

LONG TERM CARE COMMUNITY COALITION

Advancing Quality, Dignity & Justice

An Assessment of the Impact of Low Staffing Levels on Quality of Nursing Home Care in New York

by

Richard J. Mollot, JD, Executive Director

Dara Valanejad, JD, Policy Counsel

Sean Whang, MPH, Policy Fellow

**The Long Term Care Community Coalition
One Penn Plaza, Suite 6252, New York, NY 10119**

INFO@LTCCC.ORG

WWW.NURSINGHOME411.ORG

©2019 The Long Term Care Community Coalition

This study was supported by a grant from the New York Community Trust.

TABLE OF CONTENTS

INTRODUCTION	4
STAFFING AND THE USE OF PAYROLL-BASED JOURNAL STAFFING DATA.....	4
PURPOSE OF REPORT	5
NOTES ON THE DATA	5
SUMMARY OF FINDINGS.....	5
TOTAL CARE STAFFING.....	6
HEALTH INSPECTION RATINGS	6
BACKGROUND	6
CHART: TOTAL STAFFING VS. HEALTH INSPECTION RATING.....	6
OBSERVATIONS	7
IMPLICATIONS	7
PRESSURE ULCER RATE	7
BACKGROUND	7
CHART: TOTAL STAFFING VS. PRESSURE ULCERS.....	8
OBSERVATIONS	8
IMPLICATIONS	8
ANTIPSYCHOTIC DRUGGING RATE.....	8
BACKGROUND	8
CHART: TOTAL STAFFING VS. ANTIPSYCHOTIC DRUGGING RATES.....	9
OBSERVATIONS	9
IMPLICATIONS	9
SUBSTANTIATED COMPLAINTS	10
BACKGROUND	10
GRAPH: TOTAL STAFFING VS. SUBSTANTIATED COMPLAINTS	11
OBSERVATIONS	11
IMPLICATIONS	11
FINES (CIVIL MONEY PENALTIES).....	11
BACKGROUND	11
GRAPH: TOTAL STAFFING VS. NUMBER OF FINES.....	12
OBSERVATIONS	12
IMPLICATIONS	12
REGISTERED NURSE STAFFING	13
HEALTH INSPECTION RATINGS	13
BACKGROUND	13
CHART: RN STAFFING VS. HEALTH INSPECTION RATINGS	14
OBSERVATIONS	14
IMPLICATIONS	14
PRESSURE ULCER RATES	14
BACKGROUND	14
CHART: RN STAFFING VS. PRESSURE ULCER RATES.....	15
OBSERVATIONS	15
IMPLICATIONS	16

ANTIPSYCHOTIC DRUGGING RATE	16
BACKGROUND	16
CHART: RN HOURS VS. ANTIPSYCHOTIC DRUGGING RATES	16
OBSERVATIONS	16
IMPLICATIONS	17
NUMBER OF SUBSTANTIATED COMPLAINTS	17
BACKGROUND	17
CHART: RN STAFFING VS. SUBSTANTIATED COMPLAINTS	18
OBSERVATIONS	18
IMPLICATIONS	18
FINES (CIVIL MONEY PENALTIES)	18
BACKGROUND	18
CHART: RN STAFFING VS. NUMBER OF FINES	19
OBSERVATIONS	19
IMPLICATIONS	19
CONCLUSIONS AND RECOMMENDATIONS	20
APPENDIX I: RESOURCES FOR MORE INFORMATION	21
APPENDIX II: FURTHER DETAILS ON SOURCES OF DATA	21
APPENDIX III: CMS PAYROLL-BASED JOURNAL REGULATIONS & GUIDANCE	22

Note: This report is a compliment to another report entitled *Patients vs. Profits: An Assessment of the Impact of For-Profit Ownership on Nursing Home Staffing and Safety in New York*, which likewise is based on an analysis of the PBJ data from CMS’s [Nursing Home Compare](#).

Visit our homepage, www.nursinghome411.org, for quarterly staffing data for all U.S. nursing homes, other facility and state-level data on quality and oversight, and free resources on residents’ rights and quality standards.

INTRODUCTION

STAFFING AND THE USE OF PAYROLL-BASED JOURNAL STAFFING DATA

Staffing is one of the most essential factors in a nursing home's quality and safety. Better staffing, in respect to both quantity and quality, has been shown to lead to higher quality of care for nursing home residents. Nursing homes with lower staffing, in particular registered nurses (RNs), tend to exhibit lower quality of nursing care.¹

Because staffing is so important, robust staffing level data are needed for understanding the quality of a nursing home's performance. Historically, information on staffing was collected only once a year from nursing homes, for the two-week period prior to their annual survey. Unfortunately, the veracity of these data were not verified by either state agencies or the federal agency, the Centers for Medicare & Medicaid Services (CMS).

Better staffing, in respect to both quantity and quality, has been shown to lead to higher quality of care for nursing home residents.

In response to concerns about facilities inflating their reported staffing levels, the 2010 Affordable Care Act (ACA) required that nursing homes electronically report auditable, payroll-based journal (PBJ) data on staffing to CMS.² These PBJ data include hours per day for licensed and unlicensed care staff, numerous categories of non-direct care staff (such as administrators, medical directors, and activity staff), and MDS census information.³

Though the ACA became law in 2010, CMS did not take steps to implement the requirements for several years. CMS only began publicly reporting the facility-level data for direct care staff in 2017 and, in 2018, the agency added public reporting of non-care staff and contract staff (i.e., personnel who are not directly employed by the facility). According to CMS, "data collected electronically through the Payroll-Based Journal (PBJ) system . . . provides an unprecedented insight into the staffing of nursing homes."⁴

In fact, *The New York Times* and Kaiser Health News reported in 2018 that, when compared to the previous system of self-reporting, **"[o]f the more than 14,000 nursing homes submitting payroll records, 7 in 10 had lower staffing using the new method, with a 12 percent average decrease, the data show. And as numerous studies have found, homes with lower staffing tended to have more health code violations — another crucial measure of quality."**⁵

¹ See the appendix for a list of studies on staffing and the relationship between staffing and quality.

² Staffing Data Submission PBJ, *Centers for Medicare & Medicaid Services (CMS)*, December 7, 2018. Available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Staffing-Data-Submission-PBJ.html>.

³ See data file at <https://nursinghome411.org/nys-nursing-homes-2019/>.

⁴ CMS Improving Nursing Home Compare in April, *CMS*, March 5, 2019. Available at <https://www.cms.gov/newsroom/press-releases/cms-improving-nursing-home-compare-april-2019>.

⁵ Rau, J., 'Like A Ghost Town': Erratic Nursing Home Staffing Revealed Through New Records, Kaiser Health News, July 13 2018. Available at <https://khn.org/news/like-a-ghost-town-erratic-nursing-home-staffing-revealed-through-new-records/>. [Emphasis added.]

PURPOSE OF REPORT

This report provides a review and assessment of the relationships, if any, between staffing levels and key indicators of nursing home quality and safety. With the advent of PBJ reporting, there is much greater confidence in the accuracy of the staffing levels reported by nursing homes, which, in turn, provides a stronger basis for assessing the impact of staffing levels on issues of concern to residents, families, communities, and policymakers.

NOTES ON THE DATA

Data were downloaded in January 2019 from federal (CMS) websites. The staffing data were downloaded January 17, 2019 from data.medicare.gov and are for the second quarter of 2018 (the most recent data available at the time of download). The data include facility-reported rates for staff assigned to provide resident care (i.e., administrative registered nurses (RNs) and licensed practical nurses (LPNs) were not included). Average staffing hours per resident day (HPRD) were calculated based on facility's reported census.

Data on the relevant quality measures selected for this analysis, antipsychotic drugging and pressure ulcer rates, are four quarter averages for MDS code 403 (pressure ulcers) and MDS code 419 (antipsychotic drugging) for the period 2017Q3 - 2018Q2 (the most current data posted on the Medicare website).

In our analysis, we used two measures of care staffing derived from the PBJ data: 1) Average total staffing hours per resident per day and 2) Average RN staffing hours per resident per day. We compare the average total and RN staffing hourly rates with various outcome measures, which include the following: 1) Number of Substantiated Complaints, 2) Number of Fines, 3) Number of Fines in Dollars, 4) Antipsychotic Drugging Rates, and 5) Pressure Ulcer Rates.

The data file that compliments this report can be found here: <https://nursinghome411.org/nys-nursing-homes-2019/>.

We continually publish (on a quarterly basis) the latest staffing data for nursing homes in New York and other states. These data sets can be found and downloaded from our website at www.nursinghome411.org.

SUMMARY OF FINDINGS

Overall, we found that most of the comparisons indicate that nursing home quality and safety improved as staffing increased. This was true, to varying degrees, for both total care staff and RN care staff.

Total Care Staffing

HEALTH INSPECTION RATINGS

Background

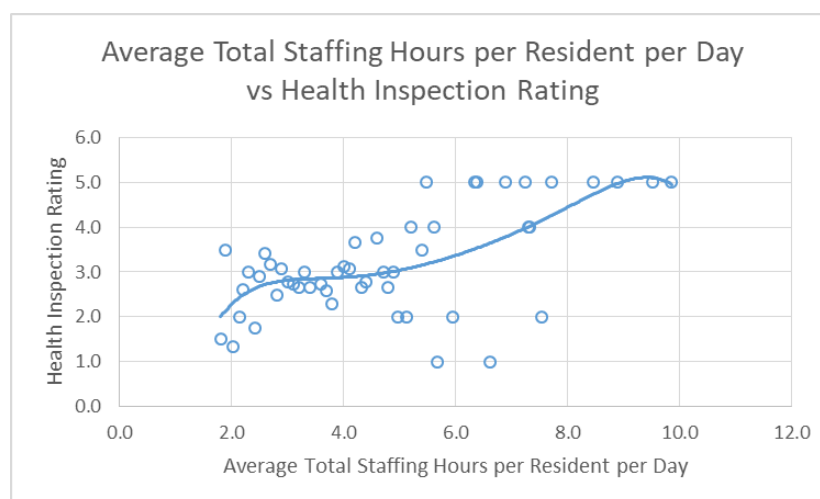
State survey agencies inspect (survey) nursing homes to determine whether facilities are complying with federal and state standards for care, quality of life, and dignity. In New York, the state agency is the New York Department of Health (DOH). Like all state agencies, CMS expects DOH to inspect nursing homes, on average, once every 12 months, with every nursing home inspected within a 9-15 month timeframe.

According to Nursing Home Compare, nursing homes are evaluated on a number of different areas, including the following:

1. Hiring enough quality staff to provide adequate care;
2. Managing medications properly;
3. Protecting residents from physical and mental abuse; and
4. Storing and preparing food properly.⁶

Based on the survey team's findings, facilities are assigned a rating of between 1-5 stars on Nursing Home Compare, with 1 being the lowest and 5 being the highest. CMS uses the "results from the three most recent standard health inspections and 36 months of complaint inspections are used to calculate the health inspection score and determine the health inspection rating."⁷

Chart: Total Staffing vs. Health Inspection Rating



⁶ *What information can you get about nursing homes?*, Nursing Home Compare. Available at <https://www.medicare.gov/nursinghomecompare/About/nhcinformation.html>.

⁷ Design for Nursing Home Compare Five-Star Quality Rating System, CMS, April 2019. Available at <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/Downloads/usersguide.pdf>.

Observations

- There is a strong overall correlation between total staffing hours and health inspection ratings.
- When average total staffing rates exceed five hours per resident day (HPRD), the ratings show a wider range in variation (as indicated by the diffusion of dots in the chart). However, only four percent of NY State facilities have over five HPRD.

Implications

- The results imply that higher staffing correlates with higher quality (to the extent that the inspection ratings are a reliable indicator of a nursing home's quality).
- Since nursing homes are only likely to be subject to fines and other penalties when their inspection results are poor, the correlation between staffing levels and health inspection ratings may support the financial case for putting more resources into staffing.

PRESSURE ULCER RATE

Background

According to the Centers for Disease Control and Prevention,

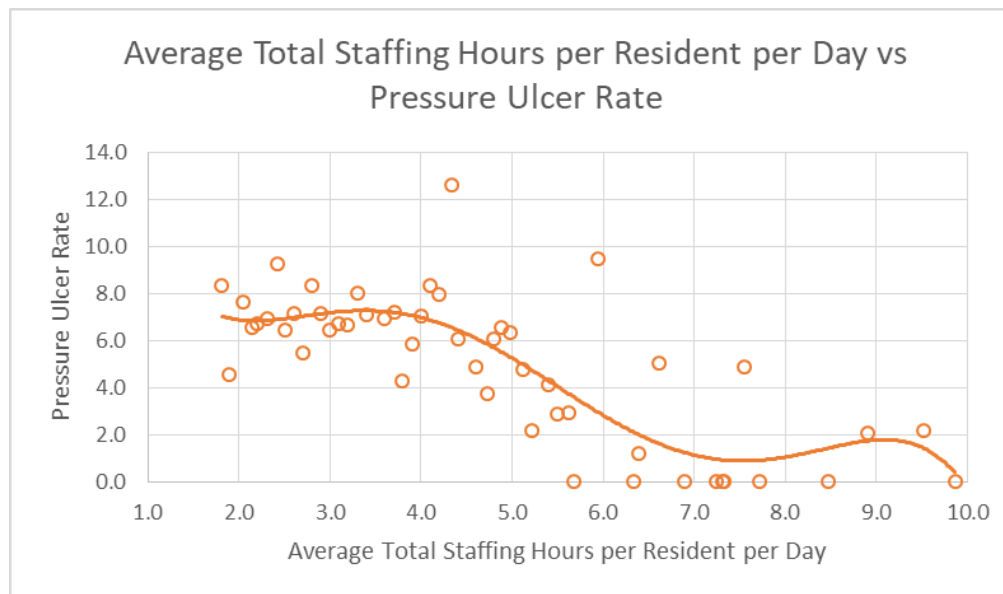
Pressure ulcers, also known as bed sores, pressure sores, or decubitus ulcers, are wounds caused by unrelieved pressure on the skin. They usually develop over bony prominences, such as the elbow, heel, hip, shoulder, back, and back of the head. Pressure ulcers are serious medical conditions and one of the important measures of the quality of clinical care in nursing homes.⁸

While some pressure ulcers are unavoidable, research and experience indicate that, “[i]n the vast majority of cases, appropriate identification and mitigation of risk factors can prevent or minimize pressure ulcer (PU) formation.”⁹ Nevertheless, according to the latest federal data, 8.62% of New York State nursing home residents have unhealed pressure ulcers.¹⁰ As a result, New York is ranked among the worst states in the country (bottom ten) in respect to keeping residents free from pressure ulcers.

⁸ NCHS Data Brief, No. 14 (February 2009), which incorporates *Pressure Ulcers Among Nursing Home Residents: United States, 2004*. Available at www.cdc.gov/nchs/data/databriefs/db14.pdf (PDF).

⁹ Edsberg, L.; Langemo, D.; Baharestani, M.; Posthauer, M.; and Goldberg, M., “Unavoidable Pressure Injury: State of the Science and Consensus Outcomes,” *Journal of Wound, Ostomy & Continence Nursing*: July/August 2014 - Volume 41 - Issue 4 - p 313–334. Abstract accessed in February 2017 at http://journals.lww.com/jwoconline/Abstract/2014/07000/Unavoidable_Pressure_Injury_State_of_the_Science.6.aspx. Henceforth *Unavoidable Pressure Injury*.

¹⁰ MDS Frequency Report: First Quarter 2019. Note: These data are reported from nursing homes and do not include residents with pressure ulcers that facilities have failed to identify and/or report. Available at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/Minimum-Data-Set-3-0-Public-Reports/Minimum-Data-Set-3-0-Frequency-Report.html>.

Chart: Total Staffing vs. Pressure Ulcers**Observations**

- For the majority of nursing homes (those which provide between 2-6 hours of total care staff per resident per day), there appears to be a negative relationship between total care staffing and pressure ulcer rates. In other words, as the total staffing rate increases, the pressure ulcer rate tends to decrease.
- Within this majority of facilities, pressure ulcer rates are high and remain high until staffing levels reach four HPRD. Between 4-6 hours, pressure ulcer rates decrease rapidly.

Implications

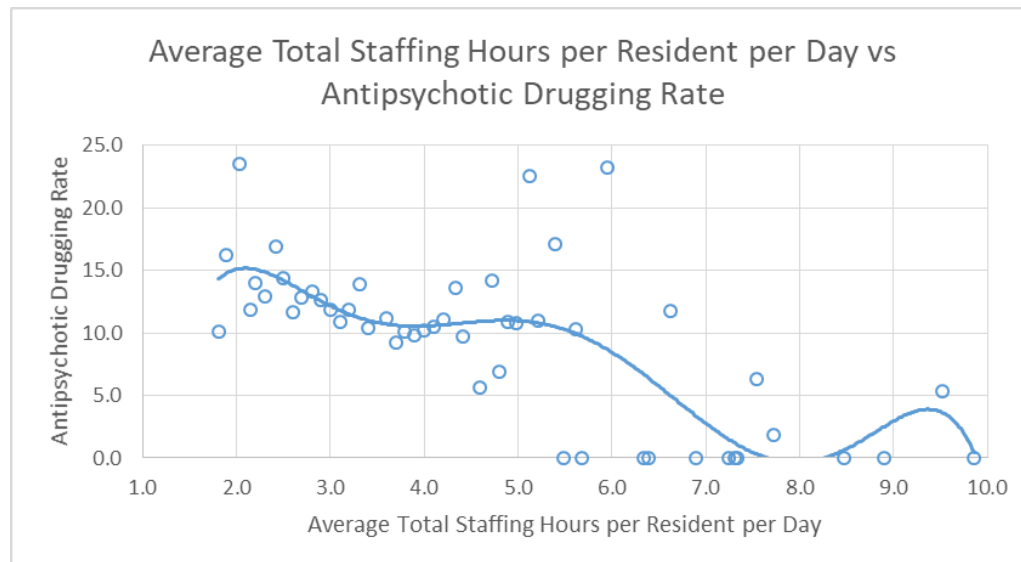
- Staffing at four HPRD or higher appears to significantly improve (reduce) pressure ulcer rates.
- New York nursing homes have among the highest average pressure ulcer rates in country, at 8.62%. Every 1% reduction in the pressure ulcer rate would result in 1,000 fewer of our nursing home residents suffering from pressure ulcers.

ANTIPSYCHOTIC DRUGGING RATE**Background**

Inappropriate antipsychotic drugging is a serious and widespread problem for nursing homes in New York and across the United States. Too often, residents are given antipsychotics to make them easier to care for or for other reasons for which there are not clinical indications. Too often, they are administered to people with dementia as a form of chemical restraint, to quell the so-called behavioral and psychological symptoms of dementia (BPSDs). In fact, antipsychotics are not clinically indicated for treatment of BPSDs and they carry a FDA “black

box” warning *against* use on elderly people with dementia due to significant risks of heart attack, stroke, Parkinsonism, and other negative outcomes.

Chart: Total Staffing vs. Antipsychotic Drugging Rates



Observations

- As with pressure ulcers, the data indicate a negative relationship between average total staffing HPRD and antipsychotic drugging. In other words, as total staffing goes up, antipsychotic drugging goes down. This is particularly true among the majority of nursing homes with between 2-6 total care staff HPRD.
- There appears to be a slight increase in the antipsychotic drugging rate at around 9 average staffing HPRD.
- The slight rise in the AP drugging rate around 9.5 HPRD is the result of a single nursing home with a high staffing rate. Thus, it does not represent a trend in the data.

Implications

- Increasing the average total staffing hours per resident per day (such as by the implementation of safe staffing standards in New York) would likely have a positive impact in reducing antipsychotic drugging rates.
- A reduction of 1% in the state’s antipsychotic drugging rate would result in 1,000 fewer residents receiving these powerful medications which, as noted above, carry a black box warning against use on elderly people with dementia.

SUBSTANTIATED COMPLAINTS

Background

Nursing home residents and families—or anyone else who becomes aware of abuse, neglect, unsafe conditions, or substandard resident care—can file a complaint with the state survey agency.

According to CMS,

You may use the form... [on CMS's website] to file a complaint if you are concerned about the health care, treatment, or services that you or another person received or did not receive in the nursing home. Some reasons for filing a complaint would be abuse, neglect, poor care, not enough staff, unsafe or unsanitary conditions, dietary problems, or mistreatment. You do not have to use this form when filing a complaint. You may file a complaint with your State Survey Agency by any means available to you, including mail, telephone, fax, online, or in person. All the instructions for filing a complaint with your State Survey Agency are located at the end of the complaint form.¹¹

Survey agencies are required to investigate every complaint that they receive. Federal requirements provide for different protocols depending on the urgency and danger to residents of the alleged problem. Despite these requirements, the vast majority of complaints are not substantiated by states. According to the Government Accountability Office (GAO), “a 1999 report found that complaint investigation processes were often inadequate to protect residents, and a 2008 report found federal oversight continued to demonstrate that state inspections understated serious care problems.”¹²

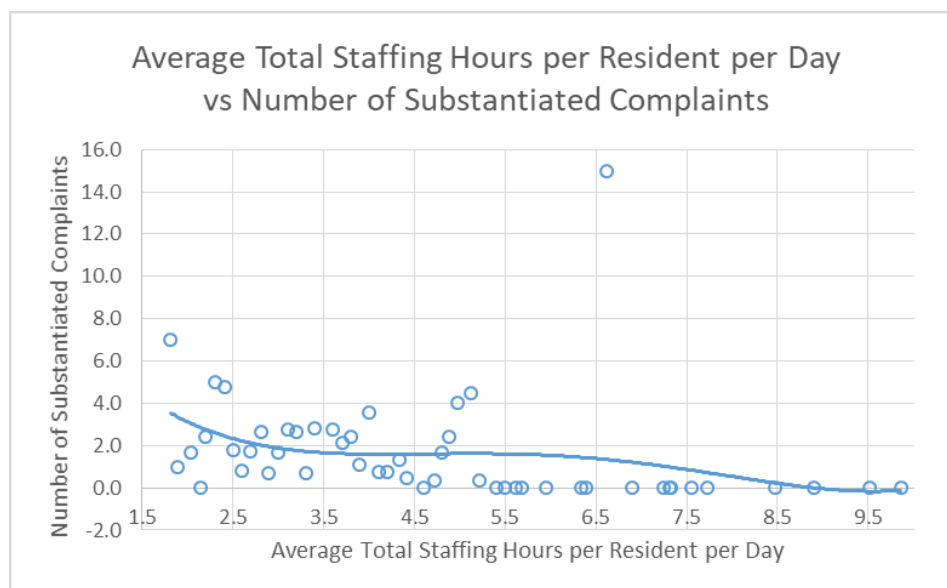
The failure to substantiate complaints about abuse, neglect, and other serious problems is a matter of great concern to residents, their families, and the communities in which nursing homes serve. Since state surveys (inspections) typically only take place once a year, a vigorous response to complaints is necessary to ensure that residents are safe—and public funds are used appropriately—the other 51 weeks of the year.

¹¹ The CMS form is available at

https://www.medicare.gov/nursinghomecompare/Nursing_Home_Complaint_Form.pdf.

¹² Agency Testimony Before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, *Nursing Home Quality: Continued Improvements Needed in CMS's Data and Oversight*, GAO-18-694T: Published: Sep 6, 2018. Available at <https://www.gao.gov/products/GAO-18-694T>.

Graph: Total Staffing vs. Substantiated Complaints



Observations

- As the average total staffing hours per resident per day increases, the number of substantiated complaints tends to decrease.
- The majority of the data lies between 2 – 5 average total staffing hours per resident per day (HPRD).

Implications

- Due to low substantiation rates overall, it is difficult to identify meaningful implications or conclusions from these data.
- To the extent that it is possible to identify implications, the data indicate the most significant correlation between approximately 1.5 – 3.5 HPRD.

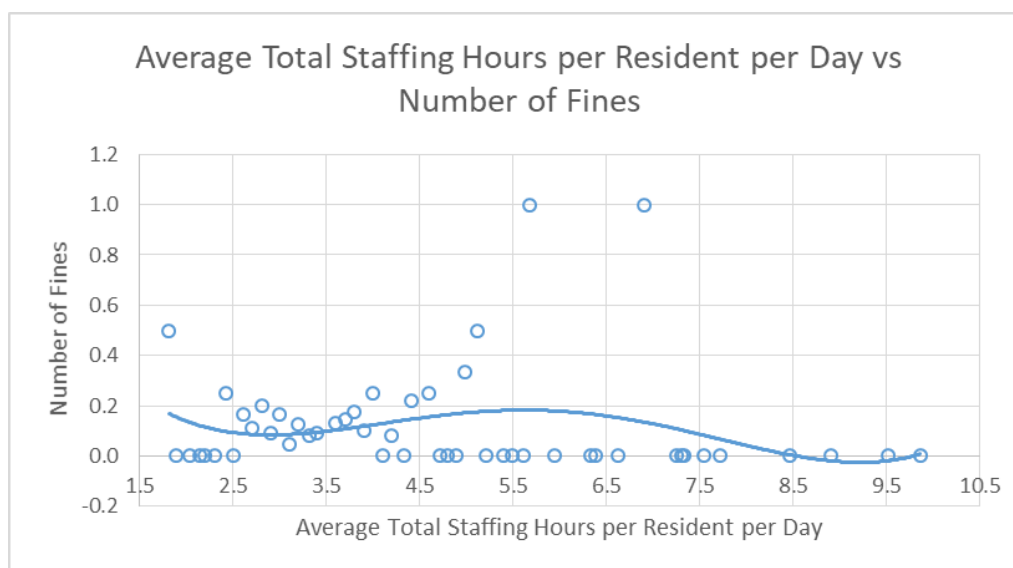
FINES (CIVIL MONEY PENALTIES)

Background

There are numerous ways in which a nursing home can be penalized when abuse, neglect, or other violations of minimum care standards are identified and substantiated by CMS and/or the Department of Health. From a consumer perspective, the imposition of fines (known as Civil Money Penalties (CMPs)), is perhaps the most important type of penalty because, when used effectively, it sends a message to the nursing home (and others in the industry) that there is a cost to harming residents or failing to provide care that meets minimum standards. Conversely, when fines are not imposed for abuse, neglect, or failures of care, it sends a message to nursing homes that these problems are “okay.”

Though CMS recognizes the importance of fines to ensuring quality care and safety (for example, fines are one of the two penalties that CMS publicly reports on its website¹³), fines are infrequently imposed against nursing homes in our country. In New York, the imposition of fines when a facility violates minimum standards is particularly low.¹⁴ In addition, fines are getting lower because of changes implemented by CMS after the nursing home industry lobbied the Trump Administration for lower fines and standards.¹⁵

Graph: Total Staffing vs. Number of Fines



Observations

- The highest number of fines that any nursing home has listed in the data is three.
- The majority of nursing homes do not have any fines listed (0 fines).

Implications

- Due to the poor utilization of fines to penalize abuse, neglect, and substandard care, it was not possible to identify a meaningful relationship between staffing levels and fines.
- From a consumer perspective, this indicates that facilities can decrease staffing levels with impunity.

¹³ The other type of penalty publicly reported by CMS is denial of payment.

¹⁴ According to federal data for 2018, though New York has the highest nursing home population of any state in the country, it ranked 27th lowest in the dollar amount of fines.

¹⁵ For a discussion on developments in fines for substandard care, see “Nursing Home Fines Drop as Trump Administration Heeds Industry Complaints,” *Kaiser Health News*, March 2019. Available at <https://khn.org/news/nursing-home-fines-drop-as-trump-administration-heeds-industry-complaints/>.

Registered Nurse Staffing

Registered nurses (RNs) play a critical role in the quality and safety of a nursing home. While nursing homes are required to have “sufficient” care staff 24-hours a day, every day of the year, to ensure that residents receive care to meet their clinical and psycho-social needs, RNs are the only category of care staff for which there is a set minimum numerical number: facilities must have at least one RN working a full-time shift every day (including weekends and holidays).

The federal Payroll-Based Journal (PBJ) staff reporting system requires that nursing homes “report hours paid for services performed onsite for the residents of the facility.”¹⁶ In this system, nursing homes must separately report RNs that are assigned to administrative tasks and those involved in resident care. This distinction is crucial, since from a consumer perspective, it is the resident care and monitoring provided by an RN that matters, not whether or not a facility employs an RN in back office operations.

In this section, we compare RN care staff with various measures we have identified as important indicators of good care and safety. Average RN Hours per Resident per Day (HPRD) were calculated for each nursing home by dividing the total average RN care staff hours for the quarter by the average number of residents present in the nursing home during the quarter (as reported to CMS in each facility’s MDS census).

HEALTH INSPECTION RATINGS

Background

Nursing homes are inspected (surveyed) by state survey agencies to determine whether they are complying with federal and state standards for care, quality of life, and dignity. In New York, the state agency is the New York Department of Health (DOH). Like all state agencies, CMS expects DOH to inspect nursing homes, on average, once every 12 months, with every nursing home inspected within a 9-15 month timeframe.

According to Nursing Home Compare, nursing homes are evaluated on a number of different areas, including the following:

1. Hiring enough quality staff to provide adequate care;
2. Managing medications properly;
3. Protecting residents from physical and mental abuse; and
4. Storing and preparing food properly.¹⁷

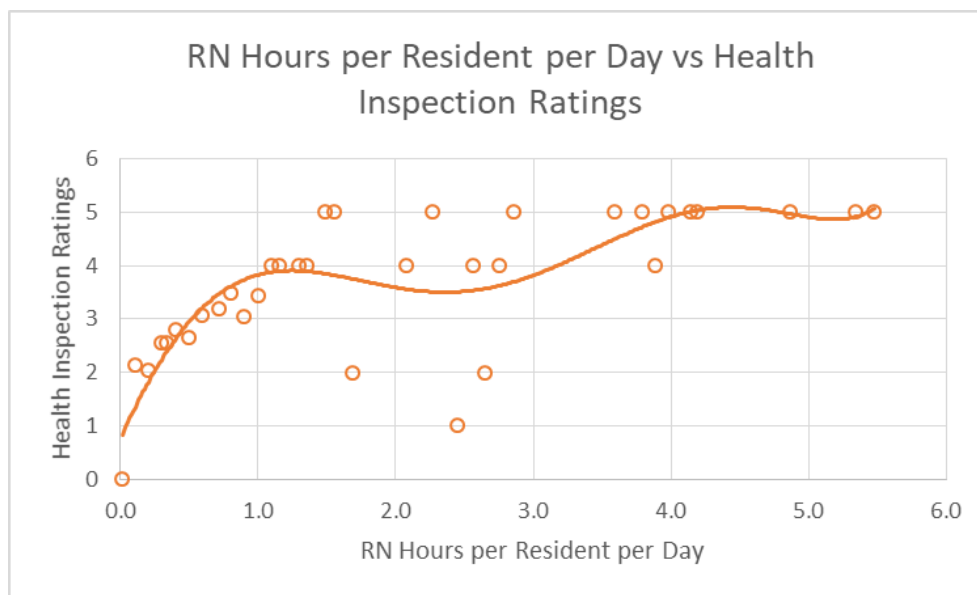
Based on the survey team’s findings, facilities are assigned a rating of between 1-5 stars on Nursing Home Compare, with one being the lowest and five being the highest. CMS uses the “results from the three most recent standard health inspections and 36 months of complaint

¹⁶ Electronic Staffing Data Submission Payroll-Based Journal (PBJ) Frequently Asked Questions, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/PBJ-Policy-Manual-FAQ-09-26-17.pdf>.

¹⁷ *What information can you get about nursing homes?*, Nursing Home Compare, <https://www.medicare.gov/nursinghomecompare/About/nhcinformation.html>.

inspections are used to calculate the health inspection score and determine the health inspection rating.”¹⁸

Chart: RN Staffing vs. Health Inspection Ratings



Observations

- There is a strong positive relationship between average RN hours per resident per day (HPRD) and health inspection ratings.
- This relationship is particularly profound with RN care staffing between zero and about 1.4 hours HPRD, which represents 96% of New York’s nursing homes. [Note: Most of the 4% of nursing homes that have higher staffing are pediatric facilities or hospital-based.]

Implications

- For the public, a nursing home’s RN care staffing levels should be an important consideration when choosing a nursing home.
- For policymakers, requiring RN staffing of one hour per day or more is likely to have a significant positive impact on resident safety and outcomes.

PRESSURE ULCER RATES

Background

According to the Centers for Disease Control and Prevention,

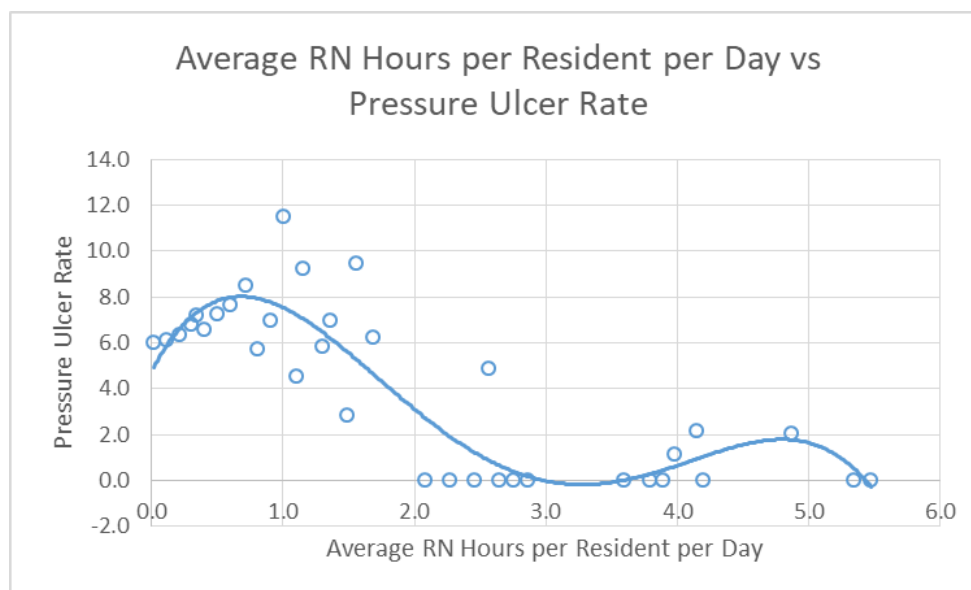
¹⁸ Design for Nursing Home Compare Five-Star Quality Rating System, CMS, April 2019.

<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/Downloads/usersguide.pdf>.

Pressure ulcers, also known as bed sores, pressure sores, or decubitus ulcers, are wounds caused by unrelieved pressure on the skin. They usually develop over bony prominences, such as the elbow, heel, hip, shoulder, back, and back of the head. Pressure ulcers are serious medical conditions and one of the important measures of the quality of clinical care in nursing homes.¹⁹

Nevertheless, according to the latest federal data, 8.62% of New York State nursing home residents have unhealed pressure ulcers.²⁰ As a result, New York is ranked among the worst states in the country (bottom ten) in respect to keeping residents free from pressure ulcers.

Chart: RN Staffing vs. Pressure Ulcer Rates



Observations

- Overall, there appears to be a negative relationship between average RN hours per resident per day (HPRD) and pressure ulcer rates. However, at the lower end of the spectrum (i.e., RN care staffing of 0.5 hours HPRD or less), pressure ulcer rates increase as RN care staffing increases. From approximately 0.5 HPRD and upward is where the pressure ulcer rate begins to steadily decrease as RN staffing HPRD increases. Only nine facilities in the state (1.5%) have three hours or more RN care state HPRD, and all of those facilities are either pediatric or hospital associated, making that end of the spectrum significantly less relevant for the vast majority of nursing home residents and families.

¹⁹ NCHS Data Brief, No. 14 (February 2009), which incorporates *Pressure Ulcers Among Nursing Home Residents: United States, 2004*. Available at www.cdc.gov/nchs/data/databriefs/db14.pdf (PDF).

²⁰ MDS Frequency Report: First Quarter 2019. Note: These data are reported from nursing homes and do not include residents with pressure ulcers that facilities have failed to identify and/or report. Available at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/Minimum-Data-Set-3-0-Public-Reports/Minimum-Data-Set-3-0-Frequency-Report.html>.

Implications

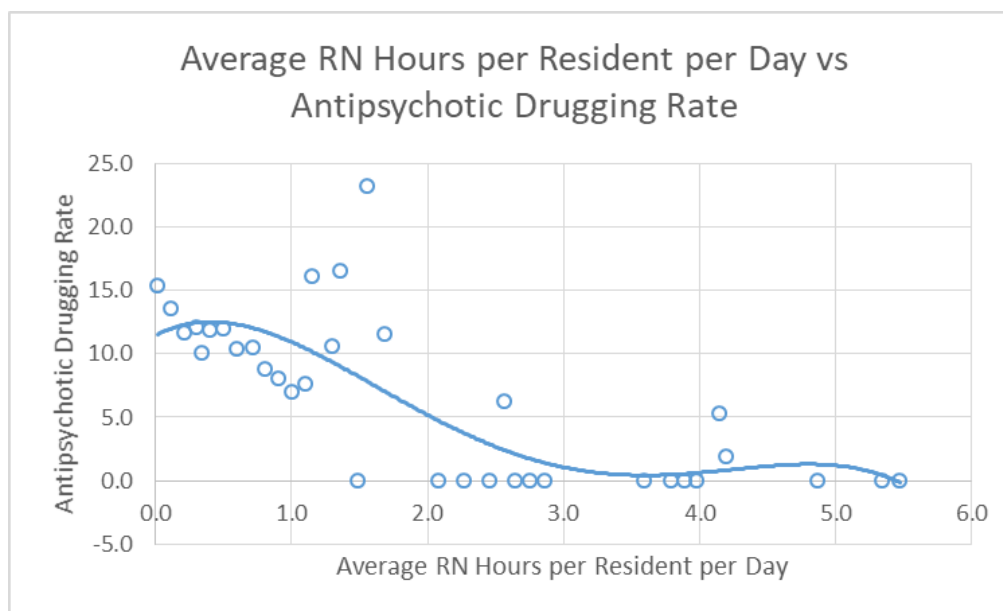
- Due to the bell curve spread of pressure ulcer rates from zero to 1.5 RN care staff HPRD, we are not able to identify implications from these data. Further study is needed to better assess the role of RN care staffing in respect to pressure ulcer prevalence.

ANTIPSYCHOTIC DRUGGING RATE

Background

Inappropriate antipsychotic drugging is a serious and widespread problem in nursing homes in New York and across the United States. Too often, residents are given antipsychotics to make them easier to care for or for other reasons for which there are no clinical indications. Too often, they are administered to people with dementia as a form of chemical restraint, to quell the so-called behavioral and psychological symptoms of dementia (BPSDs). In fact, antipsychotics are not clinically indicated for treatment of BPSDs and they carry a FDA “black box” warning *against* use on elderly people with dementia due to significant risks of heart attack, stroke, Parkinsonism, and other negative outcomes.

Chart: RN Hours vs. Antipsychotic Drugging Rates



Observations

- There appears to be a negative relationship between average RN hours per resident per day and antipsychotic (AP) drugging rates. As the average total staffing rate increases, the AP drugging rate tends to decrease.
- The relationship is particularly strong for facilities providing approximately 0.5 to 3.5 HPRD of RN care staff.
- The relationship appears to be slightly stronger than for total staffing.

Implications

- Increasing the average RN hours per resident per day may help decrease the AP drugging rate in a nursing home. This appears to be particularly true as average RN HPRD increased from a 0.5 baseline.
- A reduction of 1% in the state’s antipsychotic drugging rate would result in 1,000 fewer residents receiving these powerful medications which, as noted above, carry a black box warning against use on elderly people with dementia.

NUMBER OF SUBSTANTIATED COMPLAINTS

Background

Nursing home residents and families—or anyone else who becomes aware of abuse, neglect, unsafe conditions, or substandard resident care—can file a complaint with the state survey agency.

According to CMS,

You may use the form... [on CMS’s website] to file a complaint if you are concerned about the health care, treatment, or services that you or another person received or did not receive in the nursing home. Some reasons for filing a complaint would be abuse, neglect, poor care, not enough staff, unsafe or unsanitary conditions, dietary problems, or mistreatment. You do not have to use this form when filing a complaint. You may file a complaint with your State Survey Agency by any means available to you, including mail, telephone, fax, on-line, or in person. All the instructions for filing a complaint with your State Survey Agency are located at the end of the complaint form.²¹

Survey agencies are required to investigate every complaint that they receive. Federal requirements provide for different protocols depending on the urgency and danger to residents of the alleged problem. Despite these requirements, the vast majority of complaints are not substantiated by states. According to the Government Accountability Office (GAO), “a 1999 report found that complaint investigation processes were often inadequate to protect residents, and a 2008 report found federal oversight continued to demonstrate that state inspections understated serious care problems.”²²

The failure to substantiate complaints about abuse, neglect, and other serious problems is a matter of great concern to residents, their families, and the communities in which nursing homes serve. Since state surveys (inspections) typically only take place once a year, a vigorous

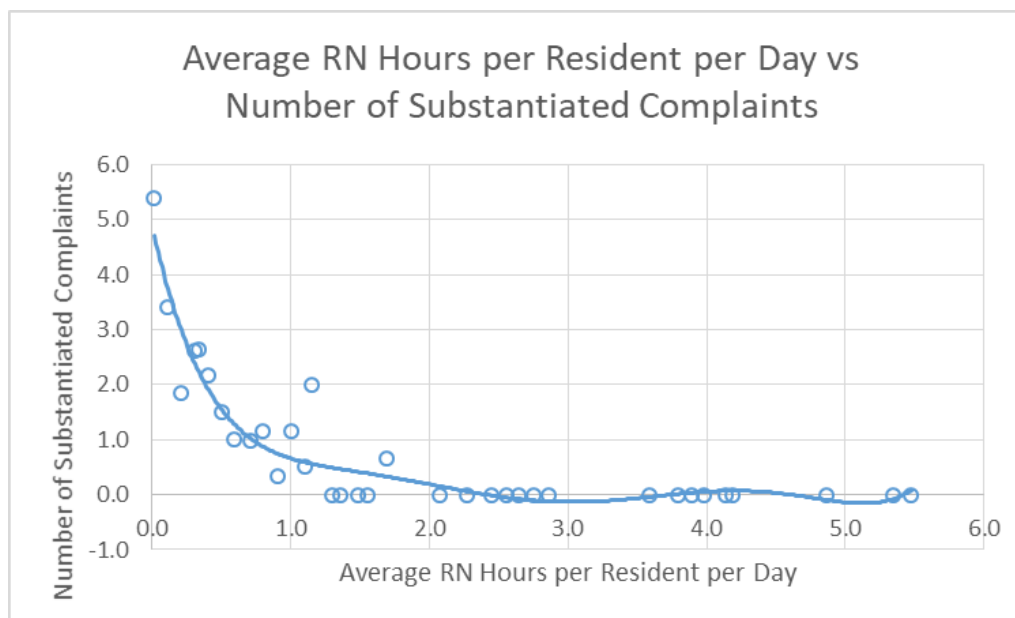
²¹ The CMS form is available at

https://www.medicare.gov/nursinghomecompare/Nursing_Home_Complaint_Form.pdf.

²² Agency Testimony Before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, *Nursing Home Quality: Continued Improvements Needed in CMS’s Data and Oversight*, GAO-18-694T: Published: Sep 6, 2018. Available at <https://www.gao.gov/products/GAO-18-694T>.

response to complaints is necessary to ensure that residents are safe—and public funds are used appropriately—the other 51 weeks of the year.

Chart: RN Staffing vs. Substantiated Complaints



Observations

- The majority of nursing homes do not have substantiated complaints. Therefore, it is difficult to identify meaningful implications or conclusions from these data.
- Nevertheless, as the chart indicates, as the average RN staffing hours per resident per day increases, the number of substantiated complaints tends to decrease at a substantial rate through about 2.2 HPRD (encompassing approximately 97.5% of all nursing homes).

Implications

- Though there is a significant correlation between substantiated complaints and RN care staffing, given the extremely low rate of substantiated complaints we are not suggesting any implications of these data.

FINES (CIVIL MONEY PENALTIES)

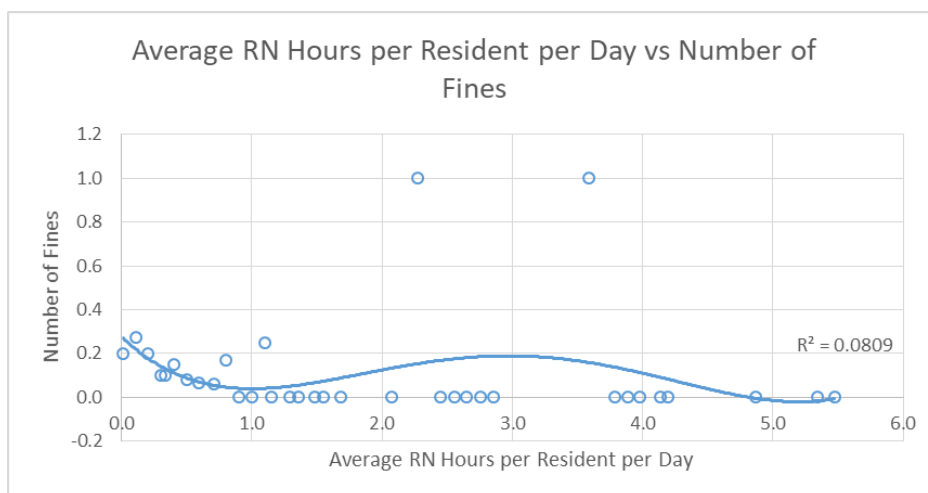
Background

There are numerous ways in which a nursing home can be penalized when abuse, neglect, or other violations of minimum care standards are identified and substantiated by CMS and/or the Department of Health. From a consumer perspective, the imposition of fines (known as Civil Money Penalties (CMPs)), is perhaps the most important type of penalty because, when used effectively, it sends a message to the nursing home (and others in the industry) that there is a cost to harming residents or failing to provide care that meets minimum standards. Conversely,

when fines are not imposed for abuse, neglect, or failures of care, it sends a message to nursing homes that these problems are “okay.”

Though CMS recognizes the importance of fines to ensuring quality care and safety (for example, fines are one of the two penalties that CMS publicly reports on its website²³), fines are infrequently imposed against nursing homes in our country. In New York, the imposition of fines when a facility violates minimum standards is particularly low.²⁴ In addition, fines are getting lower because of changes implemented by CMS after the nursing home industry lobbied for lower fines and standards.²⁵

Chart: RN Staffing vs. Number of Fines



Observations

- The majority of nursing homes do not have any fines and there are no nursing homes in New York with more than three fines on Nursing Home Compare.
- As with total average staffing hours, there does not appear to be a relationship between average RN hours per resident per day and the number of fines.

Implications

- Due to the inadequate utilization of fines to penalize nursing home abuse, neglect, and substandard care, it was not possible to identify a meaningful relationship between staffing levels and fines.
- From a consumer perspective, this indicates that facilities can decrease staffing levels with impunity.

²³ The other type of penalty publicly reported by CMS is denial of payment.

²⁴ According to federal data for 2018, though New York has the highest nursing home population of any state in the country, it ranked 27th lowest in the dollar amount of fines.

²⁵ For a discussion on developments in fines for substandard care, see “Nursing Home Fines Drop as Trump Administration Heeds Industry Complaints,” *Kaiser Health News*, March 2019. Available at <https://khn.org/news/nursing-home-fines-drop-as-trump-administration-heeds-industry-complaints/>.

CONCLUSIONS AND RECOMMENDATIONS

1. Higher staffing means better quality and safety.

Most of the criteria we assessed provided evidence that higher average staffing hours per resident per day are associated with a higher quality of nursing home care. While numerous studies over the years have indicated that inadequate staffing is associated with substandard care, the recent availability of payroll-based journal (PBJ) staffing data allowed us, for the first time, to make direct and meaningful comparisons between staffing levels and indicators of quality and safety for nursing homes in New York.

Note: It is important to note that the criteria that did not support this conclusion both related to oversight and enforcement, for which there were too little data to support any finding. For example, though imposing a civil money penalty (CMP) against a nursing home is an important tool to address abuse and neglect, the rarity of DOH fines for nursing home violations made it impossible to use the existence (or absence) of a fine as an indicator of quality or safety.

2. More vigorous oversight is needed to protect New York's nursing home residents and ensure program integrity.

The failure to adequately identify substandard care and hold providers accountable for resident harm is a problem in states across the country. However, this problem is particularly profound in New York. Though New York has the highest nursing home population of any state, it ranks 35 out of 51 (50 states plus Washington, DC) in total number of civil money penalties (CMPs) imposed against nursing homes in 2018. Other large states (California, Texas, Florida) have close to twice as many or more CMPs.²⁶ At the same time, the New York Department of Health ranked #1 in the country in respect to having the most overdue surveys (failing to inspect a nursing home within a 15 month period).²⁷

In respect to substantiating complaints about substandard care, abuse, or neglect, in 2018, federal data indicated that New York ranked in the bottom quintile of the country (15 out of 51).

3. CMS should provide the PBJ staffing data in a simpler, more user-friendly form.

As noted at the beginning of this report, staffing is a critical indicator of a nursing home's quality and safety. In addition to overall care staffing, staffing levels on weekends, holidays, and nights are important to ensuring that residents are safe and receiving the services that they need 24-hours a day, every day of the year (as federal and state laws require). Particularly in the absence of vigorous enforcement of minimum safety standards, it is essential that residents, families, and those who work with them have specific and accurate information on the sufficiency of staffing in their nursing homes and those in their communities.

²⁶ According to federal data, New York had 68 CMPs in 2018, Florida had 112, California 134, and Texas 238.

²⁷ The New York Department of Health and all state survey agencies are required, under the Social Security Act (§1864 Agreement), to conduct surveys on an average of once every twelve months statewide, in an interval of no less than nine months and no greater than 15 months for any nursing home.

APPENDIX I: RESOURCES FOR MORE INFORMATION

1. LTCCC’s website, www.nursinghome411.org, provides data on staffing and other indicators for all U.S. nursing homes. These data are frequently updated. The website also has a range of fact sheets, handouts, forms, and other resources.
2. The federal Nursing Home Compare website, www.medicare.gov, provides PBJ data sets for public use. New data sets are available each quarter, according to the CMS’ quarterly schedule.
3. Harrington, Charlene A., Ph.D., *Nursing Facility Quality, Staffing, and Economic Issues*. This chapter of *Nursing Staff in Hospitals and Nursing Homes: Is It Adequate?* (1996) provides an in-depth discussion on the relationship between nursing home staffing, quality of care, and the economic context. Available at <https://www.nap.edu/read/5151/chapter/26>.
4. Interactive Map: *How Staffing Fluctuates at Nursing Homes Around the United States* (2018). *The New York Times* provides a detailed geographic heat map showing how staffing rates vary across the U.S. Available at <https://www.nytimes.com/interactive/2018/07/07/health/nursing-home-map.html>.
5. Zhang, Xinzhi, MD, PhD and Grabowski, David C., PhD, “Nursing Home Staffing and Quality Under the Nursing Home Reform Act,” *The Gerontologist*, Volume 44, Issue 1, February 2004, Pages 13–23, <https://doi.org/10.1093/geront/44.1.13>
6. Schnelle, John F., PhD, Karuza, Jurgis PhD, and Katz, Paul R., MD, CMD, “Staffing, Quality, and Productivity in the Nursing Home,” *JAMDA*, Volume 14, Issue 11 (November 2013). Abstract available at [https://www.jamda.com/article/S1525-8610\(13\)00506-9/pdf](https://www.jamda.com/article/S1525-8610(13)00506-9/pdf).

APPENDIX II: FURTHER DETAILS ON SOURCES OF DATA

Following are some important notes on the data file presented and discussed in this report:

1. All data were derived from the federal databases (www.data.medicare.gov, www.data.cms.gov) in the first three months of 2019.
2. Nursing homes that did not have information available (e.g., under “Average total daily staffing hours per resident per day”) were considered non-compliant. These facilities did not submit staffing data to CMS in accordance with federal requirements.
3. We combined all data sets into one document by using the provider number and provider name as a way to ensure that the data matched the correct nursing home. A few facilities had missing information, due to technical error or noncompliance, so some values are missing for these homes.
4. To simplify and clarify the information, the category of data originally titled “MDS census” was renamed in our data file as “average number of residents per day”.
5. We used risk-adjusted data sets for this report. Risk-adjustment indicates that residents that had been diagnosed with certain illnesses, such as schizophrenia, were excluded

from the data set. Ideally, we would use non-risk adjusted data to take into account higher levels of resident harm, measured by higher-pressure ulcer and antipsychotic drugging rates, than we would be able to determine from a risk-adjusted data set.

6. Dates when the Nursing Home Compare data sets were downloaded:

January 17, 2019:

- Pressure Ulcer Rates
- AP Drug Rates
- Provider Name
- Provider County
- Ownership Type
- Provider Address

7. We used four types of data derived from Nursing Home Compare and other CMS databases: 1.) Ownership information; 2.) Provider information; 3.) Payroll based journal data; 4.) MDS (Minimum data set) census data for antipsychotic drugging and pressure ulcer rates. These data sets provided the following information found in our data file:

- **Ownership** – Individual Owner(s)
- **Provider Information** – Provider Name, Provider City, Provider County, Provider Address, Ownership Type, Health Inspection Rating, Number of Substantiated Complaints, Total Amount of Fines in Dollars, Total Number of Penalties
- **PBJ Data** – Avg. Total Staffing Hours Per Resident Day, Avg. RN Hour Per Resident Per Day*
- **Minimum Data Set (MDS) Census Data** – Pressure Ulcer Rates, Antipsychotic Drugging Rates

8. The data submitted by nursing homes and made available through Nursing Home Compare (data.medicare.gov) were not provided through a single file. We have combined the 2018 Quarter 2 data sets into a single data file for the convenience of our audience and to support this report.

*These values were calculated using the available PBJ data from www.data.medicare.gov.

APPENDIX III: CMS PAYROLL-BASED JOURNAL REGULATIONS & GUIDANCE

The requirements for PBJ staff reporting are in **42 CFR §483.70(q)**:

§483.70(q) Mandatory submission of staffing information based on payroll data in a uniform format. Long-term care facilities must electronically submit to CMS complete and accurate direct care staffing information, including information for agency and contract staff, based on payroll and other verifiable and auditable data in a uniform format according to specifications established by CMS.

§483.70(q)(1) Direct Care Staff. Direct Care Staff are those individuals who, through interpersonal contact with residents or resident care management, provide care and services to allow residents to attain or maintain the highest practicable physical, mental, and psychosocial wellbeing. Direct care staff does not include individuals whose primary duty is maintaining the physical environment of the long term care facility (for example, housekeeping).

§483.70(q)(2) Submission requirements. The facility must electronically submit to CMS complete and accurate direct care staffing information, including the following: (i) The category of work for each person on direct care staff (including, but not limited to, whether the individual is a registered nurse, licensed practical nurse, licensed vocational nurse, certified nursing assistant, therapist, or other type of medical personnel as specified by CMS); (ii) Resident census data; and (iii) Information on direct care staff turnover and tenure, and on the hours of care provided by each category of staff per resident per day (including, but not limited to, start date, end date (as applicable), and hours worked for each individual).

§483.70(q)(3) Distinguishing employee from agency and contract staff. When reporting information about direct care staff, the facility must specify whether the individual is an employee of the facility, or is engaged by the facility under contract or through an agency.

§483.70(q)(4) Data format. The facility must submit direct care staffing information in the uniform format specified by CMS.

§483.70(q)(5) Submission schedule. The facility must submit direct care staffing information on the schedule specified by CMS, but no less frequently than quarterly.

The following describe the Intent and Guidance for §483.70(q):

INTENT §483.70(q) To ensure that long-term care facilities are electronically submitting direct care staffing information (including agency and contract staff) per day, based on payroll and other verifiable and auditable data. The staffing hours, when combined with census information, can then be used to not only report on the level of staff in each nursing home, but also to report on employee turnover and tenure.

GUIDANCE §483.70(q) The facility is responsible for ensuring all staffing data entered in the Payroll-Based Journal (PBJ) system is auditable and able to be verified through either payroll, invoices, and/or tied back to a contract.²⁸

²⁸ U.S. Code of Federal Regulations, Title 42, Part 483, Subpart B, §483.70. Accessed at www.ecfr.gov.