



# Residency Program Collaborative



## 2011-2012 Work Plan: March 30, 2011 – June 30, 2012

### EIN

23-2340801

### DESCRIPTION

The PA IPIP Residency Program Collaborative teaches performance improvement and patient-centeredness in family medicine and internal medicine residency programs to improve patient outcomes in diabetes/CVD care.

### AUDIENCE PROFILE

The teams from residency program clinic sites must include at least a physician, a non-physician provider and an office staffer. However, currently participating teams average 6 professionals. The collaborative could reach close to 200 physicians and non-physician providers plus another 1,250 physicians through other related activities. The Collaborative currently includes 24 teams from 16 residency programs; PA IPIP hopes to add another 15 teams before June 2011.

### ABSTRACT

The Pennsylvania Academy of Family Physicians (PAFP) Foundation seeks support to sustain and expand the Primary Care Residency Program Collaborative of its Pennsylvania IPIP Program (PA IPIP). IPIP, *Improving Performance In Practice*, is a program of the Pennsylvania Primary Care Coalition, which includes the PAFP and the PA Chapter, American College of Physicians (PA Chapter, ACP).

PA IPIP uses evidence-based models to change entire practice systems so performance improvement and patient-centeredness spread to entire practices and ultimately improve care for all patients.

Further, PA IPIP is teaching systems change in residency programs so that performance improvement and patient-centeredness are not limited to the teams at the individual sites.

We aim to improve patient care at the residency program sites and help programs to graduate fully licensed physicians who have been immersed in a culture of continuous quality improvement and patient-centeredness. These new physicians will have the skills necessary to begin working in practices with these qualities or to implement – or encourage the implementation of – these qualities at their place of employment.

Begun in June 2010, the PA IPIP Residency Program Collaborative currently includes teams from 24 sites at 16 Residency Programs. There are 15 Family Medicine Residency Programs and 1 Internal Medicine Residency Program. Teams include 65 physicians plus 69 other team members, such as RNs and office managers. The teams are leading change at their sites and impacting about 7,000 patients statewide.

The collaborative will expand in 2011 to include the remaining family medicine residency programs and open enrollment to internal medicine residency programs. According to collaborative physician faculty, our collaborative is the largest single state residency program collaborative in the United States.

### **PA IPIP MISSION STATEMENT**

- Accelerate quality improvement among primary care practices;
- Support primary care physicians and their care teams to provide consistently high quality care that improves patient health;
- Motivate collaboration at state, regional and practice levels;
- Improve physician and team satisfaction;
- And improve the financial sustainability of primary care physician practices.

### **WHAT IS PA IPIP?**

IPIP began as a national program operated by the American Board of Medical Specialties (ABMS) and funded by the Robert Wood Johnson Foundation. ABMS awarded grants to start state-based IPIP programs, including a grant to the PAFP Foundation which has successfully operated and expanded the PA IPIP Program since 2007. Initially, PA IPIP focused solely on providing support services to the Pennsylvania Chronic Care Initiative, which is operated by the Governor's Office Of Health Care Reform. The Chronic Care Initiative has enrolled more than 150 primary care practices in its multiple regional collaboratives, and PA IPIP remains committed to helping those practices succeed. PA IPIP is contracted with the Chronic Care Initiative and receives grant funds from the Pennsylvania Department of Health to provide data management for all practices and interventional coaching services for low-performing practices.

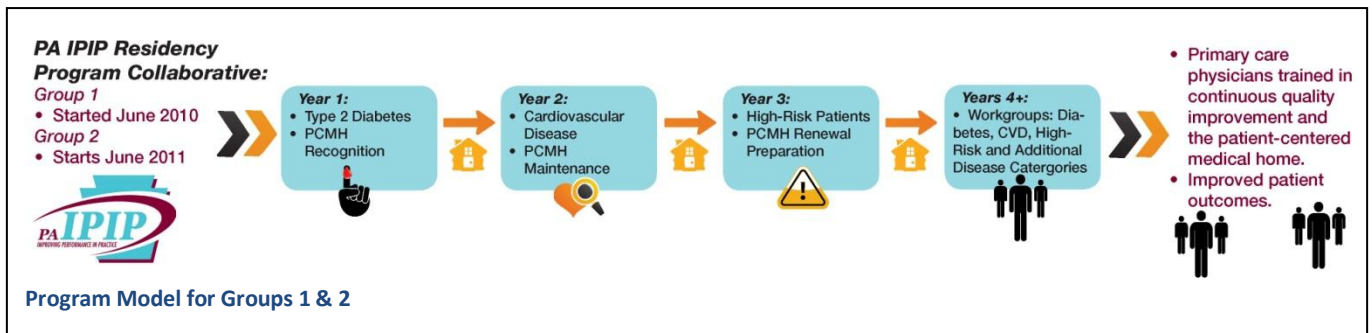
PA IPIP has helped participating practices to achieve excellent results, including:

- Decrease the percent of patients with DM in participating IPIP practices who have an A1C measure of greater than 9% from 33% to 20% (target: <5 %).
- Increase the percent of patients with DM in participating IPIP practices whose BP is documented in the past year < than 130/80 mm Hg from 40% to 49% (target: >70%).
- Increase the percent of patients with DM in participating IPIP practices with LDL < 100 mg/dl from 38% to 50% (target: >70%).
- Increase the percent of patients with DM in participating IPIP practices who have a self-management goal documented within the past 12 months from 33% to 62% (target: >90%).

Based on our successful experience with the Chronic Care Initiative, PA IPIP branched out in 2010 with the Primary Care Residency Program Collaborative, providing a triad of core services – Coaching/Facilitation; Clinical, Process and QI Education; and Data Collection & Sharing. These services are provided in a network, facilitating collaborative learning.



**PROGRAM DESCRIPTION**



Learning Objectives

- Improve the care of patients with diabetes and cardiovascular disease by implementing the Chronic Care Model.
- Become NCQA-recognized Patient-Centered Medical Homes.
- Develop systems of care that achieve at least 70% reliability on process measures, such as screening exams, lab tests, medication usage, and self-management goal setting.
- Improve outcome measures, including A1C, blood pressure, and cholesterol control.

Groups & Teams

The PA IPIP Primary Care Residency Program Collaborative will expand to feature two groups of residency programs running concurrently.

- Group 1 is the original group of family medicine and internal medicine programs that kicked off in June 2010.
- Group 2 will start in June 2011 and include internal medicine and the few remaining family medicine programs.

Each program selects a team – typically a physician, resident and office staffer – to attend collaborative events and monthly conference calls. The teams generate a plan to spread the lessons learned throughout the site where they practice and any other clinic sites attached to their residency program.

NCQA Recognition

Each site spends the first few months in the collaborative working on their application to become an NCQA-recognized Patient-Centered Medical Home. PCMH recognition is awarded by NCQA to practices

that document 10 “must-pass” standard elements and are scored using an assessment tool. Depending upon their score, practices receive Level 1, 2 or 3 recognition.

PA IPIP believes that the process of becoming an NCQA-recognized practice helps sites to shore up their infrastructure, such as IT and care management, in order to successfully implement the systems change and quality improvement work in the PA IPIP curriculum.

### What We Teach

The change package used by PA IPIP is the [Chronic Care Model](#)<sup>1</sup> with emphasis on elements such as:

- Clinical Information Systems (ex: EHR systems or patient registries)
- Decision Support (ex: algorithms)
- Patient Self-Management (ex: action plans)
- Delivery System Design (ex: team-based care)

The PA IPIP Residency Program Collaborative teaches the Chronic Care Model in the context of the Patient-Centered Medical Home. Our curriculum helps to operationalize concepts such as:

- Population management
- Expanded team care
- Patient-centeredness
- Performance measurement
- Care coordination
- Evidenced-based care

Further, we select clinical topics on which teams will focus for an entire year. Groups 1 and 2 will be focused on type 2 diabetes in year one, adding cardiovascular disease in year two and high-risk patients in year three. More clinical areas may be added in subsequent years but diabetes will remain an area of focus.

As teams identify what clinical measures and parts of their office systems they want to improve first, they select potential interventions.

For example, a lot of time and energy is spent learning how to help patients whose diabetes is out of control and, if appropriate, intensify treatment, which, for example, may include moving the patient from pills to insulin injections. The issue was addressed initially at learning session #1 by an endocrinologist consultant. It is addressed also regularly during discussions regarding clinical inertia. It is addressed most strongly during education about “risk stratification.” i.e. uncontrolled patients will “stratify” to insulin initiation treatment.

Improving the health of patients with diabetes with long-term suboptimal glycemic control often requires removing clinical inertia and overcoming patient resistance to injections. These barriers can be addressed using elements of the Chronic Care Model using the Model for Improvement.

Clinical inertia intervention examples:

- clinical information systems to identify patients who are suboptimal or haven’t been seen regularly

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<sup>1</sup> Wagner EH. Chronic disease management: what will it take to improve care for chronic illness? *Eff Clin Pract.* 1998;1:2-4

- embedding decision support at the time of care to support care consistent with guidelines
- clinical education on medication initiation or intensification
- team changes to provide for follow up after visits
- team changes to outreach to patients who do not have an A1C recorded

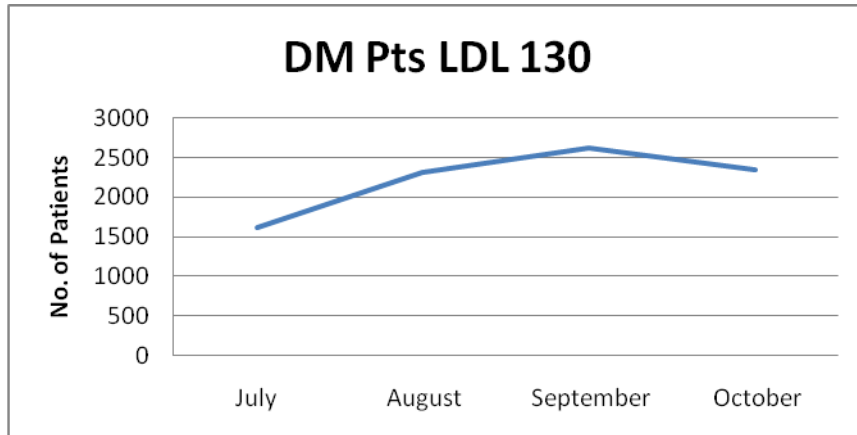
Patient Resistance intervention examples:

- patient activation
- patient self-management

Teams quickly test interventions using the [Model for Improvement](#)<sup>2</sup>. PDSA (Plan-Do-Study-Act) cycles are an element of the Model for Improvement and help practices to perform small tests in a day or even hours. This is not a research project; we need practices to develop a plan, do a test, study the result then act on that information quickly and repeatedly. This facilitates the implementation and spread of successful interventions and avoidance of unsuccessful interventions.

Teams have a better chance at improvement if they know their current level of performance and if they receive regular performance feedback. Performance measurement is plotted monthly by PA IPIP on run charts that help to detect patterns for individual clinics and for the collaborative as a whole.

For example, the run chart below shows aggregate data for the collaborative on the number of patients with diabetes mellitus with an LDL of less than 130. The data describes a steady climb of improvement with a slight dip in October. Faculty will watch to see if downward trend continues or rights itself and the measure again begins to improve.



Run Chart Example

### How We Teach

We use the [Breakthrough Series](#)<sup>3</sup> to structure the clinical, process and quality improvement education in a 12-month curriculum. In each year of the collaborative, PA IPIP sponsors four quarterly educational conferences for each group – three “learning sessions” and an “outcomes congress,” when teams celebrate the past year’s achievements and get ready for year 2. During the “action periods” held

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<sup>2</sup> Institute for Healthcare Improvement

between the conferences, PA IPIP holds monthly conference calls and sends out a monthly newsletter to maintain contact with the teams and bolster their education.

Collaborative learning is facilitated at quarterly learning sessions through the presentation of each team's "biggest accomplishment."

Here is an example of a "biggest accomplishment" from a participating site at the Group 1 learning session #2 in Pittsburgh, Nov. 5, 2010:

**Goal:**

- Developed a process with the PharmDs and the PharmD residents to educate diabetic patients about patient self management.
- Developed a follow up process for original consults referrals.

**Activities:**

- Created a patient information guide to be handed out to our diabetic patients by our clinical staff.
- All staff checks the schedule the day before to see who is coming in for a diabetes visit and sends to our PharmDs to prepare for the visit.

**Outcomes:**

- Staff checks their assigned physician consults list to see if patient has kept appointment.
- Staff feels like they are making a difference in our patients' care.
- Patients like being involved in their care.
- Patient satisfaction is higher because their doctor is calling them with their consult results.

The learning sessions and monthly conference calls provide education that becomes progressively more advanced. Additionally, each year builds on the success of the previous years. The PA IPIP curriculum does not replace any element of current medical education and training; it's integrated into the existing training. We help participants to expand their skill sets to include continuous improvement and patient-centeredness.

Our five-year plan proposes a three-year fully supported collaborative for each group, adding clinical focuses each year, spreading the system change ever wider, ultimately facilitating a new way of delivering care in all residency programs across the state. After three years in the collaborative, teams will be able to select from a variety of workgroups. Workgroups will continue the format of a collaborative network but in a less formal way and focus on a particular clinical or improvement topic, such as patient self-management, and feature a mix of formal and informal education. Programs can belong to as many workgroups and enroll/exit as they wish.

### How We Measure Outcomes

The Primary Care Residency Program Collaborative will be evaluated using Moore's Outcomes-Based CME Evaluation Model<sup>4</sup>. This model describes the following seven outcome levels:

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<sup>4</sup> Moore D E. Achieving desired results and improved outcomes: Integrating planning and assessment throughout learning activities. J Contin Educ Health Prof. 2009 Winter;29(1):1-15.

- Level 1.....Participation
- Level 2.....Satisfaction
- Level 3A.....Learning: Declarative Knowledge (Knows)
- Level 3B.....Learning: Procedural Knowledge (Knows How)
- Level 4.....Learning: Competence (Shows How)
- Level 5.....Performance (Does)
- Level 6 .....Patient Health
- Level 7.....Community Health

Because participating residency programs agree to collect a set of core measures, PA IPIP can report up to level 6 outcomes using objective data sources, namely residency program EHR systems or patient registries. All measures are national consensus measures with specifications for numerators and denominators.

Required type 2 diabetes measures:

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|--|
| Count of DM patients 18-75                           |
| Count of DM patients with latest A1C >9              |
| Count of DM patients with latest BP <130/80          |
| Count of DM patients with latest LDL <100            |
| Count of DM patients with eye exam                   |
| Count of DM patients who smoke                       |
| Count of DM pts w/ smoking cessation counseling      |
| Count of DM pts w/ medical attention for nephropathy |
| Count of DM patients with self management goal       |
| Count of DM patients with foot exam                  |

Current data on reportable measures:

| <b>PA Residency Program Collaborative Measures</b> | <b>July 31, 2010</b> | <b>August 31, 2010</b> | <b>September 30, 2010</b> | <b>October 31, 2010</b> | <b>Difference between July 31, 2010 to October 31, 2010 Actual Count</b> | <b>Percentage Difference between July 31, 2010 to October 31, 2010 Actual Count</b> |
|--|----------------------|------------------------|---------------------------|-------------------------|--|---|
| DM Pts 18-75                                       | 6640                 | 6890                   | 7052                      | 6591                    | -49  | -1%   |
| DM Pts 40-75                                       | 3807                 | 3513                   | 4305                      | 4255                    | 448  | 12%   |
| DM Pts 55-75                                       | 1913                 | 1749                   | 2203                      | 2158                    | 245  | 13%   |
| DM Pts Who Smoke                                   | 1080                 | 1120                   | 1380                      | 1346                    | 266  | 25%   |
| DM Pts A1c>9                                       | 2155                 | 2276                   | 2528                      | 2226                    | 71   | 3%  |
| DM Pts BP<130                                      | 2409                 | 2412                   | 2773                      | 2262                    | -147   | -6%   |
| DM Pts LDL100                                      | 1985                 | 1850                   | 2255                      | 2196                    | 211  | 11%   |
| DM Pts Eye Exam                                    | 1018                 | 1022                   | 1089                      | 800                     | -218   | -21%  |
| DM Pts Smoke Cessation                             | 474                  | 701                    | 1006                      | 797                     | 323  | 68%   |
| DM Pts Nephropathy Testing                         | 2775                 | 3421                   | 3856                      | 4409                    | 1634   | 59%   |
| DM Pts LDL   | 3295                 | 2938                   | 3479                      | 3442                    | 147  | 4%  |
| DM Pts LDL130                                      | 1623                 | 2310                   | 2614                      | 2347                    | 724  | 45%   |
| DM Pts Foot Exam                                   | 2395                 | 2796                   | 3047                      | 3416                    | 1021   | 43%   |
| DM Pts Flu Vacc                                    | 1675                 | 1429                   | 1883                      | 2241                    | 566  | 34%   |
| DM Pts Aspirin                                     | 2064                 | 1763                   | 2200                      | 2291                    | 227  | 11%   |
| DM Pts Self Mng Goal                               | 370                  | 512                    | 656                       | 782                     | 412  | 111%  |
| DM Pts Ace/Arb                                     | 1804                 | 1776                   | 1949                      | 1930                    | 126  | 7%  |
| DM Pts Query                                       | 3086                 | 3011                   | 3631                      | 3248                    | 162  | 5%  |
| DM Pts W/ A1c Test                                 | 3677                 | 3277                   | 3989                      | 3951                    | 274  | 7%  |
| DM Pts Pneumo                                      | 1901                 | 1609                   | 2210                      | 2032                    | 131  | 7%  |
| DM Pts A1c<7                                       | 1872                 | 1710                   | 1965                      | 1890                    | 18   | 1%  |
| DM Pts BP<140                                      | 2379                 | 2851                   | 3142                      | 3069                    | 690  | 29%   |
| DM Pts Statin                                      | 1945                 | 1576                   | 2110                      | 2170                    | 225  | 12%   |
| DM Pts Eye Referral                                | 190                  | 345                    | 1001                      | 1240                    | 1050   | 553%  |

**DIFFUSION OF INNOVATION**

PA IPIP has the capacity to change the care delivery system in primary care, and, as a result, improve patient outcomes and improve satisfaction among the 12,000+ primary care physicians in Pennsylvania. To do this we must spread the adoption of continuous quality improvement throughout all primary care practices in the Commonwealth.

Diffusion of innovation theory states that individuals must first learn about an innovation and then become interested before they can consider adopting the innovation and implementing it. Therefore, we propose to share the content and best practices generated by the Primary Care Residency Program Collaborative with primary care practices across the state using a number of successful awareness-building and learning platforms.

#### PAFP Foundation CME Packages

The PAFP Foundation holds three large **CME conferences** every year (typically during March, Summer and November). Conferences can attract more than 200 primary care physicians and non-physician providers. Events are held in family-friendly locations across the state. For example, here's the 2011 schedule:

- State College Breakaway, March 2011
- Summer Escape (Long Branch, New Jersey), July 2011
- Nemaquin Breakaway, November 2011

The PAFP Foundation will sponsor a two-hour session on the Patient-Centered Medical Home (PCMH) at all three of its CME conferences in 2011 to make the concept of a PCMH more concrete via education centered on change concepts from the Chronic Care Model.

Additionally **progressive CME** designed around the clinical focuses of the Collaborative will be offered at two CME conferences (summer and November) supplemented by collateral learning opportunities, such as tip sheets, webcasts and CME monographs.

Additionally, the PAFP Foundation sponsors a series of **regional meetings** each fall in partnership with the Pennsylvania chapters of the ACP and AAP and in 2011 will use PCMH content from the Collaborative to create the focus for the meeting series.

Our one opportunity for exposure at a national event comes each fall at the AAFP Scientific Assembly where the PA IPIP will sponsor a **satellite symposium** to educate family physicians from across the country about how to apply the change concepts of the Collaborative to their own practices.

#### PA IPIP Library

All of this material will generate content to build a **resource library** that can be accessed by any primary care practice. Many of the lectures will be recorded and archived as CME lectures. Best practices discovered by teams in the Collaborative can be catalogued.

The CME events and library are designed to help primary care physicians to begin those crucial first stages toward making the decision to implement continuous quality improvement and patient-centeredness.

#### Portable Project

A "portable project" is essentially a manual to document the process of each group in the collaborative, ultimately telling our story. The staff and faculty will write about each group's development, facilitators/barriers, enhancements, curriculum, etc. It's a narrative data collection project for the developers of this collaborative.

## **PROOF OF CONCEPT**

Beyond measuring outcomes, we propose to engage an independent evaluator to study our collaborative and position it to serve as a national model for training the next generation of primary care providers and their subspecialist “neighbors.” With the proper evaluation and, in particular, an understanding of facilitators of and barriers to transformation, we will know why some clinics are better equipped to transform, how successful residency programs engage their residents in the transformation process, how they prepare them as leaders of the PCMH movement and how to teach them the life-long skills of change management.

We have several options for evaluation. If fully funded, we will employ a multi-method evaluation, including quantitative and qualitative assessments.

- Quantitatively, we will determine whether or not the PCMH implementation led to improvements in clinical outcomes for the initial target disease (diabetes) and adherence to evidence-based guidelines such as complication screening and medication use. We also will see whether or not a PCMH implementation focused on diabetes diverted attention away from adherence to other evidence-based preventive care, such as colonoscopy and mammograms.
- Qualitatively, we will perform focus groups and key informant interviews. We will also document archive analyses, practice observations, and practice surveys to provide a description of providers’ own perceptions of quality, implementation processes, and procedures and the variables that affect PCMH implementation and performance on a daily basis. The documentation helps us to better understand the PCMH transformation process to identify barriers and facilitators that explain why some practices have improved more than others.
- We also propose the addition of an evaluation on the patient experience with the PCMH. This new area of research is of particular interest with the findings in the American Academy of Family Physicians’ National Demonstration Project (NDP)<sup>5</sup> that patients’ ratings with the transformed NDP practices actually declined. We will assess diabetes patients’ perception of their chronic illness care, assess a sampling of all patients’ satisfaction with the PCMH, and conduct focus groups with a sample of patients from each practice.

## **PROGRAM BUDGET**

To fully implement the PA IPIP Residency Program Collaborative, the PAFP Foundation is seeking \$2.9 million from a variety of investors, including, but not limited to the Pennsylvania Department of Health, Merck, Sanofi-Aventis, Pfizer, Novo Nordisk, and AstraZeneca, Bristol-Myers Squibb.

The Pennsylvania Department of Health and its project officers at the CDC are so excited about the opportunity presented by the PA IPIP Residency Program Collaborative that the collaborative is a central element of the Department’s next block grant and funds were re-appropriated to begin funding in 2011-2012.

The PAFP Foundation needs full support to fully implement PA IPIP Residency Program Collaborative as proposed. Based on funding secured, PAFP/F will modify the program as necessary, notifying funders of proposed program changes.

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<sup>5</sup> Nutting, P.A.; Crabtree, B.F.; Stewart, E.E.; Miller, W.L.; Palmer, R.F.; Stange, K.C.; Jaen, C.R. *Annals of Family Medicine* 2010, Vol. 8 supplement 1, S43.

## STATEMENT OF EDUCATIONAL OBJECTIVITY

The PAFP Foundation ensures objectivity and balance in its educational programs and adheres to all industry standards regarding limitations of data, discussion of unapproved uses, and opportunities for debate. All PAFP Foundation educational activities are for scientific and educational purposes only and do not promote the products of a supporting company, either directly or indirectly. The PAFP Foundation is ultimately responsible for control of content and selection of presenters and moderators and for the content of the presentation.

## ACCREDITATION

The PAFP Foundation is the CME provider for the PA IPIP Residency Program Collaborative and all PAFP Foundation CME activities, including CME conferences, webcasts, articles, regional meetings and the AAFP Scientific Satellite Symposium. PAFP is a state chapter of the AAFP, the accrediting body that is ACCME approved. The AAFP approves all CME credit that the PAFP Foundation offers.

|   |   |
|---|---|
| Physicians and non-physician providers participating in the PA IPIP Residency Program Collaborative and related PAFP Foundation educational activities have the opportunity to earn CME credits, as outlined below: |   |
| 20  | <a href="#">“Performance Improvement in Practice”</a> credits from AAFP; also qualifies as an “alternative” <a href="#">Maintenance of Certification Part IV</a> activity |
| 32  | Collaborative events (3 learning sessions and an Outcomes Congress for 3 groups)  |
| 6   | Patient-Centered Medical Home sessions at the CME conferences (2 per CME conference)  |
| 6   | Collaborative-related clinical sessions at the CME conferences (2 per CME conference)   |
| 1.5   | Regional Meetings (estimated 6 total)   |
| 1.5   | AAFP Scientific Satellite Symposium   |
| 67  | Subtotal  |
| 55  | Enduring credit = total number of live CME credits ( doesn’t include MOC credits)   |
| <b>122</b>  | <b>Estimated total live and enduring CME credits</b>  |

## PROVIDER HISTORY

The PAFP Foundation is a 501(c)(3) organization dedicated to improving the health of every Pennsylvanian by generating resources to foster innovative strategies and programs in education, research and philanthropy consistent with the values of family medicine. The Pennsylvania Academy of Family Physicians (PAFP) was formed in 1948 and established its foundation in 1985. The PAFP currently serves 4,800 members or 77% of all Pennsylvania family physicians, residents and students in family medicine, making it the third largest chapter of the AAFP.

## **TIMELINE**

### March 30 – June 2011

- Group 1 continues to report diabetes data
- Recruit and train director for Groups 1 and 2
- Recruit and engage additional faculty for Group 2
- Directors and faculty begin developing manuals for each group
- Recruit internal medicine residency programs for Group 2 via coordinated marketing with the PA Chapter of the ACP
- Develop curriculum for Group 1, Year 2 (CVD)
  - Select measures
  - Evaluate data reported by teams to identify learning gaps
  - Outline learning session agendas
- Solicit retention commitments from participating programs in Group 1
- Finalize participation agreements for Group 2
- Initiate pre-work for Group 2
  - Practice assessments
  - EHR evaluation/patient registry set up

### July – December 2011

- Directors and faculty continue to contribute to manuals for each group
- Hold outcomes congress for Group 1, Year 1
- Also kick off Group 1, Year 2
- Hold kick-off learning session for Group 2
- Hold learning session #2 for Groups 1 and 2
- Facilitate NCQA PCMH recognition application for programs in Group 2
- Group 1 begins to report diabetes and CVD data
- Group 2 begins to report diabetes data

### January – June 2012

- Directors and faculty continue to contribute to manuals for each group
- Programs in Group 2 to be certified at PCMHs by NCQA
- Learning session #3 for Groups 1 and 2
- Outcomes congress for Group 1, Year 2 and Group 2, Year 1
- Solicit retention commitments from participating programs for Groups 1 and 2
- Group 1 continues to report diabetes and CVD data
- Group 2 continues to report diabetes data
- Develop curriculum for Group 1 Year 3 (High Risk)
  - Select measures
  - Evaluate data reported by teams identify learning gaps
  - Outline learning session agendas