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Physician Perspectives on Incentives to Participate in Practice-Based Research: A Greater Rochester Practice-Based Research Network (GR-PBRN) Study

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Abstract

Objectives—To understand factors associated with primary care physician research participation in a practice-based research network (PBRN), and to compare perspectives by specialty.

Methods—We surveyed primary care internists, family physicians, and pediatricians in Monroe County, New York, regarding their past experience with research and incentives to participating in practice-based research. We performed descriptive and tabular analyses to assess perceptions and used chi-square and ANOVA to compare perceptions across the three specialties.

Results—Response rate was 33%. The most frequently endorsed aspects of collaboration were: the opportunity to enact quality improvement (78%), contribution to clinical knowledge (75%), and intellectual stimulation (65%). Significant differences among the primary care specialties were found in two aspects: internists were more likely to endorse additional source of income as “important”, and family medicine physicians were more likely to cite the opportunity to shape research questions, projects and journal articles as “important.”

Conclusion—Physicians across all three specialties cited the opportunity to enact quality improvement and contribution to clinical knowledge as important incentives to participating in practice-based research. This supports the importance of strengthening the interface between research and quality improvement in PBRN projects. Further study is needed to assess reasons for specialty differences if PBRNs are to become successful in research involving adult patients.

Introduction

Practice-based research networks (PBRNs) are groups of practices that collaborate to study issues of importance to clinical care. Most involve primary care practices. PBRNs are important for translational research. (1) (2)

Studies on practice-based research have primarily involved single disciplines such as pediatricians (3) or family physicians,(4) without comparing perspectives across disciplines.

In 2007, the University of Rochester's CTSA-funded Clinical and Translational Science Institute established the Greater Rochester PBRN (GR-PBRN). Prior to engaging practices in PBRN-related research, we surveyed physicians about practice-based research to assess facilitating factors regarding physician participation in practice-based research and to compare the perspectives of internists, family physicians, and pediatricians.

Methods

Setting

The study was conducted in Monroe County, NY which includes the city of Rochester and surrounding suburban and rural communities.

Study Design

We sent a confidential, physician survey to all primary care physicians in Monroe County. We used multiple search strategies to identify physicians including existing departmental lists, yellow pages listings, websites of health systems, and publicly-available insurer provider lists. We called practices to confirm physician names and practice addresses, and surveyed all physicians rather than a practice representative.

The questionnaire examined past experience with research and incentives to participating in practice-based research. We asked physicians to rate the incentives that were “most important of all” on a 4-point Likert scale which we collapsed it into 2 categories.

Analyses

We performed descriptive analyses of the data and used chi-square and ANOVA tests to compare responses among specialties.

Results

Response Rates And Demographic Characteristics

Of the 559 physicians for whom addresses were verified, 185 completed the survey (33%): 70/241 (29%) internal medicine physicians [IM], 37/132 (29%) family physicians [FP], and 78/186 (42%) pediatricians [PD]. Seventy-four percent of respondents had participated in at least one research study in the past 5 years, including 67% of internists, 68% of family physicians, and 79% of pediatricians. Four percent of respondents' practices had participated in more than 10 studies.

Perceived Incentives to Participating In Practice-Based Research

Physicians were asked to what extent aspects of collaboration with academic researchers would be important to them, and to rate the most important aspect. The three most frequently endorsed “important” items were: the opportunity to enact quality improvement (78%), contribution to clinical knowledge (75%), and intellectual stimulation (65%). These three were also most frequently cited as “the most important of all.” The three least

frequently endorsed “important” items were: recognition by patients (17%), or colleagues (21%), and additional income source (30%) (Table 1).

Significant differences among the primary care specialties were found in two aspects: internists were more likely to endorse additional income as “important”, and family physicians were more likely to cite the opportunity to shape research questions, projects and journal articles as “important.”

Discussion

Our study noted high physician interest in practice-based research, a willingness to participate in research, and key incentives being the potential for quality improvement, contribution to knowledge, and intellectual stimulation. These findings underscore the importance of conducting practice-based research that is clinically relevant to physicians, such as quality improvement studies or clinical projects with short-term practice benefits. (5)

Internists were significantly more likely to endorse “additional source of income” as an incentive than other family physicians or pediatricians. It is unclear whether this reflects a higher level of financial pressures endured by internists compared to other specialties, or other factors. Overall, PBRNs will need to carefully assess local incentives to practice-based research and devote substantial efforts to understanding specialty differences if they are to include a broad spectrum of practices in their studies.

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Table 1
Incentives Important to Monroe County Physicians for Participating in Research (Percents)

	Total (n=185)	Internal Medicine (n=70)	Family Medicine (n=37)	Pediatrics (n=78)	p value
Intellectual stimulation	65.4	60.0	64.9	70.5	0.41
Contribution to clinical knowledge	75.1	75.7	70.3	76.9	0.74
Recognition by patients	16.8	17.1	13.5	18.0	0.83
Recognition by colleagues	21.2	18.8	29.7	19.2	0.36
Opportunity to enact quality improvement	77.8	72.9	78.4	82.1	0.40
Change of pace	31.0	30.0	27.8	33.3	0.82
Additional income source	30.4	41.4	24.3	23.4	0.04
Interaction with colleagues around research issues	52.4	45.7	54.1	57.7	0.34
Method to gain Continuing Education credits or Certificate of Maintenance	49.2	48.6	48.7	50.0	0.98
Opportunity to shape research questions, projects and journal articles	35.1	28.6	54.1	32.1	0.02
Academic advancement/recognition	36.2	41.4	27.0	35.9	0.34