

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

**State-Specific Validation Tables,
2010**

Ohio

May 31, 2013

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Mei-ling Mason

MATHEMATICA
Policy Research

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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

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

percentage change between year two and year three, if applicable, followed by the expected 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 2010 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.

2009-2010 MAX IP Billing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
IP Providers					
Number of provider IDs	835	1,268	51.86	30% (+/-)	No
% billing provider on IP claim	50.5	41.9	-17.14	N/A	N/A
% NPI billing provider on IP claim	49.5	58.1	17.51	N/A	N/A
% also a provider on LT claim	0.1	12.7	10,480.83	N/A	N/A
% also a provider on OT claim	79.2	71.5	-9.64	N/A	N/A
% also a provider on RX claim	15.8	10.9	-31.16	N/A	N/A
% provider IDs with NPI	87.2	84.5	-3.03	30% (+/-)	Yes
% provider IDs linked to NPPES	9.8	40.5	312.79	30% (+/-)	No
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	Div by 0	N/A	N/A
average number of IP claims	360.8	222.2	-38.43	30% (+/-)	No
average number of beneficiaries with IP claims	280.8	175.3	-37.56	30% (+/-)	No
Provider IDs with NPI					
Number of provider IDs with NPI	728	1,072	47.25	30% (+/-)	No
% NPI source = MSIS	88.7	82.9	-6.54	30% (+/-)	Yes
% NPI source = NPPES	11.3	17.1	51.55	30% (+/-)	No
% NPI source = state cross-reference file	0.0	0.0	Div by 0	N/A	N/A
Provider IDs Linked to NPPES					
Number of provider IDs linked to NPPES	82	514	526.83	30% (+/-)	No
% linked via NPI	0.0	64.4	Div by 0	30% (+/-)	N/A
% linked via Medicaid legacy provider ID	100.0	35.6	-64.40	30% (+/-)	No
% linked via Medicare UPIN	0.0	0.0	Div by 0	30% (+/-)	N/A
% with name prefix	0.0	0.0	Div by 0	30% (+/-)	N/A
% with first name	1.2	0.4	-68.11	30% (+/-)	Yes
% with middle name	1.2	0.4	-68.11	30% (+/-)	Yes
% with last name	1.2	0.4	-68.11	30% (+/-)	Yes
% with name suffix	0.0	0.0	Div by 0	30% (+/-)	N/A
% male	0.0	0.0	Div by 0	30% (+/-)	N/A
% female	1.2	0.4	-68.11	30% (+/-)	Yes
% with credential	1.2	0.4	-68.11	30% (+/-)	Yes
% with business name	98.8	99.6	0.84	30% (+/-)	Yes
% with address line 1	100.0	100.0	0.00	30% (+/-)	Yes
% with city	100.0	100.0	0.00	30% (+/-)	Yes
% with state	100.0	100.0	0.00	30% (+/-)	Yes
% state = IP state code	84.1	85.2	1.27	30% (+/-)	Yes
% with zip code	100.0	100.0	0.00	30% (+/-)	Yes
% with primary taxonomy	100.0	98.6	-1.36	30% (+/-)	Yes
% with provider entity type = individual	1.2	0.4	-68.11	30% (+/-)	Yes
% with provider entity type = organization	98.8	99.6	0.84	30% (+/-)	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	Div by 0	N/A	N/A
Provider IDs with NPPES Primary Taxonomy					
Number of provider IDs with NPPES primary taxonomy	82	507	518.29	30% (+/-)	No
% individual or group of individuals	2.4	1.2	-51.50	30% (+/-)	Yes
% allopathic and osteopathic physicians	2.4	1.0	-59.57	30% (+/-)	Yes
% behavioral health and social service providers	0.0	0.0	Div by 0	30% (+/-)	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX IP Billing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
% chiropractic providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% dental providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% dietary and nutritional service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% emergency medical service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% eye and vision service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing service providers	0.0	0.2	Div by 0	30% (+/-)	N/A
% nursing service-related providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% other service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% pharmacy service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% physician assistants and advanced practice nursing providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% podiatric medicine and surgery service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% speech, language, and hearing service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% student health care	0.0	0.0	Div by 0	30% (+/-)	N/A
% technologists, technicians, and other technical service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% group of individuals with multi- or single specialty	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonindividuals	97.6	98.8	1.29	30% (+/-)	Yes
% agencies	0.0	0.0	Div by 0	30% (+/-)	N/A
% ambulatory health care facilities	0.0	0.2	Div by 0	30% (+/-)	N/A
% hospital units	0.0	0.8	Div by 0	30% (+/-)	N/A
% hospitals	97.6	65.9	-32.48	30% (+/-)	No
% laboratories	0.0	0.0	Div by 0	30% (+/-)	N/A
% managed care organizations	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing and custodial care facilities	0.0	31.6	Div by 0	30% (+/-)	N/A
% residential treatment facilities	0.0	0.0	Div by 0	30% (+/-)	N/A
% respite care facility	0.0	0.0	Div by 0	30% (+/-)	N/A
% suppliers	0.0	0.4	Div by 0	30% (+/-)	N/A
% transportation services	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonmedical	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Individual					
Number of provider IDs with entity type = individual	1	2	100.00	30% (+/-)	Yes
% a sole proprietorship	0.0	0.0	Div by 0	30% (+/-)	N/A
% not a sole proprietorship	100.0	100.0	0.00	30% (+/-)	Yes
% not answered	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Organization					
Number of provider IDs with entity type = organization	81	512	532.10	30% (+/-)	No
% organization is a subpart	6.2	7.6	23.39	30% (+/-)	Yes
% organization is not a subpart	76.5	74.8	-2.27	30% (+/-)	Yes
% not answered	17.3	17.6	1.70	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX LT Billing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
LT Providers					
Number of provider IDs	2,365	2,825	19.45	30% (+/-)	Yes
% billing provider on LT claim	59.4	49.8	-16.11	N/A	N/A
% NPI billing provider on LT claim	40.6	50.2	23.53	N/A	N/A
% also a provider on IP claim	0.0	5.7	13,469.05	N/A	N/A
% also a provider on OT claim	59.1	5.3	-91.01	N/A	N/A
% also a provider on RX claim	0.0	0.0	Div by 0	N/A	N/A
% provider IDs with NPI	100.0	97.1	-2.90	30% (+/-)	Yes
% provider IDs linked to NPPES	1.0	30.5	2,909.75	30% (+/-)	No
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	Div by 0	N/A	N/A
average number of LT claims	679.6	530.5	-21.93	30% (+/-)	Yes
average number of beneficiaries with LT claims	82.4	69.3	-15.82	30% (+/-)	Yes
Provider IDs with NPI					
Number of provider IDs with NPI	2,364	2,742	15.99	30% (+/-)	Yes
% NPI source = MSIS	99.0	85.0	-14.08	30% (+/-)	Yes
% NPI source = NPPES	1.0	15.0	1,373.20	30% (+/-)	No
% NPI source = state cross-reference file	0.0	0.0	Div by 0	N/A	N/A
Provider IDs Linked to NPPES					
Number of provider IDs linked to NPPES	24	863	3,495.83	30% (+/-)	No
% linked via NPI	0.0	52.5	Div by 0	30% (+/-)	N/A
% linked via Medicaid legacy provider ID	100.0	47.5	-52.49	30% (+/-)	No
% linked via Medicare UPIN	0.0	0.0	Div by 0	30% (+/-)	N/A
% with name prefix	0.0	0.0	Div by 0	30% (+/-)	N/A
% with first name	0.0	0.0	Div by 0	30% (+/-)	N/A
% with middle name	0.0	0.0	Div by 0	30% (+/-)	N/A
% with last name	0.0	0.0	Div by 0	30% (+/-)	N/A
% with name suffix	0.0	0.0	Div by 0	30% (+/-)	N/A
% male	0.0	0.0	Div by 0	30% (+/-)	N/A
% female	0.0	0.0	Div by 0	30% (+/-)	N/A
% with credential	0.0	0.0	Div by 0	30% (+/-)	N/A
% with business name	100.0	100.0	0.00	30% (+/-)	Yes
% with address line 1	100.0	100.0	0.00	30% (+/-)	Yes
% with city	100.0	100.0	0.00	30% (+/-)	Yes
% with state	100.0	100.0	0.00	30% (+/-)	Yes
% state = LT state code	100.0	100.0	0.00	30% (+/-)	Yes
% with zip code	100.0	100.0	0.00	30% (+/-)	Yes
% with primary taxonomy	91.7	98.1	7.07	30% (+/-)	Yes
% with provider entity type = individual	0.0	0.0	Div by 0	30% (+/-)	N/A
% with provider entity type = organization	100.0	100.0	0.00	30% (+/-)	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	Div by 0	N/A	N/A
Provider IDs with NPPES Primary Taxonomy					
Number of provider IDs with NPPES primary taxonomy	22	847	3,750.00	30% (+/-)	No
% individual or group of individuals	0.0	0.0	Div by 0	30% (+/-)	N/A
% allopathic and osteopathic physicians	0.0	0.0	Div by 0	30% (+/-)	N/A
% behavioral health and social service providers	0.0	0.0	Div by 0	30% (+/-)	N/A

Source: Medicaid Analytic eExtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX LT Billing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
% chiropractic providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% dental providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% dietary and nutritional service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% emergency medical service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% eye and vision service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing service-related providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% other service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% pharmacy service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% physician assistants and advanced practice nursing providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% podiatric medicine and surgery service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% speech, language, and hearing service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% student health care	0.0	0.0	Div by 0	30% (+/-)	N/A
% technologists, technicians, and other technical service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% group of individuals with multi- or single specialty	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonindividuals	100.0	100.0	0.00	30% (+/-)	Yes
% agencies	0.0	0.4	Div by 0	30% (+/-)	N/A
% ambulatory health care facilities	0.0	0.0	Div by 0	30% (+/-)	N/A
% hospital units	0.0	0.0	Div by 0	30% (+/-)	N/A
% hospitals	9.1	0.6	-93.51	30% (+/-)	Yes
% laboratories	0.0	0.0	Div by 0	30% (+/-)	N/A
% managed care organizations	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing and custodial care facilities	90.9	98.6	8.44	30% (+/-)	Yes
% residential treatment facilities	0.0	0.5	Div by 0	30% (+/-)	N/A
% respite care facility	0.0	0.0	Div by 0	30% (+/-)	N/A
% suppliers	0.0	0.0	Div by 0	30% (+/-)	N/A
% transportation services	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonmedical	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Individual					
Number of provider IDs with entity type = individual	0	0	Div by 0	30% (+/-)	N/A
% a sole proprietorship	0.0	0.0	Div by 0	30% (+/-)	N/A
% not a sole proprietorship	0.0	0.0	Div by 0	30% (+/-)	N/A
% not answered	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Organization					
Number of provider IDs with entity type = organization	24	863	3,495.83	30% (+/-)	No
% organization is a subpart	0.0	10.9	Div by 0	30% (+/-)	N/A
% organization is not a subpart	75.0	69.6	-7.15	30% (+/-)	Yes
% not answered	25.0	19.5	-22.13	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX OT Servicing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
OT Providers					
Number of provider IDs	80,592	126,113	56.48	30% (+/-)	No
% billing provider on OT claim	0.0	9.8	Div by 0	N/A	N/A
% servicing provider on OT claim	68.7	63.5	-7.63	N/A	N/A
% NPI servicing provider on OT claim	31.3	36.5	16.76	N/A	N/A
% also a provider on IP claim	0.4	0.6	52.47	N/A	N/A
% also a provider on LT claim	0.9	0.0	-94.50	N/A	N/A
% also a provider on RX claim	36.6	26.7	-27.07	N/A	N/A
% provider IDs with NPI	58.2	71.4	22.71	30% (+/-)	Yes
% provider IDs linked to NPPES	0.0	35.1	3,505,500.00	30% (+/-)	No
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	Div by 0	N/A	N/A
average number of OT claims	1,323.3	1,086.6	-17.88	30% (+/-)	Yes
average number of beneficiaries with OT claims	121.7	100.6	-17.34	30% (+/-)	Yes
Provider IDs with NPI					
Number of provider IDs with NPI	46,886	90,030	92.02	30% (+/-)	No
% NPI source = MSIS	100.0	99.4	-0.56	30% (+/-)	Yes
% NPI source = NPPES	0.0	0.6	27,950.00	30% (+/-)	Yes
% NPI source = state cross-reference file	0.0	0.0	Div by 0	N/A	N/A
Provider IDs Linked to NPPES					
Number of provider IDs linked to NPPES	1	44,210	4,420,900.00	30% (+/-)	No
% linked via NPI	0.0	98.9	Div by 0	30% (+/-)	N/A
% linked via Medicaid legacy provider ID	0.0	1.1	Div by 0	30% (+/-)	N/A
% linked via Medicare UPIN	100.0	0.0	-100.00	30% (+/-)	No
% with name prefix	0.0	34.0	Div by 0	30% (+/-)	N/A
% with first name	100.0	86.0	-13.99	30% (+/-)	Yes
% with middle name	100.0	66.7	-33.35	30% (+/-)	No
% with last name	100.0	86.0	-13.99	30% (+/-)	Yes
% with name suffix	0.0	2.3	Div by 0	30% (+/-)	N/A
% male	0.0	59.9	Div by 0	30% (+/-)	N/A
% female	100.0	26.1	-73.88	30% (+/-)	No
% with credential	100.0	84.8	-15.16	30% (+/-)	Yes
% with business name	0.0	13.8	Div by 0	30% (+/-)	N/A
% with address line 1	100.0	99.8	-0.24	30% (+/-)	Yes
% with city	100.0	99.8	-0.24	30% (+/-)	Yes
% with state	100.0	99.8	-0.24	30% (+/-)	Yes
% state = OT state code	0.0	88.9	Div by 0	30% (+/-)	N/A
% with zip code	100.0	99.8	-0.24	30% (+/-)	Yes
% with primary taxonomy	0.0	98.8	Div by 0	30% (+/-)	N/A
% with provider entity type = individual	100.0	86.0	-13.99	30% (+/-)	Yes
% with provider entity type = organization	0.0	13.8	Div by 0	30% (+/-)	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	Div by 0	N/A	N/A
Provider IDs with NPPES Primary Taxonomy					
Number of provider IDs with NPPES primary taxonomy	0	43,680	Div by 0	30% (+/-)	N/A
% individual or group of individuals	0.0	89.9	Div by 0	30% (+/-)	N/A
% allopathic and osteopathic physicians	0.0	73.8	Div by 0	30% (+/-)	N/A

Source: Medicaid Analytic eExtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX OT Servicing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
% behavioral health and social service providers	0.0	0.8	Div by 0	30% (+/-)	N/A
% chiropractic providers	0.0	0.9	Div by 0	30% (+/-)	N/A
% dental providers	0.0	2.0	Div by 0	30% (+/-)	N/A
% dietary and nutritional service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% emergency medical service providers	0.0	0.3	Div by 0	30% (+/-)	N/A
% eye and vision service providers	0.0	1.3	Div by 0	30% (+/-)	N/A
% nursing service providers	0.0	0.4	Div by 0	30% (+/-)	N/A
% nursing service-related providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% other service providers	0.0	2.3	Div by 0	30% (+/-)	N/A
% pharmacy service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% physician assistants and advanced practice nursing providers	0.0	5.4	Div by 0	30% (+/-)	N/A
% podiatric medicine and surgery service providers	0.0	1.8	Div by 0	30% (+/-)	N/A
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.5	Div by 0	30% (+/-)	N/A
% speech, language, and hearing service providers	0.0	0.1	Div by 0	30% (+/-)	N/A
% student health care	0.0	0.3	Div by 0	30% (+/-)	N/A
% technologists, technicians, and other technical service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% group of individuals with multi- or single specialty	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonindividuals	0.0	10.1	Div by 0	30% (+/-)	N/A
% agencies	0.0	2.5	Div by 0	30% (+/-)	N/A
% ambulatory health care facilities	0.0	1.9	Div by 0	30% (+/-)	N/A
% hospital units	0.0	0.0	Div by 0	30% (+/-)	N/A
% hospitals	0.0	1.0	Div by 0	30% (+/-)	N/A
% laboratories	0.0	0.5	Div by 0	30% (+/-)	N/A
% managed care organizations	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing and custodial care facilities	0.0	0.1	Div by 0	30% (+/-)	N/A
% residential treatment facilities	0.0	0.0	Div by 0	30% (+/-)	N/A
% respite care facility	0.0	0.0	Div by 0	30% (+/-)	N/A
% suppliers	0.0	2.1	Div by 0	30% (+/-)	N/A
% transportation services	0.0	1.9	Div by 0	30% (+/-)	N/A
% nonmedical	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Individual					
Number of provider IDs with entity type = individual	1	38,024	3,802,300.00	30% (+/-)	No
% a sole proprietorship	0.0	15.9	Div by 0	30% (+/-)	N/A
% not a sole proprietorship	100.0	78.2	-21.76	30% (+/-)	Yes
% not answered	0.0	5.8	Div by 0	N/A	N/A
Provider IDs with Entity Type = Organization					
Number of provider IDs with entity type = organization	0	6,081	Div by 0	30% (+/-)	N/A
% organization is a subpart	0.0	9.1	Div by 0	30% (+/-)	N/A
% organization is not a subpart	0.0	76.2	Div by 0	30% (+/-)	N/A
% not answered	0.0	14.7	Div by 0	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX OT Billing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
OT Providers					
Number of provider IDs	30,055	35,099	16.78	30% (+/-)	Yes
% billing provider on OT claim	100.0	100.0	0.00	N/A	N/A
% servicing provider on OT claim	0.0	35.4	Div by 0	N/A	N/A
% NPI servicing provider on OT claim	0.0	0.0	Div by 0	N/A	N/A
% also a provider on IP claim	1.2	1.1	-2.91	N/A	N/A
% also a provider on LT claim	2.4	0.3	-88.37	N/A	N/A
% also a provider on RX claim	9.5	8.5	-10.39	N/A	N/A
% provider IDs with NPI	49.1	60.6	23.46	30% (+/-)	Yes
% provider IDs linked to NPPES	37.6	54.7	45.26	30% (+/-)	No
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	Div by 0	N/A	N/A
average number of OT claims	2,673.9	2,401.3	-10.19	30% (+/-)	Yes
average number of beneficiaries with OT claims	220.8	188.7	-14.54	30% (+/-)	Yes
Provider IDs with NPI					
Number of provider IDs with NPI	14,754	21,272	44.18	30% (+/-)	No
% NPI source = MSIS	23.3	63.5	172.03	30% (+/-)	No
% NPI source = NPPES	76.7	36.5	-52.39	30% (+/-)	No
% NPI source = state cross-reference file	0.0	0.0	Div by 0	N/A	N/A
Provider IDs Linked to NPPES					
Number of provider IDs linked to NPPES	11,310	19,186	69.64	30% (+/-)	No
% linked via NPI	0.0	59.5	Div by 0	30% (+/-)	N/A
% linked via Medicaid legacy provider ID	99.2	40.0	-59.63	30% (+/-)	No
% linked via Medicare UPIN	0.8	0.4	-48.09	30% (+/-)	Yes
% with name prefix	29.9	31.6	5.70	30% (+/-)	Yes
% with first name	52.6	64.5	22.76	30% (+/-)	Yes
% with middle name	43.9	52.1	18.85	30% (+/-)	Yes
% with last name	52.6	64.5	22.76	30% (+/-)	Yes
% with name suffix	1.7	2.0	14.87	30% (+/-)	Yes
% male	33.3	42.1	26.48	30% (+/-)	Yes
% female	19.3	22.4	16.33	30% (+/-)	Yes
% with credential	47.1	61.0	29.55	30% (+/-)	Yes
% with business name	47.4	35.3	-25.55	30% (+/-)	Yes
% with address line 1	100.0	99.8	-0.16	30% (+/-)	Yes
% with city	100.0	99.8	-0.16	30% (+/-)	Yes
% with state	100.0	99.8	-0.16	30% (+/-)	Yes
% state = OT state code	93.5	91.0	-2.65	30% (+/-)	Yes
% with zip code	100.0	99.8	-0.16	30% (+/-)	Yes
% with primary taxonomy	98.3	98.6	0.37	30% (+/-)	Yes
% with provider entity type = individual	52.6	64.5	22.76	30% (+/-)	Yes
% with provider entity type = organization	47.4	35.3	-25.55	30% (+/-)	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	Div by 0	N/A	N/A
Provider IDs with NPPES Primary Taxonomy					
Number of provider IDs with NPPES primary taxonomy	11,114	18,923	70.26	30% (+/-)	No
% individual or group of individuals	78.7	81.3	3.30	30% (+/-)	Yes
% allopathic and osteopathic physicians	41.8	53.1	26.84	30% (+/-)	Yes

Source: Medicaid Analytic eExtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX OT Billing Provider Characteristics Validation Table
State: OH
Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
% behavioral health and social service providers	2.1	1.6	-21.94	30% (+/-)	Yes
% chiropractic providers	4.2	2.9	-30.61	30% (+/-)	Yes
% dental providers	5.6	4.3	-22.42	30% (+/-)	Yes
% dietary and nutritional service providers	0.0	0.0	-44.44	30% (+/-)	Yes
% emergency medical service providers	0.1	0.2	81.82	30% (+/-)	Yes
% eye and vision service providers	3.8	2.8	-25.39	30% (+/-)	Yes
% nursing service providers	6.3	3.6	-43.03	30% (+/-)	Yes
% nursing service-related providers	4.4	2.5	-44.25	30% (+/-)	Yes
% other service providers	4.0	3.0	-25.17	30% (+/-)	Yes
% pharmacy service providers	0.0	0.0	188.89	30% (+/-)	Yes
% physician assistants and advanced practice nursing providers	1.4	3.2	119.53	30% (+/-)	Yes
% podiatric medicine and surgery service providers	3.9	3.0	-23.23	30% (+/-)	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	0.8	0.8	1.32	30% (+/-)	Yes
% speech, language, and hearing service providers	0.1	0.1	7.41	30% (+/-)	Yes
% student health care	0.1	0.1	134.92	30% (+/-)	Yes
% technologists, technicians, and other technical service providers	0.1	0.1	-32.54	30% (+/-)	Yes
% group of individuals with multi- or single specialty	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonindividuals	21.3	18.7	-12.17	30% (+/-)	Yes
% agencies	4.9	4.5	-7.98	30% (+/-)	Yes
% ambulatory health care facilities	5.6	4.3	-22.08	30% (+/-)	Yes
% hospital units	0.0	0.0	-44.44	30% (+/-)	Yes
% hospitals	1.1	0.9	-15.54	30% (+/-)	Yes
% laboratories	0.6	0.7	21.88	30% (+/-)	Yes
% managed care organizations	0.1	0.0	-54.32	30% (+/-)	Yes
% nursing and custodial care facilities	0.2	0.3	32.51	30% (+/-)	Yes
% residential treatment facilities	0.0	0.0	-28.89	30% (+/-)	Yes
% respite care facility	0.1	0.0	-33.33	30% (+/-)	Yes
% suppliers	2.1	3.5	65.18	30% (+/-)	Yes
% transportation services	6.6	4.3	-34.86	30% (+/-)	Yes
% nonmedical	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Individual					
Number of provider IDs with entity type = individual	5,945	12,380	108.24	30% (+/-)	No
% a sole proprietorship	43.7	30.1	-31.07	30% (+/-)	No
% not a sole proprietorship	46.1	63.0	36.72	30% (+/-)	No
% not answered	10.2	6.8	-32.90	N/A	N/A
Provider IDs with Entity Type = Organization					
Number of provider IDs with entity type = organization	5,365	6,776	26.30	30% (+/-)	Yes
% organization is a subpart	7.8	9.7	23.76	30% (+/-)	Yes
% organization is not a subpart	71.8	75.4	4.94	30% (+/-)	Yes
% not answered	20.4	15.0	-26.55	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

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2009-2010 MAX RX Billing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
RX Providers					
Number of provider IDs	7,446	7,704	3.46	30% (+/-)	Yes
% billing provider on RX claim	47.7	45.8	-3.98	N/A	N/A
% prescribing provider on RX claim	0.0	0.1	Div by 0	N/A	N/A
% NPI billing provider on RX claim	52.3	54.2	3.63	N/A	N/A
% also a provider on IP claim	1.8	1.8	0.28	N/A	N/A
% also a provider on LT claim	0.0	0.0	Div by 0	N/A	N/A
% also a provider on OT claim	77.2	73.7	-4.51	N/A	N/A
% provider IDs with NPI	98.2	95.6	-2.62	30% (+/-)	Yes
% provider IDs linked to NPPES	2.2	12.0	444.44	30% (+/-)	No
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	Div by 0	N/A	N/A
average number of RX claims	2,539.2	7,231.9	184.81	30% (+/-)	No
average number of beneficiaries with RX claims	224.7	716.7	218.90	30% (+/-)	No
Provider IDs with NPI					
Number of provider IDs with NPI	7,311	7,366	0.75	30% (+/-)	Yes
% NPI source = MSIS	97.8	91.8	-6.08	30% (+/-)	Yes
% NPI source = NPPES	2.2	8.2	264.96	30% (+/-)	Yes
% NPI source = state cross-reference file	0.0	0.0	Div by 0	N/A	N/A
Provider IDs Linked to NPPES					
Number of provider IDs linked to NPPES	164	924	463.41	30% (+/-)	No
% linked via NPI	0.0	34.7	Div by 0	30% (+/-)	N/A
% linked via Medicaid legacy provider ID	100.0	65.3	-34.74	30% (+/-)	No
% linked via Medicare UPIN	0.0	0.0	Div by 0	30% (+/-)	N/A
% with name prefix	3.7	0.5	-85.21	30% (+/-)	Yes
% with first name	7.3	1.9	-73.38	30% (+/-)	Yes
% with middle name	5.5	1.9	-64.50	30% (+/-)	Yes
% with last name	7.3	1.9	-73.38	30% (+/-)	Yes
% with name suffix	0.0	0.0	Div by 0	30% (+/-)	N/A
% male	1.8	0.4	-76.33	30% (+/-)	Yes
% female	5.5	1.5	-72.39	30% (+/-)	Yes
% with credential	6.1	1.6	-73.38	30% (+/-)	Yes
% with business name	92.7	98.1	5.79	30% (+/-)	Yes
% with address line 1	100.0	100.0	0.00	30% (+/-)	Yes
% with city	100.0	100.0	0.00	30% (+/-)	Yes
% with state	100.0	100.0	0.00	30% (+/-)	Yes
% state = RX state code	90.9	94.2	3.63	30% (+/-)	Yes
% with zip code	100.0	100.0	0.00	30% (+/-)	Yes
% with primary taxonomy	91.5	95.7	4.60	30% (+/-)	Yes
% with provider entity type = individual	7.3	1.9	-73.38	30% (+/-)	Yes
% with provider entity type = organization	92.7	98.1	5.79	30% (+/-)	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	Div by 0	N/A	N/A
Provider IDs with NPPES Primary Taxonomy					
Number of provider IDs with NPPES primary taxonomy	150	884	489.33	30% (+/-)	No
% individual or group of individuals	8.7	4.8	-45.18	30% (+/-)	Yes
% allopathic and osteopathic physicians	1.3	0.8	-40.59	30% (+/-)	Yes

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

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2009-2010 MAX RX Billing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
% behavioral health and social service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% chiropractic providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% dental providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% dietary and nutritional service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% emergency medical service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% eye and vision service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing service-related providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% other service providers	0.7	0.1	-83.06	30% (+/-)	Yes
% pharmacy service providers	0.0	1.0	Div by 0	30% (+/-)	N/A
% physician assistants and advanced practice nursing providers	0.0	0.3	Div by 0	30% (+/-)	N/A
% podiatric medicine and surgery service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.2	Div by 0	30% (+/-)	N/A
% speech, language, and hearing service providers	6.7	2.3	-66.07	30% (+/-)	Yes
% student health care	0.0	0.0	Div by 0	30% (+/-)	N/A
% technologists, technicians, and other technical service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% group of individuals with multi- or single specialty	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonindividuals	91.3	95.2	4.29	30% (+/-)	Yes
% agencies	2.0	1.9	-3.85	30% (+/-)	Yes
% ambulatory health care facilities	0.0	1.8	Div by 0	30% (+/-)	N/A
% hospital units	0.0	0.0	Div by 0	30% (+/-)	N/A
% hospitals	14.7	2.8	-80.72	30% (+/-)	No
% laboratories	0.0	0.0	Div by 0	30% (+/-)	N/A
% managed care organizations	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing and custodial care facilities	0.0	0.2	Div by 0	30% (+/-)	N/A
% residential treatment facilities	0.0	0.0	Div by 0	30% (+/-)	N/A
% respite care facility	0.0	0.0	Div by 0	30% (+/-)	N/A
% suppliers	74.7	88.5	18.48	30% (+/-)	Yes
% transportation services	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonmedical	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Individual					
Number of provider IDs with entity type = individual	12	18	50.00	30% (+/-)	No
% a sole proprietorship	66.7	55.6	-16.67	30% (+/-)	Yes
% not a sole proprietorship	33.3	38.9	16.67	30% (+/-)	Yes
% not answered	0.0	5.6	Div by 0	N/A	N/A
Provider IDs with Entity Type = Organization					
Number of provider IDs with entity type = organization	152	906	496.05	30% (+/-)	No
% organization is a subpart	5.3	27.7	426.39	30% (+/-)	No
% organization is not a subpart	63.8	60.6	-5.05	30% (+/-)	Yes
% not answered	30.9	11.7	-62.16	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX RX Prescribing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
RX Providers					
Number of provider IDs	34,061	39,203	15.10	30% (+/-)	Yes
% billing provider on RX claim	0.0	0.0	Div by 0	N/A	N/A
% prescribing provider on RX claim	100.0	100.0	0.00	N/A	N/A
% NPI billing provider on RX claim	0.0	0.0	Div by 0	N/A	N/A
% also a provider on IP claim	0.0	0.0	Div by 0	N/A	N/A
% also a provider on LT claim	0.0	0.0	Div by 0	N/A	N/A
% also a provider on OT claim	78.1	77.1	-1.36	N/A	N/A
% provider IDs with NPI	21.1	24.3	15.37	30% (+/-)	Yes
% provider IDs linked to NPPES	0.0	2.3	75,733.33	30% (+/-)	Yes
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	Div by 0	N/A	N/A
average number of RX claims	277.6	710.8	156.01	30% (+/-)	No
average number of beneficiaries with RX claims	32.7	116.9	256.85	30% (+/-)	No
Provider IDs with NPI					
Number of provider IDs with NPI	7,180	9,534	32.79	30% (+/-)	No
% NPI source = MSIS	100.0	99.4	-0.61	30% (+/-)	Yes
% NPI source = NPPES	0.0	0.6	4,321.43	30% (+/-)	Yes
% NPI source = state cross-reference file	0.0	0.0	Div by 0	N/A	N/A
Provider IDs Linked to NPPES					
Number of provider IDs linked to NPPES	1	892	89,100.00	30% (+/-)	No
% linked via NPI	0.0	93.4	Div by 0	30% (+/-)	N/A
% linked via Medicaid legacy provider ID	0.0	6.5	Div by 0	30% (+/-)	N/A
% linked via Medicare UPIN	100.0	0.1	-99.89	30% (+/-)	No
% with name prefix	0.0	38.9	Div by 0	30% (+/-)	N/A
% with first name	100.0	99.2	-0.78	30% (+/-)	Yes
% with middle name	100.0	78.3	-21.75	30% (+/-)	Yes
% with last name	100.0	99.2	-0.78	30% (+/-)	Yes
% with name suffix	0.0	3.8	Div by 0	30% (+/-)	N/A
% male	0.0	72.4	Div by 0	30% (+/-)	N/A
% female	100.0	26.8	-73.21	30% (+/-)	No
% with credential	100.0	98.1	-1.91	30% (+/-)	Yes
% with business name	0.0	0.6	Div by 0	30% (+/-)	N/A
% with address line 1	100.0	99.8	-0.22	30% (+/-)	Yes
% with city	100.0	99.8	-0.22	30% (+/-)	Yes
% with state	100.0	99.8	-0.22	30% (+/-)	Yes
% state = RX state code	0.0	96.0	Div by 0	30% (+/-)	N/A
% with zip code	100.0	99.8	-0.22	30% (+/-)	Yes
% with primary taxonomy	0.0	98.8	Div by 0	30% (+/-)	N/A
% with provider entity type = individual	100.0	99.2	-0.78	30% (+/-)	Yes
% with provider entity type = organization	0.0	0.6	Div by 0	30% (+/-)	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	Div by 0	N/A	N/A
Provider IDs with NPPES Primary Taxonomy					
Number of provider IDs with NPPES primary taxonomy	0	881	Div by 0	30% (+/-)	N/A
% individual or group of individuals	0.0	99.3	Div by 0	30% (+/-)	N/A
% allopathic and osteopathic physicians	0.0	89.8	Div by 0	30% (+/-)	N/A

Source: Medicaid Analytic eExtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX RX Prescribing Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
% behavioral health and social service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% chiropractic providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% dental providers	0.0	0.2	Div by 0	30% (+/-)	N/A
% dietary and nutritional service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% emergency medical service providers	0.0	0.2	Div by 0	30% (+/-)	N/A
% eye and vision service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing service providers	0.0	0.2	Div by 0	30% (+/-)	N/A
% nursing service-related providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% other service providers	0.0	3.3	Div by 0	30% (+/-)	N/A
% pharmacy service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% physician assistants and advanced practice nursing providers	0.0	5.1	Div by 0	30% (+/-)	N/A
% podiatric medicine and surgery service providers	0.0	0.5	Div by 0	30% (+/-)	N/A
% respiratory, developmental, rehabilitative, and restorative service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% speech, language, and hearing service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% student health care	0.0	0.0	Div by 0	30% (+/-)	N/A
% technologists, technicians, and other technical service providers	0.0	0.0	Div by 0	30% (+/-)	N/A
% group of individuals with multi- or single specialty	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonindividuals	0.0	0.7	Div by 0	30% (+/-)	N/A
% agencies	0.0	0.1	Div by 0	30% (+/-)	N/A
% ambulatory health care facilities	0.0	0.1	Div by 0	30% (+/-)	N/A
% hospital units	0.0	0.0	Div by 0	30% (+/-)	N/A
% hospitals	0.0	0.2	Div by 0	30% (+/-)	N/A
% laboratories	0.0	0.0	Div by 0	30% (+/-)	N/A
% managed care organizations	0.0	0.0	Div by 0	30% (+/-)	N/A
% nursing and custodial care facilities	0.0	0.2	Div by 0	30% (+/-)	N/A
% residential treatment facilities	0.0	0.0	Div by 0	30% (+/-)	N/A
% respite care facility	0.0	0.0	Div by 0	30% (+/-)	N/A
% suppliers	0.0	0.0	Div by 0	30% (+/-)	N/A
% transportation services	0.0	0.0	Div by 0	30% (+/-)	N/A
% nonmedical	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Individual					
Number of provider IDs with entity type = individual	1	885	88,400.00	30% (+/-)	No
% a sole proprietorship	0.0	21.7	Div by 0	30% (+/-)	N/A
% not a sole proprietorship	100.0	72.9	-27.12	30% (+/-)	Yes
% not answered	0.0	5.4	Div by 0	N/A	N/A
Provider IDs with Entity Type = Organization					
Number of provider IDs with entity type = organization	0	5	Div by 0	30% (+/-)	N/A
% organization is a subpart	0.0	0.0	Div by 0	30% (+/-)	N/A
% organization is not a subpart	0.0	60.0	Div by 0	30% (+/-)	N/A
% not answered	0.0	40.0	Div by 0	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

^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.

2009-2010 MAX All Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
All Providers					
Number of provider IDs	120,943	162,722	34.54	30%(+/-)	No
% billing provider on IP claim	0.3	0.3	-6.59	N/A	N/A
% NPI billing provider on IP claim	0.3	0.5	32.84	N/A	N/A
% billing provider on LT claim	1.2	0.9	-25.50	N/A	N/A
% NPI billing provider on LT claim	0.8	0.9	9.56	N/A	N/A
% billing provider on OT claim	24.9	21.6	-13.20	N/A	N/A
% servicing provider on OT claim	45.8	49.2	7.43	N/A	N/A
% NPI servicing provider on OT claim	20.8	28.3	35.80	N/A	N/A
% billing provider on RX claim	2.9	2.2	-26.13	N/A	N/A
% prescribing provider on RX claim	28.2	24.1	-14.46	N/A	N/A
% NPI billing provider on RX claim	3.2	2.6	-20.30	N/A	N/A
% billing provider	26.1	22.9	-12.31	N/A	N/A
% NPI billing provider	4.3	3.8	-11.47	N/A	N/A
% servicing provider	45.8	49.2	7.43	N/A	N/A
% NPI servicing provider	20.8	28.3	35.80	N/A	N/A
% prescribing provider	28.2	24.1	-14.46	N/A	N/A
% provider IDs with NPI	53.3	64.1	20.25	30%(+/-)	Yes
% provider IDs linked to NPPES	9.4	32.4	245.53	30%(+/-)	No
% provider IDs with or without NPI but linked to state provider file	0.0	0.0	Div by 0	N/A	N/A
average number of claims	1,796.6	1,601.8	-10.84	30%(+/-)	Yes
average number of beneficiaries with claims	157.1	148.0	-5.77	30%(+/-)	Yes
Provider IDs with NPI					
Number of provider IDs with NPI	64,461	104,291	61.79	30%(+/-)	No
% NPI source = MSIS	82.4	92.1	11.74	30%(+/-)	Yes
% NPI source = NPPES	17.6	7.9	-54.95	30%(+/-)	No
% NPI source = state cross-reference file	0.0	0.0	Div by 0	N/A	N/A
Provider IDs Linked to NPPES					
Number of provider IDs linked to NPPES	11,349	52,763	364.91	30%(+/-)	No
% linked via NPI	0.0	84.3	Div by 0	30%(+/-)	N/A
% linked via Medicaid legacy provider ID	99.2	15.5	-84.35	30%(+/-)	No
% linked via Medicare UPIN	0.8	0.2	-81.07	30%(+/-)	Yes
% with name prefix	29.9	32.4	8.49	30%(+/-)	Yes
% with first name	52.4	78.5	49.67	30%(+/-)	No
% with middle name	43.8	61.3	40.18	30%(+/-)	No
% with last name	52.4	78.5	49.67	30%(+/-)	No
% with name suffix	1.7	2.1	23.39	30%(+/-)	Yes
% male	33.2	53.6	61.59	30%(+/-)	No
% female	19.3	24.9	29.12	30%(+/-)	Yes
% with credential	47.0	76.5	62.79	30%(+/-)	No
% with business name	47.6	21.3	-55.18	30%(+/-)	No
% with address line 1	100.0	99.8	-0.20	30%(+/-)	Yes
% with city	100.0	99.8	-0.20	30%(+/-)	Yes
% with state	100.0	99.8	-0.20	30%(+/-)	Yes
% state = claim file state code	93.5	89.7	-4.03	30%(+/-)	Yes
% with zip code	100.0	99.8	-0.20	30%(+/-)	Yes

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

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2009-2010 MAX All Provider Characteristics Validation Table

State: OH

Produced: 04/18/2013

Measure	2009 Value	2010 Value	% Change 2009-2010	Cross Year Expected Range	Cross Year Within Range ^a
% with primary taxonomy	98.2	98.8	0.55	30%(+/-)	Yes
% with provider entity type = individual	52.4	78.5	49.67	30%(+/-)	No
% with provider entity type = organization	47.6	21.3	-55.18	30%(+/-)	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	Div by 0	N/A	N/A
Provider IDs with NPPES Primary Taxonomy					
Number of provider IDs with NPPES primary taxonomy	11,146	52,106	367.49	30%(+/-)	No
% individual or group of individuals	78.5	86.3	9.97	30%(+/-)	Yes
% allopathic and osteopathic physicians	41.7	66.7	59.87	30%(+/-)	No
% behavioral health and social service providers	2.0	1.0	-51.32	30%(+/-)	Yes
% chiropractic providers	4.2	1.5	-63.99	30%(+/-)	Yes
% dental providers	5.6	2.6	-53.77	30%(+/-)	Yes
% dietary and nutritional service providers	0.0	0.0	-77.78	30%(+/-)	Yes
% emergency medical service providers	0.1	0.3	163.64	30%(+/-)	Yes
% eye and vision service providers	3.8	1.7	-55.17	30%(+/-)	Yes
% nursing service providers	6.3	1.5	-76.03	30%(+/-)	Yes
% nursing service-related providers	4.4	0.9	-79.61	30%(+/-)	Yes
% other service providers	4.0	2.4	-39.95	30%(+/-)	Yes
% pharmacy service providers	0.0	0.0	177.78	30%(+/-)	Yes
% physician assistants and advanced practice nursing providers	1.4	4.7	226.94	30%(+/-)	Yes
% podiatric medicine and surgery service providers	3.9	2.0	-47.34	30%(+/-)	Yes
% respiratory, developmental, rehabilitative, and restorative service providers	0.8	0.5	-29.05	30%(+/-)	Yes
% speech, language, and hearing service providers	0.1	0.1	-15.97	30%(+/-)	Yes
% student health care	0.1	0.3	353.97	30%(+/-)	Yes
% technologists, technicians, and other technical service providers	0.1	0.1	-55.56	30%(+/-)	Yes
% group of individuals with multi- or single specialty	0.0	0.0	Div by 0	30%(+/-)	N/A
% nonindividuals	21.5	13.7	-36.37	30%(+/-)	No
% agencies	4.9	2.7	-44.19	30%(+/-)	Yes
% ambulatory health care facilities	5.5	2.4	-56.39	30%(+/-)	Yes
% hospital units	0.0	0.0	-11.11	30%(+/-)	Yes
% hospitals	1.2	1.1	-10.90	30%(+/-)	Yes
% laboratories	0.6	0.5	-22.30	30%(+/-)	Yes
% managed care organizations	0.1	0.0	-79.01	30%(+/-)	Yes
% nursing and custodial care facilities	0.3	1.7	534.20	30%(+/-)	Yes
% residential treatment facilities	0.0	0.0	-15.56	30%(+/-)	Yes
% respite care facility	0.1	0.0	-73.61	30%(+/-)	Yes
% suppliers	2.2	2.9	29.59	30%(+/-)	Yes
% transportation services	6.6	2.3	-64.31	30%(+/-)	Yes
% nonmedical	0.0	0.0	Div by 0	N/A	N/A
Provider IDs with Entity Type = Individual					
Number of provider IDs with entity type = individual	5,951	41,410	595.85	30%(+/-)	No
% a sole proprietorship	43.7	18.9	-56.69	30%(+/-)	No
% not a sole proprietorship	46.1	75.0	62.74	30%(+/-)	No
% not answered	10.2	6.0	-40.74	N/A	N/A
Provider IDs with Entity Type = Organization					
Number of provider IDs with entity type = organization	5,398	11,248	108.37	30%(+/-)	No
% organization is a subpart	7.8	10.3	31.12	30%(+/-)	No
% organization is not a subpart	71.6	74.7	4.26	30%(+/-)	Yes
% not answered	20.5	15.1	-26.70	N/A	N/A

Source: Medicaid Analytic eXtract (MAX) Provider Characteristics Files, 2009-2010.

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