



COMMUNITY HEALTH REPRESENTATIVE WORKFORCE ASSESSMENT (PHASE II) 2020

A Report to The Arizona Advisory Council on Indian Health Care
In Collaboration with The Arizona Community Health Representative Coalition

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Arizona Community Health Representative Coalition

Like the CHR workforce, the Cornstalk is a symbol of survival and resilience, representing strength, power, community and health.



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We acknowledge and appreciate the Community Health Representative Coalition for commissioning and sharing the photographs for this report. Photographs featured in this report are part of a larger digital story initiative aimed at highlighting the important contributions of the CHR workforce to American Indian health and wellbeing. As per photo release agreements signed by participants, photos are for educational purposes only. Photographs do not represent participating individuals or Tribes in this project and are included for the explicit purpose of providing context for the daily work and community environments of the CHR workforce generally. All photographs courtesy of J. Daniel Hud (<https://www.jdanielhud.com/>) – unless otherwise noted. Cover photo by Sean O’Meara.



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To access this report digitally, please visit the AACIHC website (<https://acoihc.az.gov>) or the NAU-CHER website (<https://nau.edu/cher/>).

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EXECUTIVE SUMMARY

In 2018, the Community Health Representative (CHR) workforce celebrated their 50th year and serve as the oldest and only federally funded Community Health Worker (CHW) workforce in the United States. Since 2015, Tribal CHR Programs of Arizona have come together for annual CHR Policy Summit and Workforce Conferences to dialogue and plan for the unique issues and opportunities facing CHR workforce sustainability and advancement. Over time, the Policy Summit has resulted in an Arizona CHR Movement Coalition, which advocates for inclusion of CHRs in state and national level dialogue regarding workforce standardization, certification, training, supervision and financing.

In 2019, the Arizona Advisory Council on Indian Health Care (AACIHC) sought assistance with a multi-phase assessment of the CHR workforce in Arizona. Specifically, researchers from the Center for Health Equity Research (CHER), Northern Arizona University (NAU) collaborated with AACIHC and with the leadership of the Arizona CHR Coalition, to define the scope of a baseline CHR workforce assessment and ensure appropriate dissemination of the workforce assessment results. Phase I of the assessment involved collecting and analyzing Scopes of Work (SOW) and job descriptions for 12 of the 19 Tribal CHR Programs in Arizona. In the spring of 2020, Phase II of the CHR Workforce Assessment was launched. NAU-CHER consultants again collaborated with the AACIHC to develop and conduct interviews with CHR managers in Arizona, focusing on CHR program organization, structure, financing, health system integration, and evaluation.

Phase II Arizona CHR Workforce Assessment Objectives:

1. Document CHR efforts related to Social Determinants of Health.
2. Document CHR Program organizational structure and financing.
3. Document the formal and informal relationships that exist between the CHR Program, other Tribal programs and Indian Health Service and 638 health systems serving American Indian patients.
4. Document the current way in which CHR Programs are conducting process and outcomes evaluation.

KEY FINDINGS

The Community Health Representative programs in Arizona are valued members of the healthcare system serving American Indian communities and play a critical role in care coordination and case management for their clients through close working relationships with other Tribal programs, state entities, and the Indian Health Service (IHS) system. | **Barriers to health system integration** include gaps in communication and information sharing practices as well as a lack of understanding of the CHR workforce among critical stakeholders, including providers. | CHRs are highly focused on improving **Social Determinants of Health** for their clients, particularly in the areas of *access to care*, and *social and cultural cohesion*. | CHR Programs participating in this assessment employed a **variety of financing strategies** to sustain their programs, supplementing IHS funding with limited Medicaid reimbursement, Tribal General Funds, and grants. | CHR Programs prioritize evaluating the impact of their program yet face **multiple barriers to program evaluation**, most importantly a lack of access to effective data tracking systems that enable both process and outcomes measures.

Workforce Policy Recommendations

1. Engage CHR Programs in robust dialogue to establish a comprehensive program evaluation system that strengths and gaps in professional development, sustainability and financing of the CHR workforce and captures the effectiveness of the CHR program on American Indian populations.
2. Modernize the methods of data collection within the IHS and local public health and health care systems to ensure coordinated communication and monitoring of populations and programs.
3. Increase awareness and acceptance of CHRs among the health care team by mandating orientation to CHR workforce competency, roles, and responsibilities for all medical and public health care staff.
4. Establish procedures and policies for integrating CHRs as a functioning member of the health care team.
5. Establish a mechanism for reimbursement of CHR activities through Medicaid.
6. Establish formal mechanisms for communication between CHR and public health and health care systems to ensure coordination of care and referrals among shared clients and patients.

BACKGROUND

CHR WORKFORCE

In the 1960s, Tribal communities in the United States identified the need and advocated for community health professionals and paraprofessional to improve cross-cultural communication between Tribal communities and predominantly non-Native health care providers. In 1968, an Indian Health Service (IHS) funded CHR program was established through P.L. 100-713 as a component of health care services for American Indian people. In 1975, the Indian Self-Determination and Education Assistance Act (ISDEAA), P.L. 93-638, provided Indian Tribes the authority to contract with the Federal government to assume IHS funds to operate programs serving their tribal members and other eligible persons. Tribes may choose to *contract* with IHS to administer certain programs or services, or *compact* on a nation-to-nation basis to assume full control over health care programs. Tribal control through both types of agreements allows Tribes to manage funds, programs and services to best meet the needs of their communities.¹ All CHR Programs in Arizona are tribally directed through “638” contract or compact agreements under the ISDEAA.

CHRs are a workforce of well-trained, community-based, health care workers, designed to integrate the unique support of Tribal life with the practices of health promotion and disease prevention. More specifically, CHRs are characterized as community leaders in health who share the language, and understand and can relate to the socioeconomic status and life experiences of the community member patients they serve. The CHR workforce acts as a liaison and advocate for clients to assist them in meeting their health care needs, while upholding traditions, values, and cultural beliefs of the individuals they serve.

Nationally, the CHR workforce consists of approximately 1,700 CHRs representing 264 Tribes. Of the 22 Tribes in Arizona, 19 Tribes operate a CHR Program and employ approximately 246 CHRs – which is equivalent to 30% of the total CHW workforce in Arizona estimated at 1000 CHWs.

CHR STANDARDS OF PRACTICE

The Indian Health Service published the *Indian Health Manual*, Part 3, Chapter 16² which sets forth the goals and objectives of the program, the standards of practice for the workforce, and requirements related to training, oversight and data collection and reporting. IHS also published the Resource and Patient Management System (RPMS) Training Manual³ which outlines the CHR service codes used by CHRs to document their services completed with individual patients, community organizations and other events. The patient-oriented CHR Standards of Practice are summarized in Table 1 below.

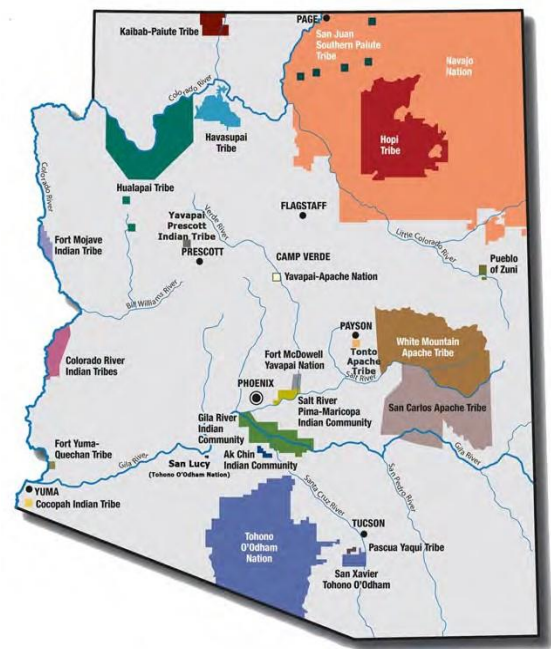


Figure 1. Native Nations of Arizona

Table 1. Indian Health Service CHR Standards of Practice

<i>Health Education</i>	Provides individuals, families and communities with the appropriate information to practice a healthy lifestyle.
<i>Case Find/Screen</i>	Carrying out efforts for the early detection of patients with diseases or conditions requiring medical attention (e.g., hypertension, TB, pregnancy, etc.)
<i>Case Management/ Coordinate</i>	Developing a patient care plan in conjunction with a community health nurse or physician, deciding upon the various responsibilities for the people involved in the patient's care. Serve as a patient advocate by arranging appointments, filing complaints, obtain services and coordinates with service providers to ensure continuity of care.
<i>Monitor Patient</i>	Making periodic contact with a patient with a known health problem or is high risk for illness or disablement, by telephone or at home, to see if he/she is feeling well, has enough food, medicine, has unmet home health care needs, with immediate action taken.
<i>Emergency Patient Care</i>	Giving care to a sick or injured person while arranging or waiting for transportation to a hospital or clinic, contracting an ambulance or hospital driver, transporting a seriously ill patient to medical care or performing crisis intervention with an emotionally upset or suicide patient.
<i>(Non-Emergency) Patient Care</i>	Taking vital signs or providing other clinical services, such as foot care, or counseling or contacting traditional services for social, emotional, mental or other related problems. Home health care and maintenance of patient equipment such as: crutches, wheelchairs, eyeglasses and hearing aids are included. Delivering items such as medications, supplies and equipment, to the patient's home.
<i>Homemaker Services</i>	Assisting the disabled, homebound, or bedridden with household chores, preparing food and feeding incapacitated patients, or assisting with personal care such as bathing or hair washing.
<i>Transport</i>	Transportation of a patient, without other means of transport, to/from an IHS or Tribal hospital/clinic when necessary for routine, non-emergency problems, which includes waiting for a patient, such as a dental patient, to finish treatment.
<i>Interpret/Translate</i>	Taking a statement from one language and expressing the meaning, either orally or in writing, in another language, so as to enable people who do not speak the same language to communicate with one another.
<i>Environmental Health</i>	Inspecting the community's environment in: water/waste-water management; vector control; air quality; solid waste; and, food handling. Example services include animal immunization clinic, community clean up, coordinating the repair/maintenance of homes or community facilities, or checking for health/safety hazards in a patient's home.
<i>Other Patient Centered Services</i>	Any patient-centered services NOT included in other service codes. E.g. Assisting with funeral arrangements; Planning, coordinating and conducting a specialty clinic/event; Preparing for or clean-up after an event; PCC documentation.
<i>Community Development</i>	Activities that help support the Tribal / community. E.g. Assist with non-health related Tribal function; assist another Tribal department with a project; assist a community organization with a project; fund-raising activities; disaster preparedness.

2. Indian Health Service. *Standards Of Practice. Section 3-16.9D4. Indian Health Services. (1991.) Retrieved From <https://www.Ihs.gov/Ihm/Pc/Part-3/P3c16/>*

3. Indian Health Service Office Of Information Technology. (N.D.) *RPMS Training: Community Health Representatives; Coding Health Problem & Service Codes [Powerpoint Slides].*

Nationally, the CHR workforce is considered a member of the Community Health Worker (CHW) workforce recognized in 2007 by the US Bureau of Labor. According to the American Public Health Association, the CHW workforce is further defined as:

Frontline public health workers who are trusted members of and/or have an unusually close understanding of the community served. This trusting relationship enables CHWs to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. CHWs also build individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy.



Figure 2. Community Health Worker Job Title

The CHR Workforce is unique from other health professions in the following ways:

1. **Relationship and trust-building** – to identify specific needs of clients.
2. **Communication** – especially continuity and clarity, between provider and patient; and traditional knowledge and language.
3. **Focus on Indigenous Social Determinants of Health** – conditions in which people are born, grow, work, live, and age, including social connectedness, traditional knowledge and spirituality, relationship to the environment and a shared history.

Figure 3. Unique Characteristics of the CHR Workforce

CHR WORKFORCE ASSESSMENT

Since 2015, Community Health Representative (CHR) Programs of Arizona have come together for annual CHR Policy Summit and Workforce Conferences to dialogue and plan for the unique issues and opportunities facing CHR workforce sustainability and advancement. Over time, the Summit has resulted in an Arizona CHR Workforce Coalition, which advocates for inclusion of CHRs in state and national level dialogue regarding workforce standardization, certification, training, supervision and financing. Coalition members are made up of CHR Programs representing several Native Nations throughout the state and include CHRs and CHR supervisors, health department directors, leading American Indian health and social policy entities, as well as local University partners. Like many professional associations and professional conferences, the CHR Summit and CHR Coalition provide an interactive environment and mode of continuous communication among stakeholders in which policy initiatives and advocacy strategies unique to the CHR workforce can be discussed and deliberated.

In 2017, in an effort to advance and sustain the CHR workforce among Tribes of Arizona, members of the CHR Coalition designed and implemented a CHR workforce assessment to administer with CHRs and CHR Managers during the 2018 CHR Policy Summit and Workforce Conference. This assessment was the first of its kind, and document important demographic, professional development and training characteristics of the CHR workforce attending the CHR Summit. A total of 60 CHRs completed the workforce assessment which

represents approximately 24% of the total 246 total members of the CHR workforce employed in Arizona. CHRs were predominately female, aged 47 years in age and had an average of 13 years of employment experience as a CHR. Approximately one quarter of the CHR workforce reported a high school diploma or a GED equivalent as their highest level of education. Almost half (47%) of CHRs reported having achieved some college education and 23% had received a college degree. In terms of annual earned income as a CHR, one quarter of CHRs who completed this assessment reported an annual salary of less than \$25,000 and approximately 53% of CHRs earned between \$25,000 - \$35,000 annually and 16% of CHRs reported earning between \$35,000 - \$50,000 annually as a CHR. Approximately 66% of CHRs reported current employment with a Tribal Health Department, while 15% were employed within a community-based organization and approximately 10% of CHR participants were employed in a clinical setting, including a hospital, federally qualified community health center (FQCHC) or an Indian Health Services or Urban Indian Health Center or facility.

In the summer of 2019, the Arizona Advisory Council on Indian Health Care (AACIHC) sought assistance with a multi-phase assessment of the CHR workforce in Arizona. Specifically, researchers from the Center for Health Equity Research, Northern Arizona University (NAU) collaborated with AACIHC and with the leadership of the Arizona CHR Coalition, to define the scope of a baseline CHR workforce assessment and ensure appropriate dissemination of the workforce assessment results. Phase I of the assessment involved collecting and analyzing Scopes of Work (SOW) and job descriptions for 12 of the 19 Tribal CHR Programs in Arizona.

In Phase II of the CHR Workforce Assessment, NAU-CHER consultants again collaborated with the AACIHC to develop and conduct interviews with CHR managers in Arizona, focusing on CHR program organization, structure, financing, health system integration, and evaluation. Table 2 below outlines the specific goals and approaches to both phases of the 2019-2020 CHR Workforce Assessment.

Table 2. Arizona CHR Workforce Assessment Objectives

PHASE I	<ol style="list-style-type: none"> 1. Collect CHR job descriptions and scopes of work from the 19 CHR Programs, Urban Indian Health Centers and American Indian serving not for profit organizations operating in Arizona. 2. Develop a CHR Workforce Database to document and track CHR core roles and skills. 3. Document current and emerging CHR core roles and skills across the CHR workforce. 4. Compare CHR core roles and skills by: (1) Indian Health Service CHR Standards of Practice and (2) National Community Health Worker (CHW) Core Roles and Competencies.
PHASE II	<ol style="list-style-type: none"> 1. Document CHR efforts related to Social Determinants of Health. 2. Document CHR Program organizational structure and financing. 3. Document the formal and informal relationships that exist between the CHR Program, other Tribal programs and Indian Health Service and 638 health systems serving American Indian patients. 4. Document the current way in which CHR Programs are conducting process and outcomes evaluation.

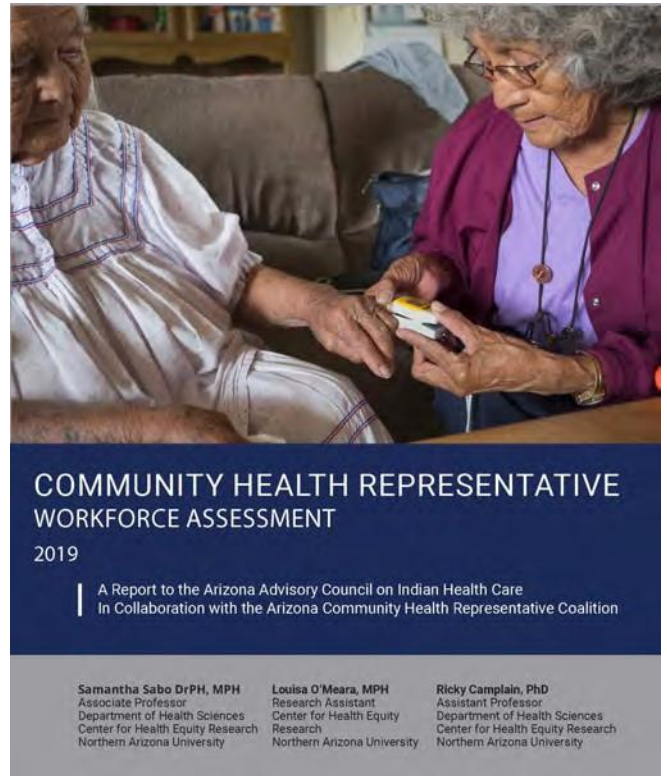
Arizona CHR Workforce Coalition members understand workforce development and planning as essential to recruit, retain and sustain a cadre of highly skilled, culturally and linguistically diverse CHRs able to serve the diverse medical, social, cultural and traditional facets of rural and urban American Indian communities in the U.S. This first ever CHR workforce assessment serves to support current and future CHR professional development, training, supervision, career advancement and financing of the CHR profession in Arizona.

KEY FINDINGS FROM PHASE I

The CHR workforce employed by Tribes in Arizona are a highly trained, standardized workforce with a comprehensive scope of practice outlined by the Indian Health Service and further enhanced by Tribal CHR Programs. CHR workforce roles and competencies span both the Indian Health Service and National Community Health Worker core roles and competencies.

CHRs are required to have various cultural, traditional and linguistic experiences and knowledge, and a variety of education and professional training and certifications to meet the unique needs of American Indian communities.

All 12 participating Arizona CHR Programs' SOWs and job descriptions identified the CHR workforce core roles and activities including the IHS standards of practice of : *health education, case finding and screening, care management and coordination and patient care and monitoring* and the following national CHW Core Competencies of : *providing culturally appropriate health education and information, conducting outreach, providing direct service, care coordination, case management and systems navigation and participating in evaluation and research*. This baseline CHR workforce assessment relied on the analysis of existing CHR scopes of work, job descriptions and job announcements for these CHR Programs of Arizona. The Phase I CHR Workforce Report can be found at the AACIHC website: <https://aacihc.az.gov/chr-movement>



APPROACH

CHR Workforce Assessment Phase II (referred to herein as Phase II) involved two distinct steps, first, a content analysis of existing scopes of work collected during Phase I and second, semi-structured qualitative interviews with CHR Managers. NAU-CHER consultants collaborated with the AACIHC to launch semi-structured interviews with CHR managers to explore program organizational structure and financing, formal and informal relationships with Tribal and IHS programs and systems, engagement with process and outcomes evaluation, impact on the social determinants of health and CHR Program involvement with COVID-19 response efforts. These topics and the interview guide used to explore these programs, management, and workforce characteristics, was developed in collaboration with AACIHC staff and members of the Arizona CHR Coalition, including representation of CHRs, CHR managers, Indian Health Service, Arizona Department of Health Services, and other important American Indian health policy experts. NAU consultants piloted the interview guide with two CHR Program managers and revised for content, clarity and flow. (See Appendix A: Interview Guide.)

Through purposive sampling, which is often used in qualitative assessment, collaborators use their expertise and judgment to select participants based on specific characteristics and qualities important to the purpose of the project. In this project, all 19 CHR program managers were invited to participate in interviews. We also, intentionally or purposefully, identified and recruited CHR Programs that represented the diverse characteristics, including service area settings, small and large population sizes, and public health and health care delivery program structures (i.e. contracted and compacted programs) to provide the greatest breadth of information for the assessment.

NAU-CHER consultants and AACIHC collaborated to engage CHR Program leadership representing 19 CHR programs in Arizona in understanding the purpose of Phase II of the CHR workforce assessment. We engaged leaders through regularly scheduled monthly meetings of the Arizona CHR Coalition, as well as by email and telephone.

Between May 5 and June 4, 2020, NAU-CHER staff conducted 45-60-minute interviews via telephone or video conference with seven managers at six CHR programs. Interviews were recorded, transcribed and analyzed for prominent themes using Atlas.ti Qualitative Analysis software. As part of this assessment, NAU-CHER consultants also took a deeper dive into the content of CHR job descriptions and scope of work (SOW) collected during Phase I of the Assessment in order to better understand how CHR activities align with Social Determinants of Health (SDoH). Consultants independently and systematically read through every document in the SOW database, as well as interview transcripts, and coded the information based on the Vitalyst SDoH definitions.⁴ Although this assessment is not considered human subject research by NAU research review board, interview findings are confidential and remain anonymous; information is reported in aggregate or as de-identified case studies to ensure anonymity of all participants and Tribes.

RESULTS

CHAPTER 1 | PROGRAM ORGANIZATION AND STRUCTURE



Figure 4. CHR Service Area in Northern Arizona

CHR managers had extensive experience in their current position, with a median time of six years as Program Manager or Director. Nearly all described prior experience working in community health in some capacity – as a CHR, RN, or WIC coordinator, for example. The CHR programs represented a diverse range of organizational structures, program sizes, and CHR pay scales. In addition, program service areas include both rural and urban environments. As outlined in Table 3 below, programs range greatly in size and CHR salary (from \$13 to \$23.50 per hour). Programs may categorize their CHRs by seniority, for example having entry level CHRs, as well as senior level CHRs who have more professional experience and training. One program has a CHR who is a Tribal Registered Nurse (RN) and splits their time between the CHR program and the Special Diabetes Program for Indians (SDPI). Another program has CHRs who are trained to specialize in either tuberculosis (TB) or sexually transmitted infections (STIs). CHR programs that provide non-emergency medical transportation have CHRs who are primarily dedicated to transportation services. CHR caseload, defined as the number and type of patient assigned to each CHR, also varies according to a number of different factors, summarized in Table 3 below.

Table 3. CHR Programs Organization and Structure

Program	CHR Program Positions (#)	CHR Salary (per hour)	Caseload Considerations
A	CHR Program Manager (1) Program Secretary/Admin (1) CHRS (7)	\$15.80	Performance Standards Minimum 40 clients Training/Experience
B	CHR program manager (1) Assistant Director (1) CHRs (3)	\$14 - \$18	Geography Maximum 40 clients Language preference Training/Experience
C	CHR program manager (1) Administrative assistant (1) Secretary (1) CHR-III (Senior) (1) CHR-II (3) CHR-I (Entry level/Transportation) (5)	\$13 - \$17	CHR preference Training/Experience
D	CHR Program Manager (1) CHR Transport Supervisor (1) Home Visiting CHR (3) Transportation CHR (6) Community Health Nurses (RNs) (2)	\$18.72 - \$23.56	Case acuity
E	CHR Health Director (1) Tribal RN/CHR (1) Medical Billing CHR (1) Transportation (not CHR but does some CHR billable work)	\$13.50	Geography
F	CHR Program Director (1) Program Supervisors (12) CHR (19) Senior CHR (79) CHR - Technicians (16) Administrative Staff (11)	\$14 - \$18	Distribution of disease in service area Geography Training/Experience

CHR Client Caseload

CHR client caseload may be affected by the geography and distribution of disease in the service area. For example, in service areas that are very large or include remote rural communities, CHRs may be assigned to certain communities or to clients who live closer to their homes. Some programs also have a minimum or maximum number of clients that each CHR has in their caseload. Many managers take into consideration CHR experience or training, explaining that while they make sure all CHRs receive equal training and training opportunities, some CHRs come into the position with previous certifications or experience (such as a Licensed Practical Nurse, Certified Nursing Assistant, phlebotomist, or Lactation Specialist) that may affect which clients are assigned to them. Certain CHRs may also receive training in specialty areas like chronic pain management or on specific curriculum-based programs such as Family Spirit, the evidence-based home visiting program for maternal and early child health. One CHR manager explained their approach this way:

Every CHR has a similar load. The training or any type of training available to the CHRs, they pretty much do it together so that they can all share in the work that is being requested within the community. So, most of them, they support each other in their project. Maybe an area we only have one CHR trained to work with chronic pain management because she's been trained and at the time [IHS] only wanted one CHR. [...] That chronic pain management training is in collaboration with the Indian Health Services.

Another consideration is the client's language preference, for instance making sure that an individual who speaks only or primarily their native language be paired with a bilingual CHR. One program manager explained that they also take into consideration CHR preference when assigning cases; CHRs may volunteer to take a certain client with whom they have previous personal or professional experience. They explained that this approach utilized the CHR's unique knowledge of the community to provide a better client experience. For another program, the most important consideration for caseload distribution is case acuity; rather than giving all CHRs an equal number of cases, some may have a smaller number of clients who are high-needs.

CHR Time and Effort

In Phase I of this CHR Workforce Assessment, we established – based on the provided scope of work (SOW) and job descriptions – that CHR programs in Arizona were strongly aligned with the National CHR Standards of Practice (SOP) set by the Indian Health Services. Job descriptions and SOW documents from the 12 participating CHR programs identified the five most common CHR roles and services as *health education, case find and screen, case management and care coordination, non-emergency patient care* and *patient monitoring*.

In order to confirm and deepen our understanding of these findings in Phase II, CHR managers were asked to describe how their CHRs spend the majority of their time and effort in everyday practice. Two-thirds of CHR managers identified “home visits” as the most common CHR service, using this umbrella term to include the following SOW categories: *patient monitoring and case find/screen* (e.g. taking blood pressure, blood sugar, and oxygen level measures, and checking medications), *patient care* (e.g. delivering supplies or medication, or providing direct



FIGURE 5. CHR CONDUCTS HOME VISIT

care) and *case management and care coordination* (e.g. making referrals to Public Health Nursing, primary care provider, or other service provider as needed based on home health assessment). They also explained that *health education* often takes place during home visits and is usually focused on chronic disease prevention or management. Additionally, these home visits may include home safety assessments to identify fall risks or other safety needs. One program manager stated that their CHRs spend the majority of their time

providing non-emergency transportation services, while another program devoted the majority of their time (prior to COVID-19) on providing health trainings such as CPR.

Coordination with Tribal Programs

CHRs’ active involvement in care coordination for their clients requires partnerships with a variety of Tribal programs across the spectrum of community health: behavioral health, chronic disease prevention and management, maternal and child health, senior services, and environmental health. CHRs may refer clients to Tribally managed programs for additional services as well as receive referrals from partners to provide services such as welfare checks with hard-to-reach clients, care coordination, targeted health education, or home safety assessments. Table 4 below lists the programs that CHR managers described collaborating or partnering with, categorized from the most to the least frequently mentioned in interviews.

Table 4. Tribal Program Partnerships

Most	Some	Least
<ul style="list-style-type: none"> • Chronic Disease Prevention and Management Programs (e.g. Cancer, Heart Health, Diabetes) • Office of Adult/Senior Services • Maternal and Child Health Programs (e.g. WIC) 	<ul style="list-style-type: none"> • Social Services • Environmental Health • Housing • Tobacco / Substance Abuse Programs • Food Distribution • Education Department • Behavioral Health • Transportation 	<ul style="list-style-type: none"> • Cultural Preservation • Language Department • Epidemiology • Emergency Preparedness • Recreation • Fire Department • Public Works
CHR Commonly Provided Services		
<ul style="list-style-type: none"> ◇ Home visits / welfare checks ◇ Home safety assessments 	<ul style="list-style-type: none"> ◇ Care coordination ◇ Health Education 	<ul style="list-style-type: none"> ◇ Coordination of physical activities

One of the most commonly reported partnerships was with senior services, with whom CHRs work closely to coordinate services for elderly clients. CHRs assist clients to apply for services, report suspected cases of elder abuse, and coordinate home renovations for disability accommodation, in addition to receiving referrals to conduct welfare checks or deliver food. One CHR manager explained how important it is for CHRs to reach out to elders and connect them with needed services such as HVAC repairs during the hot Arizona summer:

And it’s really good because a lot of times, the Tribal members won’t – they don’t know who to go to, they don’t know who to ask, they don’t know how to go about that. So, we’re able to go out and ask them if they need anything, it really connects that gap, you know, that normally is not there, that connection – we do that.

Most CHR managers also reported established partnerships with the Women, Infants and Children (WIC) and First Things First programs, both making and receiving referrals to support the maternal and child health in their communities. CHRs are also highly involved in chronic disease prevention, working frequently with the Special Diabetes Program for Indians (SDPI) to provide health education to clients. One CHR manager also described a close relationship with their Tribe’s Cancer Program, assisting with screenings at their monthly well woman clinic.

They [the Cancer Program] have a Well Woman Clinic that is held at the Indian Health Services every month. They have clinics two times a month. So, the Cancer Program sets up appointments for these women to come in for mammography or a pap, their yearly annual exams. And so, the CHRs they go in and they provide the triage to the patient for the cancer program. And so there is one CHR assigned to triage for the clinic in the day.

Some CHR programs also reported referral-based partnerships with social services, food distribution, behavioral health and substance abuse programs. CHR managers at two programs discussed the strong relationships they have with environmental health and housing programs, with whom they work closely to coordinate home improvements for safety or disability access, or to coordinate repairs for utility services (e.g. electricity, sewer, water).

CHR programs also reported being involved in coordinating physical activity opportunities at community events, working with such programs as Recreation, Substance Abuse, and the Cultural Preservation and Language departments.

Special Programs and Projects

Interviews with managers provided the opportunity to explore less common CHR activities that stretch the traditional bounds of the CHR SOW, learning how CHR programs have expanded their reach through special projects, evidence-based programs, and research partnerships. Special projects may focus on a certain disease, such as one program's Liver Disease project, in which CHRs created targeted health education for justice-involved patients and their families. Another program coordinates their community's Diabetes Education Program, as well as the CPR and First Aid Certification Programs. Advocacy, a central tenant of the CHR workforce, was taken to the policy level as one program spearheaded a passenger safety campaign for their community:

The main one that we have been focusing on is passenger safety. ...that is more about seat belt, car seat installation, alcohol related issues with DUIs, advertisements, promotions, surveys. [...] We are working currently with the lawyers to develop a new ordinance for passenger safety.

CHR programs also utilize evidence-based national programs such as Family Spirit, a maternal and child health home visiting program developed by Johns Hopkins University. Half of the programs interviewed had some CHRs who were trained in the Family Spirit curriculum and managers underscored the importance the program had for many clients. One CHR manager described the program's impact this way:

I really feel like they are really making a difference for the young mothers who are enrolled in Family Spirit, because some of these moms really have become dependent on the CHRs to asking questions – especially, if they're still pregnant. You know, "What's going to happen to me? And how am I going to...?" And they're able to touch on a lot of various subjects with these young moms. So I feel like Family Spirit has really been beneficial for the new moms, and at least for patients that we serve in our clientele listing, I feel like they've made a difference to show these clients that they care. That the work that they do is coming from the heart.

Another evidence-based program that one CHR program has put into effect comes from the Centers for Disease Control (CDC) and has three aims: tobacco cessation, type 2 diabetes prevention, and hypertension prevention. Through the program, certain CHRs receive training to become Lifestyle Change Coaches while others manage referrals to specialized intervention providers related to the three disease areas.

Several CHR programs are also involved in university-based research projects related to some aspect of community health. One research project is focused on the connections between asthma and living conditions, and the CHRs' role centers on health screenings and data collection with participants, such as conducting nutrition recalls, taking blood pressure, and performing lung capacity tests. Another CHR program is participating in a study examining uranium exposure in children. Participating CHRs are trained as Community Health Environmental Research Specialists and do outreach, recruitment, surveys and specimen collection. One CHR manager described another environmental research project, in which their CHRs were trained to administer surveys and collect samples (air, water, soil, blood) among families affected by a large mining spill.

Growth and Development of CHR Programs

When asked about where they saw the most potential for growth and development of their programs, CHR managers described the evolving nature of CHR work that requires them to grow and make changes to meet the needs of their clients and

communities. Some CHR managers focused on planned programmatic changes, while many described new areas of training and certification they envisioned for their CHRs (Table 5).

On the programmatic level, several CHR managers discussed their desire to increase patient contact through more frequent outreach and home visits. One manager emphasized that this contact is essential for CHRs to stay “connected with the community.”

Table 5. CHR Program Growth and Development

Training / Skill building	<ul style="list-style-type: none"> • Digital storytelling / PSA development • Community resource navigation • Case Management • Patient empowerment / motivational interviewing • Improved documentation and reporting • Disease-specific training
Certification Programs	<ul style="list-style-type: none"> • Community Health Aide Program (CHA/P) • Licensed Practical Nurse • Community Dental Health Coordinator
Programmatic Changes	<ul style="list-style-type: none"> • Increase patient contact / home visits • Bolster relationship with IHS PHN

Another CHR manager explained that their move in the direction of increased home health services and care coordination is largely due to the impact of COVID-19 and will result in dramatic changes in how CHRs spend the majority of their time.

Now that, you know all of that [community health education programs] was suspended and we're actually moving towards the direction of home health and so a lot of that stuff is going to go to other groups in our department, not us. We're going to be focusing more on home visits, so in six weeks it will look totally different, we'll be mostly doing home visits.

Another area of programmatic change that one CHR manager described was the development of a stronger relationship with IHS Public Health Nursing (PHN) through collaboration on a number of disease areas, including HIV and maternal and child health.

Most CHR managers focused their discussion of program development around new directions for additional CHR training and certifications, summarized in Table 5 above. One CHR manager explained that they would

like to see their CHRs receive more training around making effective PSAs, possibly incorporating digital storytelling. Two managers identified motivational interviewing and patient empowerment as skill areas they would like to improve in their CHRs. Other CHR managers noted that their CHRs who often have to act in a social worker-like capacity would benefit from additional training around community resource navigation and case management skills. One CHR manager explained that given the expanding roles of the CHR workforce, the changes in electronic health records, and the need for accurate program evaluation, CHRs will require training to improve and standardize documentation and reporting practices.

CHR managers described several ways they plan to bolster the CHR workforce by providing the opportunity for advanced certifications. One program established a partnership with the American Dental Association and a regional community college, through which a small number of their CHRs have completed formal training as Community Dental Health Coordinators. Their long-term goal is to have all CHRs on staff complete this training and have their services help fill the gap of the severe dental provider shortage in their area. One CHR manager explained that they plan to only hire CHRs who are Certified Nursing Assistants (CNA) and that they are hoping to secure Tribal funding to pay for any CHR who wants to become a Licensed Practical Nurse (LPN). The CHR managers who oversee the two largest programs interviewed explained the need for all CHRs to have at least a CNA or CMA to ensure program sustainability, as they perceive a move on the federal level favoring the Community Health Aide Program (CHA/P) model over the CHR model. (See Phase I Report, page 6, for description of CHA/P.) One CHR manager explained their approach to transitioning CHRs into CHAs:

That is something that we are looking at and that we are working. It's – from what I understand, it's is going to be mandatory from the national level and so we are going to have to make that transition and so it's something that we have been including in our funding and our budget justification. And so, it's something we are looking at and that we plan on moving towards. One thing that I think to our advantage with that is that we have a majority of the CHWs who are trained as a nurse assistant or a medical assistant. So, I think that transition, it should be – hopefully it goes smoothly for us.

Overall, CHR managers expressed a commitment to supporting CHR professional development and certification needs.



Figure 6. CHR Team in Southern Arizona

FINANCING CHR PROGRAMS

All CHR Programs are Tribally directed through government-to-government agreements with IHS through the Indian Self-Determination and Education Assistance Act (ISDEAA) (P.L. 93-638)¹ (Figure 7). Tribes assume and manage IHS program funds to develop and administer CHR programs that best meet the needs of their communities. The CHR line item in the IHS budget has not seen any significant increase in the past five years, with Congressional support for the program allowing it to maintain fairly level funding. In Fiscal Year 2019 however, the Administration sought to defund the CHR Program entirely and in FY 2021 it proposes to consolidate CHRs, the Community Health Aide Program and Health Education into a new “Community Health” line item.⁵ While all CHR programs receive IHS appropriations, it was discovered that CHR programs included in this assessment employed a variety of financing strategies to sustain their programs (summarized in Table 6 below).

Table 6. CHR Program Funding Scenarios

Primary Revenue	<ul style="list-style-type: none"> • IHS only • IHS + 3rd party billing • IHS + 3rd party billing + Tribal General Funds • IHS + Research and practice grants
Other Funding Sources	<ul style="list-style-type: none"> • Split / Piecemeal positions • Tribal gaming funds

Two of the smaller CHR programs rely solely on the standard IHS funding apportioned through their Tribe’s 638 *contract* with IHS. The manager of the first program stated that currently “the CHR funding is adequate to support the program objectives and goals.” Conversely, the manager of the other CHR program that is sustained on IHS contracted funding described their funding as inadequate for their needs. The program manager explained that one of their strategies for sustainability is to split certain positions on different funding lines; for example, sharing a Tribal RN with the Special Diabetes Program for Indians (SDPI) in order to create a full-time position, or using a staff member funded through the Transportation program to occasionally do CHR related work. The program also makes periodic requests to the Tribe for small amounts of gaming money to pay for special supplies. About their financial situation, the CHR manager stated simply, “it’s not, not enough – if it is just strictly IHS, not enough money.”

Figure 7. The Indian Self-Determination and Education Assistance Act

The Indian Self-Determination and Education Assistance Act (ISDEAA), also known as Public Law 93-638*, authorizes Indian Tribes and Tribal Organizations to contract for the administration and operation of certain Federal programs which provide services to Indian Tribes and their members.

Under the ISDEAA, Tribes and Tribal Organizations have the option to either

1. Contract with IHS to administer programs and services the IHS would otherwise provide (referred to as Title I Self-Determination Contracting), or
2. Compact on government-to-government basis with the IHS to assume control over health care programs and services that the IHS would otherwise provide (referred to as Title V Self-Governance Compacting).

These options are not exclusive; Tribes may choose to combine them based on their individual needs and circumstances.

*Programs and facilities that operate under Public Law 93-638 are often referred to as “638s.”

IHS. Tribal Self-Governance Program.
<https://www.ihs.gov/selfgovernance/aboutus/>.
 Accessed May 20, 2020, 2020.

A second financing scenario is demonstrated by a CHR program whose funding stream is evenly divided between IHS standard funding and Third Party Billing for non-emergency medical transportation (NEMT) services, claimed through the state's Medicaid program, the Arizona Health Care Cost Containment System (AHCCCS). This is one Medicaid covered service that a CHR program may bill for at the present time. This program employs several CHRs who are dedicated to transportation services, but the revenue generated by this Medicaid billable service is essential to sustaining the entire program. The program manager described how Third-Party Billing supports their program budget:

Ok so it's called Third Party CMS [Centers for Medicare and Medicaid Services] Funds and we bill through AHCCCS for non-emergency medical transportation. [...] So, that funding comes back through the tribe, through a CMS budget that those funds are to be appropriated and used to go back through the program for the community. And that's how we use that, it goes back, pays for the CHRs salaries, pays for durable medical equipment, it pays for some of the operating expenses... and is pretty much half of my budget.

Another program manager described their funding as coming from “three sources: IHS, third party collections and then the general fund.” In their case, the Tribal Health Department that houses the CHR program bills Medicaid for certain services provided by programs *other* than CHR, such as behavioral health services. The funds generated are then divided among the various health programs operated by the Tribe. The CHR manager described how third party billing works in “638” contracted programs such as theirs:

So [...] all 638 programs can share the funds that are billed through, say transportation services or billed through behavioral health services. It all goes back into a pot, then IHS has told government that you can share that money however you would like. We don't, it can't go back to the tribe and go back to a general fund. The money that does get billed through these services, these contracts, have to be reinvested back into the community or back into any 638 program. So, our department divvies up the money evenly for what's needed.

This program is also supported by matching funds from their Tribe's General Fund, at about 50% of the IHS contract amount, and by an additional amount annually sourced from their department's general fund.

Another program that relies on third-party billing is in the unique position of operating through its Tribally controlled health center, which is *compacted* with IHS. (It is important to note that this is the only program included in the assessment that is compacted.) As such, while the Tribe still receives IHS funding for the CHR program, it has greater control over the generation and allocation of revenue among its programs. The manager explained that all of the third-party reimbursement from services provided at the health center go to a general fund, which supports all of the Tribal health programs including the CHR Program. The manager described this funding arrangement as “sufficient,” although they still saw a need for more CHR staff to meet the community's needs.

The final financing scenario found was to supplement standard IHS funding with outside grants and research partnerships. One CHR program has secured outside grant funding from such sources as the National Institutes for Health (NIH) and the Centers for Disease Control (CDC), as well as from partnerships with universities that focus on health research or practice initiatives.

Program Evaluation

The standard data reporting system that CHR programs use nationally is the Resource and Patient Management System (RPMS), which was created for CHRs to track the number and type of clients served and to document the type of services provided to patients or community partners. All CHR activities are first recorded through Patient Care Component (PCC) forms and then that information is entered in the RPMS. RPMS is programmed with the IHS defined service codes for CHR activities (Table 1) and was not designed to track data related to program outcomes or impacts that would allow for program evaluation and planning.

Current Evaluation Practice

Most CHR programs interviewed relied on reports generated from RPMS to provide all program data. These reports contain information on the number of clients seen in a given period and the services provided, categorized by IHS service codes. RPMS data reports essentially provide the quantitative data that programs need to submit to IHS to demonstrate, as one manager stated, that programs are meeting their “quota” (of client contacts) and fulfilling “what was negotiated through the annual funding agreement.”

Two programs have access to Electronic Health Record (EHR) systems (as well as RPMS) and use these to generate reports containing the number of patient contacts and types of services provided by CHRs. One manager explained that the EHR data is primarily used to determine if they are “meeting [their] numbers” – though it can also be used to determine if a particular individual should be considered “high-risk” and provided additional services. One manager described how they use EHR to assess program successes: “You know the biggest thing that I do is in our Electronic Health Record I can run a report of how many patients [CHRs] have seen in a year, or six months, or three months.” As with RPMS, the reports that CHR managers are able to produce using the EHR focus almost exclusively on counts, not outcomes.

CHR managers are limited in the tools they have for understanding what areas of their program are successful or not. One manager described how informal “verbal feedback,” from clients or community partners, may be the only way to gauge the “quality” and impact of their efforts. One CHR manager actively seeks qualitative feedback from clients and conducts an annual Patient Satisfaction Survey, in which clients are asked to rate their experience with the program. The CHR program manager who created the survey explained that it is “how we gauge our feel for the program. If it’s actually being successful, and if we are actually making a change, an impact on them.”

One CHR manager, who also oversees their Tribe’s Special Diabetes Program for Indians (SDPI), explained that they were able to use data from the Diabetes Registry to see the positive impact of CHR involvement on diabetic clients. They found that over the past eight years, the number of patients with an A1C of less than 8 increased from approximately 30% to 52%.^a



Figure 8. CHR Service Area in Northeastern Arizona

^a An A1C of 7% or less is “a common treatment target” for most diabetics and indicates the disease is more well-controlled. (6. Clinic M. A1C Test. <https://www.mayoclinic.org/tests-procedures/a1c-test/about/pac-20384643>. Published 2020. Accessed May 30, 2020, 2020.)

Two of the six programs interviewed do not currently have access to RPMS or EHR systems. Consequently, one tracks all program activities through hard-copy Patient Care Component (PCC) forms that are submitted to their IHS Service Area office, from whom they do not receive program data summaries or analyses. The other program without RPMS access uses an internal system to track CHR activities and creates reports similar to those generated by RPMS. Both program managers described their lack of access to RPMS as a barrier to program evaluation.

In general, the CHR managers expressed dissatisfaction with the quality of information available from RPMS in terms of its usefulness for program evaluation.

Barriers and Solutions

CHR managers reported numerous barriers to conducting effective program evaluation, describing challenges on all levels of evaluation, from data collection, reporting, and tracking to interpretation and dissemination. At the same time, they identified evaluation measures and strategies they would prefer to implement in order to support CHR program and workforce development (Table 7).

Table 7. CHR Program Evaluation: Barriers and Solutions

Barriers	Solutions
<ul style="list-style-type: none"> • Inconsistent data collection / reporting • Lack of training / knowledge on how to conduct evaluation 	<ul style="list-style-type: none"> • Additional training for staff and managers • Outside formal evaluation
<ul style="list-style-type: none"> • No known evaluation tool • RPMS data not useful for program evaluation 	<ul style="list-style-type: none"> • Create or identify appropriate evaluation tool • Track patient outcomes and other impact measures

At a basic level, some program managers explained that inconsistent reporting practices and data entry by staff made it difficult to know if the data they collected accurately represented CHR activities and client demographics. Without reliable data, CHR program managers said they could not determine if their intervention efforts were targeting the critical disease areas for their communities. Moreover, CHR managers expressed a lack of confidence in conducting their own program evaluations, as in the following:

But the weakness would be me, as the leader, you know, not having that training thoroughly to fully understand in how I can utilize that data to [...] maybe strengthen or enhance our work that we do in the community, both at home visits and health education.

As one manager stated in describing their desire to implement more evaluation strategies in the future: “Hopefully as we move in a different direction [post-COVID-19], I’ll be able to do more of the measuring and stuff like that. But I still don’t – I don’t have a clue how to measure.”

Several managers also pointed out that they were not aware of any appropriate evaluation tool or software. When asked about program evaluation, one CHR manager responded:

Never done that, because there's is no tool for it currently. At least that I have come across that's tailored towards a community health representative program for tribal communities. We have never come across that evaluation tool.

The manager also pointed out that because of the diversity of services provided by CHR programs across the state, it would be challenging to apply a general evaluation model to all programs. Any evaluation tool would need to take into consideration the unique aspects of each CHR program.

CHR managers emphasized the inadequacy of RPMS for producing meaningful data for program evaluation, particularly related to impact. One program manager described an ideal scenario in which RPMS could produce reports demonstrating CHR impact on patient health outcome measures:

It would be really awesome to be able to tap into the RPMS to go to that Patient A and say, "Show me data from Patient A when they first signed up - all of their readings for blood pressure, blood sugar, trend it, chart it, pie chart it. I want to know what kind of difference I have made for patient A." [...] So, if it was possible, that would be one way to say that we are making a difference with our patients.

Another CHR manager explained why outcomes measures are important for program planning:

It would be nice to be able to track outcomes, and I am not sure how to track the outcomes. The numbers are easy because I can get those from the CHR work in our Electronic Health Record. [...] So, the numbers are good because people like to see those, but it would be better for our patients to track outcome because we could measure is this intervention having an impact on outcome.

One program manager succinctly stated their reasons for desiring a formal program evaluation, which they have been requesting for years but never had:

We don't have a program evaluator within the [Tribe's Health Department], nevertheless, a formal program evaluation will serve to evaluate the program's strength and weaknesses to make further improvements with program administration and service delivery.

Finally, one CHR manager explained that accurate program evaluation data demonstrating real patient outcomes and impact data was essential for supporting the case for the CHR Program's continued existence with policymakers on the national level.

CHAPTER 2 | CHR'S AND SOCIAL DETERMINANTS OF HEALTH

Social Determinants of Health (SDoH) are defined by the World Health Organization as the “conditions in which people are born, grow, live, work and age” and have been found to have a significant impact on health equity and outcomes.⁷ Content analysis of job descriptions and scope of work documents were coupled with CHR manager interviews to confirm that CHRs are highly focused on improving SDoH for their clients, particularly in the areas of *access to care*, and *social and cultural cohesion*. Other SDoH that CHR activities impact include *social justice*, *housing*, *environmental quality*, *food access*, and *parks and recreation*.

Figure 9. Social Determinants of Health Impacted by CHR Activities

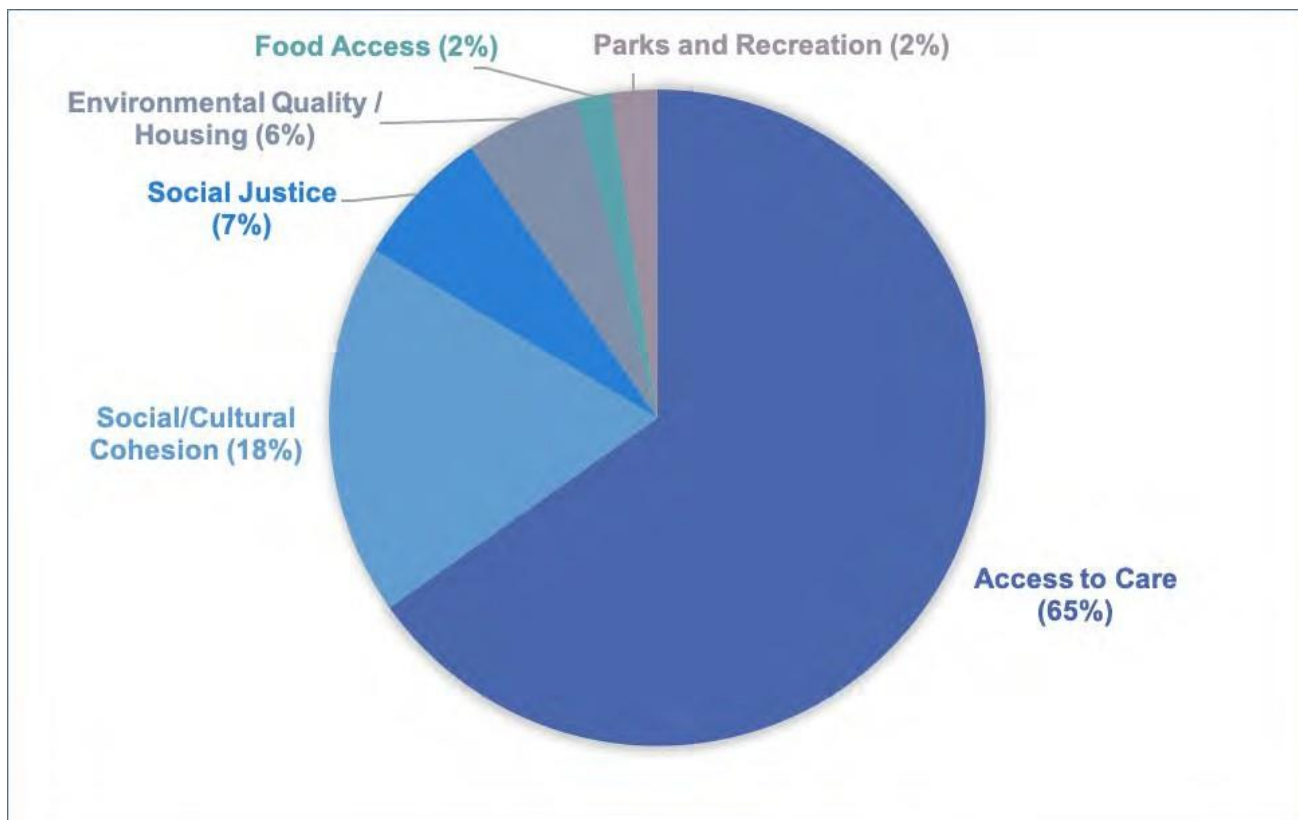


Table 8 below defines each SDoH according to the Vitalyst Healthy Community Model, providing example CHR activities and health impacts for each domain, while the pie chart in Figure 9 displays the ratio of SDoH impacted by CHRs as determined by the frequency of their mention in SOW documents and interviews.

Table 8. Social Determinants of Health and Related CHR Activities

Domain	Definition⁴	Health Impacts⁴	Example CHR Activities
<i>Access to Health Care</i>	Affordable, accessible and high-quality health care; community paramedicine/care coordination; health literacy; access to behavioral health services	Disease prevention, mental health	<ul style="list-style-type: none"> • Health Screening / Case Find / Outreach • Health Education / Health Literacy • Referrals • Case Management • Care Coordination with Service Providers • Transportation Coordination
<i>Social and Cultural Cohesion</i>	Supportive relationships, families, homes and neighborhoods; support services for behavioral health needs, community empowerment that can lead to systems change	Economic stability, mental health, public safety	<ul style="list-style-type: none"> • Translation/interpretation • Cultural liaison • Community capacity-building
<i>Social Justice</i>	Addresses historical trauma and structural racism; resolves the social and physical differences adversely affecting socially disadvantaged groups; pursues fair distribution of resources	Live longer, physical and mental health, economic stability, intact families, resiliency, public safety	<ul style="list-style-type: none"> • Patient, community and systems level advocacy • Case management and coordination • Assist patients in applying for benefits or services • File complaints on behalf of patients
<i>Environmental Quality</i>	Clean air and waterways, healthy and clean soils; water supply protection and water security; tobacco and smoke-free spaces	Asthma and other respiratory diseases, disease prevention, exposure to environmental contaminants including lead, early brain development	<ul style="list-style-type: none"> • Assess community environmental hazards • Assist with community clean up and animal immunization clinics • Conduct home safety assessments • Coordinate client participation in IHS sanitation improvement program • Coordinate repair or maintenance of client homes
<i>Affordable Quality Housing</i>	Affordable, high quality, socially integrated housing	Economic stability, disease prevention, air quality, mental health, exposure to extreme climate, exposure to lead, early brain development, injury prevention	<ul style="list-style-type: none"> • Conduct home safety assessments • Coordinate repair or maintenance of client homes • Coordinate client participation in IHS sanitation improvement program

<i>Food Access</i>	Affordable, accessible and nutritious foods; promoting a variety of healthy food access opportunities	Nutrition, obesity, disease prevention, mental health, early brain development	<ul style="list-style-type: none"> • Monitor client nutritional status • Deliver emergency food boxes • Assist with applications for food assistance programs⁵ • Promote nutrition literacy
<i>Parks and Recreation</i>	Access to affordable and safe opportunities for physical activity; joint use opportunities with schools, libraries and community centers	Physical activity, disease prevention, mental health, early brain development, air quality	<ul style="list-style-type: none"> • Promote fitness literacy • Coordinate physical activity events and programs

⁴Vitalyst. Elements of a Healthy Community. Vitalyst Health Foundation. <http://vitalysthealth.org/wp-content/uploads/2015/05/Healthy-Communities-and-social-determinants-final.pdf>.

Access to health care and coverage

The SDoH most associated with the CHR SOW is access to health care and coverage; CHRs are highly engaged in efforts to increase client access to affordable, high quality physical, behavioral, and dental health care through screening, case management and coordination, health education, transportation coordination, and direct health care services. CHR activities related to case find and screening identify patients in need of health care and connect them with providers. CHRs also facilitate access to care by coordinating or providing transportation to non-emergency medical services. Additionally, CHR services include arranging for the purchase, delivery and maintenance of durable medical equipment to clients (such as wheelchairs, eyeglasses, medical beds, hearing aids, etc.) and providing direct health care services during home visits. Health education is also an important component of the CHR SOW, providing community members with health literacy tools to improve their access to care.



FIGURE 10. LONG DISTANCES SEPARATE CLIENTS FROM HEALTH SERVICES IN REMOTE AREAS

*When we look at the Social Determinants of Health, transportation to – for medical needs and healthcare needs is a huge part of achieving health and maintaining health.
– CHR Manager*

Case management activities, in which CHRs work closely with health care providers to ensure continuity of care, provide critical support to high-risk clients. One CHR program has multiple staff devoted to coordinating and providing transportation for patients who are unable to drive themselves to appointments at the IHS Dialysis Clinic. CHR managers made clear that CHRs are considered essential members of the health care team in the coordination of patient care, with one manager explaining that “*When we talk about the service delivery, they [the providers] always make sure that a CHR’s involved.*” One CHR manager described the complexity of CHR case management activities, which involves care coordination and advocacy in multiple arenas:

[...] it’s a coordination. So, its making appointments, it’s contacting the social worker, it’s assisting and filling out documents, applying for benefits, being a representative for them to, you know like if they’re applying for AHCCCS or applying for Medicaid, Medicare, they’ll need someone to help them because some of the individuals are in a state that they’re unable to represent themselves or speak for themselves. They assisted clients [...] by representing them in a court case, trying to stand up for them. They sit with the medical doctors, with them during visits. They coordinate medical equipment for durable medical equipment. So, if they do need like a wheelchair, a walker, they need a chair or a medical bed then we we’ll kind of work that around in the background. So, and then it’s also coordinating like [...] contacting the benefits coordinator, figuring out what this person is covered in, what insurance they have, what benefits they do have, and then what they don’t have, and then we start working with the family to start applying for those benefits so that the person can get what they need, the services that they need. So that’s kind of like all of that. It’s a lot.



Figure 11. CHR in Eastern Arizona

CHRs are highly involved in improving the health literacy of their communities through in person and community-wide health education. CHRs research specific areas to provide specialized health education during home visits, in addition to creating group classes and public information campaigns. Several CHR programs produce regular newsletters focusing on a particular health issue that is available to the community at large. Common health education topics include diabetes, hypertension, nutrition, physical activity, prenatal health, oral health, tobacco cessation, STI control, car seat safety, and environmental health.

CHR services target high-risk and underserved populations, often the elderly and those with chronic diseases. One program, for example, created a project to work specifically with incarcerated clients and their families around the issue of liver disease, which receives little attention in spite of having a high incidence in the community.

CHR programs may also engage in advocacy efforts to increase the availability of health care services in their community. Dental health providers tend to be rare in rural Tribal reservation settings, so one CHR program has partnered with the American Dental Association to train and certify their CHRs as dental health coordinators to serve their community. Another program manager described their work over the past two years trying to increase access to oral health screenings and care for children, by coordinating with providers both on and off the reservation:

Oral Health, is more on the education and prevention because we don't really have a good dental office right now in the community. So, for the last two years we have been trying to contract with a dental hygienist to come in and do the varnishes and the screenings for children. We've been trying to work with one of the local dentists here so that we have a source to refer the children too, if they need to see a dentist.

Social and cultural cohesion

CHRs provide a vital link between the health care system and the community, promoting social and cultural cohesion through their role as linguistic and cultural liaisons. The CHR SOW includes language services, which encompasses interpretation during medical appointments, translation of medical documents (applications, discharge orders, etc.), and generally facilitating patient understanding of the health system. Additionally, CHRs are tasked with helping health providers and agencies understand the cultural and social contexts of their clients, as described in one of the CHR Program Objectives set forth by IHS:

To facilitate communications between community members and health care providers, thereby enhancing accessibility and acceptability of health care facilities.

The CHR standard of practice mandates fostering “cross cultural understanding” critical to the successful integration of health care services staffed in large part by non-native providers in predominantly Native communities.⁸ CHRs’ knowledge and respected status in the community make them uniquely positioned to effectively serve in this role and are often referred to as a “bridge” between two worlds.⁹

CHRs are also involved in community development activities, such as conducting community needs assessments, health advocacy work, and collaborating with other community programs and institutions to support capacity building and encourage a healthy cohesive community. CHR programs regularly collaborate with Tribal programs as well as other community and state entities to empower and support community-wide wellness efforts.

Social justice

CHRs are charged with participating in patient, community and systems level advocacy efforts, with the aim of improving access to quality, affordable, and culturally appropriate care for Native American clients. Many CHR job descriptions require CHRs to be knowledgeable about the Tribe's culture, traditions, history, socio-economic conditions, political climate and structure, and community resources. CHRs use this knowledge to inform their patient advocacy work, which ranges from assisting with applications for services or benefits, to filing complaints on the behalf of patients or, as described by one CHR manager, serving as client advocates in the legal system. As described in a previous section, some CHR programs are also involved in advocating to increase the availability of health care services in their communities.

Indeed, the IHS CHR Program Objectives include a direct mandate for community and systems level advocacy:



Figure 12. CHR Conducts Home Wellness Check

To act as a liaison/advocate for the communities served by Federal, State, and local agencies. The liaison/advocate motivates and assists the agencies by clarifying the role of Native traditions, value systems, and cultural beliefs, to meet the health care needs of the communities, thereby reducing the potential for conflict and misunderstanding regarding the health conditions of American Indian and Alaska native people.

The CHRs assist IHS and non-IHS health agencies to design and/or redesign services to ensure greater responsiveness to the needs of American and Alaska Native communities.

Environmental quality & housing

Environmental Health is an important component of the CHR Standard of Practice, requiring CHRs to assess and assist in addressing environmental hazards in the community such as water/waste management, housing/building safety and sanitation, air quality, vector control and food handling. CHR programs often collaborate with Tribal Environmental Protection Offices to address environmental health issues through activities such as community clean-up projects, animal immunization clinics, and providing and following up on referrals for bedbugs, mosquitos, ticks and mold in public or private buildings. CHRs may coordinate the application and assessment process for clients eligible for the IHS Sanitation Facility Construction program, which assists with improving access to potable water and waste disposal for Tribal communities.



Figure 13. CHR conducts home visit

CHR's are highly involved in the promotion of safe, quality housing, conducting regular home safety inspections for clients receiving home health care and making referrals for and coordinating services including handicap accessible renovations and repair or replacement of roof, septic, electrical or HVAC systems. One CHR manager described the type of support CHRs provide clients in navigating Tribal housing improvement programs:

[The housing program] goes in and does like remodels in homes for handicap bathrooms, widening doorways, those kinds of things. And so, we make referrals to that, and help the people get the paperwork filled out for that. Housing – we see a lot of people who are having health challenges because of the housing situation, so we work with Housing to get paperwork filled out and get people qualified for rental units.

Additionally, CHR programs partner with universities to conduct health research related to environmental concerns such as uranium exposure, mining, or links between living conditions and asthma.

Food access

CHRs monitor the nutritional status of their clients, ensuring that they have sufficient food and coordinating access to additional food if needed. In some cases, CHRs do the grocery shopping or deliver food boxes to high-needs clients, such as the elderly, disabled, or pregnant. CHRs may assist clients to apply for food assistance through Women, Infants and Children (WIC), AHCCCS, or FDPIR (Food Distribution Program on Indian Reservations) and collaborate with community programs such as WIC to do nutrition related outreach to the community. Nutrition literacy is also a common component of the health education that CHRs provide.



Figure 14. CHR in Traditional Corn Field

Parks and recreation

CHR Programs promote physical activity in their communities by educating clients on the benefits of fitness, coordinating physical activity events and, in some cases, overseeing exercise facilities. CHRs often plan and coordinate community physical activity events such as walk/run events for heart health, a youth basketball camp, or traditionally-based games at cultural events. One CHR job announcement includes among its CHR essential duties the coordination of “a fitness program that includes aerobics, walking, volleyball, and weight loss contests.”

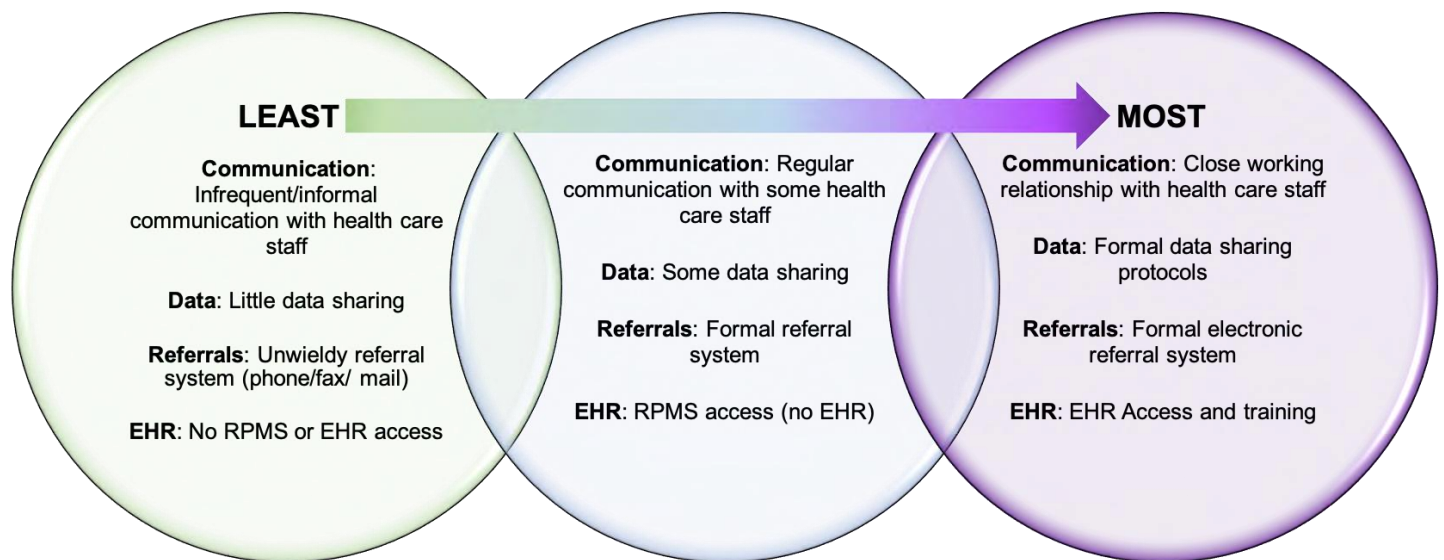
CHAPTER 3 | CHR INTEGRATION WITH HEALTH SYSTEMS

The level of CHR integration with the Indian Health Services (IHS) and Tribally managed 638 health care systems varies among programs (Figure 15). In most cases, CHR work closely with Public Health Nursing (PHN) and meet or communicate regularly with health facility staff to coordinate case management. Programs that have access to EHR, with the ability to enter notes and review patient charts, are afforded a higher level of integration. Conversely, programs without formal referral or data sharing systems in place are less integrated into the health care system, resulting in CHR managers feeling that their programs are underutilized. CHR program managers identified a number of barriers and opportunities for full health system integration (Figure 16).

The working relationship with the [IHS] service unit is integral in the delivery of health care services. Today, the CHWs play a critical role in the health care delivery system to link the patient to the Indian health care system and are intended to prevent avoidable hospital readmissions and emergency department visits through home visits to patients with chronic health conditions such as asthma, diabetes and hypertension.
 – CHR Program Manager

CHR Roles related to health systems mainly revolve around the coordination of service delivery, making and receiving referrals, providing transportation to health services, and contacting hard-to-reach clients to deliver messages, medications or do welfare checks. CHR also often accompany patients to appointments and provide interpretation if necessary, which providers rely on. Providers also look to CHR to provide insight into patient needs and their situations.

Figure 15. CHR-Health System Integration Spectrum



Integration and communication structures

Most CHR programs maintain regular contact with the health care team at their IHS service unit or 638 health facility, working directly with case managers and PHNs, as well as participating in care coordination meetings with all parties relevant to the patient’s case: the primary care provider, pharmacist, PHN, specialists, etc. As one CHR manager explained, these meetings allow for critical care coordination planning:

We would sit down and meet and discuss all the patients that had been sent out to other medical facilities and discuss the plan of care once – or coordinate care for the patient’s discharge whether it’s medication... what else, follow-up appointments, transportation, everything. I think that the care coordination meetings that I attend are really, really informative. There’s a lot of good information and I think it keeps us, it keeps us up to date with what is going on. [...] Everybody that’s kind of part of following that patient’s progress are all there at the table. Which makes it really easy to discuss what the next steps are, you know. Everybody is there and available to answer whatever questions are asked.

Additionally, several CHR managers emphasized the unique contribution that CHR makes to the health care team, providing insight into the patient based on social, cultural and historical factors. One CHR manager described how CHRs are relied on for their knowledge as well as their willingness and ability to complete any task:

And so when it comes to service delivery coordination, it’s always – be it the Public Health Nurses, be it the pharmacist, be it providers – that they’ll say “okay do we have a CHR representative here?” So that’s what – when we talk about the service delivery, they always make sure that a CHR’s involved because they know where an individual may – where the individual lives, what their conditions are and basically, they know the ins and outs of that particular individual. And so that’s why it’s always “the CHR, they know”, “We should be able to get information from them.” And it’s very true. You could call up one of the supervisors and right away they’ll respond back and say “Yes, I will get my CHR on it and they will be out there.”

In other cases, CHRs are not as closely integrated into the IHS health care team. One manager described how they and their CHRs make an effort to have a regular presence in the facility and make providers aware of their roles and responsibilities.

Aside from care coordination, the main pathway for CHR integration is through their referral and data sharing systems. Referral systems vary greatly among programs, ranging from hand-delivered, mailed or faxed forms, to electronic referrals made through a patient’s EHR. Similarly, data sharing between CHR programs and IHS/638 facilities may fall on a spectrum ranging from informal, as-needed phone calls, to a formal component of the EHR. The level of formality and standardization of these processes greatly impacts the degree to which CHR program managers feel their programs are effective and appropriately utilized.

The two programs with access to the EHR have highly standardized methods of communication; IHS or 638 facility providers make referrals through the EHR and CHRs are trained to do chart review and enter notes about their services. These notes are visible to providers and can be used to inform care.

Challenges to CHR integration

CHR program managers described a number of challenges they have faced related to the integration of their programs with IHS/638 health systems. The two main barriers described by managers were a general lack of understanding about the CHR program on the part of health care staff, and a lack of communication and information sharing between CHR programs and providers.

Familiarity and Trust in CHR

CHR managers attributed the first issue of health care staff unfamiliarity with the CHR workforce in large part to the frequent turnover of IHS staff, often coming from off-reservation. One manager explained that this misunderstanding of CHR capabilities leads to an underutilization of valuable CHR services that extend healthcare into the community:

[...] I think the issue is that some of the doctors... I am not sure about the PHN, maybe there are some PHNs that don't know what the CHRs are and they don't know what the CHRs can do and they don't know that with the CHRs they can be extenders to their healthcare management with the patients that they have.

In one case, where the CHR manager described ongoing issues related to health system integration, they pinpointed the heart of the problem as this misperception of CHRs among IHS staff:

They don't really view them as part of the system; they still view them as outsiders, more of a lay kind of employee with no technical skills, somebody that's a part of the community. And that's wrong – that's a misconception.

The lack of understanding around CHR roles and responsibilities affects all aspects of CHR integration, from communication to case management. In addition, frequent staff turnover makes it difficult to sustain relationships, particularly when the referral and communication processes are not formalized.

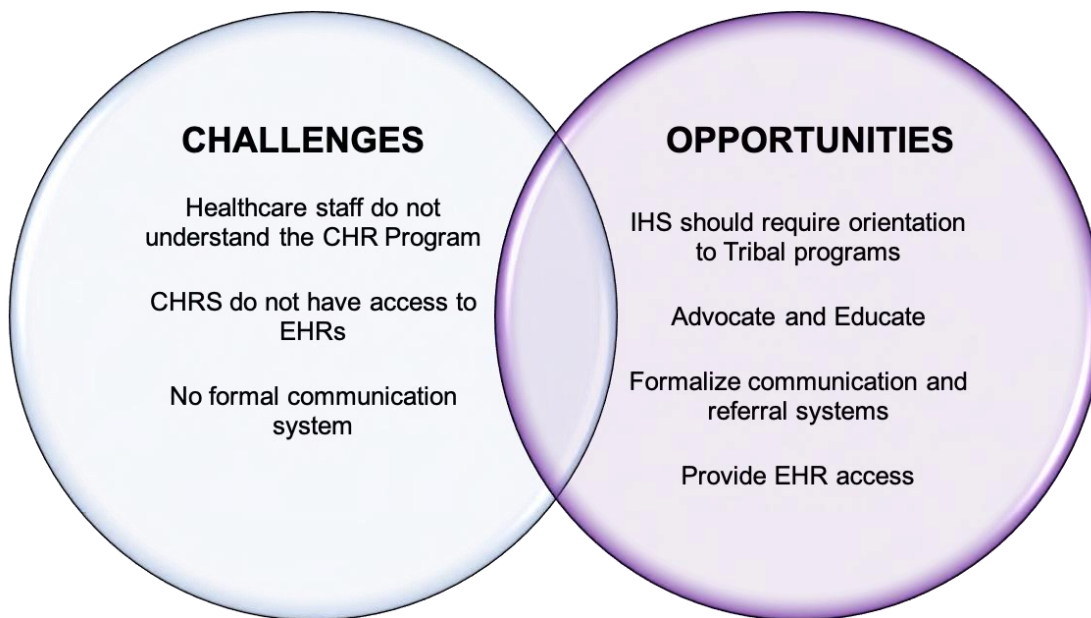


Figure 16. Challenges and Opportunities for CHR-Health System Integration

Communication and Information Sharing

The second area that CHR managers identified as presenting a significant barrier to health system integration was communication and information sharing, which included issues related to referrals, RPMS reporting, and belated involvement of CHRs in case management.

Several program managers identified major gaps in the information-sharing process between CHRs and IHS providers. Referrals are not always standardized and, in certain programs, are delivered via mail, fax or by

hand, making them difficult to track systematically. Communication with providers is often by phone, on an as-needed basis, and because the RPMS is not connected to the EHR, the services that CHR provide and health data they collect (such as blood pressure or blood sugar levels) are not seen by providers. In fact, providers may only be aware that their patient is receiving CHR services if the patient happens to mention it during a visit. One CHR manager, who is actively working to formalize their communication processes with IHS described the problem this way:

[...] we serve the same patients that IHS serves. Why is it that we don't talk? Why is it that a CHR will do a journal entry into a patient's folder but yet, the doctor sees the same patient two days later and doesn't even realize that the CHR has taken screening vitals and that was good information for a doctor to look at? So, right now that's the challenge, is that our medical providers are not able to see the CHR notes. So, in a way I feel like our work is just being entered but who cares, nobody's going use that data.

This informal "as-needed" approach to communication also means that CHRs are often contacted to assist with case management after a problem or crisis has emerged. As one CHR manager put it, CHRs are viewed as the "safety net" for patients, brought in to help resolve issues beyond the reach of standard health services, but not provided adequate resources or staff. One CHR manager explained how the health care system would benefit from greater CHR integration and involvement in primary and preventative care:

So, they [the providers] will end up connecting with a CHR, but it always happens after the fact. [...] And so I think that if the CHR was actually integrated into the system, their response time would be much quicker, the patients would get quality care, they would get more of a communication with the provider. So, I think that's a misstep on health care systems.

In spite of these barriers, CHR managers also identified several strategies for improving CHR integration, described in the following section.

Opportunities for improving CHR integration

CHR managers discussed their efforts to address the misunderstanding and misperceptions of CHRs among IHS staff. To combat the volatility of frequent staff turnover, CHR managers are actively working to formalize communication and referral processes and advocate for their programs with IHS leadership to improve CHR integration. One CHR manager who is relatively new to the position, described their efforts to bolster their program's sustainability:

There's a lot of informal right now. Even on our referral process, so we really need to put that in black and white so that, you know, in case there is change in staff turnover and maybe then the new, you know, outpatient nursing supervisor doesn't understand the relationship, we could show them that this is the partnership we have. [...] So I feel that, that relationship started to build when I started, you know, trying – not trying – but I started advocating on behalf of the workforce, letting them know that we are an untapped resource yet we go into the community, we're boots on the ground, we are in the villages, week to week, and we know what's going on out there and we're able to assist.

Another CHR manager suggested that CHR programs might be able to use their position as the health care system’s “safety net” as a point of leverage in building relationships with health system leadership and advocating for more resources.

Several CHR managers pointed out that the responsibility for changing the current conditions should not fall exclusively to CHR programs. One CHR manager explained how IHS specifically could proactively address the lack of knowledge about CHRs by requiring an orientation to Tribal programs for all new staff:

I think there just needs to be some type of introduction to the Tribal programs. Especially the CHRs, so they can get a better idea and sense of how we’re more of a resource for them, you know what I mean. I think that’s something that needs to be changed and maybe integrated into IHS. I don’t think they have a good understanding sometimes of what the CHRs are there for and how we can actually help them.

CHR managers also frequently mentioned challenges related to the RPMS reporting system and expressed a desire for their CHRs to have access to the EHR. EHR access would allow CHRs to enter notes and vital information for providers to consider in patient care, provide a standardized trackable referral system, and improve CHR services by allowing them to review patient charts. One CHR manager described how EHR access has improved and facilitated the referral and information sharing processes with their 638 health care facility. They explained that while CHRs had been limited to basic data entry into the RPMS, with the EHR they are now able to more fully understand and contribute to their patient’s care:

And so now they have the capacity to read and understand what’s going on with their patients, do some good chart reviews, that kind of thing about what’s going on and we’re actually starting to train them to put notes in. Because if they’re doing the work, we shouldn’t be getting in the way of them talking about what they saw and observed.

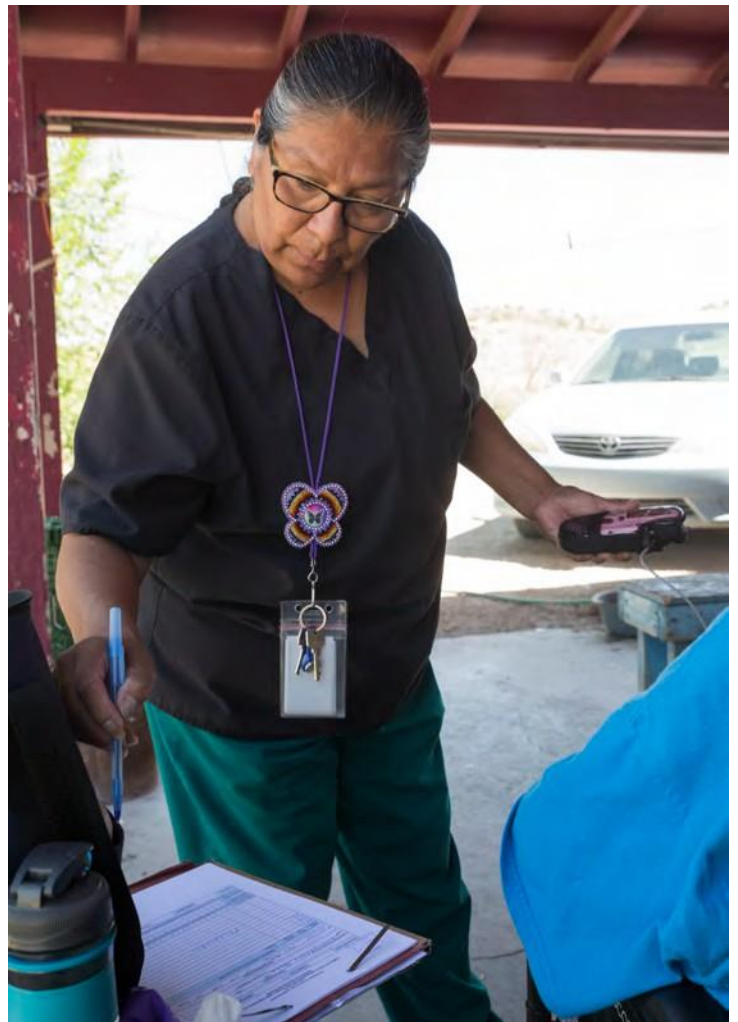


Figure 17. CHR documents patient health information
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CHAPTER 4 | CHR RESPONSE TO COVID-19

CHR managers described the wide variety of ways CHRs are working to support the health care response to COVID-19 in their communities (Table 9). CHR programs have been highly engaged in COVID-19 response efforts in spite of Tribal government shut-downs to all but essential services and challenges related to providing services while maintaining social distancing and personal protective protocols. CHRs have generally been included in the front-line emergency response teams in their communities, participating in orientation, drills, and fittings for personal protective equipment (PPE). They are also actively involved in the creation and dissemination of educational materials (see Figure 20 for example) and supplies such as masks, gloves and hand sanitizer. One CHR program made and delivered kits to every tribal member on the reservation containing gloves, hand sanitizer, masks, thermometers and educational information based on CDC recommendations. Additionally, CHRs have been enlisted to deliver much needed food, water, and medications to home bound individuals.

CHR programs have suspended normal in

Table 9. CHR Response to COVID-19

- Continuous (limited) services
- Front-line emergency response
- COVID-19 information and safety supplies distribution
- Food, water, firewood distribution
- Phone outreach / Welfare checks
- Case management of COVID positive patients
- Testing & contact tracing
- Transportation to testing
- Chronic disease prevention & maintenance

person patient care and home visits for the most part. Some programs have found creative ways of reaching patients by providing health education and activities on platforms such as zoom and focusing on frequent welfare checks by phone. One CHR manager established a new outreach program in which CHRs communicate with over 100 high-risk patients each week to check on their needs, provide information and resource referrals, and offer moral support. Another CHR program is operating a COVID-19 hotline to answer client questions and schedule appointments for testing. CHR programs that provide transportation have



Figure 19. IHS Physician and CHR conducting COVID-19 related home health visit (Photo credit: Tomas Karmelo Amaya for the New York Times)

continued to provide this critical service to patients, while enacting new safety protocols to protect staff and clients.

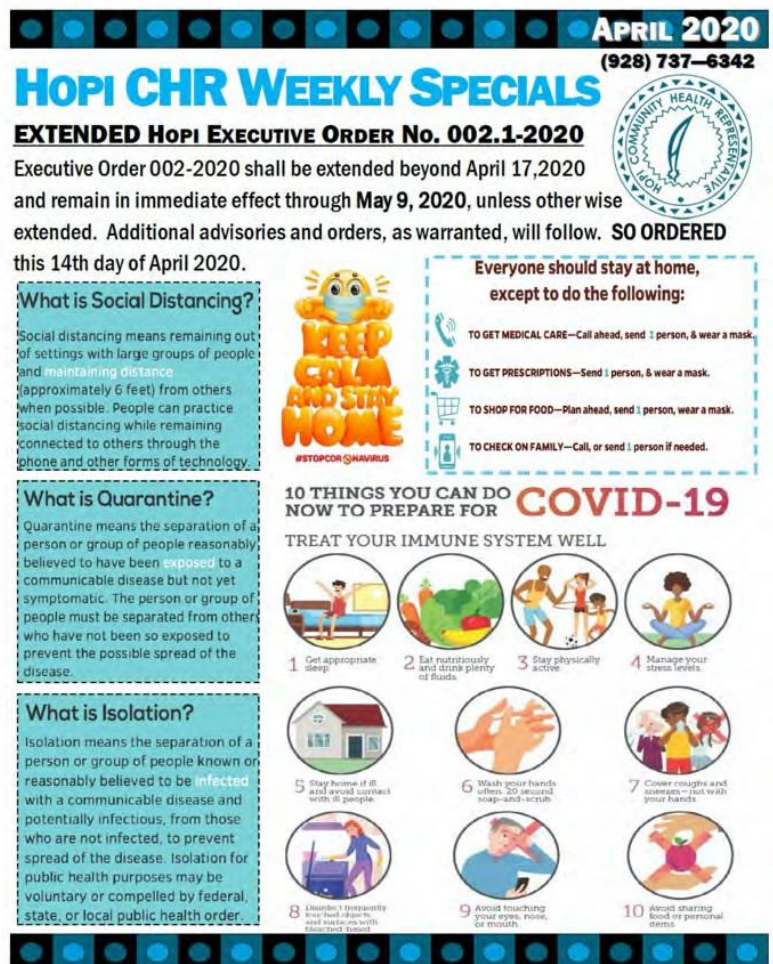
Some CHR programs have been enlisted to support contact tracing and case management efforts. As seen in Figure 19, CHR managers may even accompany IHS doctors to conduct home visits to Tribal members.¹⁰ One CHR manager described their program’s active engagement with the COVID-19 response effort in their community, including client care, material distribution, and contact tracing:

The CHR/Technicians are heavily involved with the COVID-19 response as members of the Strike Team of the Health Command Operation Center and now they have transitioned to Case Management to conduct contact tracing. First, they all had to take an in person and online contact tracing training, this is prelude to moving into the contact tracing task. When the CHRs were participating on the Strike Team, they were responsible for delivering much needed food/water/firewood/medications to the homes. The CHRs took the lead with the distribution of donated items. Although there is CDC guidelines for personal protection, some CHRs still monitored the health of their high risk clients virtually or with respect with social distancing.

CHR managers expressed uncertainty regarding the potential impacts of COVID-19 on their programs, while emphasizing their commitment to maintaining and even expanding the core CHR service of home health care. One CHR manager explained the importance of continuing outreach to patients with chronic diseases during the pandemic to ensure that they are not avoiding essential preventative care:

Well, for us because you hear the stories about people who are staying home and they’re not taking care of their other health needs. I really think in a way that’s where we need to be, is reaching out to make sure people aren’t ignoring their chronic disease issues and that those things are being maintained because this is going to get better or we are going to get used to it or something. And, but, those chronic diseases, people are getting amputations in the middle of COVID. People are getting -- and those things we need to try to help prevent them.

Figure 20. Example of informational CHR newsletter



In terms of future activities, CHR managers described their intentions of continuing COVID-19 related health education – potentially in the form of digital stories or PSAs, assisting with an immunization program once one is in place, and adjusting home visiting protocols as needed to protect patients and staff.



Figure 21. CHR looks out over Tribal lands

DISCUSSION

The Community Health Representative programs in Arizona are valuable members of the healthcare system serving American Indian communities and play a critical role in care coordination and case management for their clients through close working relationships with other Tribal programs, state entities, and the Indian Health Service (IHS) system. The degree to which each CHR program is integrated with the IHS system is largely determined by the communication and information sharing practices in place. A significant barrier to full integration of CHRs into the health system is the common lack of understanding among IHS staff of who CHRs are and what they are capable of and the lack of formal protocols for communication and information sharing. CHR managers are actively involved in efforts to increase CHR-health system integration by educating partners about the CHR program, building relationships with IHS leaders and advocating for greater CHR participation in care coordination. CHR managers identified two ways that IHS could improve CHR integration: first, to require an orientation for new staff to all Tribal programs; and second, to provide CHR programs with access to the EHR system to facilitate communication and care coordination between CHRs and IHS providers, as well as allow CHR programs access to patient data necessary for program evaluation.

Accurate program evaluation data is needed to support the growth and development of the CHR Program on a state and national level. To our knowledge, no comprehensive evaluation of the effectiveness and cost efficiency of the CHR Program has ever been conducted and, while local programs have expressed a desire to evaluate their programs, they face a number of obstacles. The most significant barrier to conducting program evaluation is the inadequacy of the CHR reporting system, RPMS, for tracking data that relates to patient or program outcomes. As mentioned above, one solution to this problem is for CHR programs to have access to EHR systems and replace the RPMS system with one that ensures CHR Programs' ability to track process and outcomes measures.

CHR Programs participating in this assessment employed a variety of financing strategies to sustain their programs, supplementing IHS funding with third party Medicaid billing, Tribal General Funds, and grants. Two-thirds or 4 of the 6 CHR program managers we interviewed reported that IHS funding alone was insufficient to support the level of services needed in their community. Some CHR programs depend on third party billing through AHCCCS for services such as non-emergency medical transportation. Several programs also seek out research and practice grants through university, government and institutional partners to bring in extra funding and or support for additional training or program development.

With their strong focus on improving the Social Determinants of Health for their clients – particularly in the area of access to care – CHRs are well positioned to support Medical Home Models. IHS and Tribal facilities across the country are increasingly incorporating a Patient-Centered Medical Home (PCMH) model in order to coordinate patient care through multidisciplinary teams that provide primary care services and health education. In Arizona, the American Indian Medical Home (AIMH) Program is available to American Indian/Alaska Native (AI/AN) members enrolled in the American Indian Health Program (AIHP) through AHCCCS. The AIMH Program provides primary care case management, care coordination and diabetes education.¹¹ By utilizing their position within the community, in addition to their skills and training related to care coordination, community outreach, wellness education and chronic disease prevention, CHRs are uniquely qualified to act as a part of the care team in a medical home model. It is recognized that the inclusion of CHWs into multidisciplinary care teams contributes to the efficacy and cost efficiency of PCMHs and Community Health Teams.¹²⁻¹⁴ In addition to coordinated care, PCMHs are required to provide routine preventive care and patient education. CHRs are well positioned to support these efforts and effectively meet mandates for prevention, education and coordination of care.^{12,13,15}

LIMITATIONS

This baseline CHR workforce assessment relied on the qualitative analysis of interviews with managers at only 6 CHR programs, representing approximately 1/3 of the Tribal CHR Programs in Arizona. Consequently, the experiences and case studies presented here do not necessarily present a complete picture of the range of CHR Program structures, activities, health system relationships and evaluation practices in the state. Additionally, our analysis of existing CHR scopes of practice, job descriptions and job announcements was limited to those CHR Programs of Arizona willing to submit those documents for analysis. Therefore, our analysis is restricted to what was outlined in the documents submitted by the CHR Programs, with some CHR Programs' documents more and less comprehensive, which may have resulted in under reporting of CHR roles and services, and or the lack of detail on roles and services unique to the CHR workforce. This assessment only included Tribal CHR Programs in Arizona, and does not reflect CHR Programs in other IHS Service Areas or CHRs employed in non IHS 638 Programs, such as Urban Indian Health Centers and or not-for-profit agencies serving American Indian populations.

A strength of this assessment is the triangulation of the Social Determinants of Health related data achieved through comparing the SOP documents with the interview responses. This workforce assessment is also strengthened through its highly collaborative approach to data collection and interpretation of results by partnering CHR Programs and American Indian health policy experts.

WORKFORCE POLICY RECOMMENDATIONS

Based on the workforce assessment results, we recommend the Arizona CHR Coalition, in collaboration with Tribal CHR Programs and IHS CHR Area Consultants engage in the following policy and environmental and systems approaches to strengthen the CHR workforce in Arizona and nationally:

1. Engage CHR Programs in robust dialogue to establish a comprehensive program evaluation system that identifies strengths and gaps in professional development, sustainability and financing of the CHR workforce and captures the effectiveness of the CHR Program on American Indian populations.
2. Modernize the methods of data collection within the IHS and local public health and health care systems to ensure coordinated communication and monitoring of populations and programs.
3. Increase awareness and acceptance of CHRs among the health care team by mandating orientation to CHR workforce competency, roles, and responsibilities for all medical and public health care staff.
4. Establish procedures and policies for integrating CHRs as a functioning member of the health care team.
5. Establish a mechanism for reimbursement of CHR activities through Medicaid.
6. Establish formal mechanisms for communication between CHR and public health and health care systems to ensure coordination of care and referrals among shared clients and patients.

CONCLUSION

Nationally, the Community Health Representative workforce consists of approximately 1,700 CHRs, representing 264 Tribes. Of the 22 Tribes in Arizona, 19 Tribes operate a CHR Program and employ approximately 246 CHRs – which is equivalent to 30% of the total CHW workforce in Arizona estimated at 1000 CHWs. In 2018, CHRs celebrated their 50th year and serve as the oldest and only federally funded Community Health Worker workforce in the United States. CHRs are a highly trained, well established standardized workforce serving the medical and social needs of American Indian communities. After 50 years, CHRs have earned the right to understand their collective impact on the patient and population level health of the communities they serve. As a workforce, CHRs deserve to plan for financial, training and workforce development of the next 50 years.



Figure 22. CHR Service Area, Central Arizona

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APPENDIX A: INTERVIEW GUIDE



Project Title:

Community Health Representative Workforce Assessment

Through funding from the Arizona Health Care Cost Containment System (AHCCCS), Northern Arizona University Center for Health Equity Research (CHER) in collaboration with the Arizona Advisory Council on Indian Health Care (AACIHC) is conducting **45-60 minute interviews** with leaders at five Community Health Representative (CHR) Programs in Arizona regarding **CHR program organization, financing and evaluation**. Information gathered will support current and future CHR professional development, training, supervision, career advancement and financing of the CHR profession and workforce in Arizona.

CHRs are a workforce of well-trained, community-based, health care providers, designed to integrate the unique support of the Tribal life with the practices of health promotion and disease prevention. More specifically, CHRs are characterized as community leaders in health who share the language, and understand and can relate to the socioeconomic status and life experiences of the community member patients they serve. The CHR workforce acts as a liaison and advocate for clients to assist them in meeting their health care needs, with upholding traditions, values, and cultural beliefs of the individuals they serve.

Interviews are not considered research by the Northern Arizona university human Subject Review Board and all information will be anonymous and reported in aggregate unless you express otherwise. Interviews can take place over the phone or through video conferencing.

We thank you for your time and expertise.

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Discussion Guide:

CHR Program Assessment Structure, Financing and Evaluation

A. Determining CHR Program organizational structure and financing

I'd like to discuss how your CHR Program is organized and financed.

- 1) What is your role in the CHR program? How long have you been in this position?
- 2) Can you describe the different positions in your CHR program? (i.e. types of CHRs, program or project managers, CHR managers, etc.)
 - a) How do you organize case/client load for each CHR?
 - b) Would you mind telling us the average salary a CHR earns?
- 3) Based on what you have described and the CHR Standards of Practice outlined by IHS, we understand that CHRs have many responsibilities and roles, Beyond regular CHR activities, do you have special programs or projects that CHRs work on?
- 4) Which areas of programming do you think your CHRs spend the most time and energy on?
 - a) Where do you see the most potential for growth and development in your program? Or areas that you see a need for more training or education for your CHRs?
- 5) How do you pay for or finance all these different positions and projects?
 - a) Have you found any particularly creative or unusual ways to fund CHR activities?

B. Formal and informal relationships that exist between the CHR Program, other Tribal programs and Indian Health Service and 638 health systems serving American Indian patients

Now I'd like to shift the conversation to explore the formal and informal relationships your CHR Program has with other Tribal programs, Indian Health Service, and 638 health systems serving American Indian patients.

- 6) We'd like to focus first on your relationships with the Tribal Programs.
 - a) Can you list for us all of the Tribal Programs you work with?
 - b) What services does your CHR program most often provide to these partners?
 - c) Are there any programs that you have a formalized relationship with? E.g. having a formal agreement in place, sharing resources and or sharing decision making on projects?
 - i) If so, can you describe the relationship and how it came about?
- 7) Let's shift now to relationships with health systems (IHS or 638, or other providers). Would you like to talk about any of these in particular? We are interested in:

- a) How was the relationship started and developed?
- b) Why do you think this relationship has been successful?
- c) What are some of the challenges you have faced?
- d) How are CHRs integrated into any or all of these systems? What roles do they play?
- e) In terms of funding, how are they paid to be integrated?
- f) How is communication structured?
- g) What do you see as the main barriers and opportunities for integrating CHRs into your health systems?

- 8) What do you think is the greatest value that CHRs contribute to health systems? (i.e. benefit to patients, community, or the health care team)

C. Current way in which CHR Programs are conducting process and outcomes evaluation

Finally, I'd like to discuss the ways in which your CHR Program currently conducts evaluation.

- 9) Can you describe how you currently track and measure the different components of the CHR program to know what is working or not working? *(For each, probe to find "who, what and how" Who does it collect information on? What information does it collect/ what does it measure? and How is the information collected?)*
- 10) Can you talk more about program evaluation of your CHR Program?
 - a) What barriers or successes have you encountered?
 - b) What would you like to track or measure related to your program?

D. CHR response to COVID-19

- 11) We know that Native Nations are being disproportionately affected by the COVID-19 pandemic. Can you talk to us about the kinds of things your program is currently doing around COVID-19 -or planning to do in response to COVID-19?

E. Final thoughts

- 12) Is there anything you would like to add about what you see as the most important contributions CHRs make to community health systems?

Long Alt Descriptions

Figure 1. Native Nations of Arizona

Arizona map showing Tribal territories for the following groups: Kaibab-Paiute Tribe, San Juan Southern Paiute Tribe, Navajo Nation, Hopi Tribe, Havasupai Tribe, Hualapai Tribe, Fort Mojave Indian Tribe, Yavapai Prescott Indian Tribe, Yavapai-Apache Nation, Pueblo of Zuni, Colorado River Indian Tribes, Fort McDowell Yavapai Nation, Tonto Apache Tribe, White Mountain Apache Tribe, San Carlos Apache Tribe, Salt River Pima-Maricopa Indian Community, Gila River Indian Community, Ak Chin Indian Community, Fort Yuma-Quechan Tribe, Cocopah Indian Tribe, Tohono O'Odham Nation, Pascua Yaqui Tribe, and San Xavier Tohono O'Odham.

Table 1. Indian Health Service CHR Standards of Practice

Categories include Health Education, Case Find/Screen, Case Management/Coordinate, Monitor Patient, Emergency Patient Care, Non-Emergency Patient Care, Homemaker Services, Transport, Interpret/Translate, Environmental Health, Other Patient Centered Services, and Community Development.

Community Health Representative Workforce Assessment 2019 poster

Graphic of the report cover for the 2019 Community Health Representative Workforce Assessment: A report to the Arizona Advisory Council on Indian Health Care in collaboration with the Arizona Community Health Representative Coalition. By three N A U faculty members: 1) Samantha Sabo, Doctor of Public Health, Master of Public Health; Associate Professor for the Department of Health Sciences and Center for Health Equity Research at N A U. 2) Louisa O'Meara, Master of Public Health; Research Assistant for the Center for Health Equity Research at N A U. 3) Ricky Camplain, P H D; Assistant Professor for the Department of Health Sciences and Center for Health Equity Research at N A U.

Figure 15. CHR-Health System Integration Spectrum

Graphic with three circles. The left circle is labeled "Least" and lists: Communication—infrequent or informal communication with staff; Data—little data sharing; Referrals—unwieldy referral system through phone, fac, and mail; E H R – no R P M S or E H R access. The middle circle is not labeled but has an arrow moving toward the right. It lists: Communication—Regular communication with some healthcare staff; Data—some data sharing; Referrals—formal referral system; and E H R – R P M S access but no E H R. The right circle is labeled "Most" and lists: Communication—close working relationships with healthcare staff; Data—formal data sharing protocols; Referrals—formal electronic referral system; E H R – E H R access and training.

Figure 16. Challenges and Opportunities for CHR-Health System Integration

Venn diagram. Challenges circle: Healthcare staff do not understand the C H R program; C H R's do not have access to E H R's; no formal communication system. Opportunities circle: I H S should require orientation to Tribal programs; Advocate and educate; Formalize communication and referral systems; provide E H R access.

Figure 18. CHR Managers' perceived value of CHRs within the Health Systems Word Cloud

Word cloud listings from largest to smallest: C H R's, health, see, community, feel, people, care, patients, transportation, service, individual, call, program, resource, trusted, family, worker, value, good, help, always. Small words: upholding, understanding, team, systems, chain, group, beneficial, questions, medical, traditions, language, connections, problems, clients, fixed, wealth, nation, trying, issues, live, home, nurses, doctors, best, hope, pretty, direction, lives, department, defense, staff, valuable, learn, issue, women, relationship, daily, needs, advocate, visits, handle, spirit hoping, serve, resources, healthcare, P H N S, work, feeling, whole, cultural, provider, hospital, check, advantage.

Figure 20. Example of informational CHR newsletter

C H R newsletter from April 2020 includes headline "Hopi C H R weekly specials: extended Hopi executive order number 002 point 1 dash 2020." Newsletter includes blurbs titled "What is social distancing?", "What is quarantine?", "What is Isolation?", and "10 things you can do now to prepare for Covid-19." Contact phone number 928-737-6342.