Retail clinics and access to care: geographic location and interaction with medical homes

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Outline of the talk

1. Define access and describe its components
2. Examine components with respect to retail clinics
   - Geographic accessibility for vulnerable populations
3. Implications of access
   - Utilization
   - Integration with medical homes

Dimensions of access

	Dimensions	Definition
1.	Availability	Adequacy of supply
2.	Accommodation	Organization of resources
3.	Affordability	Prices related to clients' ability to pay
4.	Accessibility	Location of supply
5.	Acceptability	Clients' attitudes towards providers and vice versa

Penchansky R, Thomas JW, "The Concept of Access," *Medical Care*1981; 19: 127-140

Why these dimensions matter

1. Satisfaction
2. Utilization
3. Practice patterns

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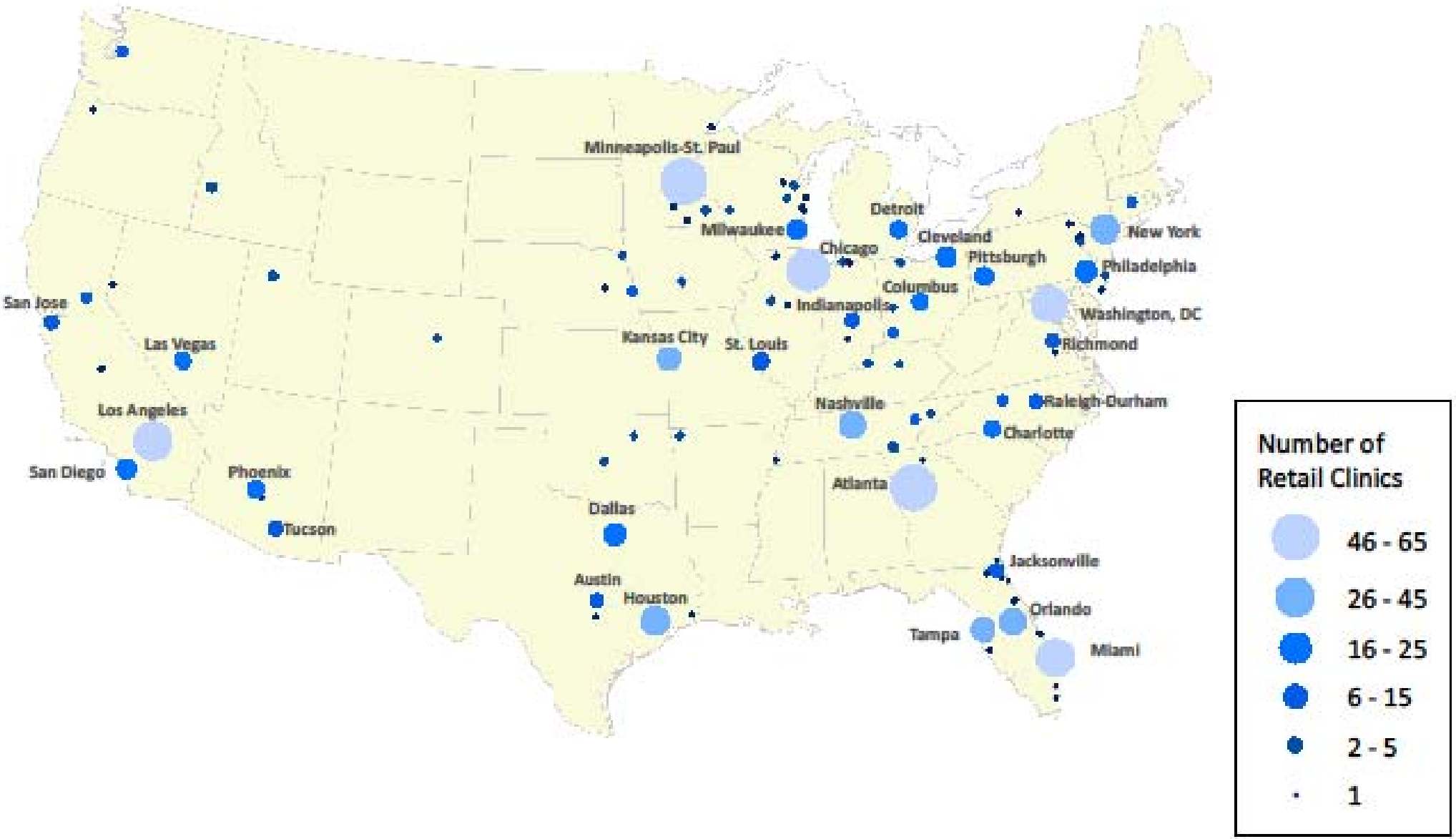
1. Availability

- All retail clinic operators as of June and August 2008
- List compiled using multiple data sources and checked with industry experts
- Final sample included 42 operators and 982 retail clinics
- For information not available through websites, we collected data from a random sample of 100 clinics

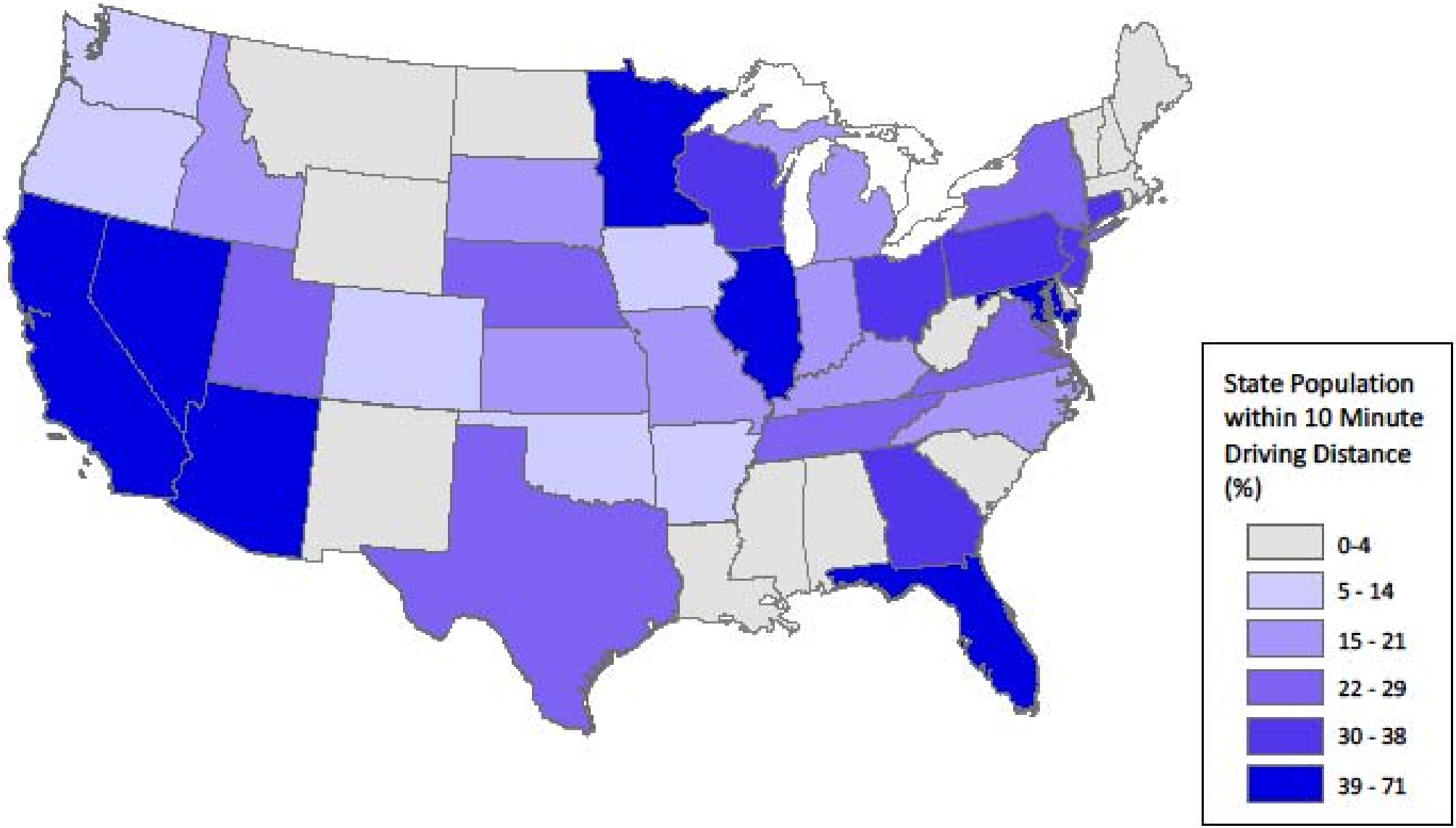

Minneapolis-St. Paul
Milwaukee
Chicago
Detroit
Cleveland
Pittsburgh
New York
Philadelphia
Columbus
Indianapolis
Washington, DC
Richmond
San Jose
Las Vegas
Kansas City
St. Louis
Los Angeles
Nashville
Raleigh-Durham
Charlotte
San Diego
Phoenix
Atlanta
Tucson
Dallas
Jacksonville
Austin
Houston
Orlando
Tampa
Miami
Number of Retail Clinics
46 - 65
26 - 45
16 - 25
6 - 15
2 - 5
1

Estimate population within reach

- From each retail clinic, calculate the distance someone would be able to drive in 5 minutes in all directions
- Driving distance incorporates normal roadway conditions (e.g. speed limits but not traffic)
- Create a boundary loop by connecting the points
- If the center of a block group falls within the boundary, the population of the block group is counted

Population within reach

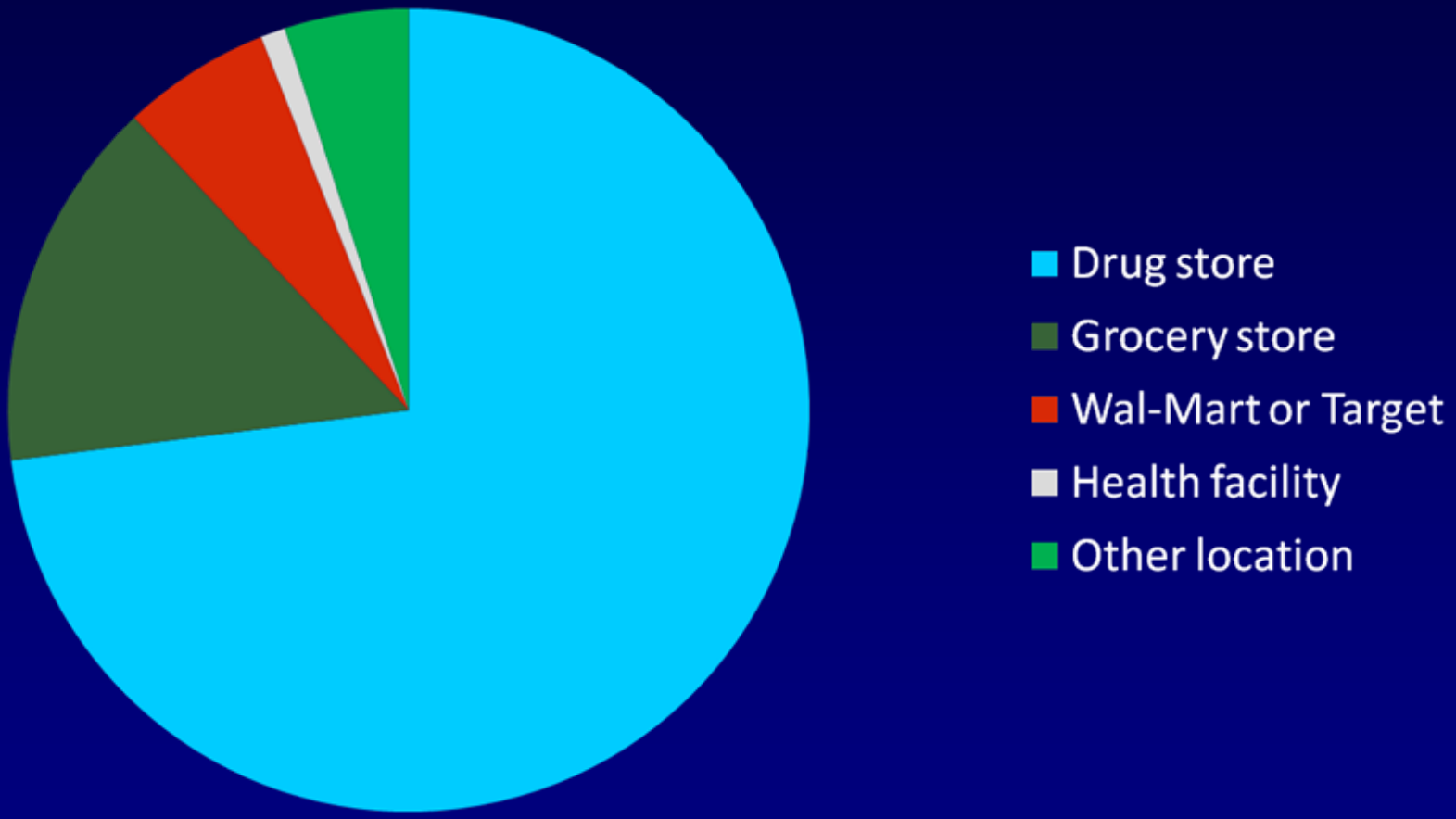
- 29.7 million people (13.4% of the US urban population) live within a 5 minute driving distance of a retail clinic
- 79.6 million people (35.8%) live within a 10 minute driving distance
- Over 85% of the populations of Nashville, Minneapolis-St.Paul, Las Vegas, Milwaukee, and Miami live within a 10 minute driving distance


State Population within 10 Minute Driving Distance (%)
0-4
5 - 14
15 - 21
22 - 29
30 - 38
39 - 71

2. Accommodation

- Over 95% provide care for:
  - » acute infectious illnesses, minor skin conditions, immunizations, routine preventive health examinations or preventive screening, pregnancy testing, allergies
- Less common services include:
  - » smoking cessation counseling (57.6% clinics), travel medicine (4.8%), HIV and/or sexually transmitted disease testing or counseling (3.0%), prescription refills (1.6%), and weight loss counseling (1.2%)

Type of store location (N=982)



Hours of operation

- All had weekday and weekend hours
- 97% had evening hours (after 6pm) on weekdays
- Walk-in appointments

3. Affordability

- Most retail clinics accepted insurance
  - » 97% accepted private insurance
  - » 93% accepted FFS Medicare
  - » 60% accepted some form of Medicaid
- Costs of care varied widely
  - » Sore throat average $78 ($35 to $254)
  - » Tetanus booster average $63 ($15 to $254)

Posted prices

Common Illnesses

Allergies (ages 6+)	$59
Bladder Infections (females, ages 12-65)	$69
Bronchitis (ages 10-65)	$59
Ear Infections	$59
Pink Eye & Styes	$59
Sinus Infections (ages 5+)	$59
Strep Throat (additional lab charges may apply)	$69
Swimmer's Ear	$59

Wellness & Prevention

Camp Physicals*	$59
Health Screening Package*	$59
Cholesterol Screening*	$39
Diabetes Screening*	$39
Hypertension Screening*	$29
Obesity Screening*	$29
Smoking Cessation*	
- Initial Visit	$29
- Follow Up Visits	$19

Additional Services

Ear Wax Removal	$59
Flu Diagnosis (ages 10-65)	$93
Mononucleosis	$69
Pregnancy Testing	$49
Suture Removal	$59
TB Testing*	$15

Prices relative to other sites of care

- Mehrotra and colleagues (2009) found lower costs per episode of care
  - » $110 at retail clinic
  - » $166 at physician office
  - » $156 at urgent care centers
  - » $570 at emergency department visit
- Similar prescription costs

4. Accessibility

- To what extent will the location of retail clinics promote access for underserved populations?

Retail clinics as a solution?

- "Moreover, low-cost, convenient clinics offer the best solution for improving access to care for the uninsured, individuals without a primary care physician and workers in need of routine care."[1]

- "If you're uninsured and seeking stop-gap care until you find coverage, you can triage your way to better health by understanding the tradeoffs of several care options. A retail clinic or urgent-care center may be a suitable fit, depending on the severity of your medical need and personal preferences."[2]

1. Herrick D, "Retail Clinics: Convenient and Affordable Care," National Center for Policy Analysis, January 14, 2010
2. Gerencher K, "Yes, the Uninsured Can Get Care," Wall Street Journal, February 14, 2010.

Geographic accessibility is associated with use of services

- Safety net providers → unmet medical need
- High quality/volume providers → greater use
- Food environment → rates of obesity
- Recreational resources → physical activity

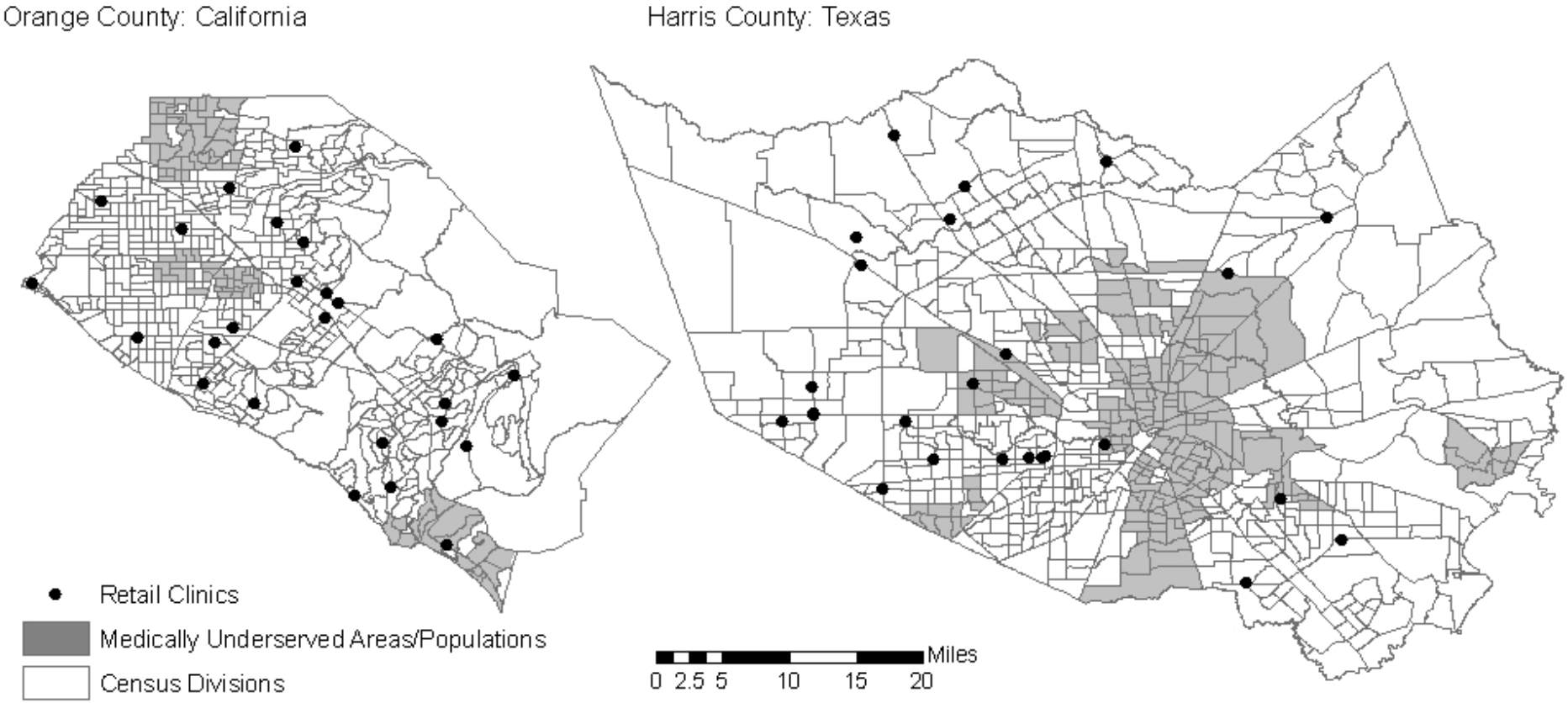
Are retail clinics more or less likely to be located in a Medically Underserved Area?

- MUA is a Federal designation by the Health Resources and Services Administration based on:
  - » Ratio of PCPs per 1,000 population
  - » Infant Mortality Ratio
  - » Percent of population with incomes below the poverty level
  - » Percent of population age 65+
- 930 retail clinics in 31 states, 247 counties, and 908 census tracts

Analysis

- Limited data to counties with at least 1 retail clinic
- Compare characteristics of census tract with at least 1 clinic versus those without a clinic
- Two different modeling techniques: GEE and random effects with nesting at the county level
- Models adjust for census-tract and county characteristics (e.g. population, % race/ethnicity, and % uninsured)

Figure 2: The Locations of Retail Clinics and Medically Underserved Areas/Populations



Comparing census tracts with and without retail clinics

	Census tracts with retail clinics	Census tracts without clinics
Number	908 tracts	28,631
MUA	13.6%	25.0%
Black	8.0	16.3
White	81.5	68.6
Hispanic	9.8	15.0
Asian	4.3	4.9
Poverty	7.0	12.4
Median Income	$58,544	50,559

Is the distribution of retail clinics purely a result of the underlying distribution of chain stores?

- 6 counties with the highest number of retail clinics
  - » Orange County, CA; Harris County, TX; Los Angeles County, CA; Palm Beach County, FL; San Diego County, CA; Cook County, IL
- Identify the chain stores with retail clinics
- Perform searches to obtain addresses of chain stores without retail clinics
- 135 retail clinics and 1293 without retail clinics

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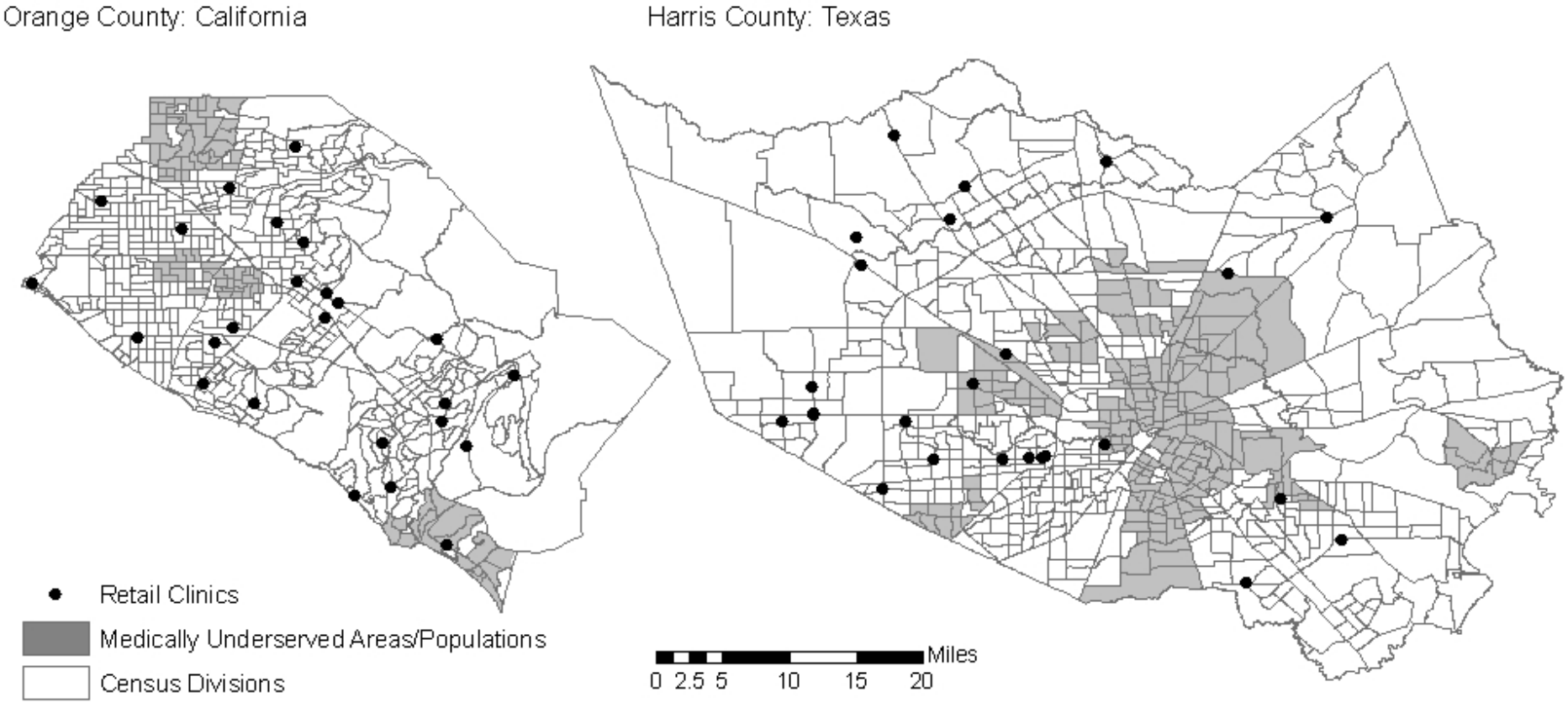
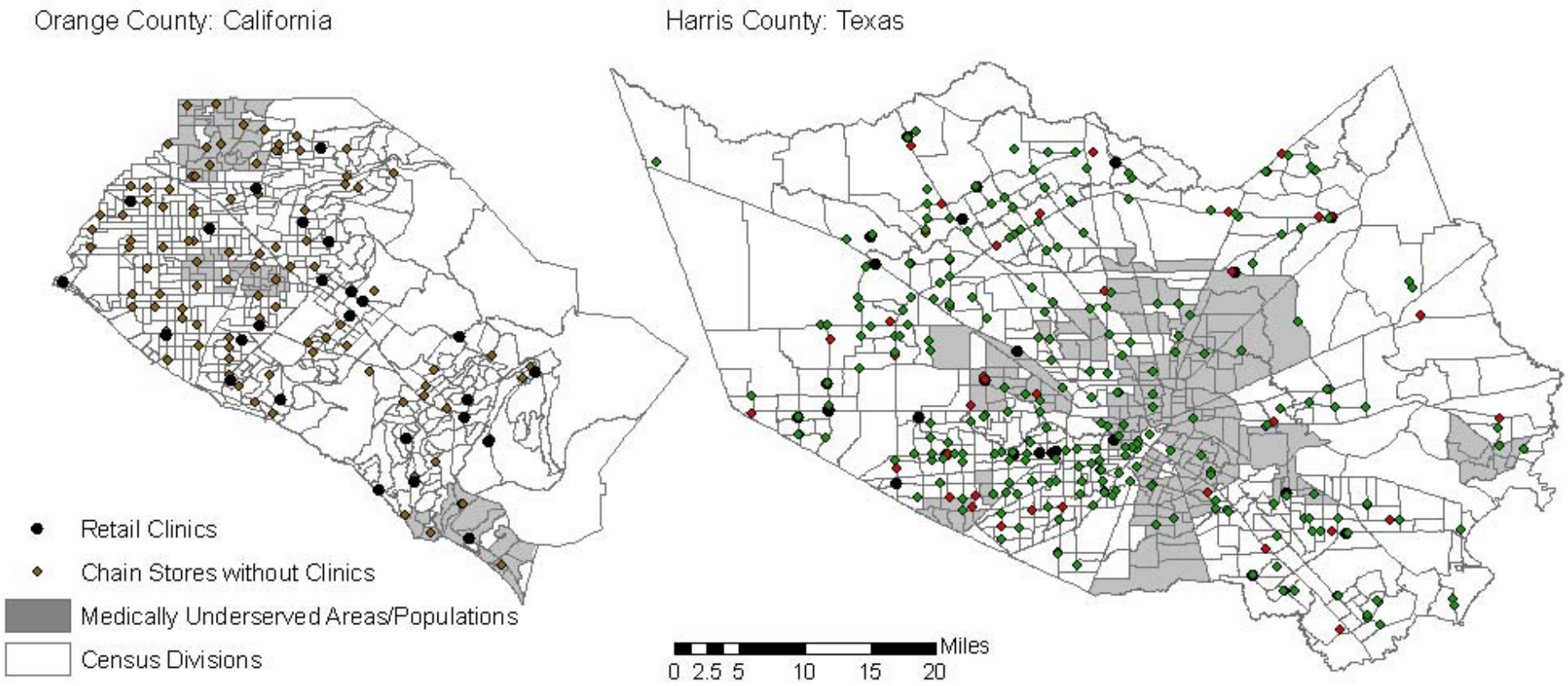


Figure 3: The Locations of Retail Clinics, Chain Stores and Medically Underserved Areas/Populations



Comparing stores with and without retail clinics

	Stores with retail clinics	Stores without retail clinics
Number	135 stores	1293
MUA	15.6%	31.6%
Black	5.4	12.5
White	76.7	63.3
Hispanic	15.9	25.9
Asian	7.6	8.0
Poverty	8.0	12.3
Median Income	$59,884	50,893

5. Acceptability

- “relationship of clients’ attitudes about personal and practice characteristics of providers to the actual characteristics of existing providers, as well as to provider attitudes about acceptable personal characteristics of clients”
- Perceptions among low income parents (Coker, 2009) and among retail clinic users (Wang, 2010)

Retail clinics and access to care

Dimensions	Definition	Retail clinics
1. Availability	Adequacy of supply	Number of clinics
2. Accommodation	Organization of resources	In stores, walk-in, night and weekend hours
3. Affordability	Prices related to clients' ability to pay	Insurance, posted prices, cheaper per episode of care
4. Accessibility	Location of supply	Distribution
5. Acceptability	Clients' attitudes towards providers and vice versa	Willingness to use and to use again

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Utilization

- Estimates of the percent who use retail clinics vary widely
- Users of retail clinics are more likely to:
  - » Pay out-of-pocket for their care
  - » Be uninsured
  - » Live in poorer neighborhoods
  - » Lack a usual source of care

Access and utilization

- To the extent that location correlates with access, the current distribution of clinics may not facilitate access for vulnerable populations.
- Current utilization may underestimate actual demand among vulnerable populations and the uninsured.

Practice patterns

- “[I]nadequate supply causes physicians to curtail preventive services or devote less than appropriate amounts of tie to each of their patients or use the hospital as a substitute for their short supply”

Principles of the Primary Care Medical Home

- "continuous and coordinated care throughout a patient's lifetime"
  - » improved access though open scheduling and enhanced hours
  - » team of providers
  - » focus on coordination among providers
  - » Electronic medical records (EMRs) integral
  - » changes to the payment system

Can retail clinics be integrated with medical homes?

- May depend on the type of the retail clinic
  - » Integrated—medical home and retail clinic owned and operated by same organization
  - » Hybrid—'co-branded'
  - » Independent—separate organizations

What characteristics promote integration and/or conflict?

- Staffing
- EHRs
- Coordination
- Financing

Future directions for integration

- Expanded scope of practice
- EHRs
- PCP shortage
- Health reform?

Summary

- Access to care is multifaceted
- Distribution of retail clinics is skewed towards wealthier populations which may present missed opportunities
- Integration with medical homes may promote access and coordination, though the feasibility may depend on the underlying model of care

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