>64.0</td>
</tr>
</tbody>
</table>
**Were you unable to receive recommended medical care for your child because of trouble paying for it?**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to see a specialist</td>
<td>4.7</td>
</tr>
<tr>
<td>Unable to have a recommended test</td>
<td>4.3</td>
</tr>
<tr>
<td>Unable to fill a recommended prescription</td>
<td>8.1</td>
</tr>
<tr>
<td>Unable to get other medical care</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Underinsured</strong></td>
<td><strong>13.2</strong></td>
</tr>
</tbody>
</table>
Predictors of underinsurance among children

<table>
<thead>
<tr>
<th></th>
<th>Adjusted Odds Ratio</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $15,000</td>
<td>3.6</td>
<td>1.8</td>
<td>7.2</td>
</tr>
<tr>
<td>$15,000 to $34,999</td>
<td>5.7</td>
<td>3.4</td>
<td>9.7</td>
</tr>
<tr>
<td>$35,000 to $74,999</td>
<td>3.2</td>
<td>2.0</td>
<td>5.0</td>
</tr>
<tr>
<td>More than $75,000</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Child’s Health Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good/Fair/Poor</td>
<td>2.5</td>
<td>1.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Very Good</td>
<td>1.4</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Excellent</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Insurance Type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>2.0</td>
<td>1.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Public</td>
<td>1.0</td>
<td></td>
<td></td>
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</tbody>
</table>

* Adjusted for family income, child’s health status, insurance type
# Predictors of child’s health suffered because of inability to pay for it

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<th>Adjusted Odds Ratio*</th>
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* Adjusted for family income, child’s health status, insurance type
Conclusions

- One in eight study parents reported that they had difficulty in obtaining healthcare recommended for their children.

- Children from low income families and those with private insurance are more likely to be underinsured than children covered by public insurance.

- The health of children from low income families with private insurance is more likely to have suffered than for children covered by public insurance.