



Dialysis Clinic, Inc.

A Non-Profit Corporation

**ANNUAL
REPORT
FOR 2017**

DCI Values

Non-profit: The patient is our reason for existence.

- We invest in research and education.
- We invest in under-served areas.
- We are fiscally responsible to ensure the long-term success of our mission.

Quality: We understand what quality and safety mean to our patients and use this to guide our clinical practices.

- We strive for excellence daily.
- We collaborate across disciplines.
- We take pride in the work we do.

Integrity: We are ethical and honest.

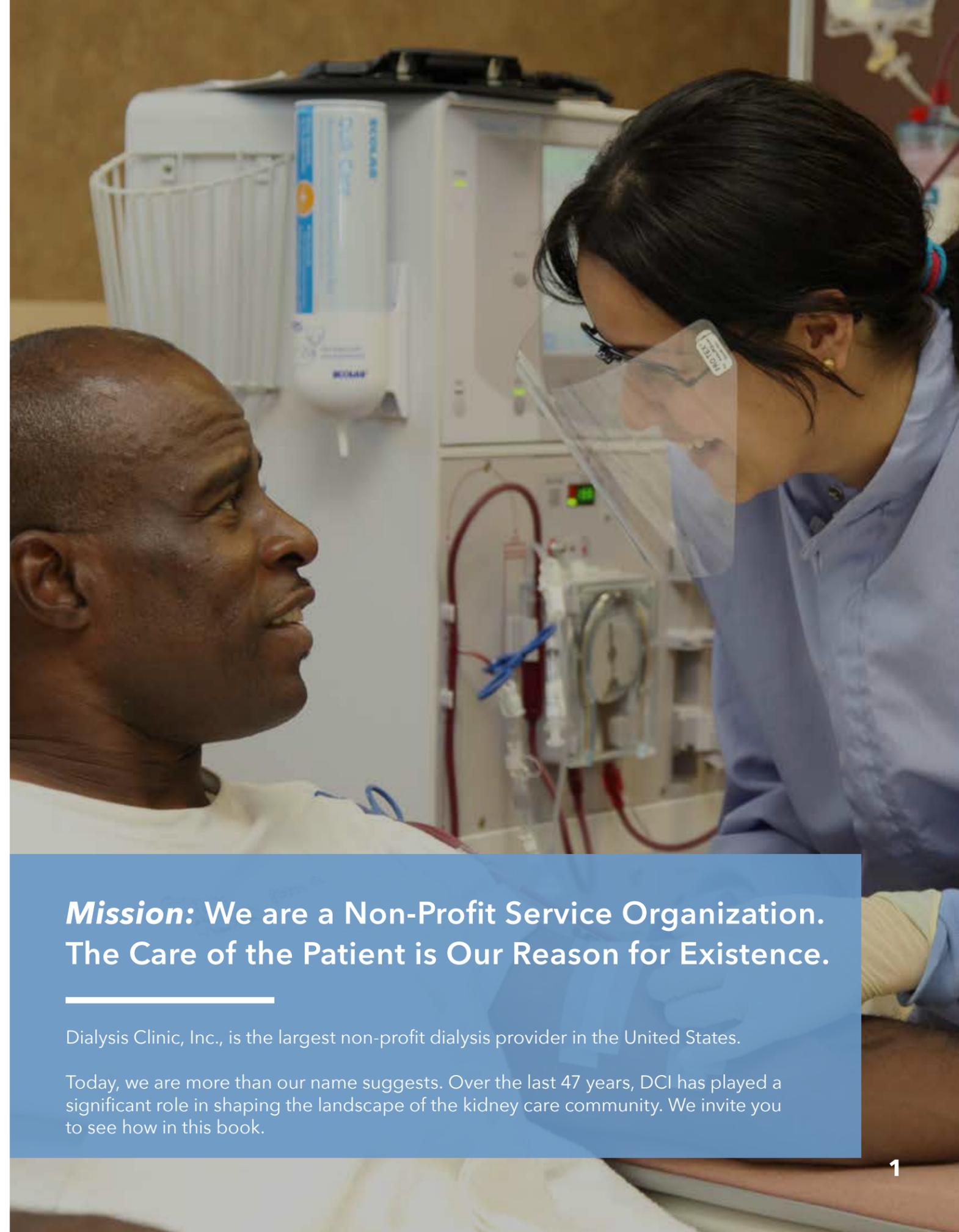
- We do the right thing.
- We treat everyone fairly and with respect.
- We do not pursue profit by cutting corners.

Services: We serve our patients, employees, physicians, and the community.

- We recognize and value patients, employees, and physicians as our partners.
- We treat others with courtesy, professionalism, and kindness.
- We are recognized and rewarded through superior patient outcomes, greater employee retention, and increased referrals.

Leadership: Leadership is a mindset, not a title.

- We go above and beyond expectations.
- We recognize a need and take action.
- We improve our weaknesses and build upon our success.



Mission: We are a Non-Profit Service Organization. The Care of the Patient is Our Reason for Existence.

Dialysis Clinic, Inc., is the largest non-profit dialysis provider in the United States.

Today, we are more than our name suggests. Over the last 47 years, DCI has played a significant role in shaping the landscape of the kidney care community. We invite you to see how in this book.



06

A Timeline: 47
Years of Service



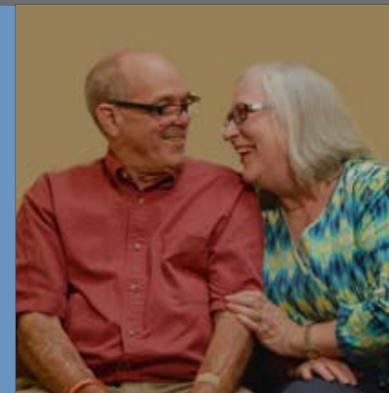
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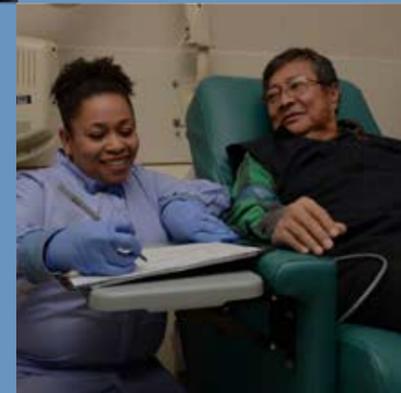


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The DCI Story

In the late 1960's Dr. H. Keith Johnson was completing his nephrology training at the VA Medical Center and Vanderbilt Medical Center. At the time, Vanderbilt only had a three-station unit responsible for dialyzing acute patients, backing up the kidney transplant program, delivering home training, and caring for a few chronic patients. Faced with the dilemma of having too few resources for so many needs, and faced with the hospitals requirement that a physician be in attendance whenever a patient received a dialysis treatment, nephrology fellows would dialyze chronic patients until the early hours of the morning, making for very long days. Inspired by Northwest Kidney Center's success with a free standing dialysis center the idea of trying the same approach was born - but the big challenge was to find funding for this effort.

During a family vacation in 1970, Dr. Johnson explained his idea to his father, Dr. Harry Johnson who was a practicing physician in New York. He considered his son's idea and offered to provide the seed money to assist from his foundation. With that, the idea became a reality.

Upon incorporation, in March of 1971, the decision was made for the organization to be non-profit and that any excess revenues generated would be used for research and education in the field of kidney disease or in other ways that would benefit people with kidney disease. Finally, **Dialysis Clinic, Inc.** (DCI), was established, a 1,000 square foot refurbished home in Nashville was secured to be the new clinic location, and in May of 1971 patients began dialyzing and the mission, "The care of the patient is our reason for existence," was not only adopted, it was lived.

In 1971, with DCI's first clinic already operating, there was no Medicare funding and most patients still did not have insurance to cover the cost of treatment. That didn't stop the DCI staff from providing treatment to patients. To the surprise of citizens all over Nashville, road blocks were established. The staff of the dialysis unit (including the doctors) and volunteers from the Kidney Foundation asked Kentucky Fried Chicken for KFC buckets to collect donations. The staff placed pictures of patients on the red and white buckets and on Saturday and Sunday afternoons, made their way to the busiest intersections in Nashville to collect donations for anything people could give. On a good weekend, they could raise \$10,000 to go toward the cost of treatments, but it wouldn't last long and they would be out collecting donations once again. To everyone's relief, in 1973, the Medicare ESRD Program began, and thousands of dialysis patients across the U.S. were able to receive treatment that was and still is paid for by that program.

Over the years, the cost of care keeps rising while the Medicare payments for dialysis have actually decreased. Somehow DCI manages to find ways to provide more than expected. For instance, DCI Donor Services was created to provide for organ and tissue recovery and transplantation. Camp Okawehna was established for the pediatric renal patient. DCI has given over \$291,000,000 to research initiatives. Today, DCI is the only national dialysis provider to have remained under its own control since its founding. It has successfully remained non-profit and has had the lowest standard mortality rates and standard hospitalization rates among national dialysis providers since 2003. DCI is the fourth largest dialysis provider in the US, operating more than 240 dialysis clinics, and more than 140 hospital services programs. DCI employs over 5,000 people and serves over 19,000 patients across 28 states.

Letter from the Chairmen

With the release of this inaugural issue of the Dialysis Clinic, Inc. (DCI) Annual Report, we've had the opportunity to reflect on DCI's journey over the past 47 years. The reflection has revealed a fundamental truth: people are the highest priority at DCI. The ability to see people and understand their needs is what guides us to provide the precise care that individuals with kidney disease require.

During 1971 in Nashville, Tennessee, we had the opportunity to care for dialysis patients in a hospital setting. We understood there were many more patients that needed access to dialysis care, but they were limited by the resources at the hospital. We also knew that without insurance coverage many patients would be forced to make difficult financial decisions, such as mortgaging their farms or depleting their life savings, that would impact their families should they attempt to pay out-of-pocket for the ongoing chronic treatments. As we continued to learn more about the individuals with kidney disease, we were certain we needed to act to build an outpatient unit. And, we knew it had to be a not for profit.

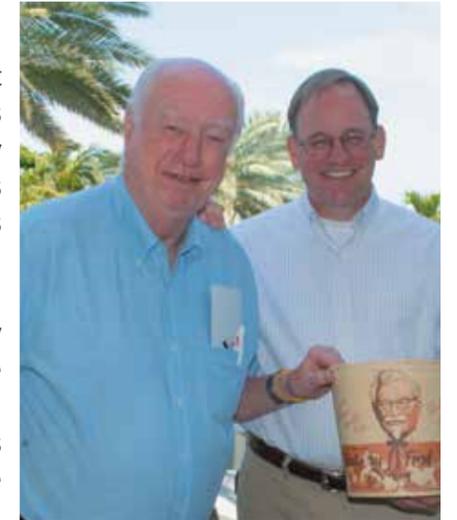
The decision to incorporate as a non-profit was the first step toward many other patient-focused approaches. We went on to establish DCI Donor Services, believing that access to transplantation is the best treatment option available for patients with kidney disease. We've provided over \$291,000,000 to support education and research studies in hopes of improving the future of kidney care. We began REACH Kidney Care programs to care for individuals with kidney disease earlier in their disease progression. Over time we've evolved from a dialysis provider to a kidney health organization. We believe we can do a better job of helping people to avoid dialysis or at the very least, slow the progression of kidney disease and provide ample education to help them prepare to live their best life despite impending kidney failure. Why is this important to us? Because this is how we would wish to receive care if we had kidney disease.

When people are your highest priority, you'll notice that your business decisions might not take the typical corporate approach. At DCI, we've been invited into all of the communities that we serve. We get involved in our communities and build relationships with local medical providers. We openly share our best practices. We believe excellent healthcare relies on local and national collaboration.

We strive to be the kidney health organization that people trust. From medical partners to dialysis patients, we want each person we work for to know that they are our highest priority. Our mission for the past 47 years has been, "We are a non-profit organization. The care of the patient is our reason for existence." It has guided our decisions in the past and it will guide us going forward.

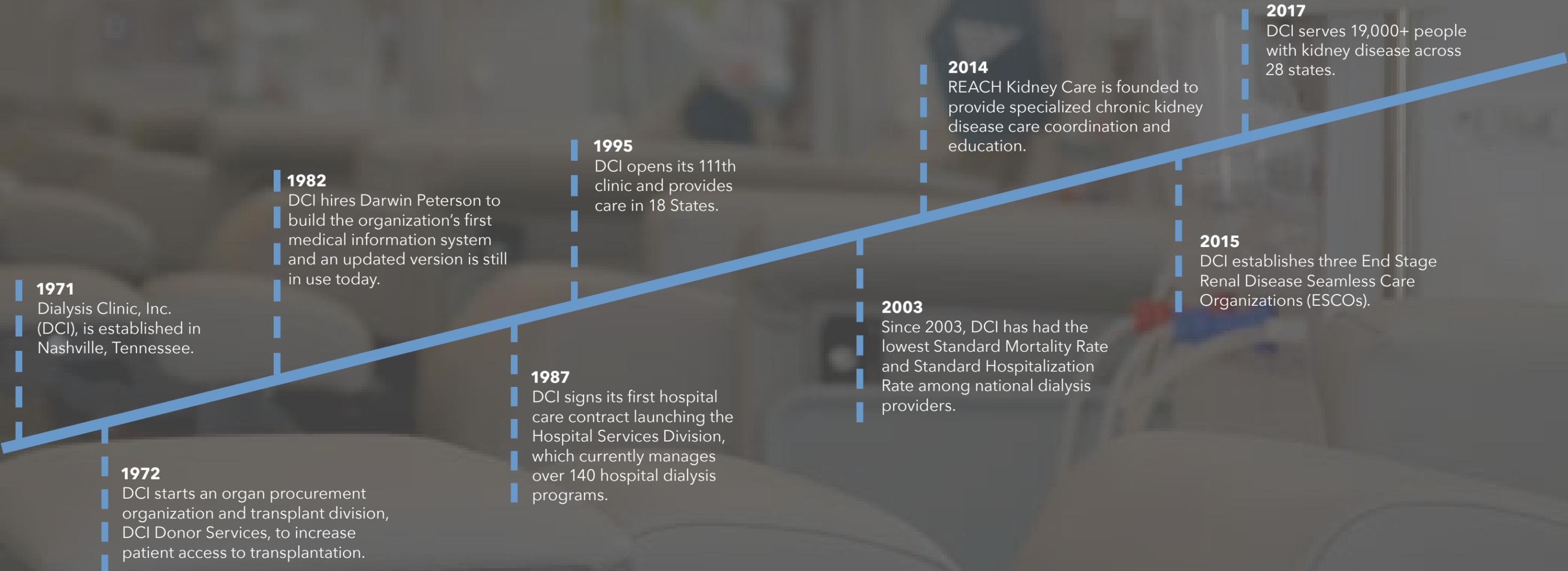
H. Keith Johnson, MD
Chairman, Founder of DCI

Doug Johnson, MD
Vice-Chairman



Dr. Keith Johnson and Dr. Doug Johnson holding an old KFC bucket.

What Does 47 Years of Service Look Like?





Leadership



H. KEITH JOHNSON, MD
Chairman, Founder of DCI



DOUG JOHNSON, MD
Vice-Chairman



ED ATTRILL
President



BILL WOOD
*Secretary, Treasurer and
Chief Financial Officer*



STUART REDPATH
Chief Operating Officer



KEN JOHNSON
Director



JAMES PERRY
Director

Operations

INNOVATIVE ESRD MODELS

Collaborating with community health partners in 6 End Stage Renal Disease Seamless Care Organizations (ESCOs) in 11 states.

LOCAL HOSPITAL PARTNERSHIPS

Managing over 140 hospital dialysis programs, improving continuity of care and community collaboration for kidney disease.

LARGEST NON-PROFIT DIALYSIS PROVIDER

Developing a robust home dialysis program while driving to quadruple the national preemptive transplant rate.

CHRONIC KIDNEY DISEASE CARE

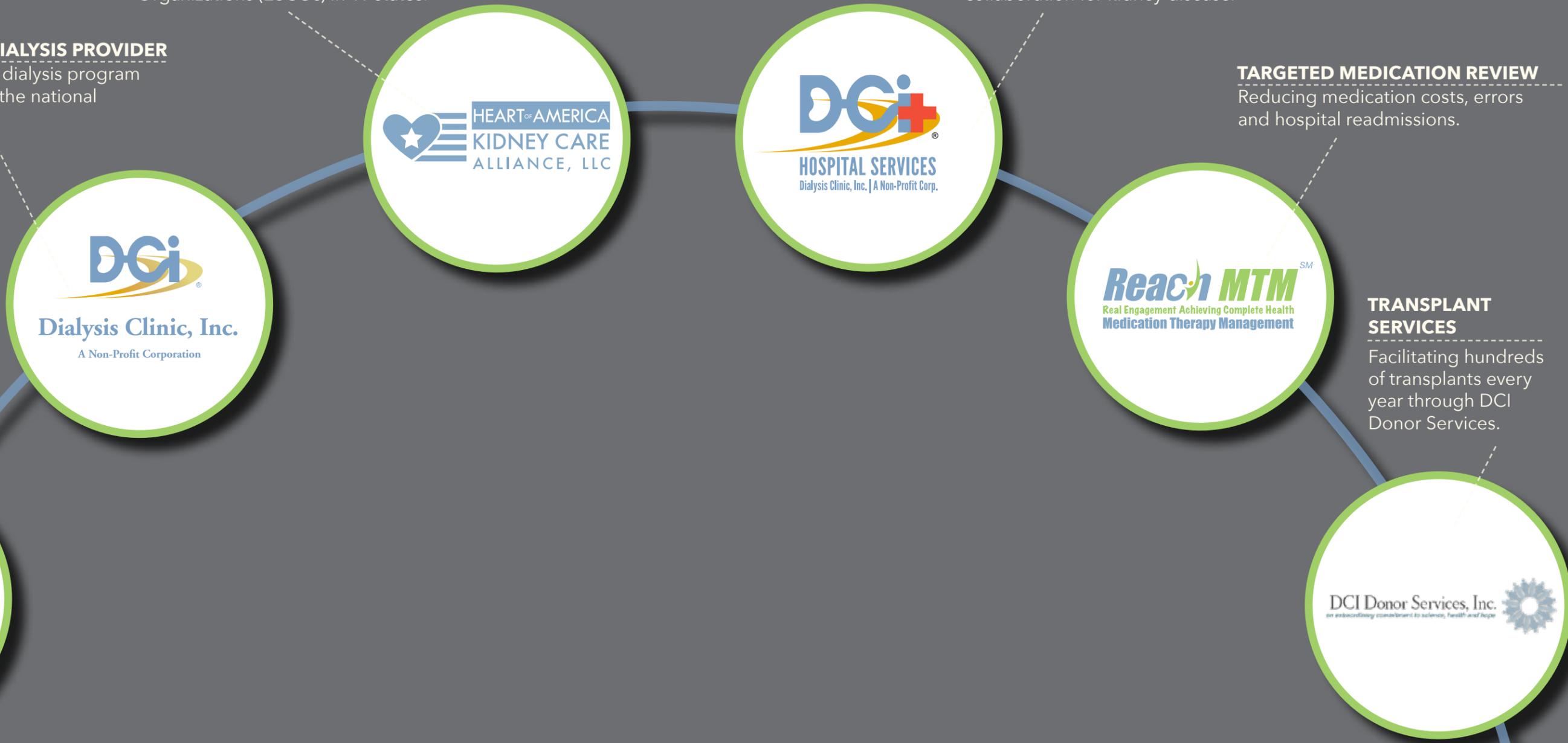
Providing specialized care coordination and early education to delay or prevent the need for dialysis.

TARGETED MEDICATION REVIEW

Reducing medication costs, errors and hospital readmissions.

TRANSPLANT SERVICES

Facilitating hundreds of transplants every year through DCI Donor Services.



Dialysis Clinic, Inc.
A Non-Profit Corporation

HEART OF AMERICA
KIDNEY CARE
ALLIANCE, LLC

HOSPITAL SERVICES
Dialysis Clinic, Inc. | A Non-Profit Corp.

Reach MTM
Real Engagement Achieving Complete Health
Medication Therapy Management

DCI Donor Services, Inc.
an extraordinary commitment to science, health and hope

Reach Kidney Care
Premier



Hospital Services

In 2017 DCI Hospital Services:

Opened 15 programs. Currently, serving over 140 hospitals.

Provides services to:

- Health Systems
- University Teaching Centers
- Rehabilitation Centers
- Long Term Care Facilities
- Rural Hospitals

Regulatory and Hospital Accreditation Standards:

- DCI Hospital Services is committed to meeting CMS and accreditation standards.
- DCI Collects and tracks treatment related data through our web-based Medical Information System (MIS) that is specific to the renal patient population and the services we provide.
- The DCI Hospital Service renal-specific MIS allows us to generate reports for hospital partners that address a variety of performance measures.

The purpose of DCI Hospital Services is to maximize patient well-being and satisfaction, be a physician partner in the inpatient care of their patients regardless of choice of outpatient provider and to be a hospital partner in achieving clinical excellence and operational efficiency in the care continuum. This goal is in concert with the values-based philosophy of DCI. We achieve these goals by providing high quality services in a safe and collaborative environment. We continually focus on improving the safety and quality of our services by analyzing meaningful measures that address clinical and financial performance in the hospital setting. The multi-disciplinary Hospital Services team meets monthly to identify opportunities for improvement, set priorities, and ensure that resources are in place to achieve desired results.

As a hospital partner, we provide seamless patient care without differentiation between DCI and hospital staff. Hospital initiatives and goals for patient care become our initiatives and goals. This unified approach improves satisfaction of hospital leaders and is responsible for our year over year growth rate of 12%. As more hospitals and health systems become aware of the quality and consistency of DCI Hospital Services, development in this setting will continue to grow. In addition, our patient centric approach improves the patient's perception of the safety and quality of care that they receive and promotes positive feedback on the Hospital Consumer Assessment of Health care Providers and Systems (HCAHPS) survey.

What does DCI's commitment to quality mean for our Hospital partners?

1. Confidence in best practices gleaned from DCI inpatient and outpatient programs and relationships with other top-caliber organizations
2. Confidence that DCI Hospital Services meets or exceeds standards of CMS and accreditation platforms (The Joint Commission, NIAHO, etc.)

DCI collaborates with Hospital partners in a consistent and accurate Quality Management program aligned with Hospital priorities for patient safety, infection control, and other performance metrics. Our service exceeds the regulations for contracted services, and beyond the requirement, we use this data to improve the care of your patients.



DCI Donor Services

DCI Donor Services, Inc.
an extraordinary commitment to science, health and hope



DCI Donor Services (DCIDS) family of companies includes DCI Donor Services Tissue Bank, Sierra Donor Services Eye Bank, and organ procurement organizations (OPOs) in Tennessee, California and New Mexico.

DCIDS is an exceptional team of professionals dedicated to saving and improving lives by connecting organ and tissue donations to the patients who need them. DCIDS strives to extend the reach of each generous donor's gift to those who are always profoundly grateful for them.

DCIDS has been an integral part of the communities it serves for nearly four decades. Professional partners include hospitals, funeral homes, motor vehicle departments, high schools, medical examiners and county clerks. Each of those professional partners plays a crucial role in the donation process. Their expertise and expediency help pave the way for others to receive the Gift of Life. DCIDS collaborates in a myriad of ways with these partners to develop educational and training programs, awareness and registration initiatives, and community memorials and celebrations.

Annual flag raising events in over 28 hospitals occur every April in celebration of National Donate Life month. In six of those events, recognition ceremonies were held celebrating donor families, living donors, hospital staff, and organ recipients, with each event attracting between 80-200 attendees.

In 2017, Tennessee Donor Services was nationally recognized by the OPO community for achieving the highest rates of donors per million among its peers. DCIDS continues to find ways to strengthen its relationship with community partners in order to improve the service to families who rely on this life-saving work.

In 2017, Donor Services had:
Organ Donors: 440
Tissue Donors: 2,639
Organs Transplanted: 1,365
Kidneys Transplanted: 645
Tissue Grafts Distributed: 139,081

DCI Logistics

DCI Logistics specializes in transportation within the organ and tissue transplantation community. Logistics offers both ground and air support for a variety of different medical transportation needs. For more than 25 years, Logistics has been providing excellence in transportation for lab samples, transplant teams, and tissue donors. Understanding the urgency of donation, Logistics works closely with Organ Procurement Organizations (OPOs) and Transplant Centers to assure all transport needs are met.

DCI Logistics Services Include:

- Coordination of ground and air transportation of organs, tissue, and transplant professionals
- 24/7 professional dispatching and air transportation
- HIPAA compliant staff
- Owned and managed by licensed medical professionals
- Aircraft fleet includes (2) Cessna Citation II, (2) Cessna 310, and (1) Piper Cheyenne III
- Vehicles and drivers located across Tennessee, dedicated to transportation of tissue donations
- Continuous monitoring of all transportation and real-time communication with Donor Services



Community Impact

Purpose Projects

The 2017 DCI Purpose Projects were comprised of 34 community service initiatives that provided education and resources to more than 47 communities. The Projects varied in nature and creativity. Three educational videos and two coloring books were designed to provide insight to kidney disease. Many Projects directly impacted patient health. Kidney screenings offered blood pressure checks and urine tests; cooking demonstrations showed how to use fresh food to prepare a kidney friendly meal; and support group sessions allowed individuals to share concerns about kidney disease. DCI Purpose Projects raised over \$18,000 for local charities in their respective communities. Over 450 people were screened for kidney disease through health fairs and community programs. The Purpose Projects are meaningful activities that reached over 20,000 people and allowed for kidney conversations that may not have occurred otherwise.

Education

DCI recognizes the rewards of higher education and has supported that endeavor since 1995 through the DCI Scholarship Program. To date, DCI has awarded over \$704,000 in university scholarships. Since 1998, DCI has also sponsored a summer internship for premedical students in the clinical area of organ transplantation. Our internship program has given more than 200 students the opportunity to expand their knowledge of the medical field and confirm their decision to go into medicine. In addition, in 2002, DCI launched a partnership with Glencliff High School to provide the opportunity for students to work in a DCI facility as patient care technician interns.

Camp Okawehna

For many children with renal disease, attending a summer camp was not an option. The emotional, physical, and financial burden of dialysis treatments extinguished their hopes for a childhood “camp” experience. However, that was until the idea of Camp Okawehna was born in the minds of two kids on hemodialysis who wanted to go to camp.

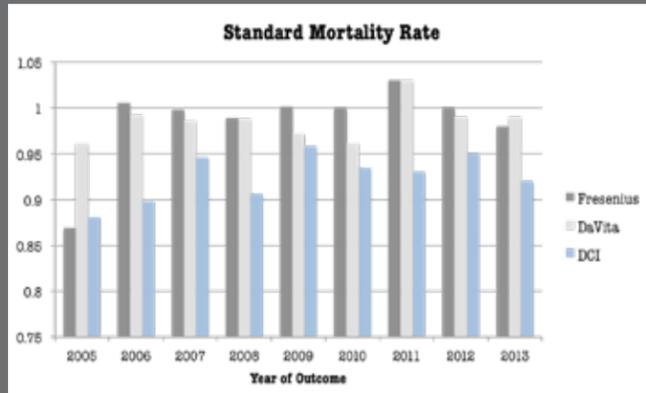
In 1974, Camp Okawehna was established as a week-long summer experience for children with kidney disease. It is located just 50 miles outside of Nashville, Tennessee, on the grounds of Cedar Crest Camp. Children who have had a kidney transplant as well as children on hemodialysis and peritoneal dialysis are welcomed at camp, where on-site dialysis is provided. Every camper who requires dialysis is required to bring a knowledgeable home unit staff person who understands the intricacies of the child’s dialysis treatment. Children between 6 to 18 years of age are eligible to attend, regardless of where their treatment is received. The nominal cost to attend camp is \$65 per camper. However, no child is denied the camp experience due to an inability to pay.

Camp “O”, as it is affectionately called, is the only kidney camp located in the state of Tennessee. With over 500 acres of green space, it is one of the largest kidney camps in the country. The support of the Cedar Crest staff over the last 40 years has allowed DCI to provide this immersive camping experience to kids with kidney disease.



DCI Dialysis Outcomes

The excellent patient outcomes attained at DCI clinics reflect the strong leadership of our Medical Directors and affiliated physicians as well as the execution of our dedicated medical staff. The DCI Corporate office provides support to meet regulatory, information technology, laboratory, pharmacy, logistics and administrative support. DCI has held the best ratios for standard mortality and hospitalization ratios since 2003 when the United States Renal Data Systems (USRDS) compared the three largest dialysis organizations (LDO's) shown in the graphs to the right.



DCI has always performed better than the other two LDOs that operate as for-profit and have a ten-fold advantage in size and resources. Since then, there have been more consolidation in the dialysis provider organizations such that two other for-profit LDOs similar in size to DCI have emerged and the USRDS stopped producing these direct, unbiased LDO outcome comparisons. There are no longer any direct national organization-specific comparisons except for the flawed facility-based reporting of Medicare star ratings. Therefore, DCI has embarked on internal development of clinical performance measures that reflect our focus on patient-centered outcomes that extend beyond regulatory emphasis on metrics related to anemia, dialysis adequacy and hypercalcemia.

We have directed tracking of population health parameters that emphasize factors that can decrease hospital admissions and readmissions such as: managing medication accuracy and polypharmacy through routine medical reconciliation every month and within 7 days after hospital discharges, vaccination for flu and pneumococcus, monitoring blood cultures and infections, decreasing exposure to hemodialysis catheters, increasing home dialysis, and increasing transplantation.

DCI believes that kidney transplants provide the best available therapy for patients with stage 5 chronic kidney disease. As a first step, we have implemented a novel metric that tracks referrals for transplant evaluation for eligible patients in the clinic, presented recently at the American Society of Transplantation's Cutting Edge of Transplantation 2018 meeting. The metric gives credit for each month spent post-referral during each yearly evaluation period which encourages timely referral and explicitly starts the clock during the month that the patient actually visits the transplant center, not simply based on a physician order for referral. We intend to maximize the chances that appropriate steps are being taken to facilitate transplantation, either from a living donor or via a deceased donor, for appropriate candidates. This internal metric is in addition to external goals as DCI works towards increasing transplant referral, waitlisting and transplantation rates.

Donor Story

Carl Higgins set the living donor process in motion when he asked his REACH Kidney Care transplant coordinator, Christa Lawson, if she would display kidney transplant information at Grace Church of the Nazarene to educate the congregation.

"I was thrilled that Carl wanted me to attend his church and offer transplant education. He put me in touch with Pastor Jonathan Trees who welcomed me. I found the congregation to be curious about organ donation, kidney failure, and what they could do to help," said Lawson. "As a society, we struggle to openly discuss kidney failure and the need for help. Most people don't know that living kidney donation is an option. That's why community education is so enlightening."

Pastor Jonathan Trees was knowledgeable about dialysis, but he admits that he didn't really understand the toll it takes on a person until you know someone on dialysis.

"It wasn't until my wife and I sat around with friends that we realized how kidney disease and dialysis was impacting their life. That's how it became personal for us. At that point, we had to take action. We had the knowledge of what can happen, what a solution might be for them, and to walk away from it would have been wrong," said Trees.

Twenty-one parishioners who heard the final segment of the Live Generously series, focusing on meeting another persons needs physically and spiritually, on Sunday morning took the next step to sign up for screening to see if they could become a donor.

Pastor Trees led by example. He was one of the 21 potential donors who turned out to be a match for Carl Higgins. On September 5th, 2017, Pastor Trees donated a kidney to Carl Higgins, and Carl Higgins received a life-changing transplant.

"Kidney donation became a way for me to not just talk and pray about healing but literally a way to become a part of the solution," said Trees. "I was surprised at how easy it was. I felt like the team that evaluated me as a potential donor had my best interests in mind each step of the way. I feel educated about the entire process. I hope that more people have the opportunity to learn about kidney failure and how easy it is to become a donor."





Transforming Care

REACH Kidney Care

Reach Kidney Care is a division of Dialysis Clinic, Inc. (DCI) focused on Chronic Kidney Disease (CKD) care and the coordination of care for patients on dialysis. The primary goal for REACH is to reduce the number of patients that require dialysis. Additional goals include:

- Improving care for patients at any stage of kidney disease by increasing compliance with their treatment plan, reducing hospitalizations, and facilitating lower cost and better outcomes.
- Empowering patients who progress to the next step in care to make the best choice for their therapy.

REACH is currently caring for approximately 4,000 patients in 19 locations across 13 states.

The chart to the right shows the impact of REACH's longest running program on new dialysis patient starts.

How Patients Start Dialysis	Typical Start	CKD Program (2015-2016)
Home Therapy - Peritoneal Dialysis	9.8% *	31%
For In-Center, Permanent Access	20% *	70%
Avoid First Hospitalization	35% **	66%

*2017 USRDS ADR (data updated to 2015)

** Wong SPY, Kreuter W, O'Hare AM: Healthcare intensity at initiation of chronic dialysis among older adults. J Am Soc Nephrol 25:143-149, 2014

CKD Patient Story

Florence L. Dicks- Delaying Dialysis

66 year old Florence L. Dicks has a strategy in place for keeping kidney disease under control. She gets advice from REACH Kidney Care of Cincinnati once or twice a month. She talks to Maria Sims, RN, REACH Care Coordinator, and Gloria Bissler, RD, REACH Dietitian, about nutrition, exercise, medications and treatment options for kidney disease.

Getting to a place where Florence felt in control of her kidney disease has taken some time. In 2011, Florence visited The Jewish Hospital Mercy Health Clinic for routine follow up for her high blood pressure. She recalls being referred to the University of Cincinnati to see a nephrologist. She didn't think much about the referral until she looked down at the paperwork in her hands and read the words "chronic kidney disease."



"Seeing those words, chronic kidney disease, did something to me," explained Florence. "I was upset."

Florence was already nearing the end of stage 3 when she learned of her kidney disease in 2011. She briefly drifted into stage 4 but by making changes on her own, she was able to maintain her stage 3 level until around 2016. Upon entering stage 4, she found a transplant class offered by the hospital and attended in hopes of learning more. During the meeting, she noticed the ad for REACH Kidney Care with Maria's picture and contact information.

"I saw Maria's picture and information in the book. I told myself as soon as I get home, I'll give her a call so that I can have someone else to talk to about this," said Florence. "I knew I needed help to take care of myself and prolong my kidney function."

The meetings with REACH started in May of 2017 and gave Florence tips on how to change her eating habits. She found ways to reduce the salt in her diet. The first step was letting go of the potato chips (not only high in salt which Florence was already avoiding but now knowing they were high in potassium as well!). Florence knew that she was receiving valuable information from REACH Kidney Care and decided to share it with her church. She invited Maria to speak to the Satisfying Seniors group at the Greater Liberty Baptist Church regarding diabetes, high blood pressure, and kidney disease.

"Maria is one of the best speakers we've ever had. She informed us of things we didn't know," stated Florence. "So many people asked questions. I think it really helped our group."

Florence is currently on the kidney transplant waiting list. She is hoping to receive a transplant and avoid dialysis. However, she's prepared either way. She's had vein mapping to get ready for a fistula. She was given a unit tour and was able to see a patient on dialysis and explored the options for in-center hemodialysis, home hemodialysis, and peritoneal dialysis (PD).

"REACH Kidney Care has helped me a whole lot! I never understood what dialysis was. Now I do," explained Florence. "I've been blessed. To have kidney disease as long as I have and still be able to keep it under control is good!"

Transforming Care Continued



REACH Medication Therapy Management (MTM)

Reach MTM pharmacists specialize in the unique pharmaceutical needs of patients with chronic kidney disease (CKD). They improve patient care through population health techniques and individualized direct patient care activities utilizing state-of-the-art software applications, healthcare team engagement and remote video conferencing.

Reach MTM has collaborated with dialysis providers and various health plans to conduct medication reviews in patients across all stages of CKD. At each medication review, Reach MTM pharmacists identify an average of three medication related issues that impact medication access, safety or cost of care.

The Reach MTM program is a three-step process comprising of nurse medication reconciliation, followed by Reach MTM pharmacist medication review to identify any medication related problems, and lastly the creation of a medication action plan containing specific recommendations for physician consideration.

Since 2013, Reach MTM conducted over 11,500 medication reviews in nearly 3,700 unique patients and identified 24,700 opportunities to improve medication safety and efficacy. The chart below illustrates the number and type of medication safety and efficacy issues resolved by Reach MTM pharmacists since program inception.

Medication Safety/Efficacy Issue	Number of issues resolved (%)
Drug Overdose	6,300 (25.5%)
Adverse drug reactions	5,627 (22.8%)
Initiate drug therapy	3,977 (16.1%)
Stop unnecessary drug therapy	3,424 (13.9%)
Drug Under-dose	2,240 (9.1%)
Recommend alternate drug therapy	1,908 (7.7%)
Increase medication compliance	1,212 (4.9%)

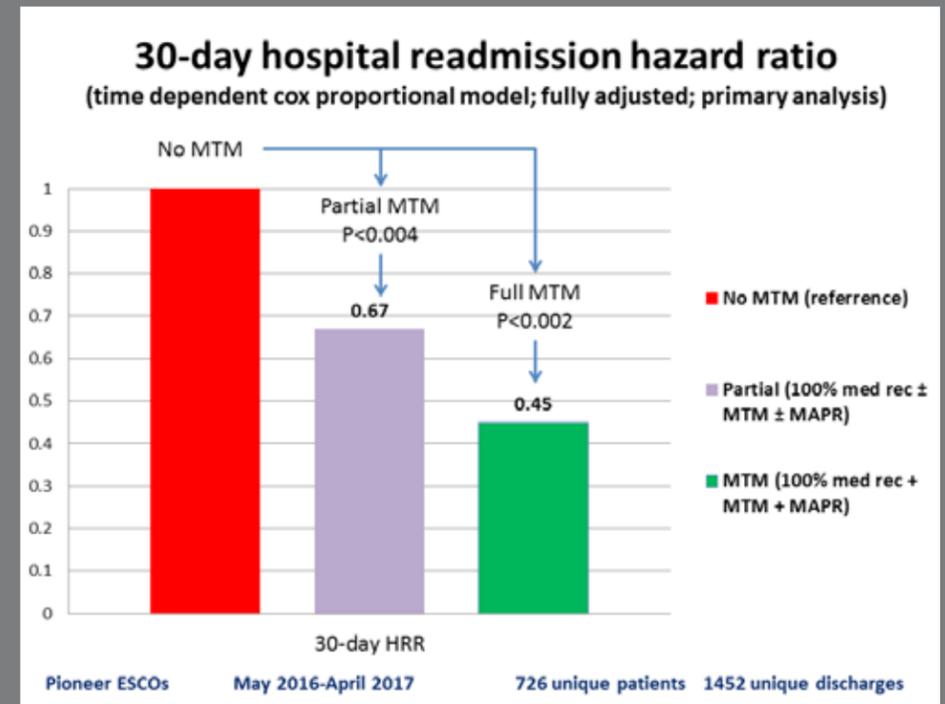


REACH MTM Program Reduces Hospital Readmissions

Reach MTM (Medication Therapy Management) program reduces dialysis patient's hospital readmissions, a key driver of healthcare costs.

Evaluation of 1,452 discharges occurring May 2016 - April 2017 demonstrate a 55% reduction in 30-day hospital readmission rate. MTM, partial MTM (initiated medical reconciliation but missed completing the entire process) and no-MTM 30-day hospitalization rates were 10.5%, 19.3% and 29.0%, respectively.

* The statements contained in this document are solely those of the authors and do not necessarily reflect the views or policies of CMS. The authors assume responsibility for the accuracy and completeness of the information contained in this document.



Transforming Care Continued



End Stage Renal Disease Seamless Care Organizations (ESCOs)

In an effort to demonstrate that the delivery of kidney care can be improved from the patient perspective and to reduce the overall cost of care for ESRD beneficiaries, DCI has joined forces with a select group of community health partners to establish six End Stage Renal Disease Seamless Care Organizations (ESCOs) across the nation. DCI currently has over 3,000 eligible patients under our care enrolled in an ESCO.

In 2017, the first year financial reports were released by the Centers for Medicare and Medicaid Services (CMS) for DCI's initial three (pioneer) ESCOs. The collective shared savings was \$6,839,119.79, or a 5.3% reduction in expenditures. While decreasing the cost of care, DCI has continued to not only maintain but further improve quality of care in the ESCOs through implementing care coordination services.

To illustrate, as we initiated monthly medication reconciliation for all DCI patients and in the collaborative coordinated care provided to patients in our pioneer ESCOs in 2017, it was completed for 86% of eligible months, outpacing non-ESCO patients where it was achieved in a timely manner in only 47% of eligible patient months. Moreover, for patients who were discharged from the hospital and were not readmitted during the month, medication reconciliation was performed within 7 days post-discharge in 66% of patients in pioneer ESCOs and only 19% in non-ESCO DCI clinics. We are evaluating lessons learned in the pioneer ESCOs to determine how to emulate such outcomes in the three new ESCOs as well as in the non-ESCO DCI patients.

DCI has also continued to improve internal quality metrics to reflect evidence-based changes in clinical practice. For example, while only 23-valent pneumococcal vaccine (brand name: Pneumovax) was previously monitored, recent guidelines have recommended the addition of 13-valent pneumococcal vaccine (brand name: Prevnar) as well. External CMS metrics have given credit to having any one single vaccine over the past 10 years for dialysis patients but DCI internal metrics track that patients receive both vaccines within the recommended schedule.

When we announced in 2015 and started monitoring in January of 2016, patients in pioneer ESCOs had a slight advantage to begin (see Table). However, as DCI-wide efforts to improve Pneumococcal vaccination rates continued, all rates increased over time, except the ensuing improvement in non-ESCO clinic patients (including the future i.e. new ESCO clinic patients) were markedly eclipsed by the more rapid uptake in the pioneer ESCOs established in the last quarter of 2015 - a strong endorsement of how coordinated care transforms care quality in the setting of decreased hospitalization rates and overall cost of health care.

Pneumococcal Vaccination Completion	1/19/2016	1/31/2017	3/20/2018
Pioneer ESCOs	40.1%	63.6%	70.7%
Non-ESCO	25.9%	41.8%	49.8%

DCI will continue to innovate, learning from our ESCO programs, but also from our REACH CKD and DCI Donor Services initiative to provide holistic high quality care for our patients with varying levels and stages of kidney disease.



Research

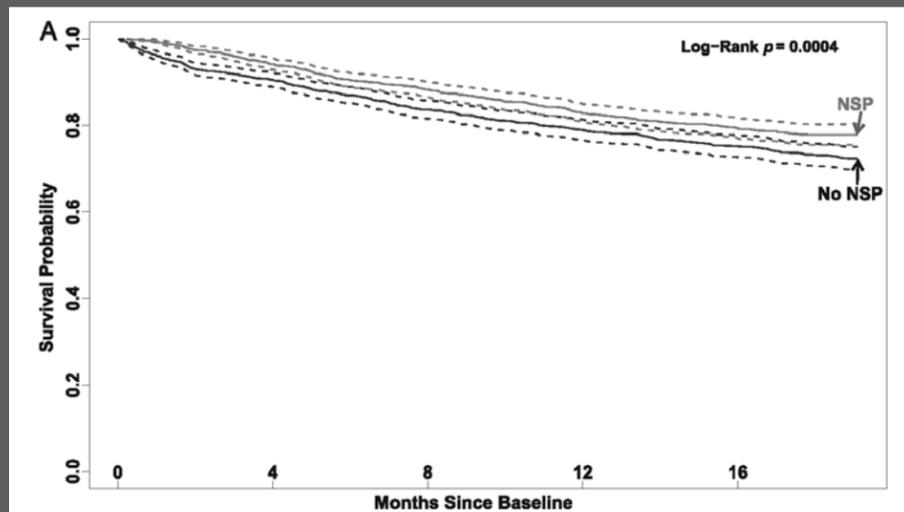
In 2007, DCI's Office of Clinical Research was established. This division provides expert knowledge in Federal Regulations, HIPAA, Medicare Clinical Trial Policy, Good Clinical Practice, and Federal Wide Assurances.

The Office of Clinical Research has access to approximately 2,500 potential study patients. DCI has an extensive MIS. All DCI clinics use the system. Information is entered on the patient at initiation to a DCI clinic and updated as events occur (medication changes, hospitalizations). When performing clinical research within the role of a site management organization, DCI leverages organizational strength, technology and integrity with over 44 years of research experience to ensure a professional, ethical, and high quality work product.

DCI is currently conducting **one of the largest dialysis studies in history**, "Health Effects of oral Protein Supplements in HD (The HELPS-HD Trial); An Open-Label Cluster Randomized Pragmatic Trial Evaluating the Effectiveness of Oral Intradialytic Nutritional Supplements on Mortality in Hemodialysis Patients." The study will explore the effectiveness of two approaches to the use of oral nutritional supplements on mortality. The three-year study has 105 DCI clinics participating with over 5,300 patients enrolled. The study has been initiated, conducted, managed, and funded by DCI. The study is anticipated to be completed by the first quarter of 2021.

DCI has contributed over \$291,000,000 to research, education, and development since inception. In 2017, DCI allocated over \$4.6 million dollars to kidney disease research studies, and granted more than \$1.6 million toward kidney disease education. In addition, DCI created and maintains a fund specifically to provide grants and research support for young investigators in the field of kidney disease. The DCI Paul Teschan Research Fund (PTRF) utilizes a peer review process to fund scientific applications. \$780,000 was provided by the PTRF in 2017 to support 13 research studies. More than \$8,700,000 dollars have provided support to 181 total PTRF projects.

The graph to the right shows a Kaplan-Meier curve showing better survival probabilities comparing DCI patients assigned to receive oral nutritional supplements by protocol (NSP) to patients not on the nutritional supplement protocol. Weiner DE et al. Oral intradialytic nutritional supplement use and mortality in hemodialysis patients. American Journal of Kidney Diseases; February, 2014.



Patient Story

Joseph "Joe" Liseno - Participating in the DCI HELPS-HD Trial

Joe Liseno, from Albany, New York, was diagnosed with kidney disease in 2000 after severe leg cramps and fluid retention led him to seek help in the local emergency room. In 2003, Joe was found to have Thymoma (malignant tumor of the thymus). It was then determined that his Nephrotic Syndrome may have been a result of this malignancy. Ultimately, kidney failure resulted.

When asked how hemodialysis has impacted his life, Joe smiled and asked, "What's the alternative?" He stated that hemodialysis does not keep him from doing anything he wouldn't normally do. He does not mind coming to dialysis three times a week.

"The staff here are beyond compassionate and professional," explained Joe.

Joe has been dialyzing with DCI since September 2015. He believes the non-profit dialysis provider doing research to improve patient care is a "very good thing." He feels the HELPS-HD nutritional study is a great way to improve patient outcomes. He enjoys the Cinnamon ZonePerfect bar so much that he is willing to snack on them at home.

In his spare time Joe enjoys baking, listening to music, and looks forward to attending concerts for 70's, 80's and 90's bands. Joe landed his first job at a Kentucky Fried Chicken franchise in Pennfield, New York, at the age of seventeen. He is now an entrepreneur who owns several Subway franchises throughout Central New York.





