



Medicaid expansion and association with HIV outcomes in Nebraska, USA: An observational prospective cohort study.

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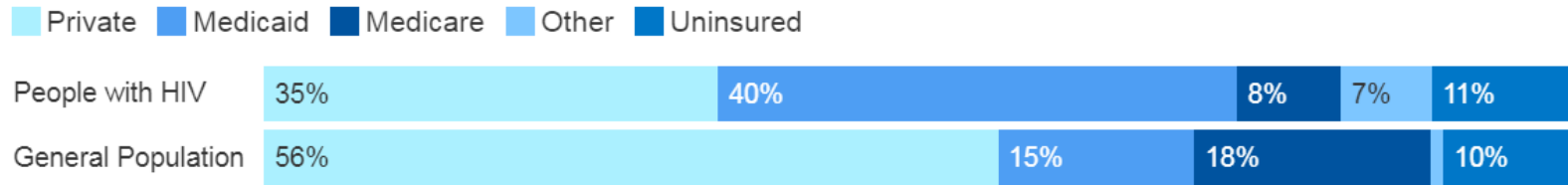
Disclosures

- None



Background: Medicaid and HIV

Insurance Coverage Among Nonelderly Adults with HIV Compared to Nonelderly Adults in the General Population, 2018



NOTE: Data sources are different for people with HIV and the general population and statistical testing was not performed.

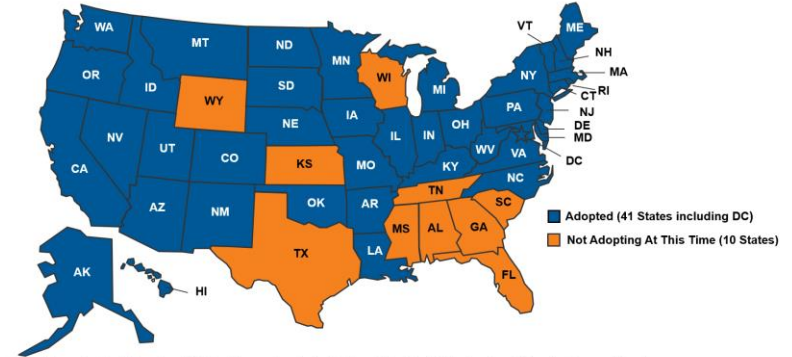
SOURCE: KFF. Issue Brief. Insurance Coverage and Viral Suppression Among People with HIV, 2018 <https://www.kff.org/hiv/aids/issue-brief/insurance-coverage-and-viral-suppression-among-people-with-hiv-2018/> • PNG



Background: Medicaid expansion



Status of State Medicaid Expansion Decisions



NOTES: Current status for each state is based on KFF tracking and analysis of state activity. See link below for additional state-specific notes.
SOURCE: "Status of State Medicaid Expansion Decisions," <https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/>



Medicaid expansion in Nebraska

| Nebraska | will | implement Medicaid expansion in October 2020 |
|----------|------|---|
| 246,460 | | Number of people covered by Medicaid/CHIP as of April 2020 |
| 123,000 | | Number of people expected to gain access to Medicaid as a result of expansion |
| 27% | | Reduction in the uninsured rate from 2013 through 2018 |

| Nebraska | has | accepted federal Medicaid expansion |
|----------|-----|--|
| 395,237 | | Number of Nebraskans covered by Medicaid/CHIP as of February 2023 |
| 150,637 | | Increase in the number of Nebraskans covered by Medicaid/CHIP fall 2013 to February 2023 |
| 38% | | Reduction in the uninsured rate from 2010 to 2021 |
| 62% | | Increase in total Medicaid/CHIP enrollment in Nebraska since late 2013 |





Medicaid expansion and impact for PWH

[BMC Public Health](#). 2020; 20: 509.

Published online 2020 Apr 16. doi: [10.1186/s12889-020-08631-7](#)

PMCID: PMC7164348

PMID: [32299421](#)

Despite early Medicaid expansion, decreased durable virologic suppression among publicly insured people with HIV in Washington, DC: a retrospective analysis

[Deborah Goldstein](#),^{1,2} [W. David Hardy](#),³ [Anne Monroe](#),⁴ [Qingjiang Hou](#),⁵ [Rachel Hart](#),⁵ [Arpi Terzian](#),⁶ and on behalf of the DC Cohort Executive Committee

> [Clin Infect Dis](#). 2019 Jul 18;69(3):538-541. doi: 10.1093/cid/ciy1088.

Human Immunodeficiency Virus (HIV) Viral Suppression After Transition From Having No Healthcare Coverage and Relying on Ryan White HIV/AIDS Program Support to Medicaid or Private Health Insurance

[Julia Raifman](#)¹, [Keri Althoff](#)², [Peter F Rebeiro](#)³, [W Christopher Mathews](#)⁴, [Laura W Cheever](#)⁵, [Heather Hauck](#)⁵, [Judith A Aberg](#)⁶, [Kelly A Gebo](#)⁷, [Richard Moore](#)⁷, [Stephen A Berry](#)⁸; HIV Research Network

> [Med Care](#). 2023 Jan 1;61(1):12-19. doi: 10.1097/MLR.0000000000001772. Epub 2022 Dec 8.

Expanding Medicaid to Reduce Human Immunodeficiency Virus Transmission in Houston, Texas: Insights From a Modeling Study

[Francis Lee](#)^{1,2}, [Aditya S Khanna](#)^{3,4}, [Camden J Hallmark](#)⁵, [Richa Lavingia](#)⁶, [Marlene McNeese](#)⁵, [Jing Zhao](#)⁶, [Melanie L McNeese](#)⁵, [Salma Khuwaja](#)⁵, [Babak M Ardestani](#)^{1,2}, [Nicholson Collier](#)⁷, [Jonathan Ozik](#)⁷, [Anna L Hotton](#)^{1,2}, [Nina T Harawa](#)^{8,9}, [John A Schneider](#)^{1,2}, [Kayo Fujimoto](#)¹⁰

1849. Impact of Medicaid Expansion on Human Immunodeficiency Virus Outcomes in Nebraska

[James M McCluskey, III](#), MD, [Renaee Furl](#), MS, [Monica Arroyo](#), and [Nada Fadul](#), MD

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The Impact of ACA and Medicaid Expansion on Progress Toward UNAIDS 90-90-90 Goals

[Blythe Adamson](#)^{1,2}, [Lauren Lipira](#)³, [Aaron B Katz](#)³

Affiliations + expand

PMID: 30762215 DOI: 10.1007/s11904-019-00429-6

[Open Forum Infect Dis](#). 2021 Feb; 8(2): ofaa595.

Published online 2020 Dec 28. doi: [10.1093/ofid/ofaa595](#)

PMCID: PMC7875325

PMID: [33598500](#)

Medicaid Expansion's Impact on Human Immunodeficiency Virus Outcomes in a Nonurban Southeastern Ryan White HIV/AIDS Program Clinic

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Aim and Hypothesis

Aims

- Compare HIV viral suppression rate at baseline and post-Medicaid enrollment between PWH who enroll in Medicaid, to those who are Medicaid eligible but did not enroll.
- Examine changes between baseline and 12 months in healthcare access, utilization, and barriers to care in PWH who enroll into Medicaid.

Hypothesis

- Medicaid enrollment in Nebraska will improve access to care and HIV viral suppression in PWH



Methods and procedures

Single-center prospective cohort study, following PWH from the University of Nebraska Medical Center Specialty Care Center (UNMC SCC).



Eligibility criteria

HIV diagnosis documented

Actively receiving care at the UNMC SCC and had at least one HIV provider visit in the 12 months preceding study enrollment;

Household income is at or below 138% of the FPL;

Enrolled into Medicaid expansion program and their coverage start date is between October 1, 2020, and December 31, 2021.



Methods and procedures

The SCC client service team identified 230 PWH eligible for Medicaid enrollment/re enrollment

101 patients enrolled in Medicaid and 96 eligible did not enroll.

Capture of baseline demographics and clinical information from EMR (both groups).

Administration of Medicaid expansion questionnaire and Adherence Barriers questionnaire (ABQ HIV) for enrollees.



Methods and procedures

Follow-up assessments (3-month, 6-month, 9-month, and end of study visit)

- Every three months
 - Chart review for Viral load levels (enrolled, unenrolled)
 - follow-up questionnaire for enrollees to evaluate access to care from patient's perspective and any barriers to care.
- At 12 months (End of Study)
 - final assessment, that included an end-of-study questionnaire and the ABQ-HIV.

Viral load measurements

- **Baseline** HIV RNA: latest HIV RNA during the 12 months prior to Medicaid enrollment.
- **Follow-up** HIV RNA: at each three-month assessment,
- **End of study** HIV RNA: At 12 months, we recorded the latest HIV RNA test value and date as the end of study viral Load.

Results



Table 1: Demographic characteristics

| | Medicaid Enrolled N(%) | Medicaid eligible, unenrolled N(%) |
|---------------------------|---------------------------|---------------------------------------|
| Overall | 101 (100) | 96 (100) |
| Age | | |
| 19-30 | 12 (11.88) | 10 (10.42) |
| 31-40 | 26 (25.74) | 27 (28.13) |
| 41-49 | 25 (24.75) | 20 (20.83) |
| 50-59 | 24 (23.76) | 29 (30.21) |
| 60-64 | 8 (7.92) | 9 (9.38) |
| 65+ | 6 (5.94) | 1 (1.04) |
| Gender | | |
| Male | 78 (77.23) | 70 (72.92) |
| Female | 18 (17.82) | 24 (25) |
| Transgender female | 4 (3.96) | 2 (2.08) |
| Non-Binary | 1 (0.99) | 0 |
| Race/Ethnicity | | |
| Hispanic | 13 (12.87) | 17 (17.71) |
| Non-Hispanic Black | 39 (38.61) | 32 (33.33) |
| Non-Hispanic White | 45 (44.55) | 38 (39.58) |
| Other | 4 (3.96) | 9 (9.38) |
| Citizenship status | | |
| US citizen | 100 (99.01) | 83 (86.46) |
| Non-Citizen | 1 (0.99) | 13 (13.54) |



Results

Table 1: Demographic characteristics (continued)

| | Medicaid Enrolled N(%) | Medicaid eligible, unenrolled N(%) |
|--|------------------------|------------------------------------|
| Overall | 101 (100) | 96 (100) |
| Housing Status | | |
| Stable | 94 (93.06) | 84 (87.5) |
| Unstable | 7 (6.94) | 12 (12.5) |
| HIV Transmission | | |
| MSM | 63 (62.37) | 47 (48.95) |
| Heterosexual | 33 (32.67) | 37 (38.54) |
| IDU | 2(1.98) | 5 (5.20) |
| Not reported or not identified | 2 (1.98) | 1 (1.04) |
| Receipt of blood transfusion, component or tissue | 0 (0.0) | 2 (2.08) |
| MSM & IDU | 1 (0.09) | 4 (4.16) |
| Baseline Viral Load Status | | |
| Undetectable | 76 (75.24) | 69 (71.87) |
| Detectable | 25 (24.75) | 27 (28.12) |
| Years on ART | | |
| <5 | 31 (30.69) | 24 (25) |
| 5-10 | 39 (38.61) | 47 (49) |
| 10+ | 31 (30.69) | 25 (26) |

Results



Table 1: Demographic characteristics (continued)

| | Medicaid Enrolled N(%) | Medicaid eligible, unenrolled N(%) |
|--------------------------------------|------------------------|------------------------------------|
| Overall | 101 (100) | 96 (100) |
| Income | | |
| <100% FPL | 66 (65.35) | 44 (45.83) |
| 100%-138% FPL | 11 (10.89) | 1 (1.04) |
| 139%-250% FPL | 16 (15.84) | 20 (20.83) |
| 251%-400% FPL | 5 (4.95) | 18 (18.75) |
| >400% FPL | 1 (0.99) | 4 (4.16) |
| Unknown/not reported | 2 (1.98) | 2 (2.08) |
| Baseline insurance | | |
| Individual or employee-based private | 7 (6.93) | 16 (16.67) |
| Other public | 1 (0.99) | 0 (0.0) |
| Medicare | 0 (0.0) | 2 (2.13) |
| Medicaid | 5 (4.95) | 0 (0.0) |
| ADAP's supported health coverage | 50 (49.50) | 48 (50) |
| Uninsured | 38 (37.62) | 30 (31.25) |
| Insurance status (2021) | | |
| Medicaid Nebraska | 98 (97.03) | 7 (7.45) |
| Medicare | 0 (0.0) | 2 (2.13) |
| Employee-based Private | 2 (1.98) | 16 (16.67) |
| ADAP's supported health coverage | 1 (0.99) | 45 (47.87) |
| Uninsured | 0 (0.0) | 22 (23.40) |



Results

Table 2: Viral suppression by enrollment status

| | Baseline (%) | Follow-up (%) | P-values |
|---------------------|--------------|---------------|----------|
| Enrolled | | | |
| VS <50 (copies/ml) | 58.4 | 77.2 | 0.0018 |
| VS <200 (copies/ml) | 63.3 | 91.09 | <0.0001 |
| Unenrolled | | | |
| VS <50 (copies/ml) | 64.58 | 75.00 | 0.09 |
| VS <200 (copies/ml) | 73.96 | 83.33 | 0.08 |

Table 3: Viral suppression change among Medicaid enrollees

| | Enrolled (N=101) | Eligible, unenrolled (N=97) | Total (N=198) | P-value |
|--|---------------------|-----------------------------------|------------------|---------------------|
| VS Change at 50 (Copies/ml), n (%) | | | | 0.6103 ¹ |
| Worsened | 9 (8.9%) | 13 (13.4%) | 22 (11.1%) | |
| Unchanged | 65 (64.4%) | 60 (61.9%) | 125 (63.1%) | |
| Improved | 27 (26.7%) | 24 (24.7%) | 51 (25.8%) | |
| VS Change at 200 (Copies/ml), n (%) | | | | 0.0268 ¹ |
| Worsened | 2 (2.0%) | 9 (9.3%) | 11 (5.6%) | |
| Unchanged | 69 (68.3%) | 70 (72.2%) | 139 (70.2%) | |
| Improved | 30 (29.7%) | 18 (18.6%) | 48 (24.2%) | |

¹Fisher Exact p-value;



Results









Table 4: Adherence Barriers Questionnaire among Medicaid enrollees pre and post Medicaid expansion

| ABQ HIV items | Score > 2 Baseline Proportion (%) | Score > 2 End of Study Proportion (%) | Interpretation | P-value |
|--|--------------------------------------|--|---|--------------|
| 4. "My medications only help me if I take them on a strict regular basis." | 6.6 | 1.1 | Decrease in the proportion of PWH facing a barrier in this domain | 0.059 |
| 8. "I feel that co-payments for medication are a great burden." | 36.3 | 51.6 | Increase in the proportion of PWH facing a barrier in this domain | 0.016 |
| <i>McNemar's Test</i> | | | | |



Results

Table 5: Changes in healthcare utilization among Medicaid enrollees pre and post Medicaid expansion

| Medicaid expansion survey items | Before Medicaid | After Medicaid | | Interpretation | P-value |
|---|-----------------|----------------|---|---|-------------------|
| Median Outpatient Visits | 2 | 3-4 |  | Increase in outpatient visits | 0.003 |
| Difficulty Getting Provider Appointment | 26.4% | 17.58% |  | Decrease in difficulty getting provider appointment | 0.053 |
| Emergency Room (ER) Visits | 23.08% | 7.69% |  | Decrease in the use of E.R. for outpatient conditions | 0.025 |
| Waiting/Choosing Not to Seek Medical Care | 40.66% | 12.09% |  | Decrease in choosing not to seek medical care | <0.0001 |
| Routine Checkups | 5.56% | 66.67% |  | Increase in routine checkup | 0.015 |
| Difficulty Paying for Medications | 6.59% | 1.1% |  | Decrease in difficulty paying for medication | 0.037 |
| Taking Less Medication Than Prescribed | 30.68% | 7.95% |  | Decrease rationing of ART | 0.001 |
| Difficulty Getting Medication Authorized | 10.11% | 29.21% |  | Increase in the proportion of patients reporting "Almost Never" facing difficulty | 0.022 |



Policy implications

- Advocate for the continuation and expansion of Medicaid programs, emphasizing their role in improving health outcomes and reducing healthcare disparities among vulnerable populations like those living with HIV.
- Advocate to lessen the burden on patients associated with increase copayment and need for medication authorization.



Future research

- Long-term effects of Medicaid expansion on HIV outcomes, and healthcare utilization
- Comparative studies across different states with varying Medicaid policies,
- Qualitative research to explore the lived experiences of individuals accessing healthcare post-Medicaid expansion.



Conclusion

- Medicaid expansion led to the improvement of HIV outcomes (VS) post-enrollment compared to baseline.
- Barriers to healthcare (access and affordability) were eased, leading to increased healthcare utilization among participants who enrolled in Medicaid.



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Thank You for your attention.



Questions ?



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