

Illinois CHIPRA Medical Home Project Baseline Results

On the National Committee for Quality Assurance
Patient Centered Medical Home Self-Assessment

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Introduction

The National Committee for Quality Assurance’s Patient-Centered Medical Home (PCMH) model offers a tool for assessing current practice so that plans and actions can be developed for improving primary care. In a set of standards that describe clear and specific criteria, the PCMH gives practices information about organizing care around patients, working in teams and coordinating and tracking care over time. As part of the Illinois CHIPRA demonstration grant to improve child health, 51 practices assessed their practices’ level of medical “homeness” (in the spring of 2012) using the PCMH self-assessment tool in order to determine a baseline measure. The instrument asks a practice to assess its model of care related to patient-centered medical home on six standards:

- access and continuity
- identifying and managing patient populations
- planning and managing care
- providing self-care support and community resources
- tracking and coordinating care
- measuring and improving performance

Each of these six standards also have a number of elements that better describe the nature of the standard, and one of the elements under each standard is a must-pass element for recognition. Scoring of the PCMH requires that practices must achieve 50% or more of the points associated with ALL 6 Must-Pass Elements AND at least 35 points of 100 to achieve PCMH Recognition at any level.

This report will discuss baseline results analyzed using a de-identified data set of the Illinois CHIPRA practices that completed the self-assessment. As such, references to specific clinic names or locations will not be cited in this report. In addition, to avoid possible identification of sites, summaries that discuss characteristics where responses were fewer than five may be grouped together in such a way as to prevent individual sites from being identified. The report contains two main sections: one that describes results across all 51 sites in Illinois and the other that summarizes results of a sub-set of those sites – those identified as a part of one of six different health systems (n=31).

Site Characteristics

Fifty-one sites (n=51) completed the NCQA PCMH self-assessment and provided some basic demographic information about the practices through another survey administered by the Illinois Chapter of the American Academy of Pediatrics (ICAAP). It is important to note that responses to a number of these site characteristic questions allowed respondents to select multiple answers. Questions that allowed multiple responses will show totals that exceed the total number of respondents (and will be labeled throughout the report).

Participating practices are concentrated to a greater degree in urban inner city and suburban locations. Table 1 shows a summary of practice location and type. A majority of the sites identified themselves to be a pediatric or family practice, but were able to select in their response as many practice types as applied to the site. Because practices could select multiple responses, there are additional limitations in using these data to conduct comparative analyses discussed later in this report. Since most sites identified themselves as a pediatric or family practices, those will be the only practice types used to examine differences in the self-assessment results.

Table 1: Summary of Practice Location and Type

Practice Location	Practice Type (Select all that apply)	
Rural	8	Pediatric Practice 29
Suburban	22	Family Practice 20
Urban, inner city	13	Academic Practice 6
Urban, not inner city	8	Federally Qualified Health Center (FQHC) 11
		Rural Health Clinic 5
Total	51	71

Practices were asked to indicate whether the practice utilized electronic medical records (EMR). Responses showed that 37 indicated that EMR were used, 13 indicated EMR were not used, and 1 practice did not respond to this question.

About Staffing & Patients

Sites were also asked to provide descriptive details about staffing and patients, using open-ended responses. Because open-ended responses provide greatly varied responses, the responses have been combined into categories to more efficiently facilitate reporting.

Staffing. The following table highlights the size of the staff (both full-time and part-time) across all 51 sites. A majority of practices involved have fewer than 20 staff members, though the staff size ranges from as few as three to as many as 132. In addition, across all practices, the sites utilize more full-time staff (n=780) than part-time staff (n=359). A majority of sites reported 5 or fewer people in each of the following positions per practice: full-time physician (n=31 sites), part-time physician (n=21 sites), full-time nurse (n=33 sites), part-time nurse (n=20 sites). More than half the practices reported using medical assistants but less than one-third of the sites used physician’s assistants, mental health providers, or social workers. Less than one-quarter of the sites relied on care coordinators and of those care coordinators involved in care delivery at practices, more were there part-time. It’s worth noting that the unusually high level of non-response related to the number of part-time staff might indicate that some sites had no part-time staff to report.

Table 2: Summary of Staffing

Total Staff	Number of Practices	Total Full-time Staff	Number of Practices	Total Part-time Staff	Number of Practices
1-5	5	1-5	16	1-5	20
6-10	13	6-10	11	6-10	13
11-20	11	11-20	9	11-20	5
21-30	7	21-30	5	21+	3
31-50	6	31+	6		
50+	5				
No response	4	No response	4	No response	10
Total	51		51		51

Patients. Practices reported the average number of patients served each year and responses ranged from 200 patients to just over 43,500 with the mean being 10,002 and the median being 7,000. Of those total patients served, sites reported serving as few as 30 to as many as 31,536 children ages birth to 21 years of age. Six practices provided no response to these questions.

Practices were asked to estimate the number of patients with the following types of insurance: ONLY public insurance, public AND private insurance, ONLY private insurance, NO insurance, or other. Responses to this question proved to be problematic as reported totals for several sites exceeded 100%, other sites' estimates were less than 100%, and a number of sites expressed difficulty in estimating this response in general. Program planners and other stakeholders reviewing this report should exercise considerable caution in interpreting these results as they appear to be highly unreliable. This patient information will also not be used for comparative analysis later on in the report when we examine the scores on the PCMH. Because of the limited reliability of these data, the following table highlights reported insurance types across all practices using several measures. The means are reported because they may help program planners see where the mathematical center is when all the responses are examined. The mean is highly vulnerable to influence from outliers (e.g. a number considerably higher or lower than other nearby numbers that have been reported). For that reason, the following table also shows the median which is the response that is positioned half way between the highest and the lowest number reported. When the mean and the median are notably different from one another, it is a good indication that outliers are pulling the mean in a direction that might lead program planners to misinterpret results. Finally, the table below contains the lowest and the highest score so that program planners can see the range of scores. Understanding how dispersed the scores are can help program planners gain better insight into the scope of variability among the sites involved in the Illinois CHIPRA demonstration project.

Table 3: Estimated Percentage of Patients Using these Types of Insurance

Type of Insurance	Number of Sites reporting	Minimum % of Patients reported	Maximum % of Patients reported	Mean	Median
ONLY Public Insurance	(n=46)	1	99	44	41
Public AND Private Insurance	(n=20)	1	98	21	8
ONLY Private Insurance	(n=42)	1	94	37	21
Uninsured	(n=42)	1	62	13	6
Other	(n=19)	1	64	16	5
No response	(n=5)				

Stakeholders might carefully explore several observations drawn from these data:

- A majority of the practices report 40% or more of patients use ONLY public insurance
- Fewer than one-quarter of the practices report that 75% or more of their patients use ONLY private insurance
- Practices reported that as little as 1% of their patients and as many as 62% of their patients were uninsured. Project stakeholders might carefully examine and discuss the implications this has on medical homeness and other quality indicators for these sites, especially for those sites at the low and high limits of that range.
- Fewer than half the sites reported anything about patients using BOTH public and private insurance. This could indicate that far fewer patients are able to use both forms of insurance or that record-keeping systems make it difficult for sites to accurately capture or report on this information at this time.

Developed Internal Advocate for Quality Improvement

Nearly 75% of the practices indicated that they have an internal advocate for quality improvement. In narrative responses, many practices described one or more quality initiatives that were in operation at the time of the survey.

Upon conducting thematic analysis of those responses, several themes emerged related to the kinds of quality initiatives the practices were engaged in:

- Childhood immunization
- Diabetes
- Asthma
- Childhood Obesity
- Bright Futures

Individual Familiarity with Medical Home

The individual who completed the self-assessment on behalf of the practice at each of the 51 sites was asked to rate their own familiarity with medical home. Nearly 70% of these respondents indicated they were somewhat or very familiar with medical home. More interesting results emerge when you look at how different the distribution of responses is when the respondents are sorted into categories by practice location. Generally, the responses of individuals working in rural and suburban practices mirrored the overall results with nearly three-quarters of them indicating they were somewhat or very familiar with medical home. However, responses from individuals in the two different urban settings varied considerably from the overall results. Respondents who worked in non-inner city urban practices were more likely (88%) to be somewhat or very familiar with medical home than the overall results. In contrast, only 46% of respondents working in an inner city urban practice were somewhat or very familiar with medical home – a considerably lower rate of familiarity. The following table highlights these results in more detail.

Table 4: Individual familiarity with Medical Home

	Practice primarily				Total
	Rural	Suburban	Urban, Inner City	Urban, Not Inner City	
Not familiar with	0	1	1	0	2
A little familiar with	2	5	6	1	14
Somewhat familiar with	4	11	2	3	20
Very familiar with	2	5	4	4	15
Total	8	22	13	8	51

Practice Familiarity with Medical Home

The individual who completed the self-assessment on behalf of the practice at each of the 51 sites was also asked to rate the familiarity of the entire practice with medical home. Generally, the rating of the practice’s knowledge is somewhat lower than the individuals rated their own knowledge of medical home. About two-thirds (64%) of the respondents indicated that the practice was somewhat or very familiar with medical home. Again, interesting results emerge when you look at how different the distribution of responses is when the respondents are sorted into categories by practice location. Generally, the respondents were less likely to indicate the practice was very familiar with medical home than when they rated their individual knowledge. However, nearly one-third of respondents from suburban practices and nearly two-thirds of the respondents from urban, inner city practices indicated that staff had little or no familiarity of medical home. The following table highlights these results in more detail.

Table 5: Practice Familiarity with Medical Home

	Practice primarily				Total
	Rural	Suburban	Urban, inner city	Urban, not inner city	
not familiar with	1	2	1	0	4
a little familiar with	1	5	7	2	15
somewhat familiar with	5	13	4	6	28
very familiar with	1	2	1	0	4
Total	8	22	13	8	51

NCQA PCMH Self-Assessment Results - Overall

This section of the report will focus on the overall results of the self-assessment and will examine results for each standard. Information and data reported will primarily be descriptive. In a few instances, the report describes differences in results among sub-groups. When statistical tests were used to examine significance, we used an alpha level of .05 for all statistical tests.

A total of 100 points are possible on the NCQA PCMH self-assessment. Scoring of the PCMH requires that practices must achieve 50% or more of the points associated with ALL 6 Must-Pass Elements AND at least 35 points of 100 to achieve PCMH Recognition at any level. Three levels of recognition are possible and are shown in Table 6.

Table 6: Levels of Recognition

	Total Points Earned	Must-Pass Elements at 50% Performance Level or greater
Not recognized	0-34	Less than 6
Level One	35-59	6 of 6
Level Two	60-84	6 of 6
Level Three	85-100	6 of 6

Table 7 shows the aggregate mean score for the PCMH survey overall and by standard. Overall, the mean score earned by the 51 sites was 45 of 100 points and scores ranged from 0 – 83 points. When we look at the performance by standard, we see that the group of practices averaged at or above 50% on their self-assessment score for two standards: Standard 1 (access and continuity) and Standard 2 (identify and manage patient population). Standard 5

(track and coordinate care) and Standard 4 (Provide self-care support and community resources) had a mean score just below 50%. Finally, two standards had mean scores of 35%: Standard 3 (plan and manage care) and Standard 6 (measure and improve performance). It is important to note that the median scores overall and for each standard were similar to the means which tells us that the mean is a reliable indicator of central tendency. For each standard, the scores earned by the practices were evenly distributed across the full range of points possible with some scoring no points on a standard and some scoring all or nearly all points on a standard. When the mean scores by standard were examined by practice type there were no practical or statistical differences - most likely because the two practice types make up the majority of the overall response rate. When examining the differences in mean scores between practices that reported involvement in other quality improvement activities and those that reported none, there was no statistical or practical difference in scores except with Standard 3¹ where those practices that reported involvement in prior quality improvement efforts scored higher than those practices that reported no prior involvement.

Table 7: Mean Scores on the NCQA PCMH Self-Assessment

By Standard	Mean Score Earned	Points Possible	Percent Score	Score Range
Standard 1: The practice provides access to culturally and linguistically appropriate routine care and urgent team-based care that meets the needs of patients/families.	10	20	50%	0 - 20
Standard 2: The practice systematically records patient information and uses it for population management to support patient care.	9	16	56%	0 - 16
Standard 3: The practice systematically identifies individual patients and plans, manages and coordinates their care, based on their condition and needs and on evidence-based guidelines.	6	17	35%	0 - 17
Standard 4: The practice acts to improve patients' ability to manage their health by providing a self-care plan, tools, educational resources and ongoing support.	4	9	44%	0 - 9
Standard 5: The practice systematically tracks tests and coordinates care across specialty care, facility-based care and community organizations.	9	18	50%	0 - 18
Standard 6: The practice uses performance data to identify opportunities for improvement and acts to improve clinical quality, efficiency and patient experience.	7	20	35%	0 - 19

Relying on overall mean scores does not do enough to describe the nature of scores for all practices, however. Mean scores varied considerably based on the practice location. Suburban practices scored considerably higher than practices at the all other locations types.²

Table 8: Variations in Mean Scores based on Practice Location

	Mean
Rural	34
Suburban	57
Urban, inner city	39
Urban, not inner city	33
Overall mean	45

¹ An analysis of variance showed that the effect of prior implementation of improvement efforts was significant only for standard 3, $F(1, 48)=7.91$, $p = .007$.

² An analysis of variance showed that the effect of location was significant, $F(3, 48)=3.31$, $p = .02$.

These data are helpful to program planners in a number of ways. First, program planners can see that a number of sites have substantial knowledge and practice to develop in order to be eligible for recognition while a number of sites will need to learn and engage in only limited effort to be eligible for recognition. Next, the standards where the gap between actual scores and scores that qualify a practice for recognition are the greatest are related to planning and managing care (Standard 3) along with measuring and improving performance (Standard 6). Knowledge of this allows program planners to target efforts for professional development and technical assistance to the sites. Because practice location has a significant relationship to score, it will be important for program planners to understand differences in policies, practices and conditions across the sites to best provide training and technical assistance to the practices, based on their location. Finally, because there are sites under every standard that score near the maximum number of possible points, it may be important to understand the policies, practices and structures in place at those sites in order to provide support and training to sites that need to improve practice in that standard. Replicating existing promising practices is one way to build local capacity to improve care delivery.

NCQA PCMH Self-Assessment Results – By Standard

Next this report will look at NCQA PCMH self-assessment results for each of the six standards, will summarize the elements that make up each standard and discuss how practices scored on the must-pass elements found within each standard. It is important to note that each element is made up of a number of factors on which a practice rates itself. Scores for each element are determined by the answers provided in response to each factor. This report will not provide analysis down to the factor level but rather will provide information about how scores on the elements contribute to the overall scores for each standard. Results in this section will show points possible for the elements within each standard, the mean score, the mean as a percent, and the median score. Again, the median is shown so that it is easier for program planners to assess whether the mean score is representative or if outliers have skewed the mean. Range scores are not reported in this section because for nearly every element of every standard, one or more sites scored 0 and others scored all possible points – thus making a report of the range almost useless for planning and decision-making purposes.

NCQA PCMH Self-Assessment Results – Standard One: Enhance Access and Continuity

Standard one focuses on enhancing access and continuity of care. It calls upon the practice to provide access to culturally and linguistically appropriate routine care and urgent team-based care that meets the needs of patients/families. The standard is made up of seven elements. Overall mean scores for the practices on the elements of Standard one are shown in Table 9 below.

Table 9: Elements of Standard One: Enhance access and continuity

	Points Possible	Mean Score	Percent	Median
1 A <i>Access During Office Hours (must-pass element)</i>	4	2.3	56%	3
1 B After-Hours Access	4	1.9	48%	2
1 C Electronic access	2	.78	35%	0.5
1 D Continuity	2	1.0	50%	1
1 E Medical Home Responsibilities	2	1.0	50%	1.5
1 F Culturally and linguistically appropriate services	2	1.6	80%	2
1 G Practice Team	4	1.4	35%	1
Total	20	10.09	50%	11.5

More than half (33 of 51) practices passed Element 1A: Access during office hours, the must-pass element for Standard One. Elements 1B (after-hours access), 1C (electronic access), 1G (practice team) were the lowest scoring elements within standard one and, as such, offer the greatest opportunity to improve performance across the sites.

NCQA PCMH Self-Assessment Results – Standard Two: Identify and Manage Patients

Standard two focuses on identifying and managing patient populations. It asks the practice to systematically record patient information and to use it for population management to support patient care. The standard is made up of four elements. Overall mean scores for the practices on the elements of Standard two are shown in Table 10 below.

Table 10: Elements within Standard Two: Identify & Manage Patient Populations

	Points Possible	Mean Score	Percent	Median
2 A Patient Information	3	2.44	83%	3
2 B Clinical data	4	2.45	63%	3
2 C Comprehensive health assessment	4	2.92	75%	3
2 D Use data for population management (must-pass element)	5	1.25	26%	0
Total	16	9.06	56%	9.25

Sixteen of 51 practices passed Element 2D: Use data for population management, the must-pass element for Standard two. This must-pass element presents the greatest opportunity to help practices improve their scores on Standard two.

NCQA PCMH Self-Assessment Results – Standard Three: Plan and Manage Care

Standard three focuses on planning and managing care. It asks the practice to systematically identify individual patients and plans, manage and coordinate their care, based on their condition and needs and on evidence-based guidelines. The standard is made up of five elements. Overall mean scores for the practices on the elements of Standard three are shown in Table 11 below.

Table 11: Elements within Standard Three: Plan & Manage Care

	Points Possible	Mean Score	Percent	Median
3 A Implement Evidence-based Guidelines	4	.67	18%	0
3 B Identify high-risk patients	3	.40	13%	0
3 C Care Management (must-pass element)	4	1.18	30%	1
3 D Medication Management	3	1.79	60%	2.25
3 E Use electronic prescribing	3	1.82	60%	2.25
Total	17	5.86	35%	5.5

Eighteen of 51 practices passed Element 3C: Care management, the must-pass element for Standard three. Elements 3A (implement evidence-based guidelines), 3B (identify high-risk patients), and 3C (care management) were the three elements where there is the greatest opportunity to improve scores on Standard three.

NCQA PCMH Self-Assessment Results – Standard Four: Provide Self-Care Support and Community Resources

Standard four focuses on providing self-care support and community resources. It asks the practice to act to improve patients' ability to manage their health by providing a self-care plan, tools, educational resources and ongoing support. The standard is made up of two elements. Overall mean scores for the practices on the elements of Standard four are shown in Table 12 below.

Table 12: Elements within Standard Four: Provide Self-Care Support and Community Resources

	Points Possible	Mean Score	Percent	Median
4 A Support self-care process (must-pass element)	6	2.06	35%	1.5
4 B Provide referrals to community resources	3	1.68	57%	1.5
Total	9	3.74	42%	3

Seventeen of 51 practices passed Element 4A: Support self-care process, the must-pass element for Standard four. The must-pass element of supporting a self-care process warrants attention and resources to help practices improve their self-assessment rating on Standard four.

NCQA PCMH Self-Assessment Results – Standard Five: Track and Coordinate Care

Standard five focuses on tracking and coordinating care. It asks the practice to systematically track tests and coordinate care across specialty care, facility-based care and community organizations. The standard is made up of three elements. Overall mean scores for the practices on the elements of Standard five are shown in Table 13 below.

Table 13: Elements within Standard Five: Track & Coordinate Care

	Points Possible	Mean Score	Percent	Median
5 A Test tracking and follow-up	6	2.97	48%	3
5 B Referral tracking and follow-up (must-pass element)	6	3.73	62%	3
5 C Coordinate with facilities/care transitions	6	2.68	45%	3
Total	18	9.38	52%	9

Eighteen of 51 practices passed Element 5B: referral tracking and follow-up, the must-pass element for Standard five. Elements 5C (coordinate with facilities/care transitions) and 5A (test tracking and follow-up) are the lowest scoring elements within Standard five and thus, efforts focused on improving practice around those elements stands to improve practice performance on factors related to Standard 5.

NCQA PCMH Self-Assessment Results – Standard Six: Measure and Improve Performance

Standard six focuses on measuring and improving performance. It asks the practice to use performance data to identify opportunities for improvement and act to improve clinical quality, efficiency and patient experiences. The standard is made up of three elements. Overall mean scores for the practices on the elements of Standard five are shown in Table 14 below.

Table 14: Elements within Standard Six: Measure & Improve Performance

	Points Possible	Mean Score	Percent	Median
6 A Measure performance	4	1.41	35%	0
6 B Measure patient/family experience	4	1.19	30%	1
6 C <i>Implement continuous quality improvement (must-pass element)</i>	4	1.55	40%	1
6 D Demonstrate continuous quality improvement	3	0.65	23%	0
6 E Report performance	3	.96	33%	0
6 F Report data externally	2	0.79	40%	1
Total	20	6.55	33%	4.25

Nearly 50% (24 of 51 practices) passed Element 6C: implementing continuous quality improvement, the must-pass element for Standard six. Extending efforts in this project to help practices improve their practices on all seven of these elements would likely improve practice performance in this self-assessment but would also improve the likelihood that practices would develop the skill and capacity to more successfully improve efforts in all the other five standards.

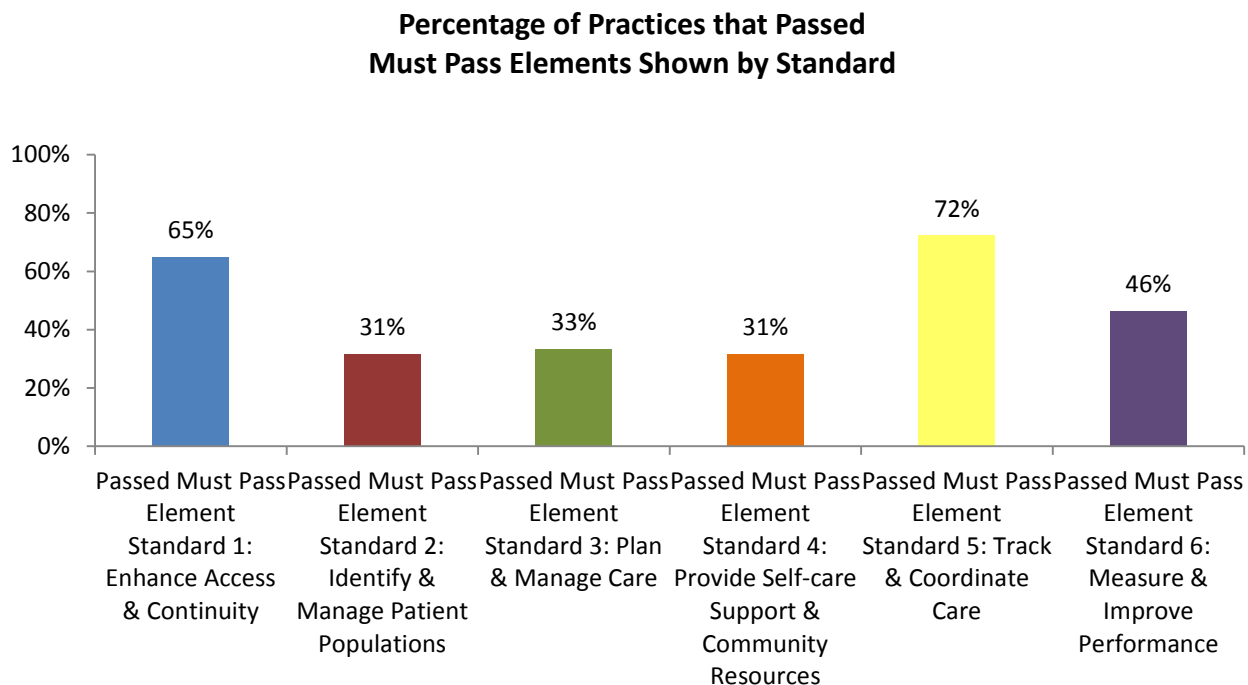
More about Must-Pass Elements and Qualifying for PCMH Recognition

Seven of the practices passed all of the must-pass elements associated with the six standards. Of the sites that passed all six (6) must-pass elements, all qualified for recognition at level two. In addition, it is notable that all of the sites that passed 6 must-pass elements were suburban and reported very low percentages of public insurance or uninsured patients. Lastly, four of those seven practices belong to the same health system. More about results by health system follow in the second main section of this report. Aside from the seven practices that are already qualified for recognition:

- Six additional sites passed 5 must-pass elements have total point scores that would qualify them for recognition at level 2 when they pass their last must-pass element
- Two practices have passed four must-pass elements and have earned enough points to qualify at level one when they pass the other two must-pass elements
- Four practices have passed 4 must-pass elements and earned enough point to qualify at level two when they pass the remaining two must-pass elements
- The remaining 32 sites have three or more must-pass elements yet to pass and most would need a number of additional points to qualify.

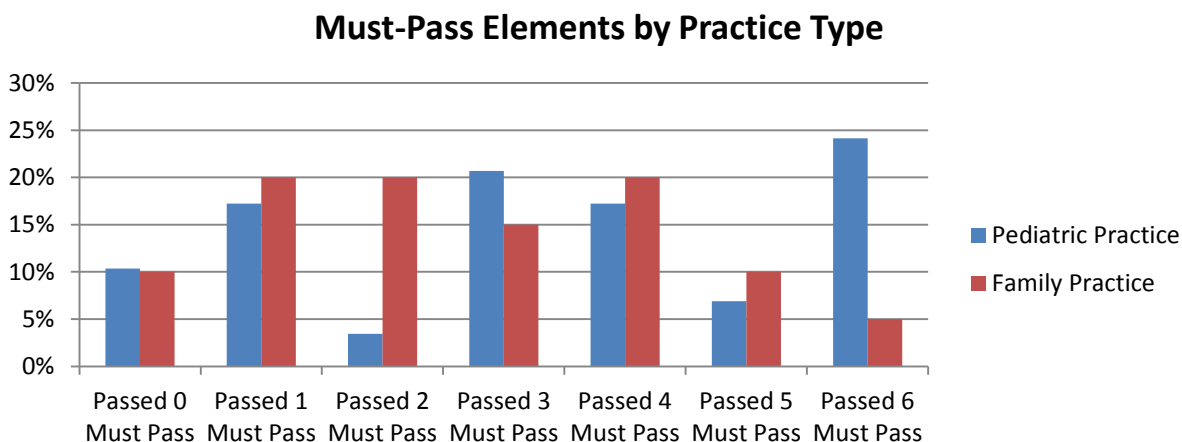
Figure 1 shows the percentage of practices that passed the must-pass elements of the six different standards. This chart allows program planners to identify the standards where it was most difficult for practices to achieve passing on the must-pass elements, especially standards 2, 3 and 4.

Figure 1: Overall Must-pass Elements by Standard



There is little difference in Must-Pass Element results based on practice type (Figure 2 below), though all but one of the sites that passed all six of the Must-Pass Elements self-identified as pediatric practices.

Figure 2: Differences in Must-pass Elements by Practice type



Again, it is important to look beyond the overall results to see where gaps or differences exist among the practices involved. Success on must-pass elements varies considerably based on practice location³. Suburban locations were likely to pass 50-100% more must-pass elements than practices in the other three locations. For example, one-quarter (25%) of the rural practices didn't pass any must-pass elements. Another 38% of the rural practices passed only one of the must-pass elements. In addition, 63% of the urban – not inner city practices passed only one must-pass element. Another 12% passed no must-pass elements.

³ An analysis of variance showed that the effect of location was significant with regards to the number of must-pass elements, $F(3, 47) = 4.14, p = .01$.

Table 15: Variation in Passed Must-Pass Elements by Location

	Mean Number of Passed Must-Pass Elements
Rural	2
Suburban	4
Urban, inner city	3
Urban, not inner city	2

Table 16: Must-Pass Elements Examined by Practice Location

	Passed No Must-Pass Elements	Passed 1 Must-Pass Element	Passed 2 Must-Pass Elements	Passed 3 Must-Pass Elements	Passed 4 Must-Pass Elements	Passed 5 Must-Pass Elements	Passed 6 Must-Pass Elements	Total
Rural	2	3	0	1	1	1	0	8
Suburban	2	1	2	5	3	2	7	22
Urban, inner city	1	3	3	2	2	2	0	13
Urban, not inner city	1	5	0	1	0	1	0	8
Total	6	12	5	9	6	6	7	51

There are a few other notable observations that are *not statistically significant* but may have practical significance for program planners:

- All of the sites that did not pass a single must-pass element reported being somewhat or very familiar with the medical home model. This could be indicative of a number of issues. The individual could have initially responded to the question about familiarity with the medical home model in such a way as to provide an answer they knew would be more satisfying to program leaders or their peers (social desirability). It may also indicate that the person who provided the responses for the practice was familiar with medical home as a term but was unaware of the standards and practices required to deliver care within the medical home model.
- In general, large practices with 31 or more employees were more likely to pass fewer must-pass elements. There could be a number of contributing factors to this observation. The practices with larger staffs see many more patients. Research often supports that the more complex the organization, the more challenging it is to identify needed improvements and implement improvement efforts with consistency.

Table 17: Variation in Must-Passed Elements based on Staff Size

	Passed No Must-Pass elements	Passed 1 Must-Pass element	Passed 2 Must-Pass elements	Passed 3 Must-Pass elements	Passed 4 Must-Pass elements	Passed 5 Must-Pass elements	Passed 6 Must-Pass elements	Total
1-5 Full Time	2	4	1	2	1	3	3	16
6-10 Full Time	1	1	0	3	4	1	1	11
11-20 Full Time	0	2	2	2	0	1	2	9
21-30 Full Time	1	1	1	1	0	0	1	5
31+ Full Time	2	1	1	0	1	1	0	6
Total	6	9	5	8	6	6	7	47*

*There were 4 clinics that provided no response to the staff size question.

Results for Sites within Health Systems

This report will now focus in on the 31 practices that were members of one of six health systems. It is important to note that these 31 sites were included in the overall results just reported so the results here are just a sub-set of the results already shared.

The overall mean score for the 31 practices grouped by health system was nearly the same as the overall mean score for all sites (43.8 points compared to 45 points). Despite how practically close these overall mean scores appear, an analysis of variance that examined scores by health system on the six standards showed that which health system practices were associated with made a statistical difference in how well they scored⁴. Table 18 highlights the mean scores by health system overall and by standard. Program planners can see that Health System 4 scored highest of the health systems involved. When examining the mean differences between individual health systems, Health System 4 scores were statistically significant from each other individual health system except Health System 5. This tell program planners two things: 1) that differences between practices in Health System 4 and practices in Health Systems 1, 2, 3, 6 truly differ in how they rated their delivery of care under a Medical Home model; and 2) that the differences between practices in Health Systems 4 and 5 could be due to natural/random variation rather than due to actual differences in how they rated their delivery of care under a Medical Home model.

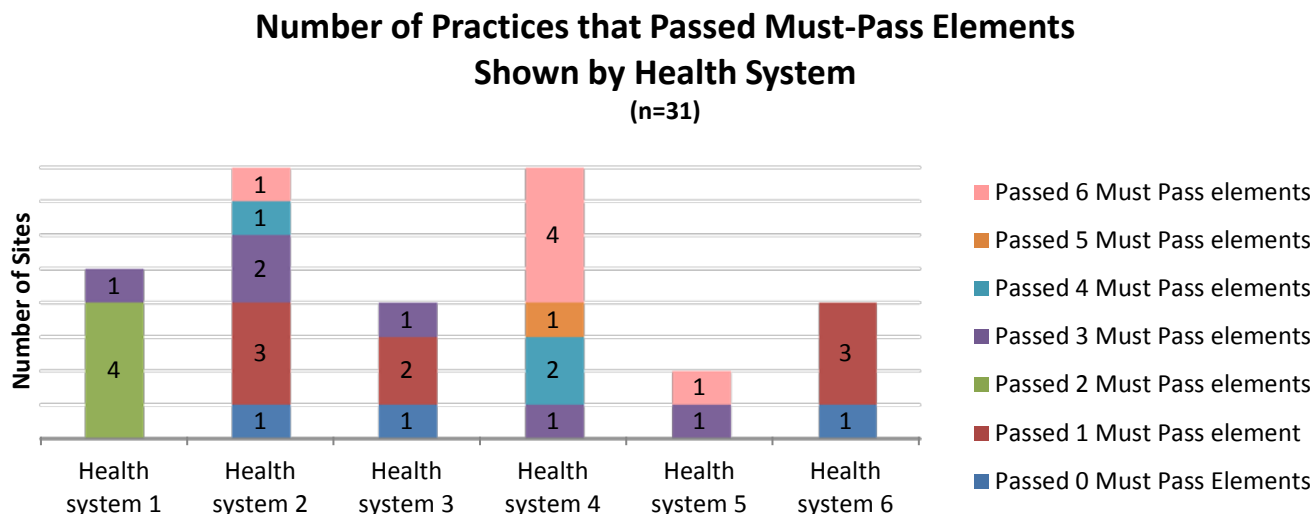
Table 18: Mean Score by Health System Overall and By Standard

	<i>Overall Mean</i>	<i>Standard 1 Mean</i>	<i>Standard 2 Mean</i>	<i>Standard 3 Mean</i>	<i>Standard 4 Mean</i>	<i>Standard 5 Mean</i>	<i>Standard 6 Mean</i>
Health System 1	19	2	6	0.5	0.5	6	4
Health System 2	41	10	9	5	4	8	6
Health System 3	29	8	8	4	1	5	3
Health System 4	74	18	12	11	7	17	10
Health System 5	62	13	10	5	5	12	16
Health System 6	26	6	9	5	2	3	1
	43.8	10.0	9.2	5.5	3.5	9.0	6.4

Figure 3 shows how health systems performed with regards to the must-pass elements for each standard. Health System 4 had four of the seven practices that passed all must-pass elements.

⁴ An analysis of variance showed that the effect of health system overall was significant, $F(5, 30)=18.22$, $p < .01$

Figure 3: Must-Pass Elements by Health System



The overall results showed that seven sites passed all 6 must-pass elements and scored enough points overall to qualify for recognition at level 2. Six of those seven sites were associated with health systems and four of the six practices were within Health System 4.

Discussion

This report has described results from the NCQA PCMH self-assessment that was administered as part of the Illinois CHIPRA demonstration grant to improve child health. This section of the report will conclude with a brief discussion of results and will pose some ideas for the consideration of program planners. The discussion in this section focuses on ways in which the demonstration project may work to build the foundational skills of the practice teams to implement medical home, improve clinical care, or improve quality improvement efforts that allow a practice to balance the needs of patient-centered care and effectively managing the practice. While a full analysis of factors that make up the elements and standards of this model was not a part of this baseline report, the information provided here is informed by how sites scored on some of those factors. Any ideas presented here for program planners to consider are informed only by scores and the framework of the NCQA’s PCMH model.

Given the wide range of scores reported here, it is evident that basic knowledge and skills related to the implementation of medical home vary considerably across the sites. One-third of responding physicians from the 51 practices indicated they had little or no familiarity with medical home in this baseline survey. The familiarity with medical home was scored even lower when that responding physician was asked to rate the familiarity of the practice, as a whole. Program planners are advised to thoughtfully plan and deliver training on a variety of topics related to the medical home model as a way of building foundational skills among the practice leadership. Important foundational skill areas for this model would be working as a team, effective communication skills with patients, enhancing access, managing populations, coordinating care and transitions, use of technology, and engaging patients, staff and other stakeholders more broadly in quality improvement efforts.

The PCMH asks a practice to assess its model of care related to patient-centered medical home on six standards:

- access and continuity

- identifying and managing patient populations
- planning and managing care
- providing self-care support and community resources
- tracking and coordinating care
- measuring and improving performance

Using the baseline results reported here, we know that, overall, practices scored the lowest on standard 3 (planning and managing care) and standard 6 (measuring and improving performance).

Based on the factor scores within the elements that make up standard 3, program planners might seek to understand ways in which the demonstration project can best develop skills and practices related to care coordination and transitions in care – especially with regard for medications and electronic record-keeping regarding medication. Prior research has shown that poor care transitions are an important source of medical errors or overuse of medical resources and the Medical Home model help support clinics to develop skills, policies, and practices that enable good care coordination between care levels and among clinicians can improve outcomes for all patients. Factor scores related to reviewing and reconciling medications with patients/families, generating and transmitting eligible prescriptions to pharmacies, entering electronic medication orders into medical record, and conducting patient-specific checks for drug-to-drug and drug-to-allergy interactions were the lowest scoring factors. Based on that, the project might look to support practices in developing processes where the practice reviews and reconciles medications for care transitions, improve electronic recordkeeping regarding medications, and develop protocols where clinicians routinely check drug-to-drug and drug-to-allergy interactions.

When the factors that make up the elements of standard 6 were examined, low scores were centered on measuring patient/family experience and reporting performance. As such, the demonstration project might look to provide support to practices in the administration, interpretation, and use of client surveys and in collecting, interpreting and disseminating quality improvement data and information more broadly. It is likely, based on the self-assessment results, that physicians and other clinical staff have received limited, if any, training on how to measure performance against evidence-based guidelines and how to use that information to make informed improvement decisions.

Based on factor (the individual yes-no questions within the elements and standards) scores these are other areas of challenge for the practices not already discussed above:

- **Standard one:** procedures and processes for improving communication with patients including but not limited to responding to requests to provide copies of health record information within 3 days or translation for any language spoken by at least 5% of the patient population at a practice
- **Standard two:** collecting, recording or accessing relevant medical history or documenting age or gender appropriate immunization and screening information
- **Standard four:** counseling a majority of patients to adopt healthy behaviors and treating or referring patients for appropriate mental health and substance abuse matters
- **Standard five:** flagging abnormal lab results, recording lab tests into structured fields in electronic health records for a majority of patients, following-up with inpatient facilities after referral, or providing clinical reason for referrals and providing electronic summary of care when patients are referred

Efforts to support practices in improvement in these areas will also improve practice scores on the must-pass elements that were not achieved in this baseline survey.

Finally, we know that practice location and system affiliation has a statistically significant impact on these self-assessment scores. It is also likely that patient insurance type would have notable impact on a practice's ability to plan and deliver patient-centered care though the format of the data collected on this measure was unreliable. These contextual factors have important implications for program planners, as well.

Appendix A: De-identified Scores of Participating Practices

This section contains:

Table 19: De-identified Total Points by Practice on All 6 Standards

Table 20: De-identified Total Points by Site and Health System

Table 19: De-identified Total Points by Practice on All 6 Standards

Site	Standard 1 Total points	Standard 2 Total points	Standard 3 Total points	Standard 4 Total points	Standard 5 Total points	Standard 6 Total points	Total Points Earned
1	13	10	6	5	15	15	64
2	12	12	9	5	18	11	67
3	2	5	0	0	6	4	17
4	2	5	0	0	6	4	17
5	2	9	2	1	6	5	25
6	2	5	0	1	6	4	18
7	2	5	0	1	6	4	18
8	7	4	0	2	0	1	14
9	16	9	17	8	18	12	79
10	5	1	0	1	6	1	14
11	3	9	6	3	6	0	27
12	1	6	2	2	0	0	10
13	16	15	13	6	18	16	83
14	6	6	3	2	0	16	33
15	12	15	12	5	17	19	78
16	2	3	0	0	0	0	5
17	7	8	3	2	0	2	22
18	8	10	4	2	6	2	32
19	12	4	6	2	9	7	39
20	6	9	6	2	5	0	28
21	12	15	6	2	12	4	50
22	13	16	9	7	18	13	75
23	14	16	3	0	18	9	60
24	8	9	6	3	9	8	43
25	11	15	9	5	9	16	66
26	13	4	5	7	15	17	60
27	11	5	4	4	17	4	45
28	7	4	2	3	2	1	18
29	6	9	5	4	2	10	35
30	16	10	4	5	12	0	46
31	16	14	12	3	11	0	54
32	13	10	5	8	15	4	54
33	19	9	7	8	18	13	75
34	12	8	5	4	5	1	33
35	19	11	10	6	6	1	53
36	5	11	6	3	3	1	29
37	5	8	6	0	2	1	22
38	6	8	3	1	5	1	24
39	7	9	5	2	2	3	28
40	15	12	11	8	14	18	77
41	12	9	0	2	11	15	48
42	17	14	10	9	17	12	78
43	17	13	10	9	15	9	73
44	17	14	10	9	17	11	77
45	19	11	11	4	17	10	71
46	19	11	8	4	17	10	68
47	17	11	11	6	18	9	72
48	20	14	15	8	18	9	83
49	12	13	4	3	17	1	49
50	17	11	11	9	14	7	68
51	19	12	10	8	15	10	73

Table 20: De-identified Total Points by Site and Health System

Site	Health System	Standard 1 total points	Standard 2 total points	Standard 3 total points	Standard 4 total points	Standard 5 total points	Standard 6 total points	Total Points Earned
1	1	2	5	0	0	6	4	17
2	1	2	5	0	0	6	4	17
3	1	2	9	2	1	6	5	25
4	1	2	5	0	1	6	4	18
5	1	2	5	0	1	6	4	18
6	2	8	10	4	2	6	2	32
7	2	6	9	6	2	5	0	28
8	2	8	9	6	3	9	8	43
9	2	11	15	9	5	9	16	66
10	2	13	4	5	7	15	17	60
11	2	7	4	2	3	2	1	18
12	2	16	10	4	5	12	0	46
13	2	12	8	5	4	5	1	33
14	3	2	3	0	0	0	0	5
15	3	7	8	3	2	0	2	22
16	3	12	4	6	2	9	7	39
17	3	12	15	6	2	12	4	50
18	4	17	14	10	9	17	12	78
19	4	17	13	10	9	15	9	73
20	4	17	14	10	9	17	11	77
21	4	19	11	11	4	17	10	71
22	4	19	11	8	4	17	10	68
23	4	17	11	11	6	18	9	72
24	4	20	14	15	8	18	9	83
25	4	19	12	10	8	15	10	73
26	5	15	12	11	8	14	18	77
27	5	12	9	0	2	11	15	48
28	6	5	11	6	3	3	1	29
29	6	5	8	6	0	2	1	22
30	6	6	8	3	1	5	1	24
31	6	7	9	5	2	2	3	28

Appendix B: Practice Scores by Element

This section contains:

Table 21: Practice Percent Scores for the Elements of Standard One – Enhance Access & Continuity

Table 22: Practice Percent scores for the Elements of Standard Two – Identify & Manage Patient Populations

Table 23: Practice Percent Scores for the Elements of Standard Three – Plan & Manage Care

Table 24: Practice Percent Scores for the Elements of Standard Four – Provide Self-Care Support & Community Resources

Table 25: Practice Percent Scores for the Elements of Standard Five – Measure & Improve Performance

Table 26: Practice Percent Scores for the Elements of Standard Six

Table 21: Practice Percent Scores for the Elements of Standard One – Enhance Access & Continuity

Site	1A Access during Office Hours Element Score Percent	1B After-Hours Access Element Score Percent	1C Electronic Access Element Score Percent	1D Continuity Element Score percent	1E Medical Home Responsibilities Element Score Percent	1F Culturally & Linguistically Appropriate Element Score Percent	1G Practice Team Element Score Percent
1	50	50	50	100	100	100	25
2	0	0	0	0	0	100	0
3	0	0	0	0	0	100	0
4	0	0	0	0	0	100	0
5	0	0	0	0	0	100	0
6	0	0	0	0	0	75	0
7	50	25	0	50	25	50	25
8	100	75	50	100	100	25	75
9	0	25	25	0	0	25	75
10	0	0	25	50	0	25	25
11	0	0	25	0	25	0	0
12	100	50	100	0	100	100	100
13	0	25	25	25	25	100	25
14	75	50	25	50	100	100	25
15	0	0	0	0	0	25	25
16	75	25	0	50	0	100	0
17	0	50	25	0	75	100	50
18	100	50	0	100	75	50	25
19	75	0	25	25	0	50	25
20	100	25	50	100	100	100	0
21	75	25	100	100	100	100	25
22	100	75	100	0	75	100	25
23	0	25	0	100	0	100	75
24	100	25	50	100	50	100	0
25	100	75	25	100	75	100	0
26	100	75	25	25	100	50	0
27	0	75	0	0	50	75	25
28	0	75	50	0	75	25	0
29	100	100	25	50	100	100	50
30	75	50	75	100	75	75	100
31	100	100	0	50	25	50	50
32	100	100	100	100	100	100	75
33	75	50	25	50	100	100	25
34	100	100	100	50	100	75	100
35	0	25	0	50	0	100	25
36	0	25	0	50	0	100	25
37	50	25	0	0	0	100	25
38	50	25	0	50	0	100	25
39	100	25	75	100	75	100	75
40	100	25	25	100	50	100	25
41	100	100	100	100	75	100	25
42	100	100	100	100	75	100	25
43	100	100	100	100	75	100	25
44	100	100	100	100	100	100	75
45	100	100	100	100	75	100	75
46	100	100	100	100	75	100	25
47	100	100	100	100	100	100	100
48	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0
50	100	75	0	100	100	100	100
51	100	100	100	100	75	100	75

Table 22: Practice Percent scores for the Elements of Standard Two – Identify & Manage Patient Populations

Site	2A Patient Information Element Percent Score	2B Clinical Data Element Percent Score	2C Comprehensive Health Assessment Element Percent Score	2D Use data for population management
1	100	100	100	25
2	75	25	50	0
3	75	25	50	0
4	100	25	50	50
5	75	25	50	0
6	75	25	50	0
7	75	0	50	0
8	75	100	75	0
9	25	0	0	0
10	100	100	50	0
11	50	50	50	0
12	100	100	100	75
13	50	0	50	50
14	100	100	100	75
15	100	0	0	0
16	100	100	25	0
17	100	75	100	0
18	75	0	50	0
19	100	100	25	25
20	100	75	100	100
21	100	100	100	100
22	100	100	100	100
23	75	100	75	0
24	100	100	100	75
25	0	0	100	0
26	75	0	75	0
27	25	0	75	0
28	100	100	50	0
29	100	75	100	0
30	100	100	100	50
31	100	75	100	0
32	0	0	100	100
33	100	50	75	0
34	100	100	100	0
35	100	100	100	0
36	75	100	50	0
37	75	100	50	0
38	75	100	75	0
39	100	50	100	50
40	100	25	100	25
41	100	75	100	75
42	100	75	75	75
43	100	75	100	75
44	100	100	100	0
45	100	100	100	0
46	100	100	100	0
47	100	100	100	50
48	0	0	0	0
49	0	0	0	0
50	100	0	100	75
51	100	100	100	25

Table 23: Practice Percent Scores for the Elements of Standard Three – Plan & Manage Care

Site	3A Implement evidence-based guidelines Element Percent Score	3B Identify High-risk patients Element Percent Score	3C Care Management Element Percent Score	3D Medication Management Element Percent Score	3E Use Electronic prescribing Element Percent Score
1	25	0	50	100	100
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	75
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	100	100	100	100	100
9	0	0	0	0	0
10	0	0	25	75	100
11	0	0	0	25	25
12	0	100	100	100	100
13	0	0	25	0	75
14	100	25	50	75	100
15	0	0	0	0	0
16	0	0	0	0	100
17	0	0	0	50	75
18	0	25	25	75	50
19	0	0	50	75	50
20	25	25	0	100	25
21	25	25	25	100	100
22	0	0	0	0	100
23	0	0	25	100	50
24	0	0	100	100	75
25	0	0	0	75	75
26	0	0	50	75	0
27	0	0	25	25	0
28	0	0	25	25	100
29	0	0	50	50	25
30	50	100	75	100	25
31	0	0	0	75	100
32	0	0	25	100	100
33	0	0	0	100	50
34	0	0	100	100	100
35	0	0	0	100	100
36	0	0	0	100	100
37	0	0	0	0	100
38	0	0	0	75	100
39	25	100	75	100	25
40	0	0	0	0	0
41	50	0	50	100	100
42	50	0	50	100	100
43	50	0	50	100	100
44	50	25	50	100	100
45	50	0	25	75	100
46	50	25	50	100	100
47	50	100	100	100	100
48	0	0	0	0	0
49	0	0	0	0	0
50	100	0	100	100	0
51	50	25	25	100	100

Table 24: Practice Percent Scores for the Elements of Standard Four – Provide Self-Care Support & Community Resources

Site	4A Support Self-care process Element Percent Score	4B Provide referrals to Community Resources Element Percent Score
1	25	100
2	0	0
3	0	0
4	0	25
5	0	25
6	0	25
7	25	25
8	100	50
9	0	25
10	25	50
11	25	25
12	75	50
13	0	75
14	25	100
15	0	0
16	0	50
17	25	25
18	0	75
19	25	25
20	0	50
21	100	25
22	0	0
23	25	50
24	75	25
25	75	75
26	25	75
27	25	50
28	50	25
29	25	100
30	0	100
31	75	100
32	100	75
33	25	75
34	75	50
35	0	100
36	0	0
37	0	25
38	0	75
39	75	100
40	0	75
41	100	100
42	100	100
43	100	100
44	25	75
45	25	75
46	50	100
47	75	100
48	0	0
49	0	0
50	100	100
51	75	100

Table 25: Practice Percent Scores for the Elements of Standard Five – Measure & Improve Performance

Site	5A Test Tracking and Follow-up Element Percent Score	5B Referral tracking and follow-up Element Percent Score	5C Coordinate with facilities/care transitions Element Percent score
1	100	100	100
2	50	50	0
3	50	50	0
4	50	50	0
5	50	50	0
6	50	50	0
7	0	0	0
8	100	100	100
9	50	50	0
10	0	100	0
11	0	0	0
12	100	100	100
13	0	0	0
14	100	100	75
15	0	0	0
16	0	0	0
17	0	50	50
18	75	25	50
19	0	50	25
20	0	100	100
21	100	100	100
22	100	100	100
23	0	50	100
24	50	75	25
25	75	100	75
26	75	100	100
27	0	25	0
28	0	25	0
29	0	100	100
30	75	100	0
31	100	50	100
32	100	100	100
33	0	25	50
34	0	75	25
35	0	50	0
36	0	25	0
37	0	25	50
38	0	25	0
39	100	100	25
40	100	50	25
41	100	100	75
42	100	100	50
43	100	100	75
44	100	100	75
45	100	100	75
46	100	100	100
47	100	100	100
48	0	0	0
49	0	0	0
50	75	50	100
51	100	100	50

Table 26: Practice Percent Scores for the Elements of Standard Six

Site	6A Measure Performance Element Percent Score	6B Measure patient/family experience Element Percent Score	6C Implement Continuous Quality Improvement Element Percent Score	6D Demonstrate Continuous Quality Improvement Element Percent Score	6E Report Performance Element Percent Score
1	75	50	100	0	0
2	0	50	50	0	0
3	0	50	50	0	0
4	0	50	50	0	0
5	0	50	50	0	0
6	0	50	50	0	0
7	0	0	0	0	0
8	75	50	50	50	75
9	0	0	25	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	75	25	100	100	100
13	75	100	100	100	75
14	100	75	100	100	100
15	0	0	0	0	0
16	0	25	0	0	0
17	0	0	0	25	0
18	0	75	0	75	50
19	0	0	0	0	0
20	0	50	0	0	75
21	75	25	50	75	75
22	100	75	0	0	0
23	0	25	0	100	75
24	100	75	100	50	75
25	75	75	100	100	75
26	75	0	25	0	0
27	0	0	0	0	0
28	75	50	25	25	50
29	0	0	0	0	0
30	0	0	0	0	0
31	0	50	0	0	0
32	75	25	100	100	75
33	0	0	0	0	0
34	0	0	0	0	0
35	0	0	0	0	0
36	0	0	0	0	0
37	0	0	0	0	0
38	25	0	0	0	0
39	75	100	100	100	75
40	25	75	100	100	50
41	75	25	100	0	75
42	75	0	50	0	75
43	75	25	100	0	75
44	75	25	100	0	75
45	75	25	100	0	75
46	75	25	50	0	75
47	75	25	50	0	75
48	0	0	0	0	0
49	0	0	0	0	0
50	100	75	0	0	0
51	75	25	100	0	75