NATIONAL QUALITY FORUM

Measure Evaluation 4.1
January 2010

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The sub-criteria and most of the footnotes from the evaluation criteria are provided in Word comments and will appear if your cursor is over the highlighted area (or in the margin if your Word program is set to show revisions in balloons). Hyperlinks to the evaluation criteria and ratings are provided in each section.

TAP/Workgroup (if utilized): Complete all yellow highlighted areas of the form. Evaluate the extent to which each sub-criterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: If there is no TAP or workgroup, the SC also evaluates the sub-criteria (yellow highlighted areas).

Steering Committee: Complete all pink highlighted areas of the form. Review the workgroup/TAP assessment of the sub-criterion, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met
C = Completely (unquestionably demonstrated to meet the criterion)
P = Partially (demonstrated to partially meet the criterion)
M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)
N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)
NA = Not applicable (only an option for a few sub-criteria as indicated)

(for NQF staff use) NQF Review #: OT3-047-10 NQF Project: Patient Outcomes Measures: Child Health and Mental Health (Phase III)

<table>
<thead>
<tr>
<th>MEASURE DESCRIPTIVE INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>De.1 Measure Title: Inpatient Consumer Survey (ICS)</td>
</tr>
<tr>
<td>De.2 Brief description of measure: Survey developed to gather client’s evaluation of their inpatient care. Each domain is scored as the percentage of adolescent clients aged 13-17 years and adult clients at time of discharge or at annual review who respond positively to the domain on the survey for a given month. Five domains in the survey include outcome, dignity, rights, treatment, and environment. Questions in each domain are based on a standard 5-pt scale, evaluated on a scale from strongly disagree to strongly agree.</td>
</tr>
<tr>
<td>De.3 Type of Measure: Other (specify) patient and family engagement</td>
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<tr>
<td>De.4 National Priority Partners Priority Area: patient and family engagement</td>
</tr>
<tr>
<td>De.5 IOM Quality Domain: patient-centered</td>
</tr>
<tr>
<td>De.6 Consumer Care Need: Getting Better</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONDITIONS FOR CONSIDERATION BY NQF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:</td>
</tr>
<tr>
<td>A. The measure is in the public domain or an intellectual property (measure steward agreement) is signed. Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</td>
</tr>
<tr>
<td>A.1 Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? Yes</td>
</tr>
<tr>
<td>A.2 Indicate if Proprietary Measure (as defined in measure steward agreement): proprietary measure</td>
</tr>
<tr>
<td>A.3 Measure Steward Agreement: agreement signed and submitted</td>
</tr>
</tbody>
</table>

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
### A.4 Measure Steward Agreement attached:
SignedNRIVersion_NQFMasureStewardAgreement_020309_Final.pdf

### B. The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. Yes, information provided in contact section

### C. The intended use of the measure includes both public reporting and quality improvement.
**Purpose:** public reporting, quality improvement Accreditation, Accountability

### D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 24 months of endorsement.
**D.1 Testing:** Yes, fully developed and tested
**D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures?**
Yes

(for NQF staff use) Have all conditions for consideration been met?
**Staff Notes to Steward (if submission returned):**

**Staff Notes to Reviewers (issues or questions regarding any criteria):** Measure was orrigionally slotted for the Child Health Outcomes Project, but upon further review was identified to be better suited for the Mental Health Outcomes Project

**Staff Reviewer Name(s):** Ian Corbridge

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**TAP/Workgroup Reviewer Name:**

**Steering Committee Reviewer Name:**

### 1. IMPORTANCE TO MEASURE AND REPORT

**Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.** (evaluation criteria)

**1a. High Impact**

(for NQF staff use) Specific NPP goal: All patients will be asked for feedback on their experience of care, which healthcare organizations and their staff will then use to improve care.

**1a.1 Demonstrated High Impact Aspect of Healthcare:** other

**1a.2 Patient and family engagement.** The ICS standards address the patient and family engagement priority identified by NQF’s National Priorities Partners. The ICS includes 28 survey items that draw out the voice of the consumer in multiple dimensions of care, including being treated with dignity, consumer rights, consumer participation in treatment planning, medication, interactions with key clinical staff, and consumer perception of outcomes. The ICS is currently in use in a standardize format in nearly 100 psychiatric hospitals.

**1a.3 Summary of Evidence of High Impact:** Consumer surveys are promoted by several large-scale initiatives such as the conditions of funding from Centers for Medicare and Medicaid Services (CMS) and conditions of accreditation by The Joint Commission (TJC). Consumer surveys are also a fundamental component to the CMHS/SAMHSA Uniform Reporting System and grants to states for mental health services. Federal agencies have supported the development of the MHSIP Consumer Survey, ECHO, and HCAPS.


The Final Report of the Mental Health Statistics Improvement Program (MHIP) Task Force on a Consumer-Oriented Mental Health Report Care. 1996. MHSIP.


Domain 1: Outcome of Care


Domain 2: Dignity


Domain 3: Rights


Domain 4: Participation


Walsh J., & Boyle J. (2009). Improving acute psychiatric hospital services according to inpatient experiences. A user-led piece of research as a means to empowerment. Issues in Mental Health Nursing. 30 (1), 31-38.

Domain 5: Environment


1b. Opportunity for Improvement

1b.1 Benefits (improvements in quality) envisioned by use of this measure: The ICS domains (measures) provide a summary of consumers’ evaluations on key areas of their experience of care. Direct feedback from consumers in areas such as dignity and rights could inform the therapeutic interactions between staffs and consumers which will ultimately produce better quality of life outcomes. These intermediate outcomes may foretell the likelihood that the client may return to receive further services when needed and participate in services in other venues. Direct feedback on outcomes and participation in treatment could inform the treatment activities and greater involvement of consumers in their own recovery. Each domain is comprised of distinct questions to enable the health care provider to target specific areas of performance.

1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:

Results of the pilot test indicated the following inter-quartile ranges for the pilot sites for the five domains in the survey: outcomes 58-76%, dignity 68-82%, rights 55-68%, participation in treatment 57-73%, and environment 55-77%. The inter-quartile ranges indicate variation across sites as well as overall room for...
improvement. The most recently completed reporting indicates average rating across sites as the following: outcomes 77%, dignity 80%, rights 65%, participation in treatment 75%, and environment 70% (inter-quartile ranges are not publically available).

1b.3 Citations for data on performance gap:


1b.4 Summary of Data on disparities by population group:
Key demographic questions allow for compiling results for groups of consumers, including by age, race/ethnicity, and length of hospital stay. Data on these subgroups are not publically available.

1b.5 Citations for data on Disparities:
N/A

1c. Outcome or Evidence to Support Measure Focus

1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population): Outcome of quality of life and quality of care

The ICS was developed through consensus and pilot testing with consumers of inpatient psychiatric services. The consumer voice played a significant role in developing questions for the survey and identifying areas that would measure a provider’s attention to the consumer’s recovery. The ICS domains (measures) provide two outcome measures (perception of outcomes of care and participation in treatment) and three intermediate outcome measures (dignity, rights, and environment). Inpatient care can be client centered and use the voice of the consumer to develop and modify care practices, particularly in relation to dignity, rights, and participation in treatment. Direct feedback on outcomes and participation in treatment indicate the extent to which the hospital has addressed the care needs of the consumer and involved the consumer in his/her recovery. Consumers expect treatment to address their needs and to use their input in its development. Ultimately, consumers continuing on the path of recovery will seek services when there has been a positive prior experience, reducing the use of forced care. Positive experiences with providers that are publicly displayed as ratings of providers may also reduce the stigma of mental illness. Accepting direct feedback from consumers in areas such as dignity and rights acknowledges the value of the consumer and the personal attributes of recovery.

1c.2-3. Type of Evidence: cohort study, expert opinion, meta-analysis, other (specify) consensus

1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome):
It is accepted that consumer evaluation of care is fundamental to ensuring that the care processes address the needs of the consumer. Consumer’s perception of improvement relates to improved functioning and self-management of illness. There is general consensus in the mental health field as to the domains a consumer survey should address and that the healthcare provider can either control their actions within a domain or assist the consumer with understanding both parties limitations (for example, mandated care often results in a consumer feeling a lack of control over their destiny and recovery, while a treatment approach to such an issue could address advanced directives returning the power to the consumer).

The questions in the survey were developed through consensus and expert opinion, where consumers who had prior psychiatric hospital stays helped to identify core aspects of care. Survey development included a pilot test with feedback from sites and recipients of the survey. Multiple analyses were performed, including meta-analysis, where each site served as a separate cohort to confirm consistency in domain score patterns.
1c.5 Rating of strength/quality of evidence (also provide narrative description of the rating and by whom):
There is some standardization in the mental health field around consumer survey development, with a strong foundation in the Mental Health Statistics Improvement Program (MHSIP) Consumer Survey. The ICS development followed these standards and was presented to the MHSIP Advisory Council.

1c.6 Method for rating evidence: Not rated

1c.7 Summary of Controversy/Contradictory Evidence:

1c.8 Citations for Evidence (other than guidelines): Refer to 1a4 for citations for evidence.

1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number):

1c.10 Clinical Practice Guideline Citation:

1c.11 National Guideline Clearinghouse or other URL:

1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):

1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF):

1c.14 Rationale for using this guideline over others:

TAP/Workgroup: What are the strengths and weaknesses in relation to the sub-criteria for Importance to Measure and Report?

Steering Committee: Was the threshold criterion, Importance to Measure and Report, met?
Rationale:

2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)

2a. MEASURE SPECIFICATIONS

S.1 Do you have a web page where current detailed measure specifications can be obtained?
S.2 If yes, provide web page URL:

2a. Precisely Specified

2a.1 Numerator Statement (Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome):
Number of clients who respond positively to the domain. Domains include outcome, dignity, rights, treatment, and environment. Each domain is calculated separately.

Five domains are embedded in the survey. Facilities can choose to participate in any of the five performance measures, one for each domain. The outcome domain includes questions about the effect of the hospital stay on the clients’ ability to deal with their illness and with social situations. The dignity domain includes questions about the quality of interactions between staff and clients that highlight a respectful relationship. The rights domain includes questions about the ability of clients to express disapproval with conditions or treatment and receive an appropriate response from the organization. The participation in treatment domain includes questions about clients’ involvement in their hospital treatment

Rating: C=Completely; P=Partially; M=Minimally; N=Not at all; NA=Not applicable
as well as coordination with the clients’ doctor or therapist from the community. The facility environment domain includes questions about feeling safe in the facility and the aesthetics of the facility.

2a.2 **Numerator Time Window** *(The time period in which cases are eligible for inclusion in the numerator)*:
During month of client discharge or during month of annual review for the client.

2a.3 **Numerator Details** *(All information required to collect/calculate the numerator, including all codes, logic, and definitions)*:
Clients who are discharged or have an annual review during the month, complete at least 2 questions in the domain, and average a positive rating for those questions.

A positive rating is a categorization of the responses in the domain. Each item is evaluated on a 5-point scale where 1 represents strongly disagree and 5 represents strongly agree. The values for items in the domain are averaged. When the average score for a domain is greater than 3.5, the response is categorized as responded positively.

2a.4 **Denominator Statement** *(Brief, text description of the denominator - target population being measured)*:
Number of clients completing at least 2 items in the domain. Domains include outcome, dignity, rights, treatment, and environment. Each domain is calculated separately.

2a.5 **Target population gender**: Female, Male
2a.6 **Target population age range**: Adolescent age 13-17 years and adults age 18 and older

2a.7 **Denominator Time Window** *(The time period in which cases are eligible for inclusion in the denominator)*:
During month of client discharge or during month of annual review for the client.

2a.8 **Denominator Details** *(All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions)*:
Clients who were discharged or had an annual review during the month and completed at least 2 questions in the domain. The count of clients is determined separately for each domain.

2a.9 **Denominator Exclusions** *(Brief text description of exclusions from the target population)*: Non-respondents, persons who submit a blank survey, and persons completing only 1 question in the domain.

2a.10 **Denominator Exclusion Details** *(All information required to collect exclusions to the denominator, including all codes, logic, and definitions)*:

2a.11 **Stratification Details/Variables** *(All information required to stratify the measure including the stratification variables, all codes, logic, and definitions)*:
Age, Sex, Race, LOS. Stratifications can be compiled using the demographic items in the survey.

2a.12-13 **Risk Adjustment Type**: Other (specify) No risk adjustment and we have no plans to risk adjust on the basis of patient factors. Stratifications have been preferred by users.

2a.14 **Risk Adjustment Methodology/Variables** *(List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method)*:
None

2a.15-17 **Detailed risk model available Web page URL or attachment**:

2a.18-19 **Type of Score**: rate/proportion
2a.20 **Interpretation of Score**: better quality = higher score
2a.21 **Calculation Algorithm** *(Describe the calculation of the measure as a flowchart or series of steps)*:
Each domain is calculated separately using the same steps. The score for a client is calculated first. Scores across clients are combined to create a measure rate. Each item is evaluated on a 5-point scale where 1=strongly disagree to 5=strongly agree and 9=not applicable.
1. For each client, count number of valid responses within the domain (valid values are 1, 2, 3, 4, 5)
   a. If number of valid responses >=2, calculate domain score
      i. Sum response values across items (exclude value 9 for NA)
      ii. Divide by number of responses
      iii. If result is > 3.5, classify client as “respond positively”
   b. If number of valid responses < 2, skip domain score
2. For a facility (organizational entity), calculate measure rate
   a. Numerator: Count number of clients categorized as “respond positively” for domain
   b. Denominator: Count number of clients with number of valid responses >=2 for the same domain

2a.22 Describe the method for discriminating performance (e.g., significance testing):
Control charts use the "p" chart method for proportion measures. Comparison charts use standard 99% confidence intervals.

2a.23 Sampling (Survey) Methodology If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):
All clients eligible for discharge and annually for continuing clients should be given an opportunity to complete the survey. Sampling is not suggested. Clients have the option to complete the survey. At least a 25% response rate should be reached to have a degree of confidence in results.

2a.24 Data Source (Check the source(s) for which the measure is specified and tested)
registry data

2a.25 Data source/data collection instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):
Inpatient Consumer Survey (ICS) collection instrument


2a.29-31 Data dictionary/code table web page URL or attachment: URL www.nri-inc.org/projects/bhpms/tools.cfm

2a.32-35 Level of Measurement/Analysis (Check the level(s) for which the measure is specified and tested)
Facility/Agency, Population: national, Other can be measured at program units and state if data are specified

2a.36-37 Care Settings (Check the setting(s) for which the measure is specified and tested)
Hospital, Long term acute care hospital, Behavioral health/psychiatric unit

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)
Behavioral Health: Mental Health, Behavioral Health: Substance use treatment

TESTING/ANALYSIS

2b. Reliability testing

2b.1 Data/sample (description of data/sample and size): The Inpatient Consumer Survey (ICS) was pilot tested by 15 state psychiatric hospitals during November 2000 through February 2001. A total of 1,027 consumers completed the survey. Forty-nine percent of the consumers were 35-54 years old, 26% were ages between 25-34, 16% were between 18-24, and 9% were 55 and older. Fifty-nine percent of consumers were White, 30% were Black, 3% were Hispanic, 5% were consumers from other race-ethnicity (Asian/Pacific, Native-American). The sample was comprised of 62% males and 38% females. More than half (51%) of the consumers were singles, 16% were in a relationship either married or cohabitating, and 33% were formerly married. Most of the consumer (76%) completed the survey at the time of discharge. Seventy percent of the
consumers had a hospital stay of one month or less. The legal status or commitment for the participating consumers was: 46% voluntary, 36% civil, 12% criminal, 6% other legal status.

2b.2 Analytic Method (type of reliability & rationale, method for testing):
Three different versions (A, B, and C) of the ICS were created to evaluate the effect of different ordering of the questions. Seventy-six percent of the responses were on Version C. Only three facilities submitted responses from at least two survey versions. Given the limited number of responses on the other two versions, testing for differences across versions was not practical. Prior research has found that when questions are grouped by domain, the internal variation for that domain is lower than when questions are not clustered in the instrument.

The ICS Version C was composed of 43 items evaluating consumer care organized by conceptual domains. The surveys from Version C (n=776) were used for further analysis. To evaluate the reliability or reproducibility of the ICS Version C, Cronbach’s alpha was used to estimate the correlation coefficient. The evaluation of the reliability of a scale is of particular interest because it evaluates the associations between pairs of variables being used to measure a construct of interest. The main interest of the ICS is to evaluate the satisfaction with the mental health services perceived by inpatient consumers. As satisfaction with care is a construct that cannot be measured directly, there is a strong dependence of this construct with the variables or items in the scale therefore, the association between them is necessary. Beginning with an analysis of association between variables is the first step for the establishment of a correlation effect between them and the construct under study.

2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted):
Internal consistency reliability for the 43-item scale was excellent (a =.986). Analysis of the item statistics showed that at least two items could be candidate for removal (questions 7 and 39) but they showed moderate to good correlation with the other items and no negative effect on the Cronbach’s alpha value if deleted. Therefore, both items remained on the scale for further analysis. The inter-item correlation for the overall sample indicated considerable correlation among the items, ranging from .25 to .73. Such inter-item correlation suggests that scales developed from the items would also be correlated.

Reliability statistics for the final 5 domains ranged from .80-.89. Third year implementation data indicated Cronbach’s alpha in the range of .80 -.87 across the five domains.

2c. Validity testing

2c.1 Data/sample (description of data/sample and size): The sample used for validity testing was the same one used for reliability testing. (see 2b1 above).

2c.2 Analytic Method (type of validity & rationale, method for testing):
Face, content, and construct validity were used to evaluate if the ICS Version C measured what it was intended to measure. Face validity is a type of content validity and was used to build consensus among stakeholders. For the development of the ICS a workgroup of consumers and state mental health agency representatives provided active feedback, their knowledge, and expertise for the development of the scale. Content validity assures the adequacy with which a measure indexes a specific domain content. It is the evidence that the ICS covers all aspects of the satisfaction perceived by inpatient consumers in state psychiatric hospitals.

Construct validity evaluates the correspondence between items in the scale. Factor analysis is a statistical tool use to examine the correlations among variables in a scale. It identifies groups of variables that are highly correlated. Factor analysis involves observed and unobserved (also called latent) variables and assumes that the latent variables explain the correlations among the observed variables. Two types of factor analysis were used during the construction of ICS: exploratory and confirmatory factor analyses. Exploratory factor analysis was helpful in exploring and summarizing the underlying structure of the data set. The confirmatory factor analysis was used to test the structure of the data set against a proposed structure.

Exploratory factor analysis was used to remove redundancy or duplication from the set of correlated variables (also known as data reduction), and to determine underlying latent variables or factors among the
set of indicators. It was helpful generating hypothesis regarding the factors proposed by the ICS workgroup and the respective indicators. Exploratory factor analysis establishes correlation structure between indicators but no causal inferences can be made. Then, confirmatory factor analysis was used for testing the hypothesis and to determine any causal relationship among the proposed factors and the indicators.

2c.3 Testing Results *(statistical results, assessment of adequacy in the context of norms for the test conducted)*:
The exploratory factor analysis indicated five dimensions for the scale. As is common with initial factor analysis, several questions aligned with multiple factors. As the goal of exploratory analysis is to create a factor structure such that each question aligns with only one factor and its' loading with that factor is large, questions that have low weights were deleted. The analysis was redone to assess the integrity of the factor structure given the reduced number of items. Questions with high rates of missing information and questions that load on several factors were the first consideration for removal. Some of the questions with high rates of missing data (more than 10%) related to medication, participation in discharge planning, and satisfaction with staff identified by specialty. Two medication related questions fell into different domains, suggesting association with different aspects of care. Questions related to participation in discharge planning held together in a factor. When responses across the staff specialty questions were averaged, lower rates of missing information were obtained. However, these questions did not load well with any factor nor did they hold together in a factor by themselves.

Confirmatory factor analysis requires that all cases used in the analysis have complete data. The factor structure analysis was completed on this subset of surveys. The five factors were tentatively called: outcome, rights, dignity, participation, and environment. The confirmatory analysis supported the five-factor structure and reduced set of questions. Each question remaining in the analysis had a strong loading (at least .7) on only one factor. The factor structure provides good fit based on the chi-square test ($X^2=383.808$, df=125, $p<.001$). The fit index statistics for confirmatory factor analysis recommended to be reported are the comparative fit index (CFI) to be equal or greater than 0.95, and the standardize root mean square residual (SRMR) to be less than 0.08. For the ICS, the CFI was 0.97 and the SRMR was 0.079. In addition, the Hierarchical Path Model provided a schematic for the relationship among the five factors. The four factors of rights, dignity, participation, and environment generate at a similar strength from a general factor (coefficients of .94, .93, .84, .92 respectively). The dignity and participation factors then have a positive direct relationship to the outcome factor (.56 and .34 respectively), while the rights and environment factors have negligible direct relationships. The strength of these relationships to outcomes would be interpreted in the low-moderate range.

A 28-item well constructed scale, seven additional demographic variables about consumers, and three variables about method of administration was the outcome of the rigorous analysis performed on the ICS. The five domains use 18 items; the remaining items address general satisfaction, staff, and medications.

Testing results were presented to the ICS workgroup for acceptance and the final reduced item tool was constructed. Results were also presented to the MHSIP Advisory Group.

2d. Exclusions Justified

2d.1 Summary of Evidence supporting exclusion(s):
Non-respondents, clients with 1 or no responses to items in a domain cannot create a composite mean.

2d.2 Citations for Evidence:
N/A

2d.3 Data/sample *(description of data/sample and size)*: N/A

2d.4 Analytic Method *(type analysis & rationale)*:
N/A

2d.5 Testing Results *(e.g., frequency, variability, sensitivity analyses)*:
N/A
### 2e. Risk Adjustment for Outcomes/ Resource Use Measures

#### 2e.1 Data/sample (description of data/sample and size):

- **Type:** Data/sample
- **Description:**
  - Description of data/sample and size

#### 2e.2 Analytic Method (type of risk adjustment, analysis, & rationale):

- **Type:** Analytic Method
- **Description:**
  - Type of risk adjustment, analysis, & rationale

#### 2e.3 Testing Results (risk model performance metrics):

- **Type:** Testing Results
- **Description:**
  - Risk model performance metrics

#### 2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:

Risk adjustment has not been applied to the survey. Stratified reports are preferred by users and highlight any disparities within the user's client population.

### 2f. Identification of Meaningful Differences in Performance

#### 2f.1 Data/sample from Testing or Current Use (description of data/sample and size):

- **Type:** Data/sample
- **Description:**
  - Description of data/sample and size
  - The initial pilot included 15 psychiatric hospitals and a convenience sample of consumers at each hospital resulting in 1027 consumer surveys.

#### 2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale):

- **Type:** Methods
- **Description:**
  - Type of analysis & rationale
  - Each question is evaluated on a scale from strongly disagree to strongly agree. For purposes of computing averages, a number value is given to the qualities of the scale from 1 for strongly disagree to 5 for strongly agree. A client must respond to a minimum of 2 questions in order for an average rating to be computed for the domain. Since there are only 3 to 4 questions in a domain, missing values are not inserted when a client does not answer a question. When the average rating for the questions in the domain is greater than 3.5, the client is considered to have “responded positively” to the domain. Then the proportion of clients who responded positively to the domain is determined as the ratio of the number of clients who responded positively to all clients who responded to the domain.

To determine statistical significance, these indicators fall into the “proportion” class. Proportion indicators follow a binomial distribution where the mean is denoted as p and the variance is denoted as p*(1-p). This information will be useful for tests of significant differences between a facility’s rate and an overall average using control chart and comparison chart techniques.

#### 2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):

- **Type:** Measure Scores
- **Description:**
  - Description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance
  - Results of the pilot test indicated the following inter-quartile ranges for the pilot sites for the five domains in the survey: outcomes 58-76%, dignity 68-82%, rights 55-68%, participation in treatment 57-73%, and environment 55-77%. The inter-quartile ranges indicate variation across sites as well as overall room for improvement. The most recently completed reporting indicates average rating across sites as the following: outcomes 77%, dignity 80%, rights 65%, participation in treatment 75%, and environment 70% (inter-quartile ranges are not publically available).

### 2g. Comparability of Multiple Data Sources/Methods

#### 2g.1 Data/sample (description of data/sample and size):

- **Type:** Data/sample
- **Description:**
  - Not applicable. There is a single data source.

#### 2g.2 Analytic Method (type of analysis & rationale):

- **Type:** Analytic Method
- **Description:**
  - Not applicable

#### 2g.3 Testing Results (e.g., correlation statistics, comparison of rankings):

- **Type:** Testing Results
- **Description:**
  - Not applicable

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**Rating:**
- C=Completely
- P=Partially
- M=Minimally
- N=Not at all
- NA=Not applicable
# 2h. Disparities in Care

2h.1 **If measure is stratified, provide stratified results** *(scores by stratified categories/cohorts)*: Stratification is optional. Comparative data depends on users’ participation with other facilities.

2h.2 **If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans:**

## TAP/Workgroup: What are the strengths and weaknesses in relation to the sub-criteria for Scientific Acceptability of Measure Properties?

2

**Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met?**

**Rationale:**

### 3. Usability

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. *(evaluation criteria)*

#### 3a. Meaningful, Understandable, and Useful Information

**3a.1 Current Use:** in use

**3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large) (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years):**

The measure steward provides a summary public report that provides the overall rating for each domain. This report is provided as a simple percent of consumers who rated the domain positively, using all consumer surveys across all fee-for-service participants. The report is updated quarterly as data are finalized and posted on the steward’s website (http://www.nri-inc.org/reports_pubs/2009/National_Public_Rates.pdf). The posting of a public report is based on agreements with participants to display only aggregate rates. The public report provides hospitals that do not participate in the fee-for-service system with a benchmark of average performance.

Many psychiatric hospitals also use the measures as part of their accreditation requirements with The Joint Commission. Since these measures fall into the category known as “non-core,” they are not publicly reported by The Joint Commission. However, hospitals are encouraged to display their measure rates as a demonstration to their consumers of quality improvement initiatives.

**3a.3 If used in other programs/initiatives (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years):**

The measure steward operates a performance measurement system for psychiatric facilities (mostly hospitals, but also some residential programs). The performance measurement system is used by the fee-for-service participants as an administrative agent to aggregate and combine data from multiple health care organizations to provide both control chart analysis and comparisons. To supplement the control charts, additional reports are provided by the steward. In addition, each participant relies on their local data to interpret their performance and any movement/change in performance. The measure steward’s main website for the performance measurement system is secure to protect the data on the individual consumers of services. The measure steward provides introductory information through a non-secure website (http://www.nri-inc.org/projects/BHPMS).

**Testing of Interpretability** *(Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)*

**3a.4 Data/sample (description of data/sample and size):** The initial pilot included 15 psychiatric hospitals
and a convenience sample of consumers at each hospital resulting in 1027 consumer surveys.

3a.5 **Methods** (*e.g.*, focus group, survey, QI project): A meeting was held with participants of the pilot study and the task group that initially developed the survey tool to review feedback on the tool itself and the initial measure calculation and reports developed by the measure steward. Participants commented on wording, readability, length, redundancy, and items that were not clear. The task group then revised the survey and shared the final product with the pilot sites for comment. The final version was also shared with the MHSIP Advisory Group for comment. Feedback was incorporated into the survey, instructions, and reports. Learning from the pilot study was shared widely with fee-for-service participants by the measure steward. The steward then provided training on the use of the survey, how the domain scores are calculated, and how results would be displayed. The final instrument and domains were submitted to The Joint Commission for listing as non-core measures by the measure steward.

3a.6 **Results** (*qualitative and/or quantitative results and conclusions*): Pilot sites all reported that their individual reports were clear and understandable and that changes in the survey after the pilot were useful. The MHSIP Advisory Group endorsed the survey tool. The Joint Commission has listed the measures in the accreditation process for hospital and behavioral health programs. A steady increase in participating has occurred over the past five years. Many participants share their rates and quality improvement actions in professional meetings.

3b/3c. **Relation to other NQF-endorsed measures**

3b.1 **NQF # and Title of similar or related measures:**

<table>
<thead>
<tr>
<th>NQF #</th>
<th>Title</th>
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<tbody>
<tr>
<td>#0008</td>
<td>Experience of Care and Health Outcomes (ECHO), Agency for Healthcare Research and Quality;</td>
</tr>
<tr>
<td>#0166</td>
<td>HCAPS, Centers for Medicare and Medicaid Services</td>
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(for NQF staff use) **Notes on similar/related endorsed or submitted measures:** Current measure under review is similar/related to two currently endorsed measures, but utilizes different specs and had a different patient population focus. Please see below for complete measure specs.

**NQF #0008**

**Title**  Experience of Care and Health Outcomes (ECHO) Survey (behavioral health, managed care versions)

**Description** 52- questions including patient demographic information. The survey measures patient experiences with behavioral health care (mental health and substance abuse treatment) and the organization that provides or manages the treatment and health outcomes. Level of analysis: health plan-HMO, PPO, Medicare, Medicaid, commercial

**Numerator** Download survey tool and instructions:


**Measure developer/instrument web site:**


**Denominator**

**Exclusions**

**Adjustments**

**Steward(s)**  Agency for Healthcare Research and Quality

**Project(s)**  National Voluntary Consensus Standards For Clinically Enriched Administrative Data

**Endorsed**  2007-07-01

**Maintenance**  scheduled for 2010-07-01

**NQF #0166**

**Title**  HCAHPS

**Description** 27-items survey instrument with 7 domain-level composites including:

communication with doctors, communication with nurses, responsiveness of hospital staff, pain control, communication about medicines, cleanliness and quiet of the hospital environment, and discharge information

Numerator

Denominator

Exclusions

Adjustments
### Steward(s)
Centers for Medicare & Medicaid Services

### Project(s)
Patient Perspective of Care- HCAHPS 2005

### Endorsed
2005-05-01

### Maintenance
scheduled for 2012-07-02

#### 3b. Harmonization
If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source or different topic but same target population):

3b.2 Are the measure specifications harmonized? If not, why?

While the ICS is similar to two other surveys endorsed by NQF, there are notable differences that would not allow for harmonization. First, the survey itself is different, covering different aspects of care, and the surveys are direct responses from consumers. Second, the ICS is designed and tested for inpatient psychiatric care settings only, so that the focus of the questions can be specific to psychiatric care. The ECHO is designed as an analysis of the health plan, and the HCAPS is designed for general hospital care with a focus on pain management and medicine.

#### 3c. Distinctive or Additive Value

3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:

The ICS was designed and tested for inpatient psychiatric care settings only, so that the focus of the questions can be specific to psychiatric care. Prior consumers had a strong voice in the development of the survey questions. The ICS adds new domains and the focus of those domains is the consumer - his/her needs, interactions, and outcomes.

5.1 Competing Measures If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), describe why it is a more valid or efficient way to measure quality:

All items in the ICS are evaluated on a 5-point Likert scale for ease of use. Every item has a “not applicable” option. In other surveys, a simple Yes/No item may be threatening and items with “skip to” can be confusing.

Five-point summated scales, like ICS, provides the opportunity of performing analysis of variation across respondents, and in our setting across facilities as well. Using a 5-point Likert scale provides the variation that a Yes/No answer cannot provide therefore, the scale is not at risk of denying respondents with more extremes attitudes to express their opinions.

#### TAP/Workgroup: What are the strengths and weaknesses in relation to the sub-criteria for Usability?

3

Steering Committee: Overall, to what extent was the criterion, Usability, met? Rationale:

#### 4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

4a. Data Generated as a Byproduct of Care Processes

4a.1-2 How are the data elements that are needed to compute measure scores generated?
Survey,

4b. Electronic Sources

4b.1 Are all the data elements available electronically? (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims)
No
4b.2 If not, specify the near-term path to achieve electronic capture by most providers. Consumer surveys tend to be paper-based and anonymous. However, the steward will be looking at direct entry by consumers and aligning with an EHR.

4c. Exclusions

4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No

4c.2 If yes, provide justification.

4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences

4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. The survey is paper-based and must be entered into a computer system for analysis. Transcription errors can be audited by double-keying surveys or a random check of keying. Low response rates may skew results and users should monitor response rates.

4e. Data Collection Strategy/Implementation

4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/implementation issues:
Response rates can be improved through actively incorporating the survey into the discharge process, annual treatment review process, and promotion at meetings with consumers. The survey can be anonymous; surveys that are identified should be clearly explained to the consumer.

4e.2 Costs to implement the measure (costs of data collection, fees associated with proprietary measures):
Staff time needs to be allocated to entering survey responses into a database (1 minute per survey). Staff time should be allocated to tracking response rates and promotion of the survey. There may be some instances where consumers need assistance completing the survey and staff time for this activity should be allocated. The survey tool is free from the steward.

4e.3 Evidence for costs:
Feedback from current users.

4e.4 Business case documentation: Ultimately, outcomes must be evaluated from the perspective of the person who receives services from the healthcare organization. Fortunately, this perspective has gained considerable strength over the past 20 years and measurement is more widespread and frequent; however, standardized and validated tools are limited. If real improvement is to be achieved within an organization, responding to the perspective of the client must be a core component. Nearly 20 years ago, the US Department of Health and Human Services considered requiring performance measures with specific objectives as part of the Performance Partnership Grants. Among the early list of outcome measures for mental health were patient satisfaction with access, appropriateness, and person outcomes. While initial focus was on public accountability, focus has shifted to using the consumer’s feedback to directly impact the provision of care.

TAP/Workgroup: What are the strengths and weaknesses in relation to the sub-criteria for Feasibility?

Steering Committee: Overall, to what extent was the criterion, Feasibility, met?
Rationale:
### RECOMMENDATION

(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.

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#### Steering Committee: Do you recommend for endorsement?

**Comments:**

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<tr>
<td>Y</td>
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<td>N</td>
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<td>A</td>
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### CONTACT INFORMATION

Co.1 **Measure Steward (Intellectual Property Owner)**  
Co.1 **Organization**  
National Assoc. of State Mental Health Program Directors Research Instit., Inc. (NRI) | 66 Canal Center Plaza, Suite 302 | Alexandria | Virginia | 22314

Co.2 **Point of Contact**  
Lucille | Schacht, Ph.D. | lucille.schacht@nri-inc.org | 703-682-9460-175

Co.3 **Measure Developer if different from Measure Steward**  
Co.3 **Organization**  
National Assoc. of State Mental Health Program Directors Research Instit., Inc. (NRI) | 66 Canal Center Plaza, Suite 302 | Alexandria | Virginia | 22314

Co.4 **Point of Contact**  
Lucille | Schacht, Ph.D. | lucille.schacht@nri-inc.org | 703-682-9460-1

Co.5 **Submitter if different from Measure Steward POC**  
Lucille | Schacht, Ph.D. | lucille.schacht@nri-inc.org | 703-682-9460-175 | National Assoc. of State Mental Health Program Directors Research Instit., Inc. (NRI)

Co.6 **Additional organizations that sponsored/participated in measure development**  
SAMHSA/CMHS co-sponsored a meeting of consumers. The MHSIP Advisory Group also participated in measure development.

### ADDITIONAL INFORMATION

**Workgroup/Expert Panel involved in measure development**

Ad.1 Provide a list of sponsoring organizations and workgroup/panel members’ names and organizations. Describe the members’ role in measure development.

Original Workgroup (Creating original 43 item survey and signed off the original 28 item survey): Cindy Hopkins (Consumer group /MHSIP, Texas), Mary Smith (MHSIP, Illinois), and Jack Wackowitz (Contractor NRI/UK, Colorado)

Assessment Workgroup (modifying the 28 item survey and finalizing the survey): Vijay Ganju (Texas), Doug Hancock (Texas), Tom Muller (Georgia), Randy Koch (Virginia), Mary Smith (Illinois), Jack Wackowitz (Colorado), Huyi Hines (University of Kentucky-BHPMS Staff), Robert Littrell (University of Kentucky BHPMS Staff), Lucille Schacht (NRI), and Ted Lutterman (NRI)

The workgroup researched other surveys and scales measuring patient satisfaction with care and health outcomes. They provided recommendations and suggestions of questions and domains to include as well as plan for how to pilot the study and prepare for implementation and analysis.

NRI invited consumers and the MHSIP Policy Group to assist the NRI in formulating an Inpatient version of the MHSIP Consumer Survey The workgroup was formed consisting of a representative from these two groups, a research consultant, and NRI-BHPMS staff. The outcome of a series of meetings was an instrument consisting of 43 total items organized around six conceptual domains and a plan for implementation and analysis.

There were several expectations of the pilot study. First, the pilot study was to test the instrument and ease of administration. Second, determine the inherent factors of the instrument to develop indicators for performance measures. Third, confirm that the instrument was able to detect differences across facilities and provide facilities with information for targeted quality improvement activities. Fourth, determine whether differences in patient
characteristics may impact performance rates. Finally, create a revised instrument that facilities could use for their performance indicators reported to TJC.

| Ad.2 If adapted, provide name of original measure: | MHSIP Consumer Survey (an outpatient survey) was used as a foundation but significant changes were made to address the inpatient environment. |
| Ad.3-5 If adapted, provide original specifications URL or attachment |
| Measure Developer/Steward Updates and Ongoing Maintenance |
| Ad.6 Year the measure was first released: | 2002 |
| Ad.7 Month and Year of most recent revision: | 0-0 |
| Ad.8 What is your frequency for review/update of this measure? | annually |
| Ad.9 When is the next scheduled review/update for this measure? | 2010-10 |
| Ad.10 Copyright statement/disclaimers: | The ICS is copyrighted to NRI but the NRI does not charge for the use of the survey and distributes it for free. For inclusion into our comparison group you must however, participate in the NRI’s performance measurement system, known as the BHPMS. |
| Ad.11 -13 Additional Information web page URL or attachment: |
| Date of Submission (MM/DD/YY): | 02/02/2010 |