

# Analyzing Needs & Service Gaps Using the Tri-County CHAIN Study

**Presentation to the  
Title I Steering Committee**

David Abramson  
Center for Applied Public Health  
Columbia University  
Nov 12, 2003

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# Topics to cover

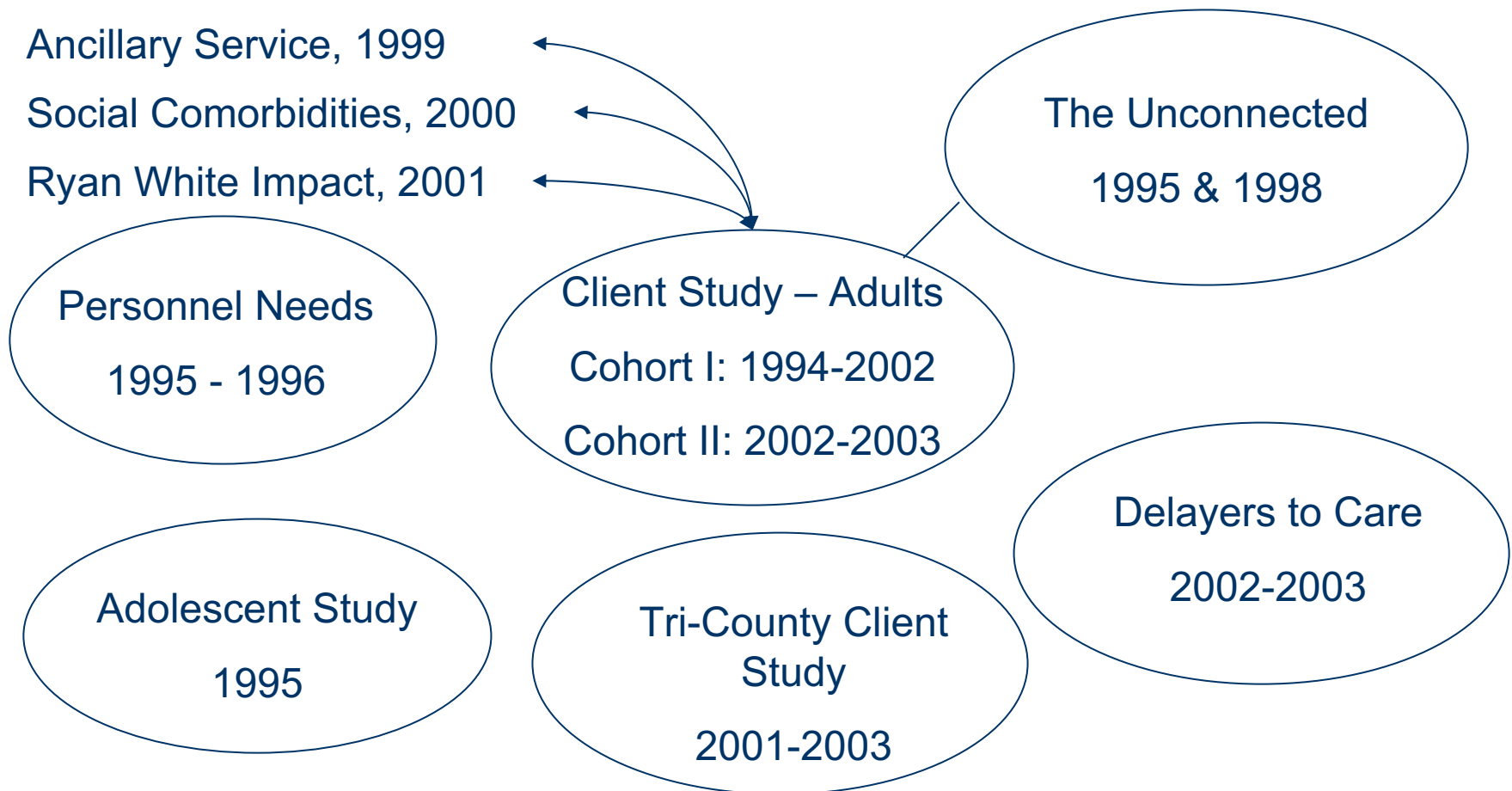
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- CHAIN overview and W2 update
- Estimating needs & service gaps
  - Definitions
  - Overall picture of needs & gaps
  - Estimating needs & gaps by service continuum
  - Subgroup comparisons
- Factors contributing to needs

# Research Team

- Tri-County CHAIN Project, Columbia University
  - David Abramson, Study Director; Barbara Bennet, Field Director; Tasha Stehling, Data Manager; Rachel Ferat, Office Manager & Research Assistant; Sofia Luyando, Rose Rivera, Elizabeth Romero, Interviewers; Sandra Smartt; Dave Hunter, Data Editors
- Technical Review Team -- MHRA, NYC DOHMH, Office of AIDS Policy, HIV Planning Council, Westchester DOH
  - Mary Ann Chiasson, DrPH, MHRA (chair); Angela Aidala, PhD (Columbia); Ken Butler, PWA Advisory Group; Robert Cordero, HIV Planning Council; JoAnn Hilger, NYC DOHMH; Julie Lehane, PhD, Westchester County DOH; Peter Messeri, PhD, Columbia; Jennifer Nelson, MHRA
- WDOH: Tom Petro, Julie Lehane, Basil Reyes, Renee Recchia
- Provider Advisory Group
  - Claire Brazil, Liz Lacy, Rob Maher, Kay Scott, Amy Sucich, Scott Sullam, Pat Taddeo

# CHAIN studies



# Evaluation Objectives

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- To recruit and maintain a representative cohort of HIV positive adults in the system of care in the Tri-County region
- To assess the system of HIV care – both health and social services – from the perspective of people living with HIV
- To report on unmet needs, service utilization trends, and outcomes to policy-makers, providers, consumers, and advocates

# CHAIN Data & Methodology

- Randomized sample recruitment of 398 participants at 32 sites among 28 agencies
- Representative of estimated 1,500 HIV+ in Tri-County care system
- At Wave 2 follow-up, 47 of 398 had died, moved, or were otherwise ineligible
- As of Nov 11<sup>th</sup>, 290 of 351 eligible participants (83%) interviewed for Wave 2 follow-up

# Cohort Representativeness

	People Living with AIDS, Tri-County† as of Dec. 31, 2001	CHAIN Cohort 2001 - 2002
	n	
	2,186	398
<b>MALE</b>	1,476	204
<i>Non-Hispanic White</i>	32%	27%
<i>Non-Hispanic Black</i>	48%	43%
<i>Hispanic</i>	20%	29%
<i>Other</i>	1%	1%
<b>FEMALE</b>	710	194
<i>Non-Hispanic White</i>	20%	14%
<i>Non-Hispanic Black</i>	62%	57%
<i>Hispanic</i>	18%	26%
<i>Other</i>	1%	3%

† NYS DOH HIV/ AIDS Surveillance Program

# Service areas

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- Medical care
- Case management
- Housing
- Mental health
- Drug treatment
- Transportation

# What is a Service Gap?

- The difference between the “need” for service, and the receipt of service
- Need may be “subjective,” in that client explicitly wants service (AKA “demand”)
  - *Ex: “In the last 6 months, have you had a problem or needed assistance with housing?”*
- Need may be “objective,” in that client’s circumstances suggest a need for a service, even if client doesn’t demand it
  - *Ex: Client has had at least one episode of homelessness, being doubled up, or being unstably housed in past 6 mo.*

# Thinking about Service Gaps

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- Is there a service gap?
- How large is the gap – what proportion of the population does it affect?
- Is the service gap disproportionately felt by some groups and not others?
- What's driving the service gap? What programs or policies can narrow the gap?

# Comparison Groups

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- Geographic – Urban Westchester, Suburban Westchester/Putnam, Rockland; zip codes; health planning regions
- Sociodemographic – gender; race/ethnicity
- Risk group – HIV risk; drug users; unstably housed
- Health status – insurance status; t-cell

# Calculating a Service Gap Proportion



# of people not receiving a needed service

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Total # of people needing the service

# Overview of Needs & Gaps

Area	# with need	% of total n=398 with need	# with service gap	Among those with need, % with service gap
Medical Care	398	100%	119	30%
Case Mgmt	332	83%	85	26%
Housing	200	50%	111	56%
Mental Health	159	40%	76	48%
AOD	252	63%	190	76%
Transportation	128	32%	85	67%

# Medical Care Needs

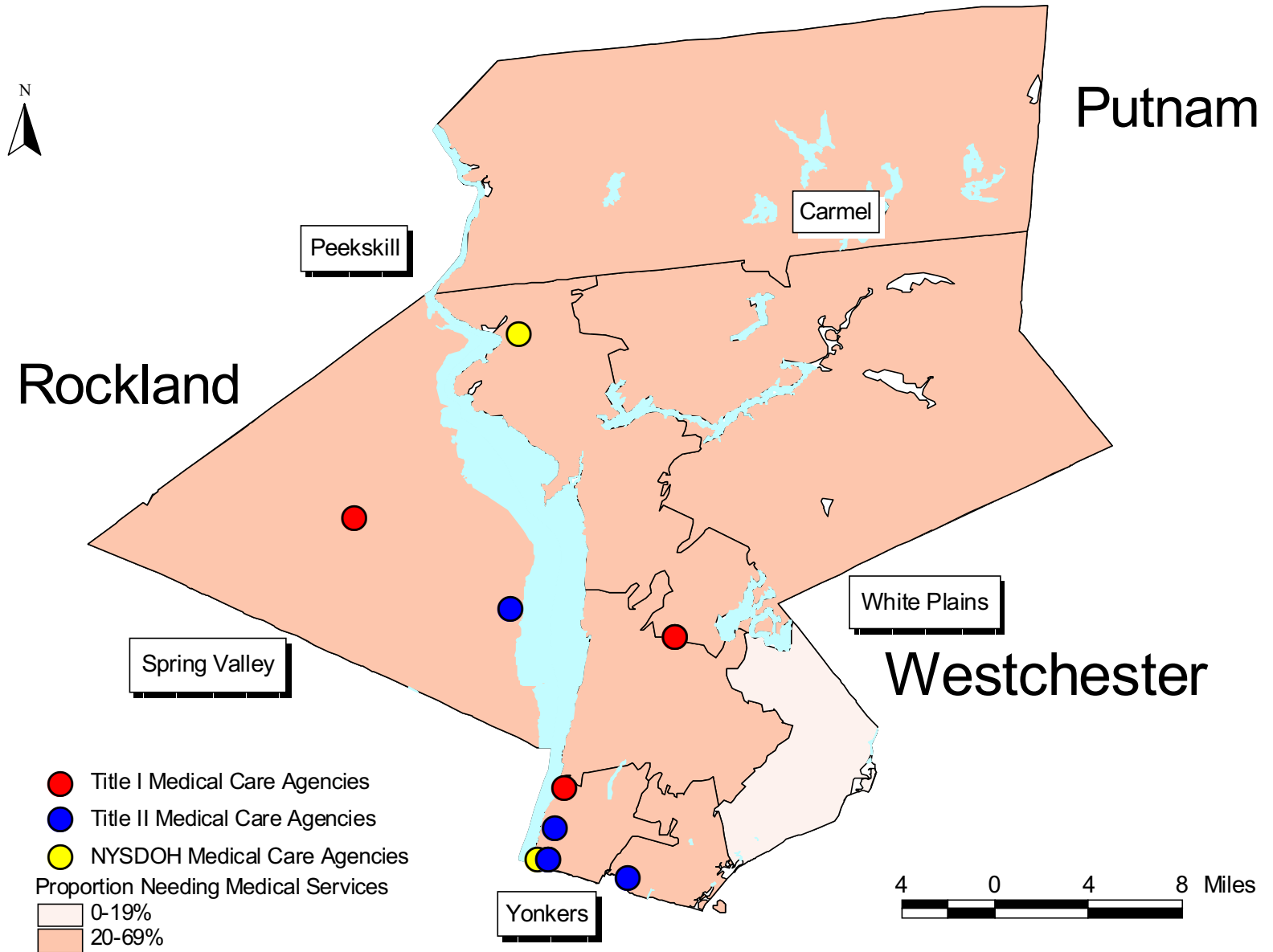
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- Goal: Care should be comprehensive (WHO definition), client should be informed of health decisions, and treatment adherence services should be available as needed
- Clients also reported medical procedures not covered by insurance: VL tests, diagnostic tests, radiography, hospitalization, MH

# Definition of Medical Care Needs & Services

Area	Need	Service Gap
Comprehensive Medical Care	HIV seropositivity	Primary medical provider does not provide ALL of the following: (1) Routine check ups, vaccinations, (2) Source of info/advice for health concerns, (3) 24-hour access for med emergencies
Consumer Education	HIV seropositivity	Respondent doesn't know t-cell count, OR didn't understand doctor's directions regarding most recent medication
Treatment Adherence	OBJ: Not completely adherent to HIV medications	Not receiving treatment adherence service

# RW Health Services & Comprehensive Medical Need

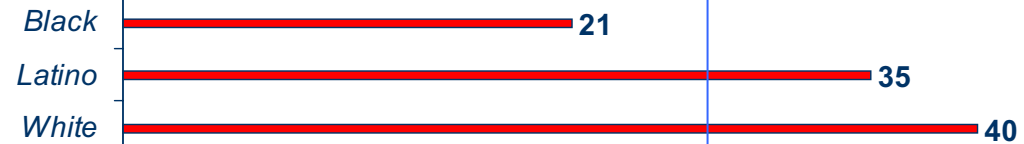


# Need for Comprehensive Med Care

## GENDER



## ETHNICITY\*



## HIV RISK



## GEOGRAPHY

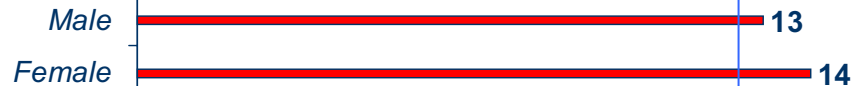


\* significant

0 5 10 15 20 25 30 35 40 45

# Need for Consumer Education

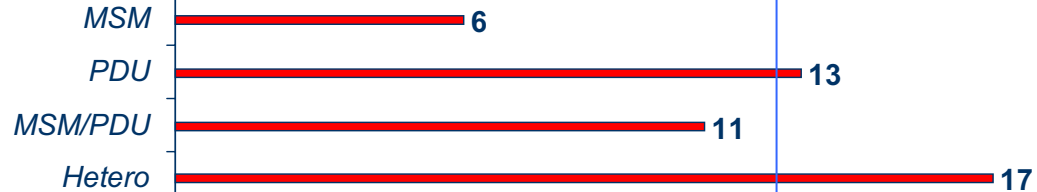
## GENDER



## ETHNICITY



## HIV RISK



## GEOGRAPHY



\* significant

0 2 4 6 8 10 12 14 16 18 20

# Need for Treatment Adherence

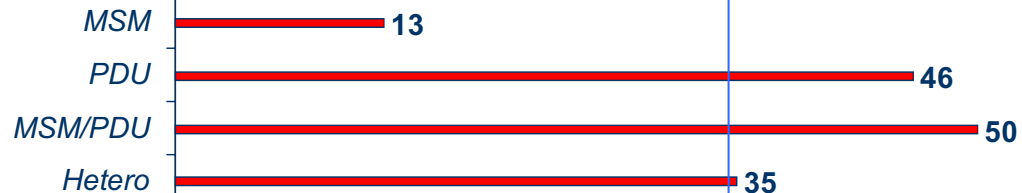
## GENDER\*



## ETHNICITY



## HIV RISK\*



## GEOGRAPHY



\* significant

0 10 20 30 40 50 60

# Gaps in Treatment Adherence

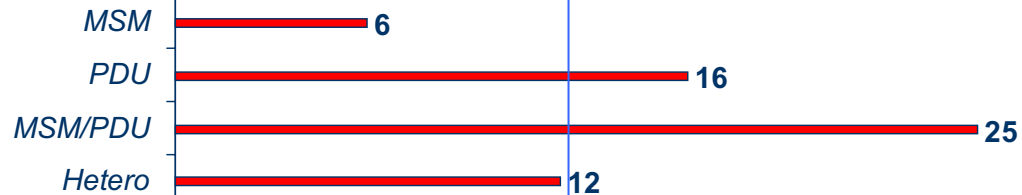
## GENDER



## ETHNICITY



## HIV RISK



## GEOGRAPHY



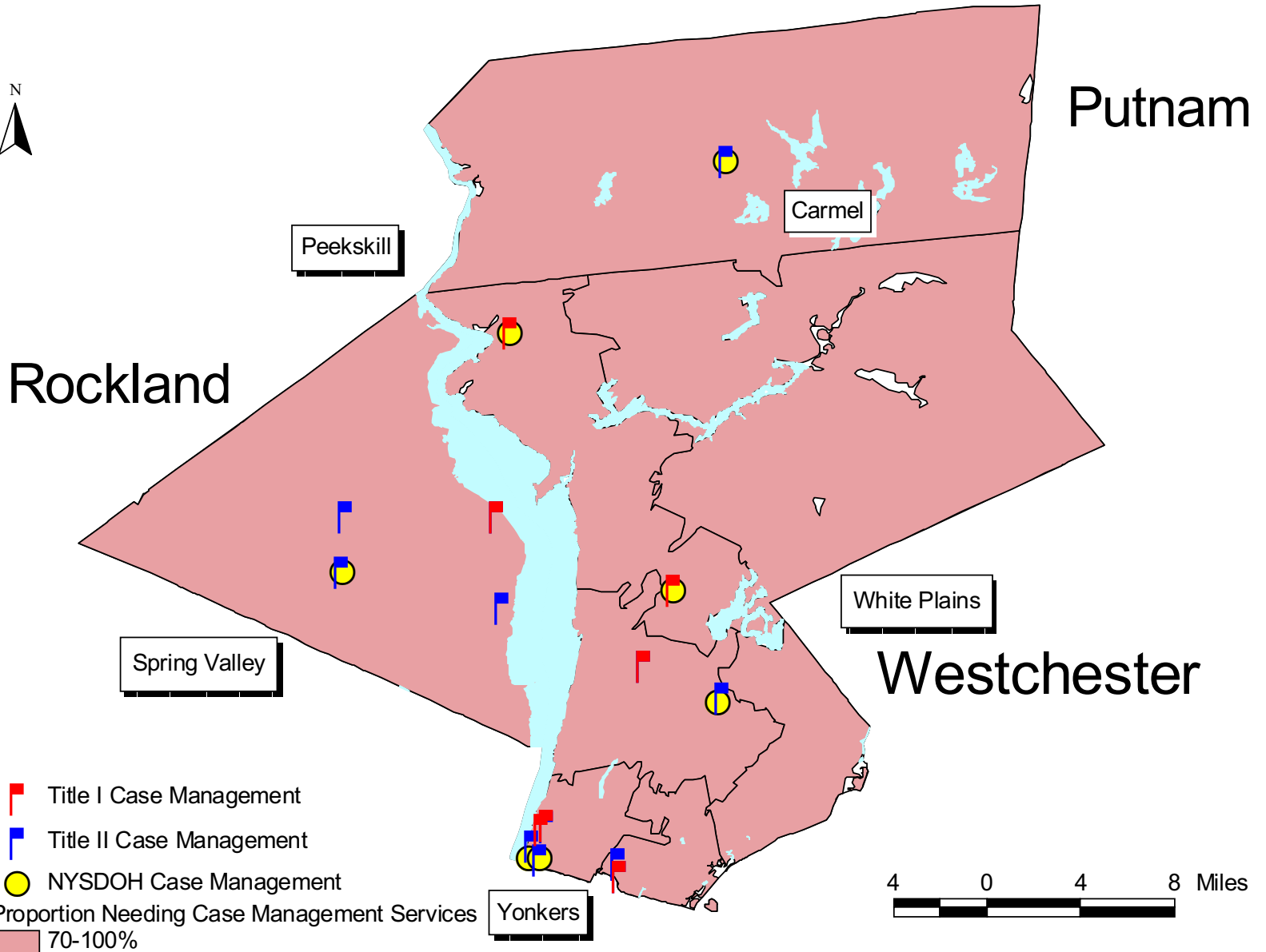
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# Definition of Case Mgmt Needs & Services

CM Model	Need	Service Gap
Medical Referral	(1) Respondent reported no primary medical provider at time of HIV diagnosis, OR	No CM assisted in getting or referring to specific medical services in past 6 months
Social Work	(2) Respondent delayed or didn't get medical or social service because didn't know where to go, OR	No CM developed a care plan, assisted in getting or referring client to social services, or helped fill out forms for benefits or entitlements in past 6 months
Counseling	(3) Respondent delayed or didn't get medical or social service because couldn't get transportation	No CM counseled client regarding personal life, drug or alcohol problems, or practicing safer sex, or periodically checked up on client in past 6 months

# RW Case Management Services & Needs



# Need for Case Management

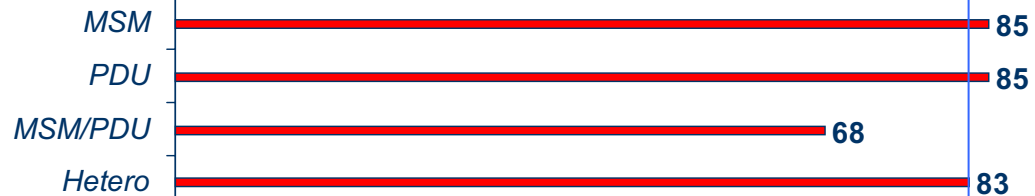
## GENDER



## ETHNICITY\*



## HIV RISK



## GEOGRAPHY\*



\* significant

0 10 20 30 40 50 60 70 80 90 100

# Gaps in CM: Medical Model

## GENDER\*



## ETHNICITY



## HIV RISK



## GEOGRAPHY



\* significant

0 10 20 30 40 50 60 70 80

# Gaps in CM: Social Work Model

## GENDER\*



## ETHNICITY



## HIV RISK



## GEOGRAPHY



\* significant

0 10 20 30 40 50 60

# Gaps in CM: Counseling Model

## GENDER



## ETHNICITY



## HIV RISK



## GEOGRAPHY



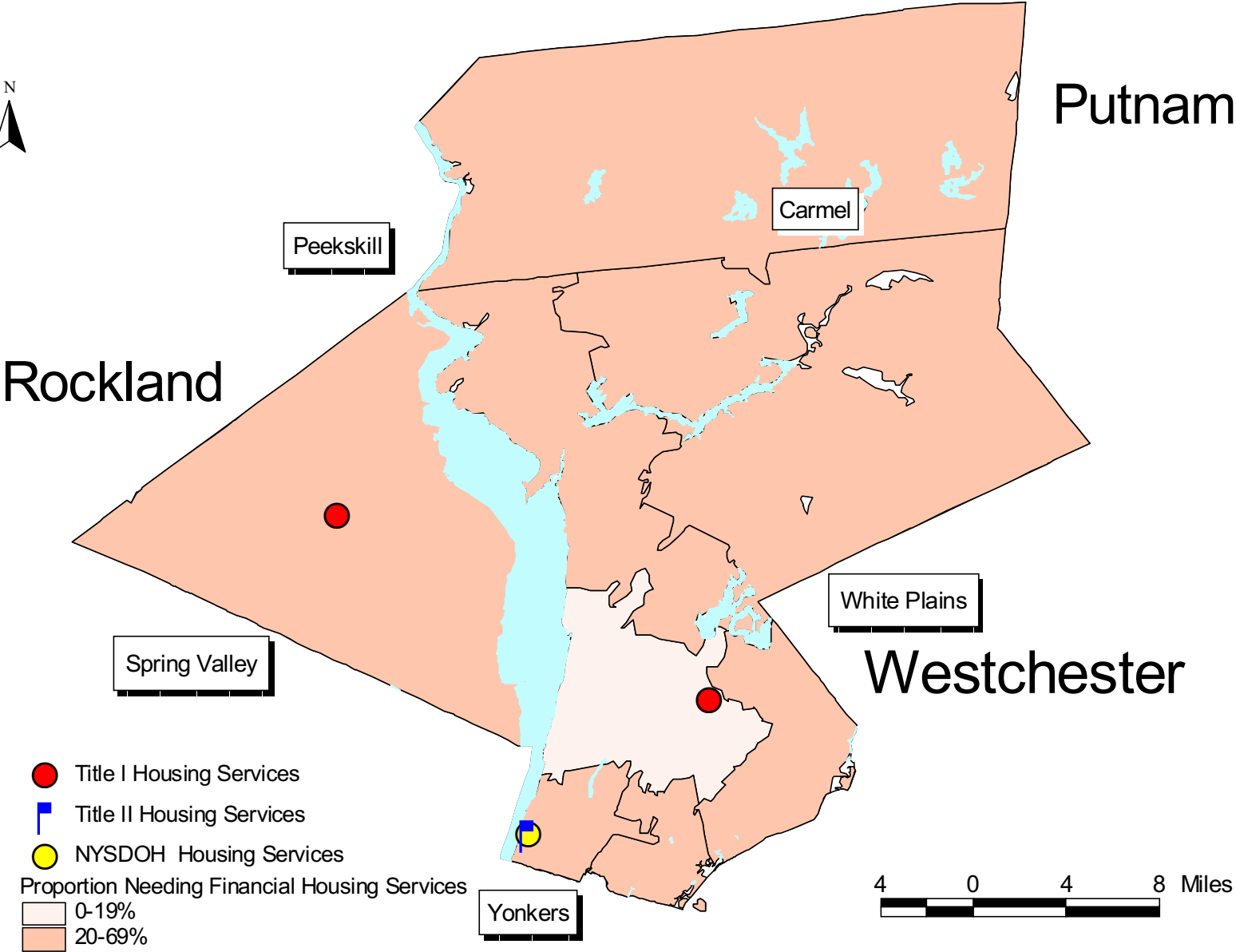
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# Definition of Housing Needs & Services

Area	Need	Service Gap
Financial housing issues	(1) Fairly often or very often did not have enough money for rent, OR (2) Reported that s/he needed help with eviction, paying rent, or maintaining rental subsidy	No housing service received, OR client not living in specialized AIDS housing
Permanent housing issues	(1) At least one episode of unstable housing or doubled-up in past six months, OR (2) Reported that s/he needed help related to homelessness, critical need to move, physical access issues, poor housing quality, or dangerous neighborhood	

# RW Housing Services & Financial Housing Need



# Financial Housing Needs

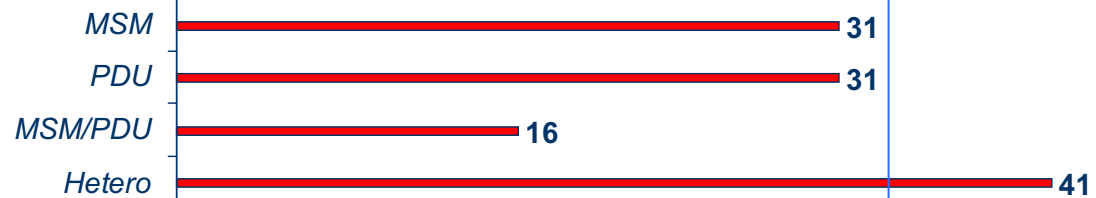
## GENDER\*



## ETHNICITY



## HIV RISK



## GEOGRAPHY



\* significant

0 5 10 15 20 25 30 35 40 45

# Gaps in Financial Housing Services

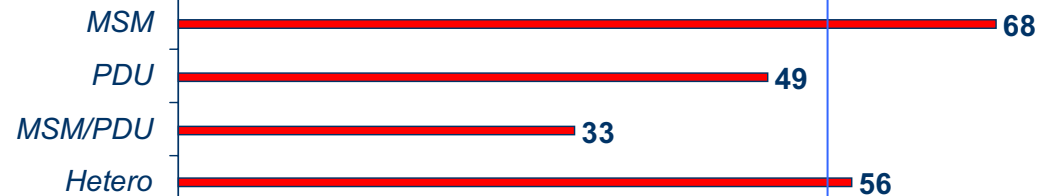
## GENDER



## ETHNICITY



## HIV RISK



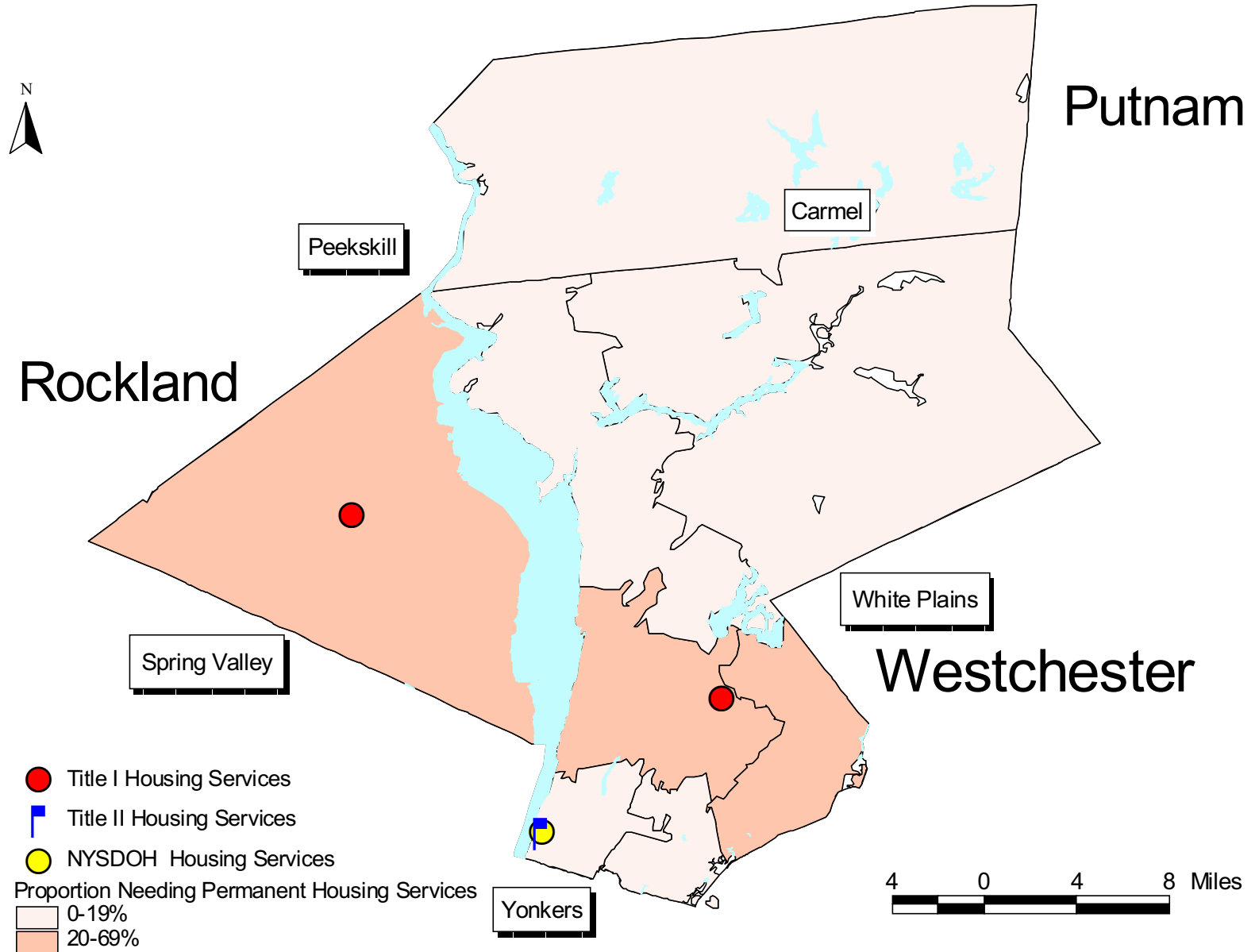
## GEOGRAPHY



\* significant

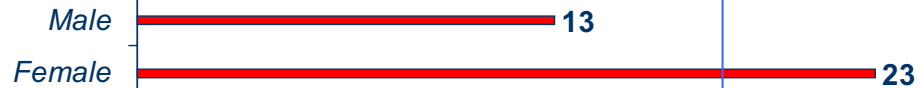
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# RW Housing Services & Permanent Housing Need

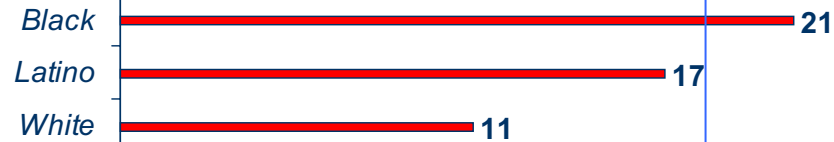


# Permanent Housing Needs

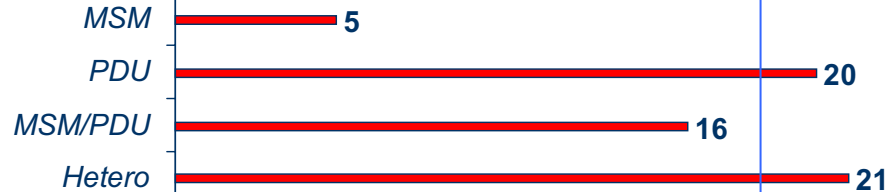
## GENDER\*



## ETHNICITY



## HIV RISK\*



## GEOGRAPHY



\* significant

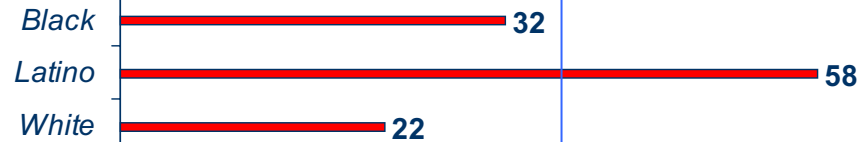
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# Gaps in Permanent Housing Services

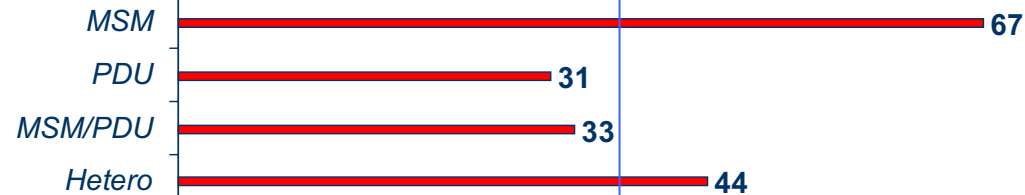
## GENDER



## ETHNICITY



## HIV RISK



## GEOGRAPHY



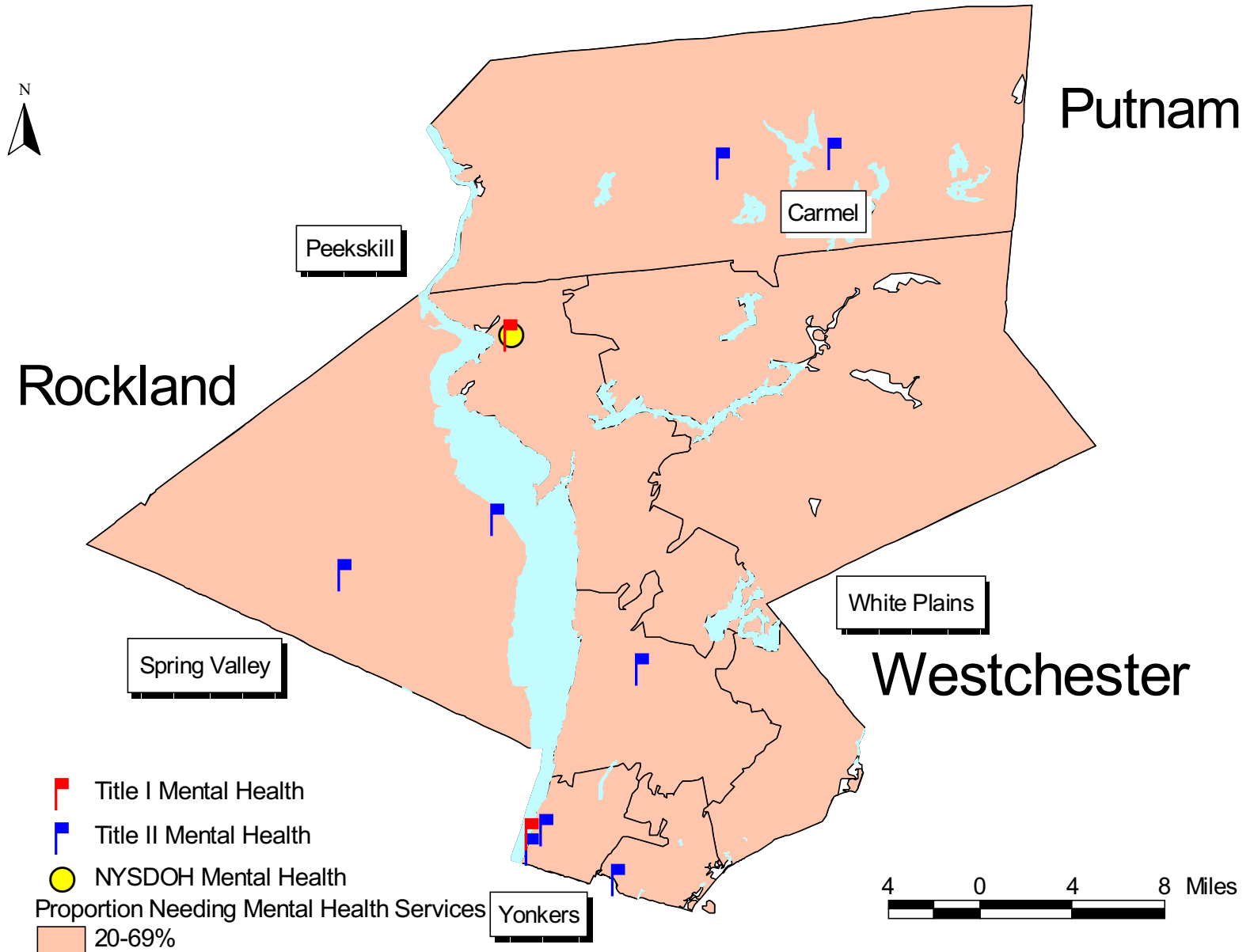
\* significant

0 10 20 30 40 50 60 70 80

# Definition of Mental Health Needs & Services

Need	Service Gap
(1) Very low mental health score on standardized scale (Medical Outcomes Study SF-36 “mcs” scale), OR (2) Reported that needed help with emotional or psychological problems	Respondent did not report professional (psychiatrist, psychologist, therapist) or supportive (support group, peer counselor, clergy) mental health service in past 6 months

# RW Mental Health Services & Need

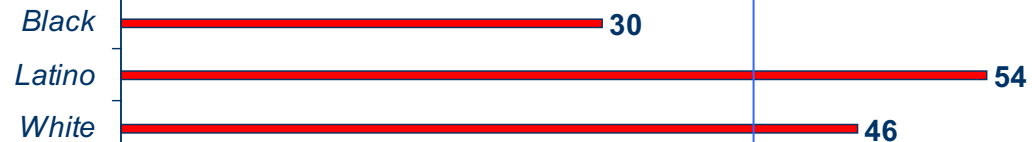


# Mental Health Needs

## GENDER\*



## ETHNICITY\*



## HIV RISK



## GEOGRAPHY\*



\* significant

0 10 20 30 40 50 60

# Mental Health Gaps

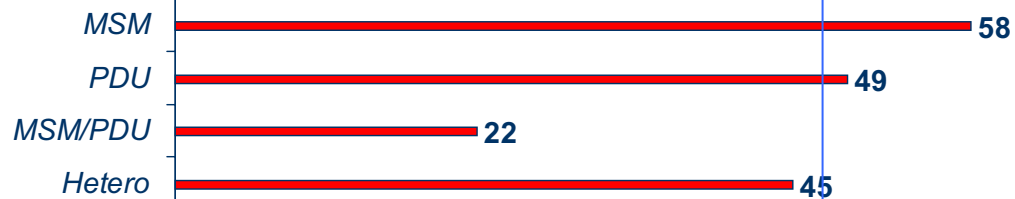
## GENDER



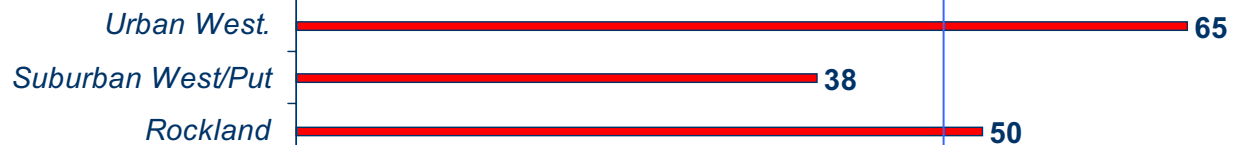
## ETHNICITY



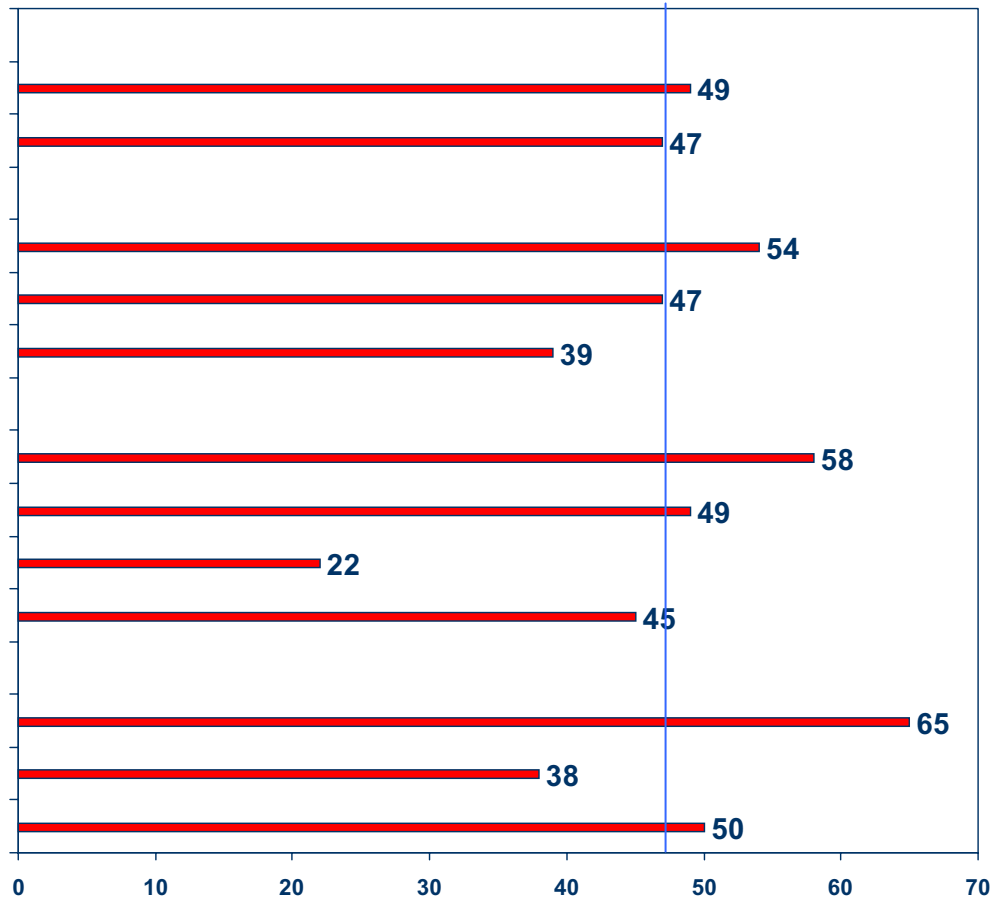
## HIV RISK



## GEOGRAPHY



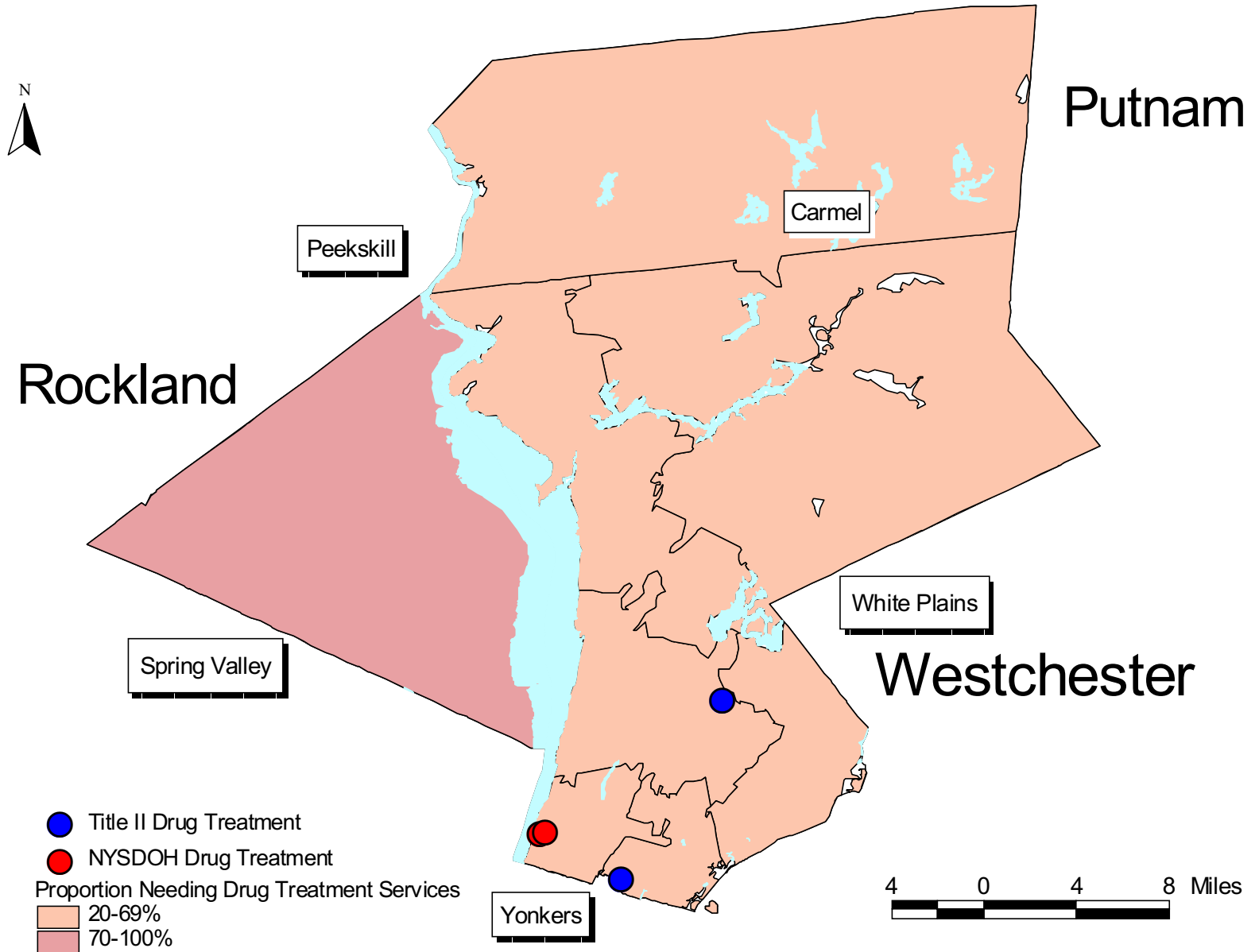
\* significant



# Definition of Drug Tx Needs & Services

Need	Service Gap
(1) Current drug or heavy alcohol use, OR (2) Client said that treatment or further treatment is “considerably” or “extremely” important	No reported therapeutic or self-help AOD treatment in prior 6 months

# RW Drug Treatment Services & Need



# AOD Needs

## GENDER



## ETHNICITY\*



## HIV RISK



## GEOGRAPHY



\* significant

0 10 20 30 40 50 60 70 80 90

# AOD Gaps

## GENDER



## ETHNICITY



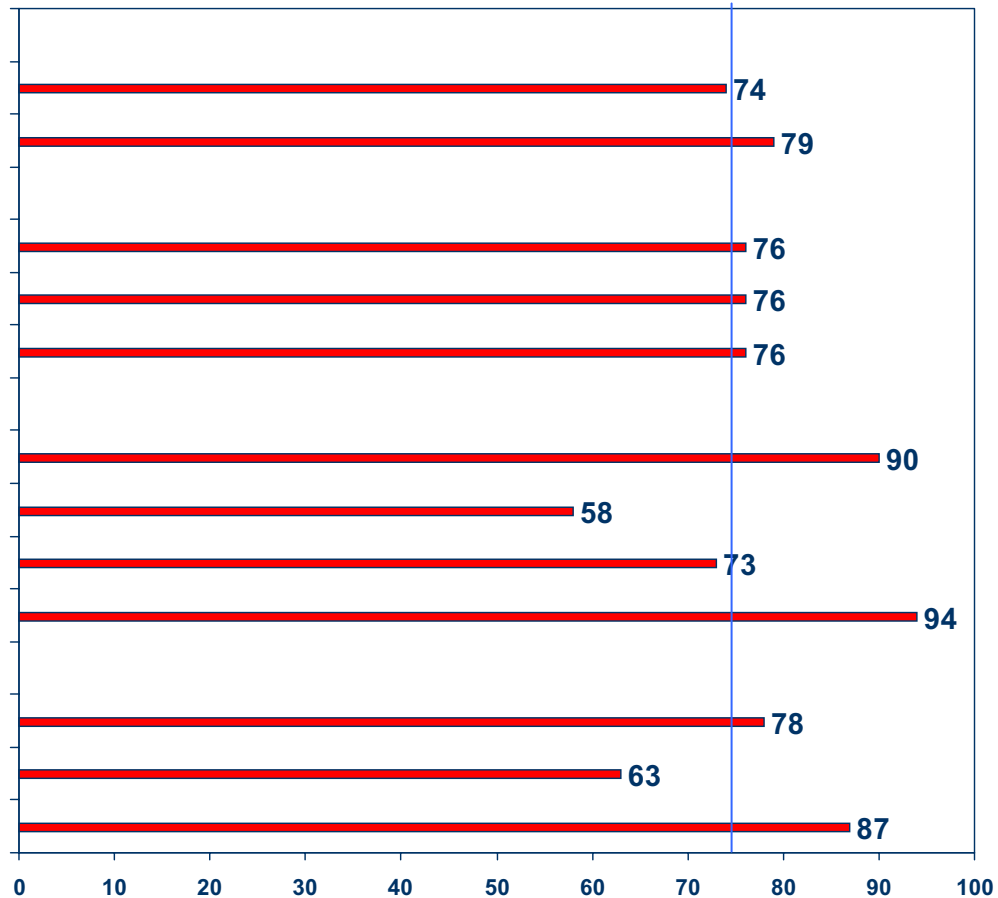
## HIV RISK\*



## GEOGRAPHY\*



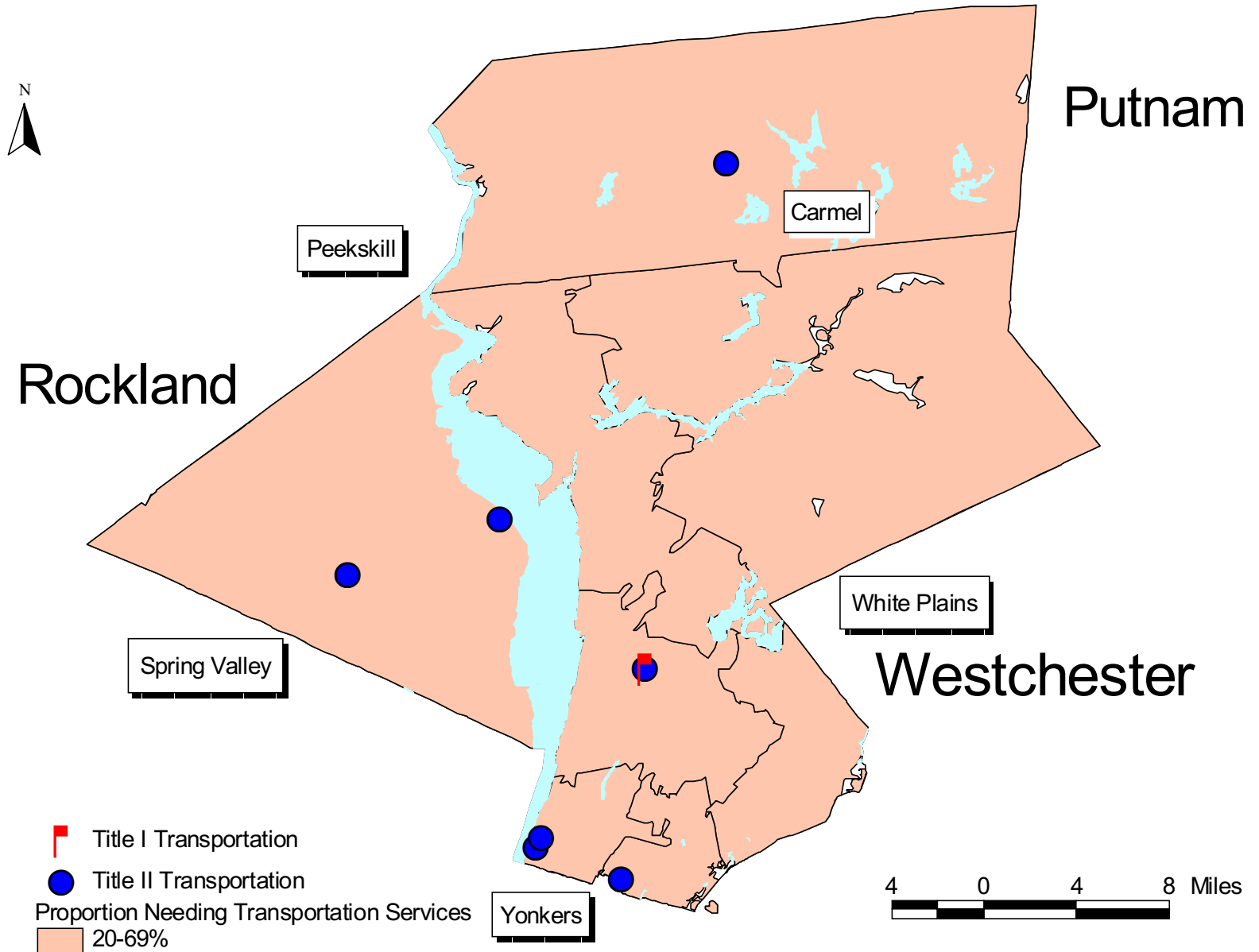
\* significant



# Definition of Transport Needs & Services

Need	Service Gap
(1) Delayed or didn't get medical or social service because couldn't get transportation, OR  (2) Reported that s/he needed help or assistance with transportation	No transportation received in prior 6 months

# RW Transportation Services & Need



# Transportation Needs

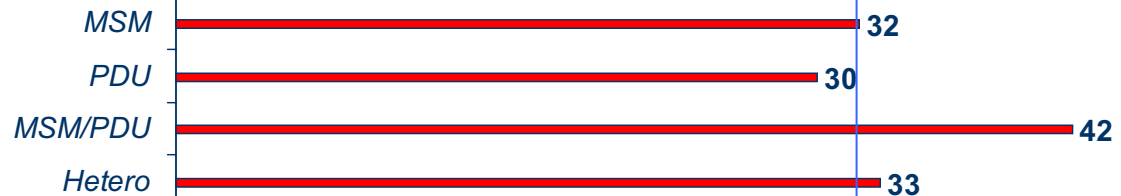
## GENDER\*



## ETHNICITY



## HIV RISK



## GEOGRAPHY



\* significant

0 5 10 15 20 25 30 35 40 45

# Transportation Gaps

## GENDER



## ETHNICITY



## HIV RISK



## GEOGRAPHY



\* significant

0 10 20 30 40 50 60 70 80

# What factors predict need? – A multivariate regression analysis

- Sociodemographics: gender, race/ethnicity, income, education, geography, years since diagnosis, access to a car, high perceived stigma, age group, kids in the household
- Risk: unstably housed, drug use, MSM, low mental health
- Health: t-cell counts, recent OI, insurance, delayer to initial care

# What predicts need for comprehensive medical care?

	<u>Adj. OR</u>
-- Low mental health score	<b>1.9*</b>

\*p<.05

\*\*p<.01

\*\*\*p<.001

# What predicts need for treatment adherence service?

	<u>Adj. OR</u>
-- Unstably housed	1.7*

\*p<.05

\*\*p<.01

\*\*\*p<.001

# What predicts need for consumer education?

	<u>Adj. OR</u>
-- Less than HS education	<b>3.8**</b>
-- Diagnosed 4-8 years ago	<b>2.9*</b>
-- Unstably housed	<b>2.0*</b>
-- T-cell >500	<b>5.2*</b>

\*p<.05

\*\*p<.01

\*\*\*p<.001

# What predicts need for financial housing issues?

	<u>Adj. OR</u>
-- Black	<b>2.2*</b>
-- Latino	<b>2.1*</b>
-- High household income	<b>0.4*</b>
-- Rockland resident	<b>2.6**</b>
-- Diagnosed 4-8 years ago	<b>1.8*</b>
-- Access to a car	<b>2.1*</b>
-- Age 35-50	<b>2.7**</b>
-- Low mental health score	<b>1.7*</b>
-- Private medical insurance	<b>0.1*</b>

\*p<.05

\*\*p<.01

\*\*\*p<.001

# What predicts need for permanent housing?

	<u>Adj. OR</u>
-- Rockland resident	3.0**
-- MSM	0.3*

\*p<.05

\*\*p<.01

\*\*\*p<.001

# What predicts need for case management?

	<u>Adj. OR</u>
-- Black	<b>0.4*</b>
-- Diagnosed 4-8 years ago	<b>2.4*</b>
-- Rockland resident	<b>3.9*</b>
-- 35-49 years old	<b>2.4*</b>
-- MSM	<b>0.4*</b>

\*p<.05

\*\*p<.01

\*\*\*p<.001

# What predicts need for mental health services?

	<u>Adj. OR</u>
-- Men	<b>0.4**</b>
-- Black	<b>0.2**</b>
-- Unstably housed	<b>0.3*</b>
-- Less than HS education	<b>0.3*</b>
-- Rockland resident	<b>0.1*</b>
-- Former drug user	<b>3.3*</b>
-- Current drug user	<b>9.4*</b>
-- MSM	<b>3.9*</b>

\*p<.05

\*\*p<.01

\*\*\*p<.001

# What predicts need for drug or alcohol treatment?

	<u>Adj. OR</u>
-- Black	<b>2.2*</b>
-- Latino	<b>2.28</b>
-- Diagnosed 4-8 years ago	<b>0.6*</b>
-- Rockland resident	<b>2.1*</b>
-- High perceived stigma	<b>1.6*</b>
-- Low mental health	<b>0.5*</b>

\*p<.05

\*\*p<.01

\*\*\*p<.001

# What predicts need for transportation?

	<u>Adj. OR</u>
-- Male	<b>0.4*</b>
-- Access to a car	<b>0.2***</b>
-- Age 20-34	<b>0.3*</b>
-- High perceived stigma	<b>2.0*</b>
-- Delayed entering med care	<b>1.7*</b>

\*p<.05

\*\*p<.01

\*\*\*p<.001

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