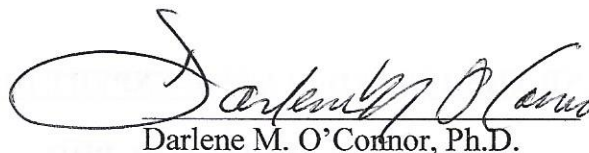


3. My report and its accompanying exhibits contain the facts, data and other information I considered in setting out my findings.
4. Exhibit A of this report describes the primary data sources, methods for preparing the analytical file, and other technical notes about the methods used.
5. Exhibits B, C, D, E, and F to this report are Excel workbooks that provide complete detail related to these findings.
6. Attachment A to my Expert Disclosure dated March 30, 2018 includes brief resumes for myself and the key project staff, including all publications that we have authored within the past ten (10) years. These resumes reflect the qualifications of myself and the Study Team who conducted the analysis and contributed to my report.
7. I have not testified as an expert witness in this or any other case, at deposition or at trial, within the last four (4) years.
8. My compensation for this work is paid by the Department of Justice under contract to JEN Associates, Inc. In February 2018, JEN Associates, Inc., was acquired by Westat, Inc. Compensation for this work is \$230 per hour for all staff time involved in preparing the data, conducting the analysis and preparing this report. This does not reflect the hourly rate should I be asked to testify or be deposed in relation to this report. My compensation is not dependent on the outcome of this litigation.

This information is accurate and complete to the best of my knowledge, information and belief.

Signed and dated:

 4/30/18
Darlene M. O'Connor, Ph.D. Date

CERTIFICATE OF SERVICE

I certify that on this 30th day of April, 2018, a true and correct copy of the foregoing Plaintiffs' and the United States' Expert Disclosure for Darlene M. O'Connor, PhD was delivered via electronic mail to the attorneys for Defendants at the addresses below:

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GARTH A. CORBETT

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
SAN ANTONIO DIVISION

ERIC STEWARD, by his next friend
and mother, Lilian Minor, *et al.*,

Plaintiffs,

v.

CHARLES SMITH, Governor, *et al.*,

Defendants.

THE UNITED STATES OF AMERICA,

Plaintiff-Intervenor,

v.

THE STATE OF TEXAS,

Defendants.

CIV. NO. 5:10-CV-1025-OG

Report of Darlene M. O'Connor, Ph.D.

In the matter of Steward, et al. v Smith

1. PURPOSE

The U.S. Department of Justice contracted with JEN Associates, Inc., on behalf of Plaintiffs and the United States, to analyze data received from the state of Texas to assist in understanding the characteristics of the population with intellectual disabilities or developmental disabilities (ID/DD) who were screened for admission to, residing in, or discharged from a nursing facility. In order to address assertions made by Defendants' experts regarding the PASRR process, specialized services, and the nursing facility census, counsel asked us to examine census estimates provided by the Defendants, provide detail about length of stay for individuals who were long-term nursing facility residents, examine the completeness of PASRR screening and evaluation documentation, examine specialized services recommendations and participation data for Interdisciplinary Team meetings and Service Planning Team meetings, and determine how many short and long-stay residents were receiving home and community-based services (HCBS) under certain Medicaid waivers before nursing facility admission.

2. QUALIFICATIONS FOR COMPLETING THE STUDY

JEN Associates, Inc. has over 30 years' experience analyzing health assessments, claims, encounters, and other forms of administrative health data. The majority of the company's work has focused on analysis of populations with disabilities, chronic conditions, and complex medical needs. I have worked at JEN for over seven years. As Vice President for Strategic Planning, and in my current role at Westat as a Senior Study Director, I develop the scope for new analytic work, develop analytic plans, and in some cases oversee study teams. Prior to my work at JEN, I led a Long-Term Care Policy research unit at the University of Massachusetts Medical School. I also have a deep understanding of the PASRR process and the Olmstead decision, having managed programs related to both for the state of Connecticut and served on the Board of the National Association of PASRR Professionals (NAPP). To complete this study, I convened a Study Team including JEN's Research Director, Joanna Kubisiak, two Senior Programmers (Douglas Bedell and Angelina Lee) and Project Management Officer (Ilene Rosin). Resumes of the key staff involved in the study are included as Attachment A to my report submitted March 30, 2018.

3. MATERIALS AND DATA

The Department of Justice provided our Study Team with data and supporting documentation (i.e., data dictionaries and related descriptive material) for this project. We understand that Texas produced this information in discovery. The time period covered by most of the data upon which the analysis is based was from October 2010 through September 1, 2017 and included electronic data from the Texas Medicaid & Healthcare Partnership ("TMHP") – including PASRR Level 1 Screenings, PASRR Level 2 Evaluations, nursing facility Minimum Data Set assessments (MDS 3.0), and nursing facility

transactions (Forms 3618 and 3619) – as well as CARE data collected on individuals who received service coordination while in a nursing facility or home and community-based services. Data sources and methods for preparing the data are described in detail in Exhibit A.

The Department of Justice also provided selected reports prepared by the Defendants which included the nursing facility census at a point in time in certain months, which I understand were relied on by Defendants’ expert to reach conclusions about the change in census over time. However, over the months of April through June 2016, the Defendants’ sources for discharge information were expanded, as discussed in the next section.

A complete list of the materials I considered, including all data files and supporting documentation provided by the Department of Justice, is set forth in Attachment B to my March 30, 2018 report and in Attachment A to this report.

4. DATA ANALYSIS & METHODOLOGY

The Study Team designed the study, reviewed the completeness and consistency of the data, and determined which variables to utilize in conducting the analysis. For this report, the Study Team linked individuals across all file types to develop a data set of unique individuals, to the extent feasible, using standard research methods as documented in Exhibit A.

The team then constructed an analytic database that included the necessary variables and time-specific markers to organize the analysis including markers for nursing facility admission/entry, discharges due to return to a non-institutional setting, transfer to another institutional setting, discharge due to death and/or discharge due to other/unknown reason. We also constructed a variable to capture what appeared to be discharges due to the lack of activity, i.e., lack of a quarterly MDS evaluation, over the next 99 days; that variable was called “discharge due to inactivity.”

For our census tracking, we added different categories of long-stay nursing facility residence in order to provide detail about the population who resided in the facility for more than 90 days and information about admissions and discharges for all groups. We produced tables for all individuals with stays of more than 90 days, one year or more, three years or more, and five years or more, respectively.

We also reviewed the completeness and responses of specific fields in all PASRR Level 1 Screenings and PASRR Level 2 Evaluations completed during the most recent year of data (9/1/16-9/1/17) to assess the most recent practice for individuals who receive these screenings and evaluations. We also broke these results down by subgroups in order to look at practice for individuals in the target population.

We also reviewed the responses of fields for specialized services recommendations in the Interdisciplinary Team Form and the PASRR Specialized Services form as well as the participation fields for the Interdisciplinary Team Form. We did not receive participation data for Service Planning Team meetings in the PASRR Specialized Services form data.

Finally, we examined the TMHP and CARE data for individuals admitted to nursing facilities during the final year of available data to determine the portion of the individuals who had been enrolled under one

of two Medicaid home and community-based services (HCBS) waivers prior to admission to the nursing facility.

We followed standard procedures for determining which source(s) to use and in which order for each variable used in the analysis. For example, because the MDS is a validated federal instrument completed within 14 days of admission to a nursing facility, we utilized the data from the MDS for the primary source for admission date, discharge date, date of birth, date of death, and Medicaid ID. When this source was not available (e.g., because an individual was discharged before an assessment was completed), we used the dates on Form 3618, Form 3619, and PASRR Level 1 screen, in that order.

In determining whether the individual had a qualifying ID/DD disability, we utilized any PASRR Level 2 evaluation as the sole source of information. Due to the nature of the PASRR Level 2 evaluation, which is designed to confirm ID/DD, we then identified the “target population” as those individuals who have the ID/DD condition confirmed under the most recent PASRR Level 2, had a Medicaid ID, and were 21 years of age or older. If the individual was identified as meeting the ID/DD qualification, all months of nursing home residency for individuals age 21 years of age and older were included in the census tables for the target population.

In general, the data were sufficiently complete to support the analysis. However, it was not feasible to clearly identify long-stay residents with a stay of more than 90 days in the first three months of complete data because of the lack of history to determine that their stay was longer than 90 days. The same is true of individuals in the longer stay groups; for example, it was not possible to conclusively determine a person had a stay of three years or longer until three years into the data. Similarly, it was not possible to confirm the census and number of discharges during the last four months of the data set because of lags in completing the MDS, which is submitted quarterly. As a result of this, conclusive data was only available through May 2017. For that reason, we show the census for the period starting April 2011 and ending May 2017 and have only generated findings for that period. We show the census in the longer stay groups only for the period in which we can conclude that the census is accurate. See Exhibit A for additional detail on our methodologies and the quality of the data.

5. FINDINGS

The key findings of our analysis are discussed below. In addition, attached as Exhibits B through F are Excel workbooks that contain more detail regarding these analyses.

a. Defendants’ Nursing Facility Census Reports

Upon request from counsel, I reviewed census reports produced by Defendants, including one from August 2015 and one from August 2017 which I understood were relied on by Defendants’ expert to reach a conclusion about the change of census during that period. Defendants’ expert had reported that the census of individuals with ID/DD in nursing facilities decreased by 17% from August 2015 to August 2017 based on these two reports. However, this conclusion is misleading. The two reports are not comparable because the August 2017 report utilized data from additional sources not used for the August 2015 report.

The report for August 2015 states that it utilized discharge information from the PL1 form, item B0655, the discharge date. Based on the documentation in the Defendants' reports, in April 2016, two additional sources were added to identify discharges: nursing facility transactions (Forms 3618 and 3619) and Service Authorization System (SAS) files which contain nursing facility authorizations. In June 2016, another source was added for determining discharges: the Local Authority Conversion Status Report (LACSR: this form was not available at the time of our review). Each of these new sources for counting discharges appears to have been used in the August 2017 report. The addition of multiple sources for counting discharges represents a different methodology for calculating the census and is likely to have contributed to differences in the total census numbers between August 2015 and August 2017. This is confirmed by a significant decrease in individuals included in the census between the March 2016 report, which used the original methodology, and the April 2016 report, which added two of new sources for counting discharges: nearly 1,000 individuals are eliminated between these two reports.

In Table 1 we provide a list of the monthly point-in-time census numbers for selected months from Defendant's counts as provided to us by the Department of Justice. After eliminating duplicate records based on social security number and records for individuals who were not 21 or older at the time of the census, we calculated the counts as of the date of the report. We believe that only the reports using a consistent methodology should be compared. Thus, we compare the August 2015 report with the March 2016 report, and June 2016 with August 2017; for March 2016-April 2016, and April 2016-June 2016 it is not possible to determine the true nature of the decrease for these periods due to the change in data sources for discharge information. The April 2016 census has a unique methodology and therefore could not be compared with any other reports. Based on the reports to which we had access, the census increased within each comparable period. The most recent 14 months, during which a consistent methodology was used, shows a census increase of 13.6%. Therefore, a conclusion that the census went down by 17% over the two years is inaccurate. We include this chart as a way of more accurately interpreting the changes over selected periods within the Defendants' reports.

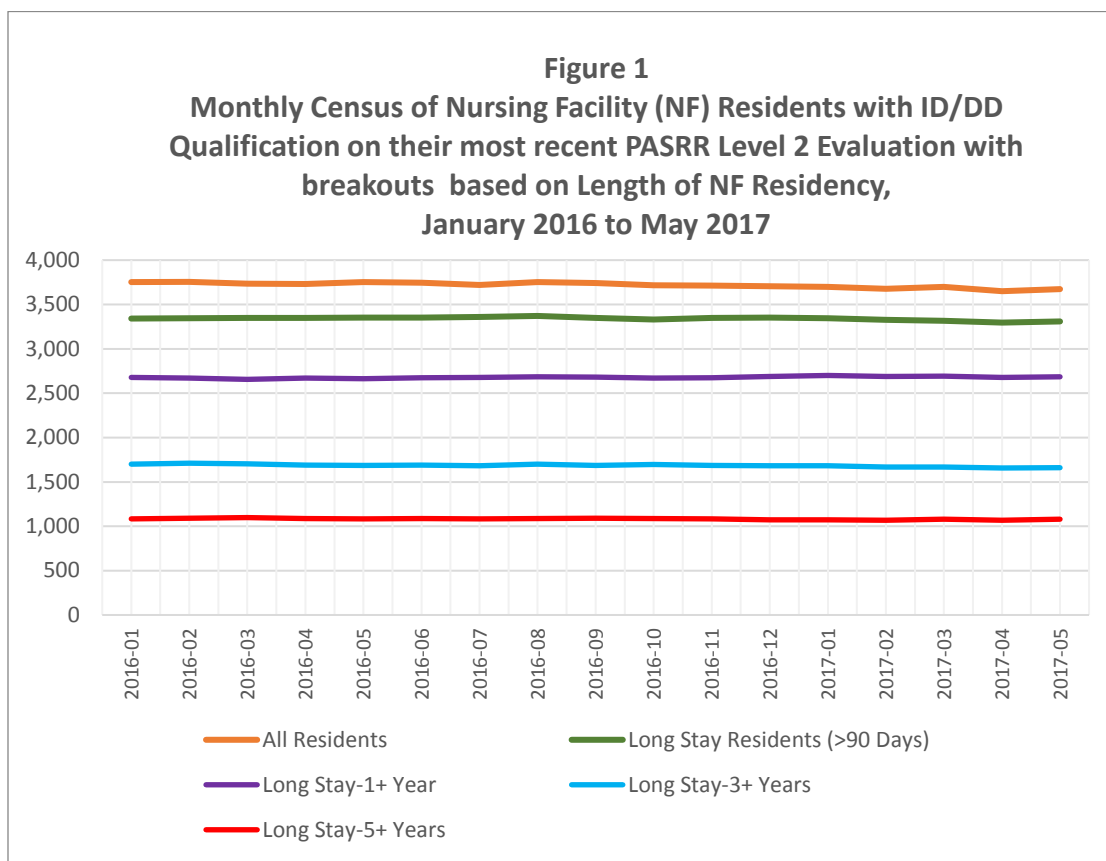
Table 1
Nursing facility census based on selected reports from Defendants

Month/ Year	Defendant Census Reports Nursing facility residents at Time of Report	Percent change within Period of comparison	Source for discharge info used in the Defendants' reports
August 2015	3,887 ¹	5.9% increase 8/15-3/16	PL1, item B0655
March 2016	4,118		
April 2016	3,126	N/A	PL1, item B0655, Form 3618, Form 3619, or SAS
June 2016	2,907	13.6% increase 6/16-8/17	PL1, item B0655, Form 3618, Form 3619, SAS, or LACSR
August 2017	3,301		
Source: Analysis of Defendants' census reports for selected months; adjustments were made to eliminate duplications and individuals under age 21 at the time of the census.			

¹ We understand that Defendants' expert calculated 3,968 individuals from the August 2015 report and 3,310 individuals from the August 2017 report. The August 2015 count of 3,968 appears to be the number of rows of individuals after eliminating duplicates based on SSN. Our count reduces this number further by removing individuals who were under age 21 at the end of the respective month. The August 2017 count of 3,310 appears to be the number of rows of individuals on the August 2017 report without deduplicating or removing children. removed 8 individuals based on duplicate SSNs and one more individual based on age at the end of the month.

b. Census and Discharge Patterns of Long-stay Residents with ID/DD

In order to assess whether Defendants' expert's assertions regarding the movement of individuals with ID/DD from nursing facilities was correct, counsel requested that we analyze the census and discharge patterns of individuals experiencing long stays in the nursing facilities. There were 3,308 individuals with long stays (more than 90 days) in a nursing facility during May 2017. The nursing facility census for long-stay residents has remained relatively stable over time. Within that group, as of the May 2017 census, there were 2,684 residents whose stay was one year or more; this included 1,662 individuals whose stay was three years or more and 1,079 with stays of five years or more. The size of each of these groups has remained stable for as far back as we are able to measure them based on available data as evident in Figure 1 below.



A complete analysis of the census and discharge data is attached as Exhibit B.

c. PASRR Level 1 Screening and PASRR Level 2 Evaluation Analyses

To assess Defendants' experts' assertion that the PASRR Level 1 and Level 2 provide ample opportunities for diversion and transition in Texas, counsel requested that we examine the completeness of data and the aggregate results of certain sections on the PASRR Level 1 Screen and the PASRR Level 2 Evaluation. The purpose was to confirm the extent to which PASRR evaluators were completing critical information on these forms.

To conduct this analysis, we looked at the most recent year of data, 9/1/16-9/1/17. We further looked at data on the screenings and evaluations conducted for individuals who were Medicaid-eligible, age 21 and older, and had ID/DD confirmed on their most recent PASRR Level 2 when that PASRR Level 2 occurred during the year (the “confirmed ID/DD subgroup”). Finally, to have a sample of the results for individuals experiencing a long stay, we examined the results for individuals in this confirmed ID/DD subgroup who were identified as residing in a nursing facility during the month of May 2017 and were experiencing a stay of more than 90 days (the “long stay subgroup”).

There were 7,979 PASRR Level 1 Screening forms provided for the period from 9/1/16-9/1/17. This number includes repeated screenings for some individuals. More than half (58.5%) of individuals screened had a positive indication of ID/DD (item C0200 or C0300) and in the confirmed ID/DD subgroup, 89% had a positive indication in this field.

Of the individuals screened in the confirmed ID/DD subgroup (N=2,167), 13.3% were admitted with a 30-day exemption due to a recent hospital discharge (item F0100). For individuals in the long stay subgroup the number admitted with a 30-day exemption was comparable at 13.2%. Another two thirds of the confirmed ID/DD subgroup were admitted under expedited admissions, most for convalescent care (61.5%). The full distribution of expedited admissions appears in Table 2.

Table 2 Expedited Admissions (9/1/16-9/1/17) Individuals with ID/DD on most recent PL2	
Total Screenings	N=2,167
Percent with expedited admissions (F0200)	
Missing	7.2%
Not expedited	25.7%
Convalescent care	61.5%
Severe physical illness	3.4%
Respite Care	0.4%
Terminal illness	1.1%
Protective Services	0.2%
Source: Analysis of Texas data extract prepared using data from PASRR Level 2 Evaluation data provided to the U.S. Department of Justice for the period from 9/1/16 through 9/1/17.	

We were asked to examine the extent to which individuals were asked about their preferences about where they would like to live, which would be important for purposes of diversion and transition, as recorded in Section E of the PASRR Level 1. For question E0100, “Where would this individual like to live now?” virtually all had this field reported as missing (99.2% for both all screenings and for the first screenings in the period for the confirmed ID/DD subgroup; 99.8% for the long stay subgroup). The same results appear for question E0300 which asks about living arrangement options. This reveals that Section E is rarely utilized to identify alternate living options for people being screened for nursing facility admission.

The screening data also included a field asking whether the nursing facility was willing and able to serve the individual (D0100N). The instructions for the form indicate that the nursing facility is required to complete this field on the PASRR Level 1 after it reviews the PASRR Level 2 Evaluation for the individual, which should contain information about the individual's specialized service needs. Only 37.6% of the individuals in the confirmed ID/DD subgroup with screening data in this period had a positive response indicating that the nursing facility had agreed to serve them on their first PE in the time period. The majority of the others (62.1%) had this field missing even though they were very likely eventually admitted to a nursing facility. The results were similar for the long stay subgroup. 57.8% of those individuals had this field missing on their PASRR Level 1 screen. This reveals that for a significant number of individuals who enter and remain in nursing facilities, Section D is not being used to document that nursing facilities can meet those individuals' needs.

We then examined PASRR Level 2 Evaluation forms for individuals in the confirmed ID/DD subgroup (2,296 individuals). We examined three key questions related to alternative settings for these individuals.

Question F0500 asked if the individual would like to live somewhere other than a nursing facility. About 33% of individuals responded that they would like to live somewhere other than a nursing facility, while 48.8% reported that they would not like to live somewhere other than a nursing facility. For the remaining portion (18.2%), the response category was marked "unknown". F0600 also asks where the individual would like to live now. Just 7.2% of this group said they would like to live in a place where there is 24-hour care. This field is left blank for 48.6% of individuals.

We then looked at the question about whether the individual faced any challenges or barriers to return to the community (F0800). The analyses indicate that 12.9% of the confirmed ID/DD subgroup (2,296) had a response of "none" on their most recent PASRR Level 2 Evaluation. Of the individuals who had said that they did not want to live somewhere other than a nursing facility (1,120 individuals), most (94.3%) had at least one barrier or challenge recorded by the evaluator. Among the individuals whose preference was unknown (418 individuals), a similar percentage (91.9%) had at least one barrier or challenge.

However, within the group of individuals who had expressed a positive preference for returning to the community (758 individuals), 73.9% had at least one challenge recorded. More than one-fourth (198 individuals, 26.1%) were listed on their most recent PASRR Level 2 Evaluation as having no barriers to returning to the community. Of those who wished to return to the community who had no challenges or barriers, only 4 (2%) had any evidence of a referral to community services on their most recent PASRR Level 2 Evaluation. For 98% the field was missing. The numbers of referrals provided were essentially the same when we looked at the last PASRR Level 2 Evaluation for all individuals in the confirmed ID/DD subgroup: only 1.8% of people with a confirmed ID/DD received any referral information for community services.

A complete analysis of the data points we reviewed from the PASRR Level 1 Screenings and PASRR Level 2 Evaluations is included at Exhibit C.

d. Specialized Services Recommendations

To examine the Defendants' experts' assertions that Texas' system ensures that individuals receive needed specialized services and the role of the PASRR Level 2 Evaluation, the Interdisciplinary Team, and the Service Planning Team in ensuring the provision of specialized services, counsel requested that we also examine data from those sources.

As of the most recent PASRR Level 2 evaluation for individuals in the confirmed ID/DD subgroup, 21.5% of individuals had no nursing facility specialized services recommended (B0500). Similarly, 20% of this subgroup had no Local Authority specialized services recommended other than service coordination and alternate placement services, which are automatically populated in the form. This information is included in Exhibit C and additional detail is included in Exhibit F.

We also looked at specialized services recommendations for nursing facility (A1700) and Local Authority specialized services (A1800) in the Service Planning Team (SPT) meeting as recorded in the PASRR Specialized Services Form for the confirmed ID/DD subgroup. 1,430 individuals had at least one Service Planning Team meeting during the year, of the 2,296 in the subgroup. Nearly 2/3 of the population that had a meeting (63%) did not have any nursing facility specialized services recommended as of their most recent SPT meeting.

1,772 individuals had at least one Interdisciplinary team meeting during the year, of the 2,296 in the subgroup. Recommendations recorded by the Interdisciplinary team were similar to the SPT form on most specific services but a smaller portion (45.7%) did not have any nursing facility services recommended. Nursing facility specialized services were recommended with the following frequency on the last evaluation for PASRR Level 2 Evaluation, the PASRR Specialized Services form (SPT) and IDT respectively:

Nursing Facility Specialized Services	PASRR Level 2 N=2,296	Interdisciplinary Team (IDT) N=1,772	PASRR Specialized Services/Service Planning Team N=1,430
Specialized Physical Therapy (PT)	44.9%	19.1%	19.1%
Specialized Occupational Therapy (OT)	74.9%	19.0%	17.8%
Customized Manual Wheelchair	4.6%	12.6%	14.3%
Specialized Assessment—PT	N/A	12.5%	13.3%
Specialized Assessment—OT	N/A	12.0%	11.5%
Specialized Assessment—ST	N/A	8.1%	7.0%
Specialized Speech Therapy (ST)	39.9%	10.6%	9.7%
Durable Medical Equipment	44.6%	4.6%	3.5%
None of the above (IDT/SPT)/Missing (PL2)	21.5%	45.7%	63.0%

For services provided through the Local Authority, most individuals who had a SPT meeting had service coordination recommended (96.6%) and 8.1% were recommended for alternate placement assistance as of their most recent SPT meeting. Within the other specialized service options, the most frequently recommended services were independent living skills training (17.4%), day habilitation (7.1%) and behavioral support (3.3%); other services were recommended for 1% or less of the population. 75.2% were not recommended to receive any other services besides service coordination or alternate placement assistance. The recommendations on the Interdisciplinary Team records were similar although there was a smaller number (74.5% compared with 96.6%) who were recommended to receive service coordination on the IDT records. And there was a similar percentage (73.3%) who had no services other than service coordination or alternative placement assistance recommended.

Local Authority Specialized services	PASRR Level 2 N=2,296	Interdisciplinary Team (IDT) N=1,772	PASRR Specialized Services/Service Planning Team N=1,430
Service Coordination	100%	74.5%	96.6%
Alternative Placement Assistance	99.96%	11.4%	8.1%
Independent Living Skills Training	79.4%	12.6%	17.4%
Day Habilitation	16.5%	8.4%	7.1%
Behavioral Support	44.5%	3.5%	3.3%
None of the above (IDT/SPT)/Missing (PL2)	0%	4.0%	3.4%
At least one service other than Service Coordination/ Alternative Placement Assist	80%	26.7%	24.8%

We also reviewed participation data for the IDT meetings. Of note, of those individuals who had IDT meetings, in 40.6% of the most recent meetings there was no representative of the Local Authority (ID/DD) present. As noted above, we did not find participation data for the Service Planning Team meetings in the PASRR Specialized Services Form data where we would expect it to be so could not assess that data point.

This data reflects a decrease in the number of individuals with recommended specialized services from the PASRR Level 2 evaluation to the IDT and SPT meetings. A complete analysis of the data points reviewed from the Interdisciplinary Team Form and the PASRR Specialized Services Form is included at Exhibit D.

e. Waiver Utilization Prior to Nursing Facility Placement

Finally, to assess Defendants' expert's statements about Texas' ability to identify individuals with ID/DD entering nursing facilities, counsel requested that we assess CARE data showing utilization of the HCS and TxHmL ID/DD waiver services prior to nursing facility placement. Between 9/1/16 and 9/1/17, there were 1,675 adults admitted to nursing facilities who had ID/DD confirmed on their most recent PASRR Level 2 Evaluation. Of those, at least 21% were enrolled in a TxHmL or HCS waiver within the month of admission or the six months prior to admission.

A complete summary of this analysis is included at Exhibit E.

6. Discussion

The state's monthly census reports suggest that there was an increase in the overall number of adult individuals with ID/DD residing in nursing facilities during the periods that can be compared using those reports between 2015 and 2017. This is inconsistent with Defendants' expert's finding that there was a 17% decrease, which relies on a misleading comparison. We used data from TMHP and CARE to construct an analytic database and determined the monthly census. Our conclusion is that the census has remained relatively flat over a more than three-year period. This is true both for individuals in nursing facilities for short periods of stay, and those in nursing facilities for years.

In addition, the failure to complete certain fields on the PASRR Level 1 Screening and on the PASRR Level 2 Evaluation forms suggest that there are missed opportunities to utilize the PASRR process for diversion and transition to enable individuals to return to the community following a nursing facility stay. These include questions about alternate placement options and referrals to community services. Our review of the PASRR Level 2 Evaluation, IDT, and SPT data showed that specialized services recommendations decrease between the PASRR Evaluation and the IDT and SPT meetings. Finally, the data on individuals receiving two of the HCBS waiver services available in Texas indicates that only about 1/5 (21%) of individuals with ID/DD admitted to nursing facilities were enrolled in community services shortly prior to admission, another potential opportunity for diversion since these individuals should be known to Texas and the LIDDA.

I believe that the methods and findings in this section provide an accurate portrayal of the information available for our analysis.

EXHIBIT A

Data Sources and Technical Notes on Study Methods

A. Target population:

- The study covered individuals in the state of Texas from 10/2010 through 9/2017 who were: Individuals with intellectual disabilities or developmental disabilities (ID/DD) identified through selection method negotiated by the parties. These criteria were included at Exhibit C to my previous report.
 - The initial selection process identified 17,412 unique individuals with an indication of ID/DD from any source (MDS, PASRR Level 1, PASRR Level 2, or old PASRR forms) in the state who were receiving nursing facility services, had a Medicaid ID, and were age 21 or older during the study period.
 - The primary focus was on the subset (7,351 unique individuals) with ID/DD indicated on the most recent PASRR Level 2 evaluation, who were aged 21 or over, who qualified for Medicaid, and who had a nursing facility admission or residence at any point within the study period.
- Some aspects of the study of PASRR Level 1 and Level 2 data, Interdisciplinary Team data, and PASRR Specialized Services form data were not limited to the target population described above but also included a review of all data from those forms within a specified time period.

B. Data sources

- Nursing facility Minimum Data Set (MDS)
A 27-page initial & quarterly nursing facility assessment conducted on all individuals admitted to and/or residing in nursing facilities.
- Electronic PASRR Documents
Level I PASRR Screen
A 12-page screening document that identifies individuals with an indication of ID/DD (or mental illness) who are referred for nursing facility placement; if ID/DD is indicated, the individual should be in this data base. (They could be included multiple times.) The form has approximately 180 fields; approximately 1/3 were considered useful for the study.

Level II PASRR Evaluation
A 32-page evaluation designed to confirm whether an individual has ID/DD (or serious mental illness), preliminarily identify any specialized services needed for ID/DD if admitted, and identify community-based services that could divert the individual from admission. (This information may be updated annually or if there is a change in the individual's status.) Approximately 100 fields were considered potentially useful for the study.
- CARE data
This source includes data collected on individuals who received home and community-based services (HCBS). Relevant information includes demographics, eligibility for HCBS waiver, detail related to specific community services authorized, and estimated

care plan payments. Details on specific services provided before and/or after nursing facility entry were considered most relevant for the study.

○ Nursing Facility Transactions: Forms 3618 and 3619

Form 3618: Resident Transaction Notice

The nursing facility administrator prepares Form 3618 for recipients who are:

- eligible Medicaid recipients,
- applicants for Medicaid (medical assistance), or
- Medicaid recipients who are being discharged from the Medicaid program.

The nursing facility administrator prepares a separate Form 3618 for each transaction. Each admission into or discharge from the facility requires a Form 3618 except approved therapeutic passes. An admission or discharge between payor sources also requires Form 3618 or Form 3619, Medicare/Skilled Nursing Facility Patient Transaction Notice.

Form 3618 must be completed and all copies submitted within 72 hours of the date of the transaction. Form 3618 is not used to report transactions involving private-pay residents, except when a resident who has been private pay is applying for Medicaid or when a recipient has been receiving Medicaid and is denied.

Form 3619: Patient Transaction Notice

The nursing facility administrator prepares Form 3619 for recipients who are Medicaid recipients/applicants approved by Medicare for a Medicare skilled nursing facility (SNF). The nursing facility administrator prepares a separate Form 3619 for each transaction. Each admission into or discharge from the facility requires a Form 3619 except approved therapeutic passes. An admission or discharge between payor sources also requires Form 3618, Resident Transaction Notice, and Form 3619, Patient Transaction Notice.

Form 3619 must be completed and all copies submitted within 72 hours of the date of the transaction. Form 3619 is not used to report transactions involving private-pay residents.

○ PASRR Specialized Services files:

These files contain the data and notes for service planning team meetings including specialized services recommended for the nursing facility and/or the Local Authority to provide while the individual is residing in the nursing facility.

○ Interdisciplinary Team (IDT) files:

These files contain the data and notes following each interdisciplinary team (IDT) meeting and the quality review team meetings. IDT meetings are generally held on a quarterly basis.

- Defendants' Monthly Census Reports

We also were provided with selected reports prepared by the Defendants which included the nursing facility census for a single day within various months. We understood that these were relied on by Defendants' expert(s) to reach conclusions about the change in census over time. Initially, we received the reports for August 2015 and August 2017. However, the sources and methodology used for calculating the census were different for those two months, so we requested and received reports for the months in which changes in methods were recorded. The result was that we received additional reports for the months of March, April, and June 2016 in order to determine the impact of the changes on the overall census numbers.

C. Project Initiation & Data Transfer

The following steps were implemented to prepare for the analysis:

- We set up a server and a secure file transfer method to receive the data.
- The Department of Justice sent the above files through secure file transfer along with the descriptions and data dictionaries that the Department of Justice had reportedly received from the state on the above data sets, and we hosted all files within our secure data center.
- The files were in several cases divided into sub-files or separate Excel tables; some additional files that could add context (e.g., Interdisciplinary Team Notes) were also received.

D. Data Quality Review and Data Linkage

The extent to which an effective analysis could be conducted was highly dependent on the quality and completeness of the data and the adequacy of the descriptive information available on the data sources and specific variables. For the TMHP-provided data (MDS, PASRR, Forms 3618 and 3619), each file type was provided as a set of three sub-files. Each sub-file was imported, checked for completeness and usability, and had duplicates removed; then the three sub-files were combined into a single source for each file type. For the CARE data, we used the most recent pull of that data provided to us.

Next, we conducted a comprehensive review of all data fields within remaining groups of files:

- Nursing facility Minimum Data Set (MDS-3.0)
- Electronic PASRR documents
- CARE files
- Nursing facility transactions, Forms 3618 and 3619
- Interdisciplinary Team files
- PASRR Specialized Service Planning Team files

In detailed reports, we documented the percent of missing values, variable length and values for numeric fields, and a variety of other descriptors of each field. We compared the Social Security Numbers

(SSNs) and other identifiers (e.g., Medicaid ID, name, address, age) across the file groups. Initially we determined that there were 227 individuals in the CARE files who were identified as transferred to a nursing facility but for whom there was no MDS form completed. Since the MDS form is required within the first 14 days after admission, we suspected that these individuals were not matched due to errors in the SSNs or early discharge prior to completion of the MDS assessment.

Overall, the quality of the data was good. Import of the raw files presented a handful of challenges which we were able to work through. In one of the Excel files, the column headings were replicated half way through the data which caused the initial import to fail. Removing the extraneous line resolved the problem with no further issues. In several of the data files that contain lengthy notes, we discovered there were line feeds embedded in the values which resulted in corrupted imports. Replacing the line feeds with spaces resolved the issue and fully captured the data contained in the raw file. In several of the files for the later pulls, there was 100% duplication of records as evidenced by exact record matches across all variables. The duplicates were removed to insure beneficiaries and/or services were not double-counted. Upon successful import, we noticed that some data contained SSNs that were less than 9 digits in length. Further analysis demonstrated that the affected SSNs had been stored with leading zeros omitted. Correcting this anomaly demonstrated that the affected records then linked to appropriate beneficiaries contained in other related data sets. Finally, we found several instances where SSNs were miscoded among the various data sources (i.e. digits transposed, off by one digit, etc.). Analysts used a custom matching algorithm to ensure proper cross-file linkages were performed.

Finally, as noted in the report, it was not feasible to clearly identify long-stay residents in the first few months of the data because of the lack of history to determine that their stay was longer than 90 days. It was also not possible to conclusively determine a person had a stay of one, three, or five years or more until one, three, and five years into the data, respectively. Similarly, it was not possible to confirm the census and number of discharges during the last four months of the data set because of potential lags in completing the MDS. For that reason, in the figures provided in the report and workbook we show the census for the period starting April 2011 and ending May 2017. We show the census in the longer stay groups only for the period in which we can conclude the census is accurate.

Methods for Linking Data Sources and Creating Nursing Facility Census and Discharge Profiles

The creation of monthly and annual nursing facility (NF) census and transition profiles was dependent on compiling date spans and admission/discharge indicators from multiple sources. Ideally, there was a single unique identifier for an individual. Initially, the Social Security Number (SSN) looked like a good possible unique identifier for all individuals. However, upon testing, we found that SSNs uniquely identified individuals only in the CARE data. In the other data sources, multiple SSNs could be observed for an individual; a given SSN could represent multiple people; and in some data, the SSN was missing. Having multiple SSNs for an individual, for example, would lead to fragmentation of their nursing facility stay, undercounting of the length of stay for the individual, and the fragmented stays would be attributed to multiple people. Having a single SSN representing multiple people, on the other hand, would lead to undercounting of people. Having a missing SSN would lead to data not being attributable to an individual.

Medicaid ID and Medicare IDs were not viable as alternative stand-alone identifiers because in addition to having the same problem of non-uniqueness, they were not as well populated as SSNs. Examples of problems found with identifiers are:

- Same SSN but different combinations of names, date of births, and/or genders
- Same Medicaid ID but different combinations of names, date of births, and/or genders
- Same Medicare ID but different combinations of names, date of births, and/or genders
- Same SSN but different Medicaid IDs
- Same SSN but different Medicare IDs
- Same Medicaid ID but different SSNs
- Same Medicare ID but different SSNs
- Same Medicaid ID, last name, first name, date of birth, gender with different SSNs

The following table shows counts of the sample problems found in the primary sources:

Example Problems Found with Identifiers	MDS	Form 3618	Form 3619	PASRR	CARE
Same SSN but different combinations of names, date of births, and/or genders	2,250	-	-	2,565	--
Same Medicaid Id but different combinations of names, date of births, and/or genders	2,042	-	-	2,064	--
Same Medicare Id but different combinations of names, date of births, and/or genders	1,573	-	-	1,322	-
Same SSN but different Medicaid Ids	682	1,533	197	2,013	-
Same SSN but different Medicare Ids	1,303	1,671	499	609	-
Same Medicaid Id but different SSNs	358	279	103	97	-
Same Medicare Id but different SSNs	310	165	103	121	-
Same Medicaid Id, last name, first name, date of birth, and gender, but different SSNs	328	-	-	88	-

We used the following data fields, where available, to identify records that likely represented an individual: SSN, Medicare ID, Medicaid ID, Last Name, First Name, Date of Birth, and Gender. The primary fields were SSN, Medicare ID, and Medicaid ID. Secondary fields for identification included name, date of birth, and gender to confirm or reject candidate linkages. While this process did not completely resolve discrepancies, it improved our ability to identify unique individuals. The following table shows the unique counts of identifiers before and after the linkage. If we had used SSNs without the linkage process, we would have over-identified the number of people in the MDS and PASRR and under-identified the number of people in Form 3618 and Form 3619.

	MDS	Form 3618	Form 3619	PASRR	CARE
Before linkage:					
Number of unique combinations of identifier fields (Medicare Id, Medicaid Id, SSN, Last Name, First Name, Date of Birth, and Gender)	29,844	32,989	16,347	27,452	2,941
Number of unique non-blank Medicaid Ids	18,794	20,394	11,984	19,423	2,941
Number of unique non-blank SSNs	19,700	17,791	10,736	20,422	2,941
Number of unique non-blank Medicare Ids	16,596	14,672	10,467	14,837	937
After linkage:					
Number of unique individuals identified after linkage	19,434	20,214	12,055	20,402	2,941

For those analyses that were limited to the target population, we then eliminated individuals who were not in the target population, i.e., eliminating those who did not have a qualifying ID/DD according to the most recent PASRR Level 2 Evaluation, were not age 21 or older during the study period, or did not have Medicaid during the study period. And for many of the tables, we also narrowed the population focus on the more recent period of performance.

Method for establishing ID/DD status for inclusion in the census tables

To confirm ID/DD qualification, we used the data identifying ID/DD as described above to “turn on” an ID/DD qualification for inclusion in the tables. The ID/DD qualification was determined from the most recent PASRR Level 2 Evaluations. Once the individual met the ID/DD qualification, we included all of their nursing facility months as meeting this criterion. This excluded 346 individuals who were identified with ID/DD on an earlier PASRR Level 2 evaluation but did not have ID/DD confirmed on their most recent evaluation.

PASRR Level 2 Evaluation Data:

- Identification based on the Assessment Type(A0600)

AssessmentType

1. ID/DD only
2. MI only
3. ID/DD and MI

and the answers in Section B (ID/DD Section):

B0100: To your knowledge, does the individual have an Intellectual Disability which manifested before the age of 18? (e.g. Mental Retardation)

B0200: To your knowledge, does the individual have a Developmental Disability other than an Intellectual Disability that manifested before the age of 22 (e.g. autism, cerebral palsy, spina bifida)

ID/DD = A0600/AssessmentType in ('1','3) **AND** positively identified with an Intellectual Disability (B0100 = 1. Yes) or a Developmental Disability (B0200 = 1. Yes)

- Limitations: The PASRR Level 2 Evaluation data only spans May 2013 to Sep 2017

We then sought to profile individuals who were admitted to or resided in a NF from 2011-2017. We used the MDS 3.0 file as our primary source and supplemented it with key elements in other data files. The other data sources contributed admissions, discharges, and death dates not always present in the MDS data. We used the combined patient information to create person histories for all NF activity, characterize transitions in and out of NFs, and summarize patient activity into NF episodes. The data sources and data elements used to create the person histories are described below:

- **MDS 3.0**

Person Identifiers

Dates:

A1600 Entry Date

A1900 Admission Date

A2000 Discharge Date

A2300 Assessment Reference Date

A2100 Discharge Status

Transition Indicators:

A0310F Entry/discharge reporting

- **FORM 3618**

Person Identifiers

Dates:

Transdate

Transition Indicators:

Transtype

Translocation

Dischargetype

- **FORM 3619**

Person Identifiers

Dates:

Transdate

Transition Indicators:

Transtype

Translocation

Dischargetype

- **PASRR LEVEL 1**

Person Identifiers

Date:

NFDateOfEntry

DeceasedOrDisChargedDate

Transition Indicators:

NFAdmittedIndividual

DeceasedOrDisCharged

- **CARE Assignments Finder Both**

Person Identifiers

Date:

EFFECTIVE_DT

Transition Indicators:

DISCHARGE_REASON

DISCHARGE_TYPE

NF Admissions and Episodes of Care

After building individual histories for NF activity, we created rules for defining episodes and characterizing transitions. These rules represented decision points to identify admissions and different types of discharges, as well as to define the time periods for short- and long-term NF episodes, including gaps in or cessation of NF stays.

Admissions marked the beginning of a new NF episode of care. Admissions were identified as dates specifically labeled as an ‘admission’ or ‘entry’. Admissions or entry dates occurring within 30 days of previous NF stay were not used to trigger a new episode based on the CMS guidance regulation Section 40.3.2 which states that “A patient is deemed not to have been discharged if the time between SNF discharge and readmission to the same or another SNF is within 30 days.”² If this occurred, the admission or entry records extended the pre-existing episode. MDS assessments not specifically labeled as an admission or entry date also served as NF admission if the assessment date met the following criteria: it was the first observed NF activity for the individual, it occurred more than 30 days after a discharge date where it was noted that the individual’s return was not anticipated, or the assessment date occurred after a gap in activity of more than 99 days. MDS assessments should be completed every 92 days. After reviewing the distribution of gaps in assessments, we used 99 days in our gap logic to provide a 7-day buffer to account for potential untimely entry of MDS data before ending an episode.

If there was conflicting admission or entry date information across the date sources, we prioritized the date used to trigger the admission from the sources in the following order:

1. MDS 3.0
2. Form 3618/3619
3. PASRR Level 1

NF Discharges

A discharge potentially ends a NF episode. We identified four different types of discharges. The different types characterized discharges from NFs. The details of each are summarized below.

1. **Discharge-Non-institutional Setting:** Discharges in this category were identified through MDS (variable A2100) or Form 3618 (Translocation variable) when the individual was indicated as having been discharged to “community” on MDS (defined in MDS as private home/apt., board/care, assisted living or group home) or to “home” on Form 3618 and their return to the nursing facility was not anticipated. This type of discharge does not imply that an individual received community-based services after discharge.
2. **Discharge-Other/Unknown Setting:** This type of discharge required the reporting of a discharge date that indicated that the individual was being discharged for one of the following:
 - For MDS—to another nursing home or swing bed, acute hospital, psychiatric hospital, inpatient rehabilitation facility, ID/DD facility, hospice, long term care

² <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/clm104c06.pdf>

hospital, or other (A2100=02, 03, 04, 05, 06, 07,09, 99) or their return was anticipated (A0310F=11)

- For Form 3618—to hospital, nursing facility, community ICF=IID³, Medicare/SNF, state institution, hospice, private pay, or other/unknown (TRANSLOCATION=1,2,3,4,6,7,8,9) or their return is anticipated (DISCHARGETYPE not 1)
 - If these sources were not available, discharge data from Form 3619 and from PASRR Level 1 were also used to identify this type of discharge.
3. **Discharge-Inactivity:** A nursing facility episode was considered to have ended if a discharge date was not reported but a gap of more than 99 days was seen in an individual's MDS assessment activity. MDS assessments are required to be completed every 92 days. After reviewing the distribution of gaps in assessments, we used 99 days in our gap logic to provide a 7-day buffer before ending an episode.
 4. **Discharge-Death:** An individual was considered discharged due to death if their discharge date coincided with the individual's death date, or if a discharge date was not reported for a person and the end of a person's activity occurred within 99 days of their death date.

If there was conflicting discharge date information across the date sources, we prioritized the date used to end the episode from the sources in the following order:

1. MDS data
2. Forms 3618 and 3619
3. PASRR Level 1

Death dates were present in the PASRR Level 1, CARE data, MDS, and Forms 3618 and 3619. If an individual had conflicting death dates reported from these sources, we used the death reported in the PASRR Level 1 data.

For the PASRR Level 1 and 2 analyses, the IDT/PSS analysis and CARE waiver utilization analysis, we used the linked identifiers to identify the individuals in the respective subgroups related length of stay. Definitions identifying fields for these analyses are included in the respective workbooks for these analyses.

Reports from Defendants:

Methodology for recalculating estimates of census for Defendants' reports:

1. We removed all duplicates based on SSN.
2. We removed all individuals under age 21 at end of the respective month. Age was

³ Note: Form 3618 included a category called "Community ICF-IID". Because these were called ICFs, we interpreted this setting to be an institutional setting; however, we understand that these could have been small group homes with less than 6 individuals. The data does not appear to be sufficient to determine which of these ICFs were non-institutional, but we were able to determine that only about 0.4% of the discharges reported in this category were to community ICFs.

calculated by:

(End of Month Date - Birth Date)/365.25)

We divided by 365.25 to account for leap years. We did not round age up or down. For example if the individual's age calculated fractionally as 20.90 then the individual was dropped as being younger than 21 at end of month.

Period	Full Count	Count No Dups	Count No < 21
Aug-15	4,014	3,968	3,887
Mar-16	4,282	4,222	4,118
Apr-16	3,198	3,192	3,126
Jun-16	4,413	2,971	2,907
Aug-17	3,310	3,302	3,301

E. Data enhancement and construction of analytic files

We had consulted with DOJ about which fields they considered most likely to be useful for the analysis. We compared these suggestions with the data collection forms and the proposed analyses and, applying our experience in working with MDS and other quantitative data, made final decisions about which variables to use, and which source to use as primary, secondary, and tertiary based on the results of the data quality review and the relative completeness/accuracy of the data in each respective field.

We maintained the analytical files for the nursing home census, the PASRR screening and evaluation documentation, the PASRR Specialized Services form data, the CARE data, and the Inter-disciplinary Team data with a common identifier for each individual to enable us to map across the files as needed. The analyses for the four workbooks related to this report utilized only the specific variables that might be needed for the analysis. We enriched the data by creating additional analytic variables (e.g. admitted, discharged, and type of discharge).

The detailed Excel workbooks provide our complete findings including additional detail supporting the report.

Exhibit B

Confidential -
Subject to
Protective Order

Exhibit B has been provided
electronically via email and also
produced electronically

Exhibit C

Confidential -
Subject to
Protective Order

Exhibit C has been provided
electronically via email and also
produced electronically

Exhibit D

Confidential -
Subject to
Protective Order

Exhibit D has been provided
electronically via email and also
produced electronically

Exhibit E

Confidential -
Subject to
Protective Order

Exhibit E has been provided
electronically via email and also
produced electronically

Exhibit F

Confidential -
Subject to
Protective Order

Exhibit F has been provided
electronically via email and also
produced electronically

Attachment A

Steward v. Smith
5:10-CV-1025-OLG
In the United States District Court for the Western District of Texas
San Antonio Division

REPORT OF DARLENE M. O'CONNOR, PHD
ATTACHMENT A

	Document	Bates No.
1.	PASRR IDD Total Current Active NF Population_201508-1	DefE-06352647
2.	PASRR IDD Total Current Active NF Population_201508	DefE-04709220
3.	PASRR IDD Total Current Active NF Population_201602	DefE-04709226
4.	PASRR IDD Total Current Active NF Population 201603	DefE-04709227
5.	PASRR IDD Total Current Active NF Population 2016Q3 20160229	DefE-04709215
6.	PASRR IDD Total Current Monthly Active NF Population 20170522-1	DefE-06352648
7.	PASRR IDD Total Current Monthly Active NF Population 20170828	DefE-06352649
8.	Detailed Item by Item Guide for Completing the PASRR Evaluation (PE), June 2016	US00271069 – US00271115
9.	Detailed Item by Item Guide for Completing the PASRR Level I Screening Form	US000006799 – US000006818
10.	PASRR Level 1 Screening, <i>available at</i> http://www.tmhp.com/Provider_Forms/Long%20Term%20Care%20Programs/PASRR%20Level%201%20Screening%20Form.pdf	
11.	PASRR Evaluation, <i>available at</i> http://www.tmhp.com/Provider_Forms/Long%20Term%20Care%20Programs/PASRR%20Evaluation%20Form.pdf	
12.	PASRR Specialized Services (PSS) Form, <i>available at</i> http://www.tmhp.com/Provider_Forms/Long%20Term%20Care%20Programs/PASRR%20Specialized%20Services.pdf	
13.	Interdisciplinary Team (IDT) Form, <i>available at</i> http://www.tmhp.com/Provider_Forms/Long%20Term%20Care%20Programs/IDT%20Form.pdf	
14.	Expert Report, <i>Steward, et al., v. Smith, et al.</i> , Prepared by Eleanor Shea-Delaney, March 30, 2018.	

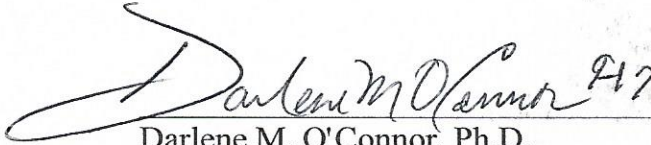
15.	Expert Report, <i>Steward, et al., v. Smith, et al.</i> , Prepared by Kathy Bruni, March 30, 2018.	
16.	Expert Report, <i>Steward, et al., v. Smith, et al.</i> , Prepared by Darlene O'Connor, March 30, 2018, including Exhibits and Attachments and all documents set forth in Attachment B.	

1. I have been retained by the Plaintiffs and the United States as a joint expert in the *Steward v. Smith* litigation. My compensation for this work is paid by the Department of Justice under contract to JEN Associates, Inc. In February 2018, JEN Associates, Inc. was acquired by Westat, Inc. Compensation for this work is \$230 per hour for all staff time involved in preparing the data, conducting the analysis and preparing this report. As of October 1, 2018, my compensation is \$350 per hour for court testimony and related

preparation. My compensation is not dependent on the outcome of this litigation.

This information is accurate and complete to the best of my knowledge, information and belief.

Signed and dated:

 7-18
Darlene M. O'Connor, Ph.D.