Hybrids, Chimeras, or New Species? Emerging Models of PBRNs

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Overview

- Historical structure and function of PBRNs
- PBRN leaders describe 3 'newer generation' networks
- Large group formulation
- Small group discussions and application
- Small groups report
- Summary of take home messages

1980's: Foundations

- Regional and national PBRNs were developed to conduct primary care research
 - Family Medicine and Pediatrics
 - ASPN, PROS, WReN, UPPR-Net
 - Sought to become 'laboratories' that build the science base of primary care
 - Sustained by academic departments & foundation grants

1980's continued

- PBRNs were research collaboratives of practicing primary care physicians and academics
- Revolutionary and counter to mainstream medical culture
- Focused on diagnosis and management of common medical conditions
 - Observational card studies, natural experiments
- Emphasis on clinical phenomena and clinician behavior
- Limited engagement of community members

1990's: Increasing Rigor

- Marked increases in rigor and complexity of studies
 - Qualitative and multimethod designs, intervention studies, group randomized trials
 - Direct Observation of Primary Care; Acute Otitis Media; STEP-UP; Improving the Care of Children with Asthma; Depression Management in Primary Care

1990's continued

- Federation of PBRNs started in 1997
- Departmental & foundation grant core funding models continued
- Experimentation with not-for-profit models
- Sporadic engagement of community stakeholders
 - Unfamiliar skill set; uncertain benefits

2000's:

Proliferation and Expansion

- AHRQ provided infrastructure development funding to 45 networks; more than \$8 million
- Quality Improvement & Best Practices networks began
- Evolution from clinical laboratories to collaborative learning communities
- AHRQ-funded PBRN Resource Center initiated
- 17 RWJ-funded Prescription for Health Projects conducted in PBRNs

2000's continued

- Recognition of slow translation of research into practice
 - First CTSAs funded in 2006
 - PBRNs part of community partnership cores
- Direct engagement of community members by PBRNs described in the literature: CBR, CES, & CBPR

Interest and openness to community engagement

• Direct academic affiliation the predominant organizational model

CTSA core support

2010's

Shifting toward PCOR and Public Health

- IOM report: Integrating Primary Care and Public Health
- Folsom Report Revisited: Communities of Solution
- Affordable Care Act
- Accountable Care Organizations: Population health
- Community engagement expertise available through CTSAs
- Patient Centered Outcomes Research Institute (PCORI)
 - Patient engagement is required

Trajectory of PBRNs

		2000's	2010's
1980's	1990's	45 PBRN	Integration of primary care &
Primary care laboratories	Sophisticated designs	infrastructure grants	public health
Observational studies	High impact research	Quality Improvement/ Best Practices	ACA & ACOs: population health focus
Dependence on academic departments	Strong academic affiliations	Learning Communities CTSA funding	PCORI: Emphasis on community engaged networks and
Focus on practice- academic partnerships	Direct engagement of patients driven by studies	Attention to community engaged research	studies CER partnerships through CTSAs

References

Fagnan LJ, Davis M, Deyo RA, Werner JJ, Stange KC. Linking practice-based research networks and clinical and translational science awards: New opportunities for community engagement by academic health centers. *Acad Med.*, 2010 Mar:85(3):476-483.

Green LA, Hickner J. A short history of primary care practice-based research networks: from concept to essential research laboratories. *JABFM 2006; 19*(1): 1-10.

Griswold KS, Lesko SE, Westfall JM. Communities of solution: partnerships for population health. *J Am Board Fam Med.* May-Jun 2013;26(3):232-238.

The Folsom Group. Communities of solution: the Folsom Report revisited. Ann Fam Med. May-Jun 2012;10(3):250-260.

Mold JW, et al. Coordinating centers and multi-Practice-based Research Network research. JABFM 2012; 25(5): 577-581.

Mold JW, Peterson KA. Primary care practice-based research networks: working at the interface between research and quality improvement. *JABFM 2005; 3(1)*: S12-S20.

Macaulay AC, Nutting PA. Moving the frontiers forward: incorporating community-based participatory research into practice based research networks Ann Fam Med. 2006 Jan-Feb;4(1):4-7.

Nutting PA, Beasley JW, Werner JJ. Practice-based research networks answer primary care questions. JAMA 1999 Feb 24;281(8):686-688.

Nutting PA. Community-Oriented Primary Care: From Principals to Practice. Washington, DC: U.S. Government Printing Office; 1987.

Sloane PD, et al. Increasing the role of practice networks in medical research. JABFM 2009; 22(4): 348-351.

Stephens GG. Family Medicine as counterculture. Family Medicine 1989;29(2):103-109

Westfall JM, Fagnan LJ, Handley M, et al. Practice-based research is community engagement. J Am Board Fam Med. Jul-Aug 2009;22(4):423-427.

Westfall JM, VanVorst RF, Main DS, Herbert C. Community-based participatory research in practice-based research networks. Ann Fam Med. Jan-Feb 2006;4(1):8-14.

Westfall JM, Dolor RJ, Mold JW, Hedgecock J. PBRNS engaging the community to integrate primary care and public health. *Ann Fam Med.* May-Jun 2013;11(3):284-285.

Williams RL, Shelley BM, Sussman AL. The marriage of community-based participatory research and practice-based research networks: can it work? -A Research Involving Outpatient Settings Network (RIOS Net) study. J Am Board Fam Med. Jul-Aug 2009;22(4):428-435.

Characteristics of Early vs. Later Generation PBRNs

Early Generation Primary Care PBRNs *	Later Generation Primary Care PBRNs
"PBRNs capture health care events that reflect the selection and observer bias that characterize primary care in community-based patient populations."	
"PBRNs provide access to the practice experience and care provided by full-time primary care clinicians."	
"PBRNs focus their activities on practice-relevant research questions, apply appropriate, multimethod research design, and generally avoid the tendency to permit research methods to define the question."	
"PBRNs strive for the systematic involvement of network clinicians in defining the research questions, participating in the study design, and interpreting study results."	

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	Early Generation Primary Care PBRNs	Later Generation Primary Care PBRNs
Settings	"PBRNs capture health care events that reflect the selection and observer bias that characterize primary care in community- based patient populations."	
Stakeholders	"PBRNs provide access to the practice experience and care provided by full-time primary care clinicians."	
Designs	"PBRNs focus their activities on practice- relevant research questions, apply appropriate, multimethod research design, and generally avoid the tendency to permit research methods to define the question."	
Participants	"PBRNs strive for the systematic involvement of network clinicians in defining the research questions, participating in the study design, and interpreting study results."	