Patient-Centered Medical Home Initiatives Expanded In 2009–13: Providers, Patients, And Payment Incentives Increased

ABSTRACT Patient-centered medical home initiatives are central to many efforts to reform the US health care delivery system. To better understand the extent and nature of these initiatives, in 2013 we performed a nationwide cross-sectional survey of initiatives that included payment reform incentives in their models, and we compared the results to those of a similar survey we conducted in 2009. We found that the number of initiatives featuring payment reform incentives had increased from 26 in 2009 to 114 in 2013. The number of patients covered by these initiatives had increased from nearly five million to almost twenty-one million. We also found that the proportion of time-limited initiatives—that with a planned end date—was 20 percent in 2013, a decrease from 77 percent in 2009. Finally, we found that the dominant payment model for patient-centered medical homes remained fee-for-service payments augmented by per member per month payments and pay-for-performance bonuses. However, those payments and bonuses were higher in 2013 than they were in 2009, and the use of shared-savings models was greater. The patient-centered medical home model is likely to continue both to become more common and to play an important role in delivery system reform.

Since the passage of the Affordable Care Act, payers and providers have been increasing their efforts to reorganize the health care delivery system, with the goal of increasing quality, improving patients’ experiences, and reducing costs. Central to many of these efforts is the creation of an advanced primary care system that seeks to increase the value of care through a tighter focus on access, prevention, and coordination. The current primary care payment system rewards providers for delivering high volumes of services instead of comprehensive, whole-person care. This leads to, among other things, increasing physician burnout and an impending workforce shortage.

Many efforts to reorganize and improve primary care focus on implementing the patient-centered medical home care model. This model has been endorsed by all major organizations of US primary care physicians. It is based on the fundamental tenets of primary care, including comprehensive care for the majority of health problems; long-term, person-focused care; serving as the first contact for new issues; and coordinated care.

Operationally, patient-centered medical homes typically use multidisciplinary teams and advanced tools such as enhanced health information technology, chronic disease registries, and online patient portals to proactively manage the full spectrum of patients’ needs. These primary care practices also feature an explicit focus on managing care transitions, often...
using dedicated care managers, and they frequently integrate behavioral health care into primary care.19

Patient-centered medical home initiatives are often organized by health plans, states, or multi-stakeholder groups. The goal of the initiatives is to create the appropriate environment for primary care practices to transform themselves into patient-centered medical homes. To accomplish this, the initiatives often build learning collaboratives among multiple participating practices, hire transformation coaches to work with practices, and reform physician payment to support advanced primary care services.

We characterized patient-centered medical home initiatives throughout the United States in 2009.20 At that point we found twenty-six initiatives with payment reforms that included over 14,000 providers caring for nearly five million patients. Since then, peer-reviewed evaluations of patient-centered medical home initiatives have shown mixed results in terms of quality of care and overall costs.12–21 Nevertheless, these initiatives have continued to expand across the country, including within Medicare.22–26

To provide a better understanding of the magnitude of the expansion of patient-centered medical homes, and of trends in payment methodologies and approaches to practice transformation, we report the results of a follow-up nationwide survey of patient-centered medical home initiatives.

**Study Data And Methods**

**Sample Identification** As we did in our previous survey, in 2013 we identified and surveyed all patient-centered medical home initiatives in the United States that included payment reform incentives. We defined these incentives as the provision of additional payments from an external payer to primary care practices to support medical home functions.

To comprehensively identify candidate initiatives for this survey, we started with the initiatives that we included in our previous survey and additional programs that we identified at that time that did not qualify for the previous survey. We then reviewed existing databases of patient-centered medical home initiatives such as those maintained by the Patient-Centered Primary Care Collaborative27 and the National Academy for State Health Policy.28

We next performed a literature search of MEDLINE, Embase, and CINAHL to identify articles published between January 1, 2000, and December 31, 2012, that used the terms *patient-centered medical home* and *medical home*. We also searched the Internet for articles, using the same two terms. Finally, we contacted known experts in the field, including representatives of state Medicaid agencies and national commercial health plans.

We included in our survey all initiatives that were active as of February 1, 2013, and those from our previous survey that had ended after January 1, 2010. We excluded programs directed toward specific medical conditions such as HIV or diabetes. However, we included a small number of programs that targeted the elderly or patients with multiple chronic diseases.

**Initiatives** were defined as distinct programs that included one or more payers operating in a distinct market area or state. Thus, a single national program that operated in more than one state was considered to be multiple programs because the details and size of the initiatives and the market contexts differed.

**Instrument Development And Data Collection** We developed written, Web-based, and telephone versions of the survey instrument to give respondents flexibility. The survey instrument used closed-ended questions. It allowed respondents to skip questions that were not applicable, based on their previous responses.

We asked respondents to provide for their patient-centered medical home initiative the start and end dates and the numbers of participating practices, physicians, and patients. We also asked respondents to identify key initiative stakeholders. And we asked respondents to describe the process that their initiative used to determine which practices could participate and if the initiative used formal patient-centered medical home recognition standards such as those of the National Committee for Quality Assurance (NCQA), described below.

The survey asked about payment methodologies and how initiatives facilitated practice transformation, including the use of learning collaboratives in which participating practices can learn different approaches to transforming care from each other and from recognized experts. The survey also asked respondents to indicate whether their initiative used consultants or coaches to work directly with practices, and whether plans for program evaluation were in place.

**Survey Administration Procedures** We used e-mail or telephone to contact leaders of each of the patient-centered medical home initiatives that we had identified to determine who in the initiative would be the most appropriate respondent or respondents for our survey. Respondents were typically physician leaders or senior administrators.

After pretesting the survey instrument with five participants by telephone, we sent the re-
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remaining participants an e-mail invitation to the Web-based survey, giving them the option of scheduling a phone interview or receiving a written version instead of completing the survey online. For patient-centered medical home initiatives that operated in multiple areas, we collected information that applied to all markets with a single survey and then obtained individual market-specific information with additional phone interviews.

**Statistical Analysis** We classified the initiatives into three groups based on payer type. Initiatives in the first group had a single commercial payer. We subdivided this group into small initiatives (those with fewer than 25,000 patients) and large initiatives (those with 25,000 patients or more).

Initiatives in the second group served only the Medicaid population. This group included initiatives organized by health plans that focused exclusively on the Medicaid population.

Initiatives in the third group had multiple payers. These payers included multiple commercial health plans and, in many cases, Medicare and Medicaid.

We present descriptive statistics and compare features of initiatives in these three groups throughout the United States. We also estimated multivariable regression models to examine differences in per member per month payments among initiative groups, after we controlled for other initiative characteristics.

**2009 Survey** In 2009, participants were identified using the same approach as described above, and data were collected in the same domains through the use of structured interviews. For the data comparisons between 2009 and 2013 presented here, the survey questions were identical.

**Limitations** There are several limitations to our work. First, despite our efforts, it is possible that we did not identify some patient-centered medical home initiatives. However, these would likely be small, time-limited programs—those with a planned end date—that would have a minimal impact on our aggregate results.

Second, we generally relied on a single informant from each initiative. These people might not have had complete knowledge of all aspects of the initiative. We did, however, encourage respondents to seek information from additional members of their organizations, and we spent a substantial amount of time confirming responses from other sources when they were available.

Finally, our analysis is only descriptive and was performed at the level of the patient-centered medical home initiative, not at the level of the participating practices. Thus, we cannot comment on how much individual practices have been transformed or how the initiatives affected quality of care, utilization, or patients’ experiences.

**Study Results**

Of the 172 patient-centered medical home initiatives that we identified nationally, 119 included payment reform as a part of the model and thus met our inclusion criteria. Of these 119 initiatives, 114 (96 percent) responded to our survey. Exhibit 1 shows the breakdown of these 114 initiatives into the payer groups. Collectively, the initiatives included 63,011 providers who cared for 20,764,676 patients.

**Initiative Scope** Initiatives varied from small pilots with only a few practices to statewide programs that involved large numbers of patients.

Small single commercial payer initiatives had a median of 3,896 patients and typically included a small number of practices (the median was four). Only 8 percent of these programs were time limited (Exhibit 1). Seventy-five percent of health plans that sponsored initiatives in this group had no more than a 20 percent share of the market in their region. The sponsoring health plans also typically included only a single line of business in their initiative (50 percent included only commercial coverage, and 50 percent only Medicare Advantage).

In contrast, large single commercial payer initiatives had a median of 160,000 patients (Exhibit 1). These initiatives often included most or all of the practices in a specific region or state (median number of practices: 105; data not shown). The health plans that sponsored this group of initiatives tended to have a larger market share (median: 21–40 percent), and 54 percent of the plans included two or more lines of business in their initiatives. None of the initia-
In contrast to other initiatives, most multi-payer initiatives (81 percent) were time limited (Exhibit 1). However, the 76 percent of initiatives that included Medicare through the Comprehensive Primary Care and the Multi-Payer Advanced Primary Care Initiatives have the potential to continue beyond their end date.

**Recognition and Practice Entry or Selection Requirements**

Recognition of participating practices as patient-centered medical homes using established standards was required by 69 percent of the initiatives (Exhibit 2). Fifty-five percent of the initiatives required practices to be recognized prior to entering the initiative. Eighty-six percent used external standards—such as those of the NCQA—for recognition; the remainder required recognition using internally developed standards.

NCQA recognition was always accepted as external recognition. However, several initiatives also accepted recognition from other organizations such as URAC (formerly known as the Utilization Review and Accreditation Commission) or the Joint Commission.

Among initiatives that required NCQA recognition, 91 percent used level 3 as the target level, and a mean of 69 percent of practices in the initiatives achieved that level (Exhibit 2). Other criteria that were used to select practices to participate in an initiative included participating in previous quality improvement efforts (41 percent) or the presence of existing chronic disease registries (48 percent) and using electronic...
Health records (59 percent; data not shown).

**Payments** All but two of the initiatives used standard or enhanced fee-for-service payments for office visits, with enhanced payments including either higher rates or reimbursement for additional services such as care coordination. These payments were augmented with pay-for-performance bonuses (8 percent), per member per month payments to practices (29 percent), or both (55 percent; Exhibit 3)—proportions that were similar to those seen in 2009. Approximately 16 percent of the initiatives used only enhanced fee-for-service payments that included additional billing codes for services such as care coordination.

In 32 percent of the initiatives, per member per month payments were adjusted for patients’ characteristics such as age, sex, and preexisting conditions (Exhibit 3). However, this was less common in small single commercial payer initiatives (8 percent). Half of the initiatives adjusted the per member per month payment for the level of patient-centered medical home recognition achieved, and 19 percent adjusted it for quality performance.

Among the initiatives that made a per member per month payment, the median amount was $4.90, with an interquartile range of $3.00–$8.00 (Exhibit 3). The median payment was lower in small single commercial payer initiatives ($4.00) and Medicaid-only initiatives ($3.62) than in multipayer initiatives ($7.00).

In the six initiatives that made a per member per month payment only for patients who had multiple chronic diseases, the median payments were substantially higher than those for the other programs (median: $17; interquartile range: $10.53–$35.00; data not shown). In initiatives that risk-adjusted the payments by patients’ characteristics, the average payment was higher than that for programs that did not use risk adjustment (median: $6.50; IQR: $3.68–$24.00).

Seventeen percent of the initiatives paid for care coordinators separately from the per patient per month payments to practices (Exhibit 3). However, this was less common in small single commercial payer initiatives (5 percent). In a multivariate regression analysis that controlled for initiatives that risk-adjusted their per member per month payments or paid care coordina-
tors directly, the payments for initiatives with multiple payers remained larger than the payments of initiatives paid by commercial payers or Medicaid only ($p<0.01$).

Sixty-four percent of the initiatives used pay-for-performance bonuses (Exhibit 3). These bonuses were most commonly based on quality metrics such as measures in the Healthcare Effectiveness Data and Information Set (97 percent) and on measures of downstream utilization, such as emergency department visits and inpatient hospitalizations (85 percent). Twenty-one percent of the initiatives used measures of patient experience to determine pay-for-performance bonuses.

Forty-four percent of all initiatives and 57 percent of multipayer initiatives used shared-savings payment models (Exhibit 3). In these initiatives, practices that reduce the rate of cost growth for patients to whom they provide primary care services as compared to a control population can share in the potential savings with health plans.

### Transformation and Evaluation

**Paid practice consultants** were used by 46 percent of the initiatives, and learning collaboratives were used by 49 percent (Exhibit 2). Thirty-seven percent of the initiatives used both paid consultants and learning collaboratives (Exhibit 4).

Notably, almost all multipayer initiatives used practice consultants (91 percent) and learning collaboratives (95 percent; Exhibit 2). In contrast, small single commercial payer initiatives used these approaches much less commonly (8 percent and 15 percent, respectively). Ninety-five percent of all initiatives shared data between payers and practices to help practices identify high-risk patients and monitor utilization. Seventy-three percent shared data internally to identify best practices.

**Ninety-two percent** of the initiatives were planning to conduct formal program evaluations (Exhibit 4). All multipayer initiatives were planning to use independent external evaluators, but this was the case with only 2 percent of small single commercial payer and 18 percent of large single commercial payer initiatives (data not shown).

The most common evaluation domains included clinical quality (98 percent), costs or utilization (99 percent), patient satisfaction (76 percent), and physician satisfaction (69 percent; data not shown). Only 40 percent of all initiatives planned to assess staff satisfaction. However, 86 percent of multipayer initiatives planned to assess staff satisfaction.

### Original Pilots

Of the twenty-six patient-centered medical home initiatives that we iden-
tified in 2009, nine (35 percent) were still operating in their previous form in 2013. Thirteen more had joined other initiatives. Respondents representing the four initiatives that ended before 2013 cited challenges involved in knowing which patients they were responsible for (and for whom they would receive extra payments) and unachievable shared-savings targets as reasons why the initiatives were terminated.

Overall, patients in the patient-centered medical home initiatives quadrupled from nearly five million in 2009 to almost twenty-one million in 2013 (Exhibit 4). In addition, the proportion of time-limited programs decreased from 77 percent to 20 percent, the number of multipayer initiatives increased from nine to twenty-one, and shared savings emerged as a new payment model.11

Discussion

Findings from this 2013 national survey of patient-centered medical home initiatives that included payment reform incentives indicate several important developments since our 2009 survey. First, there has been fourfold growth nationally in the number of these initiatives and the number of patients served by them. Patient-centered medical home initiatives can now be found in forty-four states, compared to eighteen states in 2009. Second, many more of the initiatives now are open-ended, not time-limited. Third, the dominant payment model for the initiatives remains typical fee-for-service payments augmented by per member per month payments and pay-for-performance bonuses. However, per member per month payments are higher than in the past, and shared-savings models are increasingly common. These changes make the initiatives more responsive to changes in the total costs of care, in a manner similar to accountable care organizations. Finally, the initiatives that included payment reform incentives have evolved from mostly small and time-limited demonstration programs to larger, more open-ended efforts. Current patient-centered medical home efforts are truly initiatives instead of pilots.

Several large commercial payers indicated that their patient-centered medical home initiative was merely an early step toward fundamentally reforming payment for primary care throughout their networks. Moreover, through the Affordable Care Act, the Centers for Medicare and Medicaid Services has the authority to expand the duration and scope of its multipayer demonstration projects if they reach prespecified quality and cost outcome targets.

The longer-term, more open-ended nature of the current patient-centered medical home initiatives suggests a recognition of the importance of sustained investment in the primary care infrastructure. It also recognizes the difficulty of transforming in a short period of time primary care practices that evolved into their current state during decades of fee-for-service incentives. It is likely that changing practice behavior and culture will take substantial effort and time.

We also observed heterogeneity in initiatives’ approaches to promoting practice transformation. For instance, multipayer initiatives generally made higher per member per month payments, more frequently used both learning collaboratives and practice consultants, and were more likely to be planning more comprehensive program evaluations. In contrast, small single commercial payer initiatives used consultants and learning collaboratives less frequently, made lower per member per month payments, and more frequently required NCQA recognition.

The increase in the average per member per
month payments since 2009 appears modest. However, this difference likely underestimates the aggregate difference in the amount of additional payments that practices in some initiatives receive. In multipayer initiatives, particularly those that include Medicare, the participating payers cover a larger proportion of the patients in the local market, thus generating larger aggregate payments to practices.

For example, if a five-physician practice with 10,000 patients participates in a multipayer initiative that covers half of their patients, and the practice receives the median per member per month payment of $7.00, then the practice would receive $35,000 per month. In addition, the practice could receive a pay-for-performance bonus of up to $10 per member per month, further increasing non-visit-based revenue and possible shared savings.

In contrast, small single commercial payer initiatives generally represent a small proportion of the local market. Thus, a practice similar in size to the practice in the example above that participated in such an initiative might receive the median $4.00 per member per month payment for only 5 percent of its patients, for a total of $2,000 per month.

Recent evaluations of early patient-centered medical home initiatives have yielded mixed results.17,19–21,29 However, focusing on the results of these generally small time-limited pilots risks prematurely abandoning efforts to reform the primary care system. Meanwhile, the patient-centered medical home model continues to evolve, and implementers learn from prior experience how to improve current and future initiatives.

In addition, early initiatives did not include any overt incentives or targeted learning to decrease costs and utilization. The increasing use of utilization-based pay-for-performance metrics, shared-savings programs, and transformation efforts that focus explicitly on cost reduction may provide incentives and tools for practices to more actively manage total medical expenditures.

Our study demonstrates that patient-centered medical home initiatives are highly heterogeneous, and it is likely that some approaches will be more successful than others. Most initiatives now include evaluation plans. Therefore, current initiatives likely will highlight what elements of the patient-centered medical home model are most important to achieving measurable success.

**Conclusion**

Patient-centered medical home initiatives that include payment reform incentives are rapidly expanding across the United States. Supported by private and public payers, the initiatives cover almost twenty-one million patients. Current initiatives are heterogeneous, but overall they are becoming larger, are paying higher fees, and are engaged in more risk sharing with practices. The growth in the number and size of initiatives suggests that there is substantial interest in the patient-centered medical home as a model of reform and that a wide group of payers recognizes that the existing primary care system requires additional investment and transformation.


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