

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

**State-Specific Validation Tables,
2011**

June 28, 2013

Deo Bencio
Mei-ling Mason



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Policy Research

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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.¹ 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

¹ 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: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
IP Providers								
Number of provider IDs	749	735	680	-1.87	-7.48	30% (+/-)	Yes	Yes
% billing provider on IP claim	50.1	50.3	56.5	0.55	12.18	N/A	N/A	N/A
% NPI billing provider on IP claim	49.9	49.7	43.5	-0.55	-12.34	N/A	N/A	N/A
% also a provider on LT claim	0.5	0.5	0.1	1.90	-72.98	N/A	N/A	N/A
% also a provider on OT claim	63.0	63.8	71.9	1.26	12.70	N/A	N/A	N/A
% also a provider on RX claim	7.3	6.4	7.8	-12.92	21.89	N/A	N/A	N/A
% provider IDs with NPI	99.2	99.2	88.5	-0.02	-10.74	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	98.7	98.9	88.2	0.25	-10.79	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	223.6	227.4	204.1	1.72	-10.27	30% (+/-)	Yes	Yes
average number of beneficiaries with IP claims	184.5	187.7	170.2	1.71	-9.31	30% (+/-)	Yes	Yes
Provider IDs with NPI								
Number of provider IDs with NPI	743	729	602	-1.88	-17.42	30% (+/-)	Yes	Yes
% NPI source = MSIS	99.1	99.0	98.2	-0.02	-0.88	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.9	1.0	1.8	1.92	90.29	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
Provider IDs Linked to NPPES								
Number of provider IDs linked to NPPES	739	727	600	-1.62	-17.47	30% (+/-)	Yes	Yes
% linked via NPI	99.1	99.0	98.2	-0.02	-0.88	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.9	1.0	1.8	1.65	90.40	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	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	99.4	99.7	-0.55	0.22	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.4	99.7	-0.55	0.22	30% (+/-)	Yes	Yes
% with city	100.0	99.4	99.7	-0.55	0.22	30% (+/-)	Yes	Yes
% with state	100.0	99.4	99.7	-0.55	0.22	30% (+/-)	Yes	Yes
% state = IP state code	35.7	35.8	43.5	0.11	21.63	30% (+/-)	Yes	Yes
% with zip code	100.0	99.4	99.7	-0.55	0.22	30% (+/-)	Yes	Yes
% with primary taxonomy	99.7	99.2	98.7	-0.56	-0.51	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	99.4	99.7	-0.55	0.22	30% (+/-)	Yes	Yes
Provider IDs with or without NPI but linked to state provider file								
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 IP Billing Provider Characteristics Validation Table

State: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
Provider IDs with NPPES Primary Taxonomy								
Number of provider IDs with NPPES primary taxonomy	737	721	592	-2.17	-17.89	30% (+/-)	Yes	Yes
% individual or group of individuals	13.4	0.3	0.3	-97.93	21.79	30% (+/-)	No	Yes
% allopathic and osteopathic physicians	9.9	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	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	0.8	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	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	0.3	0.3	0.3	2.22	21.79	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	0.8	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% podiatric medicine and surgery service providers	0.3	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	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	0.5	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% group of individuals with multi- or single specialty	0.8	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	86.6	99.7	99.7	15.20	-0.06	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	1.4	0.3	0.8	-79.56	204.48	30% (+/-)	Yes	Yes
% hospital units	3.5	3.7	4.2	6.15	12.77	30% (+/-)	Yes	Yes
% hospitals	78.6	95.7	94.3	21.82	-1.51	30% (+/-)	Yes	Yes
% laboratories	0.3	0.0	0.3	-100.00	Div by 0	30% (+/-)	Yes	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	0.3	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% residential treatment facilities	0.3	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	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% transportation services	2.3	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
Provider IDs with Entity Type = Individual								
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
Provider IDs with Entity Type = Organization								
Number of provider IDs with entity type = organization	739	723	598	-2.17	-17.29	30% (+/-)	Yes	Yes
% organization is a subpart	7.0	8.3	7.5	17.94	-9.32	30% (+/-)	Yes	Yes
% organization is not a subpart	82.4	84.4	84.3	2.38	-0.11	30% (+/-)	Yes	Yes
% not answered	10.6	7.3	8.2	-30.55	11.78	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: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
LT Providers								
Number of provider IDs	1,334	1,390	1,360	4.20	-2.16	30% (+/-)	Yes	Yes
% billing provider on LT claim	50.0	51.2	51.9	2.45	1.34	N/A	N/A	N/A
% NPI billing provider on LT claim	50.0	48.8	48.1	-2.45	-1.41	N/A	N/A	N/A
% also a provider on IP claim	0.3	0.3	0.1	-4.03	-74.45	N/A	N/A	N/A
% also a provider on OT claim	44.0	41.2	42.7	-6.32	3.63	N/A	N/A	N/A
% also a provider on RX claim	0.1	0.1	0.1	-52.01	2.21	N/A	N/A	N/A
% provider IDs with NPI	100.0	100.0	99.2	0.00	-0.81	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	100.0	100.0	99.2	0.00	-0.81	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	274.5	260.8	217.4	-4.98	-16.67	30% (+/-)	Yes	Yes
average number of beneficiaries with LT claims	33.1	31.6	29.6	-4.60	-6.20	30% (+/-)	Yes	Yes
Provider IDs with NPI								
Number of provider IDs with NPI	1,334	1,390	1,349	4.20	-2.95	30% (+/-)	Yes	Yes
% NPI source = MSIS	100.0	100.0	99.1	0.00	-0.89	30% (+/-)	Yes	Yes
% NPI source = NPPES	0.0	0.0	0.9	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
Provider IDs Linked to NPPES								
Number of provider IDs linked to NPPES	1,334	1,390	1,349	4.20	-2.95	30% (+/-)	Yes	Yes
% linked via NPI	100.0	100.0	99.1	0.00	-0.89	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	0.0	0.0	0.9	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	100.0	-0.14	0.14	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.9	100.0	-0.14	0.14	30% (+/-)	Yes	Yes
% with city	100.0	99.9	100.0	-0.14	0.14	30% (+/-)	Yes	Yes
% with state	100.0	99.9	100.0	-0.14	0.14	30% (+/-)	Yes	Yes
% state = LT state code	95.7	95.0	95.3	-0.64	0.31	30% (+/-)	Yes	Yes
% with zip code	100.0	99.9	100.0	-0.14	0.14	30% (+/-)	Yes	Yes
% with primary taxonomy	96.5	98.1	98.2	1.71	0.09	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	100.0	-0.14	0.14	30% (+/-)	Yes	Yes
Provider IDs with or without NPI but linked to state provider file								
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 LT Billing Provider Characteristics Validation Table

State: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
Provider IDs with NPPES Primary Taxonomy								
Number of provider IDs with NPPES primary taxonomy	1,287	1,364	1,325	5.98	-2.86	30% (+/-)	Yes	Yes
% individual or group of individuals	2.3	0.4	0.3	-83.73	-17.65	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	1.2	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% behavioral health and social service providers	0.1	0.1	0.2	88.71	2.94	30% (+/-)	Yes	Yes
% chiropractic providers	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% dental providers	0.2	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	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	0.2	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	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	0.2	0.2	Div by 0	-31.37	30% (+/-)	N/A	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	0.2	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	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	0.3	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	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	0.2	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	97.7	99.6	99.7	1.93	0.06	30% (+/-)	Yes	Yes
% agencies	1.5	0.4	0.3	-70.20	-31.37	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.5	0.2	0.2	-52.82	-31.37	30% (+/-)	Yes	Yes
% hospital units	4.7	6.7	5.5	44.68	-18.32	30% (+/-)	Yes	Yes
% hospitals	4.2	5.1	4.3	20.56	-14.96	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	74.2	82.4	84.7	11.05	2.76	30% (+/-)	Yes	Yes
% residential treatment facilities	4.7	4.8	4.8	0.54	-0.22	30% (+/-)	Yes	Yes
% respite care facility	0.3	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% suppliers	7.5	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% transportation services	0.2	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
Provider IDs with Entity Type = Individual								
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
Provider IDs with Entity Type = Organization								
Number of provider IDs with entity type = organization	1,334	1,388	1,349	4.05	-2.81	30% (+/-)	Yes	Yes
% organization is a subpart	11.7	12.2	11.3	4.12	-6.85	30% (+/-)	Yes	Yes
% organization is not a subpart	49.0	62.3	63.5	27.12	1.82	30% (+/-)	Yes	Yes
% not answered	39.3	25.5	25.2	-35.07	-1.18	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 OT Servicing Provider Characteristics Validation Table

State: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
OT Providers								
Number of provider IDs	62,340	64,366	67,256	3.25	4.49	30% (+/-)	Yes	Yes
% billing provider on OT claim	21.9	23.6	23.2	8.10	-1.65	N/A	N/A	N/A
% servicing provider on OT claim	58.3	57.8	58.8	-0.81	1.69	N/A	N/A	N/A
% NPI servicing provider on OT claim	43.8	43.7	43.0	-0.20	-1.61	N/A	N/A	N/A
% also a provider on IP claim	0.4	0.3	0.3	-31.05	16.72	N/A	N/A	N/A
% also a provider on LT claim	0.3	0.2	0.2	-16.46	-2.91	N/A	N/A	N/A
% also a provider on RX claim	18.2	18.1	18.0	-0.36	-0.89	N/A	N/A	N/A
% provider IDs with NPI	97.2	97.4	97.3	0.21	-0.14	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	79.9	81.1	81.5	1.43	0.48	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	614.8	612.8	654.9	-0.32	6.86	30% (+/-)	Yes	Yes
average number of beneficiaries with OT claims	104.9	104.2	106.5	-0.64	2.14	30% (+/-)	Yes	Yes
Provider IDs with NPI								
Number of provider IDs with NPI	60,606	62,704	65,428	3.46	4.34	30% (+/-)	Yes	Yes
% NPI source = MSIS	99.0	99.1	99.2	0.07	0.06	30% (+/-)	Yes	Yes
% NPI source = NPPES	1.0	0.9	0.8	-7.17	-6.91	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
Provider IDs Linked to NPPES								
Number of provider IDs linked to NPPES	49,840	52,197	54,801	4.73	4.99	30% (+/-)	Yes	Yes
% linked via NPI	98.8	98.9	99.0	0.10	0.08	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	1.2	1.1	1.0	-8.29	-7.48	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	28.0	28.9	29.2	3.13	1.25	30% (+/-)	Yes	Yes
% with first name	77.2	78.0	78.2	0.97	0.38	30% (+/-)	Yes	Yes
% with middle name	64.9	65.6	65.2	1.05	-0.50	30% (+/-)	Yes	Yes
% with last name	77.2	78.0	78.2	0.97	0.38	30% (+/-)	Yes	Yes
% with name suffix	1.5	1.4	1.4	-6.22	0.17	30% (+/-)	Yes	Yes
% male	53.2	52.7	52.0	-0.94	-1.31	30% (+/-)	Yes	Yes
% female	24.1	25.3	26.3	5.19	3.89	30% (+/-)	Yes	Yes
% with credential	76.2	76.9	77.1	0.96	0.31	30% (+/-)	Yes	Yes
% with business name	22.8	21.6	21.5	-5.17	-0.51	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.8	-0.43	0.19	30% (+/-)	Yes	Yes
% with city	100.0	99.6	99.8	-0.43	0.19	30% (+/-)	Yes	Yes
% with state	100.0	99.6	99.8	-0.43	0.19	30% (+/-)	Yes	Yes
% state = OT state code	63.3	61.3	62.1	-3.07	1.31	30% (+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.43	0.19	30% (+/-)	Yes	Yes
% with primary taxonomy	99.0	98.4	98.6	-0.61	0.18	30% (+/-)	Yes	Yes
% with provider entity type = individual	77.2	78.0	78.2	0.97	0.38	30% (+/-)	Yes	Yes
% with provider entity type = organization	22.8	21.6	21.5	-5.17	-0.51	30% (+/-)	Yes	Yes
Provider IDs with or without NPI but linked to state provider file								
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 OT Servicing Provider Characteristics Validation Table

State: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
Provider IDs with NPPES Primary Taxonomy								
Number of provider IDs with NPPES primary taxonomy	49,445	51,378	54,040	3.91	5.18	30% (+/-)	Yes	Yes
% individual or group of individuals	86.0	86.6	86.6	0.77	0.02	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	57.1	58.7	58.3	2.71	-0.68	30% (+/-)	Yes	Yes
% behavioral health and social service providers	1.2	1.2	1.2	-2.65	-0.89	30% (+/-)	Yes	Yes
% chiropractic providers	4.9	5.1	5.0	4.19	-1.55	30% (+/-)	Yes	Yes
% dental providers	5.3	5.3	5.0	-0.42	-5.80	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	0.2	0.1	0.1	-34.56	-9.12	30% (+/-)	Yes	Yes
% eye and vision service providers	2.8	2.8	2.7	1.18	-4.46	30% (+/-)	Yes	Yes
% nursing service providers	0.1	0.1	0.1	-34.97	8.38	30% (+/-)	Yes	Yes
% nursing service-related providers	0.0	0.0	0.0	-46.53	-4.93	30% (+/-)	Yes	Yes
% other service providers	1.0	1.1	1.0	16.96	-10.76	30% (+/-)	Yes	Yes
% pharmacy service providers	0.3	0.1	0.1	-50.24	-19.94	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	7.5	8.2	9.0	9.09	9.67	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	0.9	1.0	1.0	6.59	0.06	30% (+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	1.9	2.1	2.3	9.41	7.22	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.6	0.5	0.6	-10.31	4.44	30% (+/-)	Yes	Yes
% student health care	0.2	0.2	0.3	2.65	75.89	30% (+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.0	0.0	0.0	-83.96	90.15	30% (+/-)	Yes	Yes
% group of individuals with multi- or single specialty	1.8	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	14.0	13.4	13.4	-4.72	-0.15	30% (+/-)	Yes	Yes
% agencies	3.3	3.1	3.0	-4.88	-3.63	30% (+/-)	Yes	Yes
% ambulatory health care facilities	1.8	1.8	2.0	-4.19	13.02	30% (+/-)	Yes	Yes
% hospital units	0.0	0.0	0.0	-65.00	66.38	30% (+/-)	Yes	Yes
% hospitals	0.7	0.6	0.7	-7.78	12.84	30% (+/-)	Yes	Yes
% laboratories	0.4	0.4	0.5	3.25	7.12	30% (+/-)	Yes	Yes
% managed care organizations	0.0	0.0	0.0	13.74	17.01	30% (+/-)	Yes	Yes
% nursing and custodial care facilities	0.8	0.9	1.0	19.81	1.89	30% (+/-)	Yes	Yes
% residential treatment facilities	0.3	0.3	0.3	-9.56	1.17	30% (+/-)	Yes	Yes
% respite care facility	0.0	0.0	0.0	-30.01	1.02	30% (+/-)	Yes	Yes
% suppliers	5.1	4.7	4.4	-7.84	-4.77	30% (+/-)	Yes	Yes
% transportation services	1.5	1.4	1.4	-5.82	-3.89	30% (+/-)	Yes	Yes
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
Provider IDs with Entity Type = Individual								
Number of provider IDs with entity type = individual	38,478	40,688	42,880	5.74	5.39	30% (+/-)	Yes	Yes
% a sole proprietorship	10.0	11.1	11.0	11.61	-0.62	30% (+/-)	Yes	Yes
% not a sole proprietorship	71.9	77.7	78.8	7.99	1.50	30% (+/-)	Yes	Yes
% not answered	18.1	11.2	10.1	-38.12	-9.77	N/A	N/A	N/A
Provider IDs with Entity Type = Organization								
Number of provider IDs with entity type = organization	11,362	11,284	11,787	-0.69	4.46	30% (+/-)	Yes	Yes
% organization is a subpart	10.1	10.3	10.5	2.72	1.89	30% (+/-)	Yes	Yes
% organization is not a subpart	62.5	67.1	67.9	7.38	1.11	30% (+/-)	Yes	Yes
% not answered	27.4	22.5	21.6	-17.82	-4.15	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: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
OT Providers								
Number of provider IDs	15,413	17,641	17,918	14.46	1.57	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	88.4	86.2	87.2	-2.48	1.18	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	2.1	1.9	1.9	-10.21	1.11	N/A	N/A	N/A
% also a provider on LT claim	2.9	2.5	2.5	-11.64	-2.64	N/A	N/A	N/A
% also a provider on RX claim	5.1	4.3	4.2	-14.74	-3.34	N/A	N/A	N/A
% provider IDs with NPI	92.6	91.0	90.9	-1.76	-0.12	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	58.0	61.2	61.3	5.54	0.04	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	1408.8	1,532.3	1,969.2	8.77	28.51	30% (+/-)	Yes	Yes
average number of beneficiaries with OT claims	181.0	211.9	248.9	17.05	17.45	30% (+/-)	Yes	Yes
Provider IDs with NPI								
Number of provider IDs with NPI	14,278	16,055	16,288	12.45	1.45	30% (+/-)	Yes	Yes
% NPI source = MSIS	94.5	94.5	95.3	0.00	0.84	30% (+/-)	Yes	Yes
% NPI source = NPPES	5.5	5.5	4.7	-0.04	-14.31	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
Provider IDs Linked to NPPES								
Number of provider IDs linked to NPPES	8,943	10,803	10,977	20.80	1.61	30% (+/-)	Yes	Yes
% linked via NPI	91.2	91.8	93.0	0.67	1.29	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	8.8	8.2	7.0	-7.25	-14.61	30% (+/-)	Yes	Yes
% linked via Medicare UPIN	0.0	0.0	0.0	231.13	23.02	30% (+/-)	Yes	Yes
% with name prefix	19.1	19.2	18.2	0.67	-5.14	30% (+/-)	Yes	Yes
% with first name	33.4	38.2	37.2	14.53	-2.54	30% (+/-)	Yes	Yes
% with middle name	30.0	33.4	32.2	11.17	-3.58	30% (+/-)	Yes	Yes
% with last name	33.4	38.2	37.2	14.53	-2.54	30% (+/-)	Yes	Yes
% with name suffix	0.5	0.6	0.5	3.06	-6.43	30% (+/-)	Yes	Yes
% male	23.6	25.4	24.1	7.85	-5.03	30% (+/-)	Yes	Yes
% female	9.8	12.8	13.1	30.60	2.40	30% (+/-)	No	Yes
% with credential	32.4	37.4	36.4	15.28	-2.46	30% (+/-)	Yes	Yes
% with business name	66.6	61.4	62.5	-7.83	1.83	30% (+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.8	-0.37	0.15	30% (+/-)	Yes	Yes
% with city	100.0	99.6	99.8	-0.37	0.15	30% (+/-)	Yes	Yes
% with state	100.0	99.6	99.8	-0.37	0.15	30% (+/-)	Yes	Yes
% state = OT state code	79.1	79.7	80.3	0.76	0.72	30% (+/-)	Yes	Yes
% with zip code	100.0	99.6	99.8	-0.37	0.15	30% (+/-)	Yes	Yes
% with primary taxonomy	99.5	98.1	98.1	-1.39	-0.01	30% (+/-)	Yes	Yes
% with provider entity type = individual	33.4	38.2	37.2	14.53	-2.54	30% (+/-)	Yes	Yes
% with provider entity type = organization	66.6	61.4	62.5	-7.83	1.83	30% (+/-)	Yes	Yes
Provider IDs with or without NPI but linked to state provider file								
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: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
Provider IDs with NPPES Primary Taxonomy								
Number of provider IDs with NPPES primary taxonomy	8,929	10,603	10,773	18.75	1.60	30% (+/-)	Yes	Yes
% individual or group of individuals	57.9	59.7	59.2	3.16	-0.93	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	20.2	29.3	29.4	44.96	0.29	30% (+/-)	No	Yes
% behavioral health and social service providers	2.1	2.2	2.2	3.37	-0.31	30% (+/-)	Yes	Yes
% chiropractic providers	8.9	7.9	7.6	-11.10	-3.94	30% (+/-)	Yes	Yes
% dental providers	9.2	7.5	6.9	-17.74	-7.86	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	0.3	0.2	0.2	-42.95	3.11	30% (+/-)	Yes	Yes
% eye and vision service providers	3.6	3.3	3.2	-8.53	-3.25	30% (+/-)	Yes	Yes
% nursing service providers	0.3	0.1	0.1	-52.84	-8.61	30% (+/-)	Yes	Yes
% nursing service-related providers	0.0	0.0	0.0	-15.79	-1.58	30% (+/-)	Yes	Yes
% other service providers	0.9	1.4	1.3	61.78	-3.60	30% (+/-)	Yes	Yes
% pharmacy service providers	0.3	0.2	0.2	-36.12	-6.05	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	4.5	4.6	5.2	4.05	11.80	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	1.3	1.2	1.1	-5.71	-12.10	30% (+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	1.3	1.1	1.1	-13.55	0.12	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.7	0.5	0.6	-27.45	5.45	30% (+/-)	Yes	Yes
% student health care	0.0	0.0	0.0	Div by 0	47.63	30% (+/-)	N/A	Yes
% technologists, technicians, and other technical service providers	0.1	0.0	0.0	-83.16	96.84	30% (+/-)	Yes	Yes
% group of individuals with multi- or single specialty	4.2	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	42.1	40.3	40.8	-4.35	1.37	30% (+/-)	Yes	Yes
% agencies	9.1	8.9	8.8	-2.78	-0.85	30% (+/-)	Yes	Yes
% ambulatory health care facilities	5.1	4.7	5.4	-8.97	15.95	30% (+/-)	Yes	Yes
% hospital units	0.3	0.3	0.2	-7.64	-30.53	30% (+/-)	Yes	Yes
% hospitals	3.9	4.3	3.9	9.96	-9.98	30% (+/-)	Yes	Yes
% laboratories	1.1	1.1	1.2	-6.62	12.48	30% (+/-)	Yes	Yes
% managed care organizations	0.1	0.1	0.1	-3.76	10.72	30% (+/-)	Yes	Yes
% nursing and custodial care facilities	5.0	6.0	6.3	20.36	4.30	30% (+/-)	Yes	Yes
% residential treatment facilities	0.8	0.9	0.9	19.41	2.57	30% (+/-)	Yes	Yes
% respite care facility	0.1	0.1	0.1	-15.79	9.36	30% (+/-)	Yes	Yes
% suppliers	12.5	10.5	10.5	-16.01	-0.26	30% (+/-)	Yes	Yes
% transportation services	4.0	3.5	3.5	-13.44	0.29	30% (+/-)	Yes	Yes
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
Provider IDs with Entity Type = Individual								
Number of provider IDs with entity type = individual	2,983	4,127	4,087	38.35	-0.97	30% (+/-)	No	Yes
% a sole proprietorship	33.3	26.1	24.7	-21.68	-5.21	30% (+/-)	Yes	Yes
% not a sole proprietorship	51.3	64.2	66.5	25.10	3.61	30% (+/-)	Yes	Yes
% not answered	15.4	9.7	8.8	-36.70	-9.82	N/A	N/A	N/A
Provider IDs with Entity Type = Organization								
Number of provider IDs with entity type = organization	5,960	6,636	6,866	11.34	3.47	30% (+/-)	Yes	Yes
% organization is a subpart	10.4	10.3	10.4	-0.47	0.60	30% (+/-)	Yes	Yes
% organization is not a subpart	62.6	67.9	68.7	8.34	1.18	30% (+/-)	Yes	Yes
% not answered	27.0	21.8	20.9	-19.18	-3.95	N/A	N/A	N/A

Source: Medicaid Analytic eExtract (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 RX Billing Provider Characteristics Validation Table

State: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
RX Providers								
Number of provider IDs	12,599	13,097	13,712	3.95	4.70	30% (+/-)	Yes	Yes
% billing provider on RX claim	7.9	7.7	7.5	-3.03	-2.50	N/A	N/A	N/A
% prescribing provider on RX claim	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
% NPI billing provider on RX claim	92.1	92.3	92.5	0.26	0.21	N/A	N/A	N/A
% also a provider on IP claim	0.4	0.4	0.4	-17.79	7.71	N/A	N/A	N/A
% also a provider on LT claim	0.0	0.0	0.0	-51.90	-4.49	N/A	N/A	N/A
% also a provider on OT claim	90.0	89.1	88.1	-0.96	-1.12	N/A	N/A	N/A
% provider IDs with NPI	97.4	97.2	97.2	-0.14	-0.06	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	96.9	97.2	97.2	0.30	-0.06	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	652.4	659.4	931.1	1.07	41.20	30% (+/-)	Yes	No
average number of beneficiaries with RX claims	88.6	88.0	103.6	-0.69	17.73	30% (+/-)	Yes	Yes
Provider IDs with NPI								
Number of provider IDs with NPI	12,269	12,736	13,326	3.81	4.63	30% (+/-)	Yes	Yes
% NPI source = MSIS	94.7	95.1	95.5	0.42	0.35	30% (+/-)	Yes	Yes
% NPI source = NPPES	5.3	4.9	4.5	-7.54	-6.89	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
Provider IDs Linked to NPPES								
Number of provider IDs linked to NPPES	12,214	12,735	13,325	4.27	4.63	30% (+/-)	Yes	Yes
% linked via NPI	94.7	95.1	95.5	0.44	0.35	30% (+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	5.3	4.9	4.5	-7.95	-6.89	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	33.1	34.5	32.5	4.41	-5.75	30% (+/-)	Yes	Yes
% with first name	90.3	90.7	84.9	0.53	-6.39	30% (+/-)	Yes	Yes
% with middle name	75.5	76.1	70.8	0.72	-6.86	30% (+/-)	Yes	Yes
% with last name	90.3	90.7	84.9	0.53	-6.39	30% (+/-)	Yes	Yes
% with name suffix	1.7	1.6	1.4	-2.23	-13.53	30% (+/-)	Yes	Yes
% male	60.4	59.8	55.5	-1.05	-7.25	30% (+/-)	Yes	Yes
% female	29.8	30.9	29.5	3.73	-4.72	30% (+/-)	Yes	Yes
% with credential	89.2	89.7	83.9	0.58	-6.48	30% (+/-)	Yes	Yes
% with business name	9.7	8.7	14.7	-11.03	69.66	30% (+/-)	Yes	No
% with address line 1	100.0	99.4	99.6	-0.60	0.24	30% (+/-)	Yes	Yes
% with city	100.0	99.4	99.6	-0.60	0.24	30% (+/-)	Yes	Yes
% with state	100.0	99.4	99.6	-0.60	0.24	30% (+/-)	Yes	Yes
% state = RX state code	65.6	63.4	66.0	-3.26	4.02	30% (+/-)	Yes	Yes
% with zip code	100.0	99.4	99.6	-0.60	0.24	30% (+/-)	Yes	Yes
% with primary taxonomy	98.8	98.4	98.7	-0.41	0.23	30% (+/-)	Yes	Yes
% with provider entity type = individual	90.3	90.7	84.9	0.53	-6.39	30% (+/-)	Yes	Yes
% with provider entity type = organization	9.7	8.7	14.7	-11.03	69.66	30% (+/-)	Yes	No
Provider IDs with or without NPI but linked to state provider file								
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: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
Provider IDs with NPPES Primary Taxonomy								
Number of provider IDs with NPPES primary taxonomy	12,098	12,535	13,146	3.61	4.87	30% (+/-)	Yes	Yes
% individual or group of individuals	92.7	93.2	87.2	0.60	-6.40	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	67.9	68.6	63.5	1.13	-7.49	30% (+/-)	Yes	Yes
% behavioral health and social service providers	0.1	0.1	0.1	-9.52	1.71	30% (+/-)	Yes	Yes
% chiropractic providers	0.0	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% dental providers	9.1	9.0	8.1	-0.76	-10.06	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	0.1	0.1	0.1	-12.26	-23.72	30% (+/-)	Yes	Yes
% eye and vision service providers	3.1	3.3	3.1	5.85	-6.28	30% (+/-)	Yes	Yes
% nursing service providers	0.1	0.1	0.1	-22.79	31.11	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	0.8	0.9	0.9	11.80	-7.09	30% (+/-)	Yes	Yes
% pharmacy service providers	0.4	0.3	0.5	-32.24	76.26	30% (+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	8.6	9.3	9.4	8.02	1.17	30% (+/-)	Yes	Yes
% podiatric medicine and surgery service providers	1.4	1.4	1.3	-3.49	-2.99	30% (+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.0	0.0	-51.74	-4.65	30% (+/-)	Yes	Yes
% speech, language, and hearing service providers	0.0	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% student health care	0.2	0.2	0.3	-21.36	43.03	30% (+/-)	Yes	Yes
% 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	0.8	0.0	0.0	-100.00	Div by 0	30% (+/-)	Yes	N/A
% nonindividuals	7.3	6.8	12.8	-7.61	87.90	30% (+/-)	Yes	No
% agencies	0.1	0.1	0.1	-44.85	114.54	30% (+/-)	Yes	Yes
% ambulatory health care facilities	0.7	0.8	0.7	3.02	-4.65	30% (+/-)	Yes	Yes
% hospital units	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% hospitals	0.4	0.4	0.4	-16.48	8.07	30% (+/-)	Yes	Yes
% laboratories	0.0	0.0	0.0	-3.49	-52.32	30% (+/-)	Yes	Yes
% managed care organizations	0.0	0.0	0.0	-51.74	186.06	30% (+/-)	Yes	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	-4.65	30% (+/-)	N/A	Yes
% respite care facility	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% suppliers	6.0	5.6	11.5	-7.20	105.57	30% (+/-)	Yes	No
% 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
Provider IDs with Entity Type = Individual								
Number of provider IDs with entity type = individual	11,025	11,556	11,319	4.82	-2.05	30% (+/-)	Yes	Yes
% a sole proprietorship	9.1	10.2	10.3	11.62	1.05	30% (+/-)	Yes	Yes
% not a sole proprietorship	74.4	80.3	80.7	7.90	0.59	30% (+/-)	Yes	Yes
% not answered	16.5	9.5	9.0	-42.11	-6.06	N/A	N/A	N/A
Provider IDs with Entity Type = Organization								
Number of provider IDs with entity type = organization	1,189	1,103	1,958	-7.23	77.52	30% (+/-)	Yes	No
% organization is a subpart	18.4	18.7	21.9	1.40	17.04	30% (+/-)	Yes	Yes
% organization is not a subpart	67.7	71.0	69.7	4.85	-1.87	30% (+/-)	Yes	Yes
% not answered	13.9	10.3	8.5	-25.52	-17.97	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: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
RX Providers								
Number of provider IDs	11,843	12,282	13,582	3.71	10.58	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	Div by 0	Div by 0	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	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
% provider IDs with NPI	0.0	0.0	0.0	44.64	20.57	30% (+/-)	Yes	Yes
% provider IDs linked to NPPES	0.0	0.0	0.0	44.64	20.57	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	377.5	383.6	461.5	1.60	20.32	30% (+/-)	Yes	Yes
average number of beneficiaries with RX claims	64.7	64.7	67.1	-0.02	3.76	30% (+/-)	Yes	Yes
Provider IDs with NPI								
Number of provider IDs with NPI	2	3	4	50.00	33.33	30% (+/-)	Yes	Yes
% NPI source = MSIS	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% NPI source = NPPES	100.0	100.0	100.0	0.00	0.00	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
Provider IDs Linked to NPPES								
Number of provider IDs linked to NPPES	2	3	4	50.00	33.33	30% (+/-)	Yes	Yes
% linked via NPI	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% 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	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% with name prefix	50.0	33.3	0.0	-33.33	-100.00	30% (+/-)	No	No
% with first name	100.0	100.0	75.0	0.00	-25.00	30% (+/-)	Yes	Yes
% with middle name	50.0	66.7	50.0	33.33	-25.00	30% (+/-)	No	Yes
% with last name	100.0	100.0	75.0	0.00	-25.00	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	33.3	50.0	Div by 0	50.00	30% (+/-)	N/A	No
% female	100.0	66.7	25.0	-33.33	-62.50	30% (+/-)	No	No
% with credential	50.0	66.7	75.0	33.33	12.50	30% (+/-)	No	Yes
% with business name	0.0	0.0	25.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% 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 = RX state code	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% with zip code	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% with primary taxonomy	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% with provider entity type = individual	100.0	100.0	75.0	0.00	-25.00	30% (+/-)	Yes	Yes
% with provider entity type = organization	0.0	0.0	25.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
Provider IDs with or without NPI but linked to state provider file								
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 Prescribing Provider Characteristics Validation Table

State: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
Provider IDs with NPPES Primary Taxonomy								
Number of provider IDs with NPPES primary taxonomy	2	3	4	50.00	33.33	30% (+/-)	Yes	Yes
% individual or group of individuals	100.0	100.0	100.0	0.00	0.00	30% (+/-)	Yes	Yes
% allopathic and osteopathic physicians	0.0	33.3	50.0	Div by 0	50.00	30% (+/-)	N/A	No
% 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	25.0	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	50.0	33.3	25.0	-33.33	-25.00	30% (+/-)	No	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	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% speech, language, and hearing service providers	50.0	33.3	0.0	-33.33	-100.00	30% (+/-)	No	No
% 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	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% agencies	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% ambulatory health care facilities	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% hospital units	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% hospitals	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% 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	0.0	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	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	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
Provider IDs with Entity Type = Individual								
Number of provider IDs with entity type = individual	2	3	3	50.00	0.00	30% (+/-)	Yes	Yes
% a sole proprietorship	0.0	0.0	33.3	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% not a sole proprietorship	100.0	100.0	66.7	0.00	-33.33	30% (+/-)	Yes	No
% not answered	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
Provider IDs with Entity Type = Organization								
Number of provider IDs with entity type = organization	0	0	1	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% organization is a subpart	0.0	0.0	0.0	Div by 0	Div by 0	30% (+/-)	N/A	N/A
% organization is not a subpart	0.0	0.0	100.0	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

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: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
All Providers								
Number of provider IDs	78,250	81,584	85,724	4.26	5.07	30%(+/-)	Yes	Yes
% billing provider on IP claim	0.5	0.5	0.4	-5.37	-1.23	N/A	N/A	N/A
% NPI billing provider on IP claim	0.5	0.4	0.3	-6.39	-22.82	N/A	N/A	N/A
% billing provider on LT claim	0.9	0.9	0.8	2.38	-5.63	N/A	N/A	N/A
% NPI billing provider on LT claim	0.9	0.8	0.8	-2.50	-8.20	N/A	N/A	N/A
% billing provider on OT claim	19.7	21.6	20.9	9.78	-3.34	N/A	N/A	N/A
% servicing provider on OT claim	46.4	45.6	46.1	-1.77	1.13	N/A	N/A	N/A
% NPI servicing provider on OT claim	34.9	34.5	33.7	-1.17	-2.15	N/A	N/A	N/A
% billing provider on RX claim	1.3	1.2	1.2	-3.32	-2.85	N/A	N/A	N/A
% prescribing provider on RX claim	15.1	15.1	15.8	-0.53	5.24	N/A	N/A	N/A
% NPI billing provider on RX claim	14.8	14.8	14.8	-0.03	-0.15	N/A	N/A	N/A
% billing provider	20.3	22.3	21.6	9.68	-3.18	N/A	N/A	N/A
% NPI billing provider	16.1	16.1	15.9	-0.28	-1.23	N/A	N/A	N/A
% servicing provider	46.4	45.6	46.1	-1.77	1.13	N/A	N/A	N/A
% NPI servicing provider	34.9	34.5	33.7	-1.17	-2.15	N/A	N/A	N/A
% prescribing provider	15.1	15.1	15.8	-0.53	5.24	N/A	N/A	N/A
% provider IDs with NPI	81.3	81.1	80.2	-0.34	-1.11	30%(+/-)	Yes	Yes
% provider IDs linked to NPPES	67.5	68.2	67.8	0.93	-0.61	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	744.7	782.2	937.1	5.03	19.80	30%(+/-)	Yes	Yes
average number of beneficiaries with claims	111.2	117.0	128.0	5.28	9.41	30%(+/-)	Yes	Yes
Provider IDs with NPI								
Number of provider IDs with NPI	63,641	66,128	68,714	3.91	3.91	30%(+/-)	Yes	Yes
% NPI source = MSJS	98.6	98.5	98.7	-0.11	0.23	30%(+/-)	Yes	Yes
% NPI source = NPPES	1.4	1.5	1.3	7.50	-14.92	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
Provider IDs Linked to NPPES								
Number of provider IDs linked to NPPES	52,854	55,619	58,085	5.23	4.43	30%(+/-)	Yes	Yes
% linked via NPI	98.3	98.2	98.5	-0.10	0.28	30%(+/-)	Yes	Yes
% linked via Medicaid legacy provider ID	1.7	1.8	1.5	5.76	-15.63	30%(+/-)	Yes	Yes
% linked via Medicare UPIN	0.0	0.0	0.0	121.73	23.11	30%(+/-)	Yes	Yes
% with name prefix	26.9	27.8	28.2	3.06	1.50	30%(+/-)	Yes	Yes
% with first name	74.7	75.2	75.7	0.70	0.63	30%(+/-)	Yes	Yes
% with middle name	62.7	63.2	63.1	0.83	-0.24	30%(+/-)	Yes	Yes
% with last name	74.7	75.2	75.7	0.70	0.63	30%(+/-)	Yes	Yes
% with name suffix	1.4	1.3	1.3	-5.61	0.02	30%(+/-)	Yes	Yes
% male	51.2	50.6	50.1	-1.12	-0.88	30%(+/-)	Yes	Yes
% female	23.5	24.6	25.5	4.67	3.73	30%(+/-)	Yes	Yes
% with credential	73.7	74.2	74.6	0.71	0.55	30%(+/-)	Yes	Yes
% with business name	25.3	24.4	24.1	-3.83	-1.16	30%(+/-)	Yes	Yes
% with address line 1	100.0	99.6	99.7	-0.45	0.19	30%(+/-)	Yes	Yes
% with city	100.0	99.6	99.7	-0.45	0.19	30%(+/-)	Yes	Yes
% with state	100.0	99.6	99.7	-0.45	0.19	30%(+/-)	Yes	Yes
% state = claim file state code	62.9	61.1	61.9	-2.86	1.27	30%(+/-)	Yes	Yes
% with zip code	100.0	99.6	99.7	-0.45	0.19	30%(+/-)	Yes	Yes
% with primary taxonomy	99.0	98.4	98.6	-0.55	0.17	30%(+/-)	Yes	Yes

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 All Provider Characteristics Validation Table

State: IA

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 ^a	Cross Year 2010-2011 Within Range ^b
% with provider entity type = individual	74.7	75.2	75.7	0.70	0.63	30%(+/-)	Yes	Yes
% with provider entity type = organization	25.3	24.4	24.1	-3.83	-1.16	30%(+/-)	Yes	Yes
Provider IDs with or without NPI but linked to state provider file								
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
Provider IDs with NPES Primary Taxonomy								
Number of provider IDs with NPES primary taxonomy	52,396	54,738	57,262	4.47	4.61	30%(+/-)	Yes	Yes
% individual or group of individuals	83.4	83.6	83.8	0.24	0.30	30%(+/-)	Yes	Yes
% allopathic and osteopathic physicians	55.5	56.7	56.4	2.06	-0.43	30%(+/-)	Yes	Yes
% behavioral health and social service providers	1.2	1.1	1.1	-1.30	-1.98	30%(+/-)	Yes	Yes
% chiropractic providers	4.6	4.8	4.7	3.59	-1.09	30%(+/-)	Yes	Yes
% dental providers	5.2	5.2	4.9	-0.70	-5.42	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	0.2	0.1	0.1	-34.95	-8.50	30%(+/-)	Yes	Yes
% eye and vision service providers	2.6	2.6	2.5	0.46	-3.41	30%(+/-)	Yes	Yes
% nursing service providers	0.1	0.1	0.1	-29.80	6.02	30%(+/-)	Yes	Yes
% nursing service-related providers	0.0	0.0	0.0	-46.82	-4.41	30%(+/-)	Yes	Yes
% other service providers	0.9	1.1	1.0	17.60	-9.65	30%(+/-)	Yes	Yes
% pharmacy service providers	0.3	0.2	0.1	-46.96	-7.70	30%(+/-)	Yes	Yes
% physician assistants and advanced practice nursing providers	7.4	8.1	8.8	8.57	9.55	30%(+/-)	Yes	Yes
% podiatric medicine and surgery service providers	0.9	1.0	1.0	3.90	0.18	30%(+/-)	Yes	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	1.8	2.0	2.1	8.67	7.77	30%(+/-)	Yes	Yes
% speech, language, and hearing service providers	0.6	0.5	0.5	-10.77	4.63	30%(+/-)	Yes	Yes
% student health care	0.2	0.2	0.3	1.70	69.82	30%(+/-)	Yes	Yes
% technologists, technicians, and other technical service providers	0.0	0.0	0.0	-84.05	91.18	30%(+/-)	Yes	Yes
% group of individuals with multi- or single specialty	1.7	0.0	0.0	-100.00	Div by 0	30%(+/-)	Yes	N/A
% nonindividuals	16.6	16.4	16.2	-1.21	-1.51	30%(+/-)	Yes	Yes
% agencies	3.3	3.1	3.0	-4.83	-4.46	30%(+/-)	Yes	Yes
% ambulatory health care facilities	1.8	1.9	2.0	2.66	5.42	30%(+/-)	Yes	Yes
% hospital units	0.2	0.2	0.2	17.74	-20.73	30%(+/-)	Yes	Yes
% hospitals	1.6	1.7	1.5	9.91	-15.94	30%(+/-)	Yes	Yes
% laboratories	0.4	0.4	0.4	2.69	8.57	30%(+/-)	Yes	Yes
% managed care organizations	0.0	0.0	0.0	11.68	16.08	30%(+/-)	Yes	Yes
% nursing and custodial care facilities	2.4	2.7	2.7	12.94	-2.56	30%(+/-)	Yes	Yes
% residential treatment facilities	0.4	0.4	0.4	-5.98	-3.54	30%(+/-)	Yes	Yes
% respite care facility	0.0	0.0	0.0	-36.19	1.57	30%(+/-)	Yes	Yes
% suppliers	5.0	4.5	4.7	-9.42	4.52	30%(+/-)	Yes	Yes
% transportation services	1.4	1.3	1.3	-6.58	-3.49	30%(+/-)	Yes	Yes
% nonmedical	0.0	0.0	0.0	Div by 0	Div by 0	N/A	N/A	N/A
Provider IDs with Entity Type = Individual								
Number of provider IDs with entity type = individual	39,463	41,818	43,947	5.97	5.09	30%(+/-)	Yes	Yes
% a sole proprietorship	9.9	11.0	11.0	11.47	-0.23	30%(+/-)	Yes	Yes
% not a sole proprietorship	72.0	77.8	78.9	8.05	1.38	30%(+/-)	Yes	Yes
% not answered	18.1	11.2	10.1	-38.33	-9.41	N/A	N/A	N/A
Provider IDs with Entity Type = Organization								
Number of provider IDs with entity type = organization	13,391	13,552	13,989	1.20	3.22	30%(+/-)	Yes	Yes
% organization is a subpart	10.3	10.8	11.1	4.81	2.29	30%(+/-)	Yes	Yes
% organization is not a subpart	61.7	66.9	67.5	8.48	0.89	30%(+/-)	Yes	Yes
% not answered	28.0	22.3	21.4	-20.46	-3.80	N/A	N/A	N/A

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

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