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CHEROKEE NATION®
Health Services

OUTPATIENT DIALYSIS ACCESS REPORT

Addressing Gaps in End-Stage Renal Disease Care Through Partnerships, Prevention, and Patient Support

ABSTRACT

This report reviews Cherokee Nation Health Services' (CNHS) current capacity and challenges in providing outpatient dialysis care for patients with End-Stage Renal Disease (ESRD).

WORK GROUP ON DIALYSIS ACCESS SUPPORT

Dr. Stephen Jones, Chief Executive Officer of Cherokee Nation Health Services, Dr. Corey Bunch, Chief of Staff of the Cherokee Nation, Deputy Secretary of State Canaan Duncan

Report compiled by the Medicare Usage and Access Work Group and published by the Cherokee Nation Office of the Principal Chief.

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Abstract

This report was prepared in response to the **February 27, 2025 administrative memorandum** issued by Principal Chief Chuck Hoskin Jr., directing a work group to examine outpatient hemodialysis access and identify strategies for improvement. As emphasized in the accompanying **Anadisgoi news release**, this initiative reflects the Chief's commitment to responding to Council and citizen concerns regarding dialysis accessibility, particularly for rural patients. Speaker Mike Shambaugh requested the review after hearing concerns from constituents who face long travel times to access dialysis services, while Chief Hoskin stressed the need for a thoughtful, sustainable approach before expanding into this complex area of care.

The work group's analysis confirms that while CNHS has successfully implemented inpatient dialysis at W.W. Hastings Hospital, outpatient dialysis is not currently feasible for direct operation by CNHS due to patient volume thresholds, infrastructure requirements, and specialized staffing demands. Instead, the report identifies a range of strategic opportunities — from partnerships with DaVita to investments in transportation, nutrition, ancillary surgical services, and prevention programs like SDPI — that can meaningfully enhance dialysis access and quality of care.

About Cherokee Nation Health Services (CNHS)

Cherokee Nation Health Services (CNHS) is the largest tribally operated health care system in the United States, serving more than 2 million patient visits annually across a network of nine health centers, one employee clinic, and W.W. Hastings Hospital in Tahlequah. CNHS provides comprehensive medical, behavioral, and community health services, while also investing in state-of-the-art facilities such as a new $400 million hospital and an $84 million health center in Salina. With programs ranging from diabetes prevention and cancer care to emergency medical services and behavioral health treatment, CNHS works to ensure no citizen within the reservation lives more than 30 minutes from quality care. Guided by the vision of "Healthy Cherokee people, families, and communities for this and future generations," CNHS reflects the Cherokee Nation's commitment to improving the quality of life for its more than 460,000 citizens, strengthening tribal sovereignty, and building a world-class system of wellness for future generations.

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Executive Summary

Cherokee Nation Health Services (CNHS) provides care for approximately **530 patients with End-Stage Renal Disease (ESRD)**, 19 of whom are Cherokee speakers. ESRD disproportionately affects Native Americans, occurring at **2.3 times the rate** of whites. Diabetes — already highly prevalent among Cherokee citizens — is the leading cause of kidney failure requiring dialysis.

Key findings of this report include:

- **Current State:**
    - CNHS began offering **inpatient dialysis** at W.W. Hastings in 2023.
    - Outpatient dialysis remains provided almost entirely by **DaVita Dialysis**, which operates **13 centers within the reservation**.
    - Analysis indicates no current population clusters meet the minimum threshold of 60–80 patients required for CNHS to operate its own outpatient center.
- **Challenges:**
    - Rural and remote patients face long travel times.
    - Transportation barriers impact treatment adherence.
    - Specialized staff and infrastructure costs make direct CNHS operation of outpatient dialysis infeasible at this time.
- **Opportunities:**
    - **Partnerships:** Expand collaboration with DaVita, including land lease agreements for centers near CNHS facilities and expansion of home/peritoneal dialysis programs.
    - **Patient Support:** Strengthen CNHS patient transport services and integrate renal-specific nutrition support through the Cherokee Nation Food Distribution Program.
    - **Ancillary Services:** Expand CNHS surgical capacity for catheter placements and pursue vascular surgery partnerships through the PRC program.
    - **Prevention:** Prioritize continued investment in the Special Diabetes Program for Indians (SDPI), which has reduced new kidney failure cases by 50% nationwide.

In alignment with Chief Hoskin's directive and the public framing in Anadisgoi, this report concludes that Cherokee Nation should pursue a sustainable, partnership-driven approach to outpatient dialysis. By leveraging private-sector collaboration, enhancing patient support systems, and strengthening prevention programs, CNHS can ensure that citizens affected by ESRD receive equitable and effective care without overextending tribal resources.

Background

Cherokee Nation Health Services (CNHS) is the largest tribally operated health system in the United States, providing nearly two million patient visits annually across eleven healthcare facilities. CNHS delivers care not only to Cherokee Nation citizens but to all tribal citizens residing within the Cherokee Nation Reservation.

Guided by our vision—"Healthy Cherokee people, families, and communities for this and future generations"—CNHS is committed to delivering high-quality, culturally appropriate healthcare. This vision, along with our mission and values, serves as the foundation for every initiative we undertake.

As the population within the reservation continues to grow, so does the demand for accessible, comprehensive healthcare. CNHS has responded by expanding the size, scope, and capabilities of its facilities, while increasing access to specialized services. A persistent challenge for many American Indian communities is the geographic distance to healthcare. To overcome this, the Cherokee Nation Health Services Strategic Plan prioritizes bringing care closer to home through a seamless, integrated delivery model.

Our strategic goals include:

- Establishing seamless care delivery between primary and tertiary facilities to ensure coordinated, state-of-the-art healthcare for all patients.
- Locating health centers strategically to ensure that every resident on the reservation is within a 30-minute drive of a CNHS facility.

To meet these objectives, CNHS has launched several key initiatives:

- Recruitment of physicians, advanced practice providers, and essential support staff;
- Construction of new health facilities and modernization of existing clinics;
- Advocacy for reinstating the Joint Venture Construction Program;
- Generation of third-party revenue to support sustainability;
- Investment of over $100 million in Tribal business revenue to expand health infrastructure.

Through these efforts, CNHS continues to transform the health landscape for Cherokee citizens, ensuring future generations have access to equitable, high-quality healthcare services.

Current State

Within the healthcare system, patient care is broadly categorized into two distinct types: inpatient care and outpatient care. Understanding the distinction between these two models of care is essential to contextualize the current state of outpatient dialysis services at CNHS.

Inpatient care involves the admission of a patient to a hospital or medical facility for conditions that require overnight monitoring, intensive treatment, or surgical intervention. These patients are typically dealing with complex or acute medical issues that necessitate continuous observation and round-the-clock clinical support. Examples of inpatient care scenarios include major surgeries, severe infections such as pneumonia, or injuries that require extended recovery. In these settings, patients are assigned a hospital bed and receive comprehensive care, including meals, medications, and all necessary treatments delivered on-site by an interdisciplinary medical team.

In 2023, CNHS expanded its clinical capabilities by implementing inpatient dialysis services for acutely and critically ill patients with End Stage Renal Disease (ESRD). This development significantly reduced the need for patient transfers to external facilities, thereby minimizing disruption and emotional stress on patients and their families. It also marked an important milestone in the hospital's ability to provide comprehensive and specialized care within CNHS.

In contrast, outpatient care refers to medical services provided to patients who do not require overnight hospitalization. Outpatient services are generally scheduled procedures, treatments, or consultations that allow patients to return home the same day. These services are suited for conditions that are manageable without continuous supervision. Examples include routine vaccinations, diagnostic imaging, wound care, physical therapy, and importantly, dialysis treatment for patients with ESRD. While the intensity and duration of care vary, outpatient settings offer a more flexible and resource-efficient model, especially for patients with ongoing treatment needs.

Dialysis, in particular, represents a critical component of outpatient care. Patients with ESRD often require multiple dialysis sessions per week, each lasting several hours. The ability to receive this life-sustaining treatment on an outpatient basis enables patients to maintain a higher quality of life and reduces the burden on inpatient hospital resources. However, given the frequency and time commitment required for dialysis, the accessibility and operational efficiency of outpatient dialysis units are vital to patient outcomes and satisfaction.

In summary, inpatient care is characterized by overnight stays and intensive treatment protocols, while outpatient care—such as dialysis—allows patients to receive essential medical services in a more convenient and decentralized manner.

Issue

End Stage Renal Disease (ESRD) is a form of kidney failure that requires the use of dialysis to sustain the life of the affected patient. Native Americans are disproportionately affected by this condition with occurrence rates 2.3 times higher than white individuals (United States Renal Data System, 2023). Diabetes is the leading cause of kidney failure in the United States. Uncontrolled type 2 diabetes is the most common cause associated with ESRD needing dialysis. Type 2 Diabetes is one of the most common medical problems affecting Native American communities, with incidence rates around 16%. This is double the U.S. average of 8 % (Bullock et al., 2017). Additionally, high blood pressure and cardiovascular disease are often linked to a form of kidney disease called Chronic Kidney Disease (CKD). If not treated early, CKD can lead to progressive worsening of kidney function until patients develop ESRD (the fifth and final stage of Chronic Kidney Disease) and require dialysis (Cherokee Nation Public Health, 2021). It is estimated that 40% of patients with type 2 diabetes will develop CKD within their lifetime (Cherokee Nation Public Health, 2021).

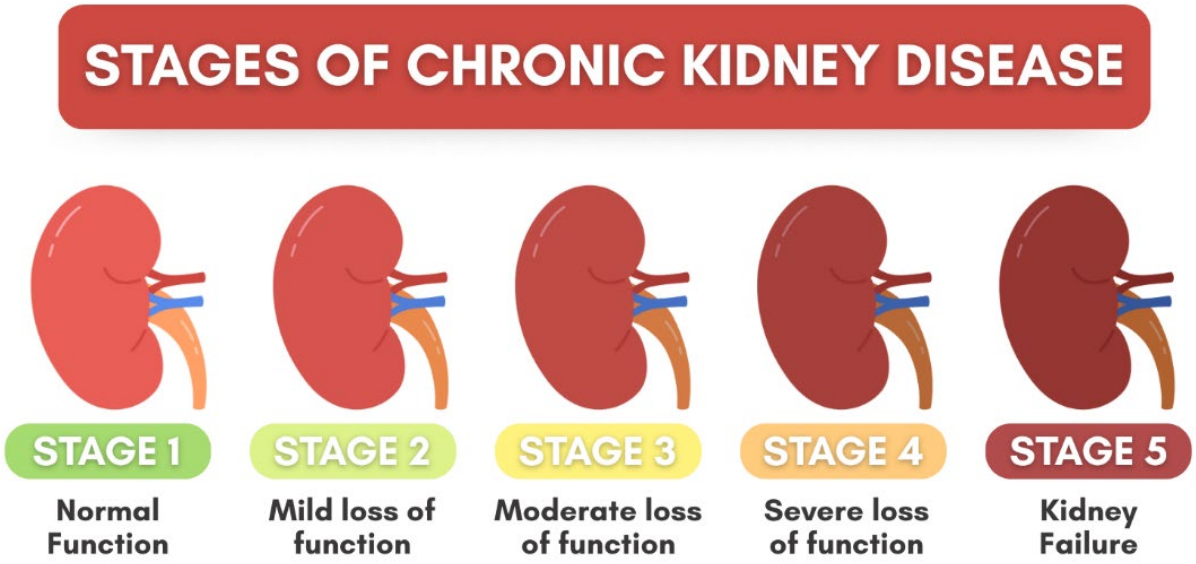

Figure 1 Stages of Chronic Kidney Disease

According to the Centers for Medicare & Medicaid Services, patients suffering from ESRD will typically require dialysis three times per week, usually on alternating days (e.g., Monday-Wednesday-Friday or Tuesday-Thursday-Saturday). Each session will typically last between 3 to 5 hours. Patients will typically require dialysis indefinitely, or until a transplant becomes available (Centers for Medicare & Medicaid Services, n.d.).

A unique aspect of ESRD in the United States is that Medicare covers dialysis treatment for ESRD patients of any age. Thus, all Native American patients with ESRD, including those within the Cherokee Nation, become Medicare beneficiaries once they require dialysis (Bullock et al.,

2017). The Cherokee Nation Patient Benefit Coordinators actively assist patients in this federal program so that patients can receive their needed services.

Currently CNHS cares for approximately 530 patients with ESRD; of these 530 patients, 19 are identified as Cherokee Speakers. The majority of these patients suffer from some combination of diabetes, hypertension, and cardiovascular disease. In an effort to care for these patients at CNHS facilities, WW Hastings Cherokee Nation Hospital developed the ability to provide inpatient dialysis to acutely ill and critically ill patients in 2023. This had led to fewer transfers to other facilities, less hardship on the patients and their families, and an expansion of services within WW Hastings Cherokee Nation Hospital. Currently CNHS does not provide any outpatient dialysis services at this time.

For patients utilizing CNHS who are in need of outpatient dialysis, DaVita Dialysis is the most prominent provider within the reservation. According to Forbes, DaVita Dialysis represents 36% of the market share for outpatient services within the United States (GuruFocus, 2025).

Figure 2: Red kidney pins mark the distribution of outpatient dialysis centers within the Cherokee Nation Reservation

Within the Reservation, DaVita has 13 locations (See figure 1). There are two in Bartlesville, three in eastern Tulsa, two in Claremore, and one each in Pryor, Wagoner, Tahlequah, Stilwell, and Sallisaw. Nearby, but outside the reservation boundaries, dialysis centers are located in Miami, OK, Siloam Springs, AR, Bentonville, AR, Springdale, AR, and Fayetteville, AR.

In order to operate an outpatient dialysis center effectively—both clinically and financially—a minimum of 60 patients is required, with the optimal capacity being approximately 80 patients per center. After a thorough analysis of the geographic distribution of dialysis patients within the Cherokee Nation Reservation, it has been determined that there are currently no viable locations that meet these patient volume thresholds.

DaVita Dialysis attempts to locate its outpatient dialysis centers in locations with the highest incidence of ESRD requiring dialysis. A “heat map” of CNHS patients based on zip code with a diagnosis of ESRD shows that most patients are geographically located within a reasonable distance from a DaVita Dialysis outpatient center (See Figure 2). However, some patients in the

more remote areas of the reservation, especially the far Northeastern area, face longer travel times.

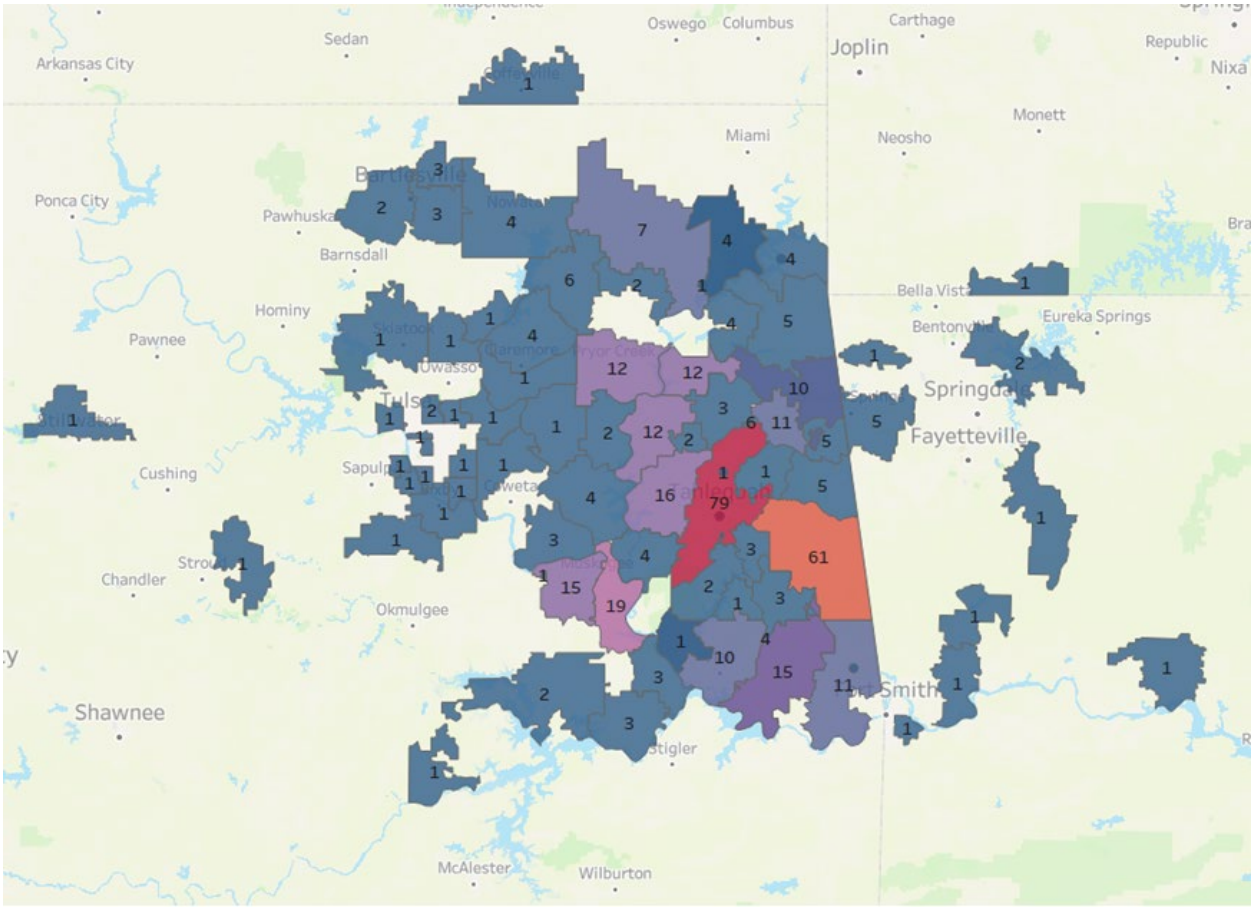

Figure 3. Distribution of Cherokee Nation Health Services ESRD Patients

Recommendations

While the development of an outpatient dialysis program directly operated by CNHS is not currently feasible—due to significant infrastructure investment, equipment costs, and the challenges of recruiting specialized staff—there remain several actionable strategies through which CNHS can enhance care coordination and support for patients living with ESRD.

Strategic Partnerships

CNHS has an established and positive relationship with DaVita, a longstanding partner in dialysis care. Should geographic gaps in outpatient dialysis coverage emerge across the reservation in the future, CNHS could consider strategic land lease agreements with DaVita to construct outpatient dialysis centers near existing CNHS health facilities. Such an arrangement would help alleviate travel burdens on patients and increase access to regular dialysis in underserved areas.

In addition to brick-and-mortar centers, DaVita offers a robust home dialysis and peritoneal dialysis program. These modalities are particularly beneficial for patients who face transportation challenges or prefer treatment from the comfort of their home. DaVita has already expressed interest in expanding these services to citizens residing within the reservation. CNHS should continue exploring these conversations, potentially facilitating outreach, screening, and care coordination efforts between DaVita and eligible patients.

Transportation Services

Transportation remains a significant barrier to treatment adherence for dialysis patients, particularly for elders, individuals living in rural areas, or those without reliable personal transportation. Further investment in CNHS's patient transport services could have a meaningful impact on dialysis compliance and health outcomes. Enhanced coordination between primary care teams and transportation services may also optimize scheduling and reduce missed appointments.

Nutrition Support for Chronic Kidney Disease

Managing ESRD and preventing further renal decline requires a multidisciplinary approach that includes tailored nutritional support. CNHS could consider collaboration with the Cherokee Nation Food Distribution Program to provide diabetes-friendly and renal-specific food options to patients diagnosed with diabetes or CKD. This partnership could support long-term disease management and promote health equity by addressing social determinants of health.

Ancillary Services and Procedural Capacity

Efforts are already underway within CNHS to expand services that support dialysis treatment. The planned addition of a rural track radiology residency and the ongoing expansion of general surgery capacity will enable more CNHS facilities to perform the placement of temporary dialysis catheters and peritoneal dialysis catheters. These developments will enhance local care and reduce reliance on external referrals.

An area for further development is vascular surgery. While adding a dedicated vascular surgeon to CNHS staff is currently cost-prohibitive, strategic partnerships with regional vascular surgeons through the Purchased and Referred Care (PRC) program may offer a practical solution. Such collaborations could provide patients with more timely access to arteriovenous fistula placement and management of fistula-related complications, ultimately reducing delays in dialysis initiation.

Prevention and Education

CNHS continues to lead in prevention through its operation of the nation's largest Special Diabetes Program for Indians (SDPI). Across the United States, this program has reduced the new cases of kidney failure by half in Native Americans (Indian Health Service, 2020). Within the reservation, 70% of participating patients have their diabetes and hypertension under control (Hoskin Jr., 2023). This will help prevent or slow CKD from progressing to ESRD. Since prevention of ESRD is far superior to treatment, consideration of increased funding and expansion of this program should be a priority. Continued investment in and expansion of SDPI

should be a strategic priority, as prevention of ESRD remains far more effective and cost-efficient than treatment.

Looking forward, CNHS could enhance prevention through additional community-based education programs. Initiatives like Kidney Smart, which provide structured education on kidney health, may be deployed through Community Health Nurses or integrated into primary care visits. The use of telemedicine and CNHS community centers as access points for virtual nephrology consultations and kidney health education sessions would further extend the reach of these programs into remote areas.

While CNHS is not currently positioned to operate its own outpatient dialysis centers, the workgroup recommends several strategies to enhance care for patients with ESRD:

- ❖ Strategic Partnerships:
    - Consider land lease agreements with DaVita to expand dialysis access near CNHS facilities.
    - Support expansion of home and peritoneal dialysis through DaVita with CNHS-assisted outreach and coordination.
- ❖ Transportation:
    - Strengthen CNHS transport services and improve scheduling coordination to reduce missed dialysis appointments.
- ❖ Nutrition Support:
    - Partner with the Cherokee Nation Food Distribution Program to offer renal- and diabetes-friendly foods.
- ❖ Ancillary Services:
    - Expand internal capacity for catheter placements through radiology and general surgery.
    - Leverage PRC partnerships to provide vascular surgery services for fistula access.
- ❖ Prevention and Education:
    - Invest in continued growth of SDPI to prevent CKD progression.
    - Expand kidney health education through programs like Kidney Smart, telehealth, and community outreach.

Multidisciplinary Workgroup Members

- Dr. Corey Bunch, CN Chief of Staff
- Canaan Duncan, CN Deputy Secretary of State
- Dr. Stephen Jones, CNHS Executive Director
- Brian Hail, CNHS Chief Operating Officer
- Beth Harp, CNHS Chief Medical Officer
- Lewanda Teehee, CNHS Director Medical Records
- Roy Ward, CNHS Hospital Medical Director
- Jessie Brackett, CNHS Senior Director Health Facilities
- Jason Loepp, CNHS Senior Director Health Business Operations
- Crosby Caughron, CNHS Senior Clinic Administrator
- David Markes, CNHS-OHC Medical Director
- Elton Sunday, CNHS Senior Clinic Administrator
- Rebecca Shepherd, CNHS Chief Nursing Officer
- Brett Gray, CNHS Deputy Executive Medical Director
- Seth Yandell, CNHS Chief of the Hospitalist Department
- Kathleen Imhoff, CNHS Ambulatory Care Nursing Director
- Krysten Knight, CNHS Hospital Nursing Director
- Katie Ferguson, CNHS Healthcare Office Manager II

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Appendices

1. Transcription of original *Administration Memorandum Directing a Review of the State of Medicare Part B, C and D Usage by Cherokee Nation Health Services Patients and Opportunities to Support such Usage by the Work Group on Medicare Usage and Access Support*

February 27, 2025

To: Dr. Stephen Jones, Chief Executive Officer of Cherokee Nation Health Services
From: Chuck Hoskin, Jr. Principal Chief

CC: Cabinet, Sub-Cabinet, Bryan Warner, Deputy Principal Chief, Mike Shambaugh, Speaker of the Council of the Cherokee Nation

Administration Memorandum Directing a Review of Outpatient hemodialysis Access by Cherokee Nation Health Services (CNHS) Patients and Strategies to Improve Access by the Work Group on Dialysis Access

The purpose of this memorandum is to direct a review of access to outpatient hemodialysis services by Cherokee Nation Health Services (CNHS) patients and to examine strategies to improve access.

I. Overview: Hemodialysis

CNHS has expanded its scope and now directly provides inpatient dialysis services to our patients hospitalized at W.W. Hastings Hospital. CNHS offers comprehensive primary care focused on the prevention, early detection, and management of end-stage renal disease (ESRD), addressing key risk factors such as diabetes and hypertension. Through the Purchased Referred Care (PRC) program, primary care providers can refer patients with existing or elevated risk for ESRD to specialized care, including nephrologists and cardiovascular specialists. Additionally, CNHS works closely with patient benefit coordinators to help secure insurance coverage for dialysis patients, ensuring they have the necessary financial support throughout their treatment. Additionally, in the case of a Sallisaw based third party provider, Cherokee Nation subsidizes operations of that facility through the provision of a building.

II. Elected and appointed leadership can better support future improvements to outpatient hemodialysis access by better understanding current access, as well as opportunities for, and barriers to, future Cherokee Nation support of increased access to these services.

Cherokee Nation's commitment to excellence in health care requires a broad understanding of our growing and increasingly complex health system by not only health care staff and leadership but also by elected and appointed leadership outside of our health system. Cherokee Nation leadership is deeply invested in the success of our health system, and every leader has the opportunity to support and strengthen it. Additionally, citizens look to Cherokee Nation leadership to have sufficient depth of knowledge of the health system to answer questions and understand concerns.

Anecdotal concerns have arisen regarding geographic access to dialysis services and the feasibility of integrating dialysis into Cherokee Nation's health system. In terms of geographic access, Cherokee

Nation has prioritized investing in health care facilities that are within reasonable reach of all Cherokees on the reservation. However, dialysis services are primarily provided by private sector entities, whose facility locations may not always align with this approach. Regarding feasibility, Cherokee Nation Health Services has strategically expanded direct services with a focus on quality and sustainability. At this time, outpatient dialysis services have not yet been incorporated into that strategy.

To optimize our Health System's support for dialysis patients, leadership needs an overview of the current dialysis access usage and future strategies for expanding access to dialysis services.

Dialysis Access Work Group

On the basis of the foregoing, I am directing a Work Group on Dialysis Access Support. The Work Group is composed of:

- Health leadership and staff as designated by Dr. Jones
- Chief of Staff Corey Bunch or Designee
- Deputy Secretary of State Canaan Duncan

The Work Group shall draft and submit to the Principal Chief a brief report which outlines current dialysis access and opportunities to support increased patient access to dialysis all as determined by Dr. Jones, but which should address these issues:

- What are the current statistics on dialysis access by our patients?
- What opportunities exist now, or may exist in the future, to support greater patient access to dialysis services? Areas of review should include strategies and investments to encourage the placement of private sector dialysis services in underserved areas.

The Work Group described herein is not a public body within the meaning of Cherokee Nation FOIA, but the report or a summary thereof will be disclosed to members of the Council of the Cherokee Nation and to the general public as the Principal Chief directs. The report should be submitted by July 1, 2025, or by an approved deadline extension.

Signed.
Chuck Hoskin, Jr.
Principal Chief of the Cherokee Nation