

Leading the Dialysis Unit: Role of the Medical Director



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The responsibilities of a dialysis unit medical director are specified in the ESRD Conditions for Coverage and encompass multiple quality, safety, and educational domains. Many of these responsibilities require leadership skills that are neither intuitive nor acquired as part of the medical director's training. An effective medical director is able to shape the culture of the dialysis facility such that patients and staff feel free to communicate their concerns regarding suboptimal processes without fear of retribution, and there is a continuous iterative process of quality improvement and safety, which values input from all stakeholders. This ultimately decreases the use of shortcuts and work-arounds that may compromise patient safety and quality because policies and procedures make it easiest to do the right thing. Fundamental to this leadership by the medical director are communications skills, staff empowerment, allocation of resources, mentoring, team building, and strategic vision. The medical director leads by example and must be present in the dialysis unit for extended periods to send a message of accessibility and commitment. Many dialysis medical directors would benefit from leadership training inside or outside their dialysis corporation.

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The ESRD Conditions for Coverage (CfC) for dialysis facilities requires that every facility has a medical director.¹ The dialysis facility medical director must have a minimum of 12 months of experience caring for patients on dialysis. The most recent 2008 revision of the CfC mandates extensive areas of responsibility for the medical director, which have been previously reviewed in detail² and are summarized in Table 1. The CfC suggest that to fulfill these responsibilities, the medical director should allocate 25% of his/her total work time to the dialysis facility medical director role. Several areas of medical director responsibility are worthy of more detailed description because they require the medical director to lead and inspire other members of the facility staff.

MEDICAL DIRECTOR RESPONSIBILITIES

Perhaps, the most important responsibility of the medical director is active participation and leadership in the quality assessment and performance improvement (QAPI) process. The focus on population management in the QAPI meetings allows for the interdisciplinary group to identify trends and pursue necessary interventions. Some issues the team may review include metabolic parameters, adverse events, infection control, and vascular access opportunities. Adverse events may require a root cause analysis, and the medical director should be actively involved in the process along with the team. The medical director should become a visible quality of care champion to the entire staff and focus his/her efforts in endeavors to better the dialysis facility as a whole. For example, an increased trend in dialysis catheters >90 days would lead the medical director to question the facility's current permanent access referral protocols or algorithms and perhaps identify a shortage of surgeons in the geographic area or a need for more dialysis staff to be involved in dialysis access planning.

It is essential that the medical director be familiar with water treatment in the dialysis facility and that the facility is following Association of Advancement of Medical Instrumentation standards. Water quality is essential to

the dialysis facility operation. There are numerous and potentially fatal consequences to substandard water quality. Water quality should be discussed at the monthly QAPI meetings so that multiple team members have the opportunity to raise concerns. The diligent tracking, documenting, and observing involved in facility water management are vital to dialysis patients' health. It is common for Medicare state surveyors to ask the medical director or any staff member to perform a water quality check. The medical director is also the person notified when there are derangements in water protocols or quality, and he/she must subsequently make decisions on how to proceed with patient care in the event of an aberrancy. The leadership by the medical director in such situations inspires confidence among the staff and sets the tone for teamwork in a patient-centered culture.

The medical director has a unique opportunity as an educator to the dialysis staff. Discussing recent research findings can improve as well as enlighten the team. Examples include developing educational materials to address ultrafiltration rate and its importance and relevance to care or piloting studies on quality of care issues such as pain control. The medical director can be a source of encouragement to facility staff, perhaps inspiring the dietitian to revisit visual aids for phosphorus binder adherence or coaching the nursing staff to use instructional videos for home modalities education. There are certain educational requirements for the medical director specified by regulatory bodies, but there is also immense

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flexibility in how much a medical director can be involved with teaching the dialysis team. The mentoring of and ongoing communication with facility staff is a crucial component of leadership.

Regarding infection control, the medical director should be aware of how the facility compares to national averages for blood stream infections and to be able to address staff concerns including isolation procedures for certain infections, improving handwashing compliance, and increasing immunization rates. The leadership of the medical director in infection safety can have a major impact on decreasing dialysis patient hospitalization and mortality rates and has become the focus of the Nephrologists Transforming Dialysis Safety (NTDS) initiative discussed below. Some of the infection control issues addressed in the CfC for which the medical director has ultimate leadership responsibility are summarized in Table 2.

Ultimately, the medical director must ensure that standards are met, lead the quality improvement team, and identify the facility's strengths and weaknesses. These standards can include those set in the CfC, those developed by the corporation which owns the facility, and those imposed by state licensing requirements. In maintaining both the attention to detail and the balance of a more global view, the medical director can set the tone and drive the culture of a dialysis unit. The medical director has the unique responsibility and capacity as a physician leader to foster the improvement of standard metrics (such as the Quality Incentive Program and Dialysis Facility Compare) but also to cultivate a more comprehensive patient-centric mission.

The medical director works closely with the governing body of the dialysis facility. Depending upon the corporate organization, the governing body may include the medical director, the facility administrator, and a regional administrator. The dialysis facility governing body meets regularly to discuss the clinical care parameters and also the fiscal health of the dialysis unit including any staffing needs or staff performance concerns. This gives medical directors a role in the administrative and business operations of the dialysis unit, which is beyond the scope of the other nephrologists caring for patients in the facility. With this unique business perspective, the medical director may be involved in considering not only whether interventions are cost-effective but also whether they risk compromising quality of care in the pursuit of fiscal health. In the case of joint venture dialysis facilities in which a dialysis organization shares ownership of the facility with the medical director and potentially other nephrologists, the medical director must not allow his/her personal financial stake to cloud

his/her judgment in deciding whether business decisions are in the best interests of patients.

THE MEDICAL DIRECTOR AS LEADER

The dialysis facility is a unique somewhat autonomous center of health-care delivery that requires significant coordination among numerous entities. The optimal care of dialysis patients includes managing health-care transitions, objective parameters such as laboratory values, and quality of life measures. The literature addressing the medical director leadership touches on the complexities involved in this coordination of care, but a newer paradigm of leadership is necessary to adapt to the current health-care climate. Depending upon its organizational structure, the culture of a dialysis unit may be most directly influenced by the medical director, the facility manager, the large dialysis organization administrators, or the part owner nephrologist in the joint venture model. Because the medical director has the regulatory mandate as well as the training and experience to be a patient advocate and champion of quality and safety, the medical director would seem best suited to assume cultural leadership of the facility.

Approachability, medical knowledge, communication skills, and mentorship are strengths of a leader based on a review of health-care leadership literature mostly outside the field of nephrology. Leaders can help create and maintain a supportive environment that reinforces learning.³ When extrapolated to the dialysis unit, it can be helpful for the staff to hear lectures given by the medical director

CLINICAL SUMMARY

- An effective dialysis medical director must possess leadership skills that are neither intuitive nor acquired during training.
- An effective medical director shapes the culture of a dialysis facility such that achieving a high quality and safe environment becomes the easiest thing to do.
- An effective medical director leads by example and must be present in the dialysis facility for extended periods to send a message of accessibility and commitment.

on important quality improvement and patient safety topics. Many medical directors find the dialysis unit staff appreciative of lectures related to the pathophysiology of kidney disease and the mechanisms of renal replacement therapy, which allow the staff to better understand the scientific basis of the services they provide to patients. The medical director is also involved in reviewing staff competencies and grievances. The culture of psychological safety can also be influenced by the medical director; if the team feels safe to address deficiencies in any part of the dialysis facility's operation, this fosters a more effective environment for learning and quality improvement.

It is likely that the leadership skills of most dialysis medical directors would benefit from further professional development. There have been numerous health-care leadership curricula developed but not specific to the field of nephrology. Some examples of health-care leadership programs are within the United Kingdom's National Health Service, the Canadian medical system, and among large organizations such as the Cleveland Clinic and Kaiser Permanente in the United States. Historically, medical training has lacked a curriculum addressing the

Table 1. Responsibilities of the Medical Director in the Conditions for Coverage

- Developing, reviewing, and implementing policies and procedures for patient care
- Ensuring that all policies and procedures relative to patient care and safety are followed by all who treat the patient
- Leading of the quality improvement team
- Chairing the monthly quality assessment and performance improvement (QAPI) meetings
- Reviewing clinical performance metrics including facility-specific reports from oversight agencies
- Participating in facility-targeted ESRD Network activities
- Training and education of facility staff
- Ensuring water quality; reviewing water quality reports
- Developing, implementing, and monitoring adherence to infection control policies and procedures
- Overseeing dialyzer reuse (if applicable)
- Ensuring rights of patients
- Reviewing adverse events and outcomes
- Reviewing and approving involuntary patient discharges

Adapted from Wish.²

business and administrative responsibilities that the career now requires. However, more recent programs have been described that even start during residency training.⁴

Coltart and colleagues⁵ describe the National Health Service Medical Director's Clinical Fellows scheme part of the Faculty of Medical Leadership and Management, where clinical advisers are excused from their clinical position to work for a year full-time in various high-level health organizations and undergo a structured leadership training program. For medical directors of dialysis units, it seems that there is disparity between the dialysis organization leaders' management training and the medical directors' management training. It would be beneficial if both were less incongruent. There is very little administrative or business leadership training if any in traditional nephrology fellowship programs. Shadowing a medical director for a month during fellowship is barely an introduction to the actual responsibilities this physician leader faces. It should be noted that this incongruence between medical and administrative leadership skills typically extends to many positions within academic institutions including departmental chairs and division directors. The inadequately developed leadership skills at physician specialty levels within these institutions may lead to an across the board top-down negative effect.

Table 2. Infection Control Issues in the Conditions for Coverage

- Isolation of hepatitis B positive patients
- Contact precautions for skin wounds and fecal incontinence
- Strict hand hygiene
- Environmental cleaning and disinfection of dialysis stations
- One-way flow of supplies and medications
- Routine serologic testing of hepatitis B and C
- Immunization for hepatitis B, influenza, and pneumococcus
- Infection control training of staff and patients
- Infection surveillance (e.g. catheter-related bacteremias)

Data from Wish.²

Table 3. Key Competencies of Physician Leadership

- Network development and relationship building
- Strategic planning and thinking
- Mentorship and coaching
- Communication
- Team building/conflict resolution
- Awareness of regulatory/legal environment
- Financial planning
- Acumen in the domains of
 - clinical activity/research/education
 - conceptualizing and implementing innovative programs

Data from Dubinsky et al.⁶

Effective physician leadership includes unique competencies such as interpersonal skills, strategic planning, delegating, mentoring, and approachability. Dubinsky and colleagues⁶ describe the key competencies of physician leaders, which are summarized in Table 3. These authors also demonstrate the transition from leadership theory to practice with utilization of a 3-part toolkit comprising a Development Tracking Tool, Self-Assessment Questionnaire, and an Interview Discussion Guide. This paradigm could be used for dialysis medical directors as well but may be better suited if simplified. Dialysis facility medical directors could excel with the following qualities and/or abilities: approachability, medical knowledge, communication skills, and mentorship. Although many definitions of clinical leadership have been proposed, perhaps the one with the greatest applicability to dialysis medical directors is that by Stanley⁷ in the context of nursing clinical leaders: "A clinician who is an expert in their field, and who, because they are approachable, effective communicators, and empowered, are able to act as a role model, motivating others by matching their values and beliefs." This congruity of desirable characteristics between nurse leaders and dialysis medical directors is more than coincidental and emphasizes that successful leadership in health-care settings transcends discipline and professional roles.

In a review of the desirable characteristics of physician leaders at the hospital level, Daly and colleagues⁸ note the considerable barriers that remain to clinical leadership including inadequate incentives, poor confidence, clinician cynicism, inadequate communication, poor preparation, curriculum deficiencies at undergraduate level in medicine and health professional courses, poorly constructed and inadequately funded development programs, lack of vision and commitment at the higher levels, perceptions that leadership is not core to a clinical practice role, poor interdisciplinary relationships, role conflict, resistance to change, and poor teamwork. Some of these barriers disproportionately apply to dialysis medical directors who may be fresh out of fellowship in a new city without an adequate local professional support network. The desirable characteristics of clinical leaders described by Daly and colleagues⁸ are summarized in Table 4.

Table 4. Desirable Characteristics of Clinical Leadership and Attributes of Clinical Leaders

- Leadership as situational
 - Directly involved in care
 - Custodian of care processes and microsystems
 - Reflexivity
- Leadership as skill driven
 - Clinical passion and credibility
 - Expert knowledge
 - Courage
- Leadership as value driven
 - Professional identity
 - Positive attitudes toward own profession
- Leadership as vision driven
 - Strategic view
 - Drive
 - Sees improvement opportunities
 - Understands improvement techniques
- Leadership as collective
 - Enabling others to act
 - Advocacy skills
 - Approachable
 - Works well as a team
- Leadership as coproduced
 - Effective communicator
 - Able to influence others to act
 - Interpersonal skills
 - Able to lead a team
- Leadership as exchange relationships
 - Capacity to enlist colleagues
 - Role model
 - Provides support
 - Motivator
 - Empowers others
 - Supports others
- Leadership as boundary spanning
 - Ability to work across teams
 - Systems knowledge

Adapted from Daly et al.⁸

Hopkins and colleagues⁹ highlight that physicians are trained to be independent, autonomous, and decisive; however, these qualities may be in opposition to desirable physician leader qualities which may be more focused on team approaches. Nagel and colleagues¹⁰ highlight that leaders should have emotional care, presence, and awareness. The humanistic qualities make for approachable and effective leaders. Emotional intelligence is an important and underrecognized attribute of good physicians as well as good physician leaders. Some other hurdles to developing physician leaders include time constraints on part of the physicians as well as organizational disengagement for allotting both time and money for leadership development programs. Another challenge in particular for the dialysis medical director is operating in a climate where the patients are required to spend several hours per week in a health-care setting. Dialysis patients are often unable to maintain employment, and financial hardships affect all aspects of care from affording transportation, medications, home health aides, and nutritious foods and supplements.

The American Society of Nephrology has established the NTDS project in collaboration with the Centers for Disease Control and Prevention. NTDS emphasizes that a reactive nature of responses to deficiencies does not usually lead to sustainable change.¹¹ For example, if a state survey gives a citation for infection control violations, a nurse may be appointed as the infection control champion, and temporarily, there is a heightened awareness and adherence to protocols. However, gradually violations recur, and protocols are not followed. Sustained accountability and responsibility of an entire system is not the focus in a model with a single person champion. Every stakeholder in a facility (staff, patients, and leaders) must buy into the safety culture and adopt protocols as second nature. The facility medical director should be instrumental in fostering a safety culture. Key recommendations of the NTDS include a conversion from event-oriented thinking (quality assurance) to systems thinking (quality improvement); a culture of safety with a high level of communication, shared perception about the importance of safety, confidence in the efficacy of preventive measures, shared commitment to reduce preventable harms, and “collective mindfulness”; understanding that culture represents an evolution from a survival mechanism to a shared learning of solutions to a way to think and feel that drops from awareness; and recognition that staff notice what leaders pay attention to, how they react to critical situations, how they allocate their time, how they teach and coach, and how they allocate rewards and status.¹¹ Ultimately a culture of safety is established by making it easy to do the right thing.

Transparency and psychological safety are also important; any member of the dialysis community should be able to share concerns and not be fearful of retaliation regardless of his/her perceived rank. All staff need to feel engaged in plans to promote quality and patient safety, and without their dedication, the system is likely to fail. Patient and family engagement is also key to continue the mission of patient safety. Approachability of the medical director should extend to patients as well as staff. Since patients often do not want to “bother” the doctor, the medical director should reach out to patients during what some facilities call “safety rounds”. During these rounds, the medical director (often along with the facility administrator) reaches out to patients to discuss facility, rather than personal health, concerns and then incorporates common themes into the facility’s QAPI process.

Physician leaders can be influential in fostering the dialysis facility culture, and a systems-based approach can help provide a framework. The London Protocol is a systems safety model for health care that can be applied to dialysis care delivery. The London protocol delineates 7 factor types including institutional, management, work environment, team, individual, task, and patient.¹² By thinking of dialysis care in a systems approach, one may be better able to identify the deficiencies that led to a system failure. It is evident that the dialysis facility has a distinct culture, and the climate is different from other health-care delivery settings. The immense number of process steps, transitions of care, and patient and staff turnover makes sustaining a high level of quality and safety

in a dialysis unit challenging. There are numerous opportunities for shortcuts or work-arounds that can be perpetuated if safety is not perceived as paramount by all staff. Leadership in the dialysis unit is a key to provide a culture of responsibility, accountability, and protocol adherence.

It is necessary to adopt successful motivators and invest in innovation for effective sustainable change of the dialysis culture. How do we instill in the entire care team that shortcuts or work-arounds are not tolerated? Would perhaps decreasing patient to staff ratios improve outcomes? Perhaps layers of checks and balances would also reinforce team efforts and the concepts of shared accountability and responsibility. Policing staff for procedural infractions is inefficient, ineffective, and unsustainable and leads to a culture of distrust. The most sustainable change occurs when staff perceive they are part of the solution, not part of the problem. The medical director's role as leader of the QAPI process demands engagement of staff at all levels to identify how the system can be improved so there is no temptation to go around it. Staff then take ownership of the process improvement and are more likely to implement it than if it is "top-down". Keys to effective leadership include communication, empowerment, and support with the resources required to effect positive change. If the medical director is also a member of the governing body, he/she has influence on how resources are allocated to improve patient outcomes and staff satisfaction. As a content expert on dialysis quality and safety, the medical director can provide the educational tools so that staff understand the scientific basis for the processes they are implementing.

The lack of large trials and novel therapies in nephrology may lead to decreased morale. Many physicians are suffering from burnout, and growth of the population of trained nephrologists is dwindling. New fellowship applicants to nephrology are scarce, and the current workforce is spread thin.¹³ The nephrologist is pulled in many different directions. Providers are faced with completing a virtual checklist, and beyond those objective markers, there is little energy left to pursue other goals. The checklists are enforced by regulatory bodies from the government and dialysis organizations. Nephrologists are leaning more on the nurse managers of the dialysis units to achieve compliance. Many nephrologists are also working with physician extenders and spend less time in the dialysis unit than they did a decade ago. The disengagement of the nephrologist, including the medical director, from dialysis care is worsening in the current climate.

Having the capability to influence protocols, interact closely with staff, and engage in quality improvement motivates the nephrologist and enhances the culture of a dialysis unit. Sharing protocols across organizations could help improve the efficiency of dialysis organizations. There is redundancy in developing protocols and that time could be invested in other arenas such as transitions of care and patient safety. Improved electronic medical record systems and cross communication among the many health-care delivery systems that a patient may encounter is crucial and would significantly impact and improve patient care. Many patients may select providers whose

medical record system is different from that of the nephrologist's health system. Difficulty in coordinating communication leads to fragmented and suboptimal care and can be another source of frustration and disengagement.

It may improve patient satisfaction to allow for a more multidisciplinary approach where the dialysis unit could serve as a medical home for patients.¹⁴ One implementation option might be to have the physician extender also serve as a primary care provider for the patient. In this model, the dialysis facility would contain proper examining rooms and would allow for better patient and family engagement. The dialysis facility would provide a central location, access to medical records and improved coordination of all care. One barrier to this approach is navigating the payment processes as the monthly capitation Medicare payment is insufficient to include the complex comprehensive care of a dialysis patient.

CONCLUSION

The medical director is a physician leader who would benefit from further leadership training or at least a better paradigm to foster a healthy dialysis culture. Identifying leadership attributes along with barriers helps redefine the role. Highlighting the lack of formal training as well as competing priorities can help explain why medical directors may feel disengaged or overwhelmed. Effective leadership attributes include mentorship, communication, approachability, emotional intelligence, and medical knowledge. The physician leader should help promote a culture of psychological safety and transparency. The barriers such as time constraints, staff disengagement, and the complex patient population can also impede successful leadership of the dialysis facility. One could consider that innovation in the administrative infrastructure of our dialysis system to

Table 5. How an Effective Medical Director May Spend 10 Hours/Week

- The letter of the Conditions for Coverage probably takes 3-4 h/wk (meetings, review of data, signing forms, troubleshooting problems, and so forth)
- Accessibility
 - Being physically present in the facility to demonstrate commitment to quality and safety
 - Talking with all staff, learning their names, understanding their barriers to quality and safety
 - Meeting with medical staff on regular basis to build consensus and identify champions
- Education
 - Regular participation in teaching of staff (topics not just related to dialysis care so they have context)
 - Review and revision of required educational programs for staff so they are more relevant
- Leadership
 - Dealing with nephrologists who do not do their jobs (especially interdisciplinary meetings)
 - Dealing with administration to get beyond the bottom line and consider innovative ideas from staff
 - Providing liaison with ESRD Network to promote patient-centered care and quality improvement initiatives
 - Promoting the win-win-win approach to quality and safety (not necessarily the business case)

improve patient safety and satisfaction may serve our patients as well as a new drug or fancier dialysis machine. The medical director is central to the administrative structure of the dialysis facility, and his/her commitment to leadership is paramount. Although a 25% of time commitment might seem daunting, the visibility of the medical director in the facility one-quarter of the time sends a message to the staff that the medical director is committed to the job, accessible, eager to learn, and eager to help. Medical director activities that may consume 10 hours per week in the aggregate are outlined in Table 5. A leader with a face and voice that are familiar to and trusted by the staff will invariably be more effective than a leader with little more than a signature on a policy or memo.

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