HPOG Health Profession Opportunity Grants
OFFICE OF FAMILY ASSISTANCE

Abt

Challenges and Opportunities for Workforce Programs in Rural Areas: Evidence from HPOG 2.0

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KEY FINDINGS

- A quarter of HPOG 2.0 programs served participants in mostly rural or partly rural areas.
- Rural programs served a larger share of White participants and younger participants than non-rural HPOG 2.0 programs.
- A larger share of participants in rural programs were working at baseline than in non-rural programs.
- Common implementation challenges reported by rural program staff included outreach and recruitment, access to transportation and child care, and staffing.
- Rural HPOG 2.0 program staff attributed certain implementation challenges to long distances and low population density.
- Participant take-up of support services was similar at both rural and non-rural programs, suggesting that HPOG 2.0 programs in rural areas were successful in providing these services despite location-specific challenges.
- Rural and non-rural programs showed positive impacts on receipt of training, receipt of credentials, and employment in the healthcare field.

Introduction

Recent research has explored the delivery of human services programs in rural contexts, identifying promising models for service delivery and highlighting remaining needs (Brimsek et al. 2022; Ward et al. 2022). This research brief uses data from the National Evaluation of the 2nd Generation of Health Profession Opportunity Grants (HPOG 2.0) as a case study to further examine human services delivery in rural areas.[1]

In the evaluation, the 27 non-Tribal HPOG 2.0 grantees operated 38 distinct programs across 17 states.[2] Each program consisted of a unique set of services, training courses, and personnel. The majority of programs were concentrated in the Midwest (15 programs) and Northeast (11 programs). The HPOG 2.0 programs varied in the size of their service areas, ranging from single cities or counties to metropolitan areas to a state (Roy et al. 2022).

ABOUT HPOG

The Health Profession Opportunity Grants (HPOG) Program was administered by the Office of Family Assistance (OFA) in the Administration for Children and Families (ACF) within the U.S. Department of Health and Human Services. HPOG supported local programs that provided education and training to Temporary Assistance for Needy Families (TANF) recipients and other adults with low incomes for occupations in the healthcare industry.

In September 2015, ACF awarded a second round of grants (HPOG 2.0) to 27 non-Tribal organizations across 17 states. Some grantees operated multiple local programs under a single grant, bringing the total number of non-Tribal HPOG 2.0 programs to 38.

Participants in HPOG 2.0 were mainly single women in their 20s and 30s, many with dependent children. At the time they enrolled, more than half had some college education, about one-third had a professional license or certification, and about one-quarter were already in school.

National Evaluation of the HPOG 2.0 Program

This brief was developed under the HPOG 2.0 National Evaluation. This evaluation is a key component of the Office of Planning, Research, and Evaluation (OPRE)'s broader Career Pathways Research Portfolio.

[1] ACF supported a multifaceted research and evaluation strategy to assess the success of the HPOG 2.0 Program, including an impact study, a descriptive implementation study, an outcome study, and a systems change analysis for the HPOG 2.0 non-Tribal grantees and a separate evaluation of the HPOG 2.0 Tribal grantees.

[2] The five Tribal HPOG 2.0 programs were evaluated under a separate study and are not included in this brief.

This brief explores the challenges, strategies, and outcomes of HPOG 2.0 programs operating in rural areas. As a large, multi-site, experimental evaluation, the HPOG 2.0 National Evaluation offers a rich set of data to explore variation in participant characteristics between programs in rural and non-rural areas; implementation strategies and challenges for programs operating in rural areas; and differences in impacts on participant outcomes between participants in rural and non-rural programs. The discussion of implementation strategies and challenges for programs highlights some service delivery challenges reported by both rural and non-rural program staff, but specifically focuses on strategies that rural program staff use to mitigate those challenges.

Drawing from the National Evaluation's qualitative and quantitative data, the brief explores the following research questions:

- Which HPOG 2.0 programs are mostly rural, partly rural, or non-rural?
- How do the characteristics of HPOG 2.0 participants differ between rural and non-rural programs?
- What are the implementation strategies and challenges reported by rural HPOG 2.0 programs?
- How do impacts on participant outcomes differ between rural and non-rural HPOG 2.0 programs?

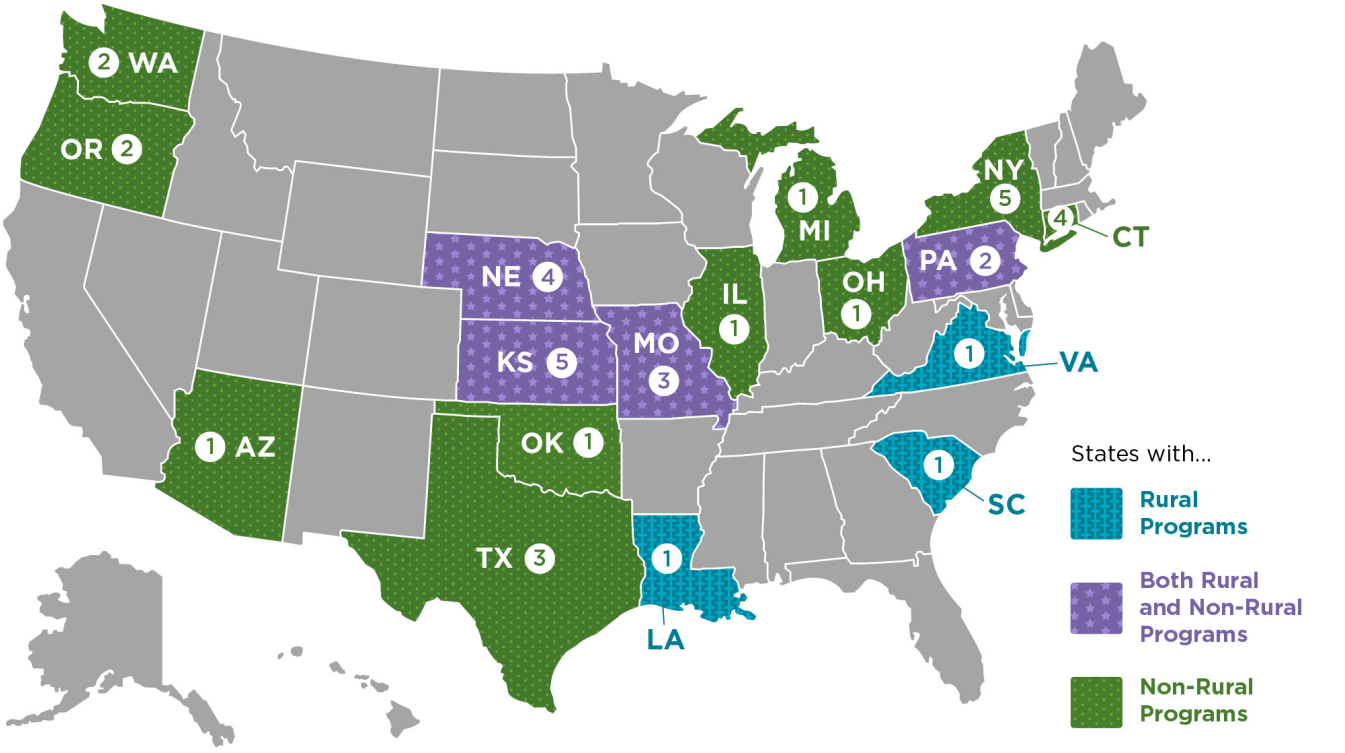
The Appendix provides detail on the data sources and statistical methods used in this brief.

SECTION 1

HPOG 2.0 Programs in Rural Areas

To classify the rurality of HPOG 2.0 programs, the research team used both the location of each HPOG 2.0 program and the addresses of HPOG 2.0 participants at the time they enrolled in a program (at "baseline"). Seven programs were classified as mostly rural, three programs as partly rural, and 28 programs as non-rural.[3] For this brief, the research team **defined as "rural" the set of 10 programs** classified as either mostly rural or partly rural. Exhibit 1 shows the location of rural and non-rural programs by state, including states with both rural and non-rural programs.

Exhibit 1. HPOG 2.0 Program Locations



[3] Programs were classified as mostly rural if the program is located in a rural county, and at least half of participants lived in a rural county. Programs were classified as partly rural if the program is located in a non-rural county, but at least a quarter of participants lived in a rural county. See Appendix for full detail on classification.

SECTION 2

Rural Programs

There were some notable differences in the demographic characteristics of participants between rural and non-rural programs (Exhibit 2). Rural programs served younger participants than non-rural programs did (average age of 29 vs. 32 years). Rural programs served a larger share of White participants than non-rural programs did (56 percent vs. 24 percent). In addition, a larger share of participants in rural programs were working at baseline than non-rural programs (58 percent vs. 44 percent).

Exhibit 2. Characteristics of HPOG 2.0 Participants at Rural and Non-Rural Programs

Characteristic	Rural	Non-Rural	Significant Difference
Women	94%	91%	
Age	29	32	**
Dependent Children	62%	62%	
Race/Ethnicity			
White	56%	24%	**
Black	22%	46%	*
Hispanic	13%	21%	
Other Non-Hispanic	6%	7%	
Highest Education			
Less than High School	7%	7%	
High School/GED	33%	37%	
Some College	41%	40%	
College Degree	17%	15%	
Employed at Baseline	58%	44%	**
Enrolled in School at Baseline	27%	19%	
Baseline Earnings	$9,990	$9,832	
Public Assistance Use at Baseline			
SNAP/WIC	54%	63%	
TANF	17%	19%	
Barriers that Interfere with School or Work (Sometimes, Often, or Very Often)			
Any Barrier	43%	44%	
Child Care	23%	22%	
Transportation	15%	22%	**
Health	20%	15%	
Other	8%	10%	

Source: HPOG 2.0 Participant Accomplishment and Grant Evaluation System (PAGES)
N = 28,077 participants and 38 programs (10 rural and 28 non-rural)
Statistical significance levels for two-sided hypothesis tests are indicated with asterisks, as follows: **=1 percent, *=5 percent.

There were no statistical differences across programs in gender, prior education, school enrollment, or earnings at baseline.[4] There were also no differences in receipt of public assistance at baseline or the presence of several possible barriers that might interfere with school or work. However, a smaller share of participants in rural programs reported transportation as a barrier that interfered with school or work (15 percent vs. 22 percent). The next section explores program staff perception of barriers to service delivery, including availability of transportation.

SECTION 3

Service Delivery Strategies in Rural HPOG 2.0 Programs

Research on human services delivery in rural areas highlights far distance and low population density as intrinsic challenges to accessibility (Blair et al. 2023). Rural and non-rural HPOG 2.0 program staff reported similar service delivery challenges, but the nature of these challenges may have varied by location. This section summarizes implementation challenges reported by rural program staff and strategies used to mitigate those challenges.

Staff from rural programs noted that **long distances and sparse populations** influenced how they implemented their programs. Staff reported common HPOG 2.0 program implementation challenges in rural areas included outreach and recruitment, access to transportation and child care, and staffing. Program staff described several strategies to mitigate them.

[4] The small number of rural programs limits the research team's ability to detect statistical differences between rural and non-rural programs; see Appendix for details on statistical testing and limitations.

> **As the program has continued, outreach has involved the same type of work, but also relies a great deal on maintaining quality services that result in word-of-mouth publicity from participants who had good experiences.**
>
> **– RURAL PROGRAM STAFF**

OUTREACH AND RECRUITMENT

Staff in rural areas served by HPOG 2.0 programs reported that long distances hindered their outreach and recruitment efforts. Transportation challenges made it difficult for potential participants and program staff to attend HPOG 2.0 outreach and information sessions.

To address these challenges, rural programs **relied heavily on person-to-person recruitment strategies**. These included building relationships with employers, college career counselors, and community-based organizations; staffing tables at career fairs; word-of-mouth; advertising; and disseminating program information during college registration days. Some programs increased advertising in rural communities by building partnerships with community-based agencies including education centers, youth organizations, and community centers. Additionally, virtual intake meetings allowed applicants at one program to avoid long drives to the program office.

SUPPORT SERVICES

Regardless of geographic location, program staff emphasized the importance of providing support services to help participants attend and persist in their training programs. For rural communities, these needs were heightened in particular ways.

> **Transportation can also be a challenge for participants who have classes scheduled after public transportation stops running.... In some service areas, public buses stop operating at 8pm. In [one service area], the public bus systems stop running at 6pm.**
>
> **– RURAL PROGRAM STAFF**

Transportation

Studies on access and service delivery in rural areas document transportation as a well-known challenge for rural residents (Blair et al. 2023; Buckwalter and Toglia 2019). Staff from rural HPOG 2.0 programs reported **transportation issues were the biggest challenge** experienced by participants. Rural participants traveled long distances, often driving two hours or more to attend classes or clinicals, or to reach testing sites or other program-related locations. Having money for gas was noted as a frequent challenge. Program staff also reported that participants **lacked access to reliable vehicles**, exacerbated by **limited or no public transit**. Buses stopped operating at a certain time or service was infrequent. Some participants relied on carpooling with relatives, friends, and classmates.

Gas money was the most common form of transportation assistance requested. However, programs often did not have adequate resources to meet demand. Staff from rural programs described some creative strategies. At one rural program, all participants were eligible for transportation assistance in the form of gas cards once enrolled into the program. The dollar **amount depended on how far the participant lived from their training site**.

Another program transitioned from providing the same number of gas cards to all students who needed them to **tiered eligibility**, whereby students in short-term training were eligible for fewer gas cards than students in long-term training. This policy aimed to more efficiently allocate limited resources, as students in short-term training were not using all the gas cards they were eligible for whereas those in long-term training were running out before their training was complete. Other programs approved additional gas cards for students who traveled to certification testing sites.

High fees for gas cards pushed one rural program to develop a **voucher system with a local gas station**. The program gave the gas station the names of eligible students; the gas station pumped these students a specified dollar amount of free fuel and then invoiced the program at the end of each month.

> **[Students] are rural and spread out, so not everyone is nearby the program, and so they might be traveling an hour to an hour and a half in their training.... In the urban part of our county, it's never a problem, but a majority of the county is rural and it is often a problem. If they don't have their own vehicle or a friend, it can be a problem.**
>
> – RURAL PROGRAM STAFF

> **Child care is another [challenge]. [Students] work shift work, and there is no evening or weekend child care in any of the [#] counties… [Employers] are very strict about attendance, being on time, and that's a challenge for any parent, and employers don't tend to be very [tolerant].**
>
> **– RURAL PROGRAM STAFF**

Child Care

Rural program staff noted a **lack of available licensed child care providers** affected recruitment and retention, particularly for participants having to navigate demanding work schedules, long commutes, and backup care for sick children. Some participants did not have child care during work hours or had to work a limited schedule to balance caregiving responsibilities. Affordability of child care was an obstacle for families who needed services in the evenings, further restricting their ability to work while their children were in school.

Further, rural program staff described a lack of child care centers in the areas they served, making it difficult to address participants' needs. For example, staff at one program reported there were no child care providers in nearby counties that offered evening or weekend child care. Some local providers were oversubscribed; others were located far away from participants' homes or work, resulting in longer commutes and costly late pickup fees.

Program staff did not report strategies to address the child care shortage, noting that **participants primarily depended on informal child care support** from family or community members.

> **Some students in the nursing program get discouraged from working full-time because of the intensity and rigor of the nursing training program. This makes it difficult to place them into employment after they complete training. Additionally, participants often need other supportive services which are hard to obtain, like child care support.**
>
> **– RURAL PROGRAM STAFF**

> **The geography of our service area, which is very rural and spread out, has made it challenging to serve our participants with a limited staff.**
>
> – RURAL PROGRAM STAFF

STAFFING SHORTAGES

Program staff reported hiring challenges because there was a limited pool of qualified individuals in rural areas. Staff reported **high caseloads**, often **driving long distances** to satellite program sites to provide case management and other services. One program described how staff turnover led it to assign existing staff to cover larger geographies. Another program reported that staff turnover and associated restructuring had led it to limit training offerings.

Programs addressed staff shortages by **assigning staff to large geographic areas, where they fulfilled multiple roles**, instead of a single assigned role. For example, a career coach at one program took on recruitment and enrollment at the satellite campuses, which were small sites located in rural areas. At another program, the data specialist took on a part-time position as the career coach at a satellite office that served a limited number of participants. Hiring additional staff, when possible, made a difference. For one program, hiring an additional career coach reduced the radius of each coach's travel time from 2.5 hours to 1.5 hours.

Program staff in rural areas also reported difficulties recruiting and retaining instructors. Without a sufficient number of instructors, staff were unable to enroll or retain students in specific healthcare occupation training courses. Some programs offered courses less frequently due to instructor shortages, resulting in fewer slots for participants.

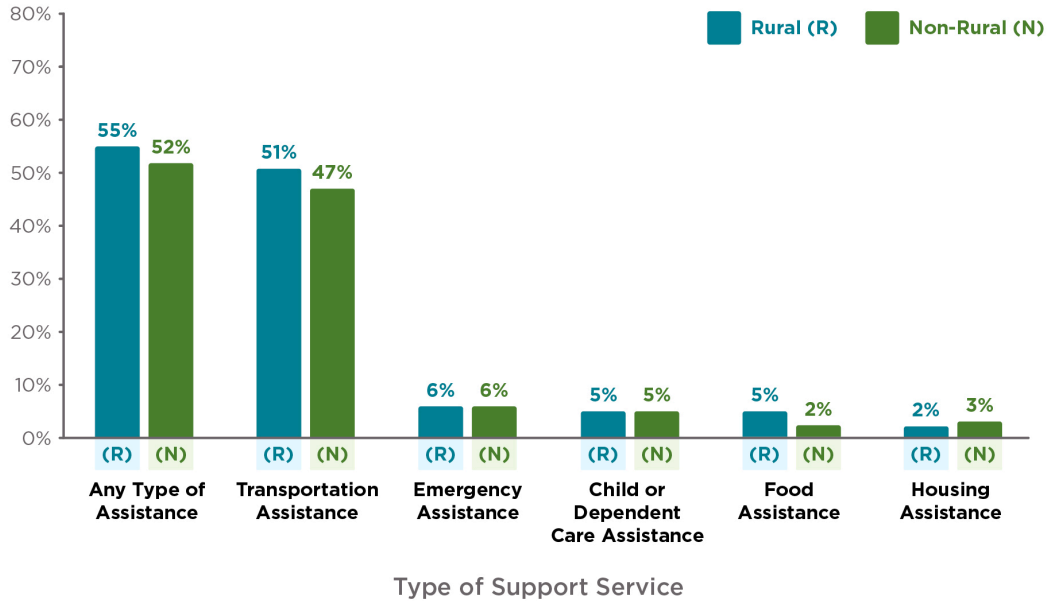
SECTION 4

Participant Receipt of Support Services

HPOG 2.0 program staff tracked participant take-up of various support services using the Participant Accomplishment and Grant Evaluation System (PAGES) management information system (Exhibit 3). The research team found no statistical differences in service receipt between rural and non-rural programs. Both rural and non-rural programs reported that **more than half of participants were provided at least one type of assistance**, with **transportation as the most common** type. That receipt of support services did not differ between rural and non-rural participants suggests that HPOG programs in rural areas were able to provide services at similar rates as non-rural programs despite location-specific challenges.

Exhibit 3. Participant Receipt of Support Services from HPOG 2.0 Programs

Type of Support Service	Rural	Non-Rural
Any Type of Assistance	55%	52%
Transportation Assistance	51%	47%
Emergency Assistance	6%	6%
Child or Dependent Care Assistance	5%	5%
Food Assistance	5%	2%
Housing Assistance	2%	3%



Source: HPOG 2.0 Participant Accomplishment and Grant Evaluation System (PAGES)
N = 28,077 participants and 38 programs (10 rural and 28 non-rural)

SECTION 5

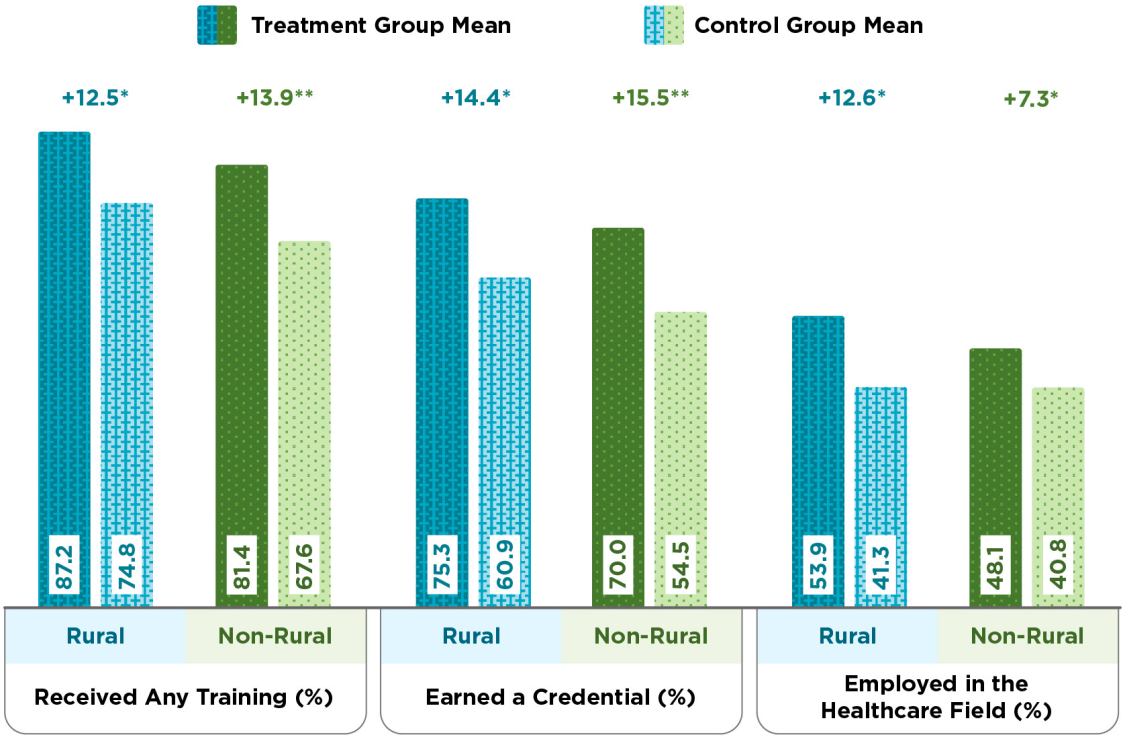
Impacts on Participant Outcomes

Rural program staff identified several implementation challenges—including those related to outreach and recruitment, support services, and staffing shortages. To understand whether these challenges might be related to program impacts, the research team explored differences in impacts between rural and non-rural programs on key outcomes—including training receipt, credential receipt, and employment in healthcare. Data for these outcomes are based on participant responses to the intermediate-term follow-up survey, which was fielded about three years after study enrollment. This analysis leveraged the experimental design of the HPOG 2.0 Impact Evaluation, in which eligible program applicants were assigned at random to either a treatment group whose members could access their local HPOG 2.0 program or to a control group whose members could not access their local HPOG 2.0 program, but could participate in any similar services available in the community (see Appendix for analytic details and additional results).

Three years after study enrollment, there were **no detectable differences in impacts between rural and non-rural programs on any training, service receipt, credential receipt, or employment outcomes** (Exhibit 4 and Appendix Exhibit A-3). In general, outcome levels were broadly similar between participants at rural and non-rural programs. The small sample size of rural programs limited our ability to detect significant differences between rural and non-rural programs.

HPOG 2.0 had a statistically significant positive effect on key participant outcomes. Both **rural and non-rural programs show strong impacts on receipt of training**. Both rural and non-rural programs **produced large impacts on receipt of credentials**. Finally, consistent with the goal of HPOG to increase healthcare employment, both rural and non-rural programs produced positive impacts on employment in the healthcare field. Impacts on receipt of services are similarly favorable for rural and non-rural programs, although many of the rural impacts are not statistically significant due to smaller sample sizes; see Appendix for more details.

Exhibit 4. Impacts on Three-Year Outcomes for Rural and Non-Rural Programs



Source: HPOG 2.0 Intermediate-Term Follow-up Survey
N = 3,234 study participants. Sample includes 387 respondents at 10 rural programs and 2,847 respondents at 28 non-rural programs.
Statistical significance levels for two-sided hypothesis tests are indicated with asterisks, as follows: **=1 percent, *=5 percent.

Despite the challenges identified in the previous sections, the majority of HPOG participants at rural programs received training (87 percent), received at least one type of support service (71 percent, Exhibit A-3), and earned a credential (75 percent). In addition, more than half (54 percent) obtained employment in the healthcare field.

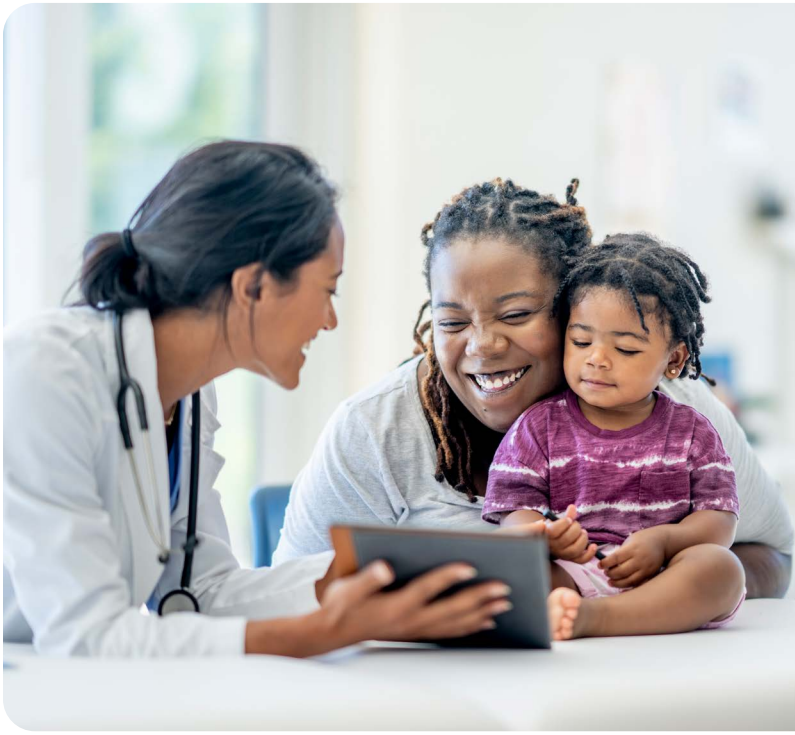
Moreover, the data collected for the impact analyses indicated that large shares of rural control group members received training (75 percent), received at least one type of support service (60 percent, Exhibit A-3), and earned a credential (61 percent) from a non-HPOG program in the community. Together, they suggest that these rural HPOG programs appear to be operating in areas with other training and service providers, as many members of the control group were able to get training and services without access to an HPOG program.

Conclusion

HPOG 2.0 programs operating in rural areas differed along various dimensions from non-rural programs. Rural HPOG 2.0 programs served a larger share of White participants and younger participants than non-rural HPOG 2.0 programs. In addition, a larger share of participants in rural programs were working at baseline than non-rural programs.

Rural and non-rural programs faced similar implementation challenges, but the nature of the challenges varied by location. Program staff from rural programs noted that long distances and low population density made it difficult to maintain staffing levels and provide training and support services. Staff implemented creative strategies to mitigate transportation challenges and staffing shortages where possible. Programs' service receipt data show that participant take-up of support services was similar at both rural and non-rural programs, with more than half of participants at both types of programs receiving at least one type of assistance. These findings suggest that HPOG 2.0 programs in rural areas were successful in providing services despite location-specific challenges.

Three years after participants enrolled, both rural and non-rural HPOG 2.0 programs showed strong positive impacts on receipt of training, receipt of credentials, and employment in the healthcare field. These positive impacts suggest that HPOG programs in rural areas were able to operate successfully, despite the location-specific challenges. Moreover, large shares of control group members received training, received at least one type of support service, and earned a credential from programs elsewhere in the community. This suggests that these rural programs operated in training- and service-rich areas.



This brief is a preliminary look into program implementation challenges and strategies in rural HPOG 2.0 programs. It is limited by the data available for this study. Future research could more directly study the unique challenges experienced by employment and training programs operating in rural areas.

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APPENDIX: DATA, ANALYSIS METHODS, AND ADDITIONAL RESULTS

Data

The data for this brief are drawn from the HPOG 2.0 National Evaluation, which collected qualitative and quantitative information from HPOG 2.0 programs and participants. This brief analyzed data from the following sources:

- Administrative program and participant data entered by HPOG 2.0 program staff into the Participant Accomplishment and Grant Evaluation System (PAGES), the management information system used by all HPOG 2.0 grantees for program management, monitoring, and reporting.
- Grantee survey data collected in 2017 and 2019.
- Notes from monthly evaluation monitoring calls between the research team and local HPOG 2.0 program staff.
- Participant responses to the intermediate-term follow-up survey, which was fielded about three years after study enrollment. The intermediate-term survey was fielded between September 2020 and June 2021, after the onset of the COVID-19 pandemic. The pandemic affected both the treatment and the control groups; thus, even if the pandemic affected the levels of outcomes, differences between treatment and control groups on those outcomes still represent the impact of HPOG 2.0.

A detailed overview of each data source is available in the HPOG 2.0 Descriptive Evaluation Design Report (https://www.acf.hhs.gov/opre/report/descriptive-evaluation-design-report-national-evaluation) and Intermediate-Term Impact Report (https://www.acf.hhs.gov/opre/report/health-profession-opportunity-grants-hpog-20-intermediate-term-impact-report).

Analysis Methods and Additional Results

The research team used a mixed-methods approach to answer the research questions:

- To classify the **rurality of each program**, we geocoded program location and participant addresses reported at baseline and recorded in PAGES.
- To explore the **implementation strategies and challenges reported by HPOG 2.0 programs** in rural areas, the team systematically coded program staff responses to open-ended questions in grantee surveys and reviewed notes from monthly evaluation monitoring calls to identify common themes.
- To explore **differences in participant characteristics and service receipt**, the team used quantitative data from PAGES and conducted statistical tests for differences between rural and non-rural programs.
- To explore **differences in impacts** between participants at rural and non-rural programs, the team estimated regression-adjusted differences in impacts on three-year outcomes as reported in the intermediate-term follow-up survey and then tested for differences between participants at rural programs and participants at non-rural programs.

This section begins with a discussion of the limitations of our analysis. It then provides further detail on analytic methods and additional results on the classification of rural programs; participant characteristics and service receipt; and impacts on participant outcomes.

LIMITATIONS

Though the HPOG 2.0 National Evaluation offers a rich set of information to study healthcare training in rural areas, there are several limitations of this analysis. First, the evaluation did not set out to systematically examine differences in implementation between rural and non-rural programs; as a result, the grantee surveys did not methodically collect data for the purpose of informing the brief. Readers should not interpret the qualitative findings as being representative of all programs reporting a particular challenge; these examples are illustrative only. In addition, a relatively small sample size of rural programs (n=10) limits the research team's ability to detect statistical differences in impacts between participants at rural versus non-rural programs.

CLASSIFICATION OF RURAL PROGRAMS

To classify the rurality of HPOG programs, the research team used both the location of each HPOG 2.0 program and the addresses at baseline of HPOG participants enrolled at each program. First, the research team geocoded the program location and participant household addresses to the corresponding county of residence. Following Elgin et al. (2021), the research team defined the rurality of each county using the U.S. Department of Agriculture's Rural-Urban Continuum Codes (RUCCs).[5] In consultation with OPRE and OFA, the research team defined the following thresholds for classifying programs:

- ***Mostly Rural:*** the program is located in a rural county, and at least half of participants lived at baseline in a rural county.
- ***Partly Rural:*** the program is located in a non-rural county, but at least a quarter of participants lived at baseline in a rural county.
- ***Not Rural:*** the program is located in a non-rural county, and fewer than a quarter of participants lived at baseline in a rural county.

Based on these thresholds, seven HPOG programs were classified as mostly rural, three programs as partly rural, and 28 programs at not rural. For this brief, the research team defined as "rural" the set of 10 programs classified as either mostly or partly rural.

PARTICIPANT CHARACTERISTICS AND SERVICE RECEIPT

Data for the analysis of participant characteristics and service receipt was drawn from PAGES. The analysis was conducted at the program level, by first calculating the average level of each characteristic for participants at each program, and then taking the average across the 10 rural programs and the average across the 28 non-rural programs. The research team used two-sided t-tests to test for significant differences between participants at rural versus non-rural programs, with 37 degrees of freedom (the number of programs minus 1). Appendix Exhibit A-1 shows differences in characteristics between participants at rural versus non-rural programs, and Appendix Exhibit A-2 shows differences in service receipt.

[5] U.S. Department of Agriculture's Rural-Urban Continuum Codes (RUCCs) range from 1 to 9. Following Elgin et al. (2021), RUCCs of 4 or higher were considered to be rural. See https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/

Exhibit A-1. Characteristics of HPOG 2.0 Participants at Rural and Non-Rural Programs

Characteristic	Rural	Non-Rural	p-Value	Significant Difference
Women	94%	91%	.098	None
Age	29	32	.006	**
Dependent Children	62%	62%	.943	None
Race/Ethnicity				
White	56%	24%	<.001	**
Black	22%	46%	.024	*
Hispanic	13%	21%	.087	None
Other Non-Hispanic	6%	7%	.453	None
Characteristic	**Rural**	**Non-Rural**	**p-Value**	**Significant Difference**
Highest Education				
Less than High School	7%	7%	.857	None
High School/GED	33%	37%	.374	None
Some College	41%	40%	.720	None
College Degree	17%	15%	.521	None
Enrolled in School at Baseline	27%	19%	.151	None
Employed at Baseline	58%	44%	<.001	**
Baseline Earnings	$9,990	$9,832	.819	None
Public Assistance Use at Baseline				
SNAP/WIC	54%	63%	.136	None
TANF	17%	19%	.711	None
Barriers that Interfere with School or Work (Sometimes, Often, or Very Often)				
Any Barrier	43%	44%	.872	None
Child Care	23%	22%	.565	None
Transportation	15%	22%	.001	**
Health	20%	15%	.120	None
Alcohol or Drug Use	0%	0%	.969	None
Other	8%	10%	.515	None

Source: HPOG 2.0 Participant Accomplishment and Grant Evaluation System (PAGES)
N=28,077 participants and 38 programs.
Statistical significance levels for two-sided hypothesis tests are indicated with asterisks, as follows: **=1 percent, *=5 percent.

Exhibit A-2. Participant Receipt of Support Services from HPOG 2.0 programs

Characteristic	Rural	Non-Rural	p-Value	Significant Difference
Any Type of Assistance	55%	52%	.749	None
Transportation Assistance	51%	47%	.650	None
Emergency Assistance	6%	6%	.902	None
Child or Dependent Care Assistance	5%	5%	.952	None
Food Assistance	5%	2%	.286	None
Housing Assistance	2%	3%	.425	None
Other Assistance	2%	7%	.121	None

Source: HPOG 2.0 Participant Accomplishment and Grant Evaluation System (PAGES)
N=28,077 participants and 38 programs.
Statistical significance levels for two-sided hypothesis tests are indicated with asterisks, as follows: **=1 percent, *=5 percent.

DIFFERENCES IN IMPACTS ON PARTICIPANT OUTCOMES BETWEEN RURAL AND NON-RURAL PROGRAMS

To explore differences in impacts between participants at rural and non-rural programs, the team leveraged the experimental design of the HPOG 2.0 Impact Evaluation, in which eligible program applicants were assigned at random either to a treatment group whose members could access their local HPOG 2.0 program or to a control group whose members could not access their local HPOG 2.0 program, but could participate in any similar services available in the community. Following the methods from the HPOG 2.0 Intermediate-Term Impact Report (Klerman et al. 2023), the research team estimated impacts as regression-adjusted differences between treatment and control group members, with survey nonresponse weights, separately for participants at rural and non-rural programs. The research team then tested for differential effects (i.e., differences in impacts between participants at rural programs versus participants at non-rural programs) using an augmented version of the regression model described in the Analysis Plan for the Intermediate-Term Impact Report (Judkins et al. 2021).

Across a range of training, service receipt, credential receipt, and employment outcomes, there were no detectable differences in impacts between rural and non-rural programs (Appendix Exhibit A-3).

Exhibit A-3: Impacts on Three-Year Outcomes for Rural and Non-Rural Programs

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value for Effect (Two-Sided)	p-Value for Differential Effects
Training Outcomes						
Received Any Training						.838
Rural	87.2	74.8	+12.5 *	5.9	.042	
Non-Rural	81.4	67.6	+13.9 **	3.6	<.001	
Received Any Training in the Healthcare Field						.497
Rural	83.4	69.2	+14.1 *	5.8	.020	
Non-Rural	76.9	57.9	+19.0 **	4.2	<.001	
Cumulative Months of Training through Q12						.957
Rural	13.1	11.8	1.3	1.8	.479	
Non-Rural	9.4	8.1	+1.4 *	0.7	.043	

Outcome	Treatment Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value for Effect (Two-Sided)	p-Value for Differential Effects
Service Receipt Outcomes						
Received Any Support Service						.614
Rural	71.1	59.7	11.4	7.9	.156	
Non-Rural	68.2	52.4	+15.7 **	3.0	<.001	
Received Any Advising						.169
Rural	46.3	44.8	1.5	6.8	.825	
Non-Rural	46.3	34.4	+11.9 **	3.0	<.001	
Received Any Career Counseling						.362
Rural	32.7	25.0	7.7	5.5	.169	
Non-Rural	40.3	26.7	+13.6 **	3.2	<.001	
Received Any Caseworker Assistance						.295
Rural	20.6	14.8	5.8	5.5	.294	
Non-Rural	24.9	12.5	+12.4 **	2.9	<.001	
Received Any Financial Aid Assistance						.359
Rural	43.0	40.6	2.4	6.5	.711	
Non-Rural	40.3	31.3	+9.0 **	2.7	.002	
Received Any Job Search Assistance						.597
Rural	35.9	21.5	+14.4 **	3.9	<.001	
Non-Rural	39.3	27.6	+11.7 **	2.9	<.001	
Received Any Tutoring Assistance						.934
Rural	29.5	23.7	5.8	9.6	.549	
Non-Rural	30.3	23.6	+6.6 *	2.6	.016	
Credential Receipt Outcomes						
Received Degree, Certificate, or Professional License						.887
Rural	75.3	60.9	+14.4 *	6.8	.041	
Non-Rural	70.0	54.5	+15.5 **	2.5	<.001	
Employment Outcomes						
Employed at Follow-Up						.405
Rural	74.3	63.6	10.6	7.7	.176	
Non-Rural	65.7	61.9	3.9	2.2	.090	
Employed in the Healthcare Field at Follow-Up						.431
Rural	53.9	41.3	+12.6 *	6.1	.045	
Non-Rural	48.1	40.8	+7.3 **	1.9	<.001	

Source: HPOG 2.0 Intermediate-Term Follow-up Survey

Sample includes 339 respondents at 10 rural programs and 2,431 respondents at 28 non-rural programs.

Statistical significance levels for two-sided hypothesis tests are indicated with asterisks, as follows: **=1 percent, *=5 percent.

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