Eliminating Tobacco Smoke Exposure Among Children with Asthma

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February 5, 2013
Asthma Telehealth Network
DISCLOSURE

• The presenter is President of Pediatricians Against Secondhand Smoke

• The presenter is a member of the AAP Richmond Center of Excellence, Faculty Expert Panel

• The content of this presentation does not relate to any product of a commercial entity
Learning Objectives

• Participants will understand:
  – The burden of tobacco smoke exposure (TSE) among children with asthma
  – Role for healthcare professionals in helping reduce TSE among children with asthma
  – Evidence-based (EB) techniques for intervention among child asthmatics with TSE
J.M. - 18 month old in the PICU

- Hospitalized three times for asthma
- Skin allergies: eczema
- Dad smokes - but only outside
- Decided on this hospitalization that he will quit
- Mom given Utah State Quitline information
A Child’s Question

“If smoking is so bad for me, then why can they still sell cigarettes?”

- Utah 6th grader

“A cigarette is the only consumer product which when used as directed kills its consumer.”

- Dr. Gro Harlem Brundtland
  Former WHO Director-General
Smoking in the U.S.

• Each day
  – Over 3000 people become regular smokers
  – 850 adolescents become regular smokers

• Each year
  – 443,000 people die from smoking related illness

• Cost
  – Over $200 billion in medical expense/lost productivity

• Disparate populations sectors bear disproportionate burden

www.cdc.gov/tobacco/
Smoking in Utah

• Each year
  – Over 1200 adults die from smoking attributable illnesses

• Cost
  – $663 million per year in Utah
  – 75% of state budget shortfall
  – 13% total state budget expenditures
  – 4.5% total state healthcare expenditures

11th Annual Report, TPCP, UDOH, 2011
StateHeathFacts.Org, Kaiser Permanente, $14.6 billion,
Smoking in Utah

• About 200,000 Utahns smoke

• Utah Children
  – 14,000 use tobacco.
  – 17,000 exposed to secondhand smoke

• Disparate populations disproportionately affected
  – Approach 25% in some communities
  – Smoking rates have plateaued
  – Poverty and low education associated with smoking

Adult Cigarette Smoking Rate by Small Area, Salt Lake Valley Health District

Utah Tobacco Facts Report, 2009
Courtesy of the SLVHD
UDOH BRFSS, 2001-2005

Glendale 23.2%
Magna 21.4%
West Valley West 16.7%
Kearns 18.7%
Tooele 12.2%

Downtown Salt Lake 21.9%
South Salt Lake 26.1%
West Valley East 24.3%

Utah’s Average Overall Smoking Rate 11.2%
Adult Cigarette Smoking Rate by Small Area, Salt Lake Valley Health District

<table>
<thead>
<tr>
<th>Small Area</th>
<th>Smoking Rate</th>
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<tr>
<td>Downtown Salt Lake</td>
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Child Asthma

• Asthma affects about 65,000 Utah children (6.5 million US children)
  – Leading cause of childhood hospitalizations
  – Utah, boys 24/10,000, girls 12.2/10,000 (ages 1-4)
  – Nationally, 700,000 ED and 190,000 hospital admissions
  – Nationally, $2 billion in medical expenditures

• Readmission rates approach 40%
  – Risk increases with each hospitalization
  – TSE influence hospital readmissions
TSE & Child Asthma

- TSE strongly linked to asthma prevalence, exacerbations, and severity
  - Increases morbidity
  - Impaired recovery after hospitalization
  - Greater need for asthma medications

- TSE occurs mainly in the home due to parent smoking

- Other settings - child care sites, play dates, other family member’s homes, or public areas where not prohibited
TSE & Child Asthma in Utah

- 11.7% adults with asthma smoke, 9.9% former smokers
  - 3.2% asked to remove smoking from environment

Asthma Report, UDOH, 2010
TSE & Child Asthma in Utah

- Conclusion: 1/4 to 1/5 child asthmatics with TSE
  - 3.2% asked to remove smoking from environment
- We can do better!

Asthma Report, UDOH, 2010
Healthcare Provider Interventions

Patients with Asthma, COPD, CVD

Trend p=0.83

PCP office visits

Trend p=0.29

Smoking screening

Smoking education

Pediatrician Interventions

Smoking screening (trend p=0.039)

Smoking education (trend p=0.029)

Patients with Asthma

PCP office visits

Nelson KE, et. al, National Ambulatory Medical Care Survey 2001-2009
Treating TSE

- Evidence-based guidelines recommend treating TSE in children with asthma
  - National Heart, Lung and Blood Institute Asthma Guidelines
  - U.S. Public Health Service Guidelines
  - AAP clinical practice guidelines (Bright Futures & Tobacco Policy Statement)

- Prevent exacerbations, hospital readmissions, and medical expenditures remain high

Fiore et al., 2008 Clinical Practice Guideline: Treating Tobacco Use and Dependence.; AAP Policy Statement, Pediatrics 2009; Available at www.cdc.gov
Barriers

Clinician perceptions

• Patients
  – Ignore advice, offended or disinterested

• Tobacco cessation counseling
  – Time consuming
  – Ineffective
  – Not their role
  – Inadequate training and preparation

You Can Make a Difference!

• Most patients want and expect healthcare professionals to provide cessation advice.
  – Two-thirds want to quit and have attempted in the past.
  – Hospitalization and clinic visits are teachable moments.
  – Clinician advice increases success in quitting.
  – Brief interventions are effective.
  – Success increases when adding pharmacotherapy.

Fiore et al., 2008 Clinical Practice Guideline: Treating Tobacco Use and Dependence.
Knowing Our Role

• AAP clinical practice guidelines:
  
  – “Helping parents quit smoking is now a recognized priority of child health care clinicians.”
  
  – “Exposure to tobacco smoke and should rank this among their highest health prevention priorities.”

BE THE LEADER...

Race Through Life
Tar Free
Evidence Based Framework

• **5 A’s**
  – Ask, Advise, Assess, Assist, Arrange

• **2 A’s & R**
  – **Ask**: identify tobacco users
  – **Advise**: strong personalized message to quit smoking
  – **Refer**: refer to quitline

## Recommendations

<table>
<thead>
<tr>
<th>5A’s</th>
<th>Intervention</th>
<th>Level of evidence</th>
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<tbody>
<tr>
<td>Ask</td>
<td>Effective screening methods</td>
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<td></td>
<td>Clinical screening system</td>
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<tr>
<td>Assess</td>
<td>Determine readiness for change</td>
<td>C</td>
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<tr>
<td>Advise</td>
<td>Physician advice to quit</td>
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<td>Clinician advice to quit</td>
<td>B</td>
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<tr>
<td>Assist</td>
<td>Effective counseling processes</td>
<td>A</td>
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<td></td>
<td>Stages of Change, Motivational Interviewing</td>
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<tr>
<td></td>
<td>Pharmacotherapy</td>
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<tr>
<td>Arrange</td>
<td>Nicotine replacement therapy</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Patient followup</td>
<td>C</td>
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The Five A’s

• **Ask:** identify tobacco users
• **Advise:** encourage tobacco users to quit
• **Assess:** determine willingness to quit
• **Assist:** help make a plan for quitting
• **Arrange:** schedule follow-up

2 A’s & R

• **Ask:** identify tobacco users
• **Advise:** strong personalized message to quit smoking
• **Refer:** refer to quitline

Systems Change

• Change occurs most consistently when there are systems in place

• Cooperative Approach
  – Including all members of the medical team

• Expectations
  – Defining what your practice’s expectations are
  – Providing adequate training

• Feedback and Quality Improvement

Ask

• Screen all patients with evidence-based questions
  – “How much does the child’s primary caregiver smoke?”
  – “What are the smoking rules in the child’s home?”
  – “Does your child live or spend time with anyone who uses tobacco?”

• Performed by medical assistant/office staff

• Incorporate as “the fifth vital sign”
Ask

• Chart identification
  – Paper charts
  – EMR
  – List SHS exposure on the problem list
  – Registry
Advise

• Encourage household members to quit smoking
  – Simple, clear, and personalized message
  – Provide information about the dangers of SHS exposure

• Tobacco screening and cessation counseling
  – positively associated with patient satisfaction

Conroy, et al., 2005
Counseling Parents

- Interventions with parents increase likelihood of successful quitting
  - Maternal cessation
  - Pharmacotherapy
- Efficacy similar to interventions with adults
  - Overall quit rate - 4%
  - Adult patients – 5%
- Challenges – Follow up ➔ REFER

REFER

• Give them something to take home:
  – Utah state Quitline - 1-800-QUIT-NOW
  – State or CDC handouts
• Incorporate into routine counseling and anticipatory guidance
Quitlines

• It only takes 30 seconds to refer a patient to a toll-free tobacco use cessation quitline.
  – Accessibility
  – Appeal to those who are uncomfortable in a group setting
  – More likely to use a quitline than face-to-face program
  – No cost to patient

• Quitlines are staffed by trained cessation experts who tailor a plan and advice for each caller.

Courtesy: Richmond Center, AAP, http://www2.aap.org/richmondcenter/
Refer

• Follow-up with Clinician
  – Primary Care or Other Provider
    • Establish PCP if necessary
  – Pediatrician
    • Follow up visit
      – Ex. – follow up for asthma/pneumonia/AOM, etc.
      – Well child visits - birth to 36 months
  – Other healthcare provider

– Quit Line - offers follow up information to providers
Refer

Keep in mind:

• Tobacco use is a chronic disease
• More frequent follow-up = more chance for success
• Recognize relapses - common and expected
• The average smoker will try to quit smoking 4-9 times before they are successful
Referral Resources

• **Quitline**
  – **1-800-QUIT-NOW** - Free cessation assistance to all U.S. tobacco users.
  – Fax or electronic referral program in many states.
  – AAP Richmond Center - State-specific information on Quitline services provided [www.aap.org/richmondcenter](http://www.aap.org/richmondcenter).

• **Who can refer**
  – Clinicians
  – Non-clinicians in a healthcare setting or community-based organization.

• **[www.smokefree.gov](http://www.smokefree.gov)**
  – Provides free, accurate, evidence-based information
  – Professional assistance to help support the immediate and long-term needs of people trying to quit smoking.
All Aboard!
The Right Track To Good Health

CHOO! CHOOSE to be Tobacco Free
2 A’s & R

• **Ask:** identify tobacco users
• **Assist:** help make a plan for quitting
• **Refer:** refer to quitline

Resources

- Health Department – tobaccofreeutah.org
- Pediatricians Against Secondhand Smoke medicine.utah.edu/pediatrics/pass
- Utah State Quitline - www.quitlinems.com/1.800.QUIT.NOW
- AAP Richmond Center - www.aap.org/richmondcneter/
- CDC - www.cdc.gov/tobacco
- Surgeon General - www.surgeongeneral.gov
- Utah Quitnet - www.utahquitnet.com
- Other local, practice, hospital specific
Summary

• Smoking causes asthma and serious asthma comorbidities
• All members of the health care team intervene
• Evidence based smoking interventions are available
• All parents should be screened and treated for smoking and tobacco use
• Systems integration and policy - necessary for sustained effective treatment
• Healthcare providers are advocates for tobacco treatment
Even Small Change Can Lead to Big Rewards
Why Motivational Interviewing?

• Evidence-base
  – Many of randomized trials
  – Several meta-analyses
  – MI > Direct advice alone, education

• Practice Guidelines
  – Tobacco:
    • USPHS Guidelines ("5 A’s"), American Academy of Pediatrics (2009), AMA

Slide Courtesy of Stephen Dillaspy, PhD
What is “Motivational Interviewing”

• “…a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence.”

• **In MI, we attempt to:**
  1. observe, respect, and avoid opposing sustain talk and;
  2. elicit, amplify, and affirm change talk
Motivational Interviewing: Five Principles

• Generate a Gap
  – What does change look like to you?
  – Current behavior vs. what you want to be doing

• Roll with Resistance
  – Not everyone wants to change

• Avoid Argumentation/Conflict
  – It’s ok to not be ready

• Can Do
  – Inspire self confidence

• Express Empathy
Motivational Interviewing: Five Skills

- Open-ended Questions
  - “How would you like things to be different?”
  - “What does change look like to you?”
- Affirmations
  - Statements of recognition of client strengths
- Reflective Listening
  - Repeating, rephrasing, paraphrasing, emotional aspect of statements
- Summaries
  - “It sounds like you are saying…”
- Elicit self-motivational statements
  - Emphasizing Personal Choice and Control
Motivational Interviewing: Five Tools

- Pros and Cons Exercise

- Assess Importance and Confidence
  - “On a scale of 1-10 how important is this to you?”
  - “What would it take to get you to a __?”

- Looking Back
  - Reflects on effective strategies used with past successes

- Looking Forward
  - “What are the best possible results if you make this change?”

- Exploring Goals
  - Assess (mis)match between current behavior and future goals
  - Explore how realistic goals are
Pharmacotherapy

• Clinicians should encourage all patients attempting to quit to use effective medications.

• Exceptions
  – Contraindicated
  – Insufficient evidence of effectiveness
  – i.e., pregnant women, smokeless tobacco users, light smokers, and adolescents

Courtesy: Richmond Center, AAP, http://www2.aap.org/richmondcenter/
Acknowledgments

Wendy Hobson-Rohrer
Karen Buchi
Mandy Allison
Jennifer Brinton
Jaime Bruse
Dedee Caplin
Emily Eresuma
Kim Johnson
Heather Nelson
Marcie Nelson
Joan Sheetz
Paul Young

Community Partners
American Heart Association
American Lung Association
Communidades Unidas
PASS Coalition members
Utah Latino Network
Salt Lake Valley Health Department
Utah Department of Health
Utah Tobacco Prevention & Control Project
Utah Chapter of the AAP
Weber-Morgan Health Department

University of Utah
Department of Pediatrics
Division of General Pediatrics
Pediatrics Residency Program

Visit PASS at:
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