

# Developing Medicaid-Based Primary Care Rational Service Areas in New York State

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# What is a Rational Service Area

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- RSAs are geographic areas that should correspond to how populations or communities access health care services
- RSAs may differ depending on the type of health care provided
  - RSAs for specialty care such as bypass surgery may be larger than those for primary care
- RSAs are
  - similar in physical characteristics,
  - similar in population or culture, and/or
  - isolated by cultural barriers or physical barriers such as parks, rivers, major highways, or major industrial areas.

# What is a Rational Service Area

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- RSAs are used by HRSA in the analysis of shortage areas.
- RSAs for shortage designations can be
  - Whole counties
  - Aggregations of townships within counties (in rural areas)
  - Entire cities
  - Aggregations of census tracts (in urban areas)
- Dr. David Goodman out of Dartmouth created primary care services areas (PCSAs) using Medicare data

# Why Focus on the Medicaid Population

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- New York has an abundance of primary care providers. There is however:
  - A maldistribution of physicians serving those in inner cities and in rural areas
  - Access issues for vulnerable populations, e.g., low-income, Medicaid-eligible, with limited English proficiency
- Medicaid patient travel patterns are likely to differ from Medicare or commercially insured
- Better information on physicians serving Medicaid patients; little information on practice patterns of active physicians

# RSA Development

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- Assessed Medicaid Data. Limited to:
  - Outpatient settings
  - Primary care providers
  - Evaluation and management codes
    - 99201 – 99205
    - 99211 – 99215
    - 99381 – 99387
    - 99391 – 99397
- Linked zip code of patient to zip code of provider
- Linked zip codes to each other based on plurality of where patients went for care

# RSA Development

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- Only considered commuting distances within regions, i.e., did not consider patients in Capital District getting care in New York City
- Used Department of Labor regions
  - Can link to other DOL data on projections and employment data
- Used HRSA Guidelines to “rationalize” RSAs

# New York State Regions

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# RSA Results

Region (1)	Total Medicaid Patients	Localization (2)	# zip codes	# RSAs	Mean zip/RSA	Total Population	Mean pop/RSA
<b>Capital District</b>	236,357	64.34%	262	16	16.4	1,085,965	67,873
<b>Central NY</b>	217,954	66.31%	145	13	11.2	814,919	62,686
<b>Finger Lakes</b>	346,671	53.85%	193	21	9.2	1,219,131	58,054
<b>Hudson Valley</b>	516,318	61.38%	326	39	8.4	2,301,120	59,003
<b>Long Island</b>	453,580	41.03%	207	48	4.3	2,871,770	59,829
<b>Mohawk Valley</b>	134,275	68.16%	165	13	12.7	506,780	38,983
<b>New York City</b>	3,703,310	32.26%	311	67	4.6	8,270,869	123,446
<b>North Country</b>	98,083	82.29%	182	15	12.1	428,539	28,569
<b>Southern Tier</b>	184,796	68.08%	158	18	8.8	640,599	35,589
<b>Western NY</b>	440,247	42.67%	209	27	7.7	1,396,367	51,717
<b>Statewide</b>	6,331,591	42.12%	2,158	277	7.8	19,536,059	70,527

(1) RSAs rather than zip codes were linked to regions. Consequently, zip codes and their corresponding information in some cases are identified in a neighboring region.

(2) Localization refers to the percent of patients who find primary care services within the same RSA

# Analyzing Need

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- Identified data elements for analysis.
  - Research
  - HRSA Rules
  - DOH Programs
- What was available by zip code
  - Link data elements using zip codes to RSAs
- Ranked each data element using quartiles

# Initial Need Indicators Used

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- Demographic
  - Percent population enrolled in Medicaid
  - Percent population below 200% of the federal poverty level
  - Percent ages 65 and older
  - Percent racial or ethnic minorities
  - Limited English proficiency
- Health Care
  - Avoidable hospitalizations rate
  - Avoidable ED visits rate
  - Population-to-primary care physician rate
  - Overall mortality rate
  - Percent low birthweight births

# Initial Needs Assessment Results

- Fourth quartile indicates the highest need
- RSAs in both rural and urban areas show need

Region	# RSAs	Quartiles					
		First	Second	Third	Fourth		
						Number	Percent
Capital District	16	6	3	6	1		6.25%
Central NY	13	6	4	2	1		7.69%
Finger Lakes	21	6	6	6	3		14.29%
Hudson Valley	39	17	13	4	5		12.82%
Long Island	48	16	19	8	5		10.42%
Mohawk Valley	13	1	3	7	2		15.38%
New York City	67	7	8	17	35		52.24%
North Country	15	1	4	4	6		40.00%
Southern Tier	18	1	4	8	5		27.78%
Western NY	27	4	3	6	14		51.85%

# Findings

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- Commuting patterns differ by insurance status
  - Medicaid patients travel further for care
  - Fewer Medicaid RSAs than PCSAs
- Rural RSAs tended to be larger than urban RSAs and had more of their Medicaid patients staying in their “home” RSA for services
- Community characteristics as important as health care outcomes and provider availability in identifying need
- High need RSAs spread around the state, but many in New York City
  - Need identified in both rural and urban areas

# RSA Development Limitations

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- Initial RSAs did not follow current HPSA guidelines
- Analysis did not consider access to care in bordering states
- Claims data providing billing addresses instead of service addresses
- Instability of Medicaid patient counts

# Data and Ranking Limitations

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## DATA

- Variability in data
  - Level of geography
    - ZCTAs, zip codes, and county level data
    - Census versus sample data
- Were the correct data elements used?

## RANKING

- Sensitivity of ranking mechanism
  - How big of difference between categories
  - Weighted versus non-weighted
- Is it a true measure of need

# Using Needs Assessments

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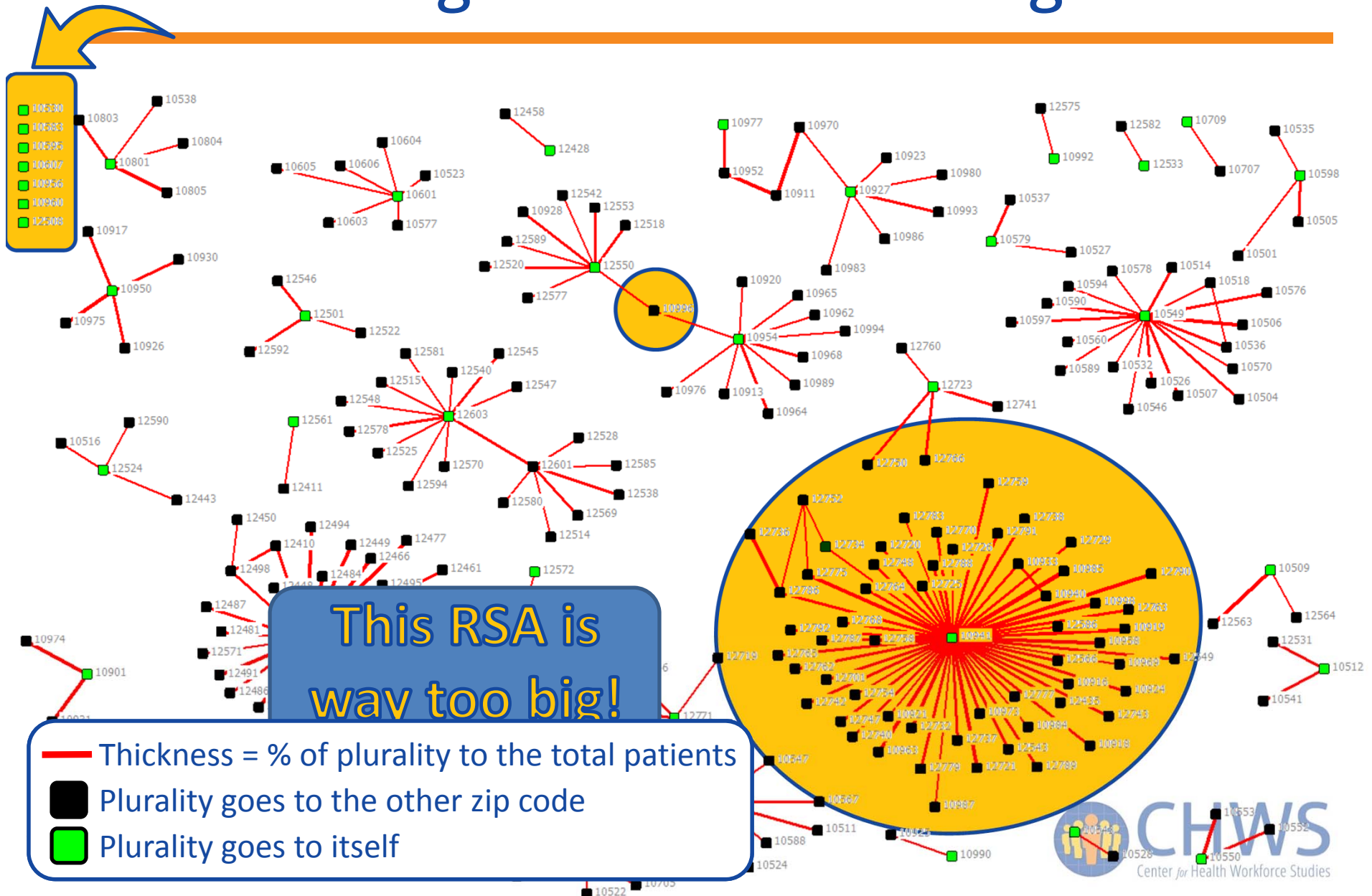
- Identify potential HPSAs and MUAs/Ps
- Identify areas of need for DSRIP, SHIP, and PHIP
- Identify areas of need for Doctors Across New York and other service-obligated placements
- Assess Medicaid utilization
- Also comparing to PCSAs



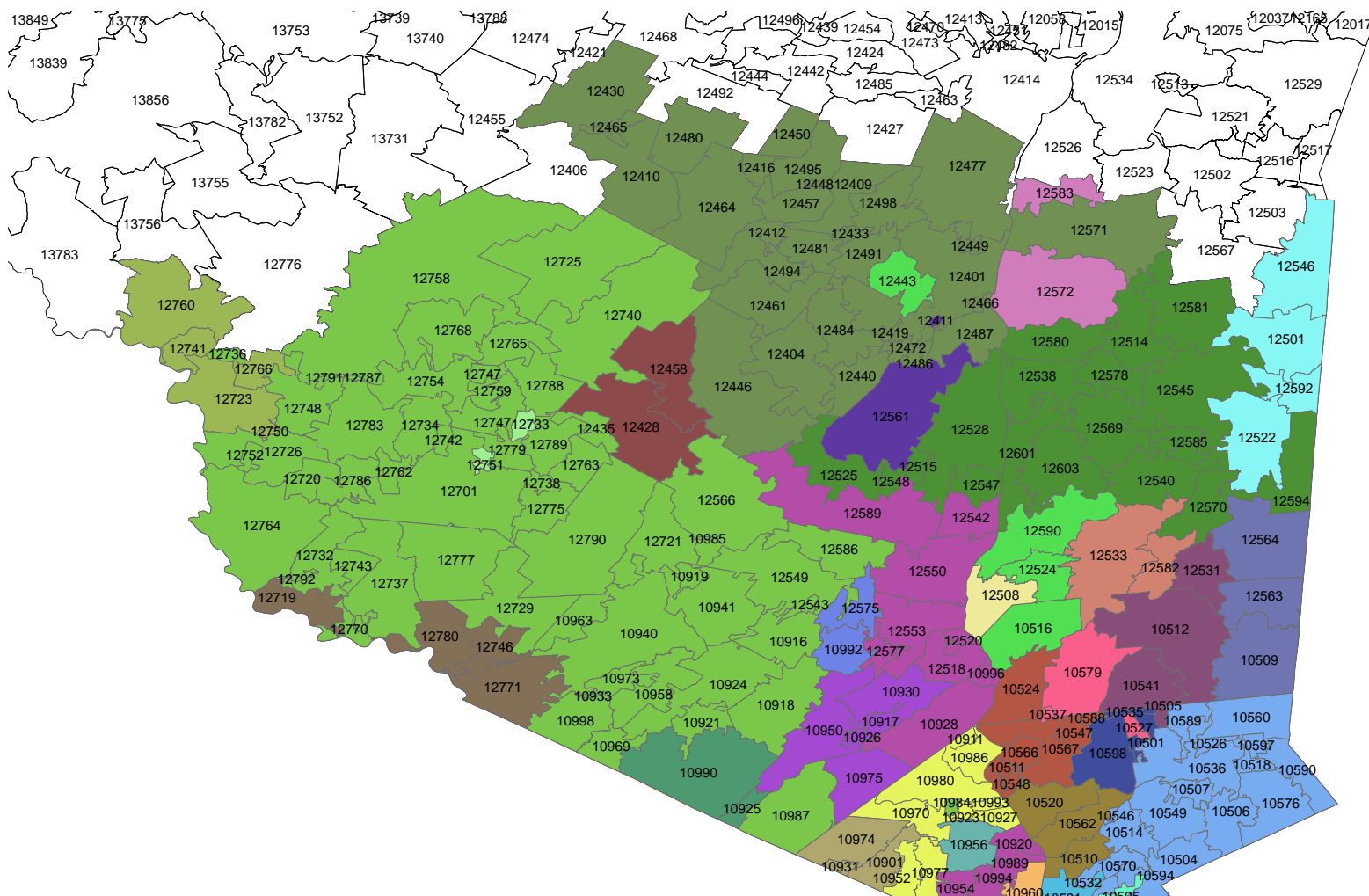
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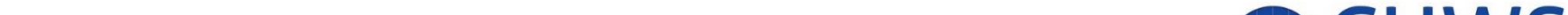
# Maps of Lower Hudson Valley

# Understanding Patient Commuting Patterns



# Initial RSAs Don't Follow HPSA Rules





# Thank You

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Questions?????