

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

**State-Specific Validation Tables,  
2011**

June 28, 2013

Deo Bencio  
Mei-ling Mason



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Submitted to:  
Centers for Medicare & Medicaid Services  
7500 Security Boulevard, B2-29-04  
Baltimore, MD 21244-1850  
Project Officer: Cara Petroski

Submitted by:  
Mathematica Policy Research  
1100 1st Street, NE  
12th Floor  
Washington, DC 20002-4221  
Telephone: (202) 484-9220  
Facsimile: (202) 863-1763  
Project Director: Julie Sykes

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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: IL

Produced: 05/20/2013

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>a</sup>
<b>IP Providers</b>								
Number of provider IDs	1,349	1,277	1,060	-5.34	-16.99	30% (+/-)	Yes	Yes
% billing provider on IP claim	45.7	45.1	43.9	-1.38	-2.74	N/A	N/A	N/A
% NPI billing provider on IP claim	54.3	54.9	56.1	1.16	2.26	N/A	N/A	N/A
% also a provider on LT claim	0.7	0.9	0.9	16.19	9.57	N/A	N/A	N/A
% also a provider on OT claim	88.9	90.8	87.1	2.11	-4.06	N/A	N/A	N/A
% also a provider on RX claim	13.1	13.0	3.8	-0.93	-70.97	N/A	N/A	N/A
% provider IDs with NPI	91.0	90.8	90.2	-0.22	-0.63	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	91.0	90.8	90.2	-0.22	-0.63	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	674.5	707.6	702.8	4.91	-0.68	30% (+/-)	Yes	Yes
average number of beneficiaries with IP claims	487.0	511.6	521.1	5.05	1.85	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	1,227	1,159	956	-5.54	-17.52	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	1,227	1,159	956	-5.54	-17.52	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	99.9	99.9	-0.09	-0.02	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.9	99.9	-0.09	-0.02	30% (+/-)	Yes	Yes
% with city	100.0	99.9	99.9	-0.09	-0.02	30% (+/-)	Yes	Yes
% with state	100.0	99.9	99.9	-0.09	-0.02	30% (+/-)	Yes	Yes
% state = IP state code	34.7	36.4	42.2	4.87	15.77	30% (+/-)	Yes	Yes
% with zip code	100.0	99.9	99.9	-0.09	-0.02	30% (+/-)	Yes	Yes
% with primary taxonomy	99.5	99.2	99.5	-0.29	0.26	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	99.9	99.9	-0.09	-0.02	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 IP Billing Provider Characteristics Validation Table

State: IL

Produced: 05/20/2013

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>a</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	1,221	1,150	951	-5.81	-17.30	30% (+/-)	Yes	Yes
% individual or group of individuals	0.1	0.2	0.3	112.20	81.30	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	0.0	0.1	0.2	Div by 0	141.73	30% (+/-)	N/A	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	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing service-related providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	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	0.1	0.1	0.1	6.10	20.86	30% (+/-)	Yes	Yes
% 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	99.9	99.8	99.7	-0.09	-0.14	30% (+/-)	Yes	Yes
% agencies	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% ambulatory health care facilities	0.2	0.3	0.1	6.10	-59.71	30% (+/-)	Yes	Yes
% hospital units	8.4	8.8	9.7	4.11	10.14	30% (+/-)	Yes	Yes
% hospitals	91.0	90.3	89.4	-0.80	-0.98	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	0.3	0.3	41.46	-9.35	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	0.0	0.2	0.2	Div by 0	20.86	30% (+/-)	N/A	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	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	1,227	1,158	955	-5.62	-17.53	30% (+/-)	Yes	Yes
% organization is a subpart	10.9	10.7	11.7	-1.95	9.52	30% (+/-)	Yes	Yes
% organization is not a subpart	72.8	78.3	74.9	7.62	-4.41	30% (+/-)	Yes	Yes
% not answered	16.3	11.0	13.4	-32.72	22.21	N/A	N/A	N/A

Source: Medicaid Analytic eExtract (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.

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2009-2011 MAX LT Billing Provider Characteristics Validation Table

State: IL

Produced: 05/20/2013

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>a</sup>
<b>LT Providers</b>								
Number of provider IDs	2,216	2,296	2,233	3.61	-2.74	30% (+/-)	Yes	Yes
% billing provider on LT claim	41.6	42.1	41.2	1.12	-1.97	N/A	N/A	N/A
% NPI billing provider on LT claim	58.4	57.9	58.8	-0.80	1.43	N/A	N/A	N/A
% also a provider on IP claim	0.5	0.5	0.4	6.21	-6.51	N/A	N/A	N/A
% also a provider on OT claim	47.6	50.0	52.0	5.12	3.99	N/A	N/A	N/A
% also a provider on RX claim	0.7	0.7	0.3	-9.56	-51.99	N/A	N/A	N/A
% provider IDs with NPI	71.1	66.5	65.2	-6.43	-2.03	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	71.1	66.5	65.2	-6.43	-2.03	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	912.6	851.1	753.6	-6.74	-11.45	30% (+/-)	Yes	Yes
average number of beneficiaries with LT claims	98.9	99.9	93.2	1.08	-6.72	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	1,575	1,527	1,455	-3.05	-4.72	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	1,575	1,527	1,455	-3.05	-4.72	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	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% with address line 1	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% with city	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% with state	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% state = LT state code	98.5	98.4	98.5	-0.11	0.13	30% (+/-)	Yes	Yes
% with zip code	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% with primary taxonomy	96.8	97.4	97.5	0.71	0.01	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	100.0	100.0	0.00	0.00	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.

<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 LT Billing Provider Characteristics Validation Table

State: IL

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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>a</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	1,524	1,488	1,418	-2.36	-4.70	30% (+/-)	Yes	Yes
% individual or group of individuals	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	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	0.0	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	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing service-related providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	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	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% agencies	3.3	3.2	0.7	-3.59	-78.14	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.2	0.2	0.1	2.54	-30.18	30% (+/-)	Yes	Yes
% hospital units	1.8	1.9	1.8	6.21	-6.32	30% (+/-)	Yes	Yes
% hospitals	2.3	2.4	2.3	5.31	-6.71	30% (+/-)	Yes	Yes
% laboratories	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% managed care organizations	0.2	0.3	0.5	36.55	83.51	30% (+/-)	Yes	Yes
% nursing and custodial care facilities	76.9	81.0	83.5	5.30	3.11	30% (+/-)	Yes	Yes
% residential treatment facilities	10.7	11.0	11.1	2.41	1.72	30% (+/-)	Yes	Yes
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% suppliers	4.3	0.1	0.0	-98.43	-100.00	30% (+/-)	Yes	Yes
% transportation services	0.3	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	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	1,575	1,527	1,455	-3.05	-4.72	30% (+/-)	Yes	Yes
% organization is a subpart	11.0	11.6	12.1	5.53	4.36	30% (+/-)	Yes	Yes
% organization is not a subpart	41.1	48.3	50.5	17.49	4.66	30% (+/-)	Yes	Yes
% not answered	47.9	40.1	37.4	-16.26	-6.86	N/A	N/A	N/A

Source: Medicaid Analytic eExtract (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 OT Servicing Provider Characteristics Validation Table  
 State: IL  
 Produced: 05/20/2013

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>a</sup>
<b>OT Providers</b>								
Number of provider IDs	141,590	147,362	149,873	4.08	1.70	30% (+/-)	Yes	Yes
% billing provider on OT claim	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
% servicing provider on OT claim	65.3	65.1	63.8	-0.35	-1.95	N/A	N/A	N/A
% NPI servicing provider on OT claim	34.7	34.9	36.2	0.65	3.63	N/A	N/A	N/A
% also a provider on IP claim	0.4	0.4	0.3	-6.47	-20.54	N/A	N/A	N/A
% also a provider on LT claim	0.5	0.5	0.5	8.70	3.58	N/A	N/A	N/A
% also a provider on RX claim	22.8	23.0	22.9	1.07	-0.81	N/A	N/A	N/A
% provider IDs with NPI	69.2	69.7	72.1	0.75	3.38	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	69.0	69.7	72.0	1.00	3.39	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	1,054.8	1,052.6	1,055.3	-0.21	0.25	30% (+/-)	Yes	Yes
average number of beneficiaries with OT claims	223.4	227.7	231.2	1.95	1.54	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	97,945	102,704	107,988	4.86	5.14	30% (+/-)	Yes	Yes
% NPI source = MSIS	99.9	99.9	100.0	0.01	0.04	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.1	0.1	0.0	-10.84	-53.70	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	97,697	102,693	107,981	5.11	5.15	30% (+/-)	Yes	Yes
% linked via NPI	99.9	99.9	100.0	0.01	0.04	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.1	0.1	0.0	-10.84	-53.70	30% (+/-)	Yes	Yes
% linked via Medicare UPIN	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with name prefix	37.2	38.5	39.5	3.41	2.72	30% (+/-)	Yes	Yes
% with first name	81.1	81.5	83.1	0.48	1.90	30% (+/-)	Yes	Yes
% with middle name	55.0	55.7	56.6	1.31	1.66	30% (+/-)	Yes	Yes
% with last name	81.1	81.5	83.1	0.48	1.90	30% (+/-)	Yes	Yes
% with name suffix	1.5	1.5	1.4	0.07	-5.87	30% (+/-)	Yes	Yes
% male	52.1	51.4	49.1	-1.41	-4.54	30% (+/-)	Yes	Yes
% female	29.0	30.2	34.0	3.88	12.88	30% (+/-)	Yes	Yes
% with credential	78.3	79.0	79.4	0.82	0.56	30% (+/-)	Yes	Yes
% with business name	18.9	18.1	16.7	-4.08	-7.58	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.8	-0.38	0.18	30% (+/-)	Yes	Yes
% with city	100.0	99.6	99.8	-0.38	0.18	30% (+/-)	Yes	Yes
% with state	100.0	99.6	99.8	-0.38	0.18	30% (+/-)	Yes	Yes
% state = OT state code	75.3	73.7	75.8	-2.13	2.86	30% (+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.38	0.18	30% (+/-)	Yes	Yes
% with primary taxonomy	98.9	98.1	98.3	-0.80	0.22	30% (+/-)	Yes	Yes
% with provider entity type = individual	81.1	81.5	83.1	0.48	1.90	30% (+/-)	Yes	Yes
% with provider entity type = organization	18.9	18.1	16.7	-4.08	-7.58	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: IL

Produced: 05/20/2013

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>a</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	96,736	100,714	106,133	4.11	5.38	30% (+/-)	Yes	Yes
% individual or group of individuals	81.2	82.5	83.9	1.64	1.69	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	63.9	63.0	60.1	-1.27	-4.69	30% (+/-)	Yes	Yes
% behavioral health and social service providers	0.1	0.2	0.5	87.38	175.34	30% (+/-)	Yes	Yes
% chiropractic providers	1.0	1.0	0.9	-7.08	-9.08	30% (+/-)	Yes	Yes
% dental providers	2.5	3.7	4.0	48.18	6.30	30% (+/-)	Yes	Yes
% dietary and nutritional service providers	0.0	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% emergency medical service providers	0.1	0.0	0.0	-30.00	26.53	30% (+/-)	Yes	Yes
% eye and vision service providers	1.7	1.7	1.7	1.26	2.39	30% (+/-)	Yes	Yes
% nursing service providers	0.1	0.1	0.2	79.45	23.71	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	1.2	1.8	1.8	52.18	2.80	30% (+/-)	Yes	Yes
% pharmacy service providers	0.3	0.1	0.1	-76.98	-8.72	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	4.9	6.2	6.1	26.34	-0.24	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	1.2	1.2	1.1	1.04	-2.70	30% (+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	2.2	2.2	4.2	0.09	93.32	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.9	1.0	2.6	5.29	162.51	30% (+/-)	Yes	Yes
% student health care	0.1	0.3	0.4	108.05	42.85	30% (+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.0	0.0	0.0	20.59	-5.78	30% (+/-)	Yes	Yes
% group of individuals with multi- or single specialty	1.0	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	18.8	17.5	16.1	-7.06	-7.99	30% (+/-)	Yes	Yes
% agencies	1.3	2.8	2.7	114.96	-3.24	30% (+/-)	Yes	Yes
% ambulatory health care facilities	4.7	2.4	2.2	-49.56	-5.34	30% (+/-)	Yes	Yes
% hospital units	0.1	0.1	0.1	-16.67	-2.64	30% (+/-)	Yes	Yes
% hospitals	3.4	2.8	2.1	-19.33	-22.03	30% (+/-)	Yes	Yes
% laboratories	0.4	0.5	0.4	2.45	-7.42	30% (+/-)	Yes	Yes
% managed care organizations	0.0	0.0	0.0	-43.33	-5.78	30% (+/-)	Yes	Yes
% nursing and custodial care facilities	1.0	1.1	1.1	13.19	-6.37	30% (+/-)	Yes	Yes
% residential treatment facilities	0.1	0.3	0.4	183.19	11.56	30% (+/-)	Yes	Yes
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% suppliers	6.3	6.2	5.8	-2.40	-6.21	30% (+/-)	Yes	Yes
% transportation services	1.4	1.4	1.3	-3.05	-8.74	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	79,278	83,736	89,722	5.62	7.15	30% (+/-)	Yes	Yes
% a sole proprietorship	14.7	15.7	18.2	7.28	15.76	30% (+/-)	Yes	Yes
% not a sole proprietorship	74.5	76.7	74.9	3.01	-2.34	30% (+/-)	Yes	Yes
% not answered	10.8	7.5	6.8	-30.53	-9.11	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	18,419	18,571	18,047	0.83	-2.82	30% (+/-)	Yes	Yes
% organization is a subpart	18.9	19.4	19.8	2.60	2.16	30% (+/-)	Yes	Yes
% organization is not a subpart	57.6	62.9	63.0	9.16	0.16	30% (+/-)	Yes	Yes
% not answered	23.5	17.7	17.2	-24.57	-2.95	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: IL

Produced: 05/20/2013

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>a</sup>
<b>OT Providers</b>								
Number of provider IDs	18,057	16,683	15,708	-7.61	-5.84	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	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
% also a provider on IP claim	3.1	3.2	2.7	3.64	-16.77	N/A	N/A	N/A
% also a provider on LT claim	2.0	2.2	2.2	9.42	-1.75	N/A	N/A	N/A
% also a provider on RX claim	3.9	3.8	3.8	-2.58	0.49	N/A	N/A	N/A
% provider IDs with NPI	6.5	6.4	5.8	-2.68	-8.93	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	6.5	6.4	5.8	-2.44	-8.93	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	5,878.9	6,771.9	7,152.2	15.19	5.62	30% (+/-)	Yes	Yes
average number of beneficiaries with OT claims	780.6	848.9	901.5	8.74	6.20	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	1,179	1,060	909	-10.09	-14.25	30% (+/-)	Yes	Yes
% NPI source = MSIS	99.7	99.7	99.7	0.06	-0.05	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.3	0.3	0.3	-16.52	16.62	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	1,176	1,060	909	-9.86	-14.25	30% (+/-)	Yes	Yes
% linked via NPI	99.7	99.7	99.7	0.06	-0.05	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.3	0.2	0.2	-25.88	16.41	30% (+/-)	Yes	Yes
% linked via Medicare UPIN	0.1	0.1	0.1	10.59	17.03	30% (+/-)	Yes	Yes
% with name prefix	0.3	0.4	0.4	10.88	16.72	30% (+/-)	Yes	Yes
% with first name	0.4	0.5	0.6	11.06	16.54	30% (+/-)	Yes	Yes
% with middle name	0.3	0.4	0.4	10.88	16.72	30% (+/-)	Yes	Yes
% with last name	0.4	0.5	0.6	11.06	16.54	30% (+/-)	Yes	Yes
% with name suffix	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% male	0.3	0.3	0.3	10.98	16.62	30% (+/-)	Yes	Yes
% female	0.2	0.2	0.2	11.18	16.41	30% (+/-)	Yes	Yes
% with credential	0.3	0.4	0.4	10.88	16.72	30% (+/-)	Yes	Yes
% with business name	99.6	99.3	99.3	-0.24	0.00	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.8	99.9	-0.19	0.08	30% (+/-)	Yes	Yes
% with city	100.0	99.8	99.9	-0.19	0.08	30% (+/-)	Yes	Yes
% with state	100.0	99.8	99.9	-0.19	0.08	30% (+/-)	Yes	Yes
% state = OT state code	65.2	62.3	67.4	-4.53	8.31	30% (+/-)	Yes	Yes
% with zip code	100.0	99.8	99.9	-0.19	0.08	30% (+/-)	Yes	Yes
% with primary taxonomy	99.1	97.6	97.6	-1.44	-0.06	30% (+/-)	Yes	Yes
% with provider entity type = individual	0.4	0.5	0.6	11.06	16.54	30% (+/-)	Yes	Yes
% with provider entity type = organization	99.6	99.3	99.3	-0.24	0.00	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: IL

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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>a</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	1,168	1,035	887	-11.39	-14.30	30% (+/-)	Yes	Yes
% individual or group of individuals	49.5	3.2	3.8	-93.56	20.24	30% (+/-)	No	Yes
% allopathic and osteopathic physicians	0.0	0.0	0.1	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	0.0	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	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	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	49.4	3.1	3.6	-93.74	16.68	30% (+/-)	No	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	0.1	0.1	0.1	12.79	16.23	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	0.0	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	50.5	96.8	96.2	91.65	-0.67	30% (+/-)	No	Yes
% agencies	0.3	1.2	1.1	350.97	-2.73	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.2	0.1	0.2	-43.27	132.45	30% (+/-)	Yes	Yes
% hospitals	0.3	0.2	0.1	-43.57	-41.59	30% (+/-)	Yes	Yes
% hospitals	38.6	41.8	37.1	8.35	-11.34	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	7.7	7.9	8.0	2.83	1.03	30% (+/-)	Yes	Yes
% residential treatment facilities	1.8	1.6	1.5	-8.62	-10.80	30% (+/-)	Yes	Yes
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% suppliers	1.5	44.0	48.1	2,752.76	9.51	30% (+/-)	No	Yes
% transportation services	0.1	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	5	5	5	0.00	0.00	30% (+/-)	Yes	Yes
% a sole proprietorship	60.0	60.0	60.0	0.00	0.00	30% (+/-)	Yes	Yes
% not a sole proprietorship	40.0	40.0	40.0	0.00	0.00	30% (+/-)	Yes	Yes
% 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	1,171	1,053	903	-10.08	-14.25	30% (+/-)	Yes	Yes
% organization is a subpart	10.2	10.9	10.7	6.57	-1.64	30% (+/-)	Yes	Yes
% organization is not a subpart	70.5	75.7	75.5	7.30	-0.22	30% (+/-)	Yes	Yes
% not answered	19.2	13.4	13.7	-30.31	2.55	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 Billing Provider Characteristics Validation Table

State: IL

Produced: 05/20/2013

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>a</sup>
<b>RX Providers</b>								
Number of provider IDs	3,760	3,774	3,748	0.37	-0.69	30% (+/-)	Yes	Yes
% billing provider on RX claim	27.0	26.6	25.9	-1.35	-2.62	N/A	N/A	N/A
% prescribing provider on RX claim	0.3	0.7	0.6	99.13	-14.81	N/A	N/A	N/A
% NPI billing provider on RX claim	73.0	73.4	74.1	0.50	0.95	N/A	N/A	N/A
% also a provider on IP claim	0.9	1.0	0.9	5.53	-7.71	N/A	N/A	N/A
% also a provider on LT claim	0.1	0.1	0.1	-33.75	0.68	N/A	N/A	N/A
% also a provider on OT claim	74.5	72.1	71.1	-3.18	-1.41	N/A	N/A	N/A
% provider IDs with NPI	96.5	96.7	96.7	0.18	0.00	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	96.0	96.7	96.7	0.71	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	13,436.3	13,992.4	13,878.3	4.14	-0.82	30% (+/-)	Yes	Yes
average number of beneficiaries with RX claims	1,445.9	1,480.8	1,516.4	2.41	2.40	30% (+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	3,628	3,648	3,623	0.55	-0.69	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	3,609	3,648	3,623	1.08	-0.69	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	0.3	0.3	0.2	-1.08	-9.34	30% (+/-)	Yes	Yes
% with first name	0.6	0.5	0.5	-13.97	-4.30	30% (+/-)	Yes	Yes
% with middle name	0.5	0.4	0.4	-18.47	-6.56	30% (+/-)	Yes	Yes
% with last name	0.6	0.5	0.5	-13.97	-4.30	30% (+/-)	Yes	Yes
% with name suffix	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% male	0.5	0.4	0.4	-18.47	-6.56	30% (+/-)	Yes	Yes
% female	0.2	0.2	0.2	-1.20	0.98	30% (+/-)	Yes	Yes
% with credential	0.6	0.5	0.5	-19.18	0.78	30% (+/-)	Yes	Yes
% with business name	99.4	98.8	99.2	-0.52	0.38	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.4	99.8	-0.60	0.36	30% (+/-)	Yes	Yes
% with city	100.0	99.4	99.8	-0.60	0.36	30% (+/-)	Yes	Yes
% with state	100.0	99.4	99.8	-0.60	0.36	30% (+/-)	Yes	Yes
% state = RX state code	83.3	82.2	82.7	-1.40	0.66	30% (+/-)	Yes	Yes
% with zip code	100.0	99.4	99.8	-0.60	0.36	30% (+/-)	Yes	Yes
% with primary taxonomy	99.3	97.9	98.3	-1.48	0.41	30% (+/-)	Yes	Yes
% with provider entity type = individual	0.6	0.5	0.5	-13.97	-4.30	30% (+/-)	Yes	Yes
% with provider entity type = organization	99.4	98.8	99.2	-0.52	0.38	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.

<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 Billing Provider Characteristics Validation Table

State: IL

Produced: 05/20/2013

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>a</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	3,597	3,570	3,560	-0.75	-0.28	30% (+/-)	Yes	Yes
% individual or group of individuals	46.8	3.6	3.5	-92.28	-4.37	30% (+/-)	No	Yes
% allopathic and osteopathic physicians	0.0	0.1	0.1	300.00	0.32	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	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% nursing service-related providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	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	46.8	3.5	3.3	-92.51	-4.52	30% (+/-)	No	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	53.2	96.4	96.5	81.14	0.16	30% (+/-)	No	Yes
% agencies	0.2	0.6	0.6	152.25	10.35	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.0	0.1	0.1	300.00	0.32	30% (+/-)	Yes	Yes
% hospital units	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% hospitals	0.3	0.4	0.2	45.60	-38.26	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	0.1	0.1	Div by 0	0.32	30% (+/-)	N/A	Yes
% nursing and custodial care facilities	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% 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	52.7	95.3	95.5	80.79	0.25	30% (+/-)	No	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	23	20	19	-13.04	-5.00	30% (+/-)	Yes	Yes
% a sole proprietorship	69.6	80.0	78.9	15.00	-1.32	30% (+/-)	Yes	Yes
% not a sole proprietorship	30.4	20.0	21.1	-34.29	5.26	30% (+/-)	No	Yes
% 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	3,586	3,606	3,595	0.56	-0.31	30% (+/-)	Yes	Yes
% organization is a subpart	31.4	31.4	31.9	0.15	1.54	30% (+/-)	Yes	Yes
% organization is not a subpart	57.6	60.3	60.5	4.70	0.40	30% (+/-)	Yes	Yes
% not answered	11.1	8.3	7.6	-24.86	-8.72	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 Prescribing Provider Characteristics Validation Table

State: IL

Produced: 05/20/2013

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>a</sup>
<b>RX Providers</b>								
Number of provider IDs	112,184	105,095	75,405	-6.32	-28.25	30% (+/-)	Yes	Yes
% billing provider on RX claim	0.0	0.0	0.0	Div by 0	Div by 0	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	0.0	0.0	0.0	108.33	16.70	N/A	N/A	N/A
% also a provider on IP claim	0.1	0.1	0.0	-3.08	-92.63	N/A	N/A	N/A
% also a provider on LT claim	0.0	0.0	0.0	0.00	-44.74	N/A	N/A	N/A
% also a provider on OT claim	26.9	30.3	42.7	12.74	40.77	N/A	N/A	N/A
% provider IDs with NPI	27.0	30.4	42.8	12.78	40.71	30% (+/-)	Yes	No
% provider IDs linked to NPPES	26.9	30.4	42.8	13.05	40.71	30% (+/-)	Yes	No
% 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	226.5	253.5	348.1	11.94	37.32	30% (+/-)	Yes	No
average number of beneficiaries with RX claims	42.1	45.8	64.7	8.84	41.30	30% (+/-)	Yes	No
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	30,239	31,948	32,254	5.65	0.96	30% (+/-)	Yes	Yes
% NPI source = MSIS	99.9	99.9	99.9	-0.04	0.00	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.1	0.1	0.1	38.68	-0.87	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	30,166	31,947	32,253	5.90	0.96	30% (+/-)	Yes	Yes
% linked via NPI	99.9	99.9	99.9	-0.04	0.00	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.1	0.1	0.1	11.32	-5.41	30% (+/-)	Yes	Yes
% linked via Medicare UPIN	0.1	0.1	0.1	66.04	2.18	30% (+/-)	Yes	Yes
% with name prefix	46.5	47.8	48.7	2.84	1.72	30% (+/-)	Yes	Yes
% with first name	98.6	98.4	99.5	-0.23	1.10	30% (+/-)	Yes	Yes
% with middle name	65.8	66.2	66.8	0.62	0.94	30% (+/-)	Yes	Yes
% with last name	98.6	98.4	99.5	-0.23	1.10	30% (+/-)	Yes	Yes
% with name suffix	1.8	1.8	1.7	0.39	-3.88	30% (+/-)	Yes	Yes
% male	65.0	63.4	63.2	-2.43	-0.32	30% (+/-)	Yes	Yes
% female	33.6	35.0	36.3	4.02	3.67	30% (+/-)	Yes	Yes
% with credential	95.9	95.8	96.7	-0.11	0.96	30% (+/-)	Yes	Yes
% with business name	1.4	1.2	0.3	-11.80	-75.63	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 = RX state code	82.0	79.5	80.0	-3.08	0.61	30% (+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.39	0.17	30% (+/-)	Yes	Yes
% with primary taxonomy	98.8	98.3	98.5	-0.53	0.21	30% (+/-)	Yes	Yes
% with provider entity type = individual	98.6	98.4	99.5	-0.23	1.10	30% (+/-)	Yes	Yes
% with provider entity type = organization	1.4	1.2	0.3	-11.80	-75.63	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: IL

Produced: 05/20/2013

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>a</sup>
<b>Provider IDs with NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	29,845	31,393	31,759	5.19	1.17	30% (+/-)	Yes	Yes
% individual or group of individuals	97.7	98.8	99.6	1.19	0.82	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	82.9	80.8	80.3	-2.58	-0.56	30% (+/-)	Yes	Yes
% behavioral health and social service providers	0.1	0.1	0.1	-40.17	30.45	30% (+/-)	Yes	Yes
% chiropractic providers	0.1	0.0	0.0	-30.00	-91.00	30% (+/-)	Yes	Yes
% dental providers	3.8	5.5	6.1	44.26	10.97	30% (+/-)	Yes	Yes
% dietary and nutritional service providers	0.0	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% emergency medical service providers	0.1	0.0	0.0	-30.00	34.94	30% (+/-)	Yes	Yes
% eye and vision service providers	2.2	2.4	2.5	5.66	6.61	30% (+/-)	Yes	Yes
% nursing service providers	0.1	0.1	0.1	31.43	12.94	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	1.6	2.4	2.3	50.44	-4.18	30% (+/-)	Yes	Yes
% pharmacy service providers	0.0	0.0	0.0	-85.00	4.96	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	4.1	5.4	5.8	30.74	8.10	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	1.7	1.7	1.7	0.24	1.91	30% (+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	0.1	0.1	0.1	9.16	-25.14	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.1	0.0	0.0	-24.00	-58.57	30% (+/-)	Yes	Yes
% student health care	0.2	0.4	0.6	81.78	46.51	30% (+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.0	0.0	0.0	-40.00	-47.52	30% (+/-)	Yes	Yes
% group of individuals with multi- or single specialty	0.6	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	2.3	1.2	0.4	-50.15	-69.57	30% (+/-)	Yes	Yes
% agencies	0.1	0.1	0.0	-49.53	-65.01	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.7	0.4	0.1	-43.65	-70.67	30% (+/-)	Yes	Yes
% hospital units	0.1	0.1	0.0	-4.48	-95.08	30% (+/-)	Yes	Yes
% hospitals	1.3	0.5	0.1	-62.77	-74.63	30% (+/-)	Yes	Yes
% laboratories	0.0	0.0	0.0	-70.00	-100.00	30% (+/-)	Yes	Yes
% managed care organizations	0.0	0.0	0.0	0.00	4.96	30% (+/-)	Yes	Yes
% nursing and custodial care facilities	0.0	0.0	0.0	2.94	-64.01	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	0.1	0.1	0.1	64.06	-31.03	30% (+/-)	Yes	Yes
% transportation services	0.0	0.0	0.0	-76.92	-100.00	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	29,757	31,441	32,090	5.66	2.06	30% (+/-)	Yes	Yes
% a sole proprietorship	16.0	17.0	17.5	6.34	2.78	30% (+/-)	Yes	Yes
% not a sole proprietorship	73.1	75.8	75.6	3.70	-0.19	30% (+/-)	Yes	Yes
% not answered	11.0	7.2	6.9	-33.92	-4.56	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	409	382	94	-6.60	-75.39	30% (+/-)	Yes	No
% organization is a subpart	11.0	14.1	6.4	28.49	-54.85	30% (+/-)	Yes	No
% organization is not a subpart	61.9	66.8	80.9	7.91	21.12	30% (+/-)	Yes	Yes
% not answered	27.1	19.1	12.8	-29.58	-33.20	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 All Provider Characteristics Validation Table

State: IL

Produced: 05/20/2013

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>a</sup>
<b>All Providers</b>								
Number of provider IDs	243,893	239,556	211,070	-1.78	-11.89	30%(+/-)	Yes	Yes
% billing provider on IP claim	0.3	0.2	0.2	-5.14	-8.21	N/A	N/A	N/A
% NPI billing provider on IP claim	0.3	0.3	0.3	-2.33	-3.79	N/A	N/A	N/A
% billing provider on LT claim	0.4	0.4	0.4	6.61	8.27	N/A	N/A	N/A
% NPI billing provider on LT claim	0.5	0.6	0.6	4.52	12.00	N/A	N/A	N/A
% billing provider on OT claim	7.4	7.0	7.4	-5.94	6.87	N/A	N/A	N/A
% servicing provider on OT claim	37.9	40.0	45.3	5.59	13.18	N/A	N/A	N/A
% NPI servicing provider on OT claim	20.2	21.5	25.7	6.65	19.61	N/A	N/A	N/A
% billing provider on RX claim	0.4	0.4	0.5	0.72	9.79	N/A	N/A	N/A
% prescribing provider on RX claim	46.0	43.9	35.7	-4.62	-18.57	N/A	N/A	N/A
% NPI billing provider on RX claim	1.1	1.2	1.3	2.66	13.81	N/A	N/A	N/A
% billing provider	7.8	7.4	7.9	-5.12	7.18	N/A	N/A	N/A
% NPI billing provider	2.0	2.0	2.2	2.46	10.74	N/A	N/A	N/A
% servicing provider	37.9	40.0	45.3	5.59	13.18	N/A	N/A	N/A
% NPI servicing provider	20.2	21.5	25.7	6.65	19.61	N/A	N/A	N/A
% prescribing provider	46.0	43.9	35.7	-4.62	-18.57	N/A	N/A	N/A
% provider IDs with NPI	41.4	44.1	52.4	6.46	18.96	30%(+/-)	Yes	Yes
% provider IDs linked to NPPES	41.3	44.1	52.4	6.72	18.97	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	1,370.3	1,461.7	1,662.7	6.67	13.75	30%(+/-)	Yes	Yes
average number of beneficiaries with claims	222.8	235.3	272.1	5.61	15.64	30%(+/-)	Yes	Yes
<b>Provider IDs with NPI</b>								
Number of provider IDs with NPI	100,990	105,603	110,688	4.57	4.82	30%(+/-)	Yes	Yes
% NPI source = MSIS	99.9	99.9	99.9	0.00	0.04	30%(+/-)	Yes	Yes
% NPI source = NPPES	0.1	0.1	0.1	3.48	-33.95	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	100,730	105,592	110,681	4.83	4.82	30%(+/-)	Yes	Yes
% linked via NPI	99.9	99.9	99.9	0.00	0.04	30%(+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.1	0.1	0.1	-6.12	-44.02	30%(+/-)	Yes	Yes
% linked via Medicare UPIN	0.0	0.0	0.0	58.82	0.39	30%(+/-)	Yes	Yes
% with name prefix	36.1	37.4	38.6	3.71	3.05	30%(+/-)	Yes	Yes
% with first name	78.7	79.4	81.1	0.77	2.22	30%(+/-)	Yes	Yes
% with middle name	53.4	54.2	55.3	1.60	1.97	30%(+/-)	Yes	Yes
% with last name	78.7	79.4	81.1	0.77	2.22	30%(+/-)	Yes	Yes
% with name suffix	1.4	1.4	1.3	0.42	-5.59	30%(+/-)	Yes	Yes
% male	50.6	50.0	47.9	-1.14	-4.24	30%(+/-)	Yes	Yes
% female	28.2	29.4	33.2	4.21	13.22	30%(+/-)	Yes	Yes
% with credential	76.0	76.9	77.5	1.10	0.87	30%(+/-)	Yes	Yes
% with business name	21.3	20.3	18.7	-4.64	-7.79	30%(+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.8	-0.38	0.18	30%(+/-)	Yes	Yes
% with city	100.0	99.6	99.8	-0.38	0.18	30%(+/-)	Yes	Yes
% with state	100.0	99.6	99.8	-0.38	0.18	30%(+/-)	Yes	Yes
% state = claim file state code	75.2	73.6	75.7	-2.10	2.86	30%(+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.38	0.18	30%(+/-)	Yes	Yes
% with primary taxonomy	98.9	98.1	98.3	-0.82	0.22	30%(+/-)	Yes	Yes

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 All Provider Characteristics Validation Table

State: IL

Produced: 05/20/2013

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>a</sup>
% with provider entity type = individual	78.7	79.4	81.1	0.77	2.22	30%(+/-)	Yes	Yes
% with provider entity type = organization	21.3	20.3	18.7	-4.64	-7.79	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 NPPES Primary Taxonomy</b>								
Number of provider IDs with NPPES primary taxonomy	99,748	103,534	108,768	3.80	5.06	30%(+/-)	Yes	Yes
% individual or group of individuals	80.3	80.4	82.0	0.14	1.99	30%(+/-)	Yes	Yes
% allopathic and osteopathic physicians	61.9	61.4	58.7	-0.95	-4.39	30%(+/-)	Yes	Yes
% behavioral health and social service providers	0.1	0.2	0.5	87.00	177.78	30%(+/-)	Yes	Yes
% chiropractic providers	1.0	0.9	0.9	-6.71	-8.94	30%(+/-)	Yes	Yes
% dental providers	2.5	3.6	3.9	48.49	6.59	30%(+/-)	Yes	Yes
% dietary and nutritional service providers	0.0	0.0	0.0	-100.00	Div by 0	30%(+/-)	Yes	N/A
% emergency medical service providers	0.0	0.0	0.0	-29.17	27.09	30%(+/-)	Yes	Yes
% eye and vision service providers	1.6	1.6	1.7	1.49	2.71	30%(+/-)	Yes	Yes
% nursing service providers	0.1	0.1	0.2	78.87	24.52	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	1.1	1.7	1.8	52.73	3.03	30%(+/-)	Yes	Yes
% pharmacy service providers	1.8	0.2	0.1	-91.45	-9.26	30%(+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	4.7	6.0	6.0	26.80	0.05	30%(+/-)	Yes	Yes
% podiatric medicine and surgery service providers	1.1	1.1	1.1	1.25	-2.37	30%(+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	2.1	2.1	4.1	0.43	93.89	30%(+/-)	Yes	Yes
% speech, language, and hearing service providers	0.9	1.0	2.6	5.66	163.12	30%(+/-)	Yes	Yes
% student health care	0.1	0.3	0.4	109.03	43.56	30%(+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.0	0.0	0.0	21.21	-5.76	30%(+/-)	Yes	Yes
% group of individuals with multi- or single specialty	1.0	0.0	0.0	-100.00	Div by 0	30%(+/-)	Yes	N/A
% nonindividuals	19.7	19.6	18.0	-0.56	-8.17	30%(+/-)	Yes	Yes
% agencies	1.3	2.8	2.7	112.32	-4.14	30%(+/-)	Yes	Yes
% ambulatory health care facilities	4.5	2.3	2.2	-49.29	-5.18	30%(+/-)	Yes	Yes
% hospital units	0.1	0.1	0.1	-7.91	-4.47	30%(+/-)	Yes	Yes
% hospitals	3.9	3.2	2.5	-18.05	-21.67	30%(+/-)	Yes	Yes
% laboratories	0.4	0.4	0.4	2.76	-7.03	30%(+/-)	Yes	Yes
% managed care organizations	0.0	0.0	0.0	-37.93	2.15	30%(+/-)	Yes	Yes
% nursing and custodial care facilities	1.6	1.6	1.5	0.44	-9.09	30%(+/-)	Yes	Yes
% residential treatment facilities	0.2	0.4	0.5	89.47	7.05	30%(+/-)	Yes	Yes
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30%(+/-)	N/A	N/A
% suppliers	6.2	7.4	6.9	19.22	-5.56	30%(+/-)	Yes	Yes
% transportation services	1.4	1.4	1.2	-2.92	-8.47	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	79,319	83,790	89,775	5.64	7.14	30%(+/-)	Yes	Yes
% a sole proprietorship	14.7	15.7	18.2	7.26	15.74	30%(+/-)	Yes	Yes
% not a sole proprietorship	74.5	76.7	74.9	3.01	-2.34	30%(+/-)	Yes	Yes
% not answered	10.8	7.5	6.8	-30.54	-9.11	N/A	N/A	N/A
<b>Provider IDs with Entity Type = Organization</b>								
Number of provider IDs with entity type = organization	21,411	21,404	20,688	-0.03	-3.35	30%(+/-)	Yes	Yes
% organization is a subpart	18.0	18.5	19.0	2.44	2.81	30%(+/-)	Yes	Yes
% organization is not a subpart	57.8	63.1	63.3	9.20	0.21	30%(+/-)	Yes	Yes
% not answered	24.1	18.4	17.7	-23.87	-3.54	N/A	N/A	N/A

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

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