

# Using Medicaid Claims Data to Calculate Capacity for Federally Designated Shortage Areas



*June 21, 2017*  
**PART 2**  
*Data Demonstration*



**John Snow, Inc.**

*Promoting and Improving Health*

# Analysis of Extracted Claims

- Need to separate out non-PC, non-physician claims and organizational billing
- Connect to full NPI file listing for providers
  - SDMS won't have organizations and some individuals
- Develop classifications of claims:
  - PC Only, Individual
  - PC Only, Org
  - PC Mixed, Org
  - *Option: PC Mixed, Individual*

# Demo Data File - Tables

- MS Access Format (but can use any database platform)
- ‘Sample’ Data Tables:
  - MedicaidPC\_ClaimsRAW
    - Claims pre-aggregated to NPI and Address
    - CPT codes selections pre-defined in Medicaid extract
  - NPI
  - LicenseList
  - SDMS\_Download
- Lookup Tables
  - MedPC\_Taxonomy\_Codes
    - DentPC\_Taxonomy\_Codes\_All (Reference)
    - PsychPC\_MDonly\_Taxonomy\_Codes (Reference)
  - TaxonomyCodeImport

# Analytic Steps Using Taxonomy and Type

1. Select claims with NPI having any matching PC taxonomies (*PC inclusive*)
2. Select claims with NPI having any that do not match PC Taxonomies (*Non-PC inclusive*)
3. Separate into Individual vs Organizational
  - Claims by providers with both PC and Non-PC taxonomies classified as ‘Mixed’ – require additional follow up

**Q MA Claims PC any inclusive**

Primary Care Core Claims

- Servicing Provider ID
- Servicing Provider NPI
- Servicing Provider Name
- Servicing Provider Street Address (DBA)
- Servicing Provider City (DBA)
- Servicing Provider State (DBA)
- Servicing Provider Zip (DBA)
- Servicing Provider Service Location
- Servicing Provider Type Code and Description
- # of Paid Claims

NPI\_MAAI\_2014\_Import

- NPI
- EntityTypeCode
- ReplacementNPI
- EmployerIdentificationNumber
- ProviderOrganizationNameLegalBusinessName
- ProviderLastNameLegalName
- ProviderFirstName
- ProviderMiddleName
- ProviderNamePrefixText
- ProviderNameSuffixText
- ProviderCredentialText
- ProviderOtherOrganizationNameLegalBusinessName
- ProviderOtherOrganizationNameLegalName
- ProviderOtherLast Name

Q Filter Taxonomy for PC all

- TaxonomyCode
- SpecialtyDesc
- Type

Q Filter Taxonomy for PC all\_1

- TaxonomyCode
- SpecialtyDesc
- Type

Q Filter Taxonomy for PC all\_2

- TaxonomyCode
- SpecialtyDesc
- Type

Q Filter Taxonomy for PC all\_3

- TaxonomyCode
- SpecialtyDesc
- Type

Q Filter Taxonomy for PC all\_4

- TaxonomyCode
- SpecialtyDesc
- Type

Field:	ProviderCredentialText	HealthcareProviderTaxonomyCode_1	TaxonomyCode	ProviderLicenseNumber	HealthcareProviderPrimaryTaxonomySwitch_1	HealthcareProviderNPI
Table:	NPI_MAAI_2014_Import	NPI_MAAI_2014_Import	Q Filter Taxonomy for PC all	NPI_MAAI_2014_Import	NPI_MAAI_2014_Import	NPI_MAAI_2014_Import
Sort:						
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		Is Not Null	Is Not Null	"MA" Or Is Null		Is Not Null

**Q MA Claims NON-PC any inclusive**

Primary Care Core Claims

- Servicing Provider ID
- Servicing Provider NPI
- Servicing Provider Name
- Servicing Provider Street Address (DBA)
- Servicing Provider City (DBA)
- Servicing Provider State (DBA)
- Servicing Provider Zip (DBA)
- Servicing Provider Service Location
- Servicing Provider Type Code and Description
- # of Paid Claims

NPI\_MAAI\_2014\_Import

- NPI
- EntityTypeCode
- ReplacementNPI
- EmployerIdentificationNumber
- ProviderOrganizationNameLegalBusinessName
- ProviderLastNameLegalName
- ProviderFirstName
- ProviderMiddleName
- ProviderNamePrefixText
- ProviderNameSuffixText
- ProviderCredentialText

Q Filter Taxonomy for PC all

- TaxonomyCode
- SpecialtyDesc
- Type

Q Filter Taxonomy for PC all\_1

- TaxonomyCode
- SpecialtyDesc
- Type

Q Filter Taxonomy for PC all\_2

- TaxonomyCode
- SpecialtyDesc
- Type

Q Filter Taxonomy for PC all\_3

- TaxonomyCode
- SpecialtyDesc
- Type

Q Filter Taxonomy for PC all\_4

- TaxonomyCode
- SpecialtyDesc
- Type

Field:	ProviderCredentialText	HealthcareProviderTaxonomyCode_1	TaxonomyCode	ProviderLicenseNumber	HealthcareProviderPrimaryTaxonomySwitch_1	HealthcareProviderNPI
Table:	NPI_MAAI_2014_Import	NPI_MAAI_2014_Import	Q Filter Taxonomy for PC all	NPI_MAAI_2014_Import	NPI_MAAI_2014_Import	NPI_MAAI_2014_Import
Sort:						
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		Is Not Null	Is Null	"MA" Or Is Null		Is Not Null

**Q MA POnly Individual**

Q MA Claims PC any inclusive

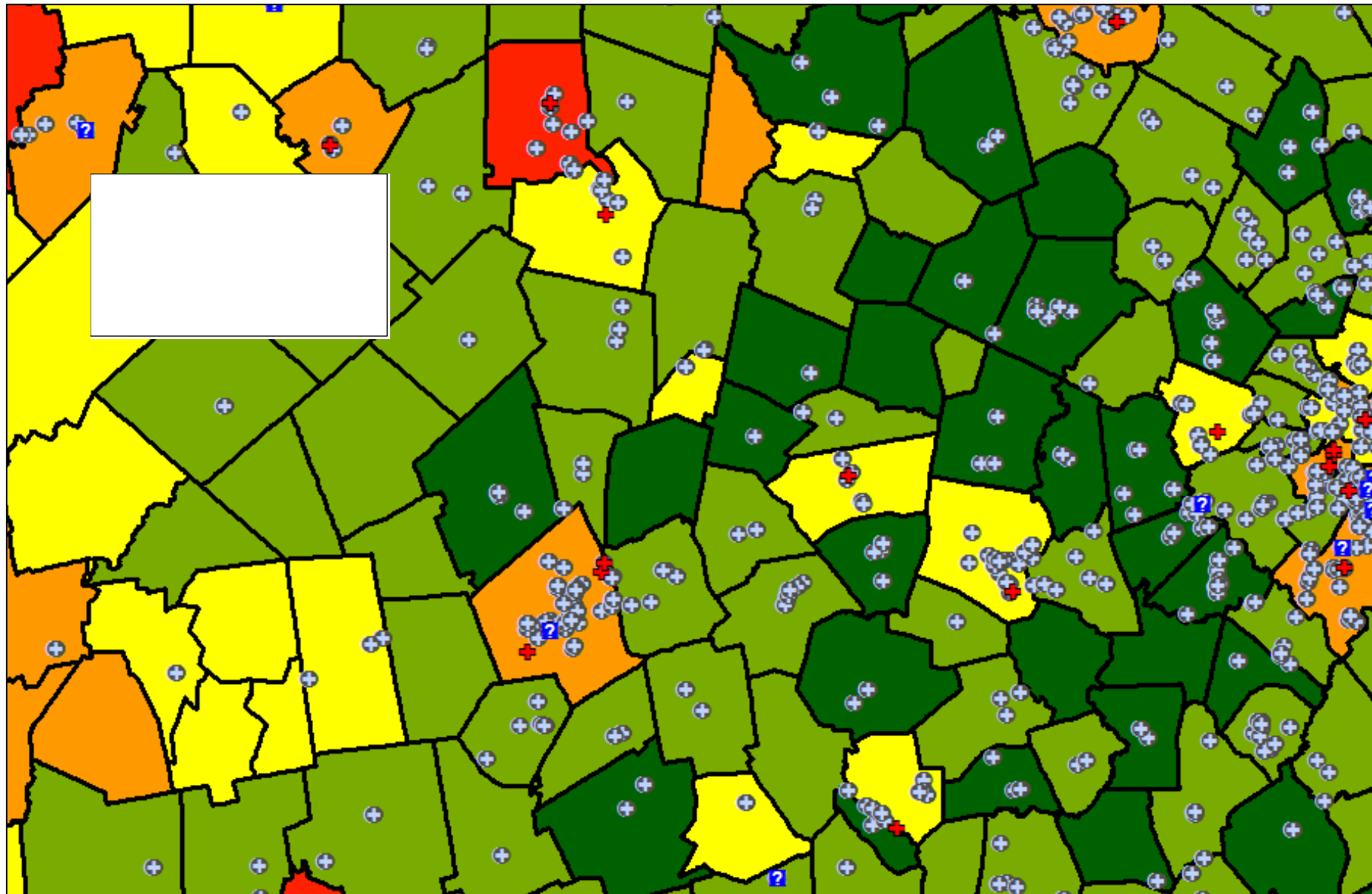
- Servicing Provider ID
- Servicing Provider NPI
- Servicing Provider Name
- Servicing Provider Street Address (DBA)
- Servicing Provider City (DBA)
- Servicing Provider State (DBA)
- Servicing Provider Zip (DBA)
- Servicing Provider Service Location
- Servicing Provider Type Code and Description
- # of Paid Claims
- EntityTypeCode
- ProviderOrganizationNameLegalBusinessName
- ProviderLastNameLegalName
- ProviderFirstName
- ProviderMiddleName
- ProviderNamePrefixText

Q MA Claims NON-PC any inclusive

- Servicing Provider ID
- Servicing Provider NPI
- Servicing Provider Name
- Servicing Provider Street Address (DBA)
- Servicing Provider City (DBA)
- Servicing Provider State (DBA)
- Servicing Provider Zip (DBA)
- Servicing Provider Service Location
- Servicing Provider Type Code and Description
- # of Paid Claims
- EntityTypeCode
- ProviderOrganizationNameLegalBusinessName
- ProviderLastNameLegalName
- ProviderFirstName

Field:	Servicing Provider NPI	EntityTypeCode	Servicing Provider ID	# of Paid Claims	Servicing Provider Name
Table:	Q MA Claims PC any inclusive	Q MA Claims PC any inclusive	Q MA Claims NON-PC any inclusive	Q MA Claims PC any inclusive	Q MA Claims PC any inclusive
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		1	Is Null		





# Integrity Checks



- Test results to look for underlying issues
  - Compare total PC visits to Medicaid enrollees (or member years ideally) for same period: Is visit rate reasonable?
  - Look at locations with highest counts: Assure site is not a billing office/service (Google)
  - Compare to recent low income HPSA survey: Are providers similar?
  - Check if providers appear at multiple addresses: Some should

# Questions / Discussion?



***Eric Turer***

**John Snow, Inc. (JSI)**

*501 South St.*

*Bow, NH 03304*

*(603)573-3307*

*eturer@jsi.com*

*www.jsi.com*

