Research Network Panel

PBRNs

Practice-Based Research Networks

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Promoting Health Across Boundaries www.PHAB.us
NCI Division of Cancer Control & Population Sciences via IPA
1000 persons

800 report symptoms

327 consider seeking medical care

217 visit a physician office (113 visit a primary care physician’s office) PBRN Research

65 visit a complementary or alternative medical care provider

21 visit a hospital outpatient clinic

14 receive home health care

13 visit an emergency dept

8 are hospitalized

<1 is hospitalized in an academic medical center Most Research

AHRQ Support

- PBRN Resource Center
- Peer Learning Groups
- Annual PBRN Conference -
- PBRN Literature virtual library
- PBRN Secure Portal

Active and Developing Research Networks Served by the PBRN Shared Resource

- RAPHI Public Health PBRN
- Better Health Greater Cleveland
- LifeDermNet Dermatology Network
- Community Oncology Network
- APN-ARC Nurse Practitioner’s Network
- Independent Primary Care Practices
- University Hospitals Medical Practices*
- VAMC PBRN*
- SNAPSA Safety Net Provider’s Strategic Alliance
- Behavioral Health PBRN
- Cleveland Clinic Pediatric Network*
- Cleveland Clinic Family Health Centers
- MetroHealth Community Health Centers*
- RRN Rainbow Pediatric Research Network
- CROWN Dental Research Network
PBRNs - AHRQ Definition

• A group of ambulatory practices
• devoted principally to the primary care of patients
• affiliated in their mission to
  – investigate questions related to community-based practice
  – improve the quality of primary care
• Having a sense of
  – ongoing commitment to network activities, and an
  – organizational structure that transcends a single research project
• often link practicing clinicians with investigators
• enhancing the skills of the network members.

PBRN Approach

- Engage clinicians on the frontlines of patient care
  - Develop or frame research questions
  - Gather data
  - Interpret findings
  - Implement findings

- Top down and bottom up research

- Translation of research into practice and practice into research, on the problems that most people have most of the time.

- Produce findings that are generalizable, transportable & readily translated into practice


Universe of Primary Care PBRNs

• More than 133 active in US
  – Diversity in size, location and focus
  – Estimated access to >10% of patients

• Federations of PBRNs*

• AHRQ-funded PBRN Resource Center**

• Funding by AHRQ, RWJF, NIH, CTSA, CCSGs


PBRNs Blur the Distinction Between

- Research and quality improvement*
- Researcher and participant**
- Practice & community**


Take Home Lessons

• Consider PBRN work as partnership

• PBRNs are good partners if you want to
  – Capture the wisdom of practice as well as
  – D&I the learnings of academia
  – Generate knowledge among less selected settings and people than in academia

• Look for emerging opportunities
  – IT, CTSA, health care system infrastructure
  – Funding
  – Growing community partnerships
Special Bonus Slides!!

• For your viewing pleasure!!
• Will NOT be presented!
• Covering:
  – Example PBRN research & methodology findings
  – Tips for knowing & working with PBRNs
  – The research process
  – Photos of a real-life PBRN Steering Committee!
Example PBRN Research Findings
Women with a spontaneous abortion rarely need a D&C.

- Ambulatory Sentinel Practice Network (ASPN)
Antibiotics may not be needed for all children with otitis media

• ASPN & International Collaborative Network


There is no need for regular b.p. checks for normotensive adults who don’t gain weight.

- Nijmegen University Academic Network Family Medicine (CMR/NMP)

Office systems & community intervention increases sun protection counseling.

- Dartmouth COOP


Tailored QI strategies lead to sustained increases in preventive service delivery…

• RAP


...and mixed methods approaches show how to contextualize interventions

• RAP


Brief interventions in primary care reduce problem alcohol use

- WReN


Practices can change to provide health behavior change advice

- 21 PBRNs


Changing individual practice

- ASPN / WReN
PBRN methodology findings
Patients in PBRNs are representative

- ASPN, NEON
Minimal differences in practice patterns of family physicians in a PBRN

- ASPN

PBRN weekly return cards are accurate.

- ASPN


- Westfall JM, Zittleman L, Staton EW et al. Card Studies for Observational Research in Practice. *Ann Fam Med.* 2011;9:63-68. [www.annfammed.org/cgi/content/full/9/1/63](http://www.annfammed.org/cgi/content/full/9/1/63)
For accurate measurement: medical records for what clinicians do to patients; patient report for what they say

- RAP

Knowing and Working with PBRNs
Geography

• International, IFPBRN
• National/bi-national (ASPN), NatNet, PROS, PPRNet
• State WReN, MAFPRN
• Regional COOP, UPRNet, RAP
• Single healthcare system PPRG, Rainbow PBRN
• Single community HARNET
• Consortium of Networks FPBRN
Size / Participants

- A few practices - hundreds of practices
- Single specialty - multispecialty, PAs, NPs
Affiliations

• National Academy
  – PROS, AAFP Research Network

• State Academy
  – WReN, MAFPRN

• Academic Institution
  – RAP, NEON

• Hospital / Health System
  – PPRN
Initiating Vision or Event

- Individual/group with a bee in the bonnet
- Knowledge gap
- Belief in wisdom gained from practice
- Computer system
- Teaching mission
- Single question or idea
Governance

- Academy
- Board of Directors of participants
- Consensus (town meeting)
- Health system
- Academic partner
- Leader
Leadership

• Network
  – Top down
  – Bottom up
  – Coalition / whole system leadership

• Specific projects
  – Network leader(s)
  – Clinician member(s)
  – Outside principal investigator
Idea Generation

- Clinician’s practice
- Family practice department
- Academicians
- Content experts
- Funders
- Group process
Project Design/Refinement

• Small, transdisciplinary group
• Practitioner perspective
• Methods expertise
• Content expertise
• Access to literature
• Pilot testing
Funding

• Opportunistic, ad hoc
• Foundation grants
• Department grants
• Research grants
• Academic department underwriting
• Academy underwriting
Denominator

- Age/sex registries
  - Epidemiological/surveillance studies

- Representative samples of practices
  - Studies of clinician or practice behavior
Practices are Changing Rapidly
In 80 family practices in Northeast Ohio:

- 52% of all employees new within 2 years
- Staff duration
  - 1.8 yrs - network practice
  - 4.3 yrs - non-network practice
- Physician duration
  - 5.8 yrs - network practice
  - 11.3 yrs - non-network practice

Research Designs

- Descriptive studies - clinical trials
- Longitudinal studies
- Quantitative - qualitative - multimethod
Data Collection

• Data collection by
  – Practice
  – Research team
  – Health system

• Data collection method
  – “Weekly return” card
  – Computerized data
  – Medical record
  – Survey / interview
  – Direct observation
Data Analysis

- Network staff
- Investigator
Scholarly Output

- Academician or clinician
- Clinician - academician partnership
- Collaborators
- Writing / editing teams
- Participant reviewers
- Planned - evolutionary
- “Bigger pie” mentality
- Making time
- Write the abstract first
The Research Process

References - General


- Green LA, Dovey SM. Practice based primary care research networks. They work and are ready for full development and support. *BMJ*. 2001;322:567-568.
References (continued)


References (Representativeness)


References (Methods/Logistics)


References (new trends)


