Addressing Perceived Barriers to Prenatal Care in Milwaukee: Patient and Provider Survey Design and Implementation

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Presentation Overview

• **Background**
  – Setting the Stage: Why a survey? Why now?
  – Prenatal care utilization at Aurora Sinai

• **Project Methods**
  – PRECEDE-PROCEED Model
  – Theory of Care-Seeking Behavior
  – Survey design and implementation

• **Discussion**
  – Strengths
  – Limitations

• **Conclusion/What I learned**

• **Acknowledgements**
The Aurora Midwifery and Wellness Center

• 3 years ago...
  – Certified Nurse-Midwives (CNMs) were asked to staff the new OB-Triage Department, next to the Emergency Department (ED).
  – CNMs began to notice patterns of pregnant patients coming into OB-Triage without receiving any previous care.
  – Currently, evidence is anecdotal but strong. Very few research studies have focused on pregnant women utilizing acute care (most have focused on barriers to prenatal care).

• For the purposes of this study, it was important to fuse Milwaukee-specific information with previous research regarding barriers to prenatal care.
<table>
<thead>
<tr>
<th>Prenatal Care Utilization at Aurora Sinai Medical Center</th>
<th>N= 2,905</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Prenatal Care</td>
<td>81</td>
</tr>
<tr>
<td>1 to 3 visits</td>
<td>201</td>
</tr>
<tr>
<td>4 to 6 visits</td>
<td>504</td>
</tr>
<tr>
<td>7 or more</td>
<td>2119</td>
</tr>
</tbody>
</table>

The number of women is represented by the green bars in the diagram.
Infant Mortality and Prenatal Care Utilization: Aurora Sinai

- No PNC: 10.81%
- 1-3 visits: 6.47%
- 4-6 visits: 1.59%
- 7 or more visits: 0.47%
Project Overview

- The Barriers to Prenatal Care Project consists of 4 components:
  - Patient Survey
  - Checklist for a Healthy Pregnancy
  - Clinician Survey
  - Implementation Protocol
Patient Survey Target Population

Pregnant women presenting...

- to Aurora Sinai’s ED (less than 20 weeks gestation) or OB-Triage (20 weeks gestation or greater)
- for non-emergency situations or specifically requesting prenatal care services

Exclusion criteria: women experiencing a medical emergency or are in active labor and women who are unconscious or otherwise incapacitated
Implementation Protocol:
Patient and Clinician Surveys

1. Picked a planning model (PRECEDE-PROCEED)
2. Designed Surveys (previous research and Theory of Care-Seeking Behavior)
3. Designed Checklist for Healthy Pregnancy (Based on CNM feedback)
4. Created an implementation protocol for Aurora Midwifery and Wellness Center
PRECEDE-PROCEED Model Overview

Phase 1: Social Assessment

Phase 2: Epidemiological Assessment

Phase 3: Behavioral & Environmental Assessment

Phase 4: Educational & Ecological Assessment

Phase 5: Administrative & Policy Assessment

Phase 6: Implementation

Phase 7: Process Evaluation

Phase 8: Impact Evaluation

Phase 9: Outcome Evaluation
The Theory of Care-Seeking Behavior

Clinical and Social Demographic Variables
- Cultural background
- Social support
- Religious beliefs
- Model of care
- Level of cultural competence among clinicians

Feelings and emotions (Affect)
Perceived value of prenatal care (Expectations)
Values: Preventive or illness behavior?
Habits: why the ED instead of prenatal care?
Norms: social, personal and interpersonal agreements

Facilitating Conditions
- Access to insurance
- Consistency of provider and level of care
- Transportation, bus schedules, taxi service
- Daycare provided

Care-Seeking Behavior
## Survey Design

<table>
<thead>
<tr>
<th>TCSB Category</th>
<th>Definition of Category</th>
<th>Barriers Reported from Previous Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affect</td>
<td>Feelings and emotions, past experiences</td>
<td>psychosocial stress (depression, poor self-esteem, not feeling well)</td>
</tr>
<tr>
<td>Expectations</td>
<td>Beliefs about the likelihood of outcomes associated with prenatal care, perceived value of care.</td>
<td>Patient feels she does not need prenatal care</td>
</tr>
<tr>
<td>Values</td>
<td>Preventive behaviors vs. illness behaviors</td>
<td>NONE</td>
</tr>
<tr>
<td>Norms</td>
<td>Social and personal norms, interpersonal agreements</td>
<td>Personal/family problems; poor relationship with baby’s father; multiple roles</td>
</tr>
<tr>
<td>Habits</td>
<td>Personal issues that interfere with care-seeking behaviors</td>
<td>Substance abuse; homelessness; receiving drug treatment;</td>
</tr>
<tr>
<td>Facilitating Conditions</td>
<td>Specific, objective, external factors that enable one to seek care.</td>
<td>Access to BadgerCare or private insurance; interpreter services</td>
</tr>
<tr>
<td>Clinical Variables</td>
<td>Features of the clinic and clinicians that may interfere with prenatal care use.</td>
<td>Continuity of provider; comprehensiveness of service; cleanliness of waiting room</td>
</tr>
</tbody>
</table>
Patient Survey: Questions

Affect: “How would you rate your past experiences in a hospital setting? Please explain”

Expectations: “Think of not having any prenatal care. Is it possible to have a healthy baby?”

Values: “When you feel sick, what is the first thing you do?”

Norms: “Do friends or family members talk about their prenatal care experiences with you?”

Habits: “Do you plan on coming back to the ED/OB-Triage for check-ups?”

Facilitating Conditions: “How did you get to the hospital today?”

Clinical Variables: “How long did you have to wait to see a doctor or nurse-midwife today?”
Provider Survey

- Based on the TCSB Model and previous research regarding clinician biases
- Questions were a combination of qualitative and quantitative
- Question Topics:
  - Confidence in professional skills
  - Feelings and past experiences regarding subgroups of patients
  - CNM perceived barriers to prenatal care
  - Characteristics associated with women who do not seek prenatal care
Discussion: Strengths and Weaknesses

Strengths
- Educational component associated with patient survey
- Midwifery model is associated with more positive birth outcomes
- Confidential
- PPM and TCSB Models are comprehensive and complimentary
- Survey is the best method of data collection for this population

Weaknesses
- Provider survey only being administered to CNMs
- Sampling based on provider convenience
- Breach in confidentiality
- Survey could act as a barrier to care-seeking
Conclusion

• Survey design and implementation requires extensive research and planning.
  – Theoretical public health models for program planning and implementation are a great roadmap!

• Educational components should accompany the survey to empower women.

• Every community is unique!
  – While previous research is important, it cannot be the sole determinant of policy change and program development.
  – This survey project can be implemented anywhere to help clinicians and public health professionals understand care-seeking behaviors.
Acknowledgements

Capstone Committee

My Preceptor: Jackie Tillett, CNM, ND, FACNM
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My Advisor: Barbra Beck, PhD

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- Aurora Midwifery and Wellness Center
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- MPH Cohort
- Family!!
Thank you!

Questions??