



**OFFICE OF INSPECTOR GENERAL** 

WASHINGTON, DC 20201

# OF OR GEL

#### OCT - 5 2012

- TO: Marilyn Tavenner Acting Administrator Centers for Medicare & Medicaid Services
- FROM: Stuart Wright Deputy Inspector General for Evaluation and Inspections
- **SUBJECT:** Memorandum Report: Criminal Convictions for Nurse Aides With Substantiated Findings of Abuse, Neglect, and Misappropriation, OEI-07-10-00422

The Patient Protection and Affordable Care Act (ACA) mandates that the Office of Inspector General (OIG) submit a report to Congress evaluating the Nationwide Program for National and State Background Checks on Direct Patient Access Employees of Long-Term-Care Facilities and Providers (background check program) not later than 180 days after the program's completion. One required element of the mandated evaluation is an assessment of the impact of the background check program on reducing the number of incidents of neglect, abuse, and misappropriation of resident property to the extent practicable. The objective of this memorandum report is to provide baseline information for the mandated report on the extent to which nurse aides with substantiated findings of abuse, neglect, and/or misappropriation had previous criminal convictions that could have been detected through background checks and the nature of those convictions. Knowledge of this data will assist in assessing the extent to which the background check program may reduce the number of incidents of neglect, abuse, and misappropriation of resident property.

#### SUMMARY

Section 6201 of the ACA established the background check program.<sup>1</sup> This voluntary program provides grants to States, the District of Columbia, and U.S. territories (States) to implement programs to conduct background checks on prospective long-term-care employees. The ACA mandates an OIG evaluation of the State programs, including an assessment of the impact of the background check program on reducing the number of

<sup>&</sup>lt;sup>1</sup> P.L. 111-148, enacted March 23, 2010.

incidents of abuse, neglect, and misappropriation of resident property to the extent practicable.<sup>2</sup>

In September 2011, we requested from each State's nurse aide registry a roster of all nurse aides who received a substantiated finding of abuse, neglect, and/or misappropriation of property during 2010. For each nurse aide on these rosters, we requested criminal history record information from the Federal Bureau of Investigation (FBI). Nineteen percent of nurse aides with substantiated findings had at least one conviction in their criminal history records prior to their substantiated finding. Among these nurse aides, the most common conviction (53 percent) was for crimes against property (e.g., burglary, shoplifting, and writing bad checks). We also determined whether nurse aides with each type of substantiated finding were more likely to have certain types of convictions. We found that nurse aides with substantiated findings of either abuse or neglect were 3.2 times more likely to have a conviction of crime against persons than nurse aides with substantiated findings of misappropriation, and nurse aides with substantiated findings of misappropriation were 1.6 times more likely to have a conviction of crime against property than nurse aides with substantiated findings of abuse or neglect. Finally, nurse aides with substantiated findings in 2010 had a higher rate of convictions than nurse aides employed in nursing facilities overall.

#### BACKGROUND

#### **State Nurse Aide Registries**

The Omnibus Budget Reconciliation Act of 1987 added sections 1819 and 1919 of the Social Security Act (SSA) to ensure the delivery of quality care to Medicare and Medicaid long-term-care facility residents. These provisions require each State to maintain a nurse aide registry of all individuals who are certified to work as nurse aides in that State, as well as all individuals who have substantiated findings of abuse or neglect of residents, or misappropriation of resident property.<sup>3</sup> Federal regulations promulgated pursuant to these provisions prohibit long-term-care facilities from hiring nurse aides who "have had a finding entered into the State nurse aide registry concerning abuse, neglect, mistreatment of residents or misappropriation of their property...."<sup>4</sup> Long-term-care facilities must also report to the nurse aide registry any knowledge of actions by a court of law that would indicate unfitness to serve as a nurse aide.<sup>5</sup>

When a long-term-care facility suspects that abuse, neglect, or misappropriation of resident property has occurred, the facility must investigate and report the results to the State survey and certification agency.<sup>6</sup> If the State survey and certification agency finds that the allegation is substantiated, a finding is placed in the nurse aide registry for the

<sup>&</sup>lt;sup>2</sup> ACA § 6201(a)(7).

<sup>&</sup>lt;sup>3</sup> SSA §§ 1819(e)(2) and 1919(e)(2).

<sup>&</sup>lt;sup>4</sup> 42 CFR § 483.13(c)(1)(ii).

<sup>&</sup>lt;sup>5</sup> 42 CFR § 483.13(c)(1)(iii).

<sup>&</sup>lt;sup>6</sup> 42 CFR § 483.13(c)(2) through 42 CFR § 483.13(c)(4).

implicated nurse aide.<sup>7</sup> Only the State survey and certification agency may place substantiated findings on the registry.<sup>8</sup>

Nurse aide registries must include at a minimum: (1) the full name of the individual, (2) identifying information, (3) the date the individual became eligible for placement in the registry, and (4) information regarding substantiated findings, as appropriate.<sup>9</sup> Federal regulations require States to remove registry records of individuals who have not performed nursing or nursing-related services for a period of 24 consecutive months, unless the individual's registry entry includes substantiated findings of abuse, neglect, or misappropriation of property.<sup>10</sup>

Individuals with substantiated findings of abuse, neglect, or misappropriation of property must remain on the registry permanently, unless the findings were made in error, the individual was found not guilty in a court of law, or the State is notified of the individual's death.<sup>11</sup> The Balanced Budget Act of 1997 established the only exception, which allows nurse aides with substantiated findings of neglect to petition the State to have their names removed from the registry.<sup>12</sup> Such an individual must wait at least 1 year from the date on which the substantiated finding was added to the registry, and the State must determine that the employment and personal history of the nurse aide did not reflect a pattern of abusive behavior or neglect, and that the neglect involved a singular occurrence.<sup>13</sup>

Apart from the prohibition on employing as nurse aides individuals who have substantiated findings of abuse, neglect, or misappropriation, or who have been found guilty of abuse, neglect, or mistreatment of residents by a court of law, there is no Federal prohibition on employing individuals convicted of other types of crimes.<sup>14</sup>

#### **Background Check Program**

Section 6201 of the ACA requires the Secretary of Health and Human Services to establish a background check program in which States may voluntarily apply for grant funds to conduct national and State background checks of prospective direct patient access employees of nursing facilities and other long-term-care providers. The program is administered by CMS in cooperation with FBI. The ACA provides up to \$160 million in Federal funds for the program.

To implement the background check program, CMS began soliciting applications for grant awards in June 2010. Program start dates for each participating State vary based on when the State received a grant award; however, the completion date of the program

<sup>&</sup>lt;sup>7</sup> Centers for Medicare & Medicaid Services (CMS), *State Operations Manual*, Pub. No. 100-07, ch. 5, § 5310.3.

<sup>§ 5310.3.</sup> 

<sup>&</sup>lt;sup>8</sup> 42 CFR § 483.156(b)(2).

<sup>&</sup>lt;sup>9</sup> 42 CFR § 483.156(c)(1).

<sup>&</sup>lt;sup>10</sup> 42 CFR § 483.156(c)(2).

<sup>&</sup>lt;sup>11</sup> 42 CFR § 483.156(c)(1)(iv)(D).

<sup>&</sup>lt;sup>12</sup> P.L. 105-33 § 4755, amending SSA §§ 1819(g)(1) and 1919(g)(1).

<sup>&</sup>lt;sup>13</sup> P.L. 105-33 § 4755, amending SSA §§ 1819(g)(1) and 1919(g)(1).

<sup>&</sup>lt;sup>14</sup> 42 CFR § 483.13(c)(1)(ii).

(i.e., the date that participating States will deplete their grant funds) is unknown at this time. As of September 2012, 19 States had received grants.

Section 6201 of the ACA establishes requirements for the background check programs that participating States must implement. States are required to conduct three types of background checks: (1) a search of any State-based abuse and neglect registries and databases, and the abuse and neglect registries of all known States in which the employee lived; (2) a check of State criminal history records; and (3) a fingerprint-based FBI criminal history records check.<sup>15</sup> Participating States must also describe and test methods to reduce duplication of fingerprinting, including the development of "rap back" capabilities.<sup>16</sup> "Rap back" is the term used to describe processes to ensure that State law enforcement departments inform the appropriate State agency of any criminal conviction by the employee that occurs at any time following the preemployment background check. The State agency in turn informs the employer of the conviction.

#### **Mandated OIG Evaluation**

The ACA requires OIG to submit a report to Congress evaluating the background check program not later than 180 days after its completion. In July 2010, we began an evaluation entitled *Nationwide Program for National and State Background Checks for Long-Term-Care Employees* (OEI-07-10-00420). In addition to the mandated report, which we will publish at the end of the background check program, we are producing interim reports as needed. This memorandum is one such interim report.

According to the ACA, OIG must include the following in its evaluation:

- 1. A review of the various procedures implemented by participating States for long-term-care facilities or providers, including staffing agencies, to conduct background checks of prospective direct patient access employees under the background check program and identification of the most appropriate, efficient, and effective procedures for conducting such background checks;
- 2. An assessment of the costs of conducting such background checks (including startup and administrative costs);
- 3. A determination of the extent to which conducting such background checks leads to any unintended consequences, including a reduction in the available workforce for long-term-care facilities or providers;
- 4. An assessment of the impact of the background check program on reducing the number of incidents of neglect, abuse, and misappropriation of resident property to the extent practicable; and

<sup>&</sup>lt;sup>15</sup> P.L. 111-148 § 6201(a)(3)(A).

<sup>&</sup>lt;sup>16</sup> P.L. 111-148 § 6201(a)(4)(B)(viii).

5. An evaluation of other aspects of the background check program, as determined appropriate by the Secretary.<sup>17</sup>

This memorandum report provides baseline information on issue 4 above. The full mandated report will cover all of the issues listed above.

#### **Related Report**

A 2011 OIG evaluation determined the extent to which nursing facilities employed individuals with criminal convictions. In that evaluation, we found that 92 percent of nursing facilities employed at least one individual with at least one criminal conviction.<sup>18</sup> Overall, 5 percent of all nursing facility employees had at least one criminal conviction. OIG recommended that CMS work with States participating in the background check program to develop a list of State and local convictions that disqualify an individual from nursing facility employment under the Federal regulation and periods for which each conviction bars the individual from employment. In response, CMS formed a workgroup of States to provide recommendations on establishing (1) a list of specific conviction types that disqualify individuals from employment, (2) a list of conviction types that can be considered for rehabilitation, and (3) periods for disqualification.<sup>19</sup>

#### METHODOLOGY

#### **Data Collection**

<u>Nurse Aide Data</u>. From each State nurse aide registry, we obtained a roster of all nurse aides who received a substantiated finding of abuse, neglect, or misappropriation of property in 2010. For each nurse aide with a substantiated finding, we requested the following data elements: (1) full name, (2) date of birth, (3) Social Security number (SSN), (4) race, (5) sex, (6) date of initial registration, (7) effective date of the substantiated finding, and (8) whether the substantiated finding was for abuse, neglect, or misappropriation of property. We received data on a total of 1,611 nurse aides with substantiated findings in 2010. Table 1 shows the number of nurse aides with each finding type.

Criminal Convictions for Nurse Aides With Substantiated Findings (OEI-07-10-00422)

<sup>&</sup>lt;sup>17</sup> P.L. 111-148 § 6201(a)(7)(A)(ii).

<sup>&</sup>lt;sup>18</sup> OIG, Nursing Facilities' Employment of Individuals With Criminal Convictions, OEI-07-09-00110, March 2011.

<sup>&</sup>lt;sup>19</sup> The Long-Term-Care Criminal Convictions Workgroup is made up of 11 States and CMS central and regional office staff.

Finding Type	Number of Nurse Aides
Abuse	563
Neglect	511
Misappropriation	466
Abuse and Neglect	64
Abuse and Misappropriation	4
Neglect and Misappropriation	2
Abuse, Neglect, and Misappropriation	1
Total	1,611

Table 1: Number of Nurse Aides With SubstantiatedFindings in 2010 by Type

Source: OIG analysis of nurse aide registry data, 2012.

<u>Criminal History Records</u>. For each nurse aide with a substantiated finding, we requested criminal history record information from FBI.<sup>20</sup> We provided the nurse aide data obtained from State nurse aide registries to FBI. FBI performed a name-based match with the Interstate Identification Index, which is an electronic repository of criminal history record information. For the 1,611 names we provided, we received criminal history information for 852 individuals with names that closely matched.<sup>21</sup> Using the SSN, date of birth, race, and gender identifiers, we further examined the matches FBI provided to identify nurse aides with criminal convictions. We identified 341 nurse aides with substantiated findings who also had criminal convictions.<sup>22</sup>

Using six broad categories of offenses, we recorded convictions from each positively matched individual's criminal history.<sup>23</sup> Following are the six broad categories of offenses and examples of specific offenses included in each category. (These lists do not include every specific offense we found in each of the six categories.)

- crimes against persons: assault, battery, rape;
- *crimes against property*: burglary, larceny, possession of stolen property, shoplifting, theft, counterfeiting, writing bad checks;
- *driving under the influence of drugs or alcohol (DUI)*: driving under the influence, driving while intoxicated;
- *driving-related crimes (other than DUI)*: leaving the scene of an accident, driving with a suspended license;
- *drug-related crimes*: possession of drugs or paraphernalia, sale of controlled substances; and
- other: disorderly conduct, prostitution, resisting arrest, weapons violations.

Criminal Convictions for Nurse Aides With Substantiated Findings (OEI-07-10-00422)

<sup>&</sup>lt;sup>20</sup> To gain access to criminal history record information, we entered into an Information Transfer Agreement with FBI. Our Information Transfer Agreement governs the terms of OIG's access to FBI criminal history records for research purposes.

<sup>&</sup>lt;sup>21</sup> FBI did not provide any matches for 759 individuals; therefore, we did not perform further analysis on these individuals.

<sup>&</sup>lt;sup>22</sup> The identifiers of 100 individuals did not match the identifiers that the State nurse aide registries provided (e.g., different date of birth, different SSN). For the remaining 411 individuals, the criminal history records contained information on charges, but not convictions.

<sup>&</sup>lt;sup>23</sup> We consulted FBI definitions of crime to assist us in categorizing offenses. Accessed at <u>http://www2.fbi.gov/ucr</u> on June 7, 2012.

Comparison of Conviction Rates and Types for Nurse Aides With Substantiated Findings in 2010 and for Nurse Aides Employed in Nursing Facilities in 2009. We compared the rate and types of convictions for nurse aides with substantiated findings in this evaluation with an estimate of the rate and types of convictions for nurse aides employed in nursing facilities in 2009. For the latter, we used data received for the March 2011 OIG evaluation entitled Nursing Facilities' Employment of Individuals With Criminal *Convictions* (OEI-07-09-00110). This allowed us to determine whether statistically significant differences existed at the 95-percent confidence level between the two groups of nurse aides with criminal convictions: (1) nurse aides who had received substantiated findings of abuse, neglect, and/or misappropriation in 2010, and (2) nurse aides who were actively employed in nursing facilities as of June 1, 2009. Because nursing facilities are prohibited from employing nurse aides with substantiated findings, we assumed that the nurse aides who were actively employed as of June 1, 2009, did not have substantiated findings. Although the periods of review are different (calendar year 2010 for this evaluation versus the single day of June 1, 2009, for the earlier evaluation), we are unaware of any nursing facility-related changes that would invalidate the comparison of these groups of nurse aides with criminal convictions.

#### Limitations

State nurse aide registries do not identify nurse aides' dates of employment; nurse aides' dates of registration are not necessarily the same as the dates they began employment. Therefore, we are unable to determine whether employers could have been aware of nurse aides' criminal conviction(s) prior to their employment.<sup>24</sup> We examined the timing of convictions in relation to nurse aides' dates of registration.

FBI-maintained criminal history records do not contain the necessary information, such as whether the victim of a crime was a long-term-care facility resident, to determine whether a conviction disqualifies an individual from long-term-care facility employment under Federal regulation. Therefore, we limited our use of the FBI data to determining whether nurse aides with substantiated findings had criminal convictions, but not for determining whether these individuals were employed in violation of Federal regulation.

At this time, we do not know how many and which States will participate in the background check program. Therefore, we provide information in this memorandum report on all States. In the final evaluation report, we will report results specific to the States that participated in the background check program.

#### Standards

This study was conducted in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

<sup>&</sup>lt;sup>24</sup> We acknowledge that the data obtained for this memorandum report and the March 2011 OIG evaluation (*Nursing Facilities' Employment of Individuals With Criminal Convictions*, OEI-07-09-00110) are related solely to nursing facilities, whereas the background check program includes nursing facilities as well as other types of long-term-care providers (e.g., home health agencies, hospices).

#### RESULTS

#### Nineteen Percent of Nurse Aides With Substantiated Findings Had at Least One Conviction Prior to Their Substantiated Findings

Our analysis of FBI-maintained criminal history records revealed that 19 percent (300 of 1,611) of nurse aides who received substantiated findings of abuse, neglect, or misappropriation in 2010 had at least one conviction prior to their substantiated findings. This result suggests that the maximum possible reduction in substantiated findings of abuse, neglect, and misappropriation of resident property at the completion of the background check program would be 19 percent in comparison to 2010 baseline data. However, we acknowledge that the reduction will be less than 19 percent because not all nurse aides with criminal convictions are prohibited from employment and not all States plan to participate in the background check program.

Overall, the 300 nurse aides with criminal convictions before their substantiated findings had a total of 622 convictions. The number of convictions per nurse aide ranged from 1 to 14, averaging 2.1 convictions per nurse aide.

<u>*Timing of Convictions.*</u> Of the 300 nurse aides with at least one conviction prior to the dates of their substantiated findings, 170 nurse aides had at least one conviction prior to their date of registration as a nurse aide.<sup>25</sup> The remaining 130 nurse aides who received substantiated findings of abuse, neglect, or misappropriation in 2010 each had at least one conviction after the date of their registration as a nurse aide, but before a substantiated finding.

The 300 nurse aides who each had at least one criminal conviction prior to the dates of their substantiated findings include 43 nurse aides who each had both at least one conviction before the date of their substantiated findings and at least one conviction afterward.<sup>26</sup> For example, one nurse aide had an embezzlement conviction in January 1997 and a shoplifting conviction in July 1998. After receiving a substantiated finding of misappropriation on February 25, 2010, this individual had three convictions in October 2010 for crimes against property: two convictions of identity theft and a conviction for fraudulent conversion of leased goods. Table 2 shows the percentage of nurse aides with convictions prior to their substantiated findings by the amount of time elapsed between the most recent conviction and the date of the substantiated finding.

<sup>&</sup>lt;sup>25</sup> The 170 nurse aides include 54 nurse aides who each had both at least one conviction before the date of registration as a nurse aide and at least one conviction afterward.

<sup>&</sup>lt;sup>26</sup> Forty-one nurse aides had convictions only after the date of their substantiated findings.

Table 2: Percentages of Nurse Aides With Convictions Prior to Substantiated Findings by Elapsed Time Between Most Recent Conviction and Date of Substantiated Finding

Elapsed Time Before Substantiated Finding Date	Percentage of Nurse Aides With Convictions Prior to Substantiated Findings (n=300)	
Less than 1 year	28.0%	
1 year to less than 5 years	30.7%	
5 years to less than 10 years	15.7%	
10 years to less than 15 years	11.0%	
15 years to less than 20 years	7.0%	
20 years to less than 30 years	5.0%	
30 years or more	2.7%	
Total*	100.0%	

Source: OIG analysis of FBI criminal history records and data on nurse aides with substantiated findings, 2012.

\*Percentages do not sum to 100 percent due to rounding.

Types of Convictions. Among the 300 nurse aides who each had a conviction prior to a substantiated finding, the most common conviction (53 percent) was for crimes against property (e.g., burglary, shoplifting, and writing bad checks). Table 3 shows the six categories of crime and the corresponding percentages of convictions for nurse aides with substantiated findings.

Aides With Substantiated Findings by Category of Crime				
	Category of Crime	Percentage of Convictions (n=622)		
	Crimes against property	52.9%		
	Crimes against persons	14.3%		
	Other	9.3%		

## Table 3: Percentages of Convictions Received by Nurse

Source: OIG analysis of FBI criminal history records and data on nurse aides with substantiated findings, 2012.

\*Percentages do not sum to 100 percent due to rounding.

Driving-related crimes other than DUI

DUI

Total\*

Drug-related crimes

In our analysis of FBI-maintained criminal history records, we identified five nurse aides with substantiated findings in 2010 who were registered sex offenders. Three nurse aides had sex offender registration dates prior to the dates of their substantiated findings, and two were registered as sex offenders subsequent to the dates of their substantiated findings.

9.3%

7.2%

6.9% 100.0%

#### Among Nurse Aides With Convictions, Nurse Aides With Findings of Abuse or Neglect Were More Likely to Have Convictions of Crimes Against Persons; Nurse Aides With Findings of Misappropriation Were More Likely to Have Convictions of **Crimes Against Property**

We examined relationships between the type of substantiated finding(s) (i.e., abuse, neglect, and/or misappropriation) and the type of conviction (e.g., crimes against persons). Nurse aides with substantiated findings of either abuse or neglect were 3.2 times more likely to have convictions of crime against persons than nurse aides with substantiated findings of misappropriation.<sup>27</sup> Conversely, nurse aides with substantiated findings of misappropriation were 1.6 times more likely to have convictions of crime against property than nurse aides with substantiated findings of abuse or neglect.<sup>28</sup>

#### Nurse Aides With Substantiated Findings Had a Higher Rate of Criminal Convictions Than Nurse Aides Employed in Nursing Facilities Overall

When we consider convictions occurring either before or after substantiated finding dates, 21 percent (341 of 1,611) of nurse aides with substantiated findings had criminal convictions. According to data for the 2011 OIG evaluation entitled *Nursing Facilities' Employment of Individuals With Criminal Convictions*,<sup>29</sup> 6 percent of nurse aides employed in nursing facilities overall had criminal convictions.<sup>30</sup> Both groups of nurse aides averaged approximately two convictions per nurse aide.

<u>Types of Convictions</u>. We compared the percentages of each group of nurse aides with each conviction type. The percentages of nurse aides with convictions of crimes against persons and property were higher among the nurse aides with substantiated findings in 2010 when compared with nurse aides employed in nursing facilities overall.<sup>31</sup> Table 4 shows the percentages of nurse aides with these two conviction types.

	Convictions of Crimes Against Persons	Convictions of Crimes Against Property
Nurse aides with substantiated findings in 2010	23.5%	63.6%
Nurse aides employed in nursing facilities in 2009	12.9%	47.4%

## Table 4: Percentages of Nurse Aides With Convictions By Category of Conviction

Source: OIG analysis of FBI criminal history records and nurse aides with 2010 substantiated findings data and 2009 nursing facility employee data, 2012.

#### CONCLUSION

The results presented in this memorandum report provide baseline information on the extent to which nurse aides had substantiated findings (1,611) and the extent to which nurse aides with substantiated findings of abuse, neglect, and/or misappropriation had previous criminal convictions (19 percent) and the nature of those convictions. The

<sup>&</sup>lt;sup>27</sup> Fifty-one nurse aides with substantiated findings of either abuse or neglect had convictions for crimes against persons; 16 nurse aides with substantiated findings of misappropriation had convictions for crimes against persons.

<sup>&</sup>lt;sup>28</sup> Ninety-seven nurse aides with substantiated findings of misappropriation had convictions for crimes against property; 59 nurse aides with substantiated findings of either abuse or neglect had convictions for crimes against property.

<sup>&</sup>lt;sup>29</sup> OEI-07-09-00110, March 2011.

<sup>&</sup>lt;sup>30</sup> Appendix A presents the point estimates and confidence intervals for all population estimates.

<sup>&</sup>lt;sup>31</sup> Differences are statistically significant at the 95-percent confidence level. We found no statistically significant difference in the percentages of nurse aides with convictions of drug crimes and driving-related crimes other than DUI. There were statistically significant differences in the percentages of nurse aides with convictions of DUI and other crimes; however, for these two categories of crimes, the percentage of nurse aides employed in nursing facilities in 2009 was higher than the percentage of nurse aides with substantiated findings in 2010.

percentage of nurse aides with criminal convictions and substantiated findings is higher than the percentage of nurse aides with criminal convictions employed in nursing facilities; however, it is important to note that approximately 80 percent of nurse aides with substantiated findings had no criminal convictions in FBI-maintained criminal history records. To determine trends, we will repeat this analysis for nurse aides with substantiated findings as the background check program progresses. We will present the results in the mandated report entitled *Nationwide Program for National and State Background Checks for Long-Term-Care Employees* (OEI-07-10-00420).

CMS may wish to provide the information in this memorandum report to States that participate in the background check program as well as to the Long-Term-Care Criminal Convictions Workgroup. This report is being issued directly in final form because it contains no recommendations. If you have comments or questions about this report, please provide them within 60 days. Please refer to report number OEI-07-10-00422 in all correspondence.

#### **APPENDIX A**

# Table A-1: Point Estimates and Confidence Intervals for Data Used in March 2011 Report(Nursing Facilities' Employment of Individuals With Criminal Convictions,OEI-07-09-00110)

Estimate	Sample Size	Point Estimate	95-Percent Confidence Interval
Percentage of nurse aides employed in nursing facilities in 2009 with convictions	12,239	6.4%	5.1–8.0%
Average number of convictions among nurse aides employed in nursing facilities in 2009	12,239	2.0	1.8–2.2
Percentage of nurse aides employed in nursing facilities in 2009 with convictions of crimes against persons	12,239	12.9%	9.9–16.6%
Percentage of nurse aides employed in nursing facilities in 2009 with convictions of crimes against property	12,239	47.4%	41.2–53.3%

Source: Office of Inspector General analysis of Federal Bureau of Investigation criminal history records and 2009 data on nursing facility employees, 2012.