Rural Residency Training as a Strategy to Address Rural Health Disparities:
Outcomes of the HRSA Rural Residency Planning and Development Grant Program

Judith Pauwels, MD; Emily Hawes, PharmD, BCPS, CPP; Lauren Tomola, MSLS; Sheena Johnson, MPH; Erin Fraher, PhD, MPP; Amanda Weidner, MPH; Cristen Page, MD, MPH

BACKGROUND

Health disparities between rural and urban America have been well-documented. Although drivers of these disparities are multifaceted, a key determinant of poorer health in rural populations is lower access to timely, quality healthcare. One proven strategy for addressing the rural-urban mortality gap is increasing physician supply in rural communities. Evidence for a residency program-based strategy to boost rural physician supply is strong.[1] As a result, both HRSA and ACGME have adopted strategic policies and resources to support development of rurally-located GME programs. The HRSA Rural Residency Planning and Development (RRPD) program has completed two years across three grant cycles, now with 46 grantees in Family Medicine (n=35), Internal Medicine (n=4), Psychiatry (n=6), and General Surgery (n=1). The Technical Assistance Center developed a model to guide grantees through the stages of development, and to help inform effective initiatives and address barriers for development.[2]

OBJECTIVES

- Describe the rural residency program development of the HRSA RRPD grantees, including anticipated vs actual "milestones" and timelines for progress.
- Identify the critical opportunities and barriers unique to rural environments as identified by the RRPD grantees for creating programs that will meet rural physician workforce needs.
- Compare and contrast the unique challenges in rural program development across different specialties.

METHODS

The RRPD Technical Assistance Center, comprised of content experts who have helped launch over 100 rural residencies, is funded by HRSA to support and track the grantees of the RRPD program, now with its third cohort, in the specialties of family medicine, internal medicine, general surgery, and psychiatry. A roadmap for program development across six domains was developed and published, with detailed goals and objectives by stage of development.[2] Grantee progress has been tracked quarterly through a tracking tool and rating scale tied to those objectives, also noting key barriers and short-term outcomes over time. The Center has now accumulated two years of progress tracking data on Cohort 1 (funding awarded 2019) and one year on Cohort 2 (funding awarded 2020). Quarterly and summative results are now available demonstrating trajectories and timelines by initial stage of development, including overall measures as well as specific barriers related to the stages.

RESULTS

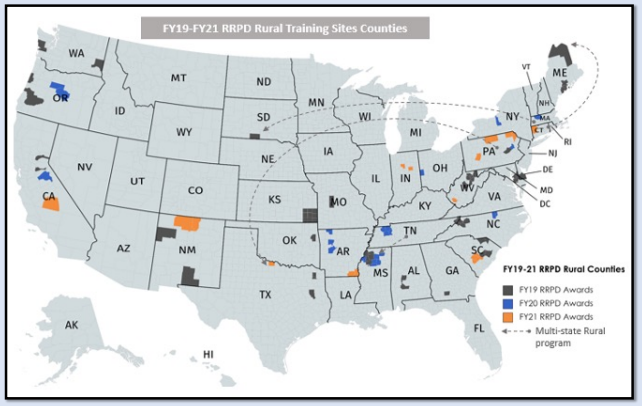
Data obtained during quarterly assessments was analyzed and tracked for two cohorts whose awards were made in 2019 (Cohort 1) and 2020 (Cohort 2). Program readiness scores demonstrated measurable program development over time with variability related to initial stage of readiness at entry and local factors. Program readiness scores are calculated as the sum of completed objectives (weighted by level of difficulty) / sum of all weighted objectives; below shows the baseline and current median readiness scores for Cohorts 1 & 2 and an example of how readiness scores have progressed for those in Cohort 1 (not all are shown). Since most RRPD grantees to date have been in family medicine, we do not yet have enough data to share results by specialty.

Program Readiness Scoring	
Baseline readiness score (Year 1 Quarter 1)	Median Readiness Score: 21% (range 2-91%)
Cohort 1 current readiness score (Year 2, Quarter 4)	Median Readiness Score: 88% (range 10-100%)
Cohort 2 current readiness score (Year 1, Quarter 4)	Median Readiness Score: 66% (range 27-100%)

Cohort 1 Readiness Scores *(example)*

'19	2020				2021			
Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
11	10	10	10	(relinquished)				
65	76	82	85	85	86	86	89	96
9	20	29	34	37	45	45	45	47
23	26	26	26	75	80	80	81	86
12	38	40	74	74	74	74	82	91
80	88	92	94	94	94	94	94	100
29	29	29	28	28	28	(relinquished)		
65	70	93	96	96	96	96	98	98
13	38	51	53	77	84	84	86	91
83	88	96	100	100	100	100	100	100
76	93	96	96	96	99	99	99	99
19	28	30	33	44	50	50	59	62
53	79	83	88	91	93	93	99	100
22	26	41	54	57	62	62	72	72
10	10	18	54	59	59	59	61	77
15	29	36	46	58	68	68	75	76
57	72	74	77	85	88	88	92	96
92	94	98	98	99	99	99	99	99
11	15	15	20	26	38	38	38	47

Key Program Developmental Outcomes	Mentions
Programs that completed a **detailed pro-forma** for all phases of program development	18
Programs that have **developed a governance structure**	27
Programs that obtained **Sponsoring Institution accreditation**	33
Programs that have **recruited a Program Director**	33
Programs that have **recruited core faculty members**	16
Programs that have completed a detailed **community asset inventory**	30
Programs that have **designed the curriculum** (including site mapping)	30



Program Accreditation Outcomes	Count
Programs that **applied** for ACGME accreditation	25 (69%)
Programs that **obtained** ACGME accreditation	20 (55%)
ACGME **approved resident positions** (at full complement) (203 FM, 36 IM, 24 Psych)	263
Programs participating in 2021 NRMP match	12
Residents matched into these 12 programs	94

Common Challenges in Rural Program Development	Mentions
Financial planning	94
Faculty recruitment	91
Curricular design/developing sufficient training experiences	20
Electronic health record adaptation	20
Faculty development	18
ACGME accreditation requirement issues	13
Resident recruitment	7

Actions to Address Common Challenges
Longitudinal advising and coaching with expert in new program development.
In-depth financial consultations, including external consultations.
Monthly webinars and online tools targeted to specific areas.
In-depth community asset inventory early in development to identify needs and strategize specific local solutions.
Connection with peer support networks and specific specialty organizations.

SIGNIFICANCE

Development of new GME programs in rural communities will impact the health of those populations directly through provision of clinical services, recruitment of residency graduates, and retention of faculty who stay in those locations, and indirectly in many other ways. Demonstrating successful pathways for development of these programs is essential, including validating the objectives to achieve program readiness, identifying assets and barriers that are most critical to success, and clarifying both financial and accreditation issues that demand ongoing attention from federal and state payer systems and the ACGME. This data provides specific results that identify those barriers and opportunities across multiple specialties, including tools and strategies to enhance success, and supports validation of a "roadmap" framework for rural program development for other communities to use in the future. This work seeks to strengthen the rural residency-to-workforce pipeline for rural communities in the United States.

A partnership between

DISCLOSURE & REFERENCES

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[1] Hawes EM, Fraher E, Crane S, Weidner A, Wittenberg H, Pauwels J, Longenecker R, Chen F, Page C. Rural Residency Training as a Strategy to Address Rural Health Disparities: Barriers to Expansion and Possible Solutions. Journal of Graduate Medical Education August 2021: 461-5.

[2] Hawes EM, Weidner A, Page C, Longenecker R, Pauwels J, Crane S, Chen F, Fraher E. A Roadmap to Rural Residency Program Development. Journal of Graduate Medical Education. 2020 Aug 1;12(4):384–387.