Helping Patients Quit Tobacco: Evidence-Based Interventions

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Why is Tobacco Use a Problem?

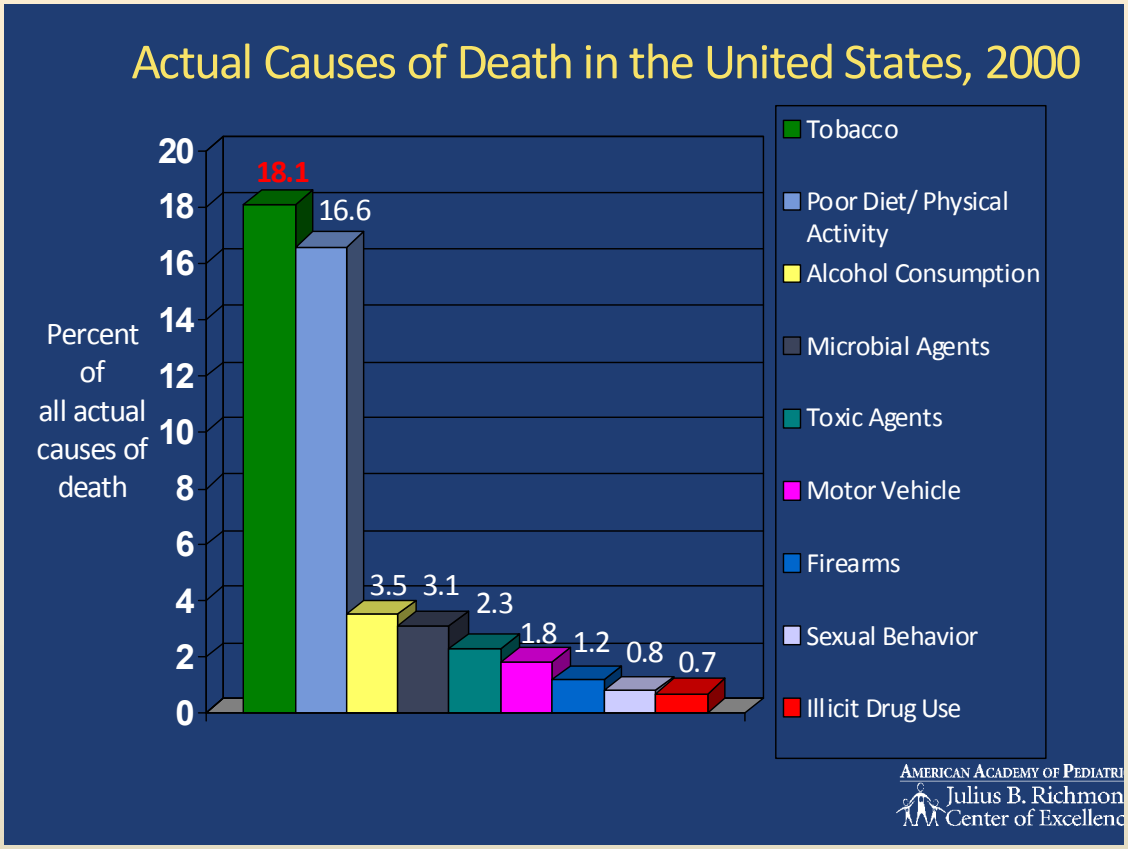
- Chronic Disease
- Addiction
- Psychological
- Second Hand Smoke
- Habitual

Health Disparity

- Who smokes?
  - About 20% of US population, slightly lower rates among women
  - Geographical diversity
    - (higher rates in Kentucky, West Virginia, lower in California, Connecticut)
  - Smoking rates inversely related to education & income
  - People who can least afford cigarettes & tobacco-related disease

Tobacco Cessation Trt

- Psychological dependence
- Physiological dependence
- Goal: long term abstinence


Actual Causes of Death in the United States, 2000
Percent of all actual causes of death
20
18
16
14
12
10
8
6
4
2
0
18.1
16.6
3.5
3.1
2.3
1.8
1.2
0.8
0.7
Tobacco
Poor Diet/ Physical Activity
Alcohol Consumption
Microbial Agents
Toxic Agents
Motor Vehicle
Firearms
Sexual Behavior
Illicit Drug Use
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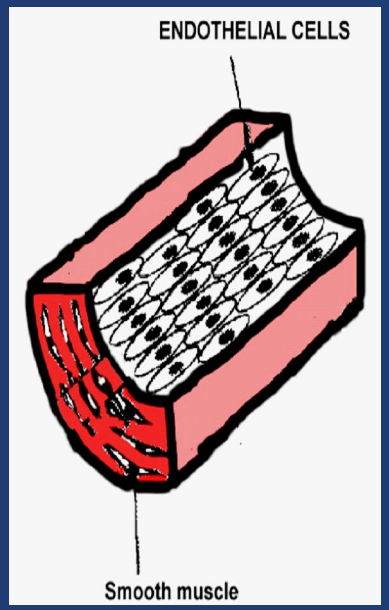

Endothelial cells maintain vascular tone & hemostasis
Vasodilation & constriction modulated by small molecules (nitric oxide, prostacyclin and endothelin)

Endothelial dysfunction implicated in adult conditions ---hypertension, obesity, inflammation, diabetes, active & passive smoking ----leading to atherosclerosis

Evidence that SHS exposure is related to endothelial dysfunction

- Healthy SHS exposed non-smokers ages 18-35
  - Impaired endothelial function measured by brachial artery dilation in response to occlusion
  - nitric oxide (NO) mediated
  - Impairment similar to that seen among smokers

The 5 As

Ask **about tobacco use and SHS exposure**

↓

Advise **to quit**

↓

Assess **readiness to quit**

↓

Assist **in quit attempt**

↓

Arrange **follow-up**

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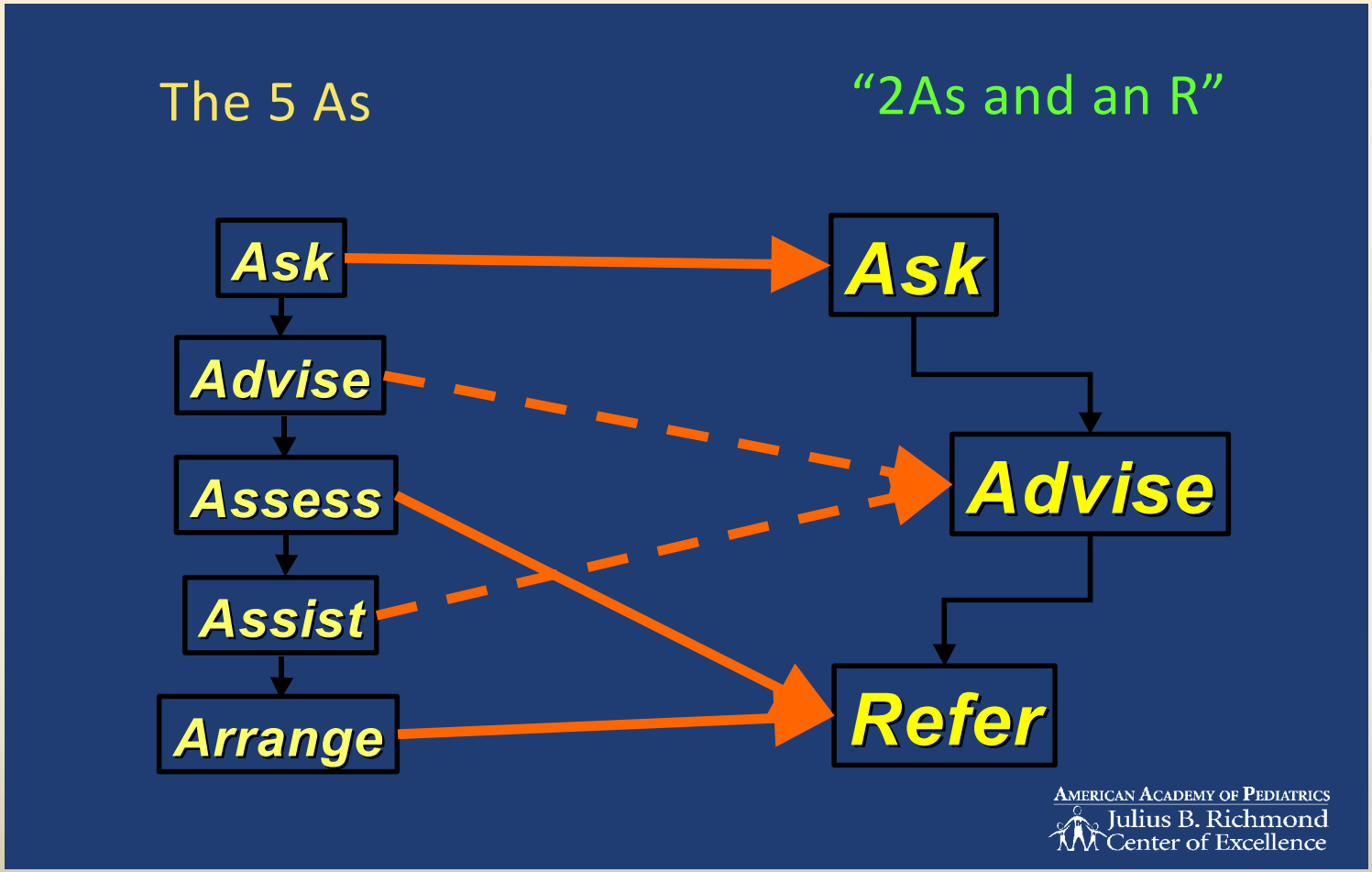
The 5 As
"2As and an R"
Ask
Advise
Assess
Assist
Arrange
Ask
Advise
Refer
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Step Two: Advise

- Quitting smoking is the best thing you can do to help protect your health and the health of your child.
- I can help you.
- Have you thought about quitting (Assess)?
  - Å No- exposure reduction
  - Å Yes- exposure reduction and Assist/Arrange

REMINDER-
Step Two: Advise

Encourage ALL families with smokers to maintain a 100% Smoke-Free Home and Car

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Be Specific…

Å Having a smoke free home means no smoking ANYWHERE inside the home or car!

Å It *DOES NOT* mean smoking:

- Near a window or exhaust fan
- In the car with the windows open
- In the basement
- Inside only when the weather's bad
- Cigars, pipes, or hookahs
- On the other side of the room

Nicotine Replacement for Cessation

- OTC: Gum, Patch, Lozenge
- RX: Inhaler, Nasal spray
- Should be combined
  - patch for maintenance, gum or lozenge for strong urges
- Minimize nicotine exposure during pregnancy

Nicotine Replacement for Reducing Smoking

- Off-label in US
  - Labeled for reduction to quit in UK, Canada, 26 countries world wide…
- Excellent evidence on safety
- Does not undermine future quits
  - 16 of 19 studies reduce-to-quit INCREASED future cessation
- Can replace cigarettes 1:1 with lozenge, gum, inhaler dosing

Current Recommendations for Gradual Cessation

Å None of the currently accepted guidelines recommend gradual

Å Meta-analyses either ignore gradual or find gradual ineffective (this is changing!)

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Quit for Keeps - Referrals

- 1-800-QUIT NOW (784-8669)
- Toll Free Health Coaching (5 appointments)
- Specialized individualized counseling
- NRT Free to qualified individuals

Clinical Practice Guideline[1]

- **Sponsored by the U.S. Public Health Service, U.S. Department of Health and Human Services. (2008 update)**
- Research panel conducted a systematic review of a literature base of 8,700+ research articles.
- Guideline contains strategies and recommendations designed to assist clinicians in delivering effective treatments for tobacco use and dependence.
- IOM "Strength of Evidence" model served as basis for each recommendation.

[1]Fiore MC, Jaen CR, Baker TB, et al. *Treating Tobacco Use and Dependence: 2008 Update.* Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. May 2008.

Impact of Referrals to SC-DHEC Quitline

- Based on 7-month follow-up at least 60% have reduced or quit tobacco
- Smoking is a chronic relapsing condition
- **Remains the leading cause of death, preventable death**
- Costing SC yrly $1.09 billion ($393 Medicaid portion taxpayers cover now)

- At enrollment, 89% of subjects were daily smokers.
  - 4 week follow- up, 64% were daily smokers, and 3 (8%) reported not smoking at all (Quitters!).
- Self reported mean number of cigarettes smoked went from 17.9 to 7 cigarettes at the 4 week point.

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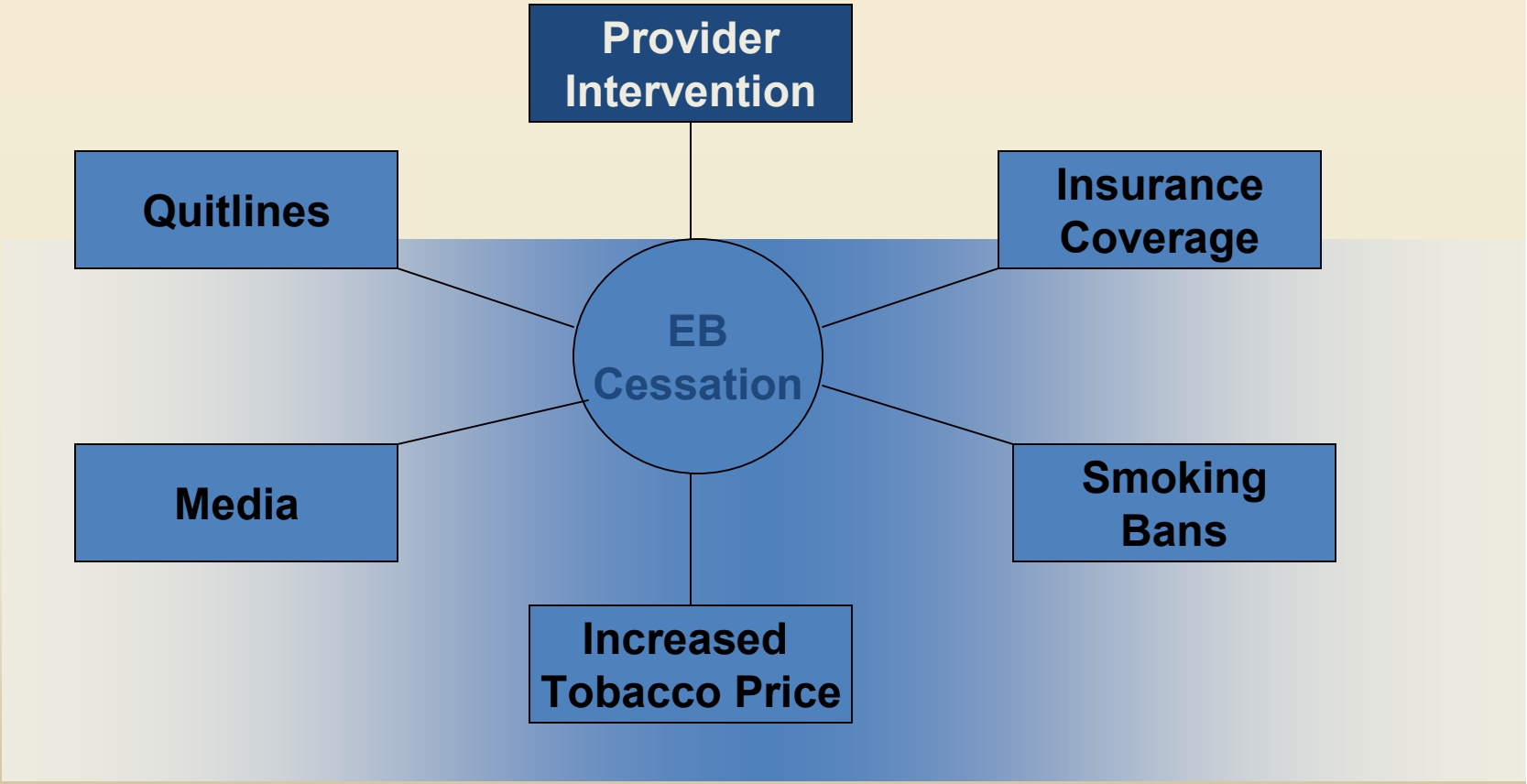
Strategies that Support Quitting

- Comprehensive Cessation Approach:



Clinical Interventions are Effective

- Even minimal (<3 mins) intervention can make a difference.
- Intensity of intervention and tobacco cessation outcome are closely related (dose/response effect).
- Even with patients not willing to make a quit attempt, clinician-delivered brief interventions can enhance motivation and increase the likelihood of future quit attempts.
- Tobacco users are being primed to consider quitting by a wide range of positive societal and environmental factors (e.g. public health messages, cessation media campaigns, policy changes, family members)
- Growing evidence shows that smokers who receive their doctor's advice and assistance with quitting report greater satisfaction with their health care than those who do not.
- Tobacco use interventions are highly cost effective.
- Tobacco use has a high case fatality rate (up to 50% of long-term smokers will die of a smoking-related disease).

Skull of a Skeleton with Burning Cigarette
Antwerp 1885-1886
Van Gogh Museum
Amsterdam

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Questions & Comments

Helping tobacco users quit
deserves our full and immediate attention.