

# 2017 PASRR National Report

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



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Prepared for the Centers for Medicare & Medicaid Services

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## Executive Summary

This sixth Preadmission Screening and Resident Review (PASRR) National Report updates the findings of the 2016 National Report on nursing home data and on the analysis of measures that states can use to help support quality monitoring and quality improvement (QM/QI) in their PASRR programs. The analysis indicates that (1) many states could expand their QM/QI data collection practices and (2) although PASRR is working fairly well at identifying individuals with intellectual disability (ID) and related conditions (RCs), individuals with serious mental illness (SMI) may be underidentified.

Section 1 provides a brief overview of the PASRR requirements.

Section 2 lays out the analysis of states' ability to track QM/QI indicators, including the data elements that the PASRR Technical Assistance Center believes can help states improve their PASRR programs in several areas, such as Level I screens, exempted hospital discharges, Level II evaluations, and Resident Reviews. The chief finding is that roughly half of all states that responded could report on at least half of the measures for any of the three populations.

Section 3 briefly reviews PASRR-specific data collected in the Minimum Data Set (MDS) process, describes the methods for analyzing those data, and presents the 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. That finding suggests that PASRR programs may produce a high number of false negatives, meaning that 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 provides recommendations for the Centers for Medicare & Medicaid Services to help expand on these findings and to conduct additional research.

## 1 Introduction

Preadmission Screening and Resident Review (PASRR) was added to Title XIX of the Social Security Act in 1987 as part of the Nursing Home Reform Act.<sup>1</sup> PASRR has important and unique powers in Medicaid law. It requires states to (1) identify individuals who might be admitted to a nursing facility (NF) who have a serious mental illness (SMI), an intellectual disability (ID), or a related condition (RC); (2) consider community placement first, and an NF only if appropriate; and (3) identify the PASRR-specific needs that must be met for individuals to thrive, whether in an NF or in the community.

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 a Medicaid-certified NF 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 evaluation 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 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 a *mandatory administrative function* rather than a *direct service function* as outlined in Section 4.39 of a State’s Medicaid State Plan.

Aside from the critical components outlined above, program design and implementation is largely at the states’ discretion. Accordingly, there is great variety among the states. In order to provide states with comprehensive technical assistance, the Centers for Medicare & Medicaid Services (CMS) funded the creation of the PASRR Technical Assistance Center (PTAC). A central aim of the PTAC contract is to help states improve their PASRR programs and ensure that their programs are meeting state-specific needs while also maintaining compliance with federal regulations. Additionally, PTAC authors an annual report on behalf of CMS designed to provide both CMS and the states with different snapshots of how PASRR is being carried out across the country. This year’s report serves as an update to information that was provided in the 2016 National Report. PTAC examines measures that can help states monitor and improve their PASRR programs (quality monitoring and quality improvement, or QM/QI). The report also provides an analysis of the findings on the PASRR-related characteristics of NF residents using Minimum Data Set (MDS) data through the end of 2016.

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<sup>1</sup> Social Security Act, 42 USC 1919(e)(7) (1987).

PTAC's analyses cannot provide direct information about the *implementation* of a state's PASRR program.

The analysis of these data continues 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 that 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

Quality monitoring and quality improvement (QM/QI) indicators are critical for program success. States currently are responsible for developing and collecting their own quality measures for PASRR.

In 2016, CMS determined that it would be helpful for PTAC to review states' capacity to track QM/QI measures, both as a way of providing a high-level comparison of state activities and to suggest to states a model of the data that can support programs' QM/QI efforts. The goal was to identify the QM/QI-related data that states already were collecting, thus allowing PASRR programs to identify any gaps in their data tracking and to observe what other states were monitoring.

A basic framework for PASRR data collection was identified that follows from the three main goals of PASRR. Ideally, states would collect data that provide the means to evaluate the degree to which their PASRR programs accomplish these goals:

1. To evaluate all applicants to Medicaid-certified NFs for evidence of SMI, ID, or RC
2. To ensure that individuals are living in the most appropriate setting, whether in the NF or in the community, on the basis of their desires and needs
3. To recommend PASRR-related services that individuals need, wherever they are placed

The model QM/QI measures identified 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). Additionally, the information collected would be for three populations targeted by PASRR; people with SMI, people with ID/RC, and people with both SMI and ID/RC.

### 2.1 Methods

Table 1 lists the set of model data elements that was analyzed.

**Table 1: Data Elements for a QM/QI System in PASRR Systems**

<b>Measure</b>
<i>Total # of NF admissions statewide</i>
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
<i>Exempted Hospital Discharges (EHDs)</i>
# 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
<i>Preadmission Evaluation (Preadmission Screens) – Level II evaluations</i>
# 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
<i>Resident Review (RR) – Level II evaluations</i>
# 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

Abbreviations: ICF/IID, intermediate care facility for individuals with intellectual disability; ID, intellectual disability; MI, mental illness; NF, nursing facility; PASRR, Preadmission Screening and Resident Review; QM/QI, quality monitoring and quality improvement; RC, related condition.

The data presented in the 2017 National Report represent an update of the information presented in the 2016 National Report. For the 2016 National Report, PTAC examined the information on file about state PASRR programs, along with publicly available information. Next, PTAC assembled state-specific fact sheets summarizing the current knowledge. If PTAC knew that a state collected a given measure, “yes” was indicated; if there was reason to believe that a state did *not* collect a given measure, “no” was indicated; if PTAC did not know either way (which was true in the vast majority of cases), “no information” was indicated. This information was then shared with the states in the form of a “State Fact Sheet.” The states were then provided an opportunity to send updates and corrections.<sup>2</sup>

Work for the 2017 National Report began on July 5, 2017, when the finalized 2016 state fact sheets and instructions were sent to PASRR representatives in all 50 states and the District of Columbia, giving them the option to update those fact sheets by August 7, 2017. On August 21, a reminder was sent to all states that had not yet responded, with a due date of August 25. Any states that did not respond by August 25 were sent a reminder email, with a request to respond as soon as possible, indicating at minimum that they had received their fact sheet. In total, states were given up to 51 calendar days to respond (although most states indicated well before that date at least that they had received their fact sheet).

Eleven states (21.6 percent) provided updates; 31 (60.7 percent) acknowledged receiving the fact sheet but provided no update; the remaining 9 states (17.6 percent) provided no acknowledgement, even after a third attempt.

## 2.2 Findings and Discussion

Tables 2, 3, and 4 summarize the updates from 42 states that acknowledged receiving their fact sheet, divided by population—individuals with SMI, individuals with ID/RC, and individuals with both types of diagnoses.<sup>3</sup>

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<sup>2</sup> In late July of 2016, PASRR program staff members in each state received the fact sheet for their state, and they were given the option to update the information that it contained. Thirty-two states (62.7 percent) updated their fact sheet; 10 states (19.6 percent) acknowledged receiving the fact sheet but did not provide updates; and 9 states (17.6 percent) did not acknowledge receipt, despite having received a reminder 2 weeks after the original fact sheet was distributed.

<sup>3</sup> Readers may notice that more states can report the number of positive Level I screens conducted than can report the number of *total* Level I screens conducted. Some states do not track the total number of Level I screens that are conducted. In particular, hospitals, which do the bulk of Level I screens, tend to report only the positive Level I screens requiring additional inquiry to the state.



**Table 2: Number and Percentage of States Able to Report on Quality Data Measures for SMI (n=34)**

Measure	SMI					
	Yes	% Yes	No	% No	NI	% NI
<i>Total # of NF admissions statewide</i>						
Total # of Level I's performed statewide	17	53.1%	7	21.9%	10	31.3%
# of Level I's that were done prior to admission	16	50.0%	8	25.0%	10	31.3%
% of Level I's that were done prior to admission	14	43.8%	8	25.0%	12	37.5%
# of positive Level I's	19	59.4%	6	18.8%	9	28.1%
% of Level I's testing positive	18	56.3%	7	21.9%	9	28.1%
# of negative Level I's	17	53.1%	7	21.9%	10	31.3%
% of Level I's testing negative	17	53.1%	7	21.9%	10	31.3%
<i>Exempted Hospital Discharges (EHDs)</i>	<i>Yes</i>	<i>% Yes</i>	<i>No</i>	<i>% No</i>	<i>NI</i>	<i>% NI</i>
# of NF admissions	18	56.3%	7	21.9%	9	28.1%
# of NF admissions under exempted hospital discharges (EHDs)	15	46.9%	9	28.1%	10	31.3%
% of NF admissions under EHDs	14	43.8%	10	31.3%	10	31.3%
# of EHDs with stays longer than 45 days	15	46.9%	10	31.3%	9	28.1%
% of EHDs longer than 45 days	15	46.9%	10	31.3%	9	28.1%
<i>Preadmission Evaluation (Preadmission Screens) – Level II evaluations</i>	<i>Yes</i>	<i>% Yes</i>	<i>No</i>	<i>% No</i>	<i>NI</i>	<i>% NI</i>
# of preadmission screens (PAS) – Level II evaluations	24	75.0%	2	6.3%	8	25.0%
# of PAS that were done prior to admission	20	62.5%	6	18.8%	8	25.0%
% of PAS that were done prior to admission	18	56.3%	7	21.9%	9	28.1%
# of positive PAS (i.e., finding of MI or ID/RC)	22	68.8%	4	12.5%	8	25.0%
% of PAS leading to positive determinations	20	62.5%	5	15.6%	9	28.1%
# of positive determinations that recommend Specialized Services	23	71.9%	3	9.4%	8	25.0%
% of positive determinations that recommend Specialized Services	21	65.6%	4	12.5%	9	28.1%
# of categorical determinations	17	53.1%	7	21.9%	10	31.3%
% of categorical determinations	16	50.0%	8	25.0%	10	31.3%
# of positive PAS recommending either community placement or any institutional placement	20	62.5%	6	18.8%	8	25.0%
% of positive PAS recommending either community placement or any institutional placement	20	62.5%	6	18.8%	8	25.0%
# of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric)	21	65.6%	5	15.6%	8	25.0%
% of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric)	20	62.5%	6	18.8%	8	25.0%
# of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric)	18	56.3%	7	21.9%	9	28.1%
% of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric)	17	53.1%	8	25.0%	9	28.1%
# of positive PAS recommending institutional placement (NF)	20	62.5%	5	15.6%	9	28.1%
% of positive PAS recommending institutional placement (NF)	19	59.4%	6	18.8%	9	28.1%
# of positive PAS recommending community placement	19	59.4%	7	21.9%	8	25.0%
% of positive PAS recommending community placement	19	59.4%	7	21.9%	8	25.0%
# of positive PAS leading to institutional placement (NF)	14	43.8%	12	37.5%	8	25.0%
% of positive PAS leading to institutional placement (NF)	13	40.6%	13	40.6%	8	25.0%
# of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric)	7	21.9%	19	59.4%	8	25.0%
% of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric)	6	18.8%	20	62.5%	8	25.0%
# of positive PAS leading to community placement	6	18.8%	20	62.5%	8	25.0%
% of positive PAS leading to community placement	6	18.8%	20	62.5%	8	25.0%
annual average time (days) between Level I and Level II PAS determination	18	56.3%	7	21.9%	9	28.1%
<i>Resident Review (RR) – Level II evaluations</i>	<i>Yes</i>	<i>% Yes</i>	<i>No</i>	<i>% No</i>	<i>NI</i>	<i>% NI</i>
# of resident reviews (RR) – Level II evaluations	23	71.9%	4	12.5%	7	21.9%
# of positive RR (i.e., finding of MI or ID/RC)	21	65.6%	5	15.6%	8	25.0%
% of RR leading to positive determinations	19	59.4%	7	21.9%	8	25.0%
# of negative RR (i.e., finding of No MI, No ID/RC)	20	62.5%	6	18.8%	8	25.0%
% of RR leading to negative determinations	19	59.4%	7	21.9%	8	25.0%
# of positive RR recommending continued NF placement	21	65.6%	5	15.6%	8	25.0%
% of positive RR recommending continued NF placement	20	62.5%	6	18.8%	8	25.0%
# of positive RR recommending community placement	18	56.3%	8	25.0%	8	25.0%
% of positive RR recommending community placement	18	56.3%	8	25.0%	8	25.0%
# of positive RR leading to continued NF placement	15	46.9%	11	34.4%	8	25.0%
% of positive RR leading to continued NF placement	14	43.8%	11	34.4%	9	28.1%
# of positive RR leading to community placement	8	25.0%	17	53.1%	9	28.1%
% of positive RR leading to community placement	7	21.9%	18	56.3%	9	28.1%

Abbreviations: ICF/IID, intermediate care facility for individuals with intellectual disability; ID, intellectual disability; MI, mental illness; NF, nursing facility; NI, no information; RC, related condition; SMI, serious mental illness.

**Table 3: Number and Percentage of States Able to Report on Quality Data Measures for ID/RC (n=34)**

Measure	ID/RC					
	Yes	% Yes	No	% No	NI	% NI
<b>Total # of NF admissions statewide</b>						
Total # of Level I's performed statewide	18	56.3%	7	21.9%	9	28.1%
# of Level I's that were done prior to admission	16	50.0%	9	28.1%	9	28.1%
# of Level I's that were done prior to admission	15	46.9%	9	28.1%	10	31.3%
# of positive Level I's	20	62.5%	6	18.8%	8	25.0%
% of Level I's testing positive	18	56.3%	7	21.9%	9	28.1%
# of negative Level I's	17	53.1%	8	25.0%	9	28.1%
% of Level I's testing negative	18	56.3%	7	21.9%	9	28.1%
<b>Exempted Hospital Discharges (EHDs)</b>						
# of NF admissions	19	59.4%	6	18.8%	9	28.1%
# of NF admissions under exempted hospital discharges (EHDs)	15	46.9%	8	25.0%	11	34.4%
% of NF admissions under EHDs	14	43.8%	9	28.1%	11	34.4%
# of EHDs with stays longer than 45 days	14	43.8%	9	28.1%	11	34.4%
% of EHDs longer than 45 days	14	43.8%	9	28.1%	11	34.4%
<b>Preadmission Evaluation (Preadmission Screens) – Level II evaluations</b>						
# of preadmission screens (PAS) – Level II evaluations	26	81.3%	2	6.3%	6	18.8%
# of PAS that were done prior to admission	21	65.6%	6	18.8%	7	21.9%
% of PAS that were done prior to admission	20	62.5%	7	21.9%	7	21.9%
# of positive PAS (i.e., finding of MI or ID/RC)	26	81.3%	2	6.3%	6	18.8%
% of PAS leading to positive determinations	23	71.9%	4	12.5%	7	21.9%
# of positive determinations that recommend Specialized Services	25	78.1%	2	6.3%	7	21.9%
% of positive determinations that recommend Specialized Services	22	68.8%	4	12.5%	8	25.0%
# of categorical determinations	18	56.3%	6	18.8%	10	31.3%
% of categorical determinations	17	53.1%	7	21.9%	10	31.3%
# of positive PAS recommending either community placement or any institutional placement	21	65.6%	6	18.8%	7	21.9%
% of positive PAS recommending either community placement or any institutional placement	20	62.5%	7	21.9%	7	21.9%
# of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric)	21	65.6%	7	21.9%	6	18.8%
% of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric)	20	62.5%	8	25.0%	6	18.8%
# of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric)	18	56.3%	8	25.0%	8	25.0%
% of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric)	17	53.1%	9	28.1%	8	25.0%
# of positive PAS recommending institutional placement (NF)	22	68.8%	7	21.9%	5	15.6%
% of positive PAS recommending institutional placement (NF)	21	65.6%	7	21.9%	6	18.8%
# of positive PAS recommending community placement	19	59.4%	9	28.1%	6	18.8%
% of positive PAS recommending community placement	18	56.3%	9	28.1%	7	21.9%
# of positive PAS leading to institutional placement (NF)	16	50.0%	10	31.3%	8	25.0%
% of positive PAS leading to institutional placement (NF)	15	46.9%	11	34.4%	8	25.0%
# of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric)	5	15.6%	20	62.5%	9	28.1%
% of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric)	4	12.5%	21	65.6%	9	28.1%
# of positive PAS leading to community placement	6	18.8%	21	65.6%	7	21.9%
% of positive PAS leading to community placement	5	15.6%	21	65.6%	8	25.0%
annual average time (days) between Level I and Level II PAS determination	19	59.4%	7	21.9%	8	25.0%
<b>Resident Review (RR) – Level II evaluations</b>						
# of resident reviews (RR) – Level II evaluations	23	71.9%	4	12.5%	7	21.9%
# of positive RR (i.e., finding of MI or ID/RC)	22	68.8%	5	15.6%	7	21.9%
% of RR leading to positive determinations	20	62.5%	7	21.9%	7	21.9%
# of negative RR (i.e., finding of no MI, no ID/RC)	18	56.3%	8	25.0%	8	25.0%
% of RR leading to negative determinations	18	56.3%	8	25.0%	8	25.0%
# of positive RR recommending continued NF placement	20	62.5%	5	15.6%	9	28.1%
% of positive RR recommending continued NF placement	21	65.6%	4	12.5%	9	28.1%
# of positive RR recommending community placement	18	56.3%	7	21.9%	9	28.1%
% of positive RR recommending community placement	17	53.1%	8	25.0%	9	28.1%
# of positive RR leading to continued NF placement	16	50.0%	9	28.1%	9	28.1%
% of positive RR leading to continued NF placement	16	50.0%	9	28.1%	9	28.1%
# of positive RR leading to community placement	8	25.0%	17	53.1%	9	28.1%
% of positive RR leading to community placement	7	21.9%	18	56.3%	9	28.1%

Abbreviations: ICF/IID, intermediate care facility for individuals with intellectual disability; ID, intellectual disability; MI, mental illness; NF, nursing facility; NI, no information; RC, related condition.

**Table 4: Number and Percentage of States Able to Report on Quality Data Measures for Dual Diagnoses (n=34)**

Measure	Dual					
	Yes	% Yes	No	% No	NI	% NI
<b>Total # of NF admissions statewide</b>						
Total # of Level I's performed statewide	15	46.9%	8	25.0%	11	34.4%
# of Level I's that were done prior to admission	14	43.8%	9	28.1%	11	34.4%
# of Level I's that were done prior to admission	15	46.9%	9	28.1%	10	31.3%
# of positive Level I's	17	53.1%	6	18.8%	11	34.4%
% of Level I's testing positive	16	50.0%	7	21.9%	11	34.4%
# of negative Level I's	16	50.0%	7	21.9%	11	34.4%
% of Level I's testing negative	16	50.0%	7	21.9%	11	34.4%
<b>Exempted Hospital Discharges (EHDs)</b>	<b>Yes</b>	<b>% Yes</b>	<b>No</b>	<b>% No</b>	<b>NI</b>	<b>% NI</b>
# of NF admissions	17	53.1%	6	18.8%	11	34.4%
# of NF admissions under exempted hospital discharges (EHDs)	14	43.8%	8	25.0%	12	37.5%
% of NF admissions under EHDs	13	40.6%	9	28.1%	12	37.5%
# of EHDs with stays longer than 45 days	13	40.6%	9	28.1%	12	37.5%
% of EHDs longer than 45 days	13	40.6%	9	28.1%	12	37.5%
<b>Preadmission Evaluation (Preadmission Screens) – Level II evaluations</b>	<b>Yes</b>	<b>% Yes</b>	<b>No</b>	<b>% No</b>	<b>NI</b>	<b>% NI</b>
# of preadmission screens (PAS) – Level II evaluations	22	68.8%	2	6.3%	10	31.3%
# of PAS that were done prior to admission	17	53.1%	6	18.8%	11	34.4%
% of PAS that were done prior to admission	16	50.0%	7	21.9%	11	34.4%
# of positive PAS (i.e., finding of MI or ID/RC)	21	65.6%	3	9.4%	10	31.3%
% of PAS leading to positive determinations	18	56.3%	5	15.6%	11	34.4%
# of positive determinations that recommend Specialized Services	22	68.8%	2	6.3%	10	31.3%
% of positive determinations that recommend Specialized Services	19	59.4%	4	12.5%	11	34.4%
# of categorical determinations	14	43.8%	7	21.9%	13	40.6%
% of categorical determinations	13	40.6%	8	25.0%	13	40.6%
# of positive PAS recommending either community placement or any institutional placement	17	53.1%	7	21.9%	10	31.3%
% of positive PAS recommending either community placement or any institutional placement	16	50.0%	7	21.9%	11	34.4%
# of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric)	17	53.1%	6	18.8%	11	34.4%
% of positive PAS recommending any institutional placement (NF, ICF/IID, or inpatient psychiatric)	16	50.0%	7	21.9%	11	34.4%
# of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric)	15	46.9%	7	21.9%	12	37.5%
% of positive PAS recommending institutional placement (ICF/IID or inpatient psychiatric)	14	43.8%	8	25.0%	12	37.5%
# of positive PAS recommending institutional placement (NF)	19	59.4%	5	15.6%	10	31.3%
% of positive PAS recommending institutional placement (NF)	17	53.1%	6	18.8%	11	34.4%
# of positive PAS recommending community placement	16	50.0%	8	25.0%	10	31.3%
% of positive PAS recommending community placement	15	46.9%	8	25.0%	11	34.4%
# of positive PAS leading to institutional placement (NF)	14	43.8%	9	28.1%	11	34.4%
% of positive PAS leading to institutional placement (NF)	13	40.6%	10	31.3%	11	34.4%
# of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric)	5	15.6%	17	53.1%	12	37.5%
% of positive PAS leading to institutional placement (ICF/IID or inpatient psychiatric)	4	12.5%	18	56.3%	12	37.5%
# of positive PAS leading to community placement	5	15.6%	18	56.3%	11	34.4%
% of positive PAS leading to community placement	4	12.5%	18	56.3%	12	37.5%
annual average time (days) between Level I and Level II PAS determination	18	56.3%	5	15.6%	11	34.4%
<b>Resident Review (RR) – Level II evaluations</b>	<b>Yes</b>	<b>% Yes</b>	<b>No</b>	<b>% No</b>	<b>NI</b>	<b>% NI</b>
# of resident reviews (RR) – Level II evaluations	17	53.1%	5	15.6%	12	37.5%
# of positive RR (i.e., finding of MI or ID/RC)	17	53.1%	5	15.6%	12	37.5%
% of RR leading to positive determinations	16	50.0%	6	18.8%	12	37.5%
# of negative RR (i.e., finding of no MI, no ID/RC)	15	46.9%	7	21.9%	12	37.5%
% of RR leading to negative determinations	15	46.9%	7	21.9%	12	37.5%
# of positive RR recommending continued NF placement	17	53.1%	5	15.6%	12	37.5%
% of positive RR recommending continued NF placement	17	53.1%	5	15.6%	12	37.5%
# of positive RR recommending community placement	13	40.6%	9	28.1%	12	37.5%
% of positive RR recommending community placement	13	40.6%	9	28.1%	12	37.5%
# of positive RR leading to continued NF placement	13	40.6%	9	28.1%	12	37.5%
% of positive RR leading to continued NF placement	13	40.6%	9	28.1%	12	37.5%
# of positive RR leading to community placement	5	15.6%	17	53.1%	12	37.5%
% of positive RR leading to community placement	4	12.5%	18	56.3%	12	37.5%

Abbreviations: ICF/IID, intermediate care facility for individuals with intellectual disability; ID, intellectual disability; MI, mental illness; NF, nursing facility; NI, no information; RC, related condition.

Despite variation from measure to measure and state to state, there are a few general patterns:

- States most consistently collect information about preadmission Level II evaluations.
- States less often collect information about Level I screens or EHDs.
- States rarely collect information about community placement following Preadmission Evaluations 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 PTAC identified (listed in Table 1), half of all states that responded could report on at least half of the measures for any of the three populations. The patterns that were found in 2016 remained broadly true in 2017, although there were some minor improvements in states' ability to track QM/QI measures.

### 3 The Minimum Data Set

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 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 question 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 2016, PTAC focused 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 a PASRR-related diagnoses as recorded elsewhere in MDS?

Responses from the two PASRR MDS questions were compared with responses from the 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 (intellectual disability/developmental disability)).

#### *SMI*

- Items I5700–I6100: bipolar disorder, psychotic disorder, schizophrenia
- Item I8000: “additional active diagnoses,” indicated with relevant International Classification of Diseases (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 codes 317–319, 758, and V79.

### 3.1 Methods

PTAC's data set covers the period between the introduction of MDS 3.0 on October 1, 2010, and December 31, 2016. In general, PTAC's method was to compare responses to PASRR MDS questions with responses to other items in MDS that ask about diagnoses related to PASRR.

For each analysis, PTAC constructed a numerator and a denominator. The denominator represents the total NF population in Medicaid-licensed NFs. Only active residents in Medicaid-licensed NFs on December 31, 2012, 2013, 2014, 2015, and 2016 are included. To determine this, a census method was used that mirrors the one CMS has used to define active residents to create a census on this annual date. An *active resident* was defined as having a target date (MDS assessment date) fewer than 150 days prior to December 31 and no discharge record between this assessment and December 31.

Because related conditions have no established diagnostic value outside PASRR, and because the MDS does not distinguish between them, PTAC treated individuals with ID and individuals with RC as belonging to the same category. Importantly, combining these categories allowed PTAC to perform compare the MDS PASRR items with the other diagnostic items in MDS.

For active residents, the most recent annual or admission record then were reviewed. The numerator varies by item (as referenced above). For ID/RC, the numerator was constructed in two ways:

1. The number of individuals for whom question A1510B *or* A1510C was checked, indicating ID or RC for the purposes of PASRR was calculated.
2. To the number of individuals computed in (1), PTAC added the number for whom A1550 contained one or more of the following answers: Down syndrome, autism, epilepsy, "other organic condition related to ID/DD," or "ID/DD with no organic condition." This method revealed the additional information that was gained by looking at diagnostic information in items other than the PASRR questions A1510B and A1510C.
3. To the number of individuals computed in (2), the number who have at least one ICD code indicating a PASRR disability—317–319, 758, and V79 – was added.

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

1. PTAC took the number of individuals for whom question A1510A was checked, indicating SMI for the purposes of PASRR.
2. To the number of individuals computed in (1), PTAC added 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 posttraumatic stress disorder (PTSD, I6100). Following Grabowski and colleagues,<sup>4</sup> the numerator was calculated in two ways:

- a. *Broad*: Individuals with all of the diagnoses listed above were included.
  - b. *Narrow*: Only individuals with schizophrenia and manic depression (bipolar disorder)—the two psychiatric conditions most often associated with institutionalization – were factored.
3. To the number of individuals computed in (2), PTAC added the number who have at least one ICD-9 code indicating a PASRR disability—codes 295–302 and codes 306–314 (whether narrow only, or narrow plus broad, as appropriate).

## 3.2 Findings and Discussion

Tables 5, 6, and 7 present the national figures for nursing homes from 2012 to 2016 for specific types of disabilities that are likely PASRR-eligible as recorded in MDS diagnostic questions listed above. Table 5 is for ID and related conditions. Tables 6 and 7 are for SMI, narrowly and broadly defined, respectively.

### *Identification of ID/RC*

Table 5 shows that in 2012–2016, the number of individuals identified by PASRR as having ID and related conditions (as recorded on A1510B/C of the 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 identified about two-thirds of the individuals it should potentially identify.

In Table 5, the second column shows the total number of active residents in Medicaid-NFs in the given year. The third column presents the number and the fourth column the percentage of these individuals who had been identified on the MDS as having had a positive PASRR for ID/RC. The fifth column presents the number of individuals in columns 3 *plus* any individuals identified as having ID/RC in item A1550 (individuals identified as having a positive PASRR for ID/RC plus individuals identified on the MDS as having a specific diagnosis of ID/RC). The seventh column presents the number of individuals in column 5 *plus* the number of individuals identified in item I8000 (ICD codes) as having a relevant type of disability (individuals identified by a positive PASRR for ID/RC plus individuals identified on the MDS as having a specific diagnosis of ID/RC plus the number of individuals who had another potentially PASRR-eligible diagnosis).

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<sup>4</sup> Grabowski DC, Aschbrenner KA, Feng Z, et al. Mental illness in nursing homes: variations across states. *Health Affairs (Millwood)*. 2009;28(3):689–700.

**Table 5: 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)	
		Number	%	Number	%	Number	%
2012	1,112,300	22,923	2.1	25,543	2.3	34,067	3.1
2013	1,296,028	28,453	2.2	31,501	2.4	42,013	3.2
2014	1,292,578	28,862	2.2	32,070	2.5	42,504	3.3
2015	1,268,609	29,303	2.3	32,518	2.6	39,610	3.1
2016	1,253,972	28,809	2.3	32,076	2.6	32,136	2.6

Abbreviation: Dx, diagnosis code; ICD, International Classification of Diseases; PASRR, Preadmission Screening and Resident Review.

Tables 6 and 7 show that the pattern for individuals with SMI is quite different. The number of individuals recorded in MDS diagnostic fields as having “narrow SMI” (bipolar disorder or schizophrenia) in the years 2012 to 2016 was 4.5 to 6 times greater than the number of individuals recorded as having a positive PASRR for SMI in question A1510A. Under the broad definition of SMI (bipolar disorder, schizophrenia, and other SMI conditions), the number of individuals recorded in MDS diagnostic fields as having SMI in the years 2012 to 2016 was 13 to 17.5 times greater than the number of individuals recorded as having positive PASRR for SMI in question A1510A.

In Tables 6 and 7, the second column shows the total number of active residents in Medicaid-NFs in the given year. The third column presents the number and the fourth column the percentage of these individuals who had been identified on the MDS as having had a positive PASRR for SMI.

In Table 6, the fifth column presents the number of individuals in column 3 plus any individuals identified as having “narrow SMI” in item A1550 (individuals identified as having a positive PASRR for SMI plus individuals identified on the MDS as having a diagnosis of bipolar disorder and/or schizophrenia). The seventh column presents the number of individuals in column 5 plus the number of individuals identified in item I8000 (ICD codes) as having a relevant type of disability (individuals identified by a positive PASRR for SMI plus individuals identified on the MDS as having a diagnosis of bipolar disorder and/or schizophrenia plus the number of individuals who had another potentially PASRR-eligible diagnosis).

In Table 7, the fifth column presents the number of individuals in column 3 plus any individuals identified as having “broad SMI” in item A1550 (individuals identified as having a positive PASRR for SMI plus individuals identified on the MDS as having a diagnosis of any PASRR-eligible mental illness). The seventh column presents the number of individuals in column 5 plus the number of individuals identified in item I8000 (ICD codes) as having a relevant type of disability (individuals identified by a positive PASRR for SMI plus individuals identified on the MDS as having a diagnosis of any PASRR-eligible mental illness plus the number of individuals who had another potentially PASRR-eligible diagnosis).



**Table 6: Rates of Serious Mental Illness (Narrowly Defined) in Nursing Homes (Year-End Census)**

Year	Number of Residents on December 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 (ICD) (PASRR or Other Dx)	
		Number	%	Number	%	Number	%
2012	1,112,300	39,512	3.6	215,497	19.4	236,979	21.3
2013	1,296,028	53,032	4.1	263,561	20.3	288,887	22.3
2014	1,292,578	57,708	4.5	261,341	20.2	289,900	22.3
2015	1,268,609	61,274	4.8	253,917	20.0	271,960	21.4
2016	1,253,972	62,426	5.0	248,353	19.8	248,437	19.8

Abbreviation: Dx, diagnosis code; PASRR, Preadmission Screening and Resident Review; SMI, serious mental illness.

**Table 7: Rates of Serious Mental Illness (Broadly Defined) in Nursing Homes (Year-End Census)**

Year	Number of Residents on December 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 (ICD) (PASRR or Other Dx)	
		Number	%	Number	%	Number	%
2012	1,112,300	39,512	3.6	684,057	61.5	701,485	63.1
2013	1,296,028	53,032	4.1	806,850	62.3	827,425	63.8
2014	1,292,578	57,708	4.5	803,663	62.2	824,354	63.8
2015	1,268,609	61,274	4.8	786,654	62.0	799,935	63.1
2016	1,253,972	62,426	5.0	776,796	61.9	776,873	62.0

Abbreviation: Dx, diagnosis code; PASRR, Preadmission Screening and Resident Review; SMI, serious mental illness.

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

1. MDS assessors accurately record in MDS the residents who have been determined by the state to have PASRR Level II status, but state PASRR programs are not identifying all of the individuals with SMI at the preadmission phase. This could be attributed to factors such as a Level I screening or the Level II evaluation process or overuse of the 30-day exempted hospital discharge and/or categorical determinations (allowing NF residents to be admitted without a preadmission screen or with an abbreviated evaluation, respectively).
2. Nursing home assessors do not accurately record PASRR status in MDS.
3. To a lesser extent, people may be developing SMI in NFs postadmission and are not undergoing Resident Review.

4. Individuals charged with completing the PASRR assessments do not have access to the MDS.

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

## 4 Recommendations

CMS will use the results of these analyses to continue discussion with states about the need to track measures that would support quality monitoring and quality improvement. Additional analyses will be conducted using MDS and other data sources to understand the cause of differences in the results presented here and will estimate more definitively how many individuals *should* have been identified by PASRR as having a relevant disability (e.g., by looking at activities of daily living, instrumental activities of daily living, medications, and other information). Training materials such as webinars and issue papers will be developed to improve PASRR identification of individuals with SMI in MDS.

In addition, CMS should:

- Continue providing technical assistance to states wishing to improve their PASRR programs, both directly (through its Central and Regional Offices) and through the PASRR Technical Assistance Center (see the "About" section below for more information).
- Continue updating the analysis of MDS presented in this National Report, in part to detect any changes in the patterns of underidentification described in this report and in the reports that PTAC has produced in previous years. If states take steps to improve their capacity to identify individuals with SMI or ID, these improvements should become evident in the MDS (specifically, in a smaller gap between the share of individuals with a PASRR identification and the share of individuals with a relevant diagnosis but no PASRR identification).
- Consider developing a "state scorecard" for PASRR programs so that states can assess in an open and transparent fashion how they compare to other states.
- Consider developing a crosswalk between the quality monitoring/quality improvement measures described in this report and the claims states submit to CMS to be reimbursed for administering the PASRR program. A crosswalk of this type could help CMS understand the degree to which states' ability to report on key metrics is related to their expenditures on their PASRR programs.
- Consider developing a series of "promising practices" pieces on states that can currently report on key QM/QI metrics to identify the strategies states have adopted to monitor and improve their programs (for example, having an electronic tracking system).

## 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, and the state intellectual disabilities authority.

PTAC urges these agencies to keep contact information up to date on the [PTAC website](#), 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 also will 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 assembled since 2009 is available on the [PTAC website](#) 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 (1) is free, (2) can include consultations by phone or email, and (3) 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](#) or by contacting the Director of PTAC, Ed Kako, at [edward.kako@PASRRassist.org](mailto:edward.kako@PASRRassist.org).