# 2016 PASRR National Report

## A Review of Preadmission Screening and Resident Review (PASRR) Programs


A joint partnership of Truven Health Analytics

Mission Analytics Group, Inc.

Prepared for the Centers for Medicare and Medicaid Services

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## Executive Summary

This fifth Preadmission Screening and Resident Review (PASRR) National Report updates the findings of our 2015 National Report on nursing home data, and begins a new analysis of measures that states can use to help support quality monitoring and quality improvement (QM/QI) in their PASRR programs. Nursing home data continue to indicate that in most states, while PASRR is working fairly well at identifying individuals with intellectual disability (ID) and related conditions (RC), PASRR significantly under-identifies individuals with serious mental illness (SMI).

### Background

Individuals with SMI or ID/RC who require long-term care have special protections under PASRR in Medicaid law to ensure that long term services and supports (LTSS) are provided in the most integrated setting that meets the individual's needs and preferences. These PASRR protections align with state obligations under the Americans with Disabilities Act (ADA) and the Supreme Court's decision in *Olmstead* to serve people in the most integrated setting appropriate. PASRR requires that individuals with SMI or ID/RC not be admitted to Medicaid-certified nursing facilities (NFs) until a full assessment is made, community alternatives are identified, and person-centered services are recommended to meet the individual's PASRR-related needs. For NF residents, PASRR also requires Resident Reviews to identify service and support needs when there are significant changes in condition, such as to increase independence, and coordinate transition planning from NFs back to the community.

In 2012, PTAC published the first PASRR National Report, focused on the Level II evaluation tools that states administer to individuals who have shown evidence in a preliminary screen (Level I) of having SMI or ID/RC as defined in PASRR regulations (42 CFR 438.100-138). The second National Report, published in 2013, showed a dramatic improvement in the comprehensiveness of most Level II tools.

In 2014, we turned our attention from reviewing Level II tools to two activities:

1. Assessing the tools that states use for their preliminary Level I screens
2. Analyzing PASRR-related items in the Minimum Data Set (MDS), the federally mandated assessment administered to all residents of Medicare- and Medicaid-certified nursing homes, upon admission and at regular intervals thereafter.

The 2015 National Report updated our findings in both areas – Level I screens and MDS.

In the current version of the National Report, we update our MDS findings to include data through the end of calendar year 2015. We also turn our attention to a new area: measures that can help states monitor and improve their PASRR programs.

### Quality Monitoring and Quality Improvement

The PASRR regulations at 42 CFR 483.100-138 require very little in the way of reporting from states. To improve the quality of PASRR programs nationwide, it would be helpful to have state-level data about the number of individuals who are assessed through PASRR, and what the findings are for those individuals.

The basic framework for PASRR data reporting follows from the three main goals of PASRR:

1. To evaluate all applicants to Medicaid-certified nursing facilities (NFs) for evidence of serious mental illness (SMI), intellectual disability (ID), or a related condition (RC);
2. To ensure individuals are living in the most appropriate setting, whether in the NF or in the community, based on their desires and needs; and
3. To recommend PASRR-related services that individuals need, wherever they are placed.

Ideally, states would report data that give CMS the means to evaluate the degree to which their PASRR programs accomplish these goals. Practically, the data must satisfy two requirements:

1. They must be informative. The data should give us information about a state's PASRR program that we would not otherwise have.
2. They must be reasonable for states to report. Specifically, these should be data the states might already be collecting for other purposes – for example, monitoring the performance of a contractor that performs Level II evaluations and determinations.

Table 1, below, lists the QM/QI measures we identified. These particular measures cannot provide information on every aspect of a state's PASRR program we might wish to know about – for example, the outcomes for individuals, or even whether Specialized Services

are being recommended for the individuals who need them. However, they represent an important first step towards quantifying key aspects of state programs.

These QM/QI measures fall into four broad categories: Level I screens, exempted hospital discharges (EHDs), preadmission Level II evaluations and determinations (including ultimate placements), and Level II Resident Reviews (again including ultimate placements).

Our goal was to collect information on three populations:

1. Individuals with SMI
2. Individuals with ID/RC
3. Individuals who had *both* SMI and ID/RC

PTAC examined the information we had on file about state PASRR programs, along with publicly available information. Next, we assembled state-specific fact sheets summarizing our current knowledge. If we knew that a state collected a given measure, we indicated "Yes"; if we had reason to believe that a state did *not* collect a given measure, we indicated "No"; if we did not know either way (which was true in the vast majority of cases), we indicated "No information" (NI).

In late July of 2016, PASRR program staff in each state received the fact sheet for their state, and they were given the option to update the information it contained. Thirty-two (32) states (62.7%) updated their fact sheets; ten (10) states (19.6%) acknowledged receiving the fact sheet, but did not provide updates; and nine (9) states (17.6%) did not acknowledge receipt, despite receiving a reminder roughly two weeks after the original fact sheet was distributed.

Of the 51 data elements we identified (listed in Table 1), only half of all states that responded could report on at least half of the measures for any of the three populations. In other words, a large share of states can report on few (and sometimes none) of these QI/QM measures.

*Table 1: Data Elements for a Quality Monitoring Quality Improvement System in PASRR Systems*

| **Measure** |
|---|
| *Total # of NF admissions statewide* |
| Total # of Level I's performed statewide |
| # of Level I's that were done prior to admission |
| % of Level I's that were done prior to admission |
| # of positive Level I's |
| % of Level I's testing positive |
| # of negative Level I's |
| % of Level I's testing negative |
| *Exempted Hospital Discharges (EHDs)* |
| # of NF admissions |
| # of NF admissions under exempted hospital discharges (EHDs) |
| % of NF admissions under EHDs |
| # of EHDs with stays longer than 45 days |
| % of EHDs longer than 45 days |
| *Preadmission Evaluation (Preadmission Screens) – Level II evaluations* |
| # of preadmission screens (PAS) – Level II evaluations |
| # of PAS that were done prior to admission |
| % of PAS that were done prior to admission |
| # of positive PAS (i.e., finding of MI or ID/RC) |
| % of PAS leading to positive determinations |
| # of positive determinations that recommend Specialized Services |
| % of positive determinations that recommend Specialized Services |
| # of categorical determinations |
| % of categorical determinations |
| # of positive PAS recommending either community placement or any institutional placement |
| % of positive PAS recommending either community placement or any institutional placement |
| # of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) |
| % of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) |
| # of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) |
| % of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) |
| # of positive PAS recommending institutional placement (NF) |
| % of positive PAS recommending institutional placement (NF) |
| # of positive PAS recommending community placement |
| % of positive PAS recommending community placement |
| # of positive PAS leading to institutional placement (NF) |
| % of positive PAS leading to institutional placement (NF) |
| # of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) |
| % of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) |
| # of positive PAS leading to community placement |
| % of positive PAS leading to community placement |
| annual average time (days) between Level I and Level II PAS determination |
| *Resident Review (RR) – Level II evaluations* |
| # of resident reviews (RR) – Level II evaluations |
| # of positive RR (i.e., finding of MI or ID/RC) |
| % of RR leading to positive determinations |
| # of negative RR (i.e., finding of No MI, No ID/RC) |
| % of RR leading to negative determinations |
| # of positive RR recommending continued NF placement |
| % of positive RR recommending continued NF placement |
| # of positive RR recommending community placement |
| % of positive RR recommending community placement |
| # of positive RR leading to continued NF placement |
| % of positive RR leading to continued NF placement |
| # of positive RR leading to community placement |
| % of positive RR leading to community placement |

**Minimum Data Set (MDS)**

Version 3.0 of MDS contains two questions about whether a nursing home resident has previously been identified by PASRR as having SMI or ID/RC. Question A1500 (introduced in October 2010) asks whether an individual has previously been identified by the state PASRR Level II process as having any PASRR disability, and A1510 (introduced in April 2012) asks which type of PASRR disability an individual has.

The percentage of nursing home residents who should have been identified as having a PASRR-relevant disability in items A1500 and A1510 can be approximated from other items in the MDS that provide diagnostic data. Comparing the diagnostic data with the PASRR questions gives an indication of the extent to which nursing home residents with a PASRR- disability are being accurately identified – a fundamental measure of state PASRR program effectiveness and nursing facility compliance in completing the MDS.

We compared responses from the two PASRR MDS questions to responses from other MDS items that ask about PASRR-related diagnoses (note that MDS does not distinguish between ID and RC, and refers to both as ID/DD).

*SMI:*

- Items I5700-I6100: bipolar disorder, psychotic disorder, schizophrenia
- Item I8000: "additional active diagnoses", indicated with relevant ICD-9/10 codes under 295 and 296

*ID/RC:*

- Item A1550: Down syndrome, autism, epilepsy, "other organic condition related to ID/DD", "ID/DD with no organic condition"
- Item I8000: "additional active diagnoses," indicated with ICD-9/10 codes 317-319, 758, and V79

Our major finding this year reinforces findings from prior years: PASRR systems are not accurately detecting all individuals who are otherwise diagnosed with SMI. It should be noted, however, that there has been insufficient time to see improvements due to the changes states have made to their Level I tools following the 2014 National Report. Tables 2 and 3 present the count of individuals who were in nursing homes on December 31, 2012, 2013, 2014, and 2015 ("census" figures); the national numbers for PASRR-related disabilities as recorded in the PASRR-related items listed above; and the national

numbers for similar conditions. Because Question A1510 was not introduced until 2012, we present data only for 2012 to 2015.

In Table 2 below, the third column presents the numbers and percentages of individuals identified by the MDS PASRR items alone. The fourth column presents the number of individuals in column 3 *plus* any individuals identified as having ID/RC in item A1550. The fifth column presents the number of individuals in column 4 *plus* the number of individuals identified in item I8000 (ICD codes) as having ID/RC. In other words, the number of individuals identified as having ID/RC grows as we move from column 3 to column 4 to column 5.

As Table 2 shows, the number of individuals identified by PASRR as having ID/RC is about two thirds of the number of individuals recorded elsewhere in MDS as having those conditions. Among these individuals, PASRR appears to be working relatively well.

*Table 2: Rates of Intellectual Disabilities and Related Conditions in Nursing Homes (Year-End Census)*

| Year | Number of Nursing Home Residents (Census) | A1510B/C (PASRR) | A1510B/C *or* At Least One A1550 (PASRR *or* Other Dx) | A1510B/C *or* At Least One A1550 *or* At Least One I8000 (ICD) (PASRR *or* Other Dx) |
|---|---|---|---|---|
| 2012 | 1,112,300 | 2.1% (22,923) | 2.3% (25,543) | 3.1% (34,067) |
| 2013 | 1,296,028 | 2.2% (28,453) | 2.4% (31,501) | 3.2% (42,013) |
| 2014 | 1,292,578 | 2.2% (28,862) | 2.5% (32,070) | 3.3% (42,504) |
| 2015 | 1,268,609 | 2.3% (29,303) | 2.6% (32,518) | 3.1% (39,610) |

Table 3 shows a markedly different pattern for individuals with SMI, narrowly defined (bipolar disorder, schizophrenia, and psychosis): The number of individuals with SMI recorded in all diagnostic items was roughly 4.5 to 6 times greater than the number identified with SMI in the PASRR items alone.

In Table 3, the third column presents the numbers and percentages of individuals identified by the MDS PASRR items alone. The fourth column presents the number of individuals in column 3 *plus* any individuals identified as having SMI in items I5700 or I6100. The fifth column presents the number of individuals in column 4 *plus* the number of individuals identified in item I8000 (ICD codes) as having SMI. In other words, the number of individuals identified as having SMI grows as we move from column 3 to column 4 to column 5.

*Table 3: Rates of SMI (Narrowly Defined) in Nursing Homes (Year-End Census)*

| Year | Number of Residents on Dec 31 | A1510A (PASRR) | *SMI (Narrowly Defined)* | |
|---|---|---|---|---|
| | | | A1510A *or* At Least One I5700-I6100 (PASRR *or* Other Dx) | A1510A = 1 or At Least One I5700-I6100 or At Least One I8000 (PASRR *or* Other Dx) |
| 2012 | 1,112,300 | 3.6% (39,512) | 19.4% (215,497) | 21.3% (236,979) |
| 2013 | 1,296,028 | 4.1% (53,032) | 20.3% (263,561) | 22.3% (288,887) |
| 2014 | 1,292,578 | 4.5% (57,708) | 20.2% (261,341) | 22.3% (289,900) |
| 2015 | 1,268,609 | 4.8% (61,274) | 20.0% (253,917) | 21.4% (271,960) |

Previous research has shown that the prevalence of SMI (as defined for PASRR) in nursing home residents ranges from 7[1] percent to 27[2] percent. Our estimates land closest to the 27 percent figure.

[1] Bagchi, A., Verdier, J., Simon, S. (2009). How many nursing home residents live with a mental illness? *Psychiatric Services, 60*(70), pp. 958-964

[2] Grabowski, D., Aschbrenner, K., Feng, Z., and Mor, V. (2009). Mental illness in nursing homes: Variation across states. *Health Affairs*, *28*(3), pp. 689-700

In the body of this report, we also include data for SMI broadly defined (i.e., the narrow diagnoses *plus* depression, anxiety, and PTSD).

The extent of the difference between PASRR and MDS indicates that there are some significant problems. There are at least two general explanations for this difference (note that these explanations are not mutually exclusive):

1. MDS assessors are accurately recording in MDS the residents who have been determined by the state to have PASRR Level II status, but state PASRR programs are failing to identify all of the individuals with SMI. State PASRR programs could fail for a variety of reasons, including (but not limited to) poor or overly restrictive Level I screens, poor training of Level II evaluators, or overuse of the 30-day exempted hospital discharge and categorical determinations.
2. Nursing home assessors are not accurately recording PASRR status in MDS, failing to note individuals who do in fact have PASRR Level II evaluations. In other words, assessors are not completing the PASRR items in the MDS correctly.

Whatever the source(s) of this difference, many individuals with SMI are not being identified, and therefore not benefiting from PASRR. The result is that nearly 211,000 individuals with SMI (as of 2015) are not considered for community alternatives by a preadmission screen, and therefore may be inappropriately institutionalized.[3] Inappropriate institutionalization impacts beneficiaries on an individual level and in some instances could give rise to a civil rights concern. Once admitted to an institution, such individuals are not receiving the Specialized Services they need to preserve and improve their functioning. Without Specialized Services or Level II Resident Review, individuals are unlikely to transition successfully back into the community. PASRR is not merely an administrative step in the nursing home admission process – a series of boxes to be checked. On the contrary, PASRR affects lives.

**Next Steps**

CMS and PTAC will use the results of these analyses to continue our discussion with states about the need to track measures that would support quality monitoring and quality improvement, including some possible steps for instituting such tracking (e.g.,

[3] The figure of 211,000 comes from subtracting the number of people identified by PASRR (61,274) from the number of people who had some indicating of having SMI (271,960), which includes those identified by PASRR.

providing guidance for contracting with a vendor that can supply an electronic system for keeping track of individuals and their PASRR status).

PTAC will also perform additional analyses using MDS and other data sources to understand the source of differences in the results presented here, and estimate more definitively how many individuals *should* have been identified by PASRR as having a relevant disability (for example, by looking at activities of daily living (ADLs), instrumental activities of daily living (IADLs), medications, and other information). Our technical assistance will include developing training materials to improve PASRR identification of individuals with SMI in MDS, such as webinars and issue papers.

# 1 Introduction

In 1999, the United States Supreme Court issued a landmark decision with profound consequences for the way states provide long-term services and supports (LTSS) to individuals with disabilities. In *Olmstead v. L.C.*, the Court found that the provisions of the 1990 Americans with Disabilities Act (ADA) applied not only to individuals with physical disabilities, but also to individuals with mental disabilities. Just as crucially, the Court declared that individuals with disabilities should be served in the most integrated, least restrictive possible setting. Because many individuals with disabilities receive LTSS from Medicaid, the burden of meeting the Court's mandate has fallen largely to states, which operate their Medicaid programs in partnership with the Federal government.

Since the Court's decision, Congress has authorized several authorities in Medicaid law for providing community-based LTSS, along with several large grant programs. One of these programs, Money Follows the Person (MFP, first authorized in 2005), focused on transitioning individuals out of nursing facilities (NFs) and back into the community. These new authorities and grants provided levers and incentives for states to expand community based alternatives to institutional placements. Until recently, little attention was paid to a pre-*Olmstead* law that has been part of Title XIX of the Social Security Act since 1987: Preadmission Screening and Resident Review (PASRR). Created as part of the Nursing Home Reform Act, PASRR has important and unique powers in Medicaid law. It requires states to: 1) identify individuals who might be admitted to a NF who have a serious mental illness (SMI), or an intellectual disability (ID) or related condition (RC); 2) consider community placement first, and nursing facility only if appropriate; and 3) identify the PASRR-specific needs that must be met for individuals to thrive, whether in a NF or in the community. Therefore, leveraging the powers of PASRR can help states meet their Olmstead objectives.

The regulations that govern PASRR (42 CFR 483.100-138) require that states administer a PASRR program that has two steps. First, all individuals who apply for admission to Medicaid-certified NFs must be screened for the possibility that they have a PASRR disability. The Code of Federal Regulations (CFR) calls this a Level I screen. Individuals who "test positive" at Level I then receive a more in-depth evaluation to determine whether they have such a disability, and (if so) whether they need Specialized Services to address their PASRR-related needs. The CFR calls this a Level II evaluation. A positive Level II produces recommendations for the setting in which services should be received,

and recommendations for Specialized Services are intended to inform the individual's plan of care.

To help encourage states to conduct the necessary screens, evaluations and determinations, the law allows them to claim an enhanced Federal match of 75 percent for all activities related to the administration of the PASRR program. PASRR is classified as mandatory administrative function rather than a direct service function as outlined in Section 4.39 of a State's Medicaid State Plan.

Because many of the administrative functions that are contained in the Medicaid State Plan remain constant over time, programs such as PASRR may not come under review by CMS on a regular basis for updating and revision. The design and implementation of PASRR can thus drift away from requirements and good practice, reducing its effectiveness.

While CMS has long been committed to helping states improve their PASRR programs, it has not until recently had the ability to provide technical assistance, or to conduct an empirical analysis of PASRR design and implementation. In 2009, prompted in part by a series of reports on PASRR from the Office of the Inspector General (OIG) and the Substance Abuse and Mental Health Services Administration (SAMHSA), the Centers for Medicare and Medicaid Services (CMS) returned focus to PASRR and funded the creation of the PASRR Technical Assistance Center (PTAC). A central aim of PTAC is to help states improve their PASRR programs, not only to bring them into compliance with Federal regulations, but also to integrate those programs with broader *Olmstead* efforts.

In 2012, PTAC released the first-ever national review of state PASRR programs. The first edition of the PASRR National Report assessed the compliance of Level II tools with Federal regulations and with a small number of good, modern clinical practices. The next National Report, released in 2013, showed marked improvement in the degree to which Level II tools captured the data elements laid out in the 2012 report.

In the 2014 National Report, we turned our attention to two activities:

1. Analyzing the tools states use for their preliminary Level I screens.
2. Analyzing PASRR-related items in the Minimum Data Set (MDS), the federally mandated assessment administered to all residents of Medicare- and Medicaid-certified nursing homes, both shortly after admission and at regular intervals thereafter.

The analyses we present in this report update our 2014 findings on the PASRR-related characteristics of NF residents, using MDS data through the end of 2015. Also, for the first time, we turn our attention to measures that can help states implement quality monitoring and quality improvement (QM/QI) in their PASRR programs.

Our analyses cannot provide direct information about the *implementation* of a state's PASRR program. Similarly, analyses of MDS can tell us about the characteristics of individuals in nursing homes and about the similarities and differences between PASRR-identified residents and other residents, and comparisons across states. But an analysis of MDS, or of QM/QI measures, cannot directly tell us how those residents were evaluated, or whether the screening and evaluation they received was appropriate and properly performed.

The remainder of this report is organized as follows. Section 2 lays out our QM/QI approach, including the data elements that we believe can help states improve their PASRR programs in several areas, such as Level I screens, exempted hospital discharges, Level II evaluations, and Resident Reviews. Our chief finding is that only half of all states that responded could report on at least half of the measures for any of the three populations. In other words, a large share of states can report on few (and sometimes none) of these QM/QI measures.

Section 3 briefly reviews the relevant data collected in MDS, describes our methods for analyzing those data, and presents our findings. The key finding of this section remains unchanged from last year: the number of individuals who have been diagnosed with some form of SMI far exceeds the number of residents who have been identified by PASRR as having SMI. This suggests that PASRR programs may produce a high number of false negatives, meaning they fail to identify many nursing home residents who have SMI. As a result, some individuals are not receiving the Specialized Services they need to preserve and improve their functioning and become better candidates for transition back to the community. Section 4 sketches the next steps for PTAC and CMS, both to help states act upon these findings, and to conduct additional research.

We hope the 2015 National Report will help continue the productive conversations that have taken place over the last several years between (and among) states, CMS, and PTAC about how states can improve the data they collect about their PASRR programs; and about how MDS can be used to make PASRR more robust and effective for the individuals it is intended to help.

# 2 Quality Monitoring and Quality Improvement

The PASRR regulations at 42 CFR 483.100-138 require very little in the way of reporting from states. To improve the quality of PASRR programs nationwide, it would be helpful to have state-level data about the number of individuals who are assessed through PASRR, and what the findings are for those individuals.

The basic framework for PASRR data reporting follows from the three main goals of PASRR:

1. To evaluate all applicants to Medicaid-certified NFs for evidence of SMI or ID/RC;
2. To place those individuals appropriately, whether in a NF or in the community; and
3. To recommend the PASRR-related services that individuals need, wherever they are placed.

Ideally, states would report data that give CMS the means to evaluate the degree to which their PASRR programs accomplish these goals. Practically, the data must satisfy two requirements:

1. They must be informative. The data should give us information about a state's PASRR program that we would not otherwise have.
2. They must be reasonable for states to report. Specifically, these should be data the states might already be collecting for other purposes – for example, monitoring the performance of a contractor that performs Level II evaluations and determinations.

## 2.1 Methods

Table 1 on the following page lists the set of data elements we have analyzed. Note that these QM/QI measures fall into four broad categories: Level I screens, exempted hospital discharges (EHDs), preadmission Level II evaluations (including ultimate placements), and Resident Reviews (again including ultimate placements).

*Table 4: Data Elements for a Quality Monitoring Quality Improvement System in PASRR Systems*

| |
|---|
| *Total # of NF admissions statewide* |
| Total # of Level I's performed statewide |
| # of Level I's that were done prior to admission |
| # of Level I's that were done prior to admission |
| # of positive Level I's |
| % of Level I's testing positive |
| # of negative Level I's |
| % of Level I's testing negative |
| *Exempted Hospital Discharges (EHDs)* |
| # of NF admissions |
| # of NF admissions under exempted hospital discharges (EHDs) |
| % of NF admissions under EHDs |
| # of EHDs with stays longer than 45 days |
| % of EHDs longer than 45 days |
| *Preadmission Evaluation (Preadmission Screens) – Level II evaluations* |
| # of preadmission screens (PAS) – Level II evaluations |
| # of PAS that were done prior to admission |
| % of PAS that were done prior to admission |
| # of positive PAS (i.e., finding of MI or ID/RC) |
| % of PAS leading to positive determinations |
| # of positive determinations that recommend Specialized Services |
| % of positive determinations that recommend Specialized Services |
| # of categorical determinations |
| % of categorical determinations |
| # of positive PAS recommending either community placement or any institutional placement |
| % of positive PAS recommending either community placement or any institutional placement |
| # of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) |
| % of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) |
| # of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) |
| % of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) |
| # of positive PAS recommending institutional placement (NF) |
| % of positive PAS recommending institutional placement (NF) |
| # of positive PAS recommending community placement |
| % of positive PAS recommending community placement |
| # of positive PAS leading to institutional placement (NF) |
| % of positive PAS leading to institutional placement (NF) |
| # of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) |
| % of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) |
| # of positive PAS leading to community placement |
| % of positive PAS leading to community placement |
| annual average time (days) between Level I and Level II PAS determination |
| *Resident Review (RR) – Level II evaluations* |
| # of resident reviews (RR) – Level II evaluations |
| # of positive RR (i.e., finding of MI or ID/RC) |
| % of RR leading to positive determinations |
| # of negative RR (i.e., finding of no MI, no ID/RC) |
| % of RR leading to negative determinations |
| # of positive RR recommending continued NF placement |
| % of positive RR recommending continued NF placement |
| # of positive RR recommending community placement |
| % of positive RR recommending community placement |
| # of positive RR leading to continued NF placement |
| % of positive RR leading to continued NF placement |
| # of positive RR leading to community placement |
| % of positive RR leading to community placement |

To compile state-level fact sheets, we gathered information about PASRR-related QM/QI from the state records we previously had on file. We supplemented these files with an inspection of quality-related documents publicly available on the internet (which were rare). When we could indicate "Yes" (the measure was collected, to our knowledge) or "No" (the measure was not collected, to our knowledge), we recorded as much on the fact sheets. Being able to answer "yes" or "no" was uncommon, however. In most cases, we had no information and so indicated as much on the fact sheets (with the abbreviation "NI," for "No Information").

*Notifying States of Our Analysis and Giving Them the Option to Respond*: On August 15, 2016, PTAC sent fact sheets and instructions to PASRR representatives in all 50 states and the District of Columbia, giving them the option to update the contents of those fact sheets by August 25, 2016. Two weeks after the original notice, on August 29, 2016, we PTAC sent a reminder to all states that had not yet responded. In several cases, states asked for additional time to update their fact sheets. We gave those states until September 6 to respond. Thus, in total, states were given up to 22 calendar days to respond.

In total, thirty-two (32) states (62.7%) updated their fact sheets; ten (10) states (19.6%) acknowledged receiving the fact sheet, but did not provide an update; and nine (9) states (17.6%) did not acknowledge receipt, despite receiving a reminder roughly two weeks after the original fact sheet was distributed.

### 2.2 Findings and Discussion

Tables 5, 6 and 7 summarize the updates that 32 states gave for all measures, divided by population: individuals with SMI, individuals with ID/RC, and individuals with both types of diagnoses.[4]

[4] Readers may notice that more states can report the number of positive Level I's conducted than can report the number of *total* Level I's conducted. This is because a number of states do not track or report the total number of Level I's that are conducted. More specifically, hospitals (which do the bulk of Level I's) often do not track how many they do, and they do not report the total number to the state. However, if a Level I is found to be positive, the form must be submitted to the relevant state authority for a final determination, before a Level II is conducted. Thus, states can know how many Level I's are positive without knowing how many Level I's are done in total.

*Table 5: Number and Percentage of States Able to Report on Quality Data Measures for SMI (n=32 States)*

| **Measure** | **SMI** | | | | | |
|---|---|---|---|---|---|---|
| *Total # of NF admissions statewide* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| Total # of Level I's performed statewide | 15 | 47% | 8 | 25% | 9 | 28% |
| # of Level I's that were done prior to admission | 13 | 41% | 10 | 31% | 9 | 28% |
| % of Level I's that were done prior to admission | 11 | 34% | 10 | 31% | 11 | 34% |
| # of positive Level I's | 16 | 50% | 7 | 22% | 9 | 28% |
| % of Level I's testing positive | 14 | 44% | 9 | 28% | 9 | 28% |
| # of negative Level I's | 15 | 47% | 8 | 25% | 9 | 28% |
| % of Level I's testing negative | 14 | 44% | 9 | 28% | 9 | 28% |
| *Exempted Hospital Discharges (EHDs)* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of NF admissions | 15 | 47% | 9 | 28% | 8 | 25% |
| # of NF admissions under exempted hospital discharges (EHDs) | 13 | 41% | 10 | 31% | 9 | 28% |
| % of NF admissions under EHDs | 12 | 38% | 11 | 34% | 9 | 28% |
| # of EHDs with stays longer than 45 days | 12 | 38% | 11 | 34% | 9 | 28% |
| % of EHDs longer than 45 days | 12 | 38% | 11 | 34% | 9 | 28% |
| *Preadmission Evaluation (Preadmission Screens) – Level II evaluations* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of preadmission screens (PAS) – Level II evaluations | 22 | 69% | 2 | 6% | 8 | 25% |
| # of PAS that were done prior to admission | 18 | 56% | 6 | 19% | 8 | 25% |
| % of PAS that were done prior to admission | 16 | 50% | 7 | 22% | 9 | 28% |
| # of positive PAS (i.e., finding of MI or ID/RC) | 20 | 63% | 4 | 13% | 8 | 25% |
| % of PAS leading to positive determinations | 18 | 56% | 5 | 16% | 9 | 28% |
| # of positive determinations that recommend Specialized Services | 21 | 66% | 3 | 9% | 8 | 25% |
| % of positive determinations that recommend Specialized Services | 19 | 59% | 4 | 13% | 9 | 28% |
| # of categorical determinations | 14 | 44% | 7 | 22% | 11 | 34% |
| % of categorical determinations | 13 | 41% | 8 | 25% | 11 | 34% |
| # of positive PAS recommending either community placement or any institutional placement | 17 | 53% | 7 | 22% | 8 | 25% |
| % of positive PAS recommending either community placement or any institutional placement | 18 | 56% | 6 | 19% | 8 | 25% |
| # of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) | 19 | 59% | 5 | 16% | 8 | 25% |
| % of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) | 18 | 56% | 6 | 19% | 8 | 25% |
| # of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) | 16 | 50% | 7 | 22% | 9 | 28% |
| % of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) | 15 | 47% | 8 | 25% | 9 | 28% |
| # of positive PAS recommending institutional placement (NF) | 18 | 56% | 5 | 16% | 9 | 28% |
| % of positive PAS recommending institutional placement (NF) | 17 | 53% | 6 | 19% | 9 | 28% |
| # of positive PAS recommending community placement | 17 | 53% | 7 | 22% | 8 | 25% |
| % of positive PAS recommending community placement | 17 | 53% | 7 | 22% | 8 | 25% |
| # of positive PAS leading to institutional placement (NF) | 12 | 38% | 12 | 38% | 8 | 25% |
| % of positive PAS leading to institutional placement (NF) | 11 | 34% | 13 | 41% | 8 | 25% |
| # of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) | 7 | 22% | 17 | 53% | 8 | 25% |
| % of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) | 6 | 19% | 18 | 56% | 8 | 25% |
| # of positive PAS leading to community placement | 6 | 19% | 18 | 56% | 8 | 25% |
| % of positive PAS leading to community placement | 6 | 19% | 18 | 56% | 8 | 25% |
| annual average time (days) between Level I and Level II PAS determination | 15 | 47% | 8 | 25% | 9 | 28% |
| *Resident Review (RR) – Level II evaluations* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of resident reviews (RR) – Level II evaluations | 21 | 66% | 4 | 13% | 7 | 22% |
| # of positive RR (i.e., finding of MI or ID/RC) | 19 | 59% | 5 | 16% | 8 | 25% |
| % of RR leading to positive determinations | 17 | 53% | 7 | 22% | 8 | 25% |
| # of negative RR (i.e., finding of no MI, no ID/RC) | 18 | 56% | 6 | 19% | 8 | 25% |
| % of RR leading to negative determinations | 17 | 53% | 7 | 22% | 8 | 25% |
| # of positive RR recommending continued NF placement | 19 | 59% | 5 | 16% | 8 | 25% |
| % of positive RR recommending continued NF placement | 18 | 56% | 6 | 19% | 8 | 25% |
| # of positive RR recommending community placement | 15 | 47% | 9 | 28% | 8 | 25% |
| % of positive RR recommending community placement | 15 | 47% | 9 | 28% | 8 | 25% |
| # of positive RR leading to continued NF placement | 14 | 44% | 10 | 31% | 8 | 25% |
| % of positive RR leading to continued NF placement | 12 | 38% | 11 | 34% | 9 | 28% |
| # of positive RR leading to community placement | 7 | 22% | 16 | 50% | 9 | 28% |
| % of positive RR leading to community placement | 7 | 22% | 16 | 50% | 9 | 28% |

*Table 6: Number and Percentage of States Able to Report on Quality Data Measures for ID/RC (n=32 States)*

| **Measure** | **ID/RC** | | | | | |
|---|---|---|---|---|---|---|
| *Total # of NF admissions statewide* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| Total # of Level I's performed statewide | 16 | 50% | 8 | 25% | 8 | 25% |
| # of Level I's that were done prior to admission | 13 | 41% | 11 | 34% | 8 | 25% |
| # of Level I's that were done prior to admission | 12 | 38% | 11 | 34% | 9 | 28% |
| # of positive Level I's | 18 | 56% | 7 | 22% | 7 | 22% |
| % of Level I's testing positive | 16 | 50% | 9 | 28% | 7 | 22% |
| # of negative Level I's | 15 | 47% | 9 | 28% | 8 | 25% |
| % of Level I's testing negative | 15 | 47% | 9 | 28% | 8 | 25% |
| *Exempted Hospital Discharges (EHDs)* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of NF admissions | 16 | 50% | 8 | 25% | 8 | 25% |
| # of NF admissions under exempted hospital discharges (EHDs) | 13 | 41% | 9 | 28% | 10 | 31% |
| % of NF admissions under EHDs | 12 | 38% | 10 | 31% | 10 | 31% |
| # of EHDs with stays longer than 45 days | 12 | 38% | 10 | 31% | 10 | 31% |
| % of EHDs longer than 45 days | 12 | 38% | 10 | 31% | 10 | 31% |
| *Preadmission Evaluation (Preadmission Screens) – Level II evaluations* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of preadmission screens (PAS) – Level II evaluations | 23 | 72% | 3 | 9% | 6 | 19% |
| # of PAS that were done prior to admission | 17 | 53% | 8 | 25% | 7 | 22% |
| % of PAS that were done prior to admission | 16 | 50% | 9 | 28% | 7 | 22% |
| # of positive PAS (i.e., finding of MI or ID/RC) | 22 | 69% | 4 | 13% | 6 | 19% |
| % of PAS leading to positive determinations | 19 | 59% | 6 | 19% | 7 | 22% |
| # of positive determinations that recommend Specialized Services | 21 | 66% | 4 | 13% | 7 | 22% |
| % of positive determinations that recommend Specialized Services | 18 | 56% | 6 | 19% | 8 | 25% |
| # of categorical determinations | 15 | 47% | 6 | 19% | 11 | 34% |
| % of categorical determinations | 14 | 44% | 7 | 22% | 11 | 34% |
| # of positive PAS recommending either community placement or any institutional placement | 18 | 56% | 7 | 22% | 7 | 22% |
| % of positive PAS recommending either community placement or any institutional placement | 17 | 53% | 8 | 25% | 7 | 22% |
| # of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) | 18 | 56% | 8 | 25% | 6 | 19% |
| % of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) | 17 | 53% | 9 | 28% | 6 | 19% |
| # of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) | 15 | 47% | 9 | 28% | 8 | 25% |
| % of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) | 14 | 44% | 10 | 31% | 8 | 25% |
| # of positive PAS recommending institutional placement (NF) | 18 | 56% | 9 | 28% | 5 | 16% |
| % of positive PAS recommending institutional placement (NF) | 17 | 53% | 9 | 28% | 6 | 19% |
| # of positive PAS recommending community placement | 16 | 50% | 10 | 31% | 6 | 19% |
| % of positive PAS recommending community placement | 15 | 47% | 10 | 31% | 7 | 22% |
| # of positive PAS leading to institutional placement (NF) | 12 | 38% | 12 | 38% | 8 | 25% |
| % of positive PAS leading to institutional placement (NF) | 11 | 34% | 13 | 41% | 8 | 25% |
| # of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) | 5 | 16% | 18 | 56% | 9 | 28% |
| % of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) | 4 | 13% | 19 | 59% | 9 | 28% |
| # of positive PAS leading to community placement | 6 | 19% | 19 | 59% | 7 | 22% |
| % of positive PAS leading to community placement | 5 | 16% | 19 | 59% | 8 | 25% |
| annual average time (days) between Level I and Level II PAS determination | 16 | 50% | 8 | 25% | 8 | 25% |
| *Resident Review (RR) – Level II evaluations* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of resident reviews (RR) – Level II evaluations | 20 | 63% | 5 | 16% | 7 | 22% |
| # of positive RR (i.e., finding of MI or ID/RC) | 19 | 59% | 6 | 19% | 7 | 22% |
| % of RR leading to positive determinations | 17 | 53% | 8 | 25% | 7 | 22% |
| # of negative RR (i.e., finding of no MI, no ID/RC) | 15 | 47% | 9 | 28% | 8 | 25% |
| % of RR leading to negative determinations | 15 | 47% | 9 | 28% | 8 | 25% |
| # of positive RR recommending continued NF placement | 17 | 53% | 6 | 19% | 9 | 28% |
| % of positive RR recommending continued NF placement | 17 | 53% | 6 | 19% | 9 | 28% |
| # of positive RR recommending community placement | 14 | 44% | 9 | 28% | 9 | 28% |
| % of positive RR recommending community placement | 14 | 44% | 9 | 28% | 9 | 28% |
| # of positive RR leading to continued NF placement | 13 | 41% | 10 | 31% | 9 | 28% |
| % of positive RR leading to continued NF placement | 12 | 38% | 11 | 34% | 9 | 28% |
| # of positive RR leading to community placement | 7 | 22% | 16 | 50% | 9 | 28% |
| % of positive RR leading to community placement | 7 | 22% | 16 | 50% | 9 | 28% |

*Table 7: Number and Percentage of States Able to Report on Quality Data Measures for Individuals with Dual Diagnoses (n=32 States)*

| **Measure** | **ID/RC** | | | | | |
|---|---|---|---|---|---|---|
| *Total # of NF admissions statewide* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| Total # of Level I's performed statewide | 16 | 50% | 8 | 25% | 8 | 25% |
| # of Level I's that were done prior to admission | 13 | 41% | 11 | 34% | 8 | 25% |
| % of Level I's that were done prior to admission | 12 | 38% | 11 | 34% | 9 | 28% |
| # of positive Level I's | 18 | 56% | 7 | 22% | 7 | 22% |
| % of Level I's testing positive | 16 | 50% | 9 | 28% | 7 | 22% |
| # of negative Level I's | 15 | 47% | 9 | 28% | 8 | 25% |
| % of Level I's testing negative | 15 | 47% | 9 | 28% | 8 | 25% |
| *Exempted Hospital Discharges (EHDs)* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of NF admissions | 16 | 50% | 8 | 25% | 8 | 25% |
| # of NF admissions under exempted hospital discharges (EHDs) | 13 | 41% | 9 | 28% | 10 | 31% |
| % of NF admissions under EHDs | 12 | 38% | 10 | 31% | 10 | 31% |
| # of EHDs with stays longer than 45 days | 12 | 38% | 10 | 31% | 10 | 31% |
| % of EHDs longer than 45 days | 12 | 38% | 10 | 31% | 10 | 31% |
| *Preadmission Evaluation (Preadmission Screens) – Level II evaluations* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of preadmission screens (PAS) – Level II evaluations | 23 | 72% | 3 | 9% | 6 | 19% |
| # of PAS that were done prior to admission | 17 | 53% | 8 | 25% | 7 | 22% |
| % of PAS that were done prior to admission | 16 | 50% | 9 | 28% | 7 | 22% |
| # of positive PAS (i.e., finding of MI or ID/RC) | 22 | 69% | 4 | 13% | 6 | 19% |
| % of PAS leading to positive determinations | 19 | 59% | 6 | 19% | 7 | 22% |
| # of positive determinations that recommend Specialized Services | 21 | 66% | 4 | 13% | 7 | 22% |
| % of positive determinations that recommend Specialized Services | 18 | 56% | 6 | 19% | 8 | 25% |
| # of categorical determinations | 15 | 47% | 6 | 19% | 11 | 34% |
| % of categorical determinations | 14 | 44% | 7 | 22% | 11 | 34% |
| # of positive PAS recommending either community placement or any institutional placement | 18 | 56% | 7 | 22% | 7 | 22% |
| % of positive PAS recommending either community placement or any institutional placement | 17 | 53% | 8 | 25% | 7 | 22% |
| # of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) | 18 | 56% | 8 | 25% | 6 | 19% |
| % of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric) | 17 | 53% | 9 | 28% | 6 | 19% |
| # of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) | 15 | 47% | 9 | 28% | 8 | 25% |
| % of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric) | 14 | 44% | 10 | 31% | 8 | 25% |
| # of positive PAS recommending institutional placement (NF) | 18 | 56% | 9 | 28% | 5 | 16% |
| % of positive PAS recommending institutional placement (NF) | 17 | 53% | 9 | 28% | 6 | 19% |
| # of positive PAS recommending community placement | 16 | 50% | 10 | 31% | 6 | 19% |
| % of positive PAS recommending community placement | 15 | 47% | 10 | 31% | 7 | 22% |
| # of positive PAS leading to institutional placement (NF) | 12 | 38% | 12 | 38% | 8 | 25% |
| % of positive PAS leading to institutional placement (NF) | 11 | 34% | 13 | 41% | 8 | 25% |
| # of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) | 5 | 16% | 18 | 56% | 9 | 28% |
| % of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric) | 4 | 13% | 19 | 59% | 9 | 28% |
| # of positive PAS leading to community placement | 6 | 19% | 19 | 59% | 7 | 22% |
| % of positive PAS leading to community placement | 5 | 16% | 19 | 59% | 8 | 25% |
| annual average time (days) between Level I and Level II PAS determination | 16 | 50% | 8 | 25% | 8 | 25% |
| *Resident Review (RR) – Level II evaluations* | *Yes* | *% Yes* | *No* | *% No* | *NI* | *% NI* |
| # of resident reviews (RR) – Level II evaluations | 20 | 63% | 5 | 16% | 7 | 22% |
| # of positive RR (i.e., finding of MI or ID/RC) | 19 | 59% | 6 | 19% | 7 | 22% |
| % of RR leading to positive determinations | 17 | 53% | 8 | 25% | 7 | 22% |
| # of negative RR (i.e., finding of no MI, no ID/RC) | 15 | 47% | 9 | 28% | 8 | 25% |
| % of RR leading to negative determinations | 15 | 47% | 9 | 28% | 8 | 25% |
| # of positive RR recommending continued NF placement | 17 | 53% | 6 | 19% | 9 | 28% |
| % of positive RR recommending continued NF placement | 17 | 53% | 6 | 19% | 9 | 28% |
| # of positive RR recommending community placement | 14 | 44% | 9 | 28% | 9 | 28% |
| % of positive RR recommending community placement | 14 | 44% | 9 | 28% | 9 | 28% |
| # of positive RR leading to continued NF placement | 13 | 41% | 10 | 31% | 9 | 28% |
| % of positive RR leading to continued NF placement | 12 | 38% | 11 | 34% | 9 | 28% |
| # of positive RR leading to community placement | 7 | 22% | 16 | 50% | 9 | 28% |
| % of positive RR leading to community placement | 7 | 22% | 16 | 50% | 9 | 28% |

While there is variation from measure to measure, and state to state, there are few general patterns:

- States most consistently collect information about Preadmission Level IIs (Preadmission Screens).
- States less often collect information about Level Is or EHDs.
- States rarely collect information about community placement following Preadmission Screens or Resident Reviews.
- States are somewhat more likely to collect information about individuals with SMI or ID/RC as separate diagnoses than they are to collect information about individuals with dual diagnoses.

Of the 51 data elements we identified (and listed in Table 1), only half of all states that responded could report on at least half of the measures for any of the three populations. In other words, a large share of states can report on few (and sometimes none) of these QM/QI measures.

# 3 The Minimum Data Set (MDS)

All residents of Medicaid and Medicare-certified nursing homes are assessed using a standardized Resident Assessment Instrument called the Minimum Data Set (MDS). MDS collects many details about an individual's medical, social, and functional status, including active diagnoses, cognitive status, and ability to perform activities of daily living (ADLs) such as bathing and dressing. MDS version 3.0 also contains two questions about whether an individual has been identified by the state's PASRR process as having SMI or ID/RC. Question A1500 (introduced in October 2010) asks whether an individual has been identified as having a PASRR disability, and A1510 (introduced in February 2012) asks which type of PASRR disability an individual has.

The introduction of these items enables us to ask important questions about the characteristics of nursing home residents. Using MDS data for 2012 to 2015, we focus on the following two questions:

1. Of the individuals admitted to nursing homes, what percentage has been identified as having a PASRR disability?
2. How accurately do state PASRR systems identify individuals who have PASRR-related diagnoses as recorded elsewhere in MDS?

## 3.1 Methods

Our data set covers the period between the introduction of MDS 3.0 on October 1, 2010 and December 31, 2015. In general, our method was to compare responses to PASRR MDS questions to responses to other items in MDS that ask about diagnoses related to PASRR. For each analysis, we construct a numerator and a denominator.

The denominator represents the total NF population. We include only residents in NFs on December 31, 2012, 2013, 2014, and 2015 – a census method. We create a census on this annual date using a method that mirrors the one CMS has used to define "active residents." An active resident is defined as having a "target date" (assessment date) less than 150 days prior to December 31, and no discharge record between this assessment and December 31. For active residents, we then select the most recent annual or admission record, because the PASRR items are not recorded on quarterly assessments. The census method is the one that CMS uses to generate the MDS tables it provides online; it is also the method used by the Long-Term Care Statistics Branch at the National Center for Health Statistics (e.g., NCHS, 2013).

Note that in the 2014 National Report, we used a second method of counting which we called "new admissions" – a method that captures mostly short-term stays. The new admissions method and the census method do not overlap very much (less than 20 percent) – meaning they count different sorts of people. The new admissions method generally counts residents who enter a NF for rehabilitation, and it generally misses residents who stay for long periods of time. The census method does the reverse. Because we are interested primarily in people who become long-stay residents, and because using two counting methods creates some confusion, we have decided in this version of the National Report to use just the census method.

For the census method, we include only records from facilities identified as Medicaid-certified NFs, since all individuals who apply for admission to NFs must first be screened by Level I PASRR. (Many of these facilities are dually certified as Medicaid NFs and Medicare skilled nursing facilities (SNFs). However, the Medicare certification status does not impact our inclusion criteria.) Because related conditions have no established diagnostic value outside PASRR, we treat individuals with ID and individuals with RC as belonging to the same category.

The numerator varies by item. For ID/RC, we construct the numerator in two ways:

1. We take the number of individuals for whom Question A1510B *or* A1510C is checked, indicating ID or RC for the purposes of PASRR.
2. To the number of individuals computed in (1), we add the number for whom A1550 contains one or more of the following answers: Down syndrome, autism, epilepsy, "other organic condition related to ID/DD," "ID/DD with no organic condition." This method reveals the additional information we gain by looking at diagnostic information in items other than the PASRR questions A1510B and A1510C.
3. To the number of individuals computed in (2), we add the number who have at least one ICD code indicating a PASRR disability – 317-319, 758, and V79.

To compute the share of individuals who have SMI, we construct the numerator as follows, taking into account different definitions of SMI:

1. We take the number of individuals for whom Question A1510A is checked, indicating SMI for the purposes of PASRR.

2. To the number of individuals computed in (1), we add the number who have at least one SMI diagnosis as recorded in Section I: anxiety disorder (I5700), depression (I5800), manic depression (bipolar disease, I5900), psychotic disorder (I5950), schizophrenia (I6000), and post-traumatic stress disorder (PTSD, I6100). Following Grabowski et al. (2009), we calculate the numerator in two ways:
    a. *Broad*: We include individuals with all of the diagnoses listed above.
    b. *Narrow*: We include only individuals with schizophrenia and manic depression (bipolar disorder) – the two psychiatric conditions most often associated with institutionalization.
3. To the number of individuals computed in (2), we add the number who have at least one ICD-9 code indicating a PASRR disability – codes 295 to 302, and codes 306 to 314.

Note that methods (2) and (3) reveal the additional information we gain by looking at diagnostic information in items other than the PASRR question A1510A.

Percentages are calculated in the following way: $\frac{numerator}{denominator}\ X\ 100$.

### 3.2 Findings and Discussion

Tables 8 and 9 present the national figures for nursing homes in 2012, 2013, 2014, and 2015 for specific types of PASRR disabilities, and for similar conditions as recorded in MDS diagnostic questions, listed above. Table 8 is for ID and related conditions. Table 9 is for SMI. (Table 8 also appears in the Executive Summary as Table 2. Table 9 expands on Table 3 in the Executive Summary, adding the narrow definition of SMI.)

Tables 8 and 9 show that in 2012-2015, the number of individuals identified by PASRR as having ID and related conditions (ID/RC in MDS) roughly corresponds to the number of individuals recorded elsewhere in MDS as having those conditions. Among these individuals, PASRR appears to be working relatively well – it correctly identifies about two thirds of the individuals it potentially should identify.

In both Table 8 and Table 9, the third column presents the numbers and percentages of individuals identified by the MDS PASRR items alone. The fourth column presents the number of individuals in column 3 *plus* any individuals identified as having ID/RC in item A1550 (Table 8), or in items I5700 or I6100 (Table 9). The fifth column presents the number of individuals in column 4 *plus* the number of individuals identified in item I8000 (ICD

codes) as having a relevant type of disability. In other words, the number of individuals identified as having ID/RC grows as we move from column 3 to column 4 to column 5.

*Table 8: Rates of Intellectual Disabilities and Related Conditions in Nursing Homes (Year-End Census)*

| Year | Number of Nursing Home Residents (Census) | A1510B/C (PASRR) | A1510B/C *or* At Least One A1550 (PASRR *or* Other Dx) | A1510B/C *or* At Least One A1550 *or* At Least One I8000 (ICD) (PASRR *or* Other Dx) |
|---|---|---|---|---|
| 2012 | 1,112,300 | 2.1% (22,923) | 2.3% (25,543) | 3.1% (34,067) |
| 2013 | 1,296,028 | 2.2% (28,453) | 2.4% (31,501) | 3.2% (42,013) |
| 2014 | 1,292,578 | 2.2% (28,862) | 2.5% (32,070) | 3.3% (42,504) |
| 2015 | 1,268,609 | 2.3% (29,303) | 2.6% (32,518) | 3.1% (39,610) |

Table 9 shows that the pattern for individuals with SMI is quite different. The number of individuals recorded in MDS diagnostic fields as having SMI in the years 2012 to 2015 was 4.5 to 6 times greater than the number of individuals recorded as having SMI in question A1510A. Under the broad definition of SMI, the number of individuals recorded in MDS diagnostic fields as having SMI in the years 2012 to 2015 was 13 to 17.5 times greater than the number of individuals recorded as having SMI in question A1510A.

*Table 9: Rates of Serious Mental Illness (Narrowly Defined) in Nursing Homes (Year-End Census)*

| Year | Number of Residents on Dec 31 | A1510A (PASRR) | *SMI Narrowly Defined* | |
|---|---|---|---|---|
| | | | A1510A *or* At Least One I5700-I6100 (PASRR *or* Other Dx) | A1510A = 1 or At Least One I5700-I6100 or At Least One I8000 (PASRR *or* Other Dx) |
| 2012 | 1,112,300 | 3.6% (39,512) | 19.4% (215,497) | 21.3% (236,979) |
| 2013 | 1,296,028 | 4.1% (53,032) | 20.3% (263,561) | 22.3% (288,887) |
| 2014 | 1,292,578 | 4.5% (57,708) | 20.2% (261,341) | 22.3% (289,900) |
| 2015 | 1,268,609 | 4.8% (61,274) | 20.0% (253,917) | 21.4% (271,960) |

*Table 10: Rates of Serious Mental Illness (Broadly Defined) in Nursing Homes (Year-End Census)*

| Year | Number of Residents on Dec 31 | A1510A (PASRR) | *SMI Broadly Defined* | |
|---|---|---|---|---|
| | | | A1510A *or* At Least One I5700-I6100 (PASRR *or* Other Dx) | A1510A = 1 or At Least One I5700-I6100 or At Least One I8000 (PASRR *or* Other Dx) |
| 2012 | 1,112,300 | (3.6%) 39,512 | 61.5% (684,057) | 63.1% (701,485) |
| 2013 | 1,296,028 | (4.1%) 53,032 | 62.3% (806,850) | 63.8% (827,425) |
| 2014 | 1,292,578 | 4.5% (57,708) | 62.2% (803,663) | 63.8% (824,354) |
| 2015 | 1,268,609 | 4.8% (61,274) | 62.0% (786,654) | 63.1% (799,935) |

Our previous analyses of Level I tools across the country suggested that the tools in some states are too restrictive or lack the items necessary to trigger a Level II evaluation, and therefore may be failing to identify many people who have a PASRR disability. Our analysis of MDS data supports this idea. While PASRR correctly identifies individuals with ID and RC, PASRR apparently fails to identify many individuals who have a recorded diagnosis of SMI; at the very least, our findings are congruent with such a failure.

To be sure, some individuals with a diagnosis of SMI may not have met the criteria for serious SMI under PASRR, and would instead have been classified as having an isolated episodic mental illness. However, published prevalence estimates of SMI in nursing home residents range from seven (7) percent (Bagchi et al, 2009) to 27 percent (Grabowski et al., 2009), well above the roughly one to four percent recorded in MDS PASRR items. It is highly unlikely that the difference between episodic MI and true SMI can account for a difference of this size.

There are at least two general explanations for this dramatic difference (note that these are not mutually exclusive):

1. MDS assessors are accurately recording in MDS the residents who have been determined by the state to have PASRR Level II status, but state PASRR programs are failing to identify all of the individuals with serious mental illness. State PASRR programs could fail for a large number of

reasons, including (but not limited to) poor or overly restrictive Level I screens, poor performance of Level II evaluators, or overuse of the 30-day exempted hospital discharge and/or categorical determinations.

2. Nursing home assessors are not accurately recording PASRR status in MDS.

Taking into consideration the above explanations, our findings indicate that many individuals with SMI are not being identified through PASRR and therefore may not be receiving the Specialized Services necessary to lead productive lives in either the NF or if appropriate in the community.

# 4 Next Steps

## 4.1 Next Steps: QM/QI

In the coming year, we will work with states to improve their capacity to collect and analyze QM/QI data – for example, by developing materials that help states draft RFPs for vendors that use electronic systems for this purpose. We will also look at the systems that states already have in place to track quality-related data in their PASRR programs, and to use what they find to make their programs more robust and effective.

## 4.2 Next Steps: MDS

To leverage and extend the results of this analysis, CMS and PTAC will:

- Communicate to state agencies and NFs their respective responsibilities under federal requirements to accurately identify SMI and ID/RC and record PASRR status.
- Provide individualized TA to help states identify the root cause(s) of the low rates of PASRR identification in MDS.
- Develop training materials to improve PASRR identification of individuals with SMI and ID/RC in MDS, including webinars and issue papers.
- Perform additional analyses using MDS and published research to estimate more definitively how many individuals *should* have been identified by PASRR as having a relevant disability (for example, by looking at ADLs, IADLs, medications, and other information captured in MDS).
- Study MDS diagnostic items and their definitions to identify any needed improvements for consistent data.
- Continue to help state agencies learn how to access MDS and provide ad hoc analyses upon request.

## About PTAC and Requesting Technical Assistance

PTAC has assembled a team of national experts on PASRR policy and implementation who regularly work directly with states and CMS. Any state agencies working with PASRR may ask a question or request assistance free of charge. All PTAC assistance is at no cost to states, including travel, if required. PTAC reaches out particularly to the three agencies with statutory responsibility for PASRR: the Medicaid agency, the state mental health authority (SMHA), and the state intellectual disabilities authority (SIDA).

We urge these agencies to keep contact information up to date at www.PASRRassist.org, and with CMS regional offices, so that you will receive notice of monthly PASRR webinars, quarterly PASRR calls with the states in your region, and communications such as this report. You will also receive information on special initiatives such as the work group for states wishing to modernize the way in which they pay for and provide the PASRR-related supports known as Specialized Services.

Much of the information and training materials PTAC has assembled since 2009 is available on the Center's website: www.PASRRassist.org, and may be useful to others involved with long term care, rebalancing and *Olmstead* initiatives, and services for individuals with SMI or ID.

PTAC's technical assistance to states:

- Is free;
- Is confidential (except in cases where the health and welfare of individuals may be jeopardized); and
- May include in-person visits (e.g., for strategic planning or to help develop interagency collaboration).

States may request technical assistance on any of the topics discussed in this report through the PTAC website (www.PASRRassist.org) or by contacting the Director of PTAC, Ed Kako, at edward.kako@PASRRassist.org.