

State of Michigan



Michigan Department of Community Health Mental Health & Substance Abuse Administration

2007–2008 PIP VALIDATION REPORT

Ongoing Service Within 14 Days of Nonemergent Assessment

for
NorthCare

August 2008



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Overview

Performance improvement projects (PIPs) provide a structured method of assessing and improving the processes, and thereby outcomes, of care for the population that prepaid inpatient health plans (PIHP) serve. This structure facilitates the documentation and evaluation of improvements in care or service. PIPs are conducted by the PIHPs to assess and improve the quality of clinical and nonclinical health care services received by beneficiaries.

This report summarizes the review conducted by Health Services Advisory Group, Inc. (HSAG), of the *Ongoing Service Within 14 Days of Nonemergent Assessment* PIP submitted by **NorthCare**. The PIP evaluation is based on Centers for Medicare & Medicaid Services (CMS) guidelines as outlined in the CMS publication *Validating Performance Improvement Projects: A Protocol for Use in Conducting Medicaid External Quality Review Activities*, final protocol, Version 1.0, May 1, 2002 (CMS PIP Protocol).

HSAG developed the PIP Summary Form in collaboration with the Michigan Department of Community Health (MDCH) to be consistent with CMS' established protocols for conducting PIPs and to assist the PIHPs in meeting compliance requirements. The PIHPs received the summary form to complete and submit to HSAG for review. The PIP Summary Form assists the PIHPs in documenting the processes undertaken in conducting the study.

The validation of a PIHP's PIP involves 10 activities. Each activity consists of elements necessary for the successful completion of a valid PIP. Some of the elements are critical elements and must be *Met* to produce an accurate and reliable PIP. Given the importance of critical elements, any critical element that receives a *Not Met* score will result in a *Not Met* validation status.

The PIHPs have an opportunity to resubmit for next year's annual evaluation a revised PIP Summary Form and additional information in response to any *Partially Met* and *Not Met* evaluation scores, regardless of whether the evaluation element was critical or noncritical.

Summary of the Validation Protocols

Using the PIP Validation Tool, HSAG assessed each component of **NorthCare's** PIP based on CMS Protocol activities. The methodology requires that the following 10 activities be reviewed.

- ◆ Activity I. Appropriate Study Topic
- ◆ Activity II. Clearly Defined, Answerable Study Question
- ◆ Activity III. Clearly Defined Study Indicator(s)
- ◆ Activity IV. Correctly Identified Study Population
- ◆ Activity V. Valid Sampling Techniques (If Sampling was Used)
- ◆ Activity VI. Accurate/Complete Data Collection
- ◆ Activity VII. Appropriate Improvement Strategies
- ◆ Activity VIII. Sufficient Data Analysis and Interpretation
- ◆ Activity IX. Real Improvement Achieved
- ◆ Activity X. Sustained Improvement Achieved

Activity X was not assessed for **NorthCare's** PIP because the PIP had not progressed to the point of assessing for sustained improvement.

Summary of Validation Findings

The following highlights the overall validation results for the **NorthCare** PIP:

- ◆ The total number of all PIP elements (including critical elements) that were evaluated equaled 52. Of this number:
 - 36 evaluation elements were *Met*.
 - 2 evaluation elements were *Partially Met*.
 - 3 evaluation elements were *Not Met*.
 - 11 evaluation elements were *Not Applicable (NA)*.
- ◆ The total number of all critical elements that were evaluated equaled 13. Of this number:
 - 11 critical elements were *Met*.
 - 0 critical elements were *Partially Met*.
 - 0 critical elements were *Not Met*.
 - 2 critical elements were *NA*.

Table 1–1 and Table 1–2 show **NorthCare’s** scores based on HSAG’s PIP evaluation. For additional details, please refer to the 2007–2008 PIP Validation Tool in Section 3 of this report.

**Table 1–1—2007–2008 PIP Validation Report Scores
for Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare**

Review Activity	Total Possible Evaluation Elements (Including Critical Elements)	Total Met	Total Partially Met	Total Not Met	Total NA	Total Possible Critical Elements	Total Critical Elements Met	Total Critical Elements Partially Met	Total Critical Elements Not Met	Total Critical Elements NA
I. Appropriate Study Topic	6	6	0	0	0	1	1	0	0	0
II. Clearly Defined, Answerable Study Question	2	2	0	0	0	2	2	0	0	0
III. Clearly Defined Study Indicator(s)	7	5	0	0	2	3	3	0	0	0
IV. Correctly Identified Study Population	3	2	0	0	1	2	2	0	0	0
V. Valid Sampling Techniques	6	0	0	0	6	1	0	0	0	1
VI. Accurate/Complete Data Collection	11	9	1	1	0	1	1	0	0	0
VII. Appropriate Improvement Strategies	4	2	1	0	1	1	1	0	0	0
VIII. Sufficient Data Analysis and Interpretation	9	7	0	1	1	2	1	0	0	1
IX. Real Improvement Achieved	4	3	0	1	0	No Critical Elements				
X. Sustained Improvement Achieved	1	Not Assessed				No Critical Elements				
Totals for All Activities	53	36	2	3	11	13	11	0	0	2

**Table 1–2—2007–2008 PIP Validation Report Overall Score
for Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare**

Percentage Score of Evaluation Elements Met*	88%
Percentage Score of Critical Elements Met**	100%
Validation Status***	Met

- * The percentage score is calculated by dividing the total *Met* by the sum of the total *Met*, *Partially Met*, and *Not Met*.
- ** The percentage score of critical elements *Met* is calculated by dividing the total critical elements *Met* by the sum of the critical elements *Met*, *Partially Met*, and *Not Met*.
- *** *Met* equals confidence/high confidence that the PIP was valid.
Partially Met equals low confidence that the PIP was valid.
Not Met equals reported PIP results that were not credible.

Conclusions and Recommendations

The final validation of **NorthCare's** PIP resulted in a *Met* validation status and an overall score of 88 percent. Future submissions should address and include documentation for all points of clarification and for all critical and noncritical elements that were *Partially Met* and *Not Met*.

Opportunities for Improvement

Opportunities for improvement are determined based on those evaluation elements that receive a *Partially Met* or a *Not Met* score, indicating that those elements are not in full compliance with CMS Protocols. Points of clarification are also included as opportunities for improvement. For a detailed explanation of opportunities for improvement, see the PIP Validation Tool section of this report under the corresponding activity.

Activity I: Appropriate Study Topic

- ◆ Future submissions of the PIP should discuss in Activity I how the study topic reflects high-volume or high-risk conditions.
- ◆ Future submissions of the PIP should discuss in Activity I how the study topic addresses a broad spectrum of care and services.
- ◆ Future submissions of the PIP should discuss the eligible study population in Activity I.
- ◆ Future submissions of the PIP should discuss in Activity I how starting ongoing services within 14 days of an initial assessment has the potential to affect beneficiary health and functional status.

Activity VI: Accurate/Complete Data Collection

- ◆ The PIP should include the qualifications, experience, education, and training for all manual data collection personnel.
- ◆ An overview (the purpose) of the study should be included in the written manual data collection tool instructions.

Activity VIII: Sufficient Data Analysis and Interpretation

- ◆ Statistical testing should be performed to show the statistical significance between measurement periods. The complete *p* value and the statistical analysis should be documented in the PIP.

Comparison of Years 1 and 2

For the 2006–2007 validation cycle, Activities I through VIII were validated, receiving an overall score of 94 percent for evaluation elements *Met*, a score of 100 percent for critical elements *Met*, and an overall validation status of *Met*. The PIP provided baseline data and HSAG’s assessment determined confidence in the reported results. HSAG identified two opportunities for improvement in Activity VI.

For the 2007–2008 validation cycle, **NorthCare** progressed through Activity IX, reporting four quarters of remeasurement data for fiscal year (FY) 2007. HSAG identified new opportunities for improvement through the use of points of clarification and noted that the same two opportunities for improvement in Activity VI from the 2006–2007 PIP Validation Tool were not addressed with this year’s submission. **NorthCare** did not perform statistical testing that would demonstrate whether or not the improvement noted from FY 2006 to FY 2007 was statistically significant. HSAG’s assessment determined confidence in the reported results. Table 1–3 illustrates the results for the study indicator.

Table 1–3

Study Indicator	Baseline FY 2006 October 1, 2005– September 30, 2006	Remeasurement 1 October 1, 2006– December 30, 2006	Remeasurement 2 January 1, 2007– March 30, 2007	Remeasurement 3 April 1, 2007– June 30, 2007	Remeasurement 4 July 1, 2007– September 30, 2007	FY 2007 Total
Number of net new children with developmental disabilities who started a face-to-face service at Pathways within 14 days of an assessment with a professional.	67%	100%	100%	100%	100%	100%

Scoring Methodology

Below is the scoring methodology HSAG uses to evaluate the PIPs conducted by the PIHP to determine if the PIP is valid and to rate the percent of compliance with CMS’ Protocol for conducting PIPs.

Each PIP activity consists of the critical and noncritical evaluation elements necessary for successful completion of a valid PIP. Each evaluation element is scored as *Met*, *Partially Met*, *Not Met*, or *Not Applicable*. In the PIP Validation Tool (see Section 3) a “C” in the column to the left of the element indicates it is a critical element. Critical elements are defined as those that are essential to producing a valid and reliable PIP; therefore, each critical element must have a score of *Met*. For example, for Activity II of the PIP Validation Tool, if the study question could not be answered, then the critical element was scored as *Not Met* and the PIP was not valid.

The following is an example of how critical elements are designated in the PIP Validation Tool.

	Evaluation Elements	Scoring
C	1. Study indicators are well-defined, objective and measurable.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA

Each evaluation element is scored as noted above, and a table is created that totals all scores (for critical and noncritical elements). From this table, percentage scores and a validation status are calculated. The percentage scores are calculated by dividing the number of elements that were *Met* by the total number of elements that were *Met*, *Partially Met*, and *Not Met*. The percentage of critical elements *Met* is calculated by dividing the number of critical elements *Met* by the total number of critical elements that were *Met*, *Partially Met*, and *Not Met*. The validation status score is based on the percentage score and whether or not critical elements were *Met*, *Partially Met*, or *Not Met* (see scoring table on page 2-2 for more details).

Due to the importance of critical elements, any critical element that is scored as *Not Met* will invalidate the PIP. Critical elements that are *Partially Met* and noncritical elements that are *Partially Met* or *Not Met* will not invalidate the PIP but will affect the overall percentage score (the percentage of the PIP’s compliance with CMS’ Protocol).

Met, *Partially Met*, and *Not Met* scores are aggregated to reflect an overall score based on the following criteria:

<i>Met</i>	(1) All critical elements were <i>Met</i> and (2) 80 percent to 100 percent of all elements were <i>Met</i> across all activities.
<i>Partially Met</i>	(1) All critical elements were <i>Met</i> and 60 percent to 79 percent of all elements were <i>Met</i> across all activities or (2) One or more critical element(s) were <i>Partially Met</i> and the percentage score for all elements across all activities was 60 percent or above.
<i>Not Met</i>	(1) All critical elements were <i>Met</i> and < 60 percent of all elements were <i>Met</i> across all activities or (2) One or more critical element(s) were <i>Not Met</i> .
<i>Not Applicable (NA)</i>	<i>Not Applicable</i> elements (including critical elements) were removed from all scoring.

HSAG then calculates an overall percentage and validation status score as follows:

Percentage Score of Evaluation Elements <i>Met</i>*	%
Percentage Score of Critical Elements <i>Met</i>**	%
Validation Status***	<Met/Partially Met/Not Met>

* The percentage score is calculated by dividing the total *Met* by the sum of the total *Met*, *Partially Met*, and *Not Met*.
 ** The percentage score of critical elements *Met* is calculated by dividing the total critical elements *Met* by the sum of the critical elements *Met*, *Partially Met*, and *Not Met*.
 *** *Met* equals confidence/high confidence that the PIP was valid.
Partially Met equals low confidence that the PIP was valid.
Not Met equals reported PIP results that were not credible.

The scoring methodology was designed to ensure that critical elements were a must-pass activity. If at least one critical element was *Not Met*, the overall validation status was *Not Met*. In addition, the methodology addresses the potential situation in which all critical elements were *Met*, however, suboptimal performance was observed in the noncritical elements. The final outcome would be based on the overall percentage score.

Section 3: Michigan 2007-2008 PIP Validation Tool:
**Ongoing Service Within 14 Days of Nonemergent Assessment
 for NorthCare**

DEMOGRAPHIC INFORMATION			
Health Plan Name:	NorthCare		
Study Leader Name:	Diane L. Bennett	Title:	Quality Improvement Coordinator
Phone Number:	(906) 226-0043	E-mail Address:	dbennett@up-pathways.org
Name of Project/Study:	Ongoing Service Within 14 Days of Nonemergent Assessment		
Type of Study:	Nonclinical	<input type="checkbox"/> Collaborative	<input type="checkbox"/> HEDIS
Date of Study:	10/1/2005 to 9/30/2007		
Type of Delivery System:	PIHP	Number of Medicaid Beneficiaries in PIHP:	5,055
		Number of Medicaid Beneficiaries in Study:	2,001
Year 2 Validation:	Initial Submission		
Results:	Remeasurement 2		

*Section 3: Michigan 2007-2008 PIP Validation Tool:
Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare*

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
I. Appropriate Study Topic: Topics selected for the study should reflect Medicaid enrollment in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of the disease. Topics could also address the need for a specific service. The goal of the project should be to improve processes and outcomes of health care. The topic may be specified by the State Medicaid agency or on the basis of Medicaid beneficiary input.		
1. Reflects high-volume or high-risk conditions (or was selected by the State). NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic was selected by the State. Point of clarification: Future submissions of the PIP should discuss in Activity I how the study topic reflects high-volume or high-risk conditions.
2. Is selected following collection and analysis of data (or was selected by the State). NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic was selected by the State following the collection and analysis of data.
3. Addresses a broad spectrum of care and services (or was selected by the State). The score for this element will be Met or Not Met.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic was selected by the State. Point of clarification: Future submissions of the PIP should discuss in Activity I how the study topic addresses a broad spectrum of care and services.
4. Includes all eligible populations that meet the study criteria. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic and study population were selected by the State. Point of clarification: Future submissions of the PIP should discuss the eligible study population in Activity I.
5. Does not exclude beneficiaries with special health care needs. The score for this element will be Met or Not Met.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Beneficiaries with special health care needs were not excluded from the study.

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

*Section 3: Michigan 2007-2008 PIP Validation Tool:
Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare*

EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
I.	Appropriate Study Topic: Topics selected for the study should reflect Medicaid enrollment in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of the disease. Topics could also address the need for a specific service. The goal of the project should be to improve processes and outcomes of health care. The topic may be specified by the State Medicaid agency or on the basis of Medicaid beneficiary input.		
C*	6. Has the potential to affect beneficiary health, functional status, or satisfaction. The score for this element will be Met or Not Met.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic was selected by the State and had the potential to affect beneficiary health and functional status. Point of clarification: Future submissions of the PIP should discuss in Activity I how starting ongoing services within 14 days of an initial assessment has the potential to affect beneficiary health and functional status.

Results for Activity I

# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
6	6	0	0	0	1	1	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

*Section 3: Michigan 2007-2008 PIP Validation Tool:
Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare*

EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
II.	Clearly Defined, Answerable Study Question: Stating the study question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation.		
C*	1. States the problem to be studied in simple terms. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study questions were stated in simple terms and were in the correct format to meet CMS Protocols.
C*	2. Is answerable. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study questions were answerable.

Results for Activity II

# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
2	2	0	0	0	2	2	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

*Section 3: Michigan 2007-2008 PIP Validation Tool:
Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare*

EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
III. Clearly Defined Study Indicator(s): A study indicator is a quantitative or qualitative characteristic or variable that reflects a discrete event (e.g., an older adult has not received a flu shot in the last 12 months) or a status (e.g., a beneficiary's blood pressure is or is not below a specified level) that is to be measured. The selected indicators should track performance or improvement over time. The indicators should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research.			
C*	1. Are well-defined, objective, and measurable. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study indicator was well-defined, objective, measurable, and was defined by the State.
	2. Are based on current, evidence-based practice guidelines, pertinent peer review literature, or consensus expert panels.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study indicator was defined by the State and was based on practice standards.
C*	3. Allow for the study question to be answered. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study indicator allowed for the study questions to be answered.
	4. Measure changes (outcomes) in health or functional status, beneficiary satisfaction, or valid process alternatives. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study indicator measured changes in a valid proxy for health and functional status.
C*	5. Have available data that can be collected on each indicator. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	There were data available to be collected on the study indicator.
	6. Are nationally recognized measures such as HEDIS specifications, when appropriate. The scoring for this element will be Met or NA.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	The study indicator was defined by the State and was not a nationally recognized measure.
	7. Includes the basis on which the indicator(s) was adopted, if internally developed.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	The study indicator was defined by the State and was not internally developed.

Results for Activity III

# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
7	5	0	0	2	3	3	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

*Section 3: Michigan 2007-2008 PIP Validation Tool:
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EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
IV.	Correctly Identified Study Population: The selected topic should represent the entire eligible Medicaid enrollment population with systemwide measurement and improvement efforts to which the PIP study indicators apply.		
C*	1. Is accurately and completely defined. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The method for identifying the study population was completely and accurately defined.
	2. Includes requirements for the length of a beneficiary's enrollment in the PIHP.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	The length of enrollment was not applicable to this study population.
C*	3. Captures all beneficiaries to whom the study question applies. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The method for identifying the study population captured all beneficiaries to whom the study questions applied.

Results for Activity IV									
# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
3	2	0	0	1	2	2	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

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EVALUATION ELEMENTS		SCORING				COMMENTS
Performance Improvement Project/Health Care Study Evaluation						
V.	Valid Sampling Techniques: (This activity is only scored if sampling was used.) If sampling is to be used to select beneficiaries of the study, proper sampling techniques are necessary to provide valid and reliable information on the quality of care provided. The true prevalence or incidence rate for the event in the population may not be known the first time a topic is studied.					
	1. Consider and specify the true or estimated frequency of occurrence.	<input type="checkbox"/> Met	<input type="checkbox"/> Partially Met	<input type="checkbox"/> Not Met	<input checked="" type="checkbox"/> NA	Sampling techniques were not used in this study.
	2. Identify the sample size.	<input type="checkbox"/> Met	<input type="checkbox"/> Partially Met	<input type="checkbox"/> Not Met	<input checked="" type="checkbox"/> NA	Sampling techniques were not used in this study.
	3. Specify the confidence level.	<input type="checkbox"/> Met	<input type="checkbox"/> Partially Met	<input type="checkbox"/> Not Met	<input checked="" type="checkbox"/> NA	Sampling techniques were not used in this study.
	4. Specify the acceptable margin of error.	<input type="checkbox"/> Met	<input type="checkbox"/> Partially Met	<input type="checkbox"/> Not Met	<input checked="" type="checkbox"/> NA	Sampling techniques were not used in this study.
C*	5. Ensure a representative sample of the eligible population.	<input type="checkbox"/> Met	<input type="checkbox"/> Partially Met	<input type="checkbox"/> Not Met	<input checked="" type="checkbox"/> NA	Sampling techniques were not used in this study.
	6. Are in accordance with generally accepted principles of research design and statistical analysis.	<input type="checkbox"/> Met	<input type="checkbox"/> Partially Met	<input type="checkbox"/> Not Met	<input checked="" type="checkbox"/> NA	Sampling techniques were not used in this study.

Results for Activity V

Total Evaluation Elements**	# of Total Evaluation Elements				Critical Elements***	# of Critical Elements			
	Met	Partially Met	Not Met	Not Applicable		Met	Partially Met	Not Met	Not Applicable
6	0	0	0	6	1	0	0	0	1

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

*Section 3: Michigan 2007-2008 PIP Validation Tool:
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EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
VI. Accurate/Complete Data Collection: Data collection must ensure that the data collected on the PIP indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement.		
1. The identification of data elements to be collected. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The data elements collected were clearly identified.
2. The identification of specified sources of data. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The sources for data collection were reported as administrative data collected through claims/encounter data and the Entry to Care Log.
3. A defined and systematic process for collecting baseline and remeasurement data. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	A defined and systematic process for collecting baseline and remeasurement data was documented in the PIP.
4. A timeline for the collection of baseline and remeasurement data. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	A timeline for the collection of baseline and remeasurement data was provided in the PIP documentation.
5. Qualified staff and personnel to abstract manual data.	<input type="checkbox"/> Met <input checked="" type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The PIP documentation and attachments did not include all required components for manual data collection personnel. The qualifications, credentials, education, experience, and training for each manual data collection staff member should be provided in the PIP documentation.
C* 6. A manual data collection tool that ensures consistent and accurate collection of data according to indicator specifications.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	A manual data collection tool that ensures consistent and accurate data collection was provided.
7. A manual data collection tool that supports interrater reliability.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The manual data collection tool supported interrater reliability.
8. Clear and concise written instructions for completing the manual data collection tool.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Written instructions for completing the manual data collection tool were included.

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

*Section 3: Michigan 2007-2008 PIP Validation Tool:
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EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
VI.	Accurate/Complete Data Collection: Data collection must ensure that the data collected on the PIP indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement.		
9.	An overview of the study in written instructions.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input checked="" type="checkbox"/> Not Met <input type="checkbox"/> NA	An overview (the purpose) of the study was not included on the written manual data collection tool instructions.
10.	Administrative data collection algorithms/flow charts that show activities in the production of indicators.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The administrative data collection process was outlined in the PIP documentation.
11.	An estimated degree of administrative data completeness. Met = 80 - 100% Partially Met = 50 - 79% Not Met = <50% or not provided	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The estimated degree of administrative data completeness was reported as 98 percent and the process used to calculate this percentage was provided.

Results for Activity VI									
# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
11	9	1	1	0	1	1	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

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EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
VII.	Appropriate Improvement Strategies: Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing systemwide improvements in care. Interventions are designed to change behavior at an institutional, practitioner, or beneficiary level.		
C*	1. Related to causes/barriers identified through data analysis and quality improvement processes. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The improvement strategies were based on a causal/barrier analysis and quality improvement processes.
	2. System changes that are likely to induce permanent change.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The system changes noted in the PIP were likely to induce permanent change.
	3. Revised if the original interventions were not successful.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	The interventions have induced improvement and had not been revised.
	4. Standardized and monitored if interventions were successful.	<input type="checkbox"/> Met <input checked="" type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The PIP reported that the interventions would be ongoing on the barrier/intervention table; however, there was no discussion in the PIP as to whether the interventions were standardized and would be monitored for continued success.

Results for Activity VII

# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
4	2	1	0	1	1	1	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

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EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
VIII. Sufficient Data Analysis and Interpretation: Describe the data analysis process on the selected clinical or nonclinical study indicators. Include the statistical analysis techniques used.			
C*	1. Is conducted according to the data analysis plan in the study design. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The data analysis was conducted according to the analysis plan in the study.
C*	2. Allows for the generalization of results to the study population if a sample was selected. If no sampling was performed, this element is scored NA.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	Sampling techniques were not used in this PIP.
	3. Identifies factors that threaten internal or external validity of findings.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Factors that could threaten the internal or external validity of the data were discussed in the PIP.
	4. Includes an interpretation of findings.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	An interpretation of the findings was provided.
	5. Is presented in a way that provides accurate, clear, and easily understood information.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The data findings were presented in a clear, accurate, and easily understood format.
	6. Identifies initial measurement and remeasurement of study indicators.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The initial measurement and remeasurements for the study indicator were identified in the PIP.
	7. Identifies statistical differences between initial measurement and remeasurement.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input checked="" type="checkbox"/> Not Met <input type="checkbox"/> NA	The PIP reported that the plan would be performing statistical testing; however, there was no statistical testing performed or discussed in the PIP.
	8. Identifies factors that affect the ability to compare initial measurement with remeasurement.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Factors that could affect the ability to compare measurement periods were discussed.
	9. Includes interpretation of the extent to which the study was successful.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	An interpretation of the extent to which the study was successful was included in the PIP documentation.

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

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EVALUATION ELEMENTS					SCORING					COMMENTS				
Performance Improvement Project/Health Care Study Evaluation														
Results for Activity VIII														
# of Total Evaluation Elements					# of Critical Elements									
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable					
9	7	0	1	1	2	1	0	0	1					

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

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EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
IX.	Real Improvement Achieved: Describe any meaningful change in performance observed and demonstrated during baseline measurement. Discuss any random, year-to-year variation, population changes, and sampling error that may have occurred during the measurement process.		
1.	Remeasurement methodology is the same as baseline methodology.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The remeasurement methodology was the same as the baseline methodology.
2.	There is documented improvement in processes or outcomes of care.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	There was documented improvement in outcomes of care.
3.	The improvement appears to be the result of planned intervention(s).	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The improvement appeared to be the result of the planned interventions.
4.	There is statistical evidence that observed improvement is true improvement.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input checked="" type="checkbox"/> Not Met <input type="checkbox"/> NA	There was no statistical evidence provided that demonstrated improvement was true improvement.

Results for Activity IX									
# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
4	3	0	1	0	0	0	0	0	0

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

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EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
X.	Sustained Improvement Achieved: Describe any demonstrated improvement through repeated measurements over comparable time periods. Discuss any random, year-to-year variation, population changes, and sampling error that may have occurred during the remeasurement process.		
1.	Repeated measurements over comparable time periods demonstrate sustained improvement, or that a decline in improvement is not statistically significant.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Not assessed. Activity X is not assessed until the study has reported a baseline and at least two annual remeasurement periods of data.

Results for Activity X

Total Evaluation Elements**	# of Total Evaluation Elements				Critical Elements***	# of Critical Elements			
	Met	Partially Met	Not Met	Not Applicable		Met	Partially Met	Not Met	Not Applicable
1	0	0	0	0	0	0	0	0	0

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

**Section 3: Michigan 2007-2008 PIP Validation Tool:
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**Table 3-1—2007-2008 PIP Validation Report Scores:
Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare**

Review Activity		Total Possible Evaluation Elements (Including Critical Elements)	Total Met	Total Partially Met	Total Not Met	Total NA	Total Possible Critical Elements	Total Critical Elements Met	Total Critical Elements Partially Met	Total Critical Elements Not Met	Total Critical Elements NA	
I.	Appropriate Study Topic	6	6	0	0	0	1	1	0	0	0	
II.	Clearly Defined, Answerable Study Question	2	2	0	0	0	2	2	0	0	0	
III.	Clearly Defined Study Indicator(s)	7	5	0	0	2	3	3	0	0	0	
IV.	Correctly Identified Study Population	3	2	0	0	1	2	2	0	0	0	
V.	Valid Sampling Techniques	6	0	0	0	6	1	0	0	0	1	
VI.	Accurate/Complete Data Collection	11	9	1	1	0	1	1	0	0	0	
VII.	Appropriate Improvement Strategies	4	2	1	0	1	1	1	0	0	0	
VIII.	Sufficient Data Analysis and Interpretation	9	7	0	1	1	2	1	0	0	1	
IX.	Real Improvement Achieved	4	3	0	1	0	No Critical Elements					
X.	Sustained Improvement Achieved	1	Not Assessed				0	No Critical Elements				
Totals for All Activities		53	36	2	3	11	13	11	0	0	2	

**Table 3-2—2007-2008 PIP Validation Report Overall Scores:
Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare**

Percentage Score of Evaluation Elements Met*	88%
Percentage Score of Critical Elements Met**	100%
Validation Status***	Met

- * The percentage score is calculated by dividing the total Met by the sum of the total Met, Partially Met, and Not Met.
- ** The percentage score of critical elements Met is calculated by dividing the total critical elements Met by the sum of the critical elements Met, Partially Met, and Not Met.
- *** Met equals confidence/high confidence that the PIP was valid.
Partially Met equals low confidence that the PIP was valid.
Not Met equals reported PIP results that were not credible.

Section 3: Michigan 2007-2008 PIP Validation Tool:
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for NorthCare**

EVALUATION OF THE OVERALL VALIDITY AND RELIABILITY OF PIP RESULTS

HSAG assessed the implications of the study's findings on the likely validity and reliability of the results based on CMS Validating Protocols. HSAG also assessed whether the State should have confidence in the reported PIP findings.

***Met = Confidence/high confidence in reported PIP results**

****Partially Met = Low confidence in reported PIP results**

*****Not Met = Reported PIP results not credible**

Summary of Aggregate Validation Findings

* **Met**

** **Partially Met**

*** **Not Met**

Summary statement on the validation findings:

Steps I through IX were assessed for this PIP Validation Report. Based on the validation of this PIP, HSAG's assessment determined confidence in the results.

Introduction

The appendices consist of the documentation that supported the validation process conducted by HSAG using the CMS Protocol for validating PIPs. Appendix A provides the CMS rationale in reviewing each activity, Appendix B is a resource to help health plans understand the broad concepts in each activity, and Appendix C provides examples for the application of the scoring methodology. Appendix D is the PIP Summary Form submitted in its original format to HSAG for review; the content provided has not been altered and no grammatical corrections have been made. Attachments that might have been provided with the PIP submission are not included in this appendix. Any new or altered information in the PIP Summary Form will be highlighted or bolded and dated; information being deleted appears in strikethrough font.

This section contains these appendices:

- ◆ Appendix A: CMS Rationale by Activity
- ◆ Appendix B: Definitions and Explanations by Activity
- ◆ Appendix C: Scoring Methodology Examples
- ◆ Appendix D: **NorthCare's** Submitted PIP Summary Form: *Ongoing Service Within 14 Days of Nonemergent Assessment*

CMS Rationale

Activity I. Appropriate Study Topic

All PIPs should target improvement in relevant areas of clinical care and nonclinical services. Topics selected for study by Medicaid managed care organizations must reflect the PIHP's Medicaid enrollment in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of disease (CMS PIP Protocol, page 2)¹

Activity II. Clearly Defined, Answerable Study Question

It is important for the PIHP to clearly state in writing the question(s) the study is designed to answer. Stating the question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation (CMS PIP Protocol, page 5).

Activity III. Clearly Defined Study Indicator(s)

A study indicator is a quantitative or qualitative characteristic (variable) reflecting a discrete event (e.g., an older adult has/has not received an influenza vaccination in the last 12 months) or a status (e.g., a beneficiary's blood pressure is/is not below a specified level) that is to be measured.

Each project should have one or more quality indicators for use in tracking performance and improvement over time. All indicators must be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research. In addition, all indicators must be capable of objectively measuring either beneficiary outcomes—such as health or functional status, or beneficiary satisfaction—or valid proxies of these outcomes.

Indicators can be few and simple, many and complex, or any combination thereof, depending on the study question(s), the complexity of existing practice guidelines for a clinical condition, and the availability of data and resources to gather the data.

Indicator criteria are the set of rules by which the data collector or reviewer determines whether an indicator has been met. Pilot or field testing is helpful to the development of effective indicator criteria. Such testing allows the opportunity to add criteria that might not have been anticipated in the design phase. In addition, criteria are often refined over time based on results of previous studies. However, if criteria are changed significantly, the method for calculating an indicator will not be consistent and performance on indicators will not be comparable over time.

¹ <http://www.cms.hhs.gov/MedicaidSCHIPQualPrac/>

It is important, therefore, for the indicator criteria to be developed as fully as possible during the design and field testing of data collection instruments (CMS PIP Protocol, page 5).

Activity IV. Correctly Identified Study Population

Once a topic has been selected, measurement and improvement efforts must be systemwide (i.e., each project must represent the entire Medicaid-enrolled population to which the study indicators apply). Once that population is identified, the PIHP must decide whether to review data for that entire population or use a sample of that population. Sampling is acceptable as long as the samples are representative of the identified population (CMS PIP Protocol, page 8). (See also Activity V. Valid Sampling Techniques.)

Activity V. Valid Sampling Techniques

If the PIHP used a sample to select beneficiaries for the study, proper sampling techniques are necessary to provide valid and reliable (and, therefore, generalizable) information on the quality of care provided. When conducting a study designed to estimate the rates at which certain events occur, the sample size has a large impact on the level of statistical confidence in the study estimates. Statistical confidence is a numerical statement of the probable degree of certainty or accuracy of an estimate. In some situations, it expresses the probability that a difference could be due to chance alone. In other applications, it expresses the probability of the accuracy of the estimate. For example, a study may report that a disease is estimated to be present in 35 percent of the population. This estimate might have a 95 percent level of confidence, plus or minus 5 percentage points, implying a 95 percent certainty that between 30 percent and 40 percent of the population has the disease.

The true prevalence or incidence rate for the event in the population may not be known the first time a topic is studied. In such situations, the most prudent course of action is to assume that a maximum sample size is needed to establish a statistically valid baseline for the project indicators (CMS PIP Protocol, page 9).

Activity VI. Accurate/Complete Data Collection

Procedures used by the PIHP to collect data for its PIP must ensure that the data collected on the study indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement. The PIHP should employ a data collection plan that includes:

- ◆ Clear identification of the data to be collected.
- ◆ Identification of the data sources and how and when the baseline and repeat indicator data will be collected.
- ◆ Specification of who will collect the data.
- ◆ Identification of instruments used to collect the data.

When data are collected from automated data systems, development of specifications for automated retrieval of the data should be devised. When data are obtained from visual inspection of medical records or other primary source documents, several steps should be taken to ensure the data are consistently extracted and recorded:

1. The key to successful manual data collection is in the selection of data collection staff. Appropriately qualified personnel with conceptual and organizational skills should be used to abstract the data; however, the specific skills should vary depending on the nature of the data collected and the degree of professional judgment required. For example, if data collection involves searching throughout the medical record to find and abstract information or judging whether clinical criteria were met, experienced clinical staff members, such as registered nurses, should collect the data. However, if the abstraction involved verifying the presence of a diagnostic test report, trained medical assistants or medical records clerks may be used.
2. Clear guidelines for obtaining and recording data should be established, especially if multiple reviewers are used to perform this activity. The PIHP should determine the necessary qualifications of the data collection staff before finalizing the data collection instrument. An abstractor would need fewer clinical skills if the data elements within the data source are more clearly defined. Defining a glossary of terms for each project should be a part of the training of abstractors to ensure consistent interpretation among project staff members.
3. The number of data collection staff members used for a given project affects the reliability of data. A smaller staff promotes interrater reliability; however, it may also increase the amount of time it takes to complete this task. Intrarater reliability (i.e., reproducibility of judgments by the same abstractor at a different time) should also be considered (CMS PIP Protocol, page 12).

Activity VII. Appropriate Improvement Strategies

Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance and developing and implementing systemwide improvements in care. Actual improvements in care depend far more on thorough analysis and implementation of appropriate solutions than on any other steps in the process.

An improvement strategy is defined as an intervention designed to change behavior at an institutional, practitioner, or beneficiary level. The effectiveness of the intervention activity or activities can be determined by measuring the PIHP's change in performance according to predefined quality indicators. Interventions are key to an improvement project's ability to bring about improved health care outcomes. The MCO must identify and develop appropriate interventions for each PIP to ensure the likelihood of measurable change.

If repeated measurements of quality improvement (QI) indicate that QI actions were not successful (i.e., the QI actions did not achieve significant improvement), the problem-solving process begins again with data analysis to identify possible causes, propose and implement solutions, and so forth. If QI actions were successful, the new processes should be standardized and monitored (CMS PIP Protocol, page 16).

Activity VIII. Sufficient Data Analysis and Interpretation

Review of PIHP data analysis begins with examining the PIHP's calculated plan performance on the selected clinical or nonclinical indicators. The review examines the appropriateness of, and the PIHP's adherence to, the statistical analysis techniques defined in the data analysis plan (CMS PIP Protocol, page 17).

Activity IX. Real Improvement Achieved

When a PIHP reports a change in its performance, it is important to know whether the reported change represents real change, is an artifact of a short-term event unrelated to the intervention, or is due to random chance. The external quality review organization (EQRO) will need to assess the probability that reported improvement is actually true improvement. This probability can be assessed in several ways, but is most confidently assessed by calculating the degree to which an intervention is statistically significant. While the protocol for this activity does not specify a level of statistical significance that a reported change in performance must meet, it does require that EQROs assess the extent to which any performance changes reported by a PIHP can be found to be statistically significant. States may choose to establish their own numerical thresholds for the significance of reported improvements (CMS PIP Protocol, page 18).

Activity X. Sustained Improvement Achieved

Real change results from changes in the fundamental processes of health care delivery. Such changes should result in sustained improvements. In contrast, a spurious one-time improvement can result from unplanned, accidental occurrences or random chance. If real change has occurred, the PIHP should be able to document sustained improvement (CMS PIP Protocol, page 19).

Appendix B. Definitions and Explanations by Activity
for NorthCare

This document was developed by HSAG as a resource to assist PIHPs in understanding the broad concepts in each activity related to PIPs. The specific concept is delineated in the left column, and the explanations and examples are provided in the right column.

Concepts	Definitions and Explanations
Activity I. Appropriate Study Topic	
Broad spectrum of care	<ul style="list-style-type: none"> ◆ Clinical focus areas: Includes prevention and care of acute and chronic conditions and high-volume/high-risk services. High-risk procedures may also be targeted (e.g., care received from specialized centers). ◆ Nonclinical areas: Continuity or coordination of care addressed in a manner in which care is provided from multiple providers and across multiple episodes of care (e.g., disease-specific or condition-specific care).
Eligible population	<ul style="list-style-type: none"> ◆ May be defined as consumers who meet the study population parameters.
Selected by the State	<ul style="list-style-type: none"> ◆ If the study topic was selected by the state Medicaid agency, this information is included as part of the description under Activity I: “Choose the Selected Study Topic” in the PIP Summary Form.
Activity II. Clearly Defined, Answerable Study Question	
Study question	<ul style="list-style-type: none"> ◆ The question(s) directs and maintains the focus of the PIP and sets the framework for data collection, analysis, and interpretation. The question(s) must be measurable and clearly defined. ◆ Examples: <ol style="list-style-type: none"> 1. Does educational outreach about immunizations increase the rates of immunizations for children 0–2 years of age? 2. Does an increase in influenza immunizations for consumers with chronic asthma impact overall health status? 3. Will increased planning and attention to follow-up after inpatient discharge improve the rate of mental health follow-up services?

Concepts	Definitions and Explanations
Activity III. Clearly Defined Study Indicator(s)	
Study indicator	<ul style="list-style-type: none"> ◆ A quantitative or qualitative characteristic reflecting a discrete event or status that is to be measured. Indicators are used to track performance and improvement over time. ◆ Example: The percentage of enrolled consumers who were 12–21 years of age who had at least one comprehensive well-care visit with a primary care practitioner or an obstetrician-gynecologist during the measurement year.
Sources identified	<ul style="list-style-type: none"> ◆ Documentation/background information that supports the rationale for the study topic, study question, and indicators. ◆ Examples: HEDIS measures, medical community practice guidelines, evidence-based practices, or provider agreements. ◆ Practice guideline examples: American Academy of Pediatrics and American Diabetes Association.
Activity IV. Use a Representative and Generalizable Study Population	
Eligible population	<ul style="list-style-type: none"> ◆ Refers to consumers who are included in the study. ◆ Includes age, conditions, enrollment criteria, and measurement periods. ◆ Example: The eligible population includes all children 0–2 years of age as of December 31 of the measurement period, with continuous enrollment and no more than one enrollment gap of 30 days or less.
Activity V. Valid Sampling Techniques	
True or estimated frequency of occurrence	<ul style="list-style-type: none"> ◆ This may not be known the first time a topic is studied. In this case, the PIHP should assume the need for a maximum sample size to establish a statistically valid baseline for the study. HSAG will review whether the PIHP defined the impact the topic has on the population or the number of eligible consumers in the population.
Sample size	<ul style="list-style-type: none"> ◆ Indicates the size of the sample to be used.
Representative sample	<ul style="list-style-type: none"> ◆ Refers to the sample reflecting the entire population.
Confidence level	<ul style="list-style-type: none"> ◆ Statistical confidence is a numerical statement of the probable degree of certainty or accuracy of an estimate (e.g., 95 percent level of confidence with a 5 percent margin of error).

Concepts	Definitions and Explanations
Activity VI. Accurate/Complete Data Collection	
Data elements	<ul style="list-style-type: none"> ◆ Identification of data elements includes unambiguous definitions of data that will be collected (e.g., the numerator/denominator, laboratory values).
Interrater reliability (IRR)	<ul style="list-style-type: none"> ◆ The HSAG review team evaluates if there is a tool, policy, and/or process in place to verify the accuracy of the data abstracted. Is there an over-read (IRR) process for the review of a minimum percentage of records? ◆ Examples: A policy that includes how IRR is tested, documentation of training, and instruments and tools used.
Algorithms	<ul style="list-style-type: none"> ◆ The development of any systematic process that consists of an ordered sequence of steps. Each step depends on the outcome of the previous step. ◆ The HSAG review team expects the PIHP to describe the process used in data collection. What are the criteria (e.g., what Current Procedural Terminology and/or source codes were used)?
Data completeness	<ul style="list-style-type: none"> ◆ For the purposes of PIP scoring, data completeness refers to the degree of complete administrative data (e.g., encounter data or claims data). PIHPs that compensate their providers on a fee-for-service basis require a submission of claims for reimbursement. However, providers generally have several months before they must submit the claim for reimbursement, and processing claims by the health plan may take several additional months, creating a claims lag. Providers paid on a capitated or salaried basis do not need to submit a claim to be paid, but should provide encounter data for the visit. In this type of arrangement, some encounter data may not be submitted. ◆ PIPs that use administrative data need to ensure that the data has a high degree of completeness prior to its use. Evidence of data completeness levels may include claim processing lag reports, trending of provider submission rates, policies and procedures regarding timeliness requirements for claims and encounter data submission, encounter data submission studies, and comparison reports of claims/encounter data versus medical record review. Discussion in the PIP should focus on evidence at the time the data was collected for use in identifying the population, sampling, and/or calculation of the study indicators. Statements such as, “Data completeness at the time of the data pull was estimated to be 97.8 percent based on claims lag reports (see attached Incurred But Not Reported report),” along with the attachment mentioned, usually (but not always) are sufficient evidence to demonstrate data completeness.

Concepts	Definitions and Explanations
Activity VII. Appropriate Improvement Strategies	
Causes and barriers	<ul style="list-style-type: none"> ◆ Interventions for improvement are identified through evaluation or barrier analysis. If there is no improvement, what problem-solving processes are put in place to identify possible causes and proposed changes to implement solutions? ◆ It is expected that interventions associated with improvement of quality indicators will be system interventions.
Standardized	<ul style="list-style-type: none"> ◆ If the interventions result in successful outcomes, the interventions should continue and the PIHP should monitor them to ensure that the outcomes remain. ◆ Examples: If an intervention is the use of practice guidelines, then the PIHP continues to use them. If mailers are a successful intervention, then the PIHP continues the mailings and monitors the outcomes.
Activity VIII. Sufficient Data Analysis and Interpretation	
Analysis plan	<ul style="list-style-type: none"> ◆ Each study should have a plan for how data analysis will occur. ◆ The HSAG review team will ensure that this plan was followed.
Generalization to the study population	<ul style="list-style-type: none"> ◆ Study results can be applied to the general population with the premise that comparable results will occur.
Factors that threaten internal and external validity	<ul style="list-style-type: none"> ◆ Did the analysis identify any factors (internal or external) that would threaten the validity of study results? ◆ Example: There was a change in record extraction (e.g., a vendor was hired or there were changes in HEDIS methodology).
Presentation of the data analysis	<ul style="list-style-type: none"> ◆ Results should be presented in tables or graphs with measurement periods, results, and benchmarks clearly identified.
Identification of initial measurement and remeasurement of study indicators	<ul style="list-style-type: none"> ◆ Clearly identify in the report which measurement period the indicator results reflect.
Statistical differences between initial measurement and remeasurement periods	<ul style="list-style-type: none"> ◆ The HSAG review team looks for evidence of a statistical test (e.g., a <i>t</i> test or Chi-square test).
Identification of the extent to which the study was successful	<ul style="list-style-type: none"> ◆ The HSAG review team looks for improvement over several measurement periods. ◆ Both interpretation and analysis should be based on continuous improvement philosophies, with the PIHP documenting data results and the follow-up steps that will be taken for improvement.

Concepts	Definitions and Explanations
Activity IX. Real Improvement Achieved	
Remeasurement methodology is the same as baseline	<ul style="list-style-type: none"> ◆ The HSAG review team looks to see that the study methodology remains the same for the entire study.
Documented improvement in processes or outcomes of care	<ul style="list-style-type: none"> ◆ The study should document how interventions were successful in impacting system processes or outcomes. ◆ Examples: There was a change in data collection or a rate increase or decrease demonstrated in graphs/tables.
Activity X. Sustained Improvement Achieved	
Sustained improvement	<ul style="list-style-type: none"> ◆ The HSAG review team looks to see if study improvements have been sustained over the course of the study. This needs to be demonstrated over a period of several (more than two) remeasurement periods.

Scoring Methodology Examples

The score for the PIHP was calculated as the percent of elements across all activities that received a *Met* status. The following five examples demonstrate how the scoring was applied.

Example 1:

Met = 43, *Partially Met* = 2, *Not Met* = 0, *NA* = 8, and all critical elements were *Met*. The PIHP receives an overall *Met* status, indicating the PIP is valid. The score for the PIHP is calculated as $43/45 = 95.6$ percent. The percentage score of critical elements *Met* is calculated as $13/13 = 100$ percent.

Example 2:

Met = 52, *Partially Met* = 0, *Not Met* = 1, *NA* = 0, and one critical element was *Not Met*. The PIHP receives an overall *Not Met* validation status and the PIP is not credible. The scores are calculated as the percentage score of evaluation elements *Met* and the percentage score of critical elements *Met*.

Example 3:

Met = 43, *Partially Met* = 1, *Not Met* = 1, *NA* = 8, and one critical element was *Partially Met*. The PIHP receives an overall *Partially Met* validation status, indicating the PIP is valid. The percentage score of evaluation elements *Met* for the PIHP is calculated as $43/45 = 95.6$ percent. The percentage score of critical elements *Met* is calculated as $12/13 = 92$ percent.

Example 4:

Met = 38, *Partially Met* = 11, *Not Met* = 4, *NA* = 0, and all the critical elements are *Met*. The PIHP receives an overall *Partially Met* status, indicating the PIP is valid. The percentage score of evaluation elements *Met* for the PIHP is calculated as $38/53 = 71.7$ percent. The percentage score of critical elements *Met* is calculated as $13/13 = 100$ percent.



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DEMOGRAPHIC INFORMATION

PIHP Name or ID: NorthCare Network

Study Leader Name: Diane L. Bennett Title: QI Coordinator

Telephone Number: 906-226-0043 E-Mail Address: dbennett@up-pathways.org

Name of Project/Study: PI #3-Timeliness: Start of Ongoing Service w/in 14-days of Initial Assessment for Children w/Developmental Disabilities

Type of Study: Clinical Nonclinical

5,055 Number of Medicaid Beneficiaries For Entire PIHP (FY06)
2,001 Number of Medicaid Beneficiaries served by Pathways (FY06)
All new children with a developmental disability that started ongoing services at Pathways during the time period. Number of Medicaid Beneficiaries in Study

NOTE: Updates noted in **bold blue text** are as of 1/31/08 reporting.

Section to be completed by HSAG

X Year 1 Validation X Initial Submission _____ Resubmission
 _____ Year 2 Validation _____ Initial Submission _____ Resubmission
 _____ Year 3 Validation _____ Initial Submission _____ Resubmission

Section to be completed by HSAG

_____ Baseline Assessment X Remeasurement 1
 _____ Remeasurement 2 _____ Remeasurement 3

Appendix D: PIP Summary Form: **Ongoing Service Within 14 Days of Nonemergent Assessment** *for NorthCare Network*

A. Activity I: Choose the study topic. PIP topics should target improvement in relevant areas of services and reflect the population in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of the disease. Topics may be derived from utilization data (ICD-9 or CPT coding data related to diagnoses and procedures; NDC codes for medications; HCPCS codes for medications, medical supplies, and medical equipment; adverse events; admissions; readmissions; etc.); grievances and appeals data; survey data; provider access or appointment availability data; beneficiary characteristics data such as race/ethnicity/language; other fee-for-service data; local or national data related to Medicaid risk populations; etc. The goal of the project should be to improve processes and outcomes of health care or services in order to have a potentially significant impact on beneficiary health, functional status, or satisfaction. The topic may be specified by the State Medicaid agency or CMS and be based on input from beneficiaries. Over time, topics must cover a broad spectrum of key aspects of beneficiary care and services, including clinical and nonclinical areas, and should include all enrolled populations (i.e., certain subsets of beneficiaries should not be consistently excluded from studies).

Study topic:

The Department of Community Health selected this performance improvement project topic based on recommendations provided by the department's Quality Improvement Committee (QIC). The QIC recommended the topic area after reviewing performance indicator data that demonstrated that a high number of PIHPs had difficulty meeting the department's established standards for ensuring that new persons began receiving any needed ongoing services within 14 days of a non-emergent assessment with a professional.

Per MDCH: "The statewide project for FY07 will be improving the timeliness of access to care for the lowest scoring population where the PIHP's average performance for the first three quarters of FY06 failed to meet the 95% standard for starting an ongoing service within 14-days of non-emergent assessment (Performance Indicator #3)."

NorthCare monitors all performance measures for all populations on an ongoing basis. When a CMHSP in our network fails to meet standard for three consecutive quarters they are required to submit a written plan of correction to NorthCare. FY06 data shows that four of our five CMHSPs exceeded the standard by scoring 100% on Performance Indicator #3 for children with developmental disabilities for all four quarters. One CMHSP (Pathways) achieved 100% compliance in quarters one and four and were at 33.3% and 50% respectively for quarters two and three, which resulted in our region being out of compliance for two consecutive quarters and averaging only 86% compliance for the first three quarters of FY06.

Although NorthCare is required to focus this PIP on children with developmental disabilities, we will narrow the focus even further to Pathways as this is the cause for NorthCare being an outlier. We will also continue to monitor all CMHSPs for all populations and all indicators at least quarterly to ensure sustained improvement over time. Corrective action will be required as necessary.

Appendix D: PIP Summary Form: Ongoing Service Within 14 Days of Nonemergent Assessment for NorthCare Network

A. Activity I: Choose the study topic. PIP topics should target improvement in relevant areas of services and reflect the population in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of the disease. Topics may be derived from utilization data (ICD-9 or CPT coding data related to diagnoses and procedures; NDC codes for medications; HCPCS codes for medications, medical supplies, and medical equipment; adverse events; admissions; readmissions; etc.); grievances and appeals data; survey data; provider access or appointment availability data; beneficiary characteristics data such as race/ethnicity/language; other fee-for-service data; local or national data related to Medicaid risk populations; etc. The goal of the project should be to improve processes and outcomes of health care or services in order to have a potentially significant impact on beneficiary health, functional status, or satisfaction. The topic may be specified by the State Medicaid agency or CMS and be based on input from beneficiaries. Over time, topics must cover a broad spectrum of key aspects of beneficiary care and services, including clinical and nonclinical areas, and should include all enrolled populations (i.e., certain subsets of beneficiaries should not be consistently excluded from studies).

FY06 Data for Children w/Developmental Disabilities:

	FY06 Q1						FY06 Q2						FY06 Q3						FY06 Q4					
	NC	C	G	H	N	P	NC	C	G	H	N	P	NC	C	G	H	N	P	NC	C	G	H	N	P
* # New Starting	13	0	0	6	3	4	13	1	0	2	7	3	16	0	1	5	1	9	8	0	1	3	1	3
- Exceptions	1	0	0	0	1	0	3	0	0	0	3	0	3	0	0	0	0	3	1	0	0	0	0	1
# Starting w/in 14 days	12	0	0	6	2	4	8	1	0	2	4	1	10	0	1	5	1	3	7	0	1	3	1	2
% Starting w/in 14 Days	100	-	-	100	100	100	80	100	-	100	100	33.3	76.9	-	100	100	100	50	100	-	100	100	100	100

*Key: NC = NorthCare; C = Copper CMH; G = Gogebic CMH, H = Hiawatha CMH, N = Northpointe CMH, P = Pathways CMH.

FY07	Qtr 1						Qtr 2						Qtr 3						Qtr 4					
	NC	CC	GO	HB	NP	PW	NC	CC	GO	HB	NP	PW	NC	CC	GO	HB	NP	PW	NC	CC	GO	HB	NP	PW
# New Starting Srv	12	0	2	0	4	6	11	2	1	5	1	2	6	0	0	1	0	5	9	0	2	1	1	5
# New Exceptions	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
# Starting w/in 14D	10	0	2	0	4	4	11	2	1	5	1	2	5	0	0	0	0	5	8	0	2	0	1	5
% Starting w/in 14D	100	##	100	##	100	100	100	100	100	100	100	100	83	##	##	0	##	100	100	##	100	##	100	100

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B. Activity II: Define the study question(s). Stating the question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation.

Study question:

MDCH Study Question: Will the interventions the PIHP enacts improve the percent of new children with developmental disabilities starting any needed ongoing service within 14 days of a non-emergent assessment with a professional result in a higher percent of new children with developmental disabilities starting any needed ongoing service with 14 days of a non-emergent assessment with a professional?

NorthCare Question: Will the interventions the PIHP enacts and/or requires of Pathways result in Pathways meeting and maintaining the timeliness standard that measures the time between the initial non-emergent assessment and the start of ongoing services for new children with a developmental disability? Standard is 95% within 14 days.

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C. Activity III: Select the study indicator(s). A study indicator is a quantitative or qualitative characteristic or variable that reflects a discrete event (e.g., an older adult has not received an influenza vaccination in the last twelve months), or a status (e.g., a consumer's blood pressure is/is not below a specified level) that is to be measured. The selected indicators should track performance or improvement over time. The indicators should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research.

Study Indicator 1	Describe the rationale for selection of the study indicator: MDCH mandate.
Numerator	Number of net "new" children w/developmental disabilities who started a face-to-face service at Pathways w/in 14 days of assessment w/a professional.
Denominator	Number of net (exceptions are subtracted total # who started service) "new" children with a developmental disability who started service at Pathways.
First Measurement Period Dates	10/1/06 – 12/31/07
Benchmark	67%
Source of Benchmark	FY 06 annualized score for Pathways.
Baseline Goal	95%
Study Indicator 2	Describe the rationale for selection of the study indicator:
Numerator	
Denominator	
First Measurement Period Dates	
Benchmark	
Source of Benchmark	
Baseline Goal	
Study Indicator 3	Describe the rationale for selection of the study indicator:
Numerator	
Denominator	
First Measurement Period Dates	
Benchmark	
Source of Benchmark	
Baseline Goal	

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D. Activity IV: Identify the study population. The selected topic should represent the entire Medicaid enrolled population, with system wide measurement and improvement efforts to which the PIP study indicators apply. Once the population is identified, a decision must be made whether to review data for the entire population or a sample of that population.

Study population:

All “new” children covered by Medicaid with a developmental disability who have received a non-emergent face-to-face assessment and starting ongoing service at Pathways within the reporting period.

New children are children who have never received services at the CMHSP/PIHP or whose last date of service (regardless of service) was 90 or more days before the assessment, or whose case was closed 90 or more days before the assessment.

Children are counted as such who are less than age 18 on the last day of the reporting period.

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E. Activity V: Use sound sampling methods. If sampling is to be used to select beneficiaries of the study, proper sampling techniques are necessary to provide valid and reliable information on the quality of care provided. The true prevalence or incidence rate for the event in the population may not be known the first time a topic is studied.

Measure	Sample Error and Confidence Level	Sample Size	Population	Method for Determining Size (describe)	Sampling Method (describe)
Study Indicator #1	N/A	All "new" children who are less than age 18 on the last day of the reporting period with developmental disabilities who have received an assessment and starting ongoing services at Pathways.	Children covered by Medicaid w/a developmental disability.	<p>Determining sample size is done through the regional data warehouse services model. All children w/DD who have received a face-to-face (reportable) service within the reporting period. We look at all service codes except: H2011-crisis contact, T1023-inpatient preadmission screening, 0100-inpatient srv., H0002-brief assmt, and H0031-clinical assmt. as these don't represent an "ongoing" service.</p> <p>The age will be calculated as of the last day of the quarter and will be stored as a dimension for each quarter. Example: Age_EOQ1 represents age at the end of quarter 1.</p>	Actual.

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F. Activity Via: Use valid and reliable data collection procedures. Data collection must ensure that the data collected on PIP indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement.

<p>Data Sources</p> <p><input checked="" type="checkbox"/> Hybrid (medical/treatment records and administrative)</p> <p><input type="checkbox"/> Medical/Treatment Record Abstraction</p> <p style="margin-left: 20px;">Record Type</p> <p style="margin-left: 40px;"><input type="checkbox"/> Outpatient</p> <p style="margin-left: 40px;"><input type="checkbox"/> Inpatient</p> <p style="margin-left: 40px;"><input type="checkbox"/> Other _____</p> <p style="margin-left: 20px;">Other Requirements</p> <p style="margin-left: 40px;"><input type="checkbox"/> Data collection tool attached</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Data collection instructions attached (Attach C-Entry to Care Process Map FY07 Data – v.41007)</p> <p style="margin-left: 40px;"><input type="checkbox"/> Summary of data collection training attached</p> <p style="margin-left: 40px;"><input type="checkbox"/> IRR process and results attached</p> <p><input type="checkbox"/> Other data</p> <p>Description of data collection staff (include training, experience and qualifications):</p> <hr/> <p>Trained Access and Billing staff who enter consumer and service data into the provider systems during the course of normal business. (Attachment A – As previously submitted.)</p> <hr/> <p>✓ This data is transferred to the NorthCare data warehouse where it is used to calculate the Performance Indicators.</p> <hr/> <p>NorthCare has facilitated the incorporation of data requirements into board procedures to ensure consistent, complete data entry at each source.</p>	<p><input type="checkbox"/> Administrative Data</p> <p style="margin-left: 20px;">Data Source</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Programmed pull from claims/encounters</p> <p style="margin-left: 40px;"><input type="checkbox"/> Complaint/appeal</p> <p style="margin-left: 40px;"><input type="checkbox"/> Pharmacy data</p> <p style="margin-left: 40px;"><input type="checkbox"/> Telephone service data /call center data</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Appointment/access data</p> <p style="margin-left: 40px;"><input type="checkbox"/> Delegated entity/vendor data _____</p> <p style="margin-left: 40px;"><input type="checkbox"/> Other _____</p> <p style="margin-left: 20px;">Other Requirements</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Data completeness assessment attached (Attachment B- PI Planning v.12205)</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Coding verification process attached (Attachment B - PI Planning v.12205)</p> <p><input type="checkbox"/> Survey Data</p> <p style="margin-left: 20px;">Fielding Method</p> <p style="margin-left: 40px;"><input type="checkbox"/> Personal interview</p> <p style="margin-left: 40px;"><input type="checkbox"/> Mail</p> <p style="margin-left: 40px;"><input type="checkbox"/> Phone with CATI script</p> <p style="margin-left: 40px;"><input type="checkbox"/> Phone with IVR</p> <p style="margin-left: 40px;"><input type="checkbox"/> Internet</p> <p style="margin-left: 40px;"><input type="checkbox"/> Other _____</p> <p style="margin-left: 20px;">Other Requirements</p> <p style="margin-left: 40px;"><input type="checkbox"/> Number of waves _____</p> <p style="margin-left: 40px;"><input type="checkbox"/> Response rate _____</p> <p style="margin-left: 40px;"><input type="checkbox"/> Incentives used _____</p>
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Appendix D: PIP Summary Form: Ongoing Service Within 14 Days of Nonemergent Assessment for NorthCare Network

F. Activity VIb: Determine the data collection cycle.	Determine the data analysis cycle.
<ul style="list-style-type: none"> <input type="checkbox"/> Once a year <input type="checkbox"/> Twice a year <input type="checkbox"/> Once a season <input checked="" type="checkbox"/> Once a quarter <input checked="" type="checkbox"/> Once a month <input type="checkbox"/> Once a week <input type="checkbox"/> Once a day <input type="checkbox"/> Continuous <input type="checkbox"/> Other (list and describe): <hr/> <ul style="list-style-type: none"> ✓ Pathways QI Coordinator runs data reports for monthly analysis. <hr/> <ul style="list-style-type: none"> ✓ The NorthCare data warehouse builds run nightly. <hr/> <ul style="list-style-type: none"> ✓ Regional boards transmit provider system data either nightly or weekly - Pathways transmits data weekly. 	<ul style="list-style-type: none"> <input type="checkbox"/> Once a year <input type="checkbox"/> Once a season <input checked="" type="checkbox"/> Once a quarter <input checked="" type="checkbox"/> Once a month <input type="checkbox"/> Continuous <input type="checkbox"/> Other (list and describe): <hr/> <ul style="list-style-type: none"> ✓ It is anticipated that while indicator models will rebuild nightly, full analysis and formal measurements will be taken quarterly. <hr/> <ul style="list-style-type: none"> ✓ Pathways QI Coordinator runs data reports for monthly analysis

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.
<p>Estimated percentage degree of administrative data completeness: <u>98</u> percent. (Describe process used to determine data completeness and accuracy.)</p> <p>Supporting documentation:</p> <hr/> <p>NorthCare compiled data submitted by each CMHSP through FY06. Each CMHSP followed standard methodologies for collecting and calculating data to submit to NorthCare. NorthCare's QI Coordinator then compiled, validated, and reported to MDCH. This process, including methodology sheets, were reviewed and fully validated by HSAG during their on-site visit in May of 2006.</p> <hr/> <p>NorthCare and each CMHSP have made a great deal of progress since May '06 in terms of creating the ability to extract performance indicator data from NorthCare's Data Warehouse. The Entry To Care process mapping/PI Planning is critical to ensuring that accurate and complete data is coming into the data warehouse from each CMHSP. NorthCare began by mapping the entry to care processes that will provide data</p>

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F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

needed to calculate the timeliness performance indicators for all CMHSPs in an accurate and consistent fashion. Each CMHSP was then required to map their internal processes and provide NorthCare with documented functional specifications that feed into the NorthCare process. CMHSP functional specifications have been submitted to, and reviewed by, NorthCare's Data Warehouse Manager and QI Coordinator. This document will continue to evolve and assist in writing the technical specifications for the data warehouse programming, now in progress **complete**. Data warehouse development is being **has been** completed by ~~NorthCare's Data Warehouse Programmer and Manager~~ **a regional cross functional work team, spearheaded by NorthCare's Data Warehouse Manager**. Each CMHSP will continue with data reporting processes used throughout FY06 **and FY07 and will** for at least the first two quarters of ~~FY07~~ **FY08**. Results of these parallel processes will be used in validating data from our new data warehouse Performance Indicator models. We plan to extract first quarter data in February for validation prior to our March 31, 2008 due date to MDCH. **To date, Copper CMHSP and Pathways CMHSP have completed and signed off on local auditing; remaining three CMHSPs have a deadline of January 31, 2008 to have this completed. NorthCare's QI Coordinator will then roll up data submitted, as in the past, and again run a comparison from the consolidated data model from the Data Warehouse for a final check and balance prior to submission to MDCH.**

- ✓ Core consumer and service data anticipated to be 100% complete as this is a straight feed from provider systems, and there are balancing procedures expected to be in place at each board
- ✓ The margin for error increases with manual processes: Logging the correct Initial Assessment Date, coding the correct initial service (i.e., H2011, T1023, 0100, H0002, H0031 are to be excluded), and properly tracking all scheduling exceptions.

Supporting Documentation Attached includes: (1) NorthCare Entry To Care process map/**PI Planning (Attachment B)** (See Steps 2.2 Initial Assessment and 2.4 Provide First Ongoing Service); (2) Performance Indicator #3 Exception Log (**Attachment D – As previously submitted.**); (3) Functional/Technical Specification Matrix (**Attachment E - As previously submitted**); (4) Technical Specification Analysis (**Attachment F – As previously submitted**); (5) **NorthCare Performance Indicator Methodology Codebook v.011008 (Attachment G)**

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G. Activity VIIIb: Implement intervention and improvement strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing systemwide improvements in care. Describe interventions designed to change behavior at an institutional, practitioner, or beneficiary level.

Describe interventions:

Interventions designed or in the process of being design to address access to care issues include two major improvement projects.

1. NorthCare's Entry to Care Project was originally started to assist in the validation of the regional benefit plan used by utilization managers across the region. However, as the project evolved it focused more directly on identifying data fields required to calculate the performance indicators. The process mapping was done to ensure all CMHSPs were capturing and entering required data in a consistent fashion. CMHSPs completed their own internal process mapping to ensure local processes will flow into the regional process to again assist with ensuring the integrity of our data. Pathways, as well as the other CMHSPs, have been a very active participant in this project.
2. In addition, NorthCare is creating an Access Center. This Access Center will conduct the access and eligibility managed care function for Pathways' beginning on April 2, 2007. NorthCare will take all "entry to care" calls for all populations in Marquette and Luce Counties beginning April 2nd. NorthCare's Access Center will begin handling calls from Alger and Delta Counties in the summer of 2007. The policies, procedures, and processes developed by the NorthCare Access Center will become the standard for all Access Systems at each CMHSP. The recent Access Standards developed by The Standards Group (State initiative) is serving as the guideline for this new Access Center. With NorthCare conducting the access and eligibility functions for Pathways, the amount of clinical staff time spent on completing eligibility screenings can be spent on direct services. It is expected that all access timeliness indicators will be consistently met.

NorthCare is in the process of developing this Access Center. While the people and forms may change, NorthCare will utilize Pathways software system (CMHC) for capturing/tracking data and therefore, we don't anticipate major changes at the onset. We will monitor for internal and external threats to the process and outcomes.

Update as of January 2008 – NorthCare Access Center began taking calls from:

- **Pathways Luce and Alger Counties on April 2, 2007.**
- **Pathways Marquette County on April 16, 2007.**
- **Pathways Delta County on May 7, 2007.**
- **Hiawatha Behavioral Health on September 2007**
- **Gogebic on January 2008**

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H. Activity VIIIa. Data analysis: Describe the data analysis process in accordance with the analysis plan and any ad hoc analysis done on the selected clinical or nonclinical study indicators. Include the statistical analysis techniques used and *p* values.

Data analysis process:

Data is compiled and analyzed by NorthCare for each CMHSP and for the region as a whole. Analyzing data by CMHSP allows us to drill down to identify specific problem areas, whether or not problems are region-wide or CMHSP specific, and evaluate the effectiveness of interventions implemented.

Analyzing FY06 data for Pathways shows an annual compliance rating of 67%. Because Pathways scored 100% for two of the four quarters we choose to benchmark for all of FY06. FY07 data will be compared against baseline data quarterly and at year end. Without a statistician on staff, NorthCare's QI Coordinator consulted with HSAG who suggested that we analyze this data using a chi square testing tool, t-Test, and/or a run chart. Based on resources available to us, we will utilize one of the testing tools and possibly a run chart for our statistical analysis.

Pathways will continue with current processes at the local level and report data to NorthCare as they did in FY06. These parallel processes will be used to validate data from the data warehouse extract.

Interpretation of findings will be included in progress reports and will be presented via narrative and graphical summary.

Review of data for all populations at all CMHSPs as well as compiled regional data will also continue as part of our ongoing monitoring. Corrective action will be required as noted in NorthCare's QI Plan, which states that a plan of correction is required for any indicator that does not meet standard for three consecutive quarters.

Baseline Measurement: Baseline is the annual compliance rating for Pathways in FY06, which is 67%.

Baseline to Remeasurement 1: *The first remeasure will show all children with a developmental disability receiving ongoing services from Pathways during the first quarter of FY07 – October 1, 2006 through December 31, 2006.*

Remeasurement 1 to Remeasurement 2: *The second remeasure will show all children with a developmental disability receiving ongoing services from Pathways during the second quarter of FY07 – January 1, 2007 through March 31, 2007.*

Remeasurement 2 to Remeasurement 3: *The third remeasure will show all children with a developmental disability receiving ongoing services from Pathways during the third quarter of FY07 – April 1, 2007 through June 30, 2007.*

Remeasurement 3 to Remeasurement 4: *The fourth remeasure will show all children with a developmental disability receiving ongoing services from Pathways during the fourth quarter of FY07 – July 1, 2007 through September 30, 2007.*

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H. Activity VIIIb. Interpretation of study results: Describe the results of the statistical analysis, interpret the findings, discuss the successfulness of the study, and indicate follow-up activities. Also, identify any factors that could influence the measurement or validity of the findings.

Interpretation of study results: (Address factors that threaten internal or external validity of the findings for each measurement period.)

Analyzing FY06 data for Pathways shows an annual compliance rating of 67%. Because Pathways scored 100% for two of the four quarters we choose to benchmark for all of FY06. FY07 data will be compared against baseline data quarterly and at year end.

Because we are moving from the FY06 data reporting processes to extracting from our regional data warehouse we expect to see some differences in our data. To assist in identifying and correcting these differences, Pathways will continue to report performance indicator data to NorthCare as they did in FY06. NorthCare will extract data from the regional data warehouse. These parallel extracts will be used to validate Medicaid data from the data warehouse.

Baseline Measurement: Baseline is 67%.

Baseline to Remeasurement 1: First remeasure for FY07 Q1 = 100%; 4 of 4 children w/developmental disabilities started ongoing services with a professional within 14 days of initial face-to-face assessment.

Remeasurement 1 to Remeasurement 2: Measure FY07 Q2 = 100%; 2 of 2 children w/developmental disabilities started ongoing services with a professional within 14 days of initial face-to-face assessment.

Remeasurement 2 to Remeasurement 3: Measure FY07 Q3 = 100%; 5 of 5 children w/developmental disabilities started ongoing services with a professional within 14 days of initial face-to-face assessment.

Remeasurement 2 to Remeasurement 3: **Measure FY07 Q4 = 100%; 5 of 5 children w/developmental disabilities started ongoing services with a professional within 14 days of initial face-to-face assessment.**

Baseline to Remeasurement 5: **FY06 baseline of 67% annualized compared to FY07 annualized measure of 100% indicates sustained improvement over time.**

In comparing the annualized data for FY06 to each quarter in FY07, we can see definite improvement that has been maintained for the entire fiscal year. 100% of children with developmental disabilities starting ongoing services at Pathways did so within 14-days of their initial psychosocial assessment.

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I. Activity IX: Report improvement. Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

Quantifiable Measure No. 1:

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance* Test statistic and p-value
FY06	<i>Baseline:</i>	10	15	67%	95%	Annualized
Oct – Dec 2006	Remeasurement 1	4	4	100%	95%	
Jan – Mar 2007	Remeasurement 2	2	2	100%	95%	
April – June 2007	Remeasurement 3	5	5	100%	95%	
July – Sept 2007	Remeasurement 4	5	5	100%	95%	
FY07	Remeasurement 5	16	16	100%	95%	Annualized

Quantifiable Measure No. 2:

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance* Test statistic and p-value
	<i>Baseline:</i>					
	Remeasurement 1					
	Remeasurement 2					
	Remeasurement 3					
	Remeasurement 4					
	Remeasurement 5					

Quantifiable Measure No. 3:

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance* Test statistic and p-value
	<i>Baseline:</i>					
	Remeasurement 1					
	Remeasurement 2					

* Specify the test, p value, and specific measurements (e.g., baseline to Remeasurement 1, Remeasurement #1 to Remeasurement 2, etc., or baseline to final remeasurement) included in the calculations.

**Appendix D: PIP Summary Form:
Ongoing Service Within 14 Days of Nonemergent Assessment
for NorthCare Network**

J. Activity X: Describe sustained improvement. Describe any demonstrated improvement through repeated measurements over comparable time periods. Discuss any random year-to-year variation, population changes, sampling error, or statistically significant declines that may have occurred during the remeasurement process

Sustained improvement:

NorthCare has been working with Pathways on corrective action to address non-compliance with this performance measure since the start of FY06. In the first quarter of FY06, Pathways experienced staff changes that affected the timeliness measures. They were given a 48 hour notice of resignation from a key clinical staff member involved in the initial phases of routines services. This, along with staff reassignments, affected Pathways' ability to ensure consumers receive their first ongoing service within 14-days of the initial face-to-face assessment. This also resulted in Pathways' request for NorthCare to assume access and eligibility functions for their four county area. Through repeat measurements, these efforts indicate improvement as noted in quarterly compliance percentages. The graph below shows sustained improvement beginning with the last quarter of FY06 which has been maintained throughout all four quarters of FY07.

Percentage of Children w/Developmental Disabilities Starting Ongoing Services w/in 14-days of Assessment

