New Knowledge in Care Coordination

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Acknowledgments

- Agency for Healthcare Research and Quality
- Robert Wood Johnson Foundation

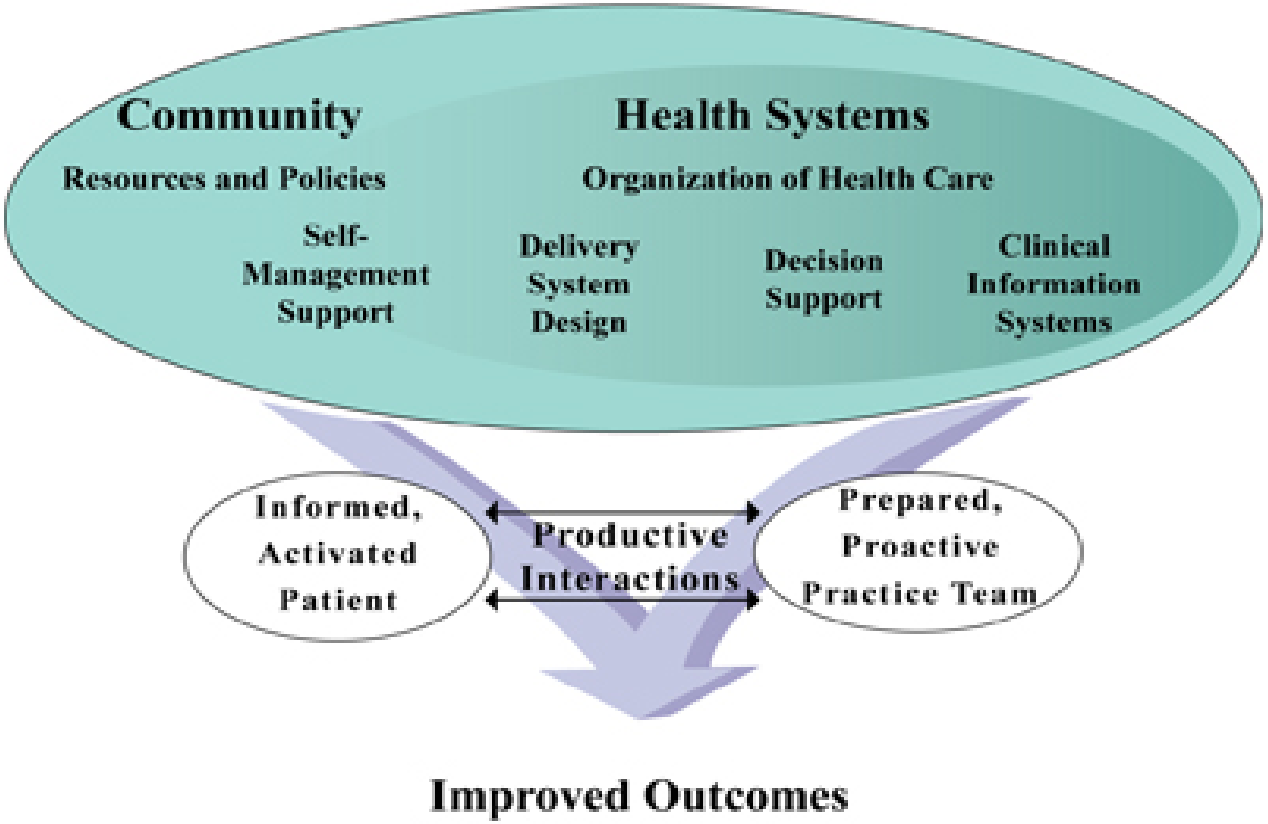
Outline

- Burden of illness associated with unhealthy behaviors
- Potential role of clinicians and community resources
- Challenge of care coordination
- Overview of Specific Projects
- Lessons learned

Leading Causes of Death

- Tobacco use
- Diet
- Physical inactivity
- Problem drinking

Chronic Care Model



Role of Clinicians

Rationale for clinician involvement

- Credibility and imprimatur of advice
- Integration with primary care and medical history

Impediments

- Benefits of counseling depend on intensity
- Lack of time, skills, staff, reimbursement to offer intensive counseling and ongoing support
- Practice redesign to offer such services not feasible in typical US primary care practices

Counseling Recommendations

5As Framework for Cessation Counseling	
A1	Ask
A2	Advise
A3	Assess
A4	Assist
A5	Arrange

"What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?"

Community Resources for Intensive Counseling

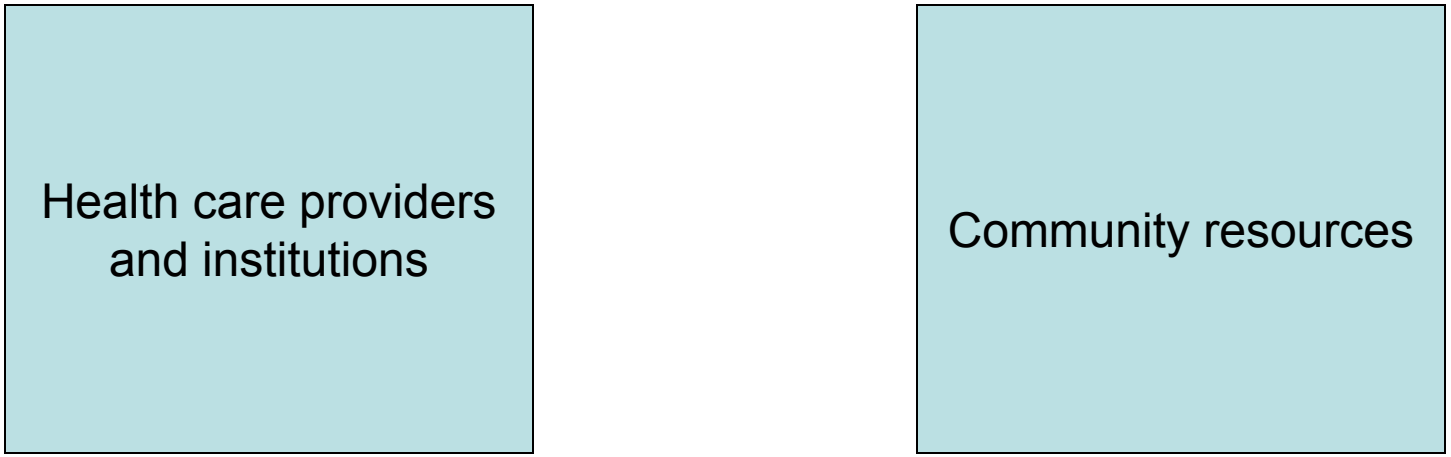
- Telephone counseling (e.g., quit lines)
- Dietitians, trainers, fitness programs
- Group meetings and classes (e.g., Weight Watchers)
- Worksite and school-based wellness programs
- Commercial programs
- Public health department services
- Online resources and websites

Impediments Faced by Community Programs

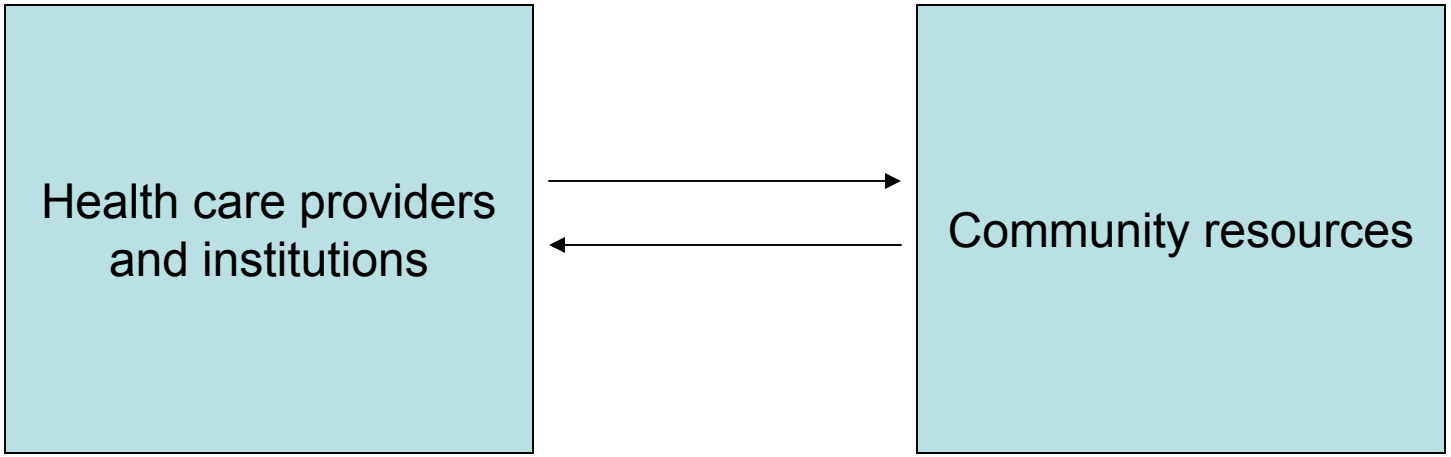
- Lack of uptake
- Few referrals; “medical community doesn’t know we are here”
- Disconnection with primary care
- Fragility of community resources and public health infrastructure
- Medicine-public health divide

The Problem of Silos

Silo Phenomenon



Silo Phenomenon



- Systematic identification of behaviors
- Brief advice
- Goal setting

Intensive assistance from skilled counselors

Ongoing support

“Win-Win” of Collaboration

- Patients: more intensive and convenient assistance with behavior change
- Clinicians: relief from untenable demands
- Community resources: more referrals and clients

Silo Phenomenon

- The same message emanates from multiple projects sponsored by Robert Wood Johnson Foundation, CDC, AHRQ, academic centers, etc.
- The themes (and solutions) are common for chronic illness care and prevention
- Individual projects know little about each other
- Policy discussion needed to address where we go from here

Policy Meetings

- Summit on Linking Clinical Practice and the Community for Health Promotion
  - Sponsored by
    - The American Medical Association
    - Association of State and Territorial Health Officers
    - Agency for Healthcare Research and Quality
  - April 30-May 1, 2008, Baltimore, MD
- Prevention and Healthcare Reform Roundtable
  - Sponsored by
    - American Cancer Society
    - American Heart Association
    - American Diabetes Association
  - July 8-9, 2008, Washington, DC

Key Questions

- How do communities create local infrastructure, including pathways for referral and “bidirectional feedback”?
- How can infrastructure evolve without burdening members of either silo?
- What national/regional resources are needed to facilitate local action?
- How can we replicate local success stories more broadly?

PRESCRIPTION FOR health

Write It Now

Prescription for Health (P4H)

- "To identify, test, evaluate, and disseminate effective strategies for primary care clinicians and practices to help their patients be healthier by targeting 4 behaviors that are leading causes of preventable disease, disability, healthcare burden, and premature death in the U.S."
- Funded by RWJF and AHRQ
- Round 1: (6/03-12/04), 17 PBRNs received 16-month "innovation grants" of $125,000 each
- Round 2: (9/05-8/07), 10 PBRNs received 24-month "innovation grants" of $300,000 each

P4H Design Elements

- ALL 10 studies…
  1. Addressed 4 health behaviors (diet, exercise, smoking AND alcohol)
  2. Were done in primary care PBRNs
  3. Collected a common set of health behavior outcomes measures
  4. Collected information about the practice intervention expenses
  5. Were asked to report results using the RE-AIM framework
  6. Systematically reported their intervention implementation experiences

RE-AIM

- REACH
- EFFICACY or EFFECTIVENESS
- ADOPTION
- IMPLEMENTATION
- MAINTENANCE
  - *www.re-aim.org*

P4H Projects

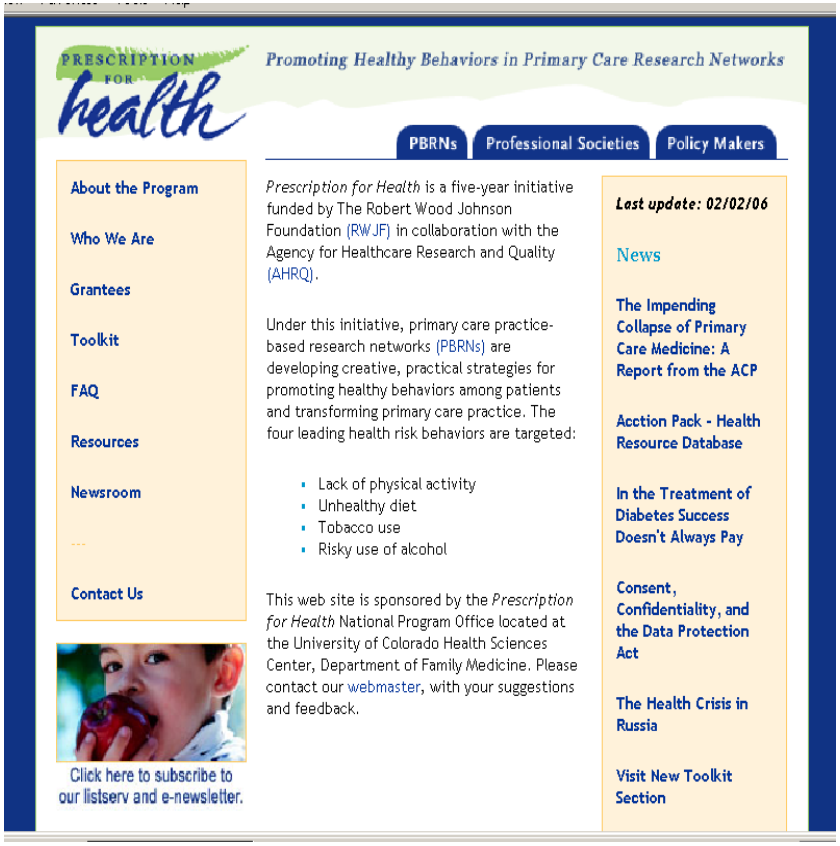
- ***ACORN*** A Comprehensive Practice-Friendly Model for Promoting Healthy Behaviors
- ***GRIN*** CHERL: Connecting Primary Care Patients with Community Resources to Encourage Healthy Lifestyles
- ***NRN*** Improving Health Behaviors Through Telephone Linked Care
- ***CaReNeT*** Multiple Interactive Technologies to Enhance Care – MITEC (CaReNet)

P4H Projects

- ***CECH*** Healthy Teens System Project (CECH)
- ***NCFPRN*** North Carolina Prevention Collaborative
- ***NYC RING*** Family Lifestyle Assessment of Risk
- ***OKPRN*** Systematic Delivery of Brief Behavioral Counseling in Primary Care
- ***PRENSA*** Engaging the Team: A Multilevel Program to Promote Healthy Behaviors
- ***RAP*** Activating Primary Care and Community Resources for Health

Prescription for Health Products and Resources

- http://www.prescriptionforhealth.org



- Learn more about Prescription for Health and its funded studies
- Access toolkit section
- Collaborate and communicate with funded networks
- Sign up for quarterly e-newsletter

Examples

- Different levels of intensity to promote care coordination between primary care practices and community resources
  - eLinkS - use of EHR
  - QuitLink - use of a fax system
  - C2P2 – use of a website and QI activities

Virginia Ambulatory Care Outcomes Research Network (ACORN)

eLinkS – An *E*lectronic *Link*age *S*ystem for Health Behavior Counseling

(ACORN P4H Project)

ACORN

"Dedicated to the Longitudinal Study of Primary Care Medicine"

VIRGINIA

Ambulatory Care Outcomes Research Network

Intervention Concept

- Physicians good at A1-A3 (Ask, Advise, Agree) but lacked expertise, infrastructure, and support to adequately provide A4 (Assist) and A5 (Arrange)
- Community resources available that already provide A4 and A5
- Needed an easy and systematic method to establish such a linkage
  - Communication between counselors and clinicians was “automated” through an EMR
  - Counselors contacted patients to initiate counseling (proactive counseling)

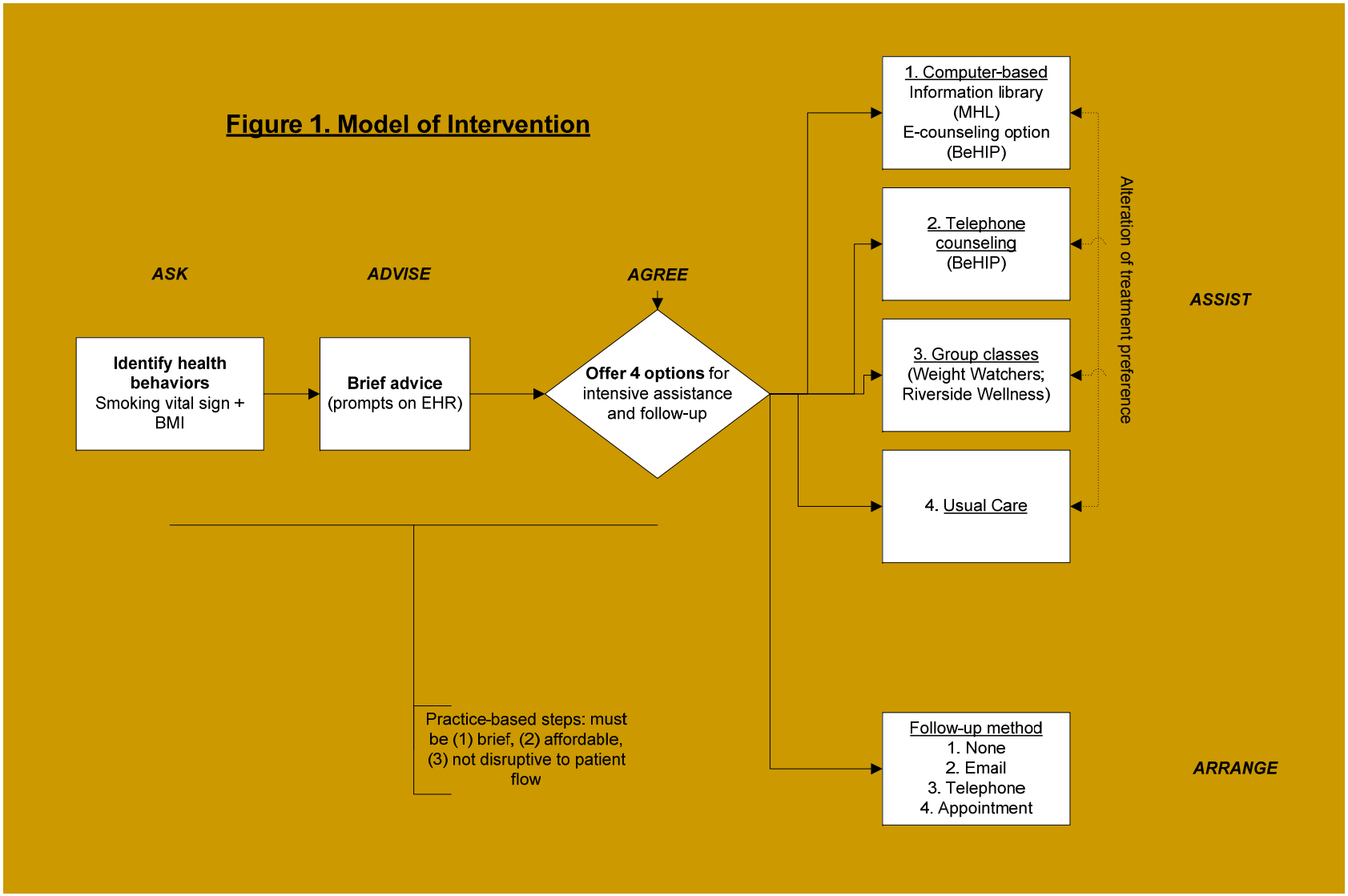
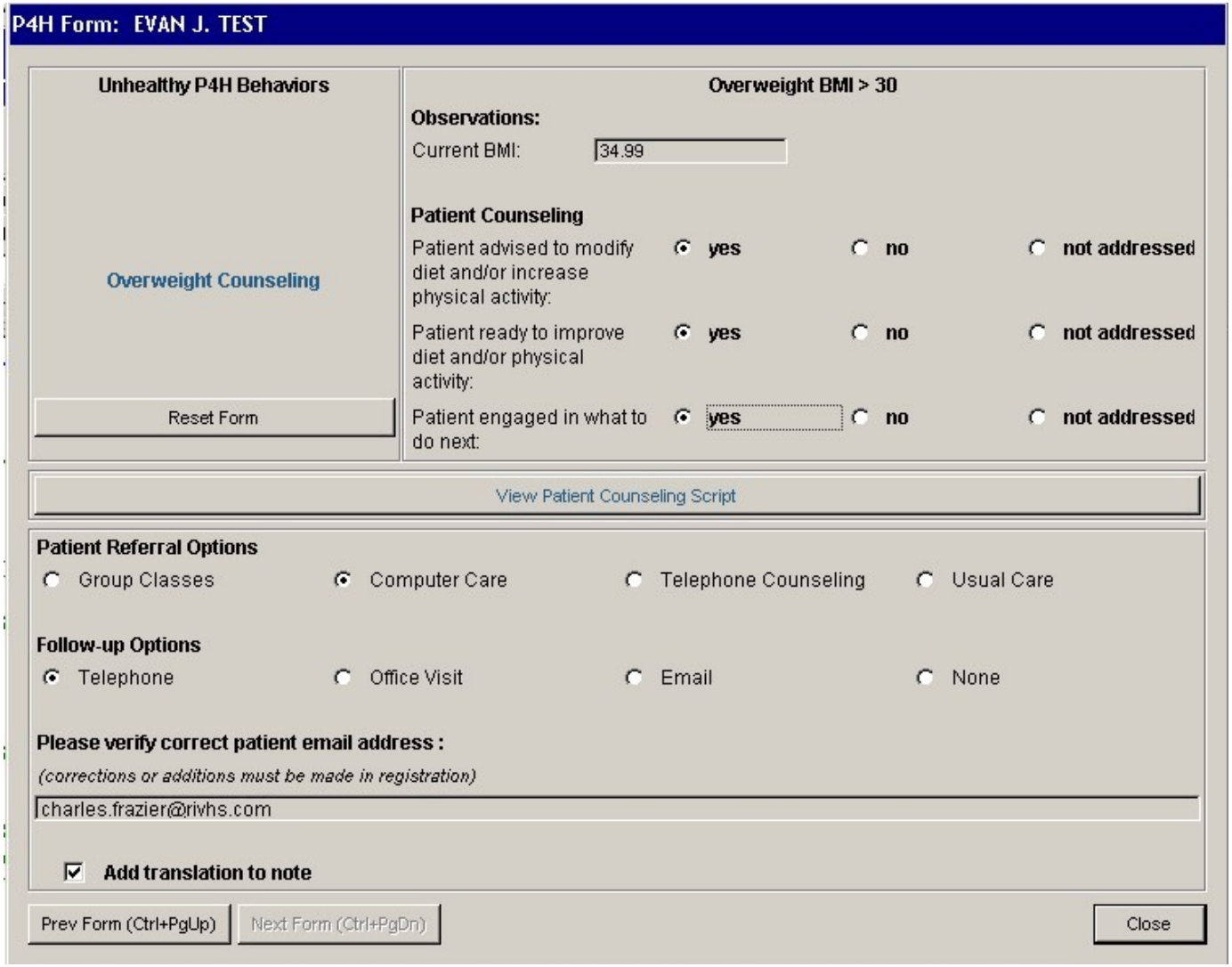


Figure 1. Model of Intervention
ASK
ADVISE
AGREE
ASSIST
ARRANGE
Identify health behaviors
Smoking vital sign + BMI
Brief advice
(prompts on EHR)
Offer 4 options for intensive assistance and follow-up
1. Computer-based
Information library
(MHL)
E-counseling option
(BeHIP)
2. Telephone counseling
(BeHIP)
3. Group classes
(Weight Watchers; Riverside Wellness)
4. Usual Care
Alteration of treatment preference
Practice-based steps: must be (1) brief, (2) affordable, (3) not disruptive to patient flow
Follow-up method
1. None
2. Email
3. Telephone
4. Appointment

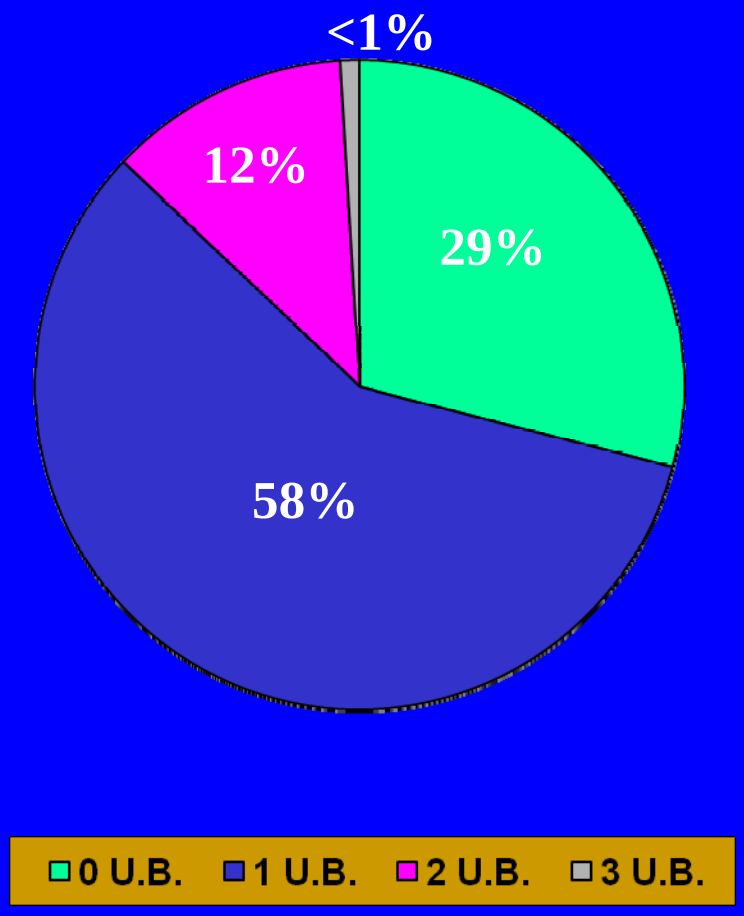
The EMR Form

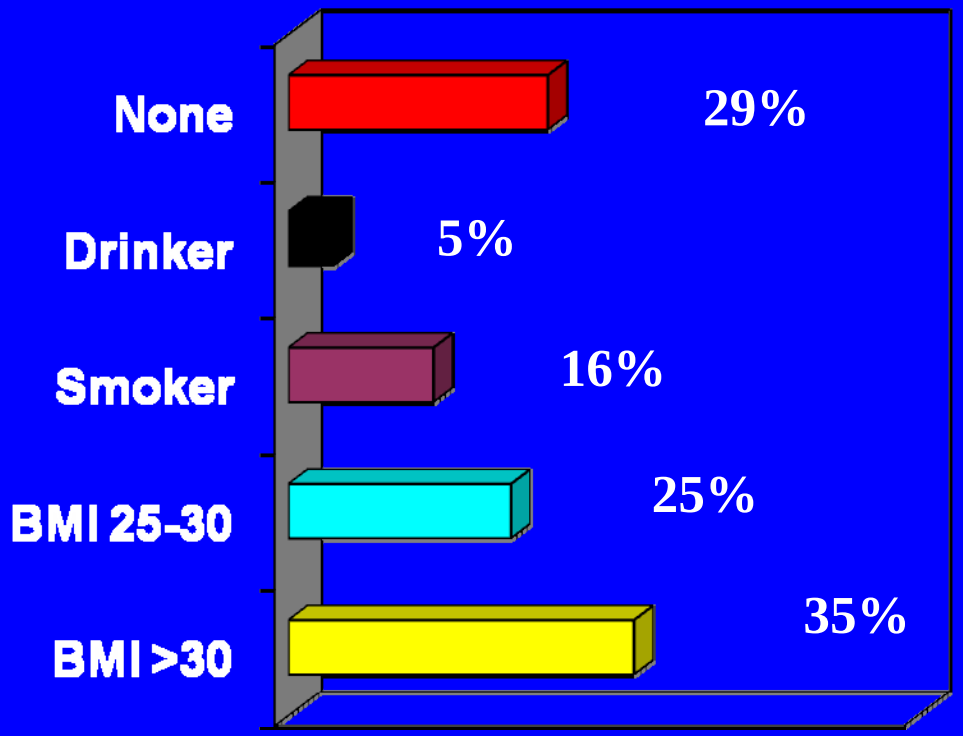

P4H Form: EVAN J. TEST
Unhealthy P4H Behaviors
Overweight Counseling
Reset Form
Overweight BMI > 30
Observations:
Current BMI:
34.99
Patient Counseling
Patient advised to modify diet and/or increase physical activity:
yes
no
not addressed
Patient ready to improve diet and/or physical activity:
yes
no
not addressed
Patient engaged in what to do next:
yes
no
not addressed
View Patient Counseling Script
Patient Referral Options
Group Classes
Computer Care
Telephone Counseling
Usual Care
Follow-up Options
Telephone
Office Visit
Email
None
Please verify correct patient email address :
(corrections or additions must be made in registration)
charles.frazier@rivhs.com
Add translation to note
Prev Form (Ctrl+PgUp)
Next Form (Ctrl+PgDn)
Close

Research Methods

- Pre-post design
- 9 practices in Tidewater Virginia area
- Prompts appear for adults with an elevated BMI, who smoke, or who drink excessively
- Outcomes assessed by survey, tracking systems within the EMR, counselor databases, and semi-structured interviews

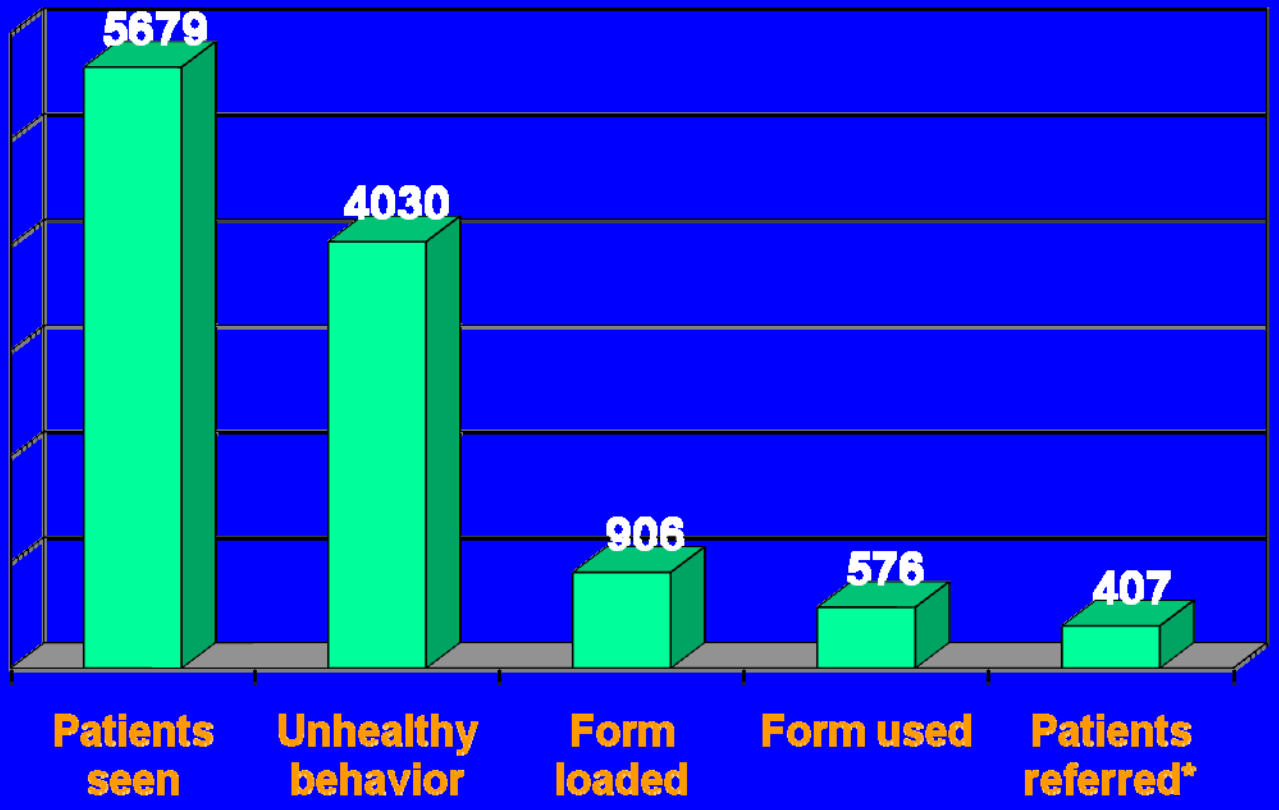
Health Behaviors as Recorded in the EMR (n=5679)





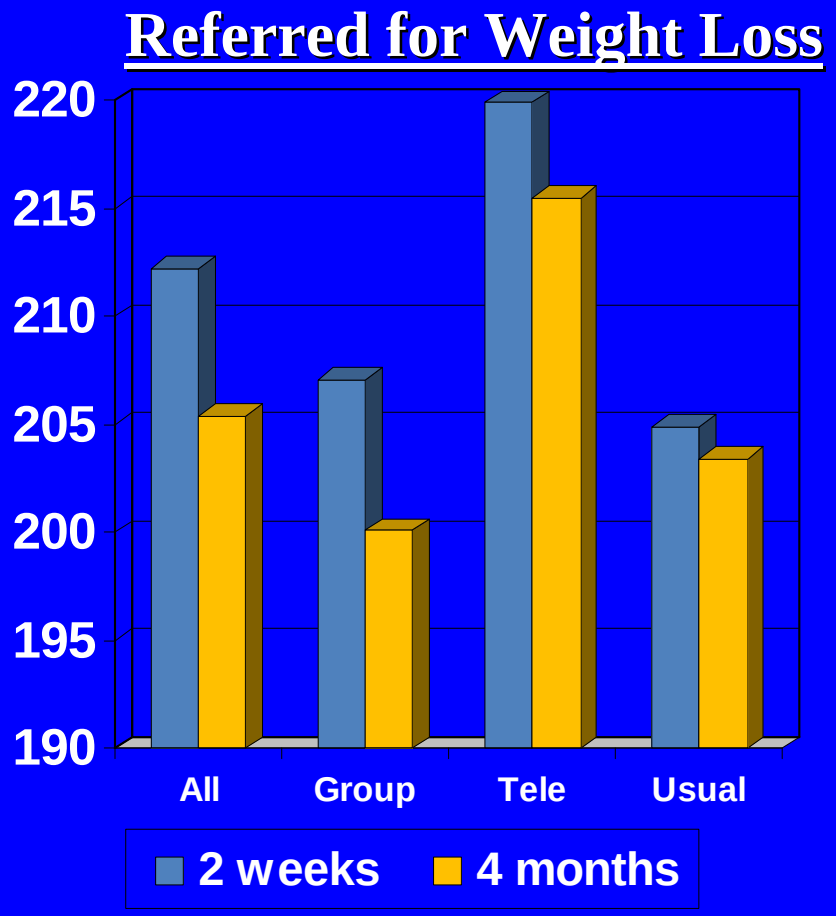
U.B. = Unhealthy Behavior

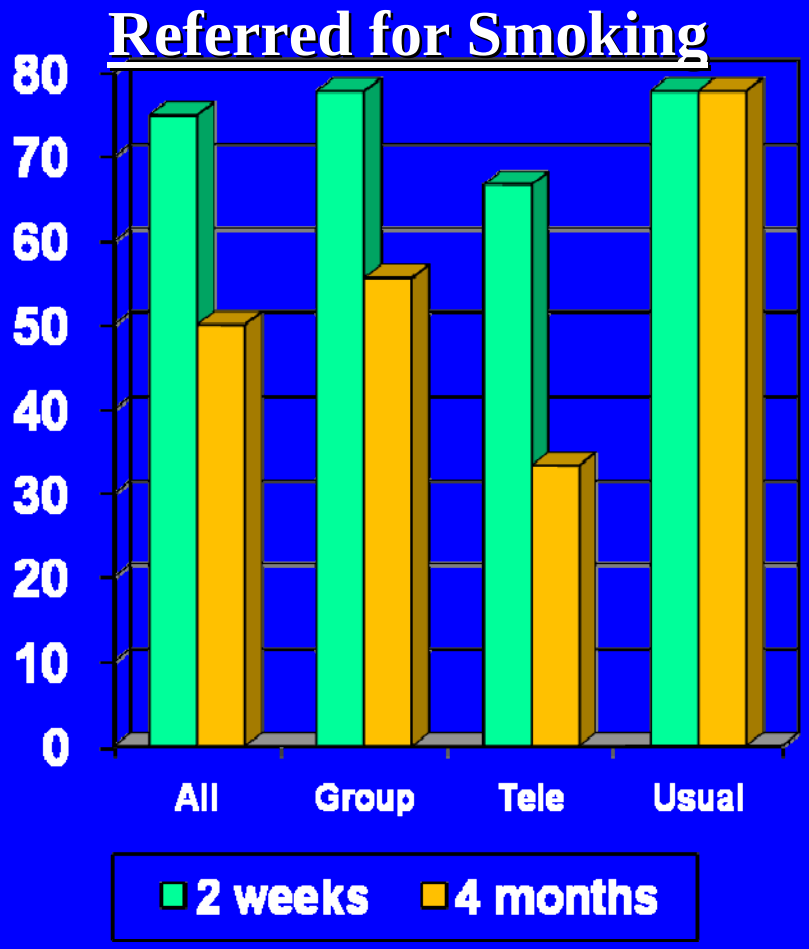
EMR Prompt System Use
(5 weeks and 2 days)



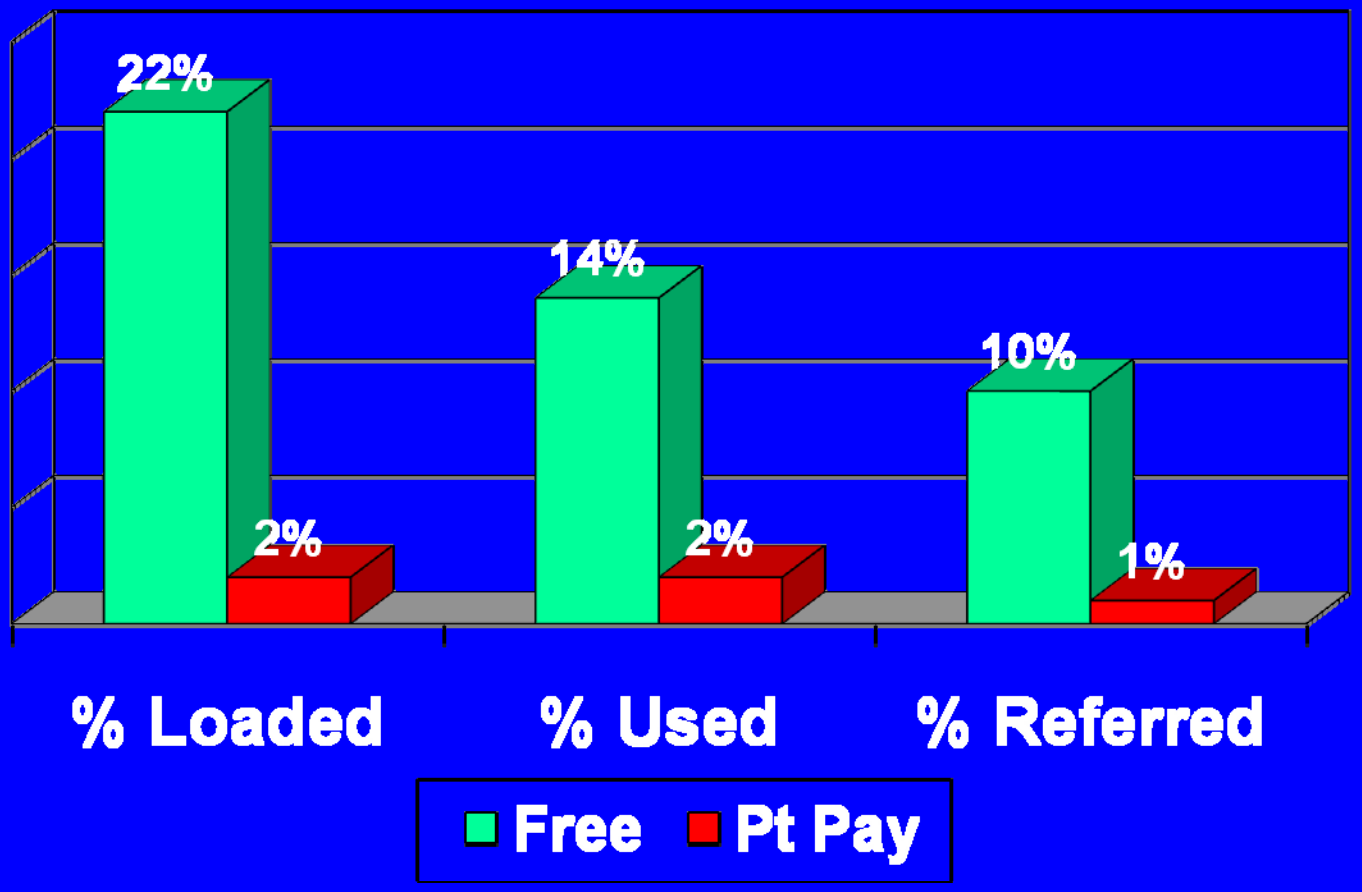
- 10% of patients with an unhealthy behavior referred
- Included chronic care (42%), acute care (34%), and wellness (18%)
- 46% would not have brought up the topic if the clinician hadn't

Health Behavior Changes

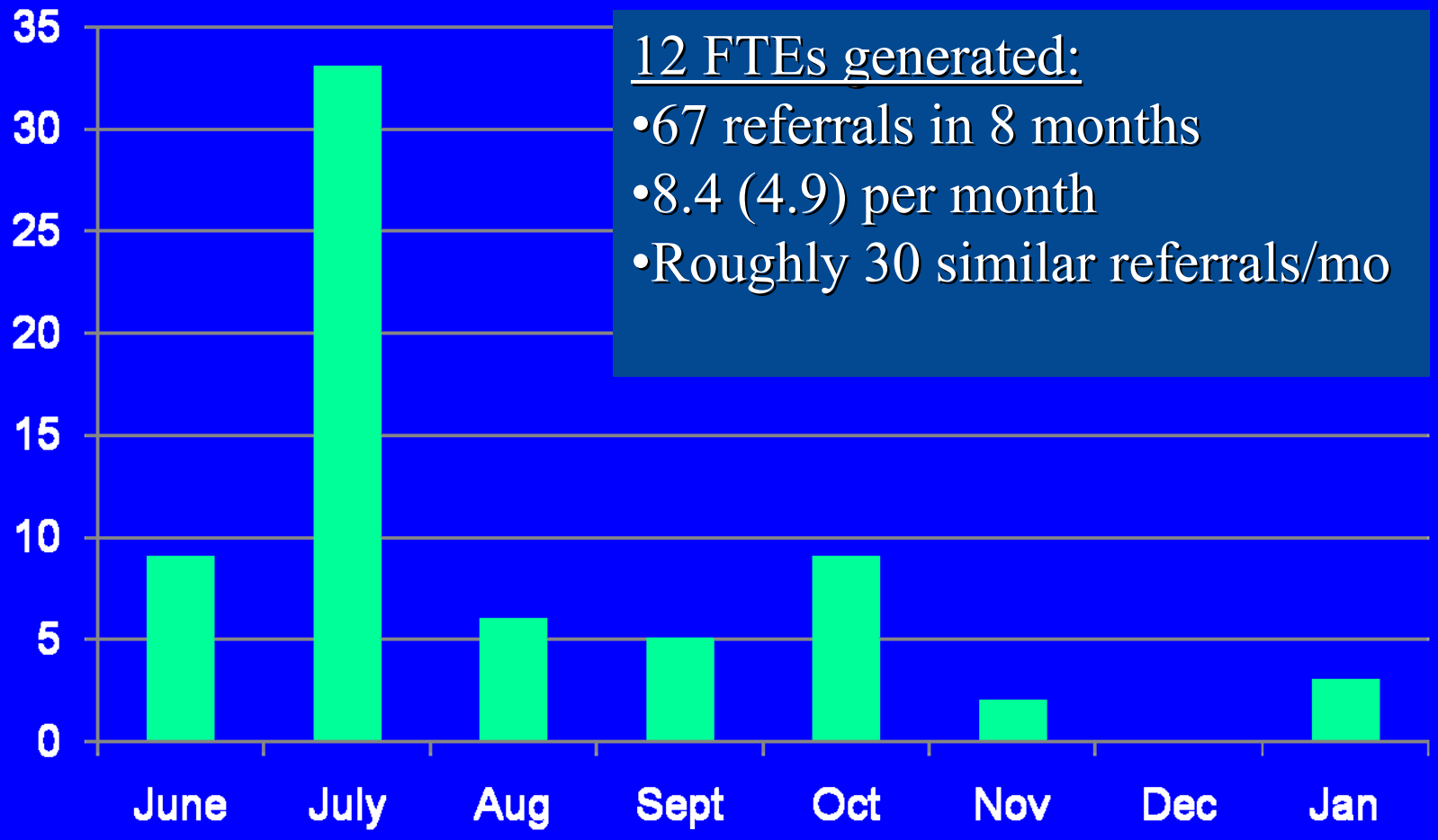




EMR Prompt System Use: Free vs. Patient pays



Epilogue: VDH Partnership



12 FTEs generated:

- 67 referrals in 8 months
- 8.4 (4.9) per month
- Roughly 30 similar referrals/mo

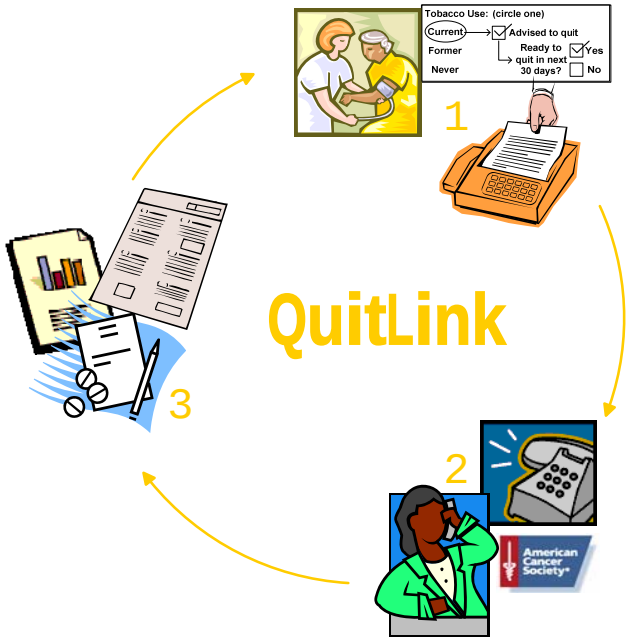
Virginia Ambulatory Care Outcomes Research Network (ACORN)

QuitLink

Leveraging Community Quit Line Services to Promote Smoking Cessation Counseling

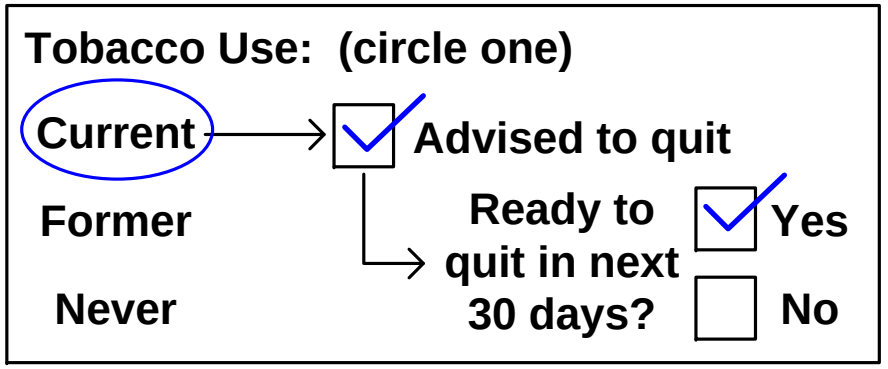
QuitLink Components

1. An expanded vital sign intervention (Ask, Advise, Assess done by staff)
2. Capacity to provide fax referral of preparation-stage patients for proactive telephone counseling (American Cancer Society Quitline)
3. Feedback to the provider team, including individual and aggregate reports and prescription requests



Intervention Elements

- Rooming staff used expanded vital sign
- Practice offered fax referral for proactive telephone counseling



- Patients contacted by ACS Quitline staff for intake and enrollment in 4 session counseling program
- Bupropion SR fax prescription request form
- Individual patient outcomes report
- Quarterly benchmarked aggregate feedback

Research Methods

- Cluster-randomized controlled trial
  - Control - traditional tobacco-use vital sign
- 16 primary care practices
  - 3 inner-city, 4 rural, and 9 suburban
- Included adults completing an office visit
- Data sources: exits survey (13,562 patients, 18% smokers), ACS minimal data set, and semi-structured interviews

Principal Findings

Counseling Behavior	Survey Question	Adjusted Affirmative Response			
		Control	Intervention	Difference	*p* value
Ask (A1)	"Did anyone ask you today if you smoke?"	64.5%	59.6%	-4.9%	0.45
Advise (A2)	"If you smoke, did anyone advise you today to stop smoking?"	55.1%	57.9%	2.8%	0.40

Principal Findings

Counseling Behavior	Survey Question	Adjusted Affirmative Response			
		Control	Intervention	Difference	*p* value
Intensive Counseling (A3-5+Referral)	**Main Outcome**	29.5%	41.4%	11.9%	<0.001
Discussion (A3-5)	"If you smoke, did anyone talk with you today about ideas or plans to help you quit smoking?"	28.7%	35.2%	6.5%	0.001
Referral	"If you smoke, were you referred today to a quit line?"	8.7%	21.4%	12.7%	<0.001

Clinician and Community Partnership for Prevention

- Goal: To evaluate strategies to develop and foster sustainable linkages between primary care practices and existing community resources to help patients address
  - tobacco use
  - poor nutrition
  - physical inactivity

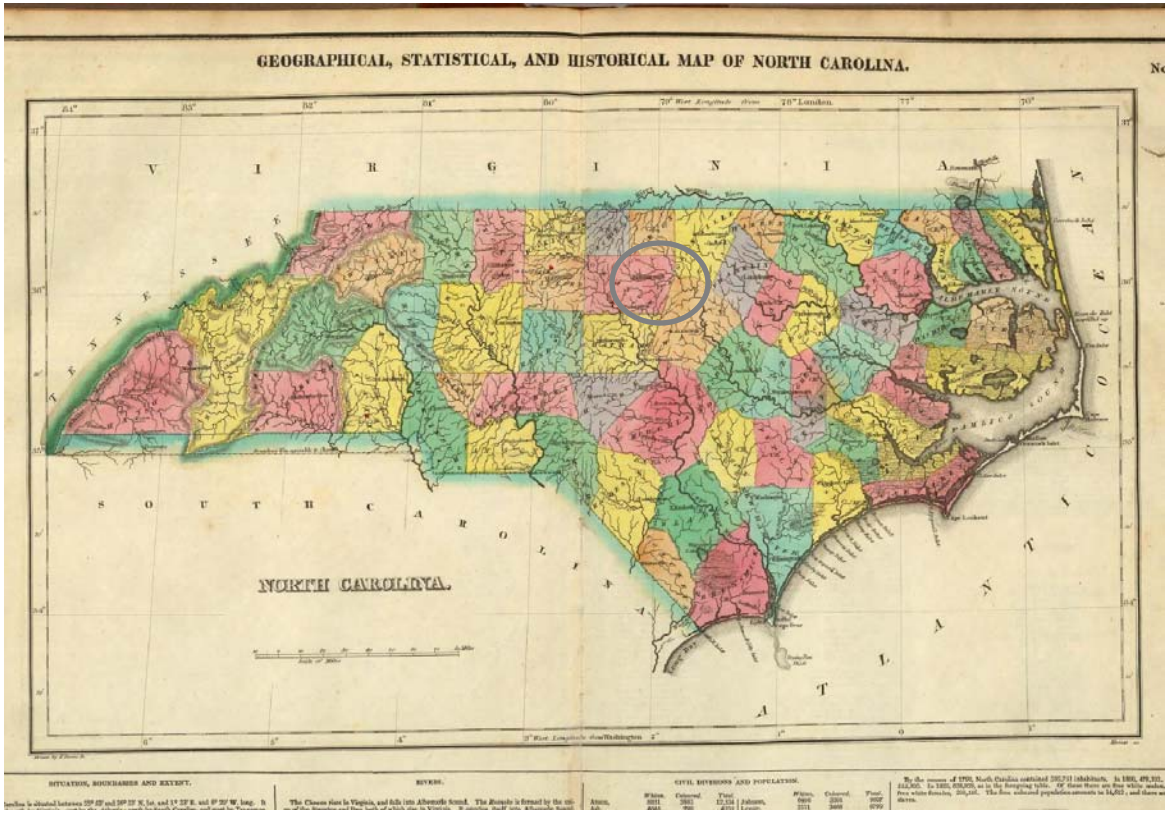
ACCTION Pack

Setting

Orange County:
Population: 120,000
Black: 13%
Hispanic: 6%

Durham County:
Population 230,000
Black 37%
Hispanic 11%

Overall, 13% below FPL

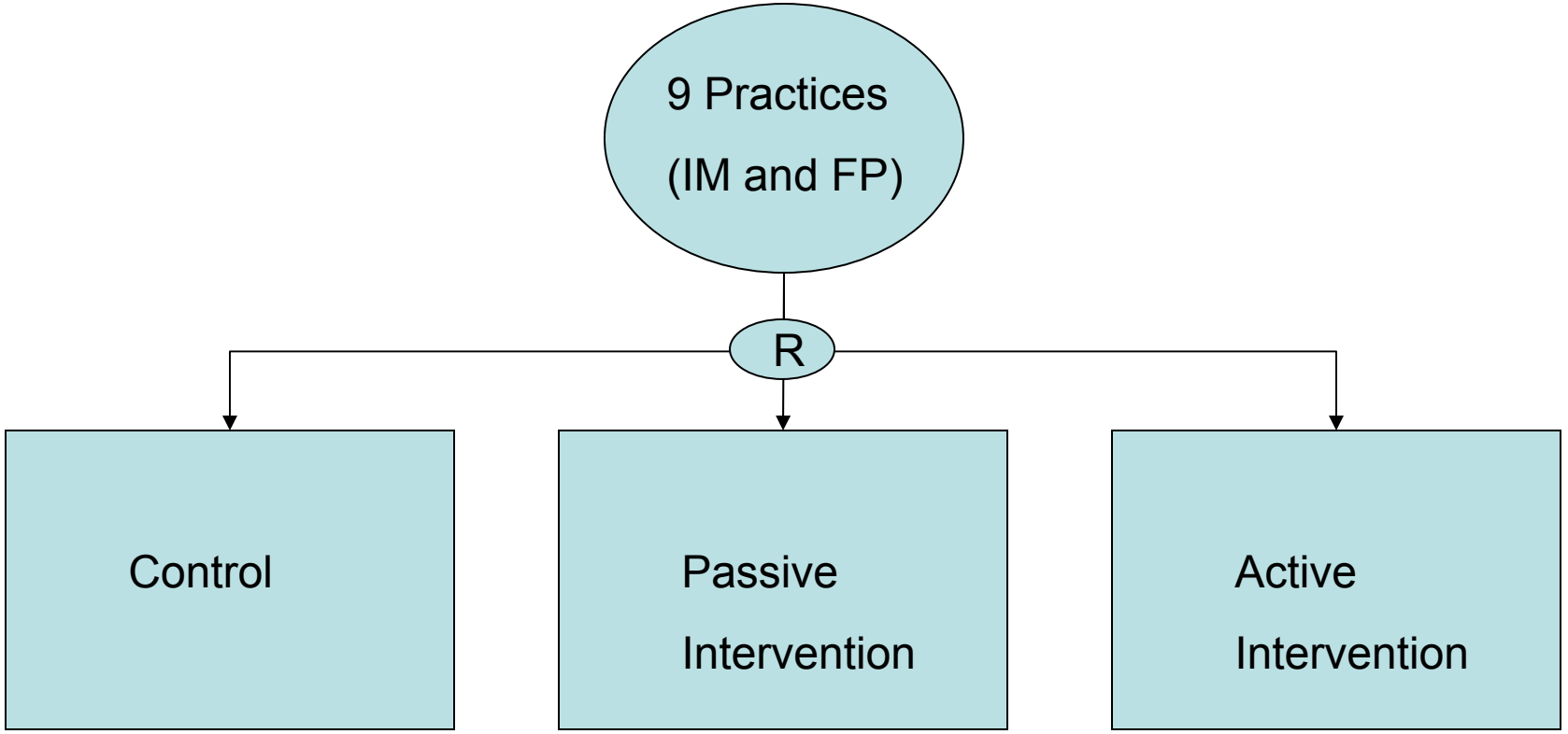


www.learnnc.org

In North Carolina
Tobacco: 25%
≥20 minutes physical activity ≥3 days per week: <25%
Overweight: 36%
Obese: 27%

Ready to change: 44% who smoke, 60% with poor nutrition, 68% who lack exercise

Participants and Interventions



Duration of the Intervention: 6 months

Control Practices

- Before and after survey to determine:
  - Current Referral Strategies
  - Practice Organization
- Chart audits at the beginning, middle and end of the intervention to evaluate:
  - Patient population that could benefit from referral to a community organization
  - Actual Referral patterns

Passive Intervention

- Protocol per control practices plus:
  - Brochure and referral material for selected community organizations:
    - NC Tobacco Quitline
    - YMCA
    - Public Health Department Dieticians
    - Duke “Live for Life” Program
  - Practice kick-off meeting
  - Brief help as requested

Practice Brochure

NCNC
North Carolina
Network Consortium

Community and Clinician
Partnership for Prevention
(C2P2)

Healthy Choices
for a
Healthy Lifestyle

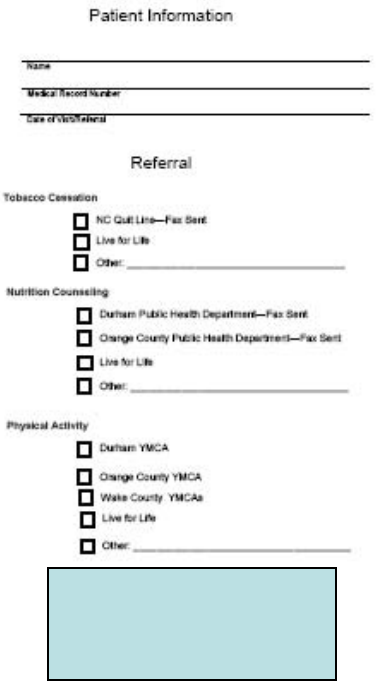
It is never too late to make changes in your lifestyle to improve your health. Making changes, however, is hard. Your doctor believes that one or more of the resources in this brochure could help you.

Resources to Support Healthy Choices

Your doctor thinks that you may benefit from one or more of the resources in this brochure to help improve your health. Research has shown that people who get support in making difficult changes in their lifestyle, like quitting smoking, improving their diet, or exercising more, lead longer and healthier lives.

We know that making these types of changes is hard. Your doctor believes that you may benefit by being referred to one or more of these resources. Please ask your doctor if you are interested in referral to other resources or if there is an important resource that you think should be in this brochure.

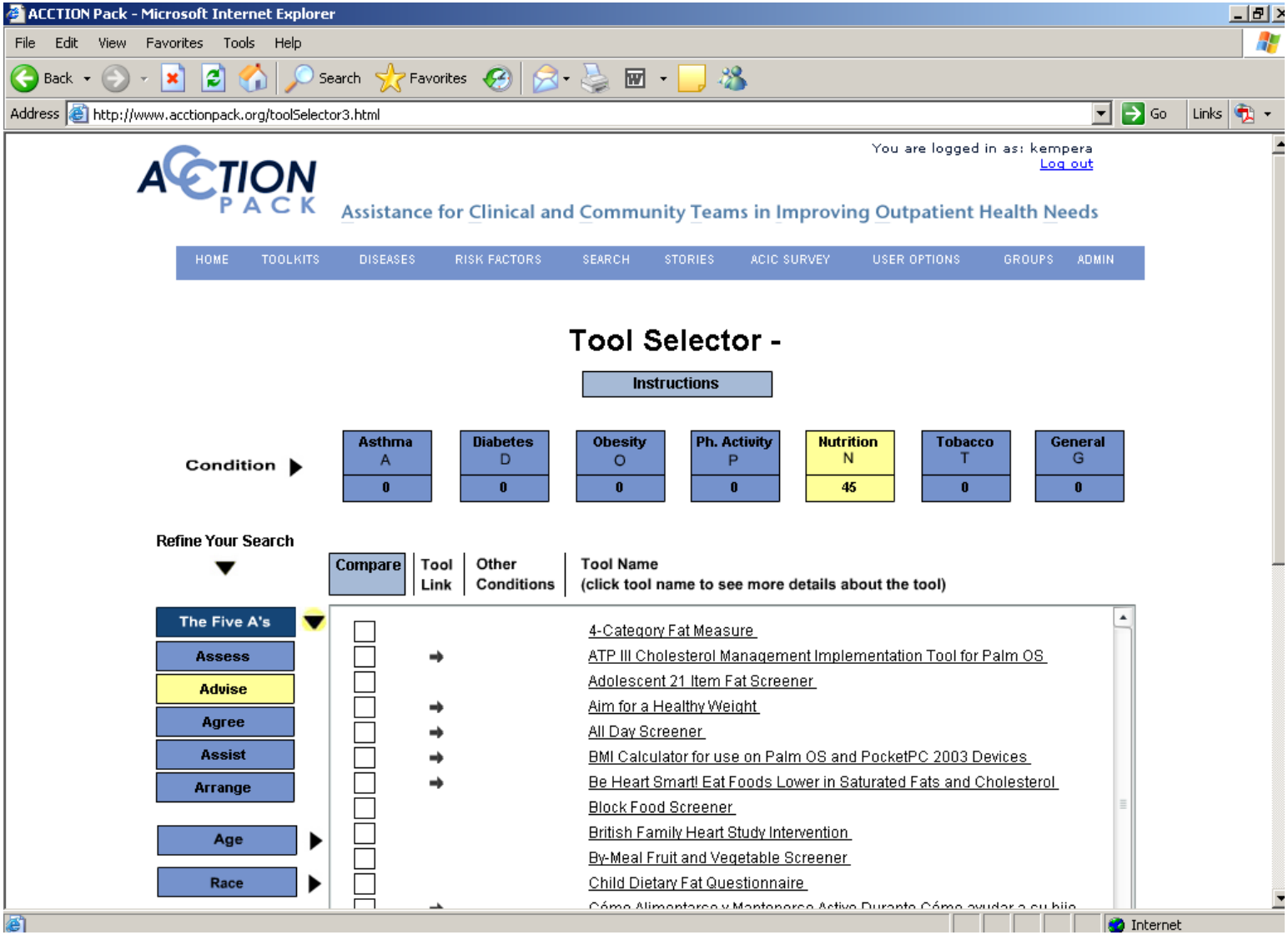
Practice Brochure



Active Intervention

- Passive Intervention Protocol plus:
  - Practice Champion who will
    - Identify other community resources
    - Receive feedback, including number of referrals made and completed, outcomes of chart audits
    - Follow-up a small number of referrals
    - Monthly QI phone call with other active practices and community resource representatives
  - Access to the “ACCTION Pack”

ACCTION Pack



Outcome Measures

- Main
  - Referral to a community resource
- Secondary
  - Completion of referral
  - Changes in provider knowledge and attitudes towards partnerships
  - Description of the barriers to and facilitators of developing linkages between practices and community resources
  - Use of the ACCTION Pack

Questions

- What are the minimal features of a community resource?
- How to assess with the practices about whether something is really a community resource (e.g., a mall walking program)?
- How can community resources be identified and tracked efficiently?
- How to develop reproducible strategies for bidirectional communication between practices and community resources?
- How to get others to add to the ACCTION Pack?

Lessons Learned

- Research challenges
  - Process measures vs. Health Outcomes
  - Generalizability
  - Primary Prevention vs. Secondary Prevention
  - Evidence Base for Choosing Interventions

Lessons Learned

- Integration of behavior change counseling is feasible in frontline primary care practice
- Obstacles to practices include inadequate
  - Resources
  - Tools
  - Reimbursement
  - Awareness
- Substantial practice redesign and revised reimbursement systems are necessary
- Multifaceted solutions involving new tools, technologies, and care teams are now available

Lessons Learned

- The parallels of addressing chronic care illness and preventive health care can be leveraged to significantly improve both
- Models and frameworks such as the 5As, the Chronic Care Model, and RE-AIM are valuable guides in the implementation of innovations into practice
- Integration of behavior change strategies extends beyond the exam room, beyond a single visit, and beyond the office
- Integration of clinical and community services to achieve behavior change is both challenging and critical. The infrastructure to make the connection is broken, fragile, or lacking