

Summary:

Practice-based research networks are groups of physicians who study patient care in a practice setting using multimethod approaches. As the provision of health services shifts from the inpatient to ambulatory setting, these networks are becoming increasingly important as clinical research sites and as quality improvement tools.

This poster outlines ACP-ASIM's initiative towards the development of a practice-based research network. It has completed five "best practice" studies with the participation of 137 physicians. Using the diabetes best practice study, we report our qualitative and quantitative findings, the lessons learned from our experience, the obstacles we encountered, and future directions.

Goals of Practice-Based Research Networks:

- ❖ To bridge the gap between research and practice by conducting research in practices and promoting evidence obtained in practice settings
- ❖ To develop clinically relevant research questions
- ❖ To promote best practices by disseminating scientifically based evidence in the form of clinical practice guidelines
- ❖ To identify and overcome barriers to implementing guidelines in physicians' practices

Demonstration Study: Best Practice of Diabetes Mellitus Management Using Audit-Feedback Method

Recruitment: Convenience sample of physician volunteers

Study Design:

- ❖ Patient Sample Selection: Patients who have been diagnosed with type 1 or type 2 diabetes and who have been continuously treated by the physician during the past 12 months

Audit-Feedback Method:

Each participant received by mail

- ◆ A letter providing instructions for participating in the studies
- ◆ Current guidelines for diabetes management
- ◆ 30 forms (1-page, 2-sided) with seven questions based on established performance indicators

Each participant submitted

- ◆ 25 forms, one for each patient, completed during patient encounter or through chart abstraction

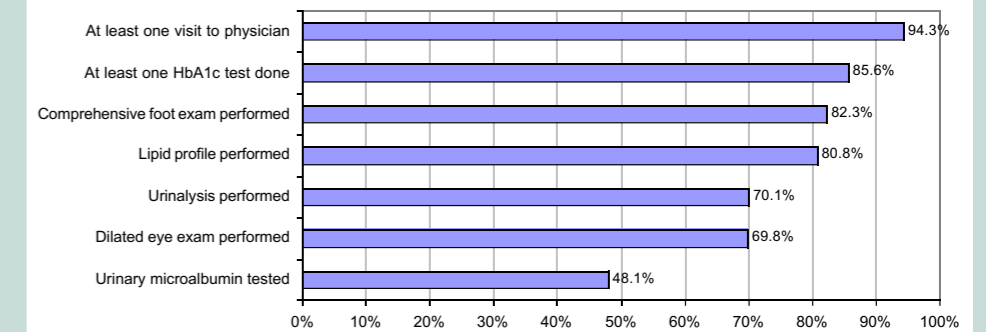
At the end of study period, each participant received

- ◆ Confidential reports showing individual physician performance compared to aggregated performance
- ◆ Analysis of comments indicating barriers to following best practices identified during study period

Results from Demonstration Study:

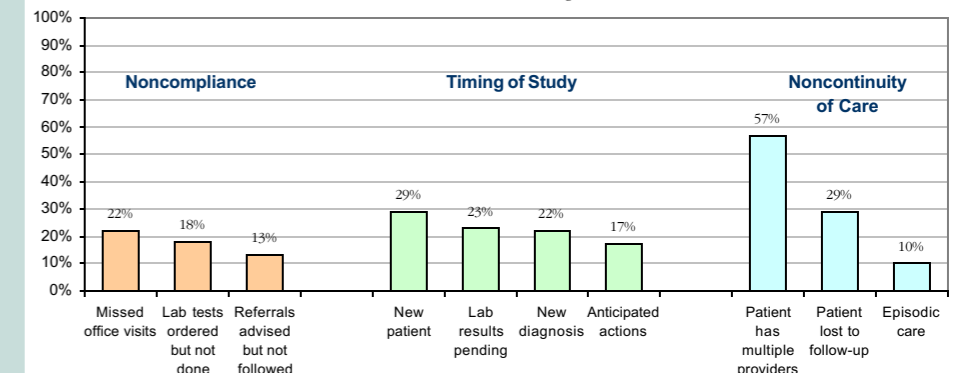
Performance Indicators for Diabetes Management

% of Total Patient Encounters In Prior Year (N=1755)



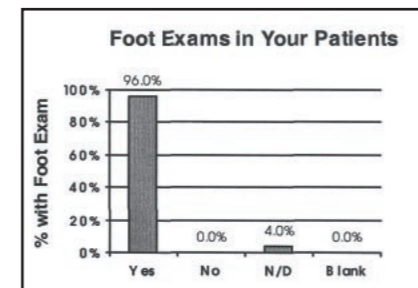
Barriers to Following Best Practices In Diabetes Management

% of Comments Addressing Each Barrier

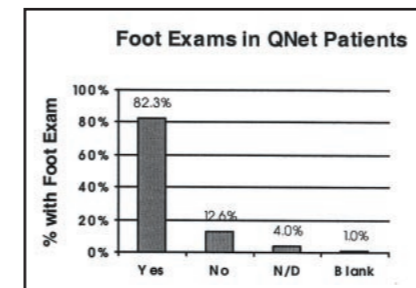


Sample Page from Personalized Report:

4. Did the patient have a comprehensive foot exam within the past 12 months?



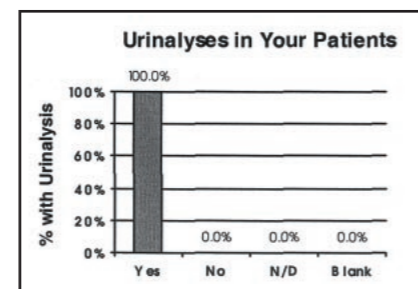
96% of your patient sample received a comprehensive foot examination within the last 12 months of their visit.



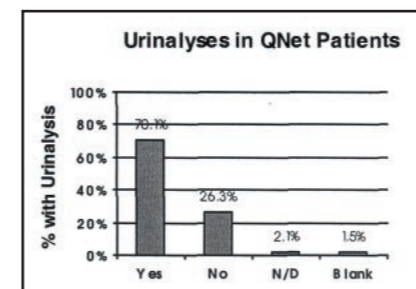
82.3% of QNet patients received a comprehensive foot examination within the last 12 months of their visit.

Patients' legs and feet must be examined, including between the toes and the posterior aspect of the heels. This examination should be performed by a qualified health care professional with experience in the care of diabetic foot problems at every regular visit or at least once a year.

5A. Did the patient have a urinalysis within the past 12 months?



100% of your patient sample had an urinalysis within the last 12 months of their visit.



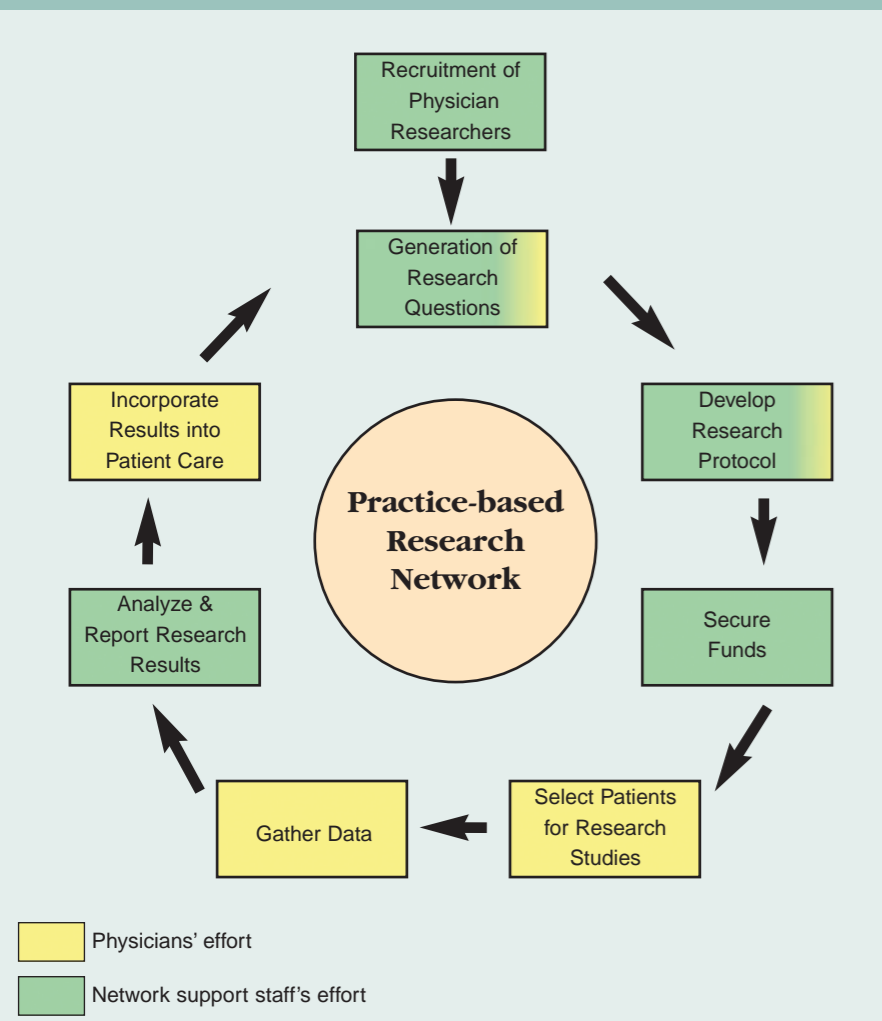
70.1% of all QNet patients had a urinalysis within the last 12 months of their visit.

Testing for microalbumin should be performed yearly in pubertal and postpubertal type 1 patients who have had diabetes for at least 5 years and yearly in all patients with type 2 diabetes. Specific assays are needed to detect microalbuminuria because standard hospital laboratory assays for urinary protein are not sufficiently sensitive to measure such levels. Microalbuminuria is said to be present if urinary albumin excretion is > 30 mg/24 h (equivalent to 20 µg/min on a timed specimen or 30 mg/g creatinine on a random sample). There is also marked day-to-day variability in albumin excretion, therefore at least two of three collections done in a 3-6 month period should show elevated levels before designating a patient as having microalbuminuria.

Appropriate Treatment for Established Patients with Diabetes Mellitus
prepared for: Doe, John

Report
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Based on 25 patients from your practice from the period 5/6/99 to 6/30/99. Aggregate data based on a total of 1,755 patients in 85 practices.



Conclusions:

Challenges for establishing and maintaining a practice-based research network:

- ❖ Funding
- ❖ Physician recruitment
- ❖ Lack of time and staff resources
- ❖ Sustained cohesiveness of network
- ❖ Protection of human research subject (45CFR46, HIPAA)
- ❖ Logistic complexity
- ❖ Patient recruitment protocol to ensure randomness

Future directions for PBRNs:

- ❖ Expand network size and geographic reach
- ❖ Involve participants in defining research issues and study designs
- ❖ Incorporate physician educational interventions and assess practice change over time