Breakout I.
Electronic Health Records: Meaningful Use Standards and System-wide Responses

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National Library of Medicine, NIH
Health Care Responsibilities

- Routinely screen for IPV
  - Are you in a relationship where you have been hurt or threatened?

- Recognize high risk situations
  - Stalking, choking, access to gun, suicide or homicide threats, times of leaving

- Link patients with appropriate resources
  - Shelter, counseling, legal resources, advocacy

- Legally-useful documentation
  - Direct quotes, forensic evidence; identity of the assailant, statement that the injuries sustained are consistent with assault

BUT WE ARE NOT VERY GOOD AT CASE FINDING!!
ED CHART REVIEW: IPV Screening (5,767 Visits by 993 Known IPV Victims)

- ~70%: No documented screening
- 24.4% Negative
- 5.8% Positive

Kothari & Rhodes, 2006
Chief Complaints in 5,767 Visits by Police-Identified IPV Victims who used ED

- IPV: 0.5%
- Assault: 3.3%
- Injury: 10.9%
- MH / SA: 6.8%
- Medical: 78.4%

Sources: NIJ Victim Participation study & ED History study, Rhodes, et al, JGIM 2011
ED Interventions

If IPV was identified…

- 50% involved a police report
- 45% saw a social worker
- 33% documented safety assessment
- 25% referred to victim services

*Time for a change of strategy…

Rhodes, et al, JGIM 2011
Why didn’t the ED docs identify IPV?

– IPV is rarely the chief complaint
– Limited time, limited comfort
– Don’t want to open Pandora’s Box
– Patients don’t conceive of themselves as victims

– But most will disclose experiences with abusive behaviors if directly questioned

Suggs, Inui. JAMA 1992;267:3157-60
Gerbert et al. Med Care 1999;37:104-111
# Promote Health Survey

**Physician Report**

**Physicians to Assess Risk**
Asses for current suicidal risk. If patient is depressed but not suicidal, give the following number 1-800-421-4211.

**Symptoms of Depression**
Assess for current suicidal risk. If patient is depressed but not suicidal, give the following number 1-800-421-4211.

**Possible Partner Abuse**
For more information, contact the Domestic Violence Hotline: at 1-800-799-SAFE.
Assess for current emotional, physical and/or sexual abuse. Assess safety issues and document. Give opportunity to file police report and to talk to someone during current visit. For more information, contact the Domestic Violence Hotline: at 1-800-799-SAFE, or the Rape & Abuse National Network: at 1-800-656-HOPE.

**Research Info**
ID #123
Time: 4:31:57 PM
Date: 1/23/2004
Time to finish quiz: 5 minutes

**Demographics**
Age: 30
Sex: Female
Race: Black
Height: 5' 3"
Weight: 150 BMI: 26.6
Marital: Single
Education: High school
Employed: Yes
Enough $ to meet needs: No
Doesn't see MD due to $: No

## Health Risks By Category

### General Health
Self-rated Health Status: Good.
- Hx Asthma or lung disease: Yes
- Hx of MI: Yes
- Six of chest pain: Yes
- Takes less of meds than prescribed: Yes
- OTC meds MD doesn't about: Yes
- Hx of HTN on BP meds: Yes
- Doesn't get regular exercise: Yes
- Hx DM: Yes
- Hx of High cholesterol: Yes

### Social Network
Lives alone
Weak social network
Recent separation or loss

### Mental Health
Depressed >2 wks in last year
Depressed in last 2 wks
Change in appetite
Trouble sleeping
Tired and w/o energy
Feels worthless or guilty
Trouble concentrating
Thoughts of suicide
Past Hx of suicide attempt

### Sexual Health
No STD risks or skipped question.

### Safety
Access to gun.
No working smoke detector.
Drives after drinking
 Doesn't always wear seatbelt

---

Show all responses
Promote Health Assessment

Computer-based Risk Assessment

Linked to ED Electronic Medical Record for provider review.

Social Service Resources automatically printed with discharge notes.
Promote Health Includes:

- General Information
- Recent Symptoms
- Health Behaviors
- Daily Life
- Social Support
- Injury Risk Factors
- Conflict & Abuse
- Family History

### General Information -- Page 1 of 10

To more fully address our patients' overall health, we are asking questions about your medical and family history, home life, emotional health, and lifestyle. Your decision to complete this survey will not influence your ability to receive care.

- **Enter Age:**
  - Clear
  - Backspace
  - 1 2 3 4 5 6 7 8 9 0

- **Sex:**
  - Male
  - Female

- **HEIGHT:**
  - Feet:
    - 1 2 3 4 5 6 7 8
  - Inches:
    - 0 1 2 3 4 5 6 7 8 9 10 11

- **WEIGHT:**
  - Pounds:
    - Clear
    - Backspace
    - 1 2 3 4 5 6 7 8 9 0

- **Race:**
  - White
  - Hispanic
  - Multi-racial
  - Other
  - Black
  - Asian
  - Native American

- **Education:**
  - None
  - Less than high school
  - High school graduate
  - Some college
  - College graduate
  - Post college

[Image of survey form]

[Next page button] [Previous page button]
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the past year, has ANYONE in your life hit or physically hurt you?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IF YES, Is this person a:</strong> (Check all that apply)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>current partner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>former partner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>someone you have a child with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>family member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>someone else</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does someone you live with have a problem controlling their anger?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do YOU have a problem controlling YOUR anger?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have YOU hit or physically hurt a partner?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you currently feel threatened or afraid of anyone?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IF YES, Is this person a:</strong> (Check all that apply)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>current partner</td>
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<tr>
<td>someone else</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Have the police been called because of a fight between you and a partner?</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Done**
Electronic Health Record Output (Provider View)

Patient Provided Data

- Providers able to review ROS, Social and Family History with Triage information.

- Positive (+) and Negative (-) ROS and other risks

- Provider can (optionally) copy and paste into the electronic medical record.

But ---
This Has Yet To Be Implemented Into Routine Clinical Care.
Results: N=871 Audio-tapes
More IPV Disclosures/Discussions* in the Computer screened Group

(*Any mention of IPV or IPV risk factor on audiotape)

164/421 (39%)
139/446 (31%)
p<0.006

Rhodes, et al. Lowering the Threshold for Discussions of Domestic Violence: A Randomized Controlled Trial of Computer Screening, Archives IM, 2006
Patient Satisfaction: Increased with Any IPV discussion*

<table>
<thead>
<tr>
<th>Any discussion of IPV Risk</th>
<th>Satisfaction with visit “Very High” or “Excellent” on Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>150/266 (56%)</td>
</tr>
<tr>
<td>No</td>
<td>195/455 (42%)</td>
</tr>
</tbody>
</table>

*p=.001

*For patients with both audio and exit data N=721
Universal Screening – is now both evidence-based and open to innovation

- Long recommended by most medical professional organizations
  - AMA, ACOG, ACEP, AAP, etc. and in 2011 by the IOM
- USPSTF (2012): Recommends screening women of childbearing age
- Evidence: RCT, (Kiely et al., Obstet& Gynecol 2010) National Institutes of Health-DC Initiative to Reduce Infant Mortality in Minority Populations
  - Women in the intervention group had less episodes of IPV during pregnancy and post partum; AOR=0.48; (0.29-0.80).
Many questions remain---

- How best to integrate (confidential) routine IPV screening into clinical care?
  - When, how often to screen, who to screen (all women, men?)

- Whether/how to transfer IPV information to the treating provider safely, securely and still empower the victim
  - Allow the women to have control over the sensitive information

- Screening without intervention is not likely to be effective (Klevens et al. JAMA, 2012)
  - Best interventions: for which groups? targeted at level of risk? length/intensity of intervention, outcomes to follow? Who should be conducting the interventions – MSWs, CHWs, Advocates?
Opportunities in the Electronic Health Record for Advancing IPV Screening, Intervention, and Research

DHHS IPV Research Symposium | December 9, 2013

Brigid McCaw, MD, MS, MPH, FACP
Medical Director, Family Violence Prevention Program
The Permanente Medical Group
Using the Electronic Health Record to Improve IPV Services

Patients

Clinicians

Health Care Organizations

Researchers
Many Elements in EHR

- COE (Computer Order Entry)
- "My Chart"
- Preventive Prompts
- Medical Record
- Registries
- Quality Measures
- Medical Record
- Release of Information
Kaiser Permanente

- Largest non-profit health plan in the US
- Fully implemented electronic medical record

- **18,000** physicians & **9 Million** members
- **8** states, **37** hospitals & **618** medical offices

- One of the largest health research programs
EHR Tools for Clinicians: Improving IPV Inquiry

- Prompts to ask about IPV
  - **Best Practice Alerts** (BPA)
    - triggered by age, gender, type of visit
    - triggered by symptoms complex, freq of visits
**EHR Tools for Clinicians:**

**Improving IPV Inquiry**

Reminders embedded in **Progress Note**

<table>
<thead>
<tr>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sexual Activity</strong></td>
</tr>
<tr>
<td>• Sexually Active: Yes -- Male partner(s)</td>
</tr>
</tbody>
</table>

**INTIMATE PARTNER VIOLENCE:**

- Current IPV: {GYN IPV Status: 293106}
- Past IPV: {GYN IPV Status: 293106}
- Partner interference with birth control or pregnancy choices: {GYN IPV Status: 293106}

No results found for this basename: HPVCERVX

**Yes, added to Problem List**

- No
- Not applicable

**Last GYN Cytology Results:**
EHR Tools for Clinicians: Improving Documentation & Intervention

- Smart phrases (clinic note with essential elements)
- Smart set (includes note, orders, referral, followup)
- Danger/lethality assessment questionnaire
- Screening for depression, PTSD, CD
Overview of SmartSet Contents

GUIDELINES AND QUESTIONNAIRES
- PROGRESS NOTES
- DIAGNOSIS (RIGHT-CLICK TO ADD COMMENTS)
- MEDICATIONS - Right click to edit details
- FOLLOW-UP - Right Click to Edit Disposition and Follow-up Data
- PATIENT INSTRUCTIONS
SmartSet: Detailed Contents

GUIDELINES AND QUESTIONNAIRES
- Clinical Practice Guidelines (multiple)
- DOMESTIC VIOLENCE CLINICAL PRACTICE GUIDELINES - NW (RIGHT-CLICK TO VIEW)
- For screening and danger assessment tool, click Questionnaire on toolbar above. (multiple)
- If questionnaire is used with a clinic visit for a medical condition or assault, consider using Progress Notes

PROGRESS NOTES
- Progress Notes (multiple)

DIAGNOSIS (RIGHT-CLICK TO ADD COMMENTS)
- Diagnoses for Domestic Violence (multiple)
- Diagnoses - Other. Use only if no DV-specific diagnosis applies, or for contraception (multiple)

MEDICATIONS - Right click to edit details
- Emergency Contraception (single)

FOLLOW-UP - Right Click to Edit Disposition and Follow-up Data
- Follow-up (single)

PATIENT INSTRUCTIONS
- Patient Instructions (DO NOT print this section out if it presents a safety issue) (multiple)
EHR Tools for Clinicians: Improving IPV Intervention & Referral

- Guidelines
- Treatment recommendations
- Referral protocol
- Intranet sites: “abuse and assault website”
Abuse and Assault Link Resources

Intimate partner violence

If the victim is under 18 years, see child abuse. If over 64 years also see elder abuse.

MD, NP, RN Mental Health/Social Services Clinician

Refer patient to mental health and local resources

Give member resource information

Document in HealthConnect™

Report to law enforcement (INJURY ONLY)

Additional Resources:

How to screen

What to say when the answer is yes

Suspicious injury report form (Cal EMA 2-920)

National Domestic Violence...
Online Training Tools for Clinicans
EHR Tools for Health Care Organizations

Using aggregated data from EHR based on diagnostic codes

- Descriptive information
- Registries
- Quality measures
- Participation in research networks
37,219 KP Patients Identified with IPV
1998-2011

Additional Information: Ethnicity • Language • Length of Kaiser membership • Smoking status • BMI • Pregnancy within 2 years of IPV diagnosis
IPV Identification Increasing: Largely in primary care and mental health departments

Members Diagnosed with Intimate Partner Violence, 2000-2013

- Emergency Dept. & Urgent Care
- Mental Health
- Primary Care

Year

Comparison of Clinics: IPV Identification Rate Among Women age 18-65

A: 22%
B: 16%
REG: 14%
C: 9%
D: 5%
E: 3%
18 HMORN Research Networks

Group Health, Center for Health Studies

HealthPartners, HealthPartners Research Foundation

Marshfield Clinic, Marshfield Clinic Research Foundation

Kaiser Permanente Northwest, Center for Health Research/Northwest

Kaiser Permanente Northern California, Division of Research

Kaiser Permanente Southern California, Department of Research and Evaluation

Lovelace Health Plan, Lovelace Clinic Foundation

Kaiser Permanente Colorado, Institute for Health Research

Harvard Pilgrim Health Care, Department of Ambulatory Care & Prevention

Fallon Community Health Plan, Meyers Primary Care Institute

Geisinger Health Plan, Center for Health Research

Kaiser Permanente Georgia, Center for Health Research/Southeast

Kaiser Permanente Hawaii, Center for Health Research/Hawaii
Contact Information

Brigid McCaw, MD, MS, MPH, FACP
Medical Director, Family Violence Prevention Program
The Permanente Medical Group

Brigid.McCaw@kp.org
510-987-2035
References for Kaiser Permanent Family Violence Prevention Program

- AHRQ Innovations Exchange
  http://www.innovations.ahrq.gov/content.aspx?id=2343

- IOM Forum on Global Violence Prevention
  Preventing Violence Against Women and Children – Summary

- Institute for Health Policy
  Kaiser Permanente Policy Stories Vol 1 Issue 10
“Meaningful Use” (MU)

- Medicare/Medicaid-eligible hospitals and health professionals may receive incentive payments (& later avoid penalties) if they:
  - Use “certified” EHR products
  - Use required EHR standards (e.g., terminology, record exchange)
  - Meet specific EHR use criteria
General Benefits for Research (and practice) increasing over time

- More standardized electronic data available as a by-product of care
- Standard data export/import formats supported by all EHR systems
- Standards for inserting/testing screening instruments/interventions in all EHR systems
Possible ways to enhance “Meaningful Use” to benefit IPV Screening & Counseling research (and practice)

- EHR product certification
  - Add requirements for relevant capabilities, e.g.,
    - import, use, and export standard data capture forms (like screening instruments)

- EHR standards
  - Ensure that IPV concepts/key screening instruments are represented in relevant required standards
    - address intellectual property issues
  - Promote useful convergence re: screening instruments??

- EHR use criteria
  - Include specific requirement(s) for IPV screening &/or counseling
The 50,000 foot view

- IPV screening works, if done & connected to services
- Integrating domestic violence prevention with EHRs works
  - What research specific to documentation and intervention is needed?
- MU EHR enhancements could facilitate more effective IPV screening, documentation, intervention, & referral
  -- What steps can be taken to promote this?
- More EHR data may support new methods for identifying at risk patients
  - What research is needed?
References


Research questions related to EHR

- Do “prompts” (eg Best Practice Alerts (BPA,) reminders embedded in progress notes) increase screening? Does it increase identification? Do some “prompts” work better than others?

- Do clinician tools (guidelines, care path, smart phrases, smart set) improve the IPV clinical intervention help? Which work best?

- Is on-line training more effective in changing clinician behavior than traditional training?
Research Questions Related to EHR

- Visible documentation of IPV: does this improve coordination of care and clinical outcomes? Are there unintended consequences? Any safety concerns? How do patients feel about it?

- What kind of screening and intervention do pts prefer, both those that are experiencing IPV and those that are not.

- What health systems level implementation approaches are associated with increased identification and improved outcomes?
EHR Challenges that Impact IPV Research

- Accuracy of data is impacted by:
  - Concerns regarding documentation related to visibility, stigma, privacy, confidentiality, safety
  - Differences in terminology, definition of abuse, multiple codes
- Different points of view: patients, clinicians, DV advocates, compliance officers, researchers, IRB’s, criminal justice
- Rapidly evolving technology