

Increasing Home Visiting Referrals through Implementation, Dissemination and Evaluation: Perspectives from Rural Healthcare Providers



August 2019

Theresa Cruz, PhD
Leona Woelk, MA
Ivy Cervantes, MD, MPH

This research was supported through a grant by the Thornburg Foundation.



Increasing Home Visiting Referrals through Implementation, Dissemination and Evaluation: Perspectives from Rural Healthcare Providers

Thornburg Early Childhood Education Grant 2018-2019 Report

INTRODUCTION

In 2017, the University of New Mexico Prevention Research Center (UNM PRC) conducted research to determine strategies for increasing healthcare provider referrals to early childhood home visiting (ECHV) programs in Bernalillo County. The UNM PRC collected background ECHV system and program information and conducted qualitative interviews with healthcare providers (pediatricians, nurse midwives, obstetricians, and family medicine physicians). Results were used to identify barriers and facilitators to healthcare provider referrals, and develop systems-level intervention strategies aimed at increasing healthcare provider referrals to ECHV programs.

In 2018, the UNM PRC, working collaboratively with community partners (e.g., home visiting champions, home visiting programs, the Bernalillo County Home Visiting Work Group), implemented the intervention strategies at birthing hospitals, healthcare settings, and medical and residency training programs in Bernalillo County.

This report discusses the ECHV research conducted by the UNM PRC through August 2019. The purpose was to build on the earlier studies by investigating barriers and facilitators to healthcare provider referrals to ECHV programs in rural communities in New Mexico. This was done in order to identify commonalities and differences between urban and rural areas when referring patients to ECHV programs and to inform systems level strategies for increasing referrals in rural areas.

Research background

In 2018, New Mexico had an estimated population of 2,095,428, with an average population density of 17 people per square mile.¹ Almost half of its population (49.1%) were ethnically Hispanic or Latino (see Table 1).¹ In 2010, New Mexico had the fourth largest American Indian/Alaska Native (AI/AN) population in the United States (U.S.).²

Table 1: New Mexico Population by Single Race/Ethnicity Category, 2018

Race/Ethnicity	White	Black or African American	American Indian/Alaska Native	Asian	Hawaiian/Pacific Islander	Hispanic or Latino
Percentage	82.0%	2.6%	10.9%	1.8%	0.2%	49.1%

According to the Federal Office of Rural Health Policy,³ counties with less than a core population of 50,000 people are designated as rural. In New Mexico, 26 out of 33 counties meet this definition.⁴ Additionally, counties that are sparsely populated (fewer than 7 people per square mile) and in which people must travel long distances to reach schools, healthcare and other types of services (e.g., treatment for substance use disorder), and food and other essentials, receive a frontier designation. About half (16) of New Mexico's counties are designated as frontier.⁵



Health, economic, and other types of disparities in rural communities are well-documented. Rates of smoking, obesity, unintentional injury, substance use, motor vehicle deaths, and overall deaths for children and young adults are all higher in rural communities.^{6,7} Women in rural communities have higher rates of intimate partner violence and depression, receive lower levels of prenatal care, and initiate prenatal care later than their urban counterparts.^{8,9} Children in rural communities also experience significant disparities. A higher percentage of children in rural areas have parents with financial difficulties, live in neighborhoods that lack amenities and are in poor condition, reside in inadequate and sometimes unsafe housing, and have a higher prevalence of mental, behavioral, and developmental disabilities.^{10,11}

In addition to health and economic disparities in rural communities, racial and ethnic inequalities also exist. Black, Hispanic and AI/AN populations within rural areas tend to be economically poorer and have lower educational attainment than Whites.¹² They are also more likely than Whites to rate their health status as fair or poor, and report cost as a prohibitive factor in receiving medical care.¹²

Disparities in the social determinants of health in rural communities are also evident.¹³ Rural areas often have higher rates of poverty. People in rural communities are less likely to receive a high school diploma than people in urban areas. Public transportation is often non-existent, and public roads are often two-lane highways that are sometimes unpaved. People in rural areas are more socially isolated, and have other challenges related to fewer individual and community resources. Additionally, most rural communities experience healthcare workforce shortages across all types of providers (e.g., physicians, nurses, dentists, mental health professionals, pharmacists, etc.), which are often related to recruitment and retention issues in under-resourced areas.¹⁴ These conditions may cause rural residents to experience disjointed and fragmented systems of health and social care administered by providers that are transitory and perceived to be disinvested in the local community.^{14,15}

Numerous rural residents have community norms around independence and self-reliance, and perceive many community-based services and programs as governmental or institutional interference. Receiving services that are meant to address barriers to health and well-being are sometimes viewed as stigmatizing or infringing on personal privacy. Language and cultural differences can also contribute to a lack of trust for services and service providers.¹⁶⁻²⁰

Inequalities related to health and social determinants are apparent in New Mexico. In 2017, 19.7% of New Mexicans lived in poverty compared to 12.3% in the U.S.¹ Women in New Mexico initiated prenatal care later than women in the U.S. as a whole (63.8% in the first trimester versus 77.3%, respectively), and a higher percentage

(9.5%) of New Mexico newborns were low birthweight than in the U.S. (8.3%).²¹ Births to adolescents ages 15-19 in New Mexico, at 27.9 per 1,000 births, were significantly higher than the national adolescent birthrate of 18.8 per 1,000 births.²²

According to the *New Mexico Kids Count Profile*,²³ in 2018 more New Mexico children lived in poverty than in the U.S. overall (27% and 18%, respectively), and twice as many (24%) lived in high poverty areas as children in the U.S. (12%). Nearly double the number of high school students in New Mexico (29%) did not graduate on time compared to high school students in the U.S. (15%). Close to half of New Mexico children (45%) lived in single-parent households compared to 34% in the U.S. According to this same source, in 2018 New Mexico ranked 50th in child well-being.

Evidence-based ECHV programs have been shown to effectively mitigate poor health and other effects associated with poverty and other types of disadvantage often experienced in rural communities. Their positive outcomes are organized across eight domains: child health; child development and school readiness; family economic self-sufficiency; linkages and referrals; maternal health; positive parenting practices; reductions in child maltreatment; and reductions in juvenile delinquency, family violence, and crime.^{24,25} Though research in this area is limited, it has also been shown that home visiting programs are more effective when adapted to fit the unique needs of rural communities (as well as other communities that have similar barriers related to the social determinants of health, and concerns around privacy and governmental interference, such as tribal communities).^{16,19,26}

Though research has shown that healthcare provider referrals influence patient participation in community-based programs like ECHV (please see the UNM PRC's previous research report, *Home Visiting: Discovering what works for increasing referrals* (December 2017)²⁷ for an in-depth discussion of healthcare provider referrals to community-based programs, as well as barriers and facilitators to healthcare provider referrals), there is still little communication or coordination between ECHV and healthcare providers.²⁸ Collaboration models that emphasize building on the strengths of rural communities, improving communication, and developing partnerships among community-based services and health care delivery systems have contributed to successfully planning and delivering health care in rural areas.²⁹⁻³¹

All counties in New Mexico except one (Catron) have at least one ECHV program (Appendix A). According to the Cradle to Career Policy Institute's 2018 assessment map of statewide ECHV capacity,³² there are a total of 5,307 ECHV slots statewide, 4,097 of them outside of Bernalillo County. Among 32 counties (excluding Bernalillo County), the percentage of unmet need for home visiting ranges from 100% in Catron County, to 0% in 9 counties (Grant, Guadalupe, Harding, Hidalgo, Los Alamos, Luna, Quay, Sierra, and Taos). Table 2 shows a breakdown of the percentage of unmet needs for ECHV by county (excluding Bernalillo County).

Table 2: ECHV, Percentage of Unmet Need, By County, 2018

Unmet Need: 60%-100%	Unmet Need: 30%-59%	Unmet Need: 0%-29%
Catron – 100%	San Juan – 53%	De Baca – 11%
Eddy – 90%	Santa Fe – 52%	Socorro – 4%
Union – 86%	Doña Ana – 52%	Grant – 0%
Chaves – 77%	Rio Arriba – 45%	Guadalupe – 0%
Roosevelt – 75%	McKinley – 44%	Harding – 0%
Curry – 74%	Cibola – 44%	Hidalgo – 0%
San Miguel – 72%	Mora – 44%	Los Alamos – 0%
Valencia – 71%	Colfax – 43%	Luna – 0%
Sandoval – 70%	Lincoln – 40%	Quay -0%
Lea – 68%	Otero – 40%	Sierra – 0%
Torrance – 60%		Taos – 0%

Study significance and contribution

Rural communities experience significant inequalities that affect health and well-being. ECHV programs can address some of these inequalities by improving prenatal and birth outcomes, cultivating positive parenting practices, identifying and addressing risks for early childhood developmental delays, and strengthening family economic and social supports. Examining rural healthcare provider knowledge and perceptions of ECHV programs, as well as processes and practices that may support or inhibit referrals to ECHV programs, can contribute to the development of strategies to increase provider referrals to these programs in rural communities.

METHODS

The UNM PRC research team utilized a semi-structured interview guide (Appendix B) to interview the healthcare providers in this qualitative study. The interviews were conducted in-person at the interviewee's workplace or preferred location, by telephone, or by Zoom video conferencing. Informed consent was obtained before each interview and before audio-recording. The UNM Human Research Protections Office approved the study protocol.

Study population

Healthcare providers who participated in this research study included a purposeful sample of physicians, and nurse midwives who work with pregnant individuals, infants, and young children in counties other than Bernalillo County. The UNM PRC research team recruited healthcare providers for interviews through e-mail and telephone calls using a recruitment script. Follow-up reminder emails were also sent.

Potential participants were identified through multiple methods. ECHV program managers and home visitors, and systems-focused members of the ECHV community were contacted to provide names of healthcare providers (i.e., pediatricians, obstetricians, family medicine physicians, nurse midwives, and nurse practitioners) who work with pregnant individuals, infants, and young children. The team also approached the leaders of professional medical organizations in New Mexico to request assistance contacting healthcare providers. Additionally, internet searches were conducted to identify and directly contact local hospitals and private practices. Lastly, interview participants were asked to provide names of other healthcare providers (snowball sampling).

Instrument

The UNM PRC research team used a semi-structured interview guide that included demographic information (e.g., clinical specialty, affiliation, gender, etc.) and questions about familiarity with ECHV, both as a concept and with ECHV programs in the counties where their patients reside. The interview guide also prompted discussions of healthcare provider experiences with referrals to ECHV programs (e.g., if they referred, what their referral process was, and whether they received feedback from ECHV programs regarding their referrals), whom healthcare providers believed would benefit from ECHV programs, and their perspective on why healthcare providers do not refer patients to ECHV. Participants were also asked for recommendations for increasing healthcare provider referrals to ECHV programs.

Data analysis

Healthcare provider interviews were audio-recorded, transcribed and analyzed using NVivo 11 software. The research team developed a coding tree using inductive (i.e., emerging from the data) and deductive (i.e., *a priori*) themes. Two research team members separately coded interview data and identified themes, barriers, and recommendations for intervention strategies using the developed coding tree. Any discrepancies in coding between researchers were reviewed and resolved. Where needed, final coding decisions were made by the Principal Investigator.

RESULTS

Between May and August 2019, the UNM PRC ECHV research team interviewed 20 healthcare providers from all four public health regions of the state (NE, NW, SE, SW). The distribution of interviewed healthcare providers by region, gender, type of provider, affiliation, and experience with ECHV referrals is shown in Table 3.

The response rate was 42.9%. Among the 15 healthcare providers who chose not to participate, 8 did not respond to requests; 3 stated they were not interested in participating; 2 cited time limitations; 1 initially agreed to participate but did not follow through with interview scheduling; and, 1 declined to participate due to concerns about legality issues. Among the healthcare providers who chose to participate, none refused audio-recording or declined to answer any questions.

The majority of interview participants were female, worked in a hospital setting, and had occasionally referred patients to ECHV services prior to the interview. Fewer interviewees were from the southeastern region of the state, and fewer were practicing obstetricians. The time in practice among participants ranged from 1 to 40 years.

Table 3: Characteristics of healthcare providers interviewed (n=20)

Region	Number	Percentage
Northeast	6	30.0%
Northwest	5	25.0%
Southeast	3	15.0%
Southwest	6	30.0%
Gender		
Female	13	65.0%
Male	7	35.0%
Type of Provider		
Family medicine physician	5	25.0%
Nurse midwife	6	30.0%
Obstetrician	3	15.0%
Pediatrician	6	30.0%
Affiliation		
Community clinic	2	10.0%
Hospital system	11	55.0%
Hospital system and community clinic	2	10.0%
Private practice	5	25.0%
Experience with early childhood home visiting referrals		
Always refers	2	10.0%
Never referred	5	25.0%
Occasionally referred	15	65.0%

Differences in findings: comparing NM regions to Bernalillo County

Many of the general barriers and recommendations identified in the rural healthcare provider interviews were similar to those discussed in the previous research report, *Home Visiting: Discovering what works for increasing referrals* (December 2017),²⁷ which focused on healthcare providers in Bernalillo County. However, new findings from rural providers included four new barriers as well as the expansion of some of the code definitions from the previous analysis with providers in Bernalillo County.

New barriers identified in this research that were not discussed by urban healthcare providers in Bernalillo County include:

- 1) concern about competition for clients/patients among healthcare or ancillary service providers;
- 2) concern about potential costs or co-pays related to ECHV participation;
- 3) healthcare providers only staying in a community under short-term contracts or only working in the community on a part-time basis; and,
- 4) patient privacy concerns/mistrust of government or institutions.

Changes in code definitions for barriers identified in our previous research included expanding *lack of knowledge of ECHV programs* to include **knowledge of programs specifically in the provider's service area** and *expanding the ability to trust ECHV programs* to include the **need for programs to be culturally competent**.

Code definitions for two recommendations were also revised. The *education or training of home visitors* recommendation was expanded to include **training on how to be inclusive of extended family members or others involved in the pregnancy or child rearing**, and the recommendation for *provider-specific messaging strategies* was expanded to include **on-site outreach efforts**.

One recommendation to increase healthcare provider referrals that was identified in our original research in Bernalillo County, the use of *legislation*, was not mentioned by any of the rural healthcare providers participating in 2019.

Additionally, the UNM PRC evaluation team also included an "other findings" category in the current analysis with two subthemes, *patient feedback* and *resource linkages*. These items did not fall under barriers or recommendations to increase healthcare provider referrals to ECHV programs, but added important contextual information about working in rural communities.

A summary of the interview results, including barriers and facilitators, is discussed below.

Themes

Familiarity with the concept of ECHV

Overall, healthcare providers were at least somewhat familiar with the concept of home visiting. Half could describe some aspects of ECHV programs, or were aware of ECHV or home-based early intervention programs in their communities or in nearby tribal communities. However, some interviewees confused ECHV with home visits as an aspect of home health care. An obstetrician stated:

We currently don't use home visiting in any other capacity than occasionally using a home health nursing agency with some of my post-operative patients.

Those who described themselves as very familiar with ECHV said it was because they had participated in ECHV programs earlier in their careers, often in other states; had accompanied early childhood home visitors as part of their residency; or routinely referred to local ECHV programs. One midwife said:

I'm very familiar with home visiting. Before I became a nurse midwife, I worked at the health department in a different state and I was part of their home visiting program. So, I've done home visits myself as a nurse.

Familiarity with ECHV programs in New Mexico

Healthcare providers were also asked if they were familiar with specific ECHV programs in their communities or in New Mexico in general, and if so, whether feedback about them had been positive or negative. The majority of the interviewees were aware of local and tribal ECHV programs and many could name specific programs that operated in their areas. In most cases the healthcare providers had heard positive things about the programs from their patients. A midwife described it this way:

Most of what I hear is for women who get contacted within prenatal care and it seems, it seems like people enjoy it. They appreciate having that extra care. I haven't heard anything necessarily negative about the programs. I see sometimes there are challenges in communication and knowing when someone's going to call you. Or like . . . I was expecting a call and I haven't heard from them, or we've been missing each other. But, mostly just those kind of logistical things.

A few respondents, however, indicated that they either heard nothing about the programs –

It's a black hole. [I'm] not sure what they do. (Pediatrician)

or had heard very little –

Well, I mean, what I have heard is positive . . . We just haven't heard a heck of a lot. (Obstetrician)

Experience referring to ECHV programs

Among the healthcare providers interviewed, only two healthcare providers stated that they regularly referred their patients to home visiting programs. One midwife said:

I kind of see my goal as soon as I meet a patient that I haven't met before, even if I'm just going to see her once during the pregnancy, . . . [I ask] if she's heard about [home visiting program], does she know what it is, and see if she wants to do it.



Thirteen healthcare providers indicated that they occasionally referred to ECHV programs. Six healthcare providers stated that they referred in the past but were not referring to ECHV at their present practices. Four reported that they referred “high-risk” and/or “first-time parents”. Lastly, three healthcare providers occasionally referred rarely, only when they remembered, and stated that ECHV referrals were not part of their regular practice. A family medicine physician said:

I don't think I'm 100% consistent with it. A lot of them, I think, have been referred . . . before they actually establish with me.

Who should be referred to ECHV programs

When asked who should be referred to ECHV programs, half of the respondents thought ECHV should be offered universally to all parents. Several of those that thought it should be universal then went on to describe the need for a prioritization process based on their perception that ECHV resources are limited. They included the need to refer people described as “high-risk”: those who misuse alcohol or drugs, those who appear to be at-risk for child maltreatment, or those who have issues related to social determinants, such as transportation, food, or other limited resources. One pediatrician stated:

Probably everybody [should be referred]. But, they can't take it, that's not high risk, and they don't have the resources. So then we have to stratify for risk: teen mom, mom who uses drugs, homeless mom, mom with mental health issues. And the other for me – really important – is a prison population. We really should have home visitation in prison for some of these pregnant moms and, and in jail, in prison. And those are, for me, a high-risk population, incarcerated women.

Participants also felt that teen mothers and first time parents should be prioritized. One provider mentioned mothers with postpartum depression, and another thought any child with a chronic medical condition should be referred.

Barriers

Rural healthcare providers discussed several barriers related to referring to ECHV programs. These included lack of knowledge about ECHV; time limitations; not having an internal referral process; lack of feedback from ECHV programs when referrals have been made; concerns about insufficient ECHV program funding; lack of trust for ECHV programs; community norms around privacy and mistrust for government programs or institutions; potential costs or co-pays that might be incurred for ECHV participation; concerns about stigmatizing clients; worries about competition among ancillary service or healthcare providers for clients/patients; healthcare providers only staying in a community under short-term contracts or only working in the community on a part-time basis; and, uncertainty about how to promote ECHV services. These are described in more detail below.



Lack of knowledge

All healthcare providers interviewed described lack of knowledge about ECHV programs as a barrier. Specifically, not knowing what was available in the community served. One pediatrician stated, “It’s like just happenstance that you hear about these programs. They’re not well-advertised.”

Healthcare providers also identified incomplete knowledge of ECHV. For instance, one provider knew ECHV programs worked with pregnant women but did not know they worked with young children as well, while another provider was only aware that they worked with children but not that they worked with pregnant women. Another provider knew of the local ECHV agency but did not know that ECHV was part of their services. A family medicine physician summarized it this way:

I think just having the awareness of what is available, because I think there is so much that’s out there that, that as a provider, you’re, you’re not either made aware of it, or you just don’t know where to access that information. . . . because I really feel that, I think most providers know that there’s a need, they just don’t know how to access [ECHV].

Time limitations

Time limitations was frequently mentioned as a barrier to ECHV. In general, interviewees talked about the sheer number of patients they have to “crank through” in a day and the amount of information they need to cover within each limited contact. One family medicine physician was sensitive to what it might be like for the parents as well:

I think lack of time during visits. I mean, definitely bringing it up is, especially in those first few visits, when you have so many other things to cover. And the parents are already feeling kind of overburdened, it feels like maybe one more thing. So I think that’s certainly an issue.

The healthcare providers also talked about limited time to learn about community resources like ECHV, tease out eligibility requirements, complete the referral process, and then follow-up with the provider to make sure the patient was receiving services. In one case, this was perceived to be especially burdensome for healthcare providers in solo practice, which is more common in rural communities.

Healthcare provider time in community

Rural healthcare providers also discussed a different type of time limitation related to ECHV referrals – healthcare providers that work only part-time or under short-term contracts in the local community. As one pediatrician stated, “Once your loans are paid – you know, a good chunk of the medical staff will disappear after a few years.”

A family medicine physician described the impact of this type of time limitation on referrals to ECHV in this way:

My sense is, you know, there are two obstetricians in [local community] now and they're, they take turns being there for 10 days. They don't live in [local community]. My sense is they don't have a big commitment in [local community]. So my, my sense is that they would not [make an ECHV referral].

No internal referral process

Half of the healthcare providers interviewed indicated that there was no process within their practice to support making referrals, including no support staff that could assist. A family medicine physician in private practice said:

And if you have a clinic at least, you know, with the large clinics we have, they all have lots of social service type people that they've hired, who are supposed to do all that. And maybe they do. But in my world, I couldn't hire anybody like that. I wouldn't have enough work for them, and I can't afford it.

Several others that worked within a larger healthcare setting described it as just not being embedded in their practice:

I guess it's a cultural thing, you know, kind of, that's just not what happens there I guess. . . . just the corporate culture, I guess, or the healthcare culture that babies aren't referred to [ECHV]. (Family Medicine Physician)

Feedback

Many healthcare providers discussed a lack of feedback from ECHV as a barrier to making referrals. None had received feedback from the ECHV programs on their previous referrals, unless they called the program to discuss a specific concern they had related to the person they referred (e.g., nutrition, child maltreatment). One pediatrician stated: *"If you don't get feedback, you're going to stop referring."*

Funding

Concerns about adequate funding related to ECHV programs was also mentioned, though this barrier was described in a variety of ways. Five interviewees connected this misgiving to the general shortage of healthcare providers in the state, described by a family medicine physician in this way:

I wonder, though, like what's the, I read from the [research consent form] that there are several . . . home visiting programs that are available within New Mexico, but I wonder if they have backlogs and stuff like that. Or how are they servicing the current referrals right now? Because I wonder about the availability of people, especially in New Mexico, who can provide the services.

Two healthcare providers talked about the history of local community-based programs having to discontinue services because of grant, hospital or community funding ending, and wondered if ECHV services were similarly funded and therefore vulnerable. One worried that if the local ECHV services were underutilized it would cause them to lose their funding. A pediatrician made a general comment that if funding issues meant that there had to be a prioritization process for referring ECHV participants, disadvantaged children should be selected first.



Trust

Several interviewees described an inability to trust ECHV programs as a barrier. Two healthcare providers related it to key clinicians in their practice being “old school” and “fixed in their ways.” Their perception was that these medical partners would not be inclined to make or encourage ECHV referrals because they ascribed to a traditional medical model in which they were the sole source for patient contact, and that, in itself, would cause them to be averse to referring to ECHV services.

Three others talked about diminished trust related to not knowing enough about local ECHV programs. In one case this was because the local ECHV program did not communicate with the provider and, based on patient feedback, did not seem to be responding to ECHV referrals. A family medicine physician said he didn't have enough information about or interaction with local programs so *“I have no idea who they are. . . . I can't evaluate them because I've never dealt with them, and then maybe they're new and great, and maybe they're awful.”* Another wondered about home visitor training, (e.g., screening for postpartum depression), and said that not knowing more about this type of competency made making referrals “tricky.”

A pediatrician talked about trust in the context of cultural competency in rural communities:

And that's really what you're talking about with home visitation. How do you culturally get in there and work with family? . . . So again, what's your population? How are you working with them? Do you look like them? If you don't look like them, you're going to have a problem. So, how do you kind of mesh with that stuff?

This type of trust issue encapsulated both the healthcare providers' perception about whether the ECHV program was a good fit for the community, and the community's ability to trust the program based on home visitor relatability.



Privacy

The issue of privacy was described as a barrier by six healthcare providers. They portrayed some of their clients as “living off the grid,” and “not wanting people in their business.” One midwife compared her experiences in New Mexico to another state she worked in, and felt that there was a marked difference in the culture here:

I did want to say something about the culture . . . because I worked, like I said, at home visiting in [another state] and I provided home visits myself. And most of my patients, and these are patients that I see throughout their pregnancy over and over again, most of them agree to have a home visit postpartum and really appreciate it. But there are, I would guess, you know, 10 to 15% of my patients decline a home visit, even for someone that they trust and have seen repeatedly – I hope they trust – and would prefer for me not to go to their home. And that's very different than what I experienced in [another state], and I feel like the culture here in New Mexico is, many communities don't trust government, I don't know, a government or, you know, professional entities.

Some healthcare providers that identified this culture of privacy as a barrier did not see this as a reflection of mistrust for ECHV per se, but a general mistrust of “Big Brother” interference. Some noted that this could be overcome by home visitors meeting these families in settings other than their homes. One midwife has learned to give very specific, local, and non-threatening examples of what home visitors do as a way to quell client fears, and added, “*And I always try to tell them, you know it doesn’t have to be in your home.*”

Cost to patient

Interviewees expressed concerns about ECHV referrals resulting in charges to their patients. They were very cost conscious on behalf of their patients both when they had private insurance and the provider was uncertain if they would incur a co-pay, and in cases where they were not sure if the service was covered by Medicaid. A pediatrician said having clarity around this issue could result in increased healthcare provider referrals:

If we knew that they were, like, for example, early intervention folks, they don’t charge insurance. So if there was something like that, that we knew we wouldn’t have to fight the insurance companies to get, that would definitely grease the wheels a little bit.



Stigma

Healthcare providers mentioned stigma as a barrier to ECHV referrals. One specifically mentioned the association with the New Mexico Children, Youth and Families Department as being a cause for client refusal when offering the option of home visiting. Another discussed it in the context of how referrals to ECHV programs might be viewed by an associate who is “full of fixed ideas” in the same way as promotion of breastfeeding, which he was resistant to because he worried it would make “moms feel like they’re bad moms if they don’t breastfeed.” One suggested universal referrals as a way to remove stigma associated with the perception that ECHV is “just for the poor or disadvantaged.”

Competition

Interviewees discussed competition inhibiting ECHV referrals. One midwife speculated that community-based ECHV may be in competition with a hospital-based, prenatal through postpartum case management program available in her area:

I don’t know if there’s competition for revenue between [hospital-based program] and a home visiting program so that if someone qualifies for [hospital-based program], are they going to lose money if they refer them to home visiting? Those are the questions I don’t know and I don’t really have a reason to know that. But maybe, if there was some kind of an issue, then maybe there would be less of a likelihood or tendency to refer to home visiting if it was a revenue issue.

A family medicine physician in private practice described how systemic changes to healthcare delivery systems have affected his clientele so that he no longer sees many pregnant women or newborns, and therefore has little reason to refer:

But in the last few years, my newborn population has just gone from quite healthy to almost nothing. And my pediatric population has, as a result, dropped. What I’ve done, just simply how do you, how do you compete against the corporate monster?

Promotional skills

One midwife described the difficulty she and her medical assistant have in persuading clients to accept ECHV services. She said, “*I find people are fairly reluctant to start during pregnancy for some reason,*” and, “*Even though the literature says . . . that you can meet someplace else if you don’t want them coming to your home. They still think*

that people find that intimidating.” This provider talked about including other family members, (e.g., grandparents, sisters, cousins), in the discussion as a strategy to help promote ECHV services, especially with teen mothers.

Recommendations

Healthcare providers had a variety of recommendations for ways to increase referrals to ECHV programs. These included: standardizing the referral process; educating healthcare providers about ECHV programs; receiving follow-up from ECHV programs on the status of referrals and program participation; promoting referrals through on-site messaging, including in-person outreach by ECHV programs; simplifying the referral process; integrating ECHV programs into clinical settings; using electronic medical record prompts as reminders to refer; making sure home visitors are well-trained; and engaging non-traditional partners in the referral process.



Standardization

The most strongly endorsed recommendation for increasing healthcare provider referrals to ECHV programs was implementing a standardized referral process. For 11 healthcare providers this included having a designated point person (e.g., resident, nurse, discharge planner) who follows up on the provider’s referral recommendation (*“cause it gets it done and it gets done quickly and effectively”*). There was also a recommendation to make it standard practice to refer, or to make referrals universal. Healthcare providers often described the helpfulness of having referrals incorporated into the electronic medical record (EMR) so the referral form itself was easy to use. Several healthcare providers discussed collaborating and maintaining frequent contact with local ECHV programs so that it was standard practice to simply call the home visiting program to make a referral. One pediatrician said, *“A lot of times I just call and say ‘hey!’”*

Education

The second most frequently recommended suggestion for increasing provider referrals was to educate healthcare providers and support staff on the existence of local ECHV programs, the evidence-base for home visiting, and the process for initiating a referral. Healthcare providers suggested incorporating home visiting information into CME opportunities, nursing and medical school training, educational webinars, New Mexico Pediatric Society meetings and materials, or conferences such as the Wylder Lecture Series. The majority of healthcare providers stated that educating healthcare providers in face-to-face interactions within their own clinical settings was important. This included during grand rounds, at monthly clinic meetings, through hospital seminars, and during “lunchtime talks.” A pediatrician suggested:

I think, I mean that the best way would be to have a physical person show up at a time that was scheduled so it wasn’t in the middle of a crazy morning. . . . something that could be set up ahead of time, somebody could come talk to us about the program, bring some information both for us and that could be passed out to families, that would be ideal.

Some saw in-person contact as vital for rural communities where personal relationships strongly influence healthcare provider collaboration with community-based programs:

In small communities like [name of town], I often have taken care of the grandparents, the mother and now the kid, and the kid's kid. So, there's a building of trust. And if I say I recommend this, then the family, especially the grandmother, will agree to do it. So in advertising this to pediatricians or family practitioners, you have to, you have to incentivize them—the physicians—to say this is a worthwhile project. So again . . . have some way that we're all coordinated and I think more pediatricians will be involved. (Pediatrician)

Because many healthcare providers practice in rural communities on a short-term basis or only part-time, interviewees included the need for ECHV programs to routinely (e.g., every 3 to 6 months) provide in-person updates about their services.

Other suggestions included direct mailings and flyers, but several healthcare providers mentioned being too busy to read material received through mail or email. One person also acknowledged that reaching solo healthcare providers is difficult, suggesting that perhaps a “town hall” for them might be a way to educate multiple healthcare providers at once. One pediatrician summarized the need to be adaptable and flexible in educational strategies in this way:

Sometimes, it's CME. Sometimes, it's conferences. Sometimes, it's just mailings. Sorry, I spend a lot of time thinking about this in other areas. It's kind of a whack-a-mole approach. It kind of depends on the practitioner. So, um, I mean I think that the key part is making it simple and having a good communication. If you make that work, then they're going to engage more. Especially if they're getting something out of it.

Follow-up

Most healthcare providers reported that receiving follow-up information on referrals to ECHV programs would help increase healthcare provider referrals. As one midwife stated:

I felt good about referring to that program because like I said, every time I asked if they [the home visitor] had gotten ahold of them [the patient], they had tried and somebody had followed through. So, I think that's an important part of the clinician trusting the, the program is I'll do my part, but making sure you guys, you know, they would do their part.

There was consensus that they did not need a great deal of information, but that they wanted to know whether a connection to the ECHV program had been made, a general sense of the referred person's well-being, and most importantly, if there was any issue on which the healthcare provider needed to take action. An obstetrician identified several reasons why follow-up was important:

Well, I think, for one reason, because there's a little bit of effort involved and we would like to feel like our efforts are at least paying off, you know. You know, it's, it's actually accomplishing something. And secondly, you know, when you identify . . . a potential problem, you'd like to know that, you know, you're able to maybe do something to improve the situation.

Several healthcare providers mentioned the helpfulness of receiving screening results as ECHV follow-up, such as the Ages and Stages Questionnaire or postpartum depression scores.



Messaging

The majority of healthcare providers suggested that having outreach materials that describe ECHV services, including program brochures and pamphlets, program cards, posters, and letters, could be a way to increase healthcare provider referrals. However, some providers felt that these would be more effective if coupled with routine, in-person outreach by program staff. As a midwife stated:

So my ideal would be like really have a sit-down conversation with somebody and to be like what kind of services do you provide, when should I be referring, what's the best way to streamline for a patient? So I, I personally enjoy conversations, whether that someone shows up to a meeting or I personally have a conversation with somebody.

A couple of the interviewees also suggested that ECHV programs develop a media strategy to help advertise their services and to appeal to younger individuals:

You know, like, um, do you guys know about the Text For Baby program that comes out of the Department of Health? Maybe, a tag on that . . . we tell a lot of our patients about the Text For Baby program. And . . . 'cause we tell them about it. I know they use it. And, you know, . . . most people are savvy, they're text savvy. So, they want to, they want to be communicating digitally. They don't want to read a book. I offer books all the time and they never read them. (Midwife)

Simple referral process

Half of the healthcare providers mentioned the importance of simplifying the referral process. They specifically talked about having a referral form that was easy to use (e.g., with checkboxes) and that it is better if there is a standardized form that can be used to refer to multiple programs. Other suggestions for simplifying the process included universal referrals so no one would be burdened by deciphering eligibility criteria, having a “one-stop-shop” website of ECHV programs that is kept current, and having a point person that can be reached if there are questions regarding eligibility:

Some things are not done because it can be tedious and it's time consuming. So the referral process would be easy, you have someone that you can call right away and ask who's easily accessible if a patient qualifies. (Family Practice Physician)

Integration

Several healthcare providers described ways that integrating ECHV into clinical practice encourages referrals. It facilitates a warm hand-off to potential clients, promotes better collaboration between the ECHV program and the medical provider, makes promotion of ECHV an “easier sell” because “as we go out of the room, they're going in,” and it is easiest to refer to the program that is routinely on-site, interacting with new parents. This intersected with the issue of trust as well. A pediatrician stated:

It doesn't help just talking about it, you have to show people in [community name]. “Okay, this is a person I trust, I like them. They'll help you at home if you want them to do it.”

EMR referral prompts

Some healthcare providers who already refer credited having an ECHV referral form in the EMR as a facilitator for their referrals, and one provider suggested that integrating a referral form along with an automatic referral prompt would be “an easy fix” for increasing referrals.



Home visitor training

One midwife discussed the commonality of extended family members being involved in childrearing in rural communities. She felt that this was an important consideration for home visitors:

So, I think it's important to be open and welcoming to whoever's doing the parenting, or whoever lives in the primary care or the primary home. . . . I've had a patient, I can think of one patient in particular. Um. It was the, the mom's sister. That was doing that. . . . She lived in the home, but she was doing primarily most of the parenting and she was a little bit older than the mom herself, but I think that's important for, um, programs when they're going into the house . . . to be inclusive.

Another healthcare provider wanted assurances that ECHV programs had established protocols for contacting a healthcare provider if the home visitor identified medical or safety concerns during the course of providing services.



Non-traditional partners

One pediatrician suggested establishing relationships directly with Managed Care Organizations (MCOs) and with the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) as a way to increase provider referrals: *“And again, it kind of goes back to, you know, engaging with MCOs and care managers – that whole thing. A whole challenge getting us all to communicate.”*

Contextual factors

During data analysis, the UNM PRC research team identified some common themes that were not directly related to ECHV referral barriers or recommendations. They appeared to demonstrate what may make it both more and less difficult to practice in rural communities, and seemed important to acknowledge as contextual factors.

In one case a barrier – “abominably low” levels of health literacy – was identified as significantly problematic. The healthcare provider described its far-reaching effects, from misunderstanding medical instructions to being unable to differentiate between an emergency and non-emergency situation. She described this as a characteristic among a substantial portion of her rural clientele.

In the other cases, certain dynamics that seemed unique to rural communities contributed to positive experiences for the healthcare providers. These related to the sense of closeness, shared responsibility and personal connections nurtured within these communities. For instance, it was common for healthcare providers to learn about ECHV experiences from their patients rather than from the programs themselves. This feedback was sometimes offered voluntarily by the patients and was other times the result of direct questions from the healthcare provider. The healthcare providers appreciated this communication, as evidenced by one midwife’s comment:

You know what I'll do, sometimes what I'll say, like, when I'm assessing their need for education about labor and birth, I'll hear from them, "Oh, I went over that with my home visitor." So sometimes, I'll realize, "Oh! Great!" Okay, so I don't have to spend 15 minutes going over something that the home visitor took care of. Then, I can move on to something else.

Another talked about how just being embedded in the community contributed to greater numbers of referrals:

I think a lot of it has been probably just on a personal level, and the fact that I, like, got my home visiting services from them and know the people well, um, and a lot of the home visitors are my patients and, and friends as well. So I think a lot of it is just kind of we have that, that personal link and know each other and so refer back and forth because of that. (Family Medicine Physician)

It was also common for medical assistants, social workers, residents, and other types of clinical staff to actively investigate and develop relationships with community programs and resources. These efforts were highly valued, and allowed clinical practices to assist with car seats, breast pumps, breast cancer support, counseling services, and other types of benefits. A family medicine physician described it this way:

So I think just being made aware how much help you get just having those professions around you, I think has provided a more robust, I guess, care system to, to that patient population. So I think we've been very lucky that we do that. And then what we aren't able to provide, again I think having those social workers who are aware of other programs within the community, can increase our awareness of what is available, and then that makes us that much more likely to refer. Once you know about them, you're going to utilize them because you can't get too much more efficient as a provider, and you're not feeling like either you have to provide that, or you really don't know how to provide a service even though you, there's the need.

One pediatrician described the profound effect these connections, in particular with ECHV, had on him personally, given the level of disparity in rural communities:

These are the things that make it possible . . . with regards to home visitation, one of its selling points for practitioners is that these are the types of resources that let me manage to stay in the community. Otherwise, I would quit. The social issues are too hard. And so, you know, and I'm a native New Mexican. And I care. But, boy, sometimes. You know, and this is one of those ways that helps me try to, kind of, work on it. To address it. Because, you know, one, I don't get paid otherwise to do this kind of stuff. And then, two, you know I sleep better at night knowing that there's other eyes on, you know, some of these, these kids. So. I will say that I can never do my job without it. It's been an amazing resource.



DISCUSSION

This research focused on healthcare providers serving rural communities throughout the state. Many of the findings were similar to previous research focused on Bernalillo County. Healthcare providers were familiar with the concept of ECHV, although some were only aware of home visiting programs related to medical procedure follow-up or chronic disease management. Many interviewees believed that universal referrals to ECHV were the optimal practice, and would also help address barriers related to program stigma and provider time limitations. Individuals identified as most in need of ECHV services included teen mothers, first time parents, and those considered high risk due to substance abuse, child maltreatment concerns, or limited social resources and supports.



The most commonly identified barriers to referrals to ECHV programs in rural communities were lack of knowledge about ECHV (both that the programs were available and what they entailed), and provider time limitations. As with Bernalillo County providers, not having an internal referral mechanism, not receiving ECHV program feedback, and uncertainty about funding and sustainability were also barriers. New barriers that arose from this data included community norms around privacy, perceived costs associated with the services, issues around competition for clients/patients, and healthcare providers serving rural communities on a temporary or part-time basis. These barriers require new and creative strategies for addressing them.

Unexpectedly, healthcare providers did not discuss a lack of available ECHV programs offering services or concerns around travel distances, although these are typical barriers in rural areas. These concerns were mentioned by community partners during our formative research. It may be that the providers being interviewed were unaware of the locations of the available programs and therefore assumed that there would be local programs available to assist their patients.

Themes of community connectedness, personal relationships, and the need for close and supportive collaboration in these rural settings were interwoven into interview discussions. They were also evident in many of the conversations regarding recommendations. The strongest recommendation for increasing provider referrals in rural communities was standardization of the referral process. Having a designated point person in charge of the referral process that could assist with eligibility criteria and answer provider questions, a standardized form, and ability to refer through the EMR were all discussed. However, the most common process for initiating a referral among those participants who currently referred patients was often a simple phone call from the healthcare provider to the ECHV program. These providers noted that they already had an established collaborative partnership with the ECHV program.

As with the research in Bernalillo County, healthcare providers recommended ECHV education as another important way to increase referrals. This included accredited CME trainings, nursing and medical student training, webinars, and online courses. However, unlike providers in Bernalillo County, the most common suggestion for education was having regular in-person training and updates by ECHV programs at healthcare provider practices. This was echoed in the recommendation for messaging as well. Although providing healthcare providers with brochures, pamphlets, referral forms, posters, etc., were seen as ways to promote referrals, on-site outreach was considered the most important messaging strategy. On-site outreach was described differently from in-person educational sessions, which were conceived as being scheduled in advance and more structured. On-site outreach was portrayed as a casual and relational way to encourage referrals. In both cases, recommendations were that these educational and outreach efforts needed to be repeated at regular intervals to be effective.

Healthcare providers recommended better follow-up from ECHV programs, and more integration of ECHV programs into medical and clinical settings as ways to facilitate referrals. Healthcare providers thought cultural competency of the programs and the home visitors was also important for them to feel comfortable referring to the

programs. Providers saw these strategies as contributing to increased ECHV and healthcare provider collaboration around patient care, allowing for a more holistic understanding of social and family situations affecting patient well-being.

A smaller number of people felt that EMR prompts coupled with an electronic ECHV referral form would be helpful, as well as training for home visitors on integrating extended family members into home visiting sessions, and developing protocols around the circumstances in which a medical provider should be notified of patient health and safety concerns. Engaging non-traditional partners (specifically MCOs and WIC) were a suggestion for increasing referrals from one interviewee.

Throughout the interviews, experiences of connectedness, the importance of personal relationships, and the value of sharing resources and information in remote and under-resourced areas were contextual factors influencing service provision. These concepts did not arise in the earlier UNM PRC home visiting study conducted in Bernalillo County.

Limitations

This research has several limitations. The purpose of the research was to learn more about the referral practices of rural healthcare providers as they relate to ECHV programs, and to better understand the barriers and facilitators to these types of referrals. Qualitative research methods are appropriate for this type of study, but generalizability is limited due to the purposive sampling. Interviews were conducted until saturation was reached and it was determined that additional interviews would not lead to new information related to the study's purpose.

Another potential limitation is response bias, given that not all healthcare providers who were invited to participate in the study responded. It should be noted that the response rate was substantially lower for healthcare providers serving rural areas compared with those in Bernalillo County. More providers either did not respond to requests to be interviewed or indicated that they would like to participate but did not have the time to do so. Additionally, some potential participants indicated that they were not permitted to participate without permission from a medical director, and one provider, despite assurances from research staff, felt that the research would violate patient privacy laws. The effects of the potential response bias are unknown.

Future directions

Some strategies for addressing barriers to healthcare provider referrals to ECHV programs in rural communities are similar to those in Bernalillo County, although the mechanisms for accomplishing those strategies may be different. The systems strategies of education, messaging, champions and use of technology, will apply throughout New Mexico. Materials previously developed for Bernalillo County (provider tip sheet, simplified referral form, champion roles and responsibilities, demonstration video) can be used with minimal modifications. However, mechanisms for educating providers across the state are made more difficult due to travel distances and the interest in in-person, relationship-building interactions with local programs. Several strategies can be undertaken to increase referrals to ECHV in rural communities. These include:

- Sharing the results of this study with local ECHV programs throughout the state
- Collaboratively developing systems strategies for addressing the need for a simple, centralized referral system
- Providing training and technical assistance to providers in rural areas on ECHV referrals
- Working together with ECHV programs that serve rural communities to develop standard practices around provider outreach and referral mechanisms
- Providing materials through local ECHV programs and statewide provider networks
- Conducting training sessions at statewide meetings
- Providing accredited on-line training for CMEs addressing knowledge gaps
- Evaluating the results of strategy implementation

CONCLUSION

Rural communities offer some unique challenges and opportunities. ECHV programs in rural communities are well-positioned to be integral, collaborative community partners for improving maternal and child health outcomes, and addressing health and social disparities at the family level. Addressing identified barriers to referrals by healthcare providers in rural communities will strengthen the referral system and better serve families in New Mexico.



REFERENCES

1. United States Census Bureau. *QuickFacts New Mexico*. <https://www.census.gov/quickfacts/NM>. Accessed August 17, 2019.
2. Norris T, Vines PL, Hoeffel EM. *The American Indian and Alaska Native Population: 2010*. United States Census Bureau, U.S. Department of Commerce, Economics and Statistics Administration;2012.
3. Health Resources & Services Administration. Federal Office of Rural Health Policy. *Defining Rural Population*. <https://www.hrsa.gov/rural-health/about-us/definition/index.html>. Accessed August 21, 2019.
4. Health Resources & Services Administration. Rural Health Grants Eligibility Analyzer. *List of Rural Counties and Designated Eligible Census Tracts in Metropolitan Counties*. <https://data.hrsa.gov/tools/rural-health>. Accessed August 21, 2019.
5. Rural Health Information Hub, Federal Office of Rural Health Policy. *Health and Healthcare in Frontier Areas*. <https://www.ruralhealthinfo.org/topics/frontier#how-much>. Accessed August 21, 2019.
6. Eberhardt MS, Ingram DD, Makuc DM. *Health, United States, 2001 with Urban and Rural Health Chartbook*. Hyattsville, MD: Centers for Disease Control and Prevention, National Center for Health Statistics;2001.
7. Meit M, Knudson A, Gilbert T, et al. *The 2014 update of the Rural-Urban Chartbook*. Rural Health Reform Policy Research Center;2014.
8. Bennett KJ, Lopes JE, Spencer K, van Hecke S. *Rural women's health*. National Rural Health Association Policy Brief, 2013.
9. Committee on Health Care for Underserved Women. *Health Disparities in Rural Women*. The American College of Obstetricians and Gynecologists;2014.
10. Robinson LR, Holbrook JR, Bitsko RH, et al. Differences in health care, family, and community factors associated with mental, behavioral, and developmental disorders among children aged 2-8 years in rural and urban areas - United States, 2011-2012. *Morbidity and Mortality Weekly Report*. 2017;66(8):1-11.
11. Probst JC, Barker JC, Enders A, Gardiner P. Current State of Child Health in Rural America: How Context Shapes Children's Health. *J Rural Health*. 2018;34 Suppl 1:s3-s12.
12. James CV, Moonesinghe R, Wilson-Frederick SM, Hall JE, Penman-Aguilar A, Bouye K. Racial/ethnic health disparities among rural adults - United States, 2012-2015. *Morbidity and Mortality Weekly Report*. 2017;66(23):1-9.
13. Rural Health Information Hub, Federal Office of Rural Health Policy. *Social Determinants of Health for Rural People*. <https://www.ruralhealthinfo.org/topics/social-determinants-of-health>. Accessed August 19, 2019.
14. Burrows E, Suh R, Hamann D. *Health care workforce distribution and shortage issues in rural America*. National Rural Health Association Policy Brief;2012.
15. Rural Health Information Hub, Federal Office of Rural Health Policy. *Rural Health Disparities*. <https://www.ruralhealthinfo.org/topics/rural-health-disparities>. Accessed August 17, 2019.
16. Hiratsuka VY, Parker ME, Sanchez J, et al. Cultural Adaptations of Evidence-Based Home-Visitation Models in Tribal Communities. *Infant Ment Health J*. 2018;39(3):265-275.
17. Tedder T, Elliott L, Lewis K. Analysis of common barriers to rural patients utilizing hospice and palliative care services: An integrated literature review. *J Am Assoc Nurse Pract*. 2017;29(6):356-362.
18. Browne T, Priester MA, Clone S, Iachini A, DeHart D, Hock R. Barriers and Facilitators to Substance Use Treatment in the Rural South: A Qualitative Study. *J Rural Health*. 2016;32(1):92-101.
19. Barlow A, McDaniel JA, Marfani F, et al. Discovering Frugal Innovations through Delivering Early Childhood Home-Visiting Interventions in Low-Resource Tribal Communities. *Infant Ment Health J*. 2018;39(3):276-286.
20. Slama K. Rural culture is a diversity issue. *Minnesota Psychologist*. 2004:9-13.

21. New Mexico Department of Health. Indicator-Based Information System for Public Health. <http://ibis.health.state.nm.us>. Accessed August 17, 2019.
22. Centers for Disease Control and Prevention. Teen birth Rate by State. 2018; <https://www.cdc.gov/nchs/pressroom/sosmap/teen-births/teenbirths.htm>. Accessed August 17, 2019.
23. New Mexico Voices for Children. *New Mexico KIDS COUNT Profile*. KIDS COUNT Data Book, Annie E. Casey Foundation, 2018 and 2019.
24. Sama-Miller E, Akers L, Mraz-Esposito A, et al. *Home Visiting Evidence of Effectiveness Review: Executive Summary*. Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Washington, D.C.; October 2018.
25. Schull CP, Anderson EA. The effect of home visiting and home safety on children's school readiness. *European Early Childhood Education Research Journal*. 2008;16(3):313-324.
26. Whittaker J, Kellom K, Matone M, Cronholm P. A Community Capitals Framework for Identifying Rural Adaptation in Maternal-Child Home Visiting. *J Public Health Manag Pract*. 2019.
27. Cruz TH, Woelk L, Cervantes I. *Home Visiting: Discovering what works for increasing referrals*. University of New Mexico Prevention Research Center; December 2017.
28. Paradis HA, Belknap A, O'Neill KMG, Baggett S, Minkovitz CS. Coordination of early childhood home visiting and health care providers. *Children and Youth Services Review*. 2018;85:202-210.
29. Galambos CM. Health care disparities among rural populations: A neglected frontier. *Health & Social Work*. 2005;30(3):179-181.
30. Phillips CD, McLeroy KR. Health in rural America: Remembering the importance of place. *American Journal of Public Health*. 2004;94(10):1661-1663.
31. Berkowitz B. Rural public health service delivery: Promising new directions. *American Journal of Public Health*. 2004;94(10):1678-1681.
32. Cradle to Career Policy Institute. Statewide Home Visiting Capacity. 2018; <http://ccpi.unm.edu/visualizations/statewide-home-visiting-capacity>. Accessed August 19, 2019.

