Health Care Can Change from Within

L. Kevin Hamberger, PhD
Medical College of Wisconsin

Bruce Ambuel, PhD, Clare Guse, MS, Amy Kistner, MS, Marlene Melzer, MD & Mary Beth Phelan, MD
Sojourner Truth Family Peace Center
Waukesha Women’s Center

This project is supported by grants from the Healthier Wisconsin Partnership Program and the Centers for Disease Control and Prevention Grant R49/CE001175

The Context

- Victims of intimate partner violence (IPV)
  - More health problems of all types
  - More outpatient visits for illness & injury
  - Fewer outpatient visits for preventive care
  - More hospitalizations for all causes
  - Want physicians & nurses to discuss IPV

The Problem

- Education changes practitioner knowledge and attitudes about IPV… but not clinical practice
- Improvement in clinic systems is hard to achieve and sustain

Primary care clinics & emergency departments
- Staffed by trained professionals skilled in discussing difficult & sensitive issues
- Provide confidential care

Health clinics & EDs are ideal settings for IPV intervention
The Question
How can we achieve sustained improvement in the health care system’s response to victims of intimate partner violence?

Response = identification, treatment, prevention

Intervention theory
- Individual change
  - knowledge, attitudes & clinical skills
- Systems change
  - Support, resources, procedures
- Cultural change
  - shared beliefs, values, attitudes, expectations
  - roles, behaviors
  - larger network of professional relationships in the community

Change from Within Intervention
6-step intervention implemented with:
- 2 family medicine clinics
- 1 pediatrics clinic
- 1 emergency department

1. Health Care Advocates
- Recruit 2 from each clinic/ED
- 20 hour training
  - In collaboration w/ local domestic violence agency
  - Intimate partner violence
  - Health care systems change
- Ongoing support
  - Quarterly follow-up meetings
  - Telephone support and consultation
2. Saturation training

**ALL clinic staff**
- 4 hours clinicians
- 3 hours non-clinicians

3. Policies & Procedures

**Clinic staff review, write & revise**
- Define goals
- Define roles for all staff & workflow
- Clinical protocols w/ chart prompts & tools
- Patient education—posters & brochures

4. Collaboration

with local IPV agencies and medical experts

5. Primary prevention

Implement education about healthy relationships
6. CQI

Use continuous quality improvement to track improvements in care
- Clinic identifies outcomes to follow

<table>
<thead>
<tr>
<th>Site</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric Clinic</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Emergency Department</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Family Medicine Clinics (2)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>FM Control Clinics (2)</td>
<td>---</td>
<td>X</td>
</tr>
</tbody>
</table>

Research Design

Clinic System Change Outcomes
- Health Advocate Reports
- Clinic Manager Reports
- Provider Attitude Survey
- Clinic Environment & System Audit
- Documentation of IPV Inquiry

Health Care Advocate Outcomes

Clinic Systems Change
Health & Well Being of Battered Women
Health Care Advocate Effort

- Average 66 minutes per week:
  - Emergency Department HCAs: 110 minutes per week
- Typical Month
  - 1-2 patient consults
  - 1 consult with physician, nurse, etc.
  - 1 IPV meeting
  - 45 minutes self-study
  - 45 minutes organizing patient education materials
  - CQI, e.g. chart audit

Reflections on HCAs role

- HCA reflections
  - Personally satisfying to help battered women
  - Developed new leadership skills
  - Learned much new information about IPV
- Clinic Manager reflection
  - HCAs increased staff and physician awareness
  - Valuable professional development for HCAs
  - Reasonable cost

Provider Attitude Survey

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>147</td>
<td>96</td>
</tr>
<tr>
<td>Position % (n)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td>66 (97)</td>
<td>59 (57)</td>
</tr>
<tr>
<td>RN</td>
<td>13 (19)</td>
<td>4 (4)</td>
</tr>
<tr>
<td>PA</td>
<td>2 (3)</td>
<td>4 (4)</td>
</tr>
<tr>
<td>Other</td>
<td>25 (37)</td>
<td>39 (37)</td>
</tr>
</tbody>
</table>

Provider Attitudes: Pre vs. Post

- More capable, comfortable and skilled **
- More able to refer appropriately ***
- Clinic/ED more supportive of efforts to help victims of IPV *

* p<0.05  ** p<0.01  ***p<0.001  Nonparametric Wilcoxon signed rank test on unpaired data
Attitudes (continued)

- Clinic/ED staff more prepared to assist victims of IPV**
- Increased knowledge of legal and regulatory requirements **

* p<0.05  ** p<0.01  ***p<0.001  Nonparametric Wilcoxon signed rank test on unpaired data

Clinic Environment Outcomes

Environmental Audit modified from Coben*

- Physical Environment
  - Posters & brochures
  - Referral information
  - Other languages
- System Policies and Procedures
  - Written Policy & Procedure
  - Routine IPV inquiry for defined populations

*Measuring the Quality of Hospital-based Domestic Violence Programs, Coben, J AEM 2002

**Physical Environment**

<table>
<thead>
<tr>
<th></th>
<th>Baseline n=4</th>
<th>Intervention n=4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posters &amp; Brochures</td>
<td>3 (65 locations)</td>
<td>4 (105 locations)</td>
</tr>
<tr>
<td>Referral Information</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Non-English Material</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

**Policies, Procedures, Collaboration**

<table>
<thead>
<tr>
<th></th>
<th>Baseline n=4</th>
<th>Intervention n=4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPV Policy &amp; Procedure</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>IPV Inquiry w/ Specified Pts.</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Community Collaboration</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
Documented Inquiry for IPV

Chart Audit of IPV Inquiry

<table>
<thead>
<tr>
<th>Year</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>30% (24)</td>
<td>70% (55)</td>
</tr>
<tr>
<td>2006</td>
<td>42% (32)</td>
<td>58% (45)</td>
</tr>
<tr>
<td>2008</td>
<td>60% (49)</td>
<td>40% (32)</td>
</tr>
</tbody>
</table>

Pearson chi2(2) = 15.0466  Pr = 0.001

Discussion

- **Intervention clinics:**
  - New written policies & procedures
  - Posters, brochures & referral information in English and Spanish
  - Routine inquiry for IPV with defined populations
- **Chart audit showed sustained improvement in rate of IPV inquiry**

Barriers: Pediatrics

- Medical records & confidentiality
- Who is the patient?
- Provider discomfort
Emergency Department Barriers
- Large & complex systems
- Large staff
- Saturation training complex
- Need a larger dose of treatment

Emergency Department Solutions
- Train more health care advocates: nursing; social work; physician assistant
- Design saturation training plan in collaboration w/ ED
  - Train the trainer model
  - Self-study modules
- More communication during project
  - Employee newsletters & posters
  - Publicize CQI outcomes

Health Care Can Change from Within: Helping Survivors—Early Findings

Research Design: Longitudinal
- Quasi-experimental
  - 2 intervention family medicine clinics
    - Healthcare can change from within
  - 2 control family medicine clinics
    - Usual practice
Pilot Project Purpose is to Evaluate Feasibility of Assessing:

- IPV prevention-related environmental changes as a result of intervention
- IPV screening rates between intervention and control clinics
- Victims’ consumer feedback about benefits and potential harms of IPV screening in a primary care healthcare setting
- Changes in:
  - victim’s knowledge and utilization of resources in intervention and control clinics, i.e., community connectedness
  - violence victimization and safety in intervention and control clinic patients
  - Health and wellbeing of IPV victims in intervention and control clinics

Method

Recruitment

Follow-up assessment
- Immediately post recruitment (Time 1), 3, 6, 12, 18 months

Patient Recruitment

Total number of women screened: 1410
- Intervention: 618 (44%)
- Control: 792 (56%)

Positive Screens Enrolled:

<table>
<thead>
<tr>
<th>Positive Screens</th>
<th>134</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Enrolled</td>
<td>35  (26%)</td>
</tr>
<tr>
<td>Ineligible*</td>
<td>24  (18%)</td>
</tr>
<tr>
<td>Declined Participation</td>
<td>75  (56%)</td>
</tr>
</tbody>
</table>

* Ineligible = perpetrator of violence was not a current or former intimate partner or was a partner of the same gender
Instruments Used
- CTS-2
- DAS
- Medicare Health Outcome Survey – adapted
- CDC Healthy Days Core & Symptom Modules
- Patient Safety and Connection to the Community
- Chart audit
- Clinic environmental audit
- Physicians and Nurses Asking about IPV

Clinic Characteristics – Payor Mix

<table>
<thead>
<tr>
<th>Intervetion</th>
<th>%</th>
<th>Usual Care</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>17</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>42.5</td>
<td>61.5</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9.5</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>HMO</td>
<td>5.5</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Self pay</td>
<td>23.5</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Very Preliminary Results

Environmental Changes
Family Medicine Clinics: Usual Care vs. Change from Within

<table>
<thead>
<tr>
<th>Physical Environment</th>
<th>Usual Care</th>
<th>Change from Within</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posters &amp; Brochures</td>
<td>0 locations</td>
<td>2 locations</td>
</tr>
<tr>
<td>Referral Information</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Non-English Material</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Pre-Intervention Violence Exposure (CTS-2)

<table>
<thead>
<tr>
<th>INTERVENTION</th>
<th>%</th>
<th>USUAL CARE %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiation</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Psych. Abuse</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Coerced Sex</td>
<td>95</td>
<td>93</td>
</tr>
<tr>
<td>Physical Abuse</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Injured</td>
<td>95</td>
<td>100</td>
</tr>
</tbody>
</table>

Comparative Screening Rates at 3 months (based on participant self-report)

<table>
<thead>
<tr>
<th>Screened (%)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Control</td>
<td>18</td>
<td>82</td>
</tr>
</tbody>
</table>

Chi-square = 8.4, p < .004
Benefits and Potential Harms of Screening

How helpful is it for a doctor or nurse to ask about IPV?
- 67% stated it is very helpful or helpful
- 26% stated they were unsure if screening is helpful
- 7.4% stated that it was not at all helpful

How harmful is it for a doctor or nurse to ask about IPV?
- 67% stated it was definitely not harmful or not harmful
- 33% stated they were unsure if screening was harmful
- 0% stated that screening was harmful

Should doctors and nurses ask about IPV?
- 77.7% stated providers definitely should or should ask
- 11% stated they were unsure if providers should ask
- 7.4% stated providers should not ask about IPV

What are we learning from interviews with women?
Please tell me if you have ever been asked about IPV, by a Doctor or Nurse, and if so, what happened afterward?

What was it like to be asked?
- ...in that situation it’s nice to have someone concerned
- If I had been asked sooner...maybe 30 years of my life would not have been in an abusive relationship, possibly.
- My doctor was surprised, she told me my partner seemed like such a nice guy and called me a happy child, I told her that’s how they all seem.

What could be or was harmful when you were asked about IPV?
- Talking about abuse with someone other than the patient
- If the provider confronts the abuser or tells him that abuse has been disclosed
- Give patients the option to take information on services instead of insisting on it

Community Connectedness

Reaching out to community resources
- No significant differences Time 1
- Time 2 & 3, Intervention connected significantly more with community resources
Safety Behaviors

- Time 1 – no differences
- Time 2 – Intervention > Controls
- Time 3 – no differences

Health Status

Number of days physical and mental health not good

- Time 1 and Time 2 – no group differences
- Time 3 – Intervention reported fewer bad days than controls

Days feeling sad, worried, or poor sleep

- Time 1: Intervention < control
- Time 2 and Time 3: No group differences
Feel safe, have less fear

- Time 1 and Time 2: Intervention > control
- Time 3: No group differences

My life is free from IPV

- Time 1: Intervention > control
- Time 2: No group differences
- Time 3: Intervention > control

Danger Assessment

- No Group Differences

Violence Reduction (CTS2)

- No Group Differences
Patient Satisfaction

- No Group Differences

Clinic is concerned about me

- No Group Differences

Clinic is an IPV Resource

- Time 1: Intervention > control
- Time 2: Intervention > control
- Time 3: Intervention > control

Main Positive Findings So Far

- Systems exposed to change processes do more IPV screening than usual care
- Women in intervention clinics report viewing their clinic as a resource for IPV-related resources than women in usual care clinics
- Women in intervention clinics report greater connectedness with their community than women in usual care clinics
Study Limitations

Future Directions & Discussion