Health and Healthcare Inequities

“These inequities—systematic, measureable, and avoidable health differences between populations that stem from social factors such as racism, poverty, lack of healthful food, and homophobia—result in disproportionate disease and death for the poor, racial and ethnic minorities, persons living with disabilities, LGBT communities, and others”

--Philip M. Alberti, PhD, Senior Director, AAMC Health Equity Research and Policy
Background: Disparities in ED Use in American Indian Children

• Data suggests higher usage of the ED
• Factors that affect the use patterns of ED care
  – Low insurance rates
  – Lack of access to quality primary care
• Increased prevalence of health issues
  – Diabetes
  – Asthma
  – Co-morbidities such as obesity
  – Increased rate of injury
Background: Disparities in ED Care in American Indian Children

• Discrimination (real or perceived)
  – Higher rate of perceived racial discrimination in American Indian parents
  – Potential lack of understanding and respect of culture religious beliefs

• Empathy erosion in the ED
  – Overcrowding
  – Non-urgent conditions
  – Reliance on stereotypes
Study Overview

• Step 1: Assess the current state of care in the context of the population and the individual groups that make up that population

• Step 2: Develop interventions to help promote better care

• Step 3: Evaluate interventions
Data Sources

- Retrospective Chart Review
- Provider Survey
- Community Focus Groups
Study Locations

- Five locations with six EDs
  - Three urban/three rural
- One additional ED that served as a pilot site
Retrospective Chart Review

• Higher use for American Indian children, especially in rural or large urban areas
• Different primary mental health diagnosis by race
• Increased odds of leaving without completing treatment for American Indian children even for serious triage codes
Retrospective Chart Review

• Triage scores
  – Possible bias with AI children (and other racial/ethnic minorities) given less acute triage scores

• Difference in hospitalization for respiratory infections based on rural/urban location and race
  – Rural AI children more likely to be admitted
  – Urban AI children less likely to be admitted

• Differences in asthma care
  – Potential excessive testing in White children
ED Study Provider Survey: Implicit Association Test

- 0.0%
- 5.0%
- 10.0%
- 15.0%
- 20.0%
- 25.0%
- 30.0%
- 35.0%
- 40.0%
- 45.0%
- 50.0%

Adults
Children

- Strong
- Moderate
- Slight
- Both Equally
- Slight
- Moderate
- Strong

Prefers American Indian

Prefers White
• Agreement ranged from 22% for more challenging to 32% for parents/caregivers less compliant
Community Focus Groups

• Barriers/Facilitators/Recommendations
  – Transportation
  – Discernment of severity
  – Environment
    • Physical
    • Emotional/Social
      – Education
      – Inequity/judgment/prejudice
      – Communication
      – Cultural Competency
  • Economic
  • Human Capital
Community Focus Groups

• Direct input from community members and parents
• Many different barriers and facilitators identified
• Culture, inequity, and communication mentioned frequently
• Common themes to help drive intervention development
Intervention Development
Intervention Development

• Meetings of stakeholders at each site to discuss study findings
• Follow-up series of group/individual meetings with EDs and community groups
• Many additional partnerships
• Issues addressed
  – Parental knowledge/resources
  – Provider training
SITE ONE
Research Aims

• To develop a culturally appropriate communication training program for medical care providers of AI children in the ED.

• To evaluate the benefit of a culturally appropriate communication training program both for AI children and their parents/guardians and for care providers in the ED.
Hypothesis

• The combination of classroom training with a shadowing program will increase scores on the cross-cultural communication scale for ED providers.

• Parent/caregiver ratings of provider communication will increase after the training and shadowing program are implemented.
Intervention Approach

• Facility focused
  – Short classroom based training for nurses
  – Broader impact through shadowing

• Identified needs
  – Better communication with providers
  – How to interact with cultures different than your own

• Provide both classroom based training and shadowing for individual training
Intercultural Communication

- Intercultural communication training
  - Presentation during training
    - Communication skills
    - Cultural intercommunication
  - Provider Shadowing
    - Feedback in real time
    - Answer questions about responses
Participants

• ED Providers
  – 31 participated in the pre-training survey
  – 23 participated in the post classroom survey
  – 11 participated in the post classroom and shadowing survey

• Parents/guardians
  – 120 participated in the pre survey
  – 79 participated in post survey
Results: Parent Survey

- Percent Highly Rated Visits
  - Nurses
  - Physicians/APP

<table>
<thead>
<tr>
<th></th>
<th>Pre Overall</th>
<th>Post Overall</th>
<th>Pre Non-Hispanic White</th>
<th>Post Non-Hispanic White</th>
<th>Pre American Indian</th>
<th>Post American Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>30.0</td>
<td>50.0</td>
<td>40.0</td>
<td>50.0</td>
<td>40.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>20.0</td>
<td>40.0</td>
<td>30.0</td>
<td>40.0</td>
<td>30.0</td>
<td>40.0</td>
</tr>
<tr>
<td>American Indian</td>
<td>20.0</td>
<td>40.0</td>
<td>30.0</td>
<td>40.0</td>
<td>30.0</td>
<td>40.0</td>
</tr>
</tbody>
</table>
Results: Provider Survey

Prepared for other cultures

Skillful in cross-cultural care
SITE TWO
Research Aim

• Enhance parent/caregiver knowledge about the ED and caring for a sick child
  – Evaluated by:
    • Parent/caregiver surveys

• Decrease non-urgent visits to the ED
  – Evaluated by:
    • Pre/post triage scores
Hypothesis

• Parents/caregiver will have increased knowledge about
  – Use of the ED
  – What to expect at the ED
  – How to care for a sick or injured child

• Parent/caregiver educational program will reduce the number of non-urgent visits to the ED.
Intervention Approach

• Community focused
• Identified needs
  – Parent/caregiver education
  – Easy to use resources
Parental Education

• Implemented in two rural communities
• Parental care for children
  – Marketing campaign
  – Lunch and Learn sessions
• Session Topics
  – Resources for caring for a sick or injured child
  – When to take a child to the ED
  – What to expect at the ED
Parental Education: Resources

Sanford Symptom Checker
Sanford Nurse Line
Reference Book

Very Helpful
Somewhat Helpful
Slightly Helpful
Parental Education: Comfort with ED

Before Program
- Very Comfortable: 10.0%
- Somewhat Comfortable: 40.0%
- Slightly Comfortable: 20.0%
- Not Comfortable: 20.0%

After Program
- Very Comfortable: 60.0%
- Somewhat Comfortable: 20.0%
- Slightly Comfortable: 10.0%
- Not Comfortable: 10.0%
Change in ED Triage

- No significant change in non-urgent visits to the ED before and after the program

<table>
<thead>
<tr>
<th>Triage</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
</tr>
<tr>
<td>Emergent/Critical/Acute (1,2,3)</td>
<td>89 (44.1%)</td>
</tr>
<tr>
<td>Urgent/Non-urgent (4,5)</td>
<td>113 (55.9%)</td>
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</table>
SITE THREE
Research Aims

• To develop a culturally appropriate training program for medical care providers of AI children in the ED.

• To evaluate the benefit of a cultural training program both for AI children and their parents/guardians and for care providers in the ED.
Hypothesis

• Our cultural training program will improve parental ratings of provider and staff communications during an ED visit.
• Our cultural training program will enhance providers’ skills and confidence in providing care to those of other cultures.
Intervention Approach

• Meetings with hospital employees
• Positive experience on other trainings
• Ownership of the project through train-the-trainer approach
• Sustainability with web-based tools for future use
Intervention Design

- Patient satisfaction with communication skills pre-survey
- ED provider cross-cultural communication pre-survey
- Four presentations
- Health equity coaches identified
- Web-based training program available and promoted to ED nurses and physicians
- Patient satisfaction post survey
- ED provider cross-cultural communication post-survey
Presentations

• Navigating Culture and Care
• Implicit and Explicit Bias: Research in Health Care Settings
• Healing in Ojibwe Country
• Unconscious Bias in Healthcare: Improving Patient Health
Health Equity Coaches

- Participated in four hour training session by our web-based course developer
- Introduced as a resource for others
- Facilitate participation in training videos
Current Status

• Completed presentations
• Web-based training modules complete
• Presentation of one web-based module at ED nurse education session
• E-mails with information about web-based training sent
• Post surveys in collection
Children’s Minnesota

The impact of health equity coaching on patients’ perceptions of cultural competency and communication in a pediatric emergency department
Research Aims

Train ED providers as Health Equity Coaches

• Assess the impact of the intervention on patients’ perceptions
  o Pre/post survey of ED patients (quantitative)

• Assess the impact of the training on the intervention participants
  o Group interview with providers (qualitative)
Hypotheses

• Increase ED providers’ knowledge and awareness

• Better relationships with AI communities

• Strengthened by participants sharing what they learned

• Patients’ perceptions will improve
## Participant Recruitment

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Demographics of ED providers</th>
<th>n=7</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Black</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>white</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td><strong>Years in pediatric ED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>10-15</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Job title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Physician</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

*We had one multiracial provider who identified as both American Black and white and is counted in both categories.*
Intervention Design

Patient satisfaction pre-survey → Educational lectures (4) → Group interview → Formal presentations to peers (3) → Patient satisfaction post-survey

Service learning in AI communities (6-8 hours) → Informal conversations with peers (3)
Why Service Learning?

• Translating knowledge into how we practice medicine
• Building community relationships
• Engagement in the community of the Minneapolis ED
• Partnering with Children’s Minnesota’s Policy & Advocacy Team
Findings: What have you learned about the AI community and health?

1. New knowledge of family structures in AI communities

2. American Indian history and historical trauma

3. Connection between mistrust of medical staff and the history of oppression

4. Institutional and structural racism present in our current health care system
## Findings: Group Interview

<table>
<thead>
<tr>
<th>Motivation for participating in this intervention</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of knowledge of AI cultures</td>
<td>“I just felt a complete blank about our Native American patients. I didn't feel like I understood anything about culture and disparities and what they experience when they come in the ED.”</td>
</tr>
<tr>
<td>Need for additional education on how to address disparities and health equity</td>
<td>“I guess I felt that maybe we can make a difference. Because knowing the need is one thing, but trying to help [address the need] is another. So I was hoping for this opportunity to actually bring on change.”</td>
</tr>
</tbody>
</table>
## Findings: Group Interview

### Educational content of the intervention

<table>
<thead>
<tr>
<th>Actively misinformed on AI history</th>
<th>“...as adults, we know things have been skewed and we weren't necessarily educated correctly, but all of that, the mis-education and the hurt... [this information was] very impactful.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive impact on interactions with AI patients and families.</td>
<td>“I think having that background was really helpful because [there] was a Native American family where the infant had rolled off the couch when the mom turned around to get a diaper...You could tell she was terrified. And I mean the story fit, and she had come in right away. And I could sort of say like, ‘This is an accident’...So I think [I did] approach the situation differently than I might've before.”</td>
</tr>
</tbody>
</table>
Findings: Group Interview

Experience of the service learning project

| An opportunity to face discomfort and uncertainties being in AI communities | “...this was five miles from where I live, and it was completely out of my comfort zone... it's just walking into something that is very different, that I shouldn't feel so uncomfortable with, right?” |
## Findings: Group Interview

### Dissemination of information learned

| Disseminating what was learned would be challenging, yet important | “I'm equipped to kind of reflect and share what I got out of this and change my own practice the best I can... I haven't lived it, and I think it was extremely valuable to get it straight from people from my community.” |

## Findings: Group Interview

### Impact of the intervention

| Significant change of perspective | “I did a complete shift on [having a uniformed officer in the waiting area]... I was someone who, six months ago, was like, ‘We need a cop, I want a cop there, I don't feel safe at work.’ I have been talking to my [partner] and was like ‘I can't believe how much my opinion has shifted on this,’ and it's absolutely because of this [intervention]... we can't have a cop there. That doesn't work for families coming in, especially Native American families, with the child protection stuff, [where] it's just a barrier getting through the door.” |

Pre-Survey Findings

My Emergency Room doctor or nurse practitioner possess the skills that are needed to treat a patient from my cultural or ethnic background.

Minneapolis, n=32
St. Paul, n=22
Pre-Survey Findings

I would recommend my Emergency Room doctor or nurse practitioner to someone with my same ethnic or cultural background.

Minneapolis, n=32
St. Paul, n=22
SUMMARY
Summary

• Data driven approach led to two types of interventions
  – Interacting and providing care across cultures
  – Providing resources for parents

• Site specific changes were important to develop a workable program
  – Some aspects that were acceptable at one site were not at all acceptable at others
Summary

• Some positive findings from intervention, but not all data were supportive
  – Parent Intervention
    • Those who attended benefited
    • Less evidence of a community wide benefit
  – Provider Intervention
    • Increase in knowledge
    • Possible increase in parental ratings of communication
    • Less change in providers feeling prepared and skillful

• Final evaluations are underway
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Audience Questions