

Roles of Race and Residence on the Incidence of Sexually Transmitted Infections in South Carolina

Improving STD Prevention and Care Through Partnerships

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Rural and Minority Health Research Center

Our mission is to illuminate and address the problems experienced by rural and minority populations in order to guide research, policy, and related advocacy.



Racial, ethnic, and rural/urban disparities in HIV and Sexually Transmitted Infections in South Carolina

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Background

- Sociodemographic, economic, and contextual disparities continue to prevail for STIs and HIV
- Racial and ethnic minority populations, particularly Black populations, experience incidence rates for STIs that are around six times higher than White populations
- Black populations also accounted for almost one-third of chlamydia, syphilis, and gonorrhea cases although they make up only 12% of the US population in 2020.⁴
- HIV incidence rate among Black populations in the US was eight times higher compared to White populations
- STIs have also disproportionately increased among rural residents compared to urban residents in the past 20 years.⁵

Background

- Potential drivers of disparities in STIs and HIV incidence and prevalence⁵⁻⁸ :
 - poverty
 - structural inequities (e.g., in housing, transportation, education)
 - mistrust in healthcare providers
 - barriers to preventive care and testing
 - lack of access to comprehensive sexual education
 - concerns about confidentiality and quality of care
 - health beliefs and cultural factors
 - geographic residence (rurality) → challenges to accessing care due to structural racism

Objectives

- To estimate the associations between chlamydia, gonorrhea, syphilis, HIV, race and ethnicity, and rurality among Medicaid beneficiaries in South Carolina
- Why Medicaid?
 - Medicaid has been identified as a significant payor of claims for STIs.⁹
- Why South Carolina?
 - Demographically unique state with almost twice the number of Black residents as well as rural residents compared to national averages
 - Among the top five states with the highest incidence rates of STIs in the US.¹⁰
 - Target state within the federal EHE plan due to persistently high HIV incidence rates.¹¹

Methods

- Study design and data source
- Retrospective study using South Carolina Medicaid administrative claims data
- Most recent and complete state fiscal years of data available for our study (fiscal year 1: July 2019 to June 2020; fiscal year 2: July 2020 to June 2021)
- All Medicaid beneficiaries with at least one medical claim during the study period were included
- Using a unique identifier, we identified all claims for unique beneficiaries across each fiscal year

Methods

- Outcomes
- Number and frequencies of chlamydia, gonorrhea, syphilis, and HIV claims
- Any patient with at least one claim for a relevant diagnosis throughout the two-year study period was considered to have one of these diseases
- The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and Current Procedural Terminology (CPT) codes across all available diagnostic codes to identify chlamydia and gonorrhea and only the primary diagnosis for syphilis and HIV
- Current Procedural Terminology (CPT) codes for services and procedures related to these diseases were used in conjunction with ICD-10-CM codes to increase accuracy when available

Methods

- Main Independent Variables
- Two main independent variables of interest :
- Race/ethnicity → non-Hispanic white, non-Hispanic Black, and other/unknown (this is how it was available in the claims data)
- Rurality → dichotomous (0=Urban, 1=Rural) according to the United States Department of Agriculture Economic Research Service rural-urban commuting area (RUCA) codes

Methods

- Covariates

- Patient-level

- Age
- Gender
- Six most common comorbidities across all available diagnoses and all claims (congestive heart failure, hypertension, obesity, COPD, depression, and substance and alcohol use).
- Overall comorbidity score for each patient based on the Elixhauser Comorbidity index

- County-level

- Poverty rates
- Unemployment rates
- Medical underserved area index scores
- Sociodemographic composition of each county (racial composition, gender composition, age-groups composition).

Methods

- Statistical analyses
- Descriptive analysis to characterize the study population
- Stratified analyses (bivariate) by the four outcomes of interest to compare characteristics of individuals with and without the three STIs and HIV
- Multivariable logistic regressions (four in total: one for each outcome) at the patient level to estimate the association of the outcomes and the two main independent variables of interest (race/ethnicity, rurality)
- All multivariable models controlled for the covariates mentioned above

Results

- 158,731 Medicaid beneficiaries with at least one medical claim during the study period in 46 counties overall
- 9,985 (6.3%) beneficiaries had at least one encounter for chlamydia (1,089.3 per 100,000)
- 5,009 (3.2%) for gonorrhea (532.5 per 100,000)
- 870 (0.5%) for syphilis (77.3 per 100,000)
- 1,281 (0.8%) for HIV (129.5 per 100,000)

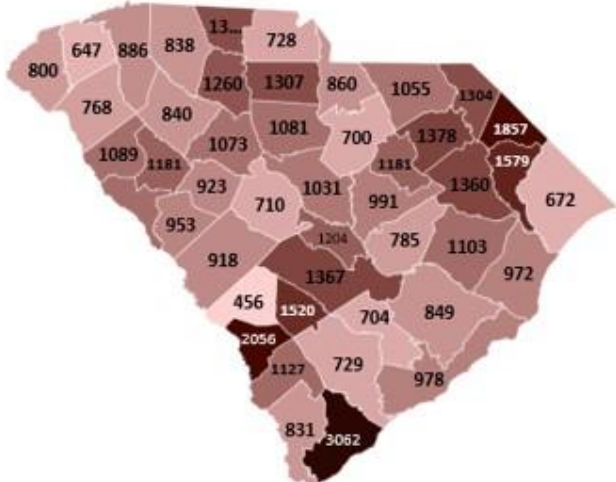
- Among the top 15 counties with higher population-adjusted rates across all STIs and HIV, the majority were rural counties

Table 1: Descriptive characteristics of Medicaid beneficiaries and stratified analyses by STI and HIV incidence in South Carolina from July 2019 to June 2021

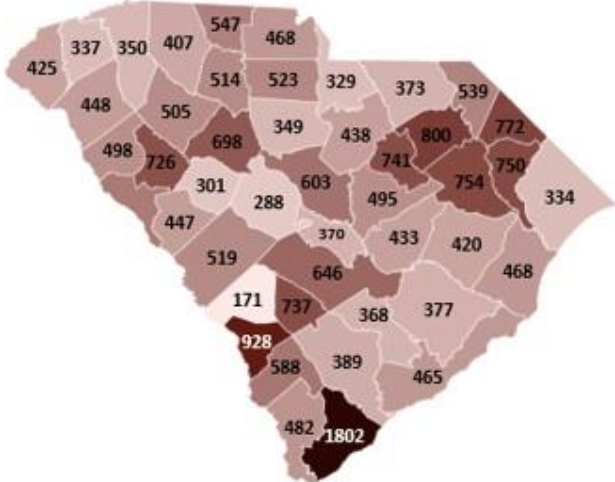
	All	Chlamydia		Gonorrhea		Syphilis		HIV	
		Yes	No	Yes	No	Yes	No	Yes	No
N	158,731	9,985	148,746	5,009	153,722	870	157,861	1,281	157,450
%		6.3%	93.7%	3.2%	96.8%	0.5%	99.5%	0.8%	99.2%
Age – average (SD)	27.0 (10.1)	22.4 (6.2)	27.3 (10.4)	24.2 (7.6)	27.1 (10.3)	33.2 (14.1)	26.9 (10.2)	45.8 (12.8)	26.8 (10.1)
Age groups									
0 to 17	17.3	20.9	17.1	16.7	17.3	5.4	17.4	1.3	17.4
18 to 24	29.9	52.0	28.4	44.9	29.4	25.1	29.9	6.0	30.1
25 to 34	33.2	22.7	33.9	29.6	33.4	34.9	33.2	16.1	33.4
35 to 44	13.5	3.6	14.2	6.8	13.7	14.9	13.5	19.4	13.5
45+	6.0	0.8	6.4	2.0	6.2	19.7	5.9	57.2	5.6
Gender									
Male	13.4	11.4	13.5	15.0	13.3	35.5	13.3	48.3	13.1
Female	86.6	88.6	86.5	85.0	86.7	64.5	86.7	51.7	86.9
Race/ethnicity									
Non-Hispanic White	24.5	17.2	25.0	15.6	24.8	18.8	24.5	8.2	24.6
Non-Hispanic Black	42.6	50.4	42.1	53.5	42.2	46.8	42.6	56.4	42.5
Other	32.9	32.5	32.9	30.9	33.0	34.4	32.9	35.4	32.9
Area (location) of residence									
Urban	66.6	61.4	66.9	62.2	66.7	73.2	66.5	69.1	66.5
Rural	33.4	38.6	33.1	37.8	33.3	26.8	33.5	30.9	33.5
Elixhauser comorbidity index									
Average (SD)	0.2 (0.8)	0.2 (0.9)	0.2 (0.8) [¥]	0.3 (1.1)	0.2 (0.8)	0.7 (1.9)	0.2 (0.8)	1.7 (1.6)	0.2 (0.8)
Top comorbidities									
Congestive Heart Failure	3.6	2.1	3.7	3.3	3.6 [¥]	8.4	3.6	11.7	3.5
Hypertension	2.9	1.5	2.9	2.6	2.9 [¥]	6.9	2.8	10.5	2.8
Obesity	2.2	2.5	2.2 [¥]	2.6	2.2 [¥]	3.0	2.2 [¥]	2.0	2.2 [¥]
COPD	1.9	2.6	1.8	3.4	1.8	3.2	1.9	2.4	1.9 [¥]
Depression	1.8	3.0	1.8	2.8	1.8	4.4	1.8	3.0	1.8
Substance & alcohol use	1.3	2.1	1.3	2.4	1.3	4.3	1.3	2.8	1.3

Results

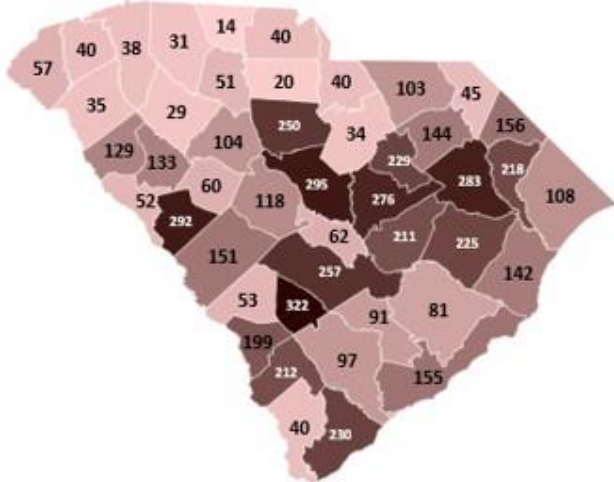
Chlamydia



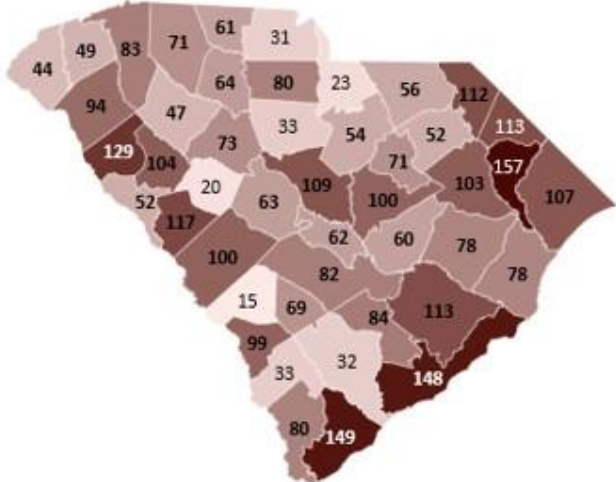
Gonorrhea



HIV



Syphilis



Results

- Medicaid beneficiaries with at least one medical claim for chlamydia and gonorrhea were:
 - Disproportionately younger (particularly 18 to 24)
 - Resided mostly in rural areas
 - More likely to exhibit substance and alcohol use disorders
- Medicaid beneficiaries with at least one medical claim for syphilis or HIV were:
 - Disproportionately older (particularly 45 or more)
 - Males
 - Resided mostly in urban areas
 - More likely to exhibit substance and alcohol use disorders
- Non-Hispanic Black beneficiaries had higher proportions of each type of STI and HIV, compared to their non-Hispanic White counterparts

Results

- Multivariable logistic regression estimates
- Compared to non-Hispanic whites, non-Hispanic Black residents were more likely to have at least one claim for:
 - Chlamydia (chlamydia: aOR=1.88, 95% CI=1.74-2.03, p<0.001)
 - Gonorrhea (gonorrhea: aOR=1.99, 95% CI=1.76-2.25, p<0.001)
 - HIV (HIV: aOR=2.51, 95% CI=1.94-3.23, p<0.001)
- Same associations were also observed among other minority ethnic/racial groups compared to their non-Hispanic white counterparts

Results

- Multivariable logistic regression estimates
- Compared to urban residents, rural residents were more likely to have a claim associated with:
 - Chlamydia (aOR=1.14, 95% CI=1.05-1.24, p=0.002)
 - Gonorrhea (aOR=1.14, 95% CI=1.04-1.25, p=0.007)
- Compared to urban residents, rural residents were less likely to have a claim associated with:
 - Syphilis (aOR=0.80, 95% CI=0.65-0.99, p=0.042)
 - HIV (aOR=0.74, 95% CI=0.56-0.97, p=0.031)

Table 2: Multivariable regression estimates of the association between having at least one claim for chlamydia, gonorrhea, syphilis, or HIV and sociodemographic individual and county-level factors among Medicaid beneficiaries in South Carolina from July 2019 to June 2021

	Chlamydia		Gonorrhea		Syphilis		HIV	
	aOR (95% CI)	p-value	aOR (95% CI)	p-value	aOR (95% CI)	p-value	aOR (95% CI)	p-value
Race/ethnicity								
Non-Hispanic White	Ref.		Ref.		Ref.		Ref.	
Non-Hispanic Black	1.88 (1.74-2.03)	<0.001	1.99 (1.76-2.25)	<0.001	1.25 (0.98-1.61)	0.077	2.51 (1.94-3.23)	<0.001
Other	1.34 (1.23-1.46)	<0.001	1.39 (1.24-1.56)	<0.001	1.22 (0.98-1.51)	0.069	2.31 (1.82-2.93)	<0.001
Area (location) of residence								
Urban	Ref.							
Rural	1.14 (1.05-1.24)	0.002	1.14 (1.04-1.25)	0.007	0.80 (0.65-0.99)	0.042	0.74 (0.56-0.97)	0.031
Age groups								
25 to 34	Ref.							
0 to 17	2.01 (1.78-2.27)	<0.001	1.06 (0.89-1.26)	0.500	0.17 (0.11-0.25)	<0.001	0.07 (0.04-0.13)	<0.001
18 to 24	2.87 (2.67-3.01)	<0.001	1.75 (1.58-1.93)	<0.001	0.68 (0.56-0.83)	<0.001	0.32 (0.26-0.41)	<0.001
35 to 44	0.38 (0.35-0.42)	<0.001	0.55 (0.48-0.62)	<0.001	0.97 (0.76-1.23)	0.795	2.76 (2.25-3.40)	<0.001
45+	0.19 (0.14-0.24)	<0.001	0.35 (0.28-0.44)	<0.001	2.02 (1.55-2.63)	<0.001	14.28 (11.29-18.07)	<0.001
Gender								
Male	Ref.							
Female	1.39 (1.23-1.56)	<0.001	0.86 (0.77-0.97)	0.012	0.23 (0.20-0.27)	<0.001	0.17 (0.14-0.21)	<0.001
Top comorbidities								
Substance & alcohol use	1.97 (1.73-2.24)	<0.001	1.98 (1.66-2.37)	<0.001	2.12 (1.26-2.88)	<0.001	1.18 (0.85-1.62)	0.326
Depression	1.66 (1.46-1.88)	<0.001	1.44 (1.20-1.73)	<0.001	2.22 (1.39-3.54)	0.001	1.83 (1.21-2.77)	0.004
COPD	1.31 (1.19-1.45)	<0.001	1.65 (1.37-1.99)	<0.001	1.33 (0.82-2.16)	0.240	1.06 (0.76-1.48)	0.743
Congestive Heart Failure	1.09 (0.91-1.31)	0.333	1.02 (0.69-1.52)	0.912	1.40 (0.79-2.48)	0.252	0.74 (0.51-1.06)	0.104
Obesity	1.09 (0.94-1.26)	0.264	1.04 (0.84-1.30)	0.718	1.23 (0.88-1.71)	0.221	0.85 (0.58-1.25)	0.415
Hypertension	0.85 (0.67-1.06)	0.159	1.12 (0.70-1.78)	0.632	0.75 (0.35-1.60)	0.463	0.92 (0.57-1.48)	0.726
County-level variables								
Poverty rate	1.00 (0.97-1.04)	0.807	0.99 (0.96-1.03)	0.693	1.06 (0.99-1.15)	0.103	0.98 (0.91-1.05)	0.520
Underserved area score	0.98 (0.89-1.09)	0.715	0.98 (0.86-1.11)	0.719	0.96 (0.80-1.16)	0.705	1.12 (0.81-1.55)	0.495
% non-Hispanic Whites	0.97 (0.93-1.01)	0.176	1.02 (0.97-1.07)	0.460	0.98 (0.87-1.10)	0.697	1.13 (0.96-1.33)	0.156
% non-Hispanic Blacks	0.97 (0.94-1.02)	0.227	1.03 (0.97-1.08)	0.361	0.97 (0.86-1.09)	0.584	1.16 (0.98-1.38)	0.079
% Females	1.06 (1.02-1.11)	0.002	1.05 (1.01-1.10)	0.026	1.03 (0.95-1.13)	0.468	1.00 (0.90-1.12)	0.978
Unemployment rate	0.94 (0.86-1.03)	0.193	0.88 (0.78-0.99)	0.039	0.93 (0.77-1.14)	0.505	0.94 (0.65-1.35)	0.727
% 18 to 24 years	0.99 (0.98-1.00)	0.159	0.98 (0.97-1.00)	0.013	1.00 (0.98-1.03)	0.770	0.99 (0.96-1.03)	0.685
% 25 or older	1.03 (1.01-1.09)	0.002	1.03 (1.01-1.05)	0.017	0.96 (0.92-1.00)	0.066	0.97 (0.93-1.02)	0.199

Discussion

- Timeliness of this analysis is important
- CMS has recently called for the inclusion of social determinants of health, which may disproportionately affect rural and racial/ethnic minority populations, in designing programs, policies, and interventions.¹²
- Examination of current rates of STIs among racial/ethnic minority populations in a rural southern state is essential for shaping state Medicaid policies around STIs
- Our findings highlight the need for programming and interventions specific to both rural and racial/ethnic minority residents, particularly in the rural South

Discussion

- For decades, rates of gonorrhea and syphilis have been higher in the Southern United States.³
- Black residents in the South face compounding challenges to accessing healthcare further exacerbating disparities in STI prevalence¹³ :
 - racial discrimination
 - higher rates of poverty
 - lower levels of access to transportation
- Our study highlights these disparities, with Black beneficiaries more likely to have chlamydia, gonorrhea, and HIV than white beneficiaries
- These disparities in access to care among racial/ethnic minority residents were further highlighted by the ongoing COVID-19 pandemic.^{14,15}

Discussion

- Efforts such as the CDC's Community Approaches to Reducing Sexually Transmitted Disease (CARS) initiative have demonstrated how community engagement can be a powerful tool in supporting STI prevention, screening, and treatment.¹⁶
- However, to date, most of the implementation sites for CARS have been in urban settings.
- Addressing disparities in outcomes among rural and racial/ethnic minority populations will require interventions that address factors at multiple levels, focused on the structural barriers that rural populations face in seeking services.¹⁷

Limitations

- Claims measures of STIs, which may be imperfect measures of STI prevalence due to provider coding
- We could not estimate incidence rates, given the nature of our data
- Large counts of missing race/ethnicity data, limiting our race/ethnicity categories to just three
- Generalizability to other states and nationwide

Conclusion

- Findings of this study may be useful for policymakers and program officials as they design interventions to prevent and treat HIV and STIs, particularly in rural communities in the Southeast
- State Area Health Education Center programs to train providers on the prevention and management of STIs may be beneficial
- Disease burdens may be reduced by more effective contact tracing and targeted distribution of prevention methods.

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Identifying the need and feasibility of providing evidence-based quality care for sexually transmitted infections in rural primary care clinics

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Background

- Overall importance of addressing STIs and HIV ✓
- Awareness of disparities in STI and HIV outcomes ✓
- Why South Carolina ✓

**How can we increase STI and HIV testing in rural South Carolina,
especially for high-risk populations?**

STIs & HIV Risk

- The HIV and STIs epidemics are deeply intertwined and **syndemic**¹
- Complementary prevention strategies are needed
 - Increase uptake of **Pre-exposure Prophylaxis (PrEP)** for individuals at-risk for HIV
 - Ensuring access to and adherence for **Anti-Retroviral Therapy (ART)** for those already living with HIV
 - Routine **STI screening and HIV testing**
 - Promoting **consistent condom use** and other risk reduction strategies

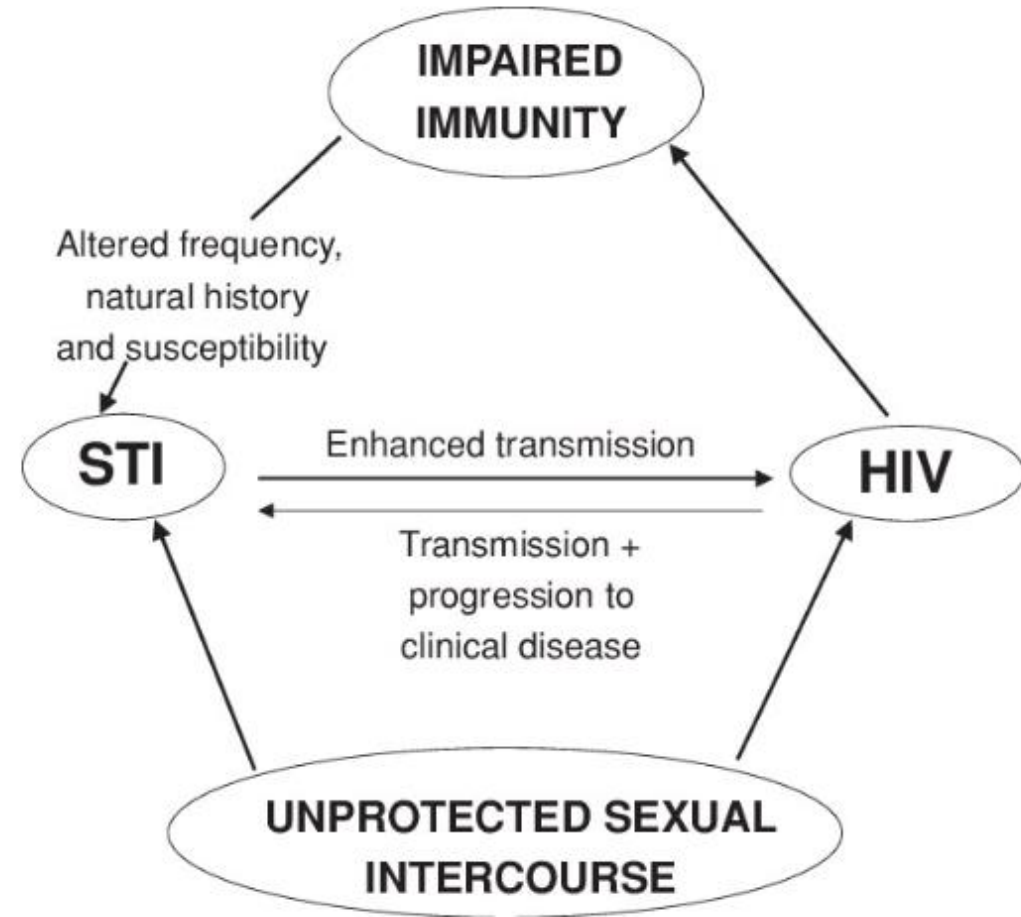


Image from Mayaud, P., & McCormick, D. (2001). Interventions against sexually transmitted infections (STI) to prevent HIV infection. *British Medical Bulletin*, 58(1), 129-153.

Clinical Guidelines

- Current recommendations for STI screening are population and risk based, increasing the complexity for physicians.²
- PrEP users at risk for infection = tested every 3 months for STIs and HIV^{3,4}
 - “At risk” → sexually active persons who are symptomatic
 - “At risk” → sexually active persons who are asymptomatic but have had (a) STI diagnoses at previous visits and/or (b) multiple sex partners
- Special populations, especially men who have sex with men (MSM) further recommend extragenital (i.e., rectal and/or pharyngeal) STI testing⁵
 - Higher STI risk and potential concurrent HIV infections
 - Asymptomatic STIs in these sites

Rural Health Care

- Access to testing and treatment for STIs and HIV is challenging^{6,7}
- Rural health departments have lower capacity to provide necessary services⁸
- Structural barriers persist⁹
- Cultural norms and stigma are prevalent¹⁰



Objectives

- Overall long-term goal = reducing STI prevalence among rural South Carolina residents
 - (1) identify high need areas within rural areas of the state with respect to disease risk and availability of healthcare infrastructure
 - (2) determine overall education and training needs of rural primary care providers related to STI and HIV care

Methods

- Descriptive, mixed-methods approach
- Study population limited to 20 rural South Carolina counties
- Data sources – high need areas:
 - CDC AtlasPlus
 - AIDS Vu.org
 - SC Department of Health and Environmental Control (DHEC) surveillance
- Data sources – health care infrastructure:
 - HRSA.gov
 - National Provider Identifier (NPI) registry
 - SC DHEC licensing data
 - Personal communication

Methods

- Determination of high need areas was accomplished by first rank ordering PrEP utilization data
- Rates of STI and HIV prevalence by county were also ranked and compared against the top 10 counties in the first list
- Counties with overlapping risk data were initially labeled as high need

Methods

- Testing and treatment infrastructure were determined for each of the 20 rural counties in the following categories:
 - Primary care clinics (especially FQHCs, RHCs)
 - Local public health departments
 - Comprehensive PrEP services
 - Educational resources
- High need counties were reviewed for number and type of services to determine the feasibility of providing STI and HIV care

Methods

- Four counties were initially selected as high need targets
- Primary care clinics in each of the four counties were engaged in the study to determine STI and HIV clinical burden and need for education and training on testing and treatment services
- Qualitative data gathered at planning meetings was used to inform engagement process
- Case studies of each of the four clinics were developed that describe current clinical practices

Results

Table 1a. County-Level PrEP Utilization, Rural South Carolina, 2018	
Top 10 Rural Counties for PrEP Utilization	PrEP Utilization Rate Per 100,000
Colleton County	54
Georgetown County	38
Hampton County	35
Bamberg County	32
Chesterfield County	31
Marlboro County	30
Marion County	30
Williamsburg County	29
Abbeville County	28
Dillon County	28

Results

Table 1b. County-Level Chlamydia Prevalence, Rural South Carolina, 2018	
Top 10 Rural Counties for Chlamydia Prevalence	Chlamydia Infection Rate Per 100,000
Allendale County	1434.3
Lee County	1156.5
Orangeburg County	1153.9
Dillon County	1091.1
McCormick County	1027.2
<i>Bamberg County</i>	<i>1009</i>
<i>Marion County</i>	<i>985.1</i>
Cherokee County	937.5
Newberry County	926
Clarendon County	841.7

Results

Table 1c. County-Level Gonorrhea Prevalence, Rural South Carolina, 2018	
Top 10 Rural Counties for Gonorrhea Prevalence	Gonorrhea Infection Rate Per 100,000
<i>Marlboro County</i>	606.8
Lee County	571.5
McCormick County	546.7
<i>Williamsburg County</i>	416.3
Greenwood County	380
<i>Hampton County</i>	375.1
Newberry County	346.3
Clarendon County	345.5
<i>Chesterfield County</i>	327.8
Oconee County	323.5

Results

Table 1d. County-Level Syphilis Prevalence, Rural South Carolina, 2018	
Top 10 Rural Counties for Syphilis Prevalence	Syphilis Infection Rate Per 100,000
<i>Williamsburg County</i>	16.3
<i>Marion County</i>	11.4
Greenwood County	9.9
<i>Dillon County</i>	9.8
McCormick County	9.7
<i>Abbeville County</i>	8.1
<i>Colleton County</i>	8
<i>Bamberg County</i>	7
Lee County	5.8
<i>Georgetown County</i>	4.8

Results

County	AHEC Region	RHC Clinics	FQHCs	Ryan White Facilities	OB-GYN clinics	DHEC Clinics	Covered by Comprehensive PrEP Services
Abbeville County	Upstate	3	1	0	0	1	no
Allendale County	Lowcountry	3	1	1	1	1	no
Bamberg County	Lowcountry	2	3	0	0	1	yes
Barnwell County	Lowcountry	1	5	0	0	1	no
Cherokee County	Mid-Carolina	6	1	1	1	1	no
Chesterfield County	Pee Dee	0	5	1	2	1	no
Clarendon County	Pee Dee	3	3	0	2	1	yes
Colleton County	Lowcountry	2	3	0	2	1	no
Dillon County	Pee Dee	1	3	0	1	1	no
Georgetown County	Pee Dee	3	6	1	5	1	yes
Greenwood County	Upstate	0	5	1	5	1	yes
Hampton County	Lowcountry	2	2	1	0	1	no
Lee County	Pee Dee	0	1	0	0	1	yes
McCormick County	Upstate	0	1	0	0	1	no
Marion County	Pee Dee	6	1	0	2	1	yes
Marlboro County	Pee Dee	2	4	0	2	1	yes
Newberry County	Mid-Carolina	1	2	0	1	1	yes
Oconee County	Upstate	8	2	0	2	1	yes
Orangeburg County	Lowcountry	8	5	1	1	2	yes
Williamsburg County	Pee Dee	4	3	0	0	1	yes

Results

- Case study: a rural health practice with one physician, five nurse practitioners, and one clinical pharmacist
 - 18,729 patients total seen in the past year
 - Currently screen for chlamydia and provide the following clinical sexual health services: cervical cancer screening, other STI testing, pregnancy testing, contraception, HPV vaccinations, and HPV screening
 - Tests are performed by a third-party laboratory who is responsible for reporting positive results to SC DHEC
 - For patients who screen positive for HIV, providers refer them to a specialty provider to initiate and manage treatment
 - The practice refers patients to other providers who prescribe PrEP
 - In the past year: 11% positive tests for chlamydia, 5% positive for gonorrhea, 0 positives for syphilis or HIV

Results

- Preliminary themes from case studies:
 - Go back to the basics – discussing PrEP prescribing practices with clinics was too advanced
 - All clinical staff need education and training in providing STI and HIV services
 - Clinics need additional tools to support this work
 - Practice assessment
 - Toolkit
 - Test reporting is a barrier
 - No incentives to keep “top of mind” with other competing concerns

Results

Table 2. SC AHEC Educational Offerings
Addressing STI and HIV Prevention & Treatment for Rural Populations: A Call to Action
Clinical Guidelines – General STI and HIV Prevention & Treatment
Clinical Guidelines – PrEP Utilization
Clinical Guidelines – Extragenital STI Testing
How to Talk to Patients about STIs and HIV
Practice Management for STI and HIV Prevention & Treatment

Discussion

- Findings from this study are important for:
 - informing decisions on resource allocation, especially for state-level programs in public health and health insurance (i.e., Medicaid)
 - supporting primary care practices to provide these services in the future
- Cost implications for Medicaid programs of continued increase in STIs (and HIV) are potentially catastrophic
- Capacity development in rural clinical settings is needed – now and with future innovation
- Must continue to address cultural issues and stigma

Discussion

- Collaboration among all stakeholders in this space is critical and public/private partnerships are essential
 - South Carolina Office of Rural Health Conference – October 2022
 - Medicaid Quarterly Managed Care Organization Meeting – November 2022
 - Federal Office of Rural Health Policy Funders Meeting – November 2022



Limitations

- Data availability:
 - Small population numbers
 - High-risk populations
 - Pharmacy claims for PrEP
- Time
- Timing
- Health care delivery system changes



Conclusion

- Increasing STI and HIV testing in rural primary care clinics will require more awareness and possibly incentives for providers
- Especially for high-risk populations there is no time to waste to help curb the spread of these infections
- The focus should continue to be on providing safe, effective, equitable, timely, patient-centered, and efficient care for all people in all places

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