

**Medicaid Analytic Extract  
Provider Characteristics (MAXPC)**

**State-Specific Validation Tables,  
2011**

June 28, 2013

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## **ACRONYMS**

CMS	Centers for Medicare & Medicaid Services
CY	Calendar year
FY	Federal fiscal year
HIPAA	Health Insurance Portability and Accountability Act
ID	Identification/identifier
IP	Inpatient
LT	Long-term care
MAX	Medicaid Analytic Extract
MAXPC	MAX Provider Characteristics File
MSIS	Medicaid Statistical Information System
NPI	National Provider Identifier
NPPES	National Plan and Provider Enumeration System
OT	Other services
RX	Drug
UPIN	Unique Physician Identification Number

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## INTRODUCTION

The Medicaid Statistical Information System (MSIS) files and the corresponding research-friendly Medicaid Analytic Extract (MAX) files support a wide range of studies on Medicaid enrollment, service use, and expenditures. There is currently considerable interest at the Centers for Medicare & Medicaid Services (CMS) in also examining health reform proposals, program integrity, and access-to-care issues among certain types of Medicaid providers. However, it has not been possible to easily conduct provider-based research activities because the provider identification numbers collected in MSIS are largely unedited, undocumented, and state specific.

The advent of the Health Insurance Portability and Accountability Act (HIPAA) mandated covered entities such as health care providers, health plans, and health care clearinghouses to obtain and use a National Provider Identifier (NPI) in all administrative and financial HIPAA transactions.<sup>1</sup> The NPI is a unique 10-digit, sequentially assigned national identification number, unstructured so as not to carry any way information such as the state or medical specialty of the health care provider who “owns” the identifier. Beginning in February 2009, states were required to include NPIs on claims submitted to MSIS. The main limitation of this identifier, however, is that certain classes of nonmedical providers are not required to obtain an NPI. Nonetheless, the availability of the NPI on MSIS claims makes the development of a uniform provider characteristic file more feasible. The MAX Provider Characteristics (MAXPC) file is such a file.

Once the state’s MAXPC file is created, validation tables are produced. Validation tables are designed as a diagnostic tool to determine whether linkages are working in the expected manner and consist of a set of seven tables. The first six tables focus on provider ID types in the IP, LT, OT, and RX files. These provider types are: IP billing, LT billing, OT servicing, OT billing, RX billing, and RX prescribing provider IDs. The seventh table examines all provider IDs in all of the files. Each file-specific validation table is used to detect linkage issues that are peculiar to a given file type. The all-provider table is used to monitor the overall quality of the linkages of all provider IDs. The design of the validation tables is very similar across file types. The measures are grouped into seven sections as denoted by the shaded rows. The first section describes measures for each unique provider in the file. The second section focuses on the source of NPIs. The third section focuses on provider IDs that link to NPPES, followed by a section for provider IDs that link to state provider files. The fifth section focuses on the primary taxonomy of providers that link to NPPES. Among providers, taxonomies are classified into two groups: (1) individuals or groups of individuals, and (2) nonindividuals. The sixth section focuses on individual providers showing their sole proprietorship status. Finally, the seventh section focuses on provider organizations and their ownership status.

The columns in the state-specific tables describe the annual statistics for up to three years, followed by a column describing the percentage change between year one and year two, the percentage change between year two and year three, if applicable, followed by the expected

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<sup>1</sup> CMS. “National Provider Identifier (NPI) Overview.” Available at <http://www.cms.gov/nationalProvIdentstand/>.

range of values across years, and finally, an indicator showing whether the percentage change between the two most recent years being compared is within the expected range.

The primary source of data used in the MAXPC 2011 files were the MSIS Valid claims files. The following measures in the MAXPC file were derived from original, unadjusted claims:

- Number of IP Claims for Provider
- Number of Beneficiaries with IP Claims for Provider
- Number of LT Claims for Provider
- Number of Beneficiaries with LT Claims for Provider
- Number of OT Claims for Provider
- Number of Beneficiaries with OT Claims for Provider
- Number of RX Claims for provider
- Number of Beneficiaries with RX Claims for Provider.



2009-2011 MAX IP Billing Provider Characteristics Validation Table

State: VA

Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>IP Providers</b>								
Number of provider IDs	1,291	1,347	1,349	4.34	0.15	30% (+/-)	Yes	Yes
% billing provider on IP claim	100.0	100.0	100.0	0.00	0.00	N/A	N/A	N/A
% NPI billing provider on IP claim	100.0	100.0	100.0	0.00	0.00	N/A	N/A	N/A
% also a provider on LT claim	21.5	20.1	20.0	-6.57	-0.52	N/A	N/A	N/A
% also a provider on OT claim	68.8	64.7	64.9	-5.88	0.31	N/A	N/A	N/A
% also a provider on RX claim	11.7	10.1	7.9	-13.68	-22.17	N/A	N/A	N/A
% provider IDs with NPI	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	99.5	99.7	99.9	0.17	0.22	30% (+/-)	Yes	Yes
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
average number of IP claims	403.1	398.2	389.8	-1.22	-2.12	30% (+/-)	Yes	Yes
average number of beneficiaries with IP claims	184.9	178.7	178.4	-3.35	-0.14	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	1,291	1,347	1,349	4.34	0.15	30% (+/-)	Yes	Yes
% NPI source = MSIS	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% NPI source = state cross-reference file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs Linked to NPPES</b>								
Number of provider IDs linked to NPPES	1,285	1,343	1,348	4.51	0.37	30% (+/-)	Yes	Yes
% linked via NPI	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% linked via Medicare UPIN	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with name prefix	0.1	0.1	0.1	-4.32	-0.37	30% (+/-)	Yes	Yes
% with first name	0.1	0.1	0.1	-4.32	-0.37	30% (+/-)	Yes	Yes
% with middle name	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with last name	0.1	0.1	0.1	-4.32	-0.37	30% (+/-)	Yes	Yes
% with name suffix	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% male	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% female	0.1	0.1	0.1	-4.32	-0.37	30% (+/-)	Yes	Yes
% with credential	0.1	0.1	0.1	-4.32	-0.37	30% (+/-)	Yes	Yes
% with business name	99.9	99.8	99.9	-0.15	0.15	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.9	100.0	-0.15	0.15	30% (+/-)	Yes	Yes
% with city	100.0	99.9	100.0	-0.15	0.15	30% (+/-)	Yes	Yes
% with state	100.0	99.9	100.0	-0.15	0.15	30% (+/-)	Yes	Yes
% state = IP state code	53.7	51.3	50.7	-4.46	-1.09	30% (+/-)	Yes	Yes
% with zip code	100.0	99.9	100.0	-0.15	0.15	30% (+/-)	Yes	Yes
% with primary taxonomy	99.3	98.6	98.7	-0.72	0.16	30% (+/-)	Yes	Yes
% with provider entity type = individual	0.1	0.1	0.1	-4.32	-0.37	30% (+/-)	Yes	Yes
% with provider entity type = organization	99.9	99.8	99.9	-0.15	0.15	30% (+/-)	Yes	Yes
<b>Provider IDs with or without NPI but linked to state provider file</b>								
Number of provider IDs with or without NPI linked to state provider file	0	0	0	Div by 0	Div by 0	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

a "Yes" signifies that either (1) the percent change between 2009 and 2010 is within the cross-year expected range or (2) both the 2009 and the 2010 values are less than 10. "No" signifies that both (1) the percent change between 2009 and 2010 is over or under the cross-year expected range and (2) either the 2009 or the 2010 value is greater than 10.

b "Yes" signifies that either (1) the percent change between 2010 and 2011 is within the cross-year expected range or (2) both the 2010 and the 2011 values are less than 10. "No" signifies that both (1) the percent change between 2010 and 2011 is over or under the cross-year expected range and (2) either the 2010 or the 2011 value is greater than 10.

2009-2011 MAX IP Billing Provider Characteristics Validation Table

State: VA  
Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	1,282	1,324	1,331	3.28	0.53	30% (+/-)	Yes	Yes
% individual or group of individuals	4.7	2.2	2.2	-53.20	-0.53	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	2.3	0.6	0.8	-73.29	24.34	30% (+/-)	Yes	Yes
% behavioral health and social service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% chiropractic providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% dental providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% dietary and nutritional service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% emergency medical service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% eye and vision service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing service providers	0.0	0.1	0.1	Div by 0	-0.53	30% (+/-)	N/A	Yes
% nursing service-related providers	0.1	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% other service providers	0.6	0.2	0.2	-75.79	-0.53	30% (+/-)	Yes	Yes
% pharmacy service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% physician assistants and advanced practice nursing providers	0.2	0.2	0.2	-3.17	-0.53	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% respiratory, developmental, rehabilitative, and restorative service providers	1.2	0.9	0.8	-22.54	-17.10	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.2	0.3	0.3	29.10	-0.53	30% (+/-)	Yes	Yes
% student health care	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% technologists, technicians, and other technical service providers	0.2	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% group of individuals with multi- or single specialty	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nonindividuals	95.3	97.8	97.8	2.61	0.01	30% (+/-)	Yes	Yes
% agencies	0.4	0.5	0.3	16.19	-33.68	30% (+/-)	Yes	Yes
% ambulatory health care facilities	22.9	23.5	23.5	2.43	0.11	30% (+/-)	Yes	Yes
% hospital units	0.9	1.3	1.1	37.17	-18.08	30% (+/-)	Yes	Yes
% hospitals	51.3	53.5	54.2	4.33	1.30	30% (+/-)	Yes	Yes
% laboratories	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% managed care organizations	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing and custodial care facilities	19.4	18.6	18.3	-4.34	-1.33	30% (+/-)	Yes	Yes
% residential treatment facilities	0.1	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% suppliers	0.2	0.1	0.1	-51.59	-0.53	30% (+/-)	Yes	Yes
% transportation services	0.1	0.4	0.3	384.14	-20.42	30% (+/-)	Yes	Yes
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Individual</b>								
Number of provider IDs with entity type = individual	1	1	1	0.00	0.00	30% (+/-)	Yes	Yes
% a sole proprietorship	0.0	100.0	100.0	Div by 0	0.00	30% (+/-)	N/A	Yes
% not a sole proprietorship	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% not answered	100.0	0.0	0.0	-100.00	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	1,284	1,340	1,347	4.36	0.52	30% (+/-)	Yes	Yes
% organization is a subpart	9.0	9.3	9.7	2.43	4.29	30% (+/-)	Yes	Yes
% organization is not a subpart	71.9	77.2	76.5	7.45	-1.00	30% (+/-)	Yes	Yes
% not answered	19.1	13.5	13.9	-29.21	2.78	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

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2009-2011 MAX LT Billing Provider Characteristics Validation Table

State: VA  
Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>LT Providers</b>								
Number of provider IDs	374	378	384	1.07	1.59	30% (+/-)	Yes	Yes
% billing provider on LT claim	100.0	100.0	100.0	0.00	0.00	N/A	N/A	N/A
% NPI billing provider on LT claim	100.0	100.0	100.0	0.00	0.00	N/A	N/A	N/A
% also a provider on IP claim	74.3	71.7	70.3	-3.55	-1.93	N/A	N/A	N/A
% also a provider on OT claim	27.0	14.3	19.0	-47.10	33.07	N/A	N/A	N/A
% also a provider on RX claim	4.0	4.2	2.6	5.54	-38.48	N/A	N/A	N/A
% provider IDs with NPI	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
average number of LT claims	1,166.4	1,144.3	1,129.3	-1.90	-1.31	30% (+/-)	Yes	Yes
average number of beneficiaries with LT claims	87.6	84.6	85.3	-3.33	0.79	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	374	378	384	1.07	1.59	30% (+/-)	Yes	Yes
% NPI source = MSIS	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% NPI source = state cross-reference file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs Linked to NPPES</b>								
Number of provider IDs linked to NPPES	374	378	384	1.07	1.59	30% (+/-)	Yes	Yes
% linked via NPI	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% linked via Medicare UPIN	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with name prefix	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with first name	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with middle name	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with last name	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with name suffix	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% male	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% female	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with credential	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with business name	100.0	99.7	100.0	-0.26	0.27	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.7	100.0	-0.26	0.27	30% (+/-)	Yes	Yes
% with city	100.0	99.7	100.0	-0.26	0.27	30% (+/-)	Yes	Yes
% with state	100.0	99.7	100.0	-0.26	0.27	30% (+/-)	Yes	Yes
% state = LT state code	96.8	95.8	95.3	-1.06	-0.47	30% (+/-)	Yes	Yes
% with zip code	100.0	99.7	100.0	-0.26	0.27	30% (+/-)	Yes	Yes
% with primary taxonomy	98.7	96.6	96.9	-2.13	0.33	30% (+/-)	Yes	Yes
% with provider entity type = individual	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with provider entity type = organization	100.0	99.7	100.0	-0.26	0.27	30% (+/-)	Yes	Yes
<b>Provider IDs with or without NPI but linked to state provider file</b>								
Number of provider IDs with or without NPI linked to state provider file	0	0	0	Div by 0	Div by 0	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

a "Yes" signifies that either (1) the percent change between 2009 and 2010 is within the cross-year expected range or (2) both the 2009 and the 2010 values are less than 10. "No" signifies that both (1) the percent change between 2009 and 2010 is over or under the cross-year expected range and (2) either the 2009 or the 2010 value is greater than 10.

b "Yes" signifies that either (1) the percent change between 2010 and 2011 is within the cross-year expected range or (2) both the 2010 and the 2011 values are less than 10. "No" signifies that both (1) the percent change between 2010 and 2011 is over or under the cross-year expected range and (2) either the 2010 or the 2011 value is greater than 10.

2009-2011 MAX LT Billing Provider Characteristics Validation Table

State: VA  
Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	369	365	372	-1.08	1.92	30% (+/-)	Yes	Yes
% individual or group of individuals	0.5	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% allopathic and osteopathic physicians	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% behavioral health and social service providers	0.3	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% chiropractic providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% dental providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% dietary and nutritional service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% emergency medical service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% eye and vision service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing service-related providers	0.3	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% other service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% pharmacy service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% physician assistants and advanced practice nursing providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% podiatric medicine and surgery service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% speech, language, and hearing service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% student health care	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% technologists, technicians, and other technical service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% group of individuals with multi- or single specialty	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nonindividuals	99.5	100.0	100.0	0.54	0.00	30% (+/-)	Yes	Yes
% agencies	0.8	0.8	0.8	1.10	-1.88	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% hospital units	3.5	6.3	6.5	78.86	2.38	30% (+/-)	Yes	Yes
% hospitals	10.6	9.6	9.4	-9.27	-1.88	30% (+/-)	Yes	Yes
% laboratories	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% managed care organizations	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing and custodial care facilities	82.7	80.5	80.4	-2.55	-0.21	30% (+/-)	Yes	Yes
% residential treatment facilities	1.4	2.7	3.0	102.19	7.93	30% (+/-)	Yes	Yes
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% suppliers	0.5	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% transportation services	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Individual</b>								
Number of provider IDs with entity type = individual	0	0	0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% a sole proprietorship	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% not a sole proprietorship	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% not answered	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	374	377	384	0.80	1.86	30% (+/-)	Yes	Yes
% organization is a subpart	12.3	14.1	13.5	14.30	-3.68	30% (+/-)	Yes	Yes
% organization is not a subpart	55.1	59.9	60.9	8.84	1.65	30% (+/-)	Yes	Yes
% not answered	32.6	26.0	25.5	-20.31	-1.82	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

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b "Yes" signifies that either (1) the percent change between 2010 and 2011 is within the cross-year expected range or (2) both the 2010 and the 2011 values are less than 10. "No" signifies that both (1) the percent change between 2010 and 2011 is over or under the cross-year expected range and (2) either the 2010 or the 2011 value is greater than 10.

2009-2011 MAX OT Servicing Provider Characteristics Validation Table

State: VA

Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>OT Providers</b>								
Number of provider IDs	74,427	78,368	80,144	5.30	2.27	30% (+/-)	Yes	Yes
% billing provider on OT claim	40.1	39.7	38.2	-1.01	-3.76	N/A	N/A	N/A
% servicing provider on OT claim	50.0	50.0	50.0	0.00	0.00	N/A	N/A	N/A
% NPI servicing provider on OT claim	50.0	50.0	50.0	0.00	0.00	N/A	N/A	N/A
% also a provider on IP claim	1.2	1.1	1.1	-6.97	-2.90	N/A	N/A	N/A
% also a provider on LT claim	0.1	0.1	0.1	-51.55	17.34	N/A	N/A	N/A
% also a provider on RX claim	26.3	26.0	26.4	-1.30	1.60	N/A	N/A	N/A
% provider IDs with NPI	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	95.5	95.7	96.0	0.20	0.36	30% (+/-)	Yes	Yes
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
average number of OT claims	692.4	720.4	697.6	4.05	-3.16	30% (+/-)	Yes	Yes
average number of beneficiaries with OT claims	151.6	152.9	148.9	0.88	-2.66	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	74,426	78,368	80,144	5.30	2.27	30% (+/-)	Yes	Yes
% NPI source = MSIS	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% NPI source = state cross-reference file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs Linked to NPPES</b>								
Number of provider IDs linked to NPPES	71,074	74,984	76,956	5.50	2.63	30% (+/-)	Yes	Yes
% linked via NPI	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% linked via Medicare UPIN	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with name prefix	36.3	36.6	36.8	0.71	0.68	30% (+/-)	Yes	Yes
% with first name	80.3	80.3	80.7	-0.02	0.49	30% (+/-)	Yes	Yes
% with middle name	62.4	62.5	62.6	0.14	0.19	30% (+/-)	Yes	Yes
% with last name	80.3	80.3	80.7	-0.02	0.49	30% (+/-)	Yes	Yes
% with name suffix	3.7	3.6	3.6	-2.86	-2.13	30% (+/-)	Yes	Yes
% male	50.1	49.3	48.3	-1.59	-2.17	30% (+/-)	Yes	Yes
% female	30.1	30.9	32.4	2.59	4.73	30% (+/-)	Yes	Yes
% with credential	77.3	77.5	77.8	0.25	0.43	30% (+/-)	Yes	Yes
% with business name	19.7	19.3	19.1	-1.91	-1.18	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% with city	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% with state	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% state = OT state code	70.7	69.3	70.1	-1.96	1.16	30% (+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% with primary taxonomy	98.8	97.7	98.0	-1.05	0.27	30% (+/-)	Yes	Yes
% with provider entity type = individual	80.3	80.3	80.7	-0.02	0.49	30% (+/-)	Yes	Yes
% with provider entity type = organization	19.7	19.3	19.1	-1.91	-1.18	30% (+/-)	Yes	Yes
<b>Provider IDs with or without NPI but linked to state provider file</b>								
Number of provider IDs with or without NPI linked to state provider file	0	0	0	Div by 0	Div by 0	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

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2009-2011 MAX OT Servicing Provider Characteristics Validation Table

State: VA

Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	71,495	73,292	75,426	2.51	2.91	30% (+/-)	Yes	Yes
% individual or group of individuals	84.2	84.1	84.2	-0.08	0.05	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	57.8	57.6	56.3	-0.27	-2.25	30% (+/-)	Yes	Yes
% behavioral health and social service providers	6.9	7.0	6.9	1.34	-1.43	30% (+/-)	Yes	Yes
% chiropractic providers	0.1	0.1	0.1	19.84	-9.61	30% (+/-)	Yes	Yes
% dental providers	3.2	3.4	3.7	7.35	6.81	30% (+/-)	Yes	Yes
% dietary and nutritional service providers	0.0	0.0	0.0	-2.45	-39.27	30% (+/-)	Yes	Yes
% emergency medical service providers	0.0	0.0	0.0	150.84	-19.02	30% (+/-)	Yes	Yes
% eye and vision service providers	2.1	2.1	2.2	-0.88	4.89	30% (+/-)	Yes	Yes
% nursing service providers	0.1	0.2	0.2	84.96	17.14	30% (+/-)	Yes	Yes
% nursing service-related providers	0.1	0.0	0.0	-73.40	5.27	30% (+/-)	Yes	Yes
% other service providers	5.4	2.8	2.7	-47.82	-5.17	30% (+/-)	Yes	Yes
% pharmacy service providers	0.1	0.1	0.1	55.35	-5.09	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	5.7	8.0	9.0	40.14	11.97	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	0.9	0.9	1.0	-2.45	4.11	30% (+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	0.8	0.9	0.9	7.63	6.43	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.4	0.5	0.5	9.74	-0.56	30% (+/-)	Yes	Yes
% student health care	0.2	0.3	0.6	75.01	65.67	30% (+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.1	0.1	0.0	-60.98	-36.84	30% (+/-)	Yes	Yes
% group of individuals with multi- or single specialty	0.1	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	15.8	15.9	15.8	0.41	-0.25	30% (+/-)	Yes	Yes
% agencies	2.7	3.2	3.3	16.76	4.83	30% (+/-)	Yes	Yes
% ambulatory health care facilities	1.7	1.6	1.6	-9.79	0.06	30% (+/-)	Yes	Yes
% hospital units	0.0	0.0	0.0	33.49	4.65	30% (+/-)	Yes	Yes
% hospitals	2.4	2.5	2.4	2.41	-3.47	30% (+/-)	Yes	Yes
% laboratories	0.5	0.6	0.5	17.75	-6.16	30% (+/-)	Yes	Yes
% managed care organizations	0.0	0.0	0.1	84.26	20.03	30% (+/-)	Yes	Yes
% nursing and custodial care facilities	0.2	0.1	0.1	-42.19	-2.83	30% (+/-)	Yes	Yes
% residential treatment facilities	0.4	0.6	0.6	39.62	-6.65	30% (+/-)	Yes	Yes
% respite care facility	0.1	0.0	0.0	-56.27	4.65	30% (+/-)	Yes	Yes
% suppliers	6.5	6.3	6.2	-2.28	-1.15	30% (+/-)	Yes	Yes
% transportation services	1.2	0.9	0.9	-24.71	3.59	30% (+/-)	Yes	Yes
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Individual</b>								
Number of provider IDs with entity type = individual	57,060	60,188	62,074	5.48	3.13	30% (+/-)	Yes	Yes
% a sole proprietorship	14.3	14.9	15.2	4.23	2.22	30% (+/-)	Yes	Yes
% not a sole proprietorship	75.8	78.5	78.7	3.54	0.22	30% (+/-)	Yes	Yes
% not answered	9.9	6.6	6.1	-33.14	-7.60	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	14,014	14,502	14,708	3.48	1.42	30% (+/-)	Yes	Yes
% organization is a subpart	9.3	10.0	10.5	6.85	5.56	30% (+/-)	Yes	Yes
% organization is not a subpart	69.3	73.4	73.9	5.91	0.67	30% (+/-)	Yes	Yes
% not answered	21.4	16.6	15.6	-22.14	-6.30	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

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2009-2011 MAX OT Billing Provider Characteristics Validation Table

State: VA

Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>OT Providers</b>								
Number of provider IDs	32,348	33,877	33,595	4.73	-0.83	30% (+/-)	Yes	Yes
% billing provider on OT claim	100.0	100.0	100.0	0.00	0.00	N/A	N/A	N/A
% servicing provider on OT claim	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
% NPI servicing provider on OT claim	92.2	91.7	91.0	-0.47	-0.76	N/A	N/A	N/A
% also a provider on IP claim	2.7	2.6	2.6	-6.23	1.19	N/A	N/A	N/A
% also a provider on LT claim	0.3	0.2	0.2	-48.95	34.45	N/A	N/A	N/A
% also a provider on RX claim	50.8	50.1	50.8	-1.48	1.38	N/A	N/A	N/A
% provider IDs with NPI	92.5	92.1	91.5	-0.43	-0.71	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	87.4	87.1	86.7	-0.29	-0.47	30% (+/-)	Yes	Yes
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
average number of OT claims	1,055.0	1,081.3	1,088.1	2.49	0.63	30% (+/-)	Yes	Yes
average number of beneficiaries with OT claims	207.0	210.4	211.2	1.62	0.37	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	29,925	31,204	30,723	4.27	-1.54	30% (+/-)	Yes	Yes
% NPI source = MSIS	99.7	99.6	99.6	-0.04	-0.02	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.3	0.4	0.4	13.24	4.31	30% (+/-)	Yes	Yes
% NPI source = state cross-reference file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs Linked to NPPES</b>								
Number of provider IDs linked to NPPES	28,263	29,512	29,129	4.42	-1.30	30% (+/-)	Yes	Yes
% linked via NPI	99.7	99.6	99.6	-0.04	-0.02	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.3	0.4	0.4	12.24	4.10	30% (+/-)	Yes	Yes
% linked via Medicare UPIN	0.0	0.0	0.0	91.54	1.31	30% (+/-)	Yes	Yes
% with name prefix	35.7	36.0	36.0	0.69	0.01	30% (+/-)	Yes	Yes
% with first name	74.9	74.7	74.1	-0.26	-0.74	30% (+/-)	Yes	Yes
% with middle name	59.0	58.7	58.1	-0.59	-1.03	30% (+/-)	Yes	Yes
% with last name	74.9	74.7	74.1	-0.26	-0.74	30% (+/-)	Yes	Yes
% with name suffix	3.8	3.7	3.5	-2.97	-3.85	30% (+/-)	Yes	Yes
% male	48.6	47.7	45.9	-1.89	-3.69	30% (+/-)	Yes	Yes
% female	26.3	27.0	28.2	2.75	4.48	30% (+/-)	Yes	Yes
% with credential	72.2	72.3	71.5	0.03	-1.00	30% (+/-)	Yes	Yes
% with business name	25.1	24.9	25.6	-0.77	2.88	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% with city	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% with state	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% state = OT state code	76.9	75.9	78.2	-1.32	3.01	30% (+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% with primary taxonomy	98.7	97.6	97.8	-1.11	0.27	30% (+/-)	Yes	Yes
% with provider entity type = individual	74.9	74.7	74.1	-0.26	-0.74	30% (+/-)	Yes	Yes
% with provider entity type = organization	25.1	24.9	25.6	-0.77	2.88	30% (+/-)	Yes	Yes
<b>Provider IDs with or without NPI but linked to state provider file</b>								
Number of provider IDs with or without NPI linked to state provider file	0	0	0	Div by 0	Div by 0	N/A	N/A	N/A

Source: Medicaid Analytic eExtract (MAX) Provider Characteristics Files, 2009-2011.

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2009-2011 MAX OT Billing Provider Characteristics Validation Table

State: VA

Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	28,526	28,800	28,502	0.96	-1.03	30% (+/-)	Yes	Yes
% individual or group of individuals	80.5	79.8	79.1	-0.80	-0.98	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	56.1	57.5	55.2	2.39	-4.00	30% (+/-)	Yes	Yes
% behavioral health and social service providers	7.4	7.5	7.6	1.43	0.44	30% (+/-)	Yes	Yes
% chiropractic providers	0.1	0.1	0.1	42.11	-17.33	30% (+/-)	Yes	Yes
% dental providers	4.0	4.4	4.8	8.83	10.85	30% (+/-)	Yes	Yes
% dietary and nutritional service providers	0.0	0.0	0.0	23.81	-39.37	30% (+/-)	Yes	Yes
% emergency medical service providers	0.0	0.1	0.0	154.70	-27.02	30% (+/-)	Yes	Yes
% eye and vision service providers	2.1	2.1	2.3	-0.13	7.54	30% (+/-)	Yes	Yes
% nursing service providers	0.1	0.1	0.1	60.95	12.70	30% (+/-)	Yes	Yes
% nursing service-related providers	0.2	0.0	0.0	-72.99	9.47	30% (+/-)	Yes	Yes
% other service providers	6.5	3.1	3.0	-52.78	-3.84	30% (+/-)	Yes	Yes
% pharmacy service providers	0.1	0.2	0.1	50.28	-3.55	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	1.4	2.5	3.2	72.55	30.54	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	1.1	1.1	1.1	-0.64	4.23	30% (+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	0.4	0.4	0.4	-6.73	-1.64	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.4	0.4	0.4	9.95	-2.29	30% (+/-)	Yes	Yes
% student health care	0.2	0.3	0.5	41.27	80.02	30% (+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.2	0.1	0.0	-60.38	-39.37	30% (+/-)	Yes	Yes
% group of individuals with multi- or single specialty	0.1	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	19.5	20.2	20.9	3.32	3.87	30% (+/-)	Yes	Yes
% agencies	3.4	4.1	4.4	19.14	9.00	30% (+/-)	Yes	Yes
% ambulatory health care facilities	1.9	2.0	2.1	4.54	3.88	30% (+/-)	Yes	Yes
% hospital units	0.0	0.0	0.0	28.76	8.82	30% (+/-)	Yes	Yes
% hospitals	3.0	3.2	3.2	3.95	0.27	30% (+/-)	Yes	Yes
% laboratories	0.6	0.7	0.7	20.99	-2.92	30% (+/-)	Yes	Yes
% managed care organizations	0.0	0.1	0.1	65.08	34.73	30% (+/-)	Yes	Yes
% nursing and custodial care facilities	0.3	0.2	0.2	-38.24	14.39	30% (+/-)	Yes	Yes
% residential treatment facilities	0.6	0.8	0.8	42.30	-2.96	30% (+/-)	Yes	Yes
% respite care facility	0.1	0.0	0.0	-55.60	8.82	30% (+/-)	Yes	Yes
% suppliers	8.1	8.0	8.3	-1.08	2.93	30% (+/-)	Yes	Yes
% transportation services	1.4	1.1	1.2	-23.55	7.72	30% (+/-)	Yes	Yes
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Individual</b>								
Number of provider IDs with entity type = individual	21,163	22,040	21,593	4.14	-2.03	30% (+/-)	Yes	Yes
% a sole proprietorship	16.4	16.9	17.5	2.94	3.61	30% (+/-)	Yes	Yes
% not a sole proprietorship	73.1	76.2	76.1	4.13	-0.05	30% (+/-)	Yes	Yes
% not answered	10.5	7.0	6.4	-33.40	-8.21	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	7,100	7,357	7,471	3.62	1.55	30% (+/-)	Yes	Yes
% organization is a subpart	9.3	9.9	10.4	6.48	5.66	30% (+/-)	Yes	Yes
% organization is not a subpart	69.5	73.7	74.2	5.95	0.67	30% (+/-)	Yes	Yes
% not answered	21.2	16.4	15.4	-22.36	-6.41	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

a "Yes" signifies that either (1) the percent change between 2009 and 2010 is within the cross-year expected range or (2) both the 2009 and the 2010 values are less than 10. "No" signifies that both (1) the percent change between 2009 and 2010 is over or under the cross-year expected range and (2) either the 2009 or the 2010 value is greater than 10.

b "Yes" signifies that either (1) the percent change between 2010 and 2011 is within the cross-year expected range or (2) both the 2010 and the 2011 values are less than 10. "No" signifies that both (1) the percent change between 2010 and 2011 is over or under the cross-year expected range and (2) either the 2010 or the 2011 value is greater than 10.



2009-2011 MAX RX Billing Provider Characteristics Validation Table

State: VA

Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>RX Providers</b>								
Number of provider IDs	1,751	1,768	1,815	0.97	2.66	30% (+/-)	Yes	Yes
% billing provider on RX claim	100.0	100.0	100.0	0.00	0.00	N/A	N/A	N/A
% prescribing provider on RX claim	10.4	3.1	3.4	-70.61	10.04	N/A	N/A	N/A
% NPI billing provider on RX claim	100.0	100.0	100.0	0.00	0.00	N/A	N/A	N/A
% also a provider on IP claim	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
% also a provider on LT claim	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
% also a provider on OT claim	90.1	90.1	90.1	-0.02	0.04	N/A	N/A	N/A
% provider IDs with NPI	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	99.4	100.0	100.0	0.57	0.00	30% (+/-)	Yes	Yes
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
average number of RX claims	5,285.0	5,358.7	5,686.8	1.39	6.12	30% (+/-)	Yes	Yes
average number of beneficiaries with RX claims	541.7	542.5	557.2	0.15	2.71	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	1,751	1,768	1,815	0.97	2.66	30% (+/-)	Yes	Yes
% NPI source = MSIS	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% NPI source = state cross-reference file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs Linked to NPPES</b>								
Number of provider IDs linked to NPPES	1,741	1,768	1,815	1.55	2.66	30% (+/-)	Yes	Yes
% linked via NPI	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% linked via Medicare UPIN	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with name prefix	0.1	0.1	0.1	-1.53	-2.59	30% (+/-)	Yes	Yes
% with first name	0.2	0.2	0.2	-1.53	-2.59	30% (+/-)	Yes	Yes
% with middle name	0.2	0.2	0.2	-1.53	-2.59	30% (+/-)	Yes	Yes
% with last name	0.2	0.2	0.2	-1.53	-2.59	30% (+/-)	Yes	Yes
% with name suffix	0.1	0.1	0.1	-1.53	-2.59	30% (+/-)	Yes	Yes
% male	0.2	0.2	0.2	-1.53	-2.59	30% (+/-)	Yes	Yes
% female	0.1	0.1	0.1	-1.53	-2.59	30% (+/-)	Yes	Yes
% with credential	0.1	0.1	0.1	-1.53	-2.59	30% (+/-)	Yes	Yes
% with business name	99.8	99.0	99.4	-0.73	0.36	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.3	99.6	-0.74	0.35	30% (+/-)	Yes	Yes
% with city	100.0	99.3	99.6	-0.74	0.35	30% (+/-)	Yes	Yes
% with state	100.0	99.3	99.6	-0.74	0.35	30% (+/-)	Yes	Yes
% state = RX state code	86.6	86.4	86.1	-0.29	-0.29	30% (+/-)	Yes	Yes
% with zip code	100.0	99.3	99.6	-0.74	0.35	30% (+/-)	Yes	Yes
% with primary taxonomy	97.4	96.1	96.5	-1.35	0.39	30% (+/-)	Yes	Yes
% with provider entity type = individual	0.2	0.2	0.2	-1.53	-2.59	30% (+/-)	Yes	Yes
% with provider entity type = organization	99.8	99.0	99.4	-0.73	0.36	30% (+/-)	Yes	Yes
<b>Provider IDs with or without NPI but linked to state provider file</b>								
Number of provider IDs with or without NPI linked to state provider file	0	0	0	Div by 0	Div by 0	N/A	N/A	N/A

Source: Medicaid Analytic eExtract (MAX) Provider Characteristics Files, 2009-2011.

a "Yes" signifies that either (1) the percent change between 2009 and 2010 is within the cross-year expected range or (2) both the 2009 and the 2010 values are less than 10. "No" signifies that both (1) the percent change between 2009 and 2010 is over or under the cross-year expected range and (2) either the 2009 or the 2010 value is greater than 10.

b "Yes" signifies that either (1) the percent change between 2010 and 2011 is within the cross-year expected range or (2) both the 2010 and the 2011 values are less than 10. "No" signifies that both (1) the percent change between 2010 and 2011 is over or under the cross-year expected range and (2) either the 2010 or the 2011 value is greater than 10.

2009-2011 MAX RX Billing Provider Characteristics Validation Table

State: VA

Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	1,699	1,699	1,751	0.00	3.06	30% (+/-)	Yes	Yes
% individual or group of individuals	2.4	3.1	2.9	29.27	-8.46	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% behavioral health and social service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% chiropractic providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% dental providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% dietary and nutritional service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% emergency medical service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% eye and vision service providers	0.1	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nursing service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing service-related providers	0.1	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% other service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% pharmacy service providers	2.2	3.1	2.9	39.47	-8.46	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% podiatric medicine and surgery service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% speech, language, and hearing service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% student health care	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% technologists, technicians, and other technical service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% group of individuals with multi- or single specialty	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nonindividuals	97.6	96.9	97.1	-0.72	0.27	30% (+/-)	Yes	Yes
% agencies	0.6	0.3	0.2	-50.00	-22.38	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.1	0.1	0.2	0.00	45.55	30% (+/-)	Yes	Yes
% hospital units	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% hospitals	0.2	0.4	0.3	50.00	-2.97	30% (+/-)	Yes	Yes
% laboratories	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% managed care organizations	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing and custodial care facilities	0.2	0.1	0.1	-33.33	-2.97	30% (+/-)	Yes	Yes
% residential treatment facilities	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% suppliers	96.5	96.0	96.3	-0.49	0.30	30% (+/-)	Yes	Yes
% transportation services	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Individual</b>								
Number of provider IDs with entity type = individual	4	4	4	0.00	0.00	30% (+/-)	Yes	Yes
% a sole proprietorship	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% not a sole proprietorship	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% not answered	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	1,737	1,751	1,804	0.81	3.03	30% (+/-)	Yes	Yes
% organization is a subpart	19.5	20.3	21.2	4.18	4.42	30% (+/-)	Yes	Yes
% organization is not a subpart	69.7	71.4	71.2	2.56	-0.38	30% (+/-)	Yes	Yes
% not answered	10.8	8.2	7.6	-24.02	-7.66	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

a "Yes" signifies that either (1) the percent change between 2009 and 2010 is within the cross-year expected range or (2) both the 2009 and the 2010 values are less than 10. "No" signifies that both (1) the percent change between 2009 and 2010 is over or under the cross-year expected range and (2) either the 2009 or the 2010 value is greater than 10.

b "Yes" signifies that either (1) the percent change between 2010 and 2011 is within the cross-year expected range or (2) both the 2010 and the 2011 values are less than 10. "No" signifies that both (1) the percent change between 2010 and 2011 is over or under the cross-year expected range and (2) either the 2010 or the 2011 value is greater than 10.

2009-2011 MAX RX Prescribing Provider Characteristics Validation Table

State: VA  
Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>RX Providers</b>								
Number of provider IDs	38,379	39,801	41,302	3.71	3.77	30% (+/-)	Yes	Yes
% billing provider on RX claim	0.5	0.1	0.1	-71.39	8.86	N/A	N/A	N/A
% prescribing provider on RX claim	100.0	100.0	100.0	0.00	0.00	N/A	N/A	N/A
% NPI billing provider on RX claim	0.5	0.1	0.1	-71.39	8.86	N/A	N/A	N/A
% also a provider on IP claim	0.4	0.3	0.3	-13.15	-24.89	N/A	N/A	N/A
% also a provider on LT claim	0.0	0.0	0.0	2.86	-39.77	N/A	N/A	N/A
% also a provider on OT claim	48.1	47.9	48.0	-0.45	0.23	N/A	N/A	N/A
% provider IDs with NPI	47.9	48.0	48.0	0.08	0.08	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	47.8	48.0	48.0	0.41	0.08	30% (+/-)	Yes	Yes
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
average number of RX claims	265.2	242.2	259.8	-8.68	7.29	30% (+/-)	Yes	Yes
average number of beneficiaries with RX claims	44.5	41.1	42.4	-7.66	3.31	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	18,389	19,085	19,820	3.78	3.85	30% (+/-)	Yes	Yes
% NPI source = MSIS	99.1	98.7	98.9	-0.38	0.15	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.9	1.3	1.1	42.18	-12.06	30% (+/-)	Yes	Yes
% NPI source = state cross-reference file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs Linked to NPPES</b>								
Number of provider IDs linked to NPPES	18,328	19,085	19,820	4.13	3.85	30% (+/-)	Yes	Yes
% linked via NPI	99.1	98.7	98.9	-0.38	0.15	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.8	1.2	1.1	48.18	-11.97	30% (+/-)	Yes	Yes
% linked via Medicare UPIN	0.1	0.0	0.0	-33.52	-14.41	30% (+/-)	Yes	Yes
% with name prefix	44.6	45.1	45.4	1.18	0.71	30% (+/-)	Yes	Yes
% with first name	96.7	97.4	98.0	0.73	0.59	30% (+/-)	Yes	Yes
% with middle name	76.9	77.4	77.5	0.61	0.17	30% (+/-)	Yes	Yes
% with last name	96.7	97.4	98.0	0.73	0.59	30% (+/-)	Yes	Yes
% with name suffix	5.0	4.9	4.8	-2.09	-2.27	30% (+/-)	Yes	Yes
% male	64.0	62.9	61.6	-1.67	-2.01	30% (+/-)	Yes	Yes
% female	32.7	34.5	36.3	5.43	5.31	30% (+/-)	Yes	Yes
% with credential	93.8	94.8	95.3	1.02	0.54	30% (+/-)	Yes	Yes
% with business name	3.3	2.2	1.8	-33.44	-17.92	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.8	-0.40	0.18	30% (+/-)	Yes	Yes
% with city	100.0	99.6	99.8	-0.40	0.18	30% (+/-)	Yes	Yes
% with state	100.0	99.6	99.8	-0.40	0.18	30% (+/-)	Yes	Yes
% state = RX state code	80.7	79.2	79.1	-1.86	-0.15	30% (+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.40	0.18	30% (+/-)	Yes	Yes
% with primary taxonomy	99.1	98.6	98.9	-0.43	0.28	30% (+/-)	Yes	Yes
% with provider entity type = individual	96.7	97.4	98.0	0.73	0.59	30% (+/-)	Yes	Yes
% with provider entity type = organization	3.3	2.2	1.8	-33.44	-17.92	30% (+/-)	Yes	Yes
<b>Provider IDs with or without NPI but linked to state provider file</b>								
Number of provider IDs with or without NPI linked to state provider file	0	0	0	Div by 0	Div by 0	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

<sup>a</sup> "Yes" signifies that either (1) the percent change between 2009 and 2010 is within the cross-year expected range or (2) both the 2009 and the 2010 values are less than 10. "No" signifies that both (1) the percent change between 2009 and 2010 is over or under the cross-year expected range and (2) either the 2009 or the 2010 value is greater than 10.

<sup>b</sup> "Yes" signifies that either (1) the percent change between 2010 and 2011 is within the cross-year expected range or (2) both the 2010 and the 2011 values are less than 10. "No" signifies that both (1) the percent change between 2010 and 2011 is over or under the cross-year expected range and (2) either the 2010 or the 2011 value is greater than 10.

2009-2011 MAX RX Prescribing Provider Characteristics Validation Table

State: VA  
Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	18,193	18,826	19,605	3.48	4.14	30% (+/-)	Yes	Yes
% individual or group of individuals	97.6	98.5	98.7	0.98	0.20	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	77.8	74.6	73.3	-4.06	-1.74	30% (+/-)	Yes	Yes
% behavioral health and social service providers	0.3	0.2	0.2	-36.15	-6.57	30% (+/-)	Yes	Yes
% chiropractic providers	0.0	0.0	0.0	Div by 0	-100.00	30% (+/-)	N/A	Yes
% dental providers	5.3	5.7	5.9	7.88	2.73	30% (+/-)	Yes	Yes
% dietary and nutritional service providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% emergency medical service providers	0.0	0.0	0.0	28.85	-3.97	30% (+/-)	Yes	Yes
% eye and vision service providers	2.3	2.3	2.3	0.38	2.97	30% (+/-)	Yes	Yes
% nursing service providers	0.1	0.1	0.1	51.86	4.76	30% (+/-)	Yes	Yes
% nursing service-related providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% other service providers	3.4	3.9	3.8	16.47	-4.36	30% (+/-)	Yes	Yes
% pharmacy service providers	0.0	0.0	0.0	-3.36	-3.97	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	6.5	9.8	10.9	49.75	11.39	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	1.4	1.3	1.4	-2.19	2.94	30% (+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.0	0.0	-3.36	-3.97	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.0	0.0	0.0	-3.36	44.04	30% (+/-)	Yes	Yes
% student health care	0.3	0.4	0.7	48.54	67.76	30% (+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.0	0.0	0.0	Div by 0	92.05	30% (+/-)	N/A	Yes
% group of individuals with multi- or single specialty	0.2	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	2.4	1.5	1.3	-39.46	-13.75	30% (+/-)	Yes	Yes
% agencies	0.2	0.2	0.1	-17.17	-10.38	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.5	0.4	0.3	-23.76	-24.26	30% (+/-)	Yes	Yes
% hospital units	0.0	0.0	0.0	20.80	-23.18	30% (+/-)	Yes	Yes
% hospitals	0.7	0.6	0.5	-9.05	-20.26	30% (+/-)	Yes	Yes
% laboratories	0.0	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% managed care organizations	0.0	0.0	0.0	286.55	-3.97	30% (+/-)	Yes	Yes
% nursing and custodial care facilities	0.0	0.0	0.0	-3.36	-3.97	30% (+/-)	Yes	Yes
% residential treatment facilities	0.0	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% suppliers	1.0	0.3	0.3	-73.01	7.55	30% (+/-)	Yes	Yes
% transportation services	0.0	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Individual</b>								
Number of provider IDs with entity type = individual	17,722	18,589	19,418	4.89	4.46	30% (+/-)	Yes	Yes
% a sole proprietorship	13.3	13.7	13.7	2.39	0.40	30% (+/-)	Yes	Yes
% not a sole proprietorship	77.0	80.5	80.9	4.56	0.50	30% (+/-)	Yes	Yes
% not answered	9.6	5.8	5.4	-39.68	-7.81	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	606	420	358	-30.69	-14.76	30% (+/-)	No	Yes
% organization is a subpart	13.4	7.9	8.7	-41.22	10.21	30% (+/-)	No	Yes
% organization is not a subpart	70.8	78.1	80.4	10.32	3.01	30% (+/-)	Yes	Yes
% not answered	15.8	14.0	10.9	-11.32	-22.45	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

a "Yes" signifies that either (1) the percent change between 2009 and 2010 is within the cross-year expected range or (2) both the 2009 and the 2010 values are less than 10. "No" signifies that both (1) the percent change between 2009 and 2010 is over or under the cross-year expected range and (2) either the 2009 or the 2010 value is greater than 10.

b "Yes" signifies that either (1) the percent change between 2010 and 2011 is within the cross-year expected range or (2) both the 2010 and the 2011 values are less than 10. "No" signifies that both (1) the percent change between 2010 and 2011 is over or under the cross-year expected range and (2) either the 2010 or the 2011 value is greater than 10.

## 2009-2011 MAX All Provider Characteristics Validation Table

State: VA  
Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
<b>All Providers</b>								
Number of provider IDs	97,526	102,658	105,385	5.26	2.66	30%(+/-)	Yes	Yes
% billing provider on IP claim	1.3	1.3	1.3	-0.88	-2.44	N/A	N/A	N/A
% NPI billing provider on IP claim	1.3	1.3	1.3	-0.88	-2.44	N/A	N/A	N/A
% billing provider on LT claim	0.4	0.4	0.4	-3.98	-1.04	N/A	N/A	N/A
% NPI billing provider on LT claim	0.4	0.4	0.4	-3.98	-1.04	N/A	N/A	N/A
% billing provider on OT claim	33.2	33.0	31.9	-0.51	-3.40	N/A	N/A	N/A
% servicing provider on OT claim	38.2	38.2	38.0	0.03	-0.38	N/A	N/A	N/A
% NPI servicing provider on OT claim	38.2	38.2	38.0	0.03	-0.38	N/A	N/A	N/A
% billing provider on RX claim	1.8	1.7	1.7	-4.08	0.00	N/A	N/A	N/A
% prescribing provider on RX claim	39.4	38.8	39.2	-1.48	1.09	N/A	N/A	N/A
% NPI billing provider on RX claim	1.8	1.7	1.7	-4.08	0.00	N/A	N/A	N/A
% billing provider	33.8	33.7	32.6	-0.34	-3.37	N/A	N/A	N/A
% NPI billing provider	3.2	3.1	3.1	-2.46	-0.89	N/A	N/A	N/A
% servicing provider	38.2	38.2	38.0	0.03	-0.38	N/A	N/A	N/A
% NPI servicing provider	38.2	38.2	38.0	0.03	-0.38	N/A	N/A	N/A
% prescribing provider	39.4	38.8	39.2	-1.48	1.09	N/A	N/A	N/A
% provider IDs with NPI	77.3	77.4	77.1	0.20	-0.42	30%(+/-)	Yes	Yes
% provider IDs linked to NPPES	73.8	74.1	74.1	0.41	-0.07	30%(+/-)	Yes	Yes
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
average number of claims	804.1	817.3	811.2	1.65	-0.75	30%(+/-)	Yes	Yes
average number of beneficiaries with claims	145.0	145.6	143.8	0.42	-1.26	30%(+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	75,355	79,481	81,250	5.48	2.23	30%(+/-)	Yes	Yes
% NPI source = MSIS	99.7	99.6	99.6	-0.10	0.03	30%(+/-)	Yes	Yes
% NPI source = NPPES	0.3	0.4	0.4	30.78	-7.22	30%(+/-)	Yes	Yes
% NPI source = state cross-reference file	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs Linked to NPPES</b>								
Number of provider IDs linked to NPPES	71,997	76,094	78,061	5.69	2.58	30%(+/-)	Yes	Yes
% linked via NPI	99.6	99.5	99.6	-0.11	0.03	30%(+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.3	0.4	0.4	33.81	-7.42	30%(+/-)	Yes	Yes
% linked via Medicare UPIN	0.0	0.0	0.0	-25.66	-11.38	30%(+/-)	Yes	Yes
% with name prefix	36.0	36.2	36.4	0.61	0.70	30%(+/-)	Yes	Yes
% with first name	79.5	79.4	79.8	-0.07	0.49	30%(+/-)	Yes	Yes
% with middle name	61.8	61.8	61.9	0.09	0.19	30%(+/-)	Yes	Yes
% with last name	79.5	79.4	79.8	-0.07	0.49	30%(+/-)	Yes	Yes
% with name suffix	3.7	3.6	3.5	-2.83	-2.06	30%(+/-)	Yes	Yes
% male	49.6	48.7	47.7	-1.71	-2.13	30%(+/-)	Yes	Yes
% female	29.9	30.7	32.1	2.65	4.65	30%(+/-)	Yes	Yes
% with credential	76.5	76.7	77.0	0.20	0.43	30%(+/-)	Yes	Yes
% with business name	20.5	20.2	20.0	-1.63	-1.09	30%(+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.8	-0.39	0.17	30%(+/-)	Yes	Yes
% with city	100.0	99.6	99.8	-0.39	0.17	30%(+/-)	Yes	Yes
% with state	100.0	99.6	99.8	-0.39	0.17	30%(+/-)	Yes	Yes
% state = claim file state code	70.6	69.2	70.0	-1.96	1.07	30%(+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.39	0.17	30%(+/-)	Yes	Yes
% with primary taxonomy	98.8	97.7	98.0	-1.04	0.27	30%(+/-)	Yes	Yes

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

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2009-2011 MAX All Provider Characteristics Validation Table

State: VA  
Produced: 04/03/2013

Measure	2009 Value	2010 Value	2011 Value	% Change 2009-2010	% Change 2010-2011	Cross Year Expected Range	Cross Year 2009-2010 Within Range <sup>a</sup>	Cross Year 2010-2011 Within Range <sup>b</sup>
% with provider entity type = individual	79.5	79.4	79.8	-0.07	0.49	30%(+/-)	Yes	Yes
% with provider entity type = organization	20.5	20.2	20.0	-1.63	-1.09	30%(+/-)	Yes	Yes
<b>Provider IDs with or without NPI but linked to state provider file</b>								
Number of provider IDs with or without NPI linked to state provider file	0	0	0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with NPES Primary Taxonomy</b>								
Number of provider IDs with NPES primary taxonomy	72,407	74,380	76,511	2.72	2.87	30%(+/-)	Yes	Yes
% individual or group of individuals	83.5	83.4	83.4	-0.16	0.05	30%(+/-)	Yes	Yes
% allopathic and osteopathic physicians	57.3	57.1	55.8	-0.33	-2.23	30%(+/-)	Yes	Yes
% behavioral health and social service providers	6.8	6.9	6.8	1.16	-1.37	30%(+/-)	Yes	Yes
% chiropractic providers	0.1	0.1	0.1	19.60	-9.57	30%(+/-)	Yes	Yes
% dental providers	3.2	3.4	3.6	7.10	6.72	30%(+/-)	Yes	Yes
% dietary and nutritional service providers	0.0	0.0	0.0	-2.65	-39.24	30%(+/-)	Yes	Yes
% emergency medical service providers	0.0	0.0	0.0	150.32	-18.99	30%(+/-)	Yes	Yes
% eye and vision service providers	2.1	2.0	2.1	-1.08	4.99	30%(+/-)	Yes	Yes
% nursing service providers	0.1	0.2	0.2	82.21	17.19	30%(+/-)	Yes	Yes
% nursing service-related providers	0.1	0.0	0.0	-73.75	5.32	30%(+/-)	Yes	Yes
% other service providers	5.4	2.8	2.7	-48.02	-4.99	30%(+/-)	Yes	Yes
% pharmacy service providers	0.1	0.1	0.1	43.77	-5.82	30%(+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	5.7	8.0	9.0	39.98	11.63	30%(+/-)	Yes	Yes
% podiatric medicine and surgery service providers	0.9	0.9	0.9	-2.65	4.16	30%(+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	0.8	0.8	0.9	7.01	6.30	30%(+/-)	Yes	Yes
% speech, language, and hearing service providers	0.4	0.5	0.5	9.48	-0.52	30%(+/-)	Yes	Yes
% student health care	0.2	0.3	0.5	70.88	66.14	30%(+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.1	0.1	0.0	-61.06	-36.81	30%(+/-)	Yes	Yes
% group of individuals with multi- or single specialty	0.1	0.0	0.0	-100.00	Div by 0	30%(+/-)	Yes	N/A
% nonindividuals	16.5	16.6	16.6	0.79	-0.24	30%(+/-)	Yes	Yes
% agencies	2.7	3.1	3.3	16.48	4.82	30%(+/-)	Yes	Yes
% ambulatory health care facilities	1.8	1.6	1.6	-10.14	0.44	30%(+/-)	Yes	Yes
% hospital units	0.0	0.1	0.1	70.36	1.18	30%(+/-)	Yes	Yes
% hospitals	2.7	2.8	2.7	3.81	-2.74	30%(+/-)	Yes	Yes
% laboratories	0.5	0.5	0.5	17.51	-6.12	30%(+/-)	Yes	Yes
% managed care organizations	0.0	0.0	0.1	83.88	20.09	30%(+/-)	Yes	Yes
% nursing and custodial care facilities	0.6	0.5	0.5	-11.04	-4.88	30%(+/-)	Yes	Yes
% residential treatment facilities	0.4	0.6	0.6	40.75	-6.32	30%(+/-)	Yes	Yes
% respite care facility	0.1	0.0	0.0	-56.36	4.69	30%(+/-)	Yes	Yes
% suppliers	6.6	6.4	6.4	-2.43	-1.06	30%(+/-)	Yes	Yes
% transportation services	1.1	0.9	0.9	-24.74	3.62	30%(+/-)	Yes	Yes
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Individual</b>								
Number of provider IDs with entity type = individual	57,216	60,428	62,295	5.61	3.09	30%(+/-)	Yes	Yes
% a sole proprietorship	14.3	14.9	15.2	4.09	2.31	30%(+/-)	Yes	Yes
% not a sole proprietorship	75.8	78.5	78.7	3.56	0.20	30%(+/-)	Yes	Yes
% not answered	9.9	6.6	6.1	-33.22	-7.57	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	14,781	15,367	15,592	3.96	1.46	30%(+/-)	Yes	Yes
% organization is a subpart	9.5	10.1	10.6	6.92	4.84	30%(+/-)	Yes	Yes
% organization is not a subpart	69.0	73.2	73.8	6.10	0.78	30%(+/-)	Yes	Yes
% not answered	21.5	16.7	15.6	-22.58	-6.37	N/A	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2011.

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