



# Identifying Barriers and Facilitators in Practice Based Research Network Studies

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## Background

Practice Based Research Networks (PBRNs) are groups of ambulatory medical practices, devoted principally to the primary care of patients, that join to conduct and disseminate research to improve the practice of primary care. PBRN studies have provided valuable information about patient health and the impact of interventions. However, PBRN research also face barriers to successful completion which may dissuade researchers from using them. We sought to identify barriers and facilitators to the successful and timely completion of such projects.

## Methods

Direct observations were made over eight weeks at the University of Missouri on the preparatory work for a project titled "Improving Care for Chronic Pain", performed in cooperation with the American Academy of Family Physicians' National Research Network (AAFP NRN).

Observations were made on the following:

- Weekly meetings amongst the MU research staff discussing progress, obstacles encountered and anticipated, and measures taken to address those obstacles
- Biweekly meetings between the research staff and the NRN project manager
- Designing surveys for participants and clinicians involved in the study

Preexisting literature was also reviewed with articles found on the following internet sources:

- PubMed
- Agency for Healthcare Research and Quality (AHRQ)

## Results

Numerous major barriers and facilitators were discovered (Table 1). Difficulties with IRB review was a common barrier both observed and frequently cited in journal articles. Common facilitators were mostly about the benefits of electronic services and preliminary planning.

## Results (continued)

Conversely, difficulties with NRN concerns was an observed barrier that had not been mentioned in the online sources. Likewise, major barriers discovered in the literature review that were not directly observed included difficulties with online tools and burnout suffered by clinicians. Finally, due to the limited time of the Summer Research Fellowship, some of the facilitators from the literature review were not directly observed but may have been employed at a later time.

**Table 1: Barriers and Facilitators Affecting PBRN Studies**

Barriers	Facilitators
Preparatory challenges faced include selecting feasible studies, overcoming budget limitations, finding appropriate members for a research team, recruiting sites to participate, and training practices on study procedures	Planning and preparatory work are very helpful in reducing potential barriers*
Clinicians may be affected by the lack of time, lack of appropriate training, and inadequate compensation	Clinicians who feel strongly about a particular study's relevancy may be further motivated to participate
Patients or clinicians may lack access or familiarity with online tools	Use of electronic services may potentially increase efficiency of communication with patients and allow for the documentation of information exchanges*
The IRB approval process is a frequent challenge since PBRN research is conducted through multiple practices, thus requiring multiple IRB approvals *	Different PBRNs can work together to pool a greater amount of data and make use of more participating practices
A long and complicated consent discussion can impede patient dynamics	Engagement strategies may improve participation of some patient groups, especially among diverse populations
Patients recruited as part of a control sample may suffer worse outcomes as they are excluded from treatments	Long-term maintenance of a project using the same personnel may increase the sustainability of interventions
Concerns voiced by the network staff (in our case the NRN staff) may cause unexpected changes in protocol*	The "Toolkit for Developing and Conducting Multi-site Clinical Trials in Practice Based Research Networks" can offer guidance to researchers unfamiliar with PBRNs
Consumers may be more concerned about privacy loss and research abuse than about the benefits of research	Incentives such as recognition or continuing medical education credit are easy, low-cost ways to reinforce clinicians' desire to improve care

\*denotes a barrier or facilitator that was directly observed

## Conclusions

The implication of the project is that studies frequently take longer than expected due to inevitable but unforeseen difficulties. Potential measures to address delays in the IRB process include setting deadlines to sites needing IRB approvals, having additional sites as reserves, and scheduling times to review IRB materials with each site.

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