

The Festering Crisis of Inadequate Nephrology Social Work Staffing: What are the Options for Improvement?

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Staffing has long been identified as a structural measure of quality in healthcare. In spite of this, it has not been accorded prominence in the CMS End-Stage Renal Disease (ESRD) program. Among the major consequences has been the absence of research on dialysis clinic staffing which could serve as a basis for developing evidence-based standards. In lieu of such standards, there has been a widespread arbitrariness in decision making about staffing, which has contributed to adverse patient outcomes and distress among the different disciplines trying to provide care. Largely ignored in these evolving developments has been the festering crisis in nephrology social work staffing, its ramifications for patients' psychosocial concerns not being addressed, and concomitant potential for the exacerbation of medical issues. This study provides a broad overview of these issues with social work staffing, and also suggests some pragmatic alternatives that could help mitigate the problem.

INTRODUCTION

Of all the subspecialties in medical care research, it has been demonstrated that social work intervention with end-stage renal disease (ESRD) patients has perhaps the greatest potential for impacting outcomes and costs. For example, depression is a widely prevalent problem among this patient population (Abdel-Kader, Unruh, & Weisbord, 2009; Battistella, 2012), and has been found to be associated with an increased risk for hospitalization and premature death (Lopes et al., 2004). Studies have established that therapeutic interventions by nephrology social workers can reduce the severity of depression (Johnstone, 2007), thus potentially mitigating complications and the associated costs. A second major problem common in ESRD patients is the struggle to limit fluid intake, as measured by excessive weight gains between treatments (Pace, 2007). Nonadherence to fluid restrictions can cause serious medical complications, including congestive heart failure (CHF) (Shotan, Dacca, Shocat, Kazatsker, Blondheim, & Meisel, 2005), exacerbation of hypertension (Rahman, Fu, Sehgal, & Smith, 2000), acute pulmonary edema (Abuelo, 1998), and earlier death (Kalantar-Zadeh et al., 2009). Research has similarly demonstrated that when nephrology social workers have adequate time for interventions they can help patients to better adhere to their fluid restrictions (Johnstone & Halshaw, 2003), thus lessening the chances of these complications. Missed and shortened treatments are a third common problem (Gordon, Leon, & Sehgal, 2003; Obialo et al., 2008) that studies have shown to result in increased morbidity and mortality risks (Obialo, Hunt, Bashir, & Zager, 2012; Saran et al., 2003). Again, investigations have demonstrated that when social workers have adequate time for therapeutic involvement, they can help decrease missed and shortened treatments (Cabness, Miller, & Martina, 2007), thus lessening the associated medical risks. Noteworthy has been Johnstone's leadership in introducing tools social workers can use to ease patients' initial adjustment to treatment (*Renal Business Today*, 2013).

Finally, psycho-educational intervention by social workers has been shown to enhance medication adherence and improve chronic conditions such as blood pressure control (Beder, Mason, Johnstone, Callahan, & LeSage, 2003).

In spite of this demonstrated ability of social workers to positively influence patient outcomes through interventions, there remains a host of psychosocial problems impacting this patient population (Bakir & Dunea, 2001; Fink & Henrich, 2001; Foster, 2008; Hegde, Vels, Seidman, Khan, & Moore, 2000; Kimmel & Peterson, 2008; Santos & Arcanjo, 2013; Watnick, Kirin, Mahnensmith, & Concato, 2003; Wellington, 2000) which are inadequately addressed. Notwithstanding unknowns about the full extent to which these problems might be contributing indirectly to an exacerbation of morbidity and mortality risks, there is overwhelming evidence that social workers lack sufficient time for mandated involvement with patients (Bogatz, Colasanto, & Sweeney, 2005; Callahan, Witten, & Johnstone, 1997; Merighi & Collins, 2011; Merighi & Ehlebracht, 2002; Merighi & Ehlebracht, 2004; King, 2003). This has constituted a "hidden crisis" which, by definition, has been largely ignored in the literature. The purpose of this study is to provide an encapsulated overview of inadequate staffing. Within the sequence that follows, there is first a review of evidence supporting a crisis in nephrology social work staffing. Next, because the problems related to staffing with social workers are not an isolated phenomena, a brief foray is made into the broader context of staffing as a longstanding neglected issue in the Medicare ESRD program. Finally, options for facilitating improvements in nephrology social work staffing are discussed.

EVIDENCE OF A CRISIS IN NEPHROLOGY SOCIAL WORK STAFFING

The architects of the ESRD program had the wisdom and foresight to recognize that patients would have many psychosocial needs adjusting to the disease and its treat-

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ment, thus the mandated requirement for social workers (Department of Health, Education, & Welfare (HEW), 1976). With similar foresight, in 1983 the National Kidney Foundation Council of Nephrology Social Workers (NKF-CNSW) set forth recommended guidelines for staffing which called for one full-time social worker for every 75 patients (NKF-CNSW, 1987). Unfortunately, this recommendation has had little influence in limiting the actual patient workloads for which these professionals have had responsibility.

Tracing the crisis in staffing, evidence reveals it has been an evolving phenomenon over the 40 years of the ESRD program. Among the earliest observations was an Institute of Medicine study, *Kidney Failure and the Federal Government* (Rettig & Levinsky, 1991), which noted that the staffing of social workers decreased during the 1980s, rendering these professionals to those who perform “minimal routine functions rather than essential counseling considered optimal for patient care.” Overlapping with these observations made during the 1980s, the NKF-CNSW Executive Committee conducted a two-part survey, between June 1983 and June 1988, which was prompted by concerns regarding the quality of social work services provided in dialysis facilities (NKF-CNSW Executive Committee, 1989). Among the major findings of the survey was that many patients did not have access to a social worker. This inaccessibility was found to be due to social workers’ reduced hours, and having to travel between multiple clinics (which could sometimes be 50 miles apart). Evidence also surfaced during this period that excessive caseloads were contributing to the limited time social workers had available for patients. Davenport, Itschaki and Siegal (1993) reported, for example, that the mean caseload was 120 to 152 patients, with a high of 400 per single worker. In a second survey by the NKF-CNSW in 1994, conducted in conjunction with the American Association of Kidney Patients (AAKP), 40 percent of patients reported that they did not have access to a social worker when they needed one (Siegal, Witten, & Lundin, 1994). In 1997, Callahan, Witten, and Johnstone summarized key facts known about the evolving crisis in staffing to that date, which included: major increases in patient caseloads over the preceding ten years, and an emerging widespread practice among dialysis providers of imposing nonclinical tasks on social workers, which was undermining their ability to provide mandated clinical services. Reinforcing this evidence, Merighi and Ehlebracht (2002) reported on a survey, conducted by the Northern California CNSW Chapter, which found that social workers were spending, on average, a combined 13 hours weekly on clerical and insurance-related tasks, and only 10 hours counseling patients. Also in 2002, the New York Metropolitan CNSW Chapter published the results of its survey, which looked at the discrepancy between the roles of social workers and tasks expected of them (Russo, 2002). The survey revealed that instead of engaging in the patient-oriented tasks that their professional education prepared them to perform, a large number of social

workers were doing “menial tasks” (e.g., arranging transportation, acting as a “bill collector” with patients), which were mainly imposed as cost-saving measures. Echoing the inaccessibility problems identified in earlier surveys of the 1980s and 90s, the National Kidney Foundation conducted a study in 2003 finding that 17 percent of patients “almost never” saw their social worker (King, 2003). Continuing with the evidence on the distractive burden of nonclinical tasks, Merighi and Ehlebracht (2004) reported on a national survey of dialysis social workers discovering that full-time workers spend approximately 17% of their time each week on insurance-related tasks, 15% on clerical tasks, 15% on patient charting, and only 15% counseling patients. Replicating the ever-growing evidence in this area, Bogatz, Colasanto, and Sweeney (2005) published the results of a survey, conducted by the Connecticut CNSW Chapter, which dramatically highlighted the struggles social workers were having. Among the findings were that 52.1 percent of social workers did not have time for psychosocial evaluations of patients; 73 percent indicated there was insufficient time for counseling; and 72.2 percent said there was not enough time for patient education. It is pertinent to note that a 2005 report found an association between these nonclinical tasks and emotional exhaustion among social workers (Merighi & Ehlebracht, 2005). The most recent evidence of the continuing crisis in staffing was a 2011 analysis examining the challenges confronting social workers since the implementation of the newest Centers for Medicare and Medicaid (CMS) Conditions for Coverage (CfCs) for ESRD facilities in 2008 (Merighi & Collins, 2011). Reinforcing the evidence accumulated over the years, investigators concluded that unrealistic patient workloads and nonclinical tasks, combined with the additional documentation requirements of the 2008 CfCs, were severely stifling social workers’ ability to meet their CMS-mandated responsibilities with patients.

While there appears to be overwhelming evidence of a crisis related to social workers’ inability to provide timely interventions, not known are its implications for exacerbating patient suffering, undermining the achievement of optimal outcomes and increasing costs. For example, while it has been demonstrated that social work interventions can help mitigate symptoms of depression (Johnstone, 2007), the medical and financial ramifications of these professionals not being able to provide sufficient therapeutic interventions are yet to be determined through research. The depths of the unaddressed needs in this area are suggested in statistics showing that only 16 percent of patients initiating dialysis are receiving help with their depression (Watnick, Kirwin, Mahnensmith, & Concato, 2003). Given that social workers can also help enhance adherence to fluid restrictions (Johnstone & Halshaw, 2003), not known are the consequences of not being able to provide more interventions to prevent increasing hospitalizations due to exacerbations of hypertension and congestive heart failure (CHF). These consequences could be quite significant given data showing

that 70 to 80 percent of patients are not able to adhere to their fluid restrictions (White, 2004).

THE BROADER SCOPE OF STAFFING AS A NEGLECTED ISSUE IN THE ESRD PROGRAM

It is important to emphasize that the problems and unknowns related to nephrology social worker staffing are not isolated phenomena, but appear to be symptomatic of much broader problems in the ESRD program related to the subject of staffing (Wolfe, 2011). Most of the broader problems can probably trace their origins to the combination of a lack of priority given to staffing by CMS, and ambiguities in the regulations set forth in the CfCs for ESRD facilities on the subject. Both the initial CfCs issued in 1976 (HEW, 1976) and the newest regulations in 2008 (CMS, 2008) describe proper dialysis staffing occurring when:

An adequate number of qualified personnel are present whenever patients are undergoing dialysis, so that the patient/staff ratio is appropriate to the level of dialysis care given and meets the needs of patients.

The fundamental problem with this regulatory statement would seem to be the vague phrase “adequate number of qualified personnel,” which has remained undefined throughout the 40 years of the ESRD program. Given this area’s total absence of regulation in most states (Wolfe, 2011), dialysis providers have had virtually unchallenged discretion in defining adequacy. The arbitrariness of decision making that has taken place over the years probably accounts for widely-fluctuating staffing ratios. For example, some nephrology social workers have 110 patients, and others have as many as 425 (Merighi, Browne, & Bruder, 2010). Within the Donabedian (1966) classic “structure, process, and outcome” model of measuring quality in healthcare, such wildly divergent staffing patterns would inescapably affect patient outcomes.

Evidence of the broader scope of problems and questions related to staffing can probably be best illustrated by looking briefly at the challenges other disciplines have also faced. Beginning with nephrologists, most of the controversy related to their staffing in clinics has focused on unknowns about the needed frequency of their contacts with patients during dialysis treatments, and whether it has any measurable impact on outcomes. Relative to the frequency question, CMS changed its reimbursement policy in 2004 to incentivize more visits, with the assumption that more frequent contacts would improve outcomes (DHHS, 2003). Research on whether this has had the desired effects has been mixed, and at times contradictory. For example, a group of investigators (Mentari, DeOreo, O’Connor, Love, & Sehgal, 2005) were the first to examine the changes in nephrologist visits since the changes in reimbursement policy and found an abrupt increase in per-patient monthly visits (from 1.52 to 3.14). Despite this dramatic increase in visits, they were not found to have any clinically important impact on quality indicators. In a second study (Plantinga et al., 2005), more

frequent patient-physician contacts were found to be associated with achievement of performance targets for albumin, calcium-phosphate, and dialysis dose. Paradoxically, this same investigation discovered that patients receiving the highest frequency of visits were significantly less likely to be on a transplant waiting list. In a recently published report (Slinin et al., 2012), greater nephrologist-patient contacts were found to be associated with a small, but statistically significant reduction in the risk of first hospitalization. However, no consistent association was found between frequency of visits and patient risk of death. Along these same lines, a just-published 2014 study has suggested that one additional monthly clinic visit by nephrologists with patients just discharged from the hospital could significantly reduce readmissions (Erickson, Winkelmayer, Cherton, & Bhattacharya, 2014). Reflecting the continuing state of confusion about an evidence basis for nephrologist staffing, the latest investigation (Erickson, Tan, Winkelmayer, Chertow, & Bhattacharya, 2013) found that the frequency of visits depends more on geography and facility location, rather than the optimal management of patients. Finally, the pressing need for more research in this area was given additional impetus by the finding of a correlation between nephrologist caseload and patient survival, with higher caseloads being associated with poorer survival (Harley et al., 2013).

Turning to nephrology nurses, several examples can be found where the arbitrariness in decision making regarding staffing has had ramifications for both patients and nurses. Starting with patients, research has found that inadequate nurse staffing increases their risk for exposure to hepatitis C virus infections (Saxena & Panhortra, 2004), which has been linked to nurses’ inability to consistently adhere to hand hygiene standards (Arenas et al., 2005; Shimokura, Weber, Miller, Wurtzel, & Alter, 2006). As to the ramifications for nurses themselves, there is overwhelming evidence linking the lack of adequate staffing to occupational burn-out (Ashker, Penprase, & Salman, 2012; Flynn, Thomas-Hawkins, & Clark, 2009) and turnover rates as high as 150 percent (Gardner, Thomas-Hawkins, Fogg, & Latham, 2007). A recent analysis has even suggested that negative word-of-mouth communications from nurses who have disappointing work experiences in clinics might be dissuading others from considering the field of nephrology nursing, thus uniquely contributing to the shortage of these specialists (Wolfe, in press).

Focusing finally on renal dietitians, arbitrariness in decision making about staffing has been found to be associated with their inability to implement all 21 Adult Nutrition Guidelines (Burrowes, Russell, & Rocco, 2005; Vergil & Wolf, 2009), which are part of the NKF Kidney Disease Outcomes Quality Initiative (KDOQI) Clinical Practice Guidelines for Nutrition (National Kidney Foundation, 2000). Similarly, the reduced time renal dietitians have available for patients, also from inadequate staffing, has been found to be associated with their inability to provide intensive nutritional counseling (Wolfe, 2012).

OPTIONS FOR FACILITATING IMPROVEMENTS IN NEPHROLOGY SOCIAL WORK STAFFING

Surveys of nephrology social workers have revealed an increasing exasperation with unrealistic work demands and acknowledgement that many of the needs of patients are simply not being met. These service delivery difficulties are epitomized in the following observation from a respondent in an investigation by Bogatz, Colesanto, and Sweeney (2005):

With such large caseloads it is impossible to meet the very complex needs of our primarily inner-city population. The combination of a more complex caseload and greater number of patients to cover make it impossible to adhere to the Federal guidelines as written. I believe our patients are being denied access to quality social work services.

Despite compelling testimonies like this from several reports, pragmatic directions for collective action by social workers which could begin a process to mitigate the crisis in staffing have not been forthcoming. The directions for such action suggested here are dictated by what is viewed as the three major contributing factors in the development and perpetuation of the crisis: the lack of priority given to staffing as a quality of care issue at the Federal level; investor-owned large dialysis organizations (LDOs) and labor cost containment; and insufficient political initiatives by nephrology social workers to influence policies and regulations.

THE LACK OF PRIORITY GIVEN TO STAFFING AS A QUALITY OF CARE ISSUE AT THE FEDERAL LEVEL

Because it pays the bills through reimbursement for services, CMS has dictated the rules, through the CfC, for the ESRD program since its creation in 1973. While this has been described as one of the most highly regulated programs administered by the Federal government (Rettig & Levinsky, 1991), there has been a perplexing absence of more specific rules about staffing in dialysis clinics. One major ramification of this has been that other entities (e.g., the ESRD Network Organizations, dialysis providers, and investigators) have tended not to view staffing as a quality of care issue. Instead, there has been a preoccupation with such indicators as adequacy of dialysis, anemia management, and the type of access patients are using. A secondary consequence has been the paucity of research on staffing, which could serve as a basis for developing evidence-based standards.

Given this lack of attention, one pragmatic step that could ultimately help to mitigate the crisis in social work staffing (and in other nephrology disciplines) is investigations which can begin to better inform policymakers about the clinical and financial ramifications of inadequate staffing. Because time is a critical variable with any professional in being able to carry out tasks (Dolecek et al., 1995), research

is needed on the variety of responsibilities performed by social workers. For example, given the high prevalence of depression among this patient population (Abdel-Kader et al., 2009), what are the time requirements for social workers to provide needed psychotherapeutic interventions? If an association is found between decreased depression symptoms and a lower risk of hospitalization, it will add an additional impetus for evidence-based staffing, in areas justified through cost savings. A second area where it is beneficial to have a better understanding of the time needed for social work interventions is with the ever-growing elderly ESRD population (Rosner, Abdel-Rahman, & Williams, 2010). It is known that these patients typically require more professional involvement because of their physical dependencies and comorbidities, including cognitive impairment (Sehgal, Grey, DeOreo, & Whitehouse, 1997). Among the areas where a better understanding of the specific social worker time requirements would be helpful is providing and facilitating various types of social support. It is known that ESRD patients often experience loss of support because of their disease (Browne, 2006). Having adequate time for such interventions is important because research demonstrates an association between enhanced support, improved quality of life, fewer hospitalizations (Plantinga et al., 2010), and better patient survival (Thong, Kaptein, Krediet, Boeschoten, & Dekker, 2007). A third and final area where studies are clearly needed is the requisite time for social workers to carry out required functions in clinics serving the urban poor. It is known that patients in these facilities have a higher social acuity, in terms of the multiple social and economic challenges they face daily (Bakir & Dunea, 2001; Fink & Henrich, 2001; Hegde, Vels, Seidman, Khan, & Moore, 2000; Kimmel, Fwu, & Eggers, 2013; Patzer et al., 2012). Illustrative of this, socio-demographic factors have been found to contribute to depression in African-American ESRD patients (Fischer et al., 2010). Reflecting the need for more adequate social work staffing, a recent investigation (Tapolyia et al., 2010) discovered that a "striking" 85.9 percent of African-American patients in the Southern region of the United States shortened at least one treatment, and 29 percent missed at least one session per month. Perhaps not surprisingly, these minority patients have a significantly higher risk of mortality than their white counterparts at ages 18 to 30 (27.6% vs. 14.2%), 31 to 40 (37.4% vs. 26.8%), and 41 to 50 (44.8% vs. 38.0%) (Kucirka et al., 2011). While the NKF-CNSW-recommended ratio of one social worker for every 75 patients might be appropriate for most facilities (1987), research may determine that given the elevated social acuity of urban units, a 1:50 ratio may be required for these professionals to carry out their mandated responsibilities.

INVESTOR-OWNED LARGE DIALYSIS ORGANIZATIONS (LDOs) AND LABOR COST CONTAINMENT

The absence of evidence-based staffing standards has given large dialysis organizations (LDOs) virtual carte blanche

in determining staffing levels, and constitutes the second major factor contributing to the crisis in staffing. Labor cost containment has been an ongoing major objective of LDOs because staffing constitutes 50 to 70 percent of the expense of doing business (Ford & Kaserman, 2000; Grieco & McDevitt, 2012). This began in the 1970s with the widespread substitution of registered nurses with unlicensed patient care technicians (PCTs) (Hoffart & Nissenson, 1998; Meyer & Kassirer, 2002). The drive has continued through what has been called “staffing efficiencies” with all the disciplines (Sullivan, 2009), including nephrologists, nurses, dialysis technicians, dietitians, and social workers. Operating with an economy of scale orientation (Himmelfarb, Berns, Szczech, & Wesson, 2007), the continuous increases in the number of patients for which individual professionals have responsibility has helped to incrementally improve profit margins. It has simultaneously however, put extraordinary pressures on renal professionals. As Blades (2010) observed in *Social Work in Healthcare Settings: Practice in Context*, “Social workers are often squeezed in efforts to enhance profits.” Given these economic dynamics, there would appear to be a good chance for further escalations of patient workloads because, as has been noted, the investor community is not satisfied with simply achieving a profitable plateau, but expect continual improvements in financial results (Hall & Conover, 2006).

Capitalizing on this profit motive, there are several areas where a business case can potentially be made for improved social work staffing. First, patient rehabilitation has long been an unfulfilled objective of the ESRD program (Kutner, Bowles, Zhang, Huang, & Pastan, 2008). The business case in this area comes from two interrelated facts. First, research (Callahan, Moncrief, Wittman, & Maceda, 1998) has demonstrated that the caseloads of social workers affect their ability to rehabilitate patients. Secondly, LDOs would appear to have a financial vested interest in more adequate staffing of these professionals because, when they are successful in supporting patients’ ability to work, employer-group health insurances reimburse providers \$180,000 annually (Just, de Charro, Tschosik, Noe, Bhattacharya, & Riella, 2008), compared to the \$66,000 received for non-working patients.

Yet another area where LDOs would appear to have a vested interest in more adequate social work staffing is with the new pay-for-performance initiative by CMS called the ESRD Quality Incentive Program (QIP) (DHHS, 2012). This program imposes payment reductions on providers failing to maintain quality from year to year. Based on CMS estimates, the 2014 QIP could take close to \$50 million directly out of the ESRD program, due to the number of facilities failing to meet their goals (Bhat & Bhat, 2012). Broken down into individual facilities, this could add up to \$52,000 in financial penalties per clinic (Fishbane, Miller, Danko, & Masani, 2012). Among the quality indicators for which payment reductions will be made is a failure to maintain adequacy of dialysis, as measured in the urea reduction ratio “greater than 65%.” Given the critical element of time

in dialysis adequacy (Daugirdas, 2012; Lacson & Brunelli, 2011) and the fact that missed and shortened treatments greatly undermine its achievement (Sehgal et al., 1998), a business case for more sufficient social work staffing can be made because these professionals have demonstrated they can help reduce missed and shortened treatments (Cabness, Miller, & Martina, 2007), thus potentially helping to minimize payment reductions.

INSUFFICIENT POLITICAL INITIATIVES BY NEPHROLOGY SOCIAL WORKERS TO INFLUENCE POLICIES AND REGULATIONS

Healthcare policy encompasses decisions that determine rules and standards under which services for patients are organized, produced, delivered and reimbursed (Greipp, 2002). Because healthcare professionals have a direct day-to-day relationship with patients, political advocacy for select policies can be a powerful tool for advancing the best interests of patients (Priest, 2012). Demonstrating what can be accomplished, through a combination of political advocacy and marshalling evidence on the adverse effects of inadequate staffing, California nurses have been successful in getting the first comprehensive legislation passed in the United States to establish minimum staffing levels (Mark, Harless, Spetz, Reiter, & Pink, 2013).

The National Kidney Foundation Council of Nephrology Social Workers (NKF-CNSW) is the leading professional organization for social workers in this field. Despite a history of advocating for clinical standards, and having offered the highest number of public comments during the 2008 CfC changes, CNSW was informed that CMS would not address the staffing issue (L. Peace, personal communication, April 12, 2013). This refusal would appear to be indicative of the long-standing aversion to the subject of staffing by CMS emphasized throughout this study. Given the continuing centrality of inadequate staffing in so many issues confronting nephrology social workers (Bogatz et al., 2005; Callahan et al., 1997; Merighi & Collins, 2011; Merighi & Ehlebracht, 2002; Merighi & Ehlebracht, 2004; Merighi & Ehlebracht, 2005; Siegal et al., 1994; Wolfe, 2011), perhaps it is time for more assertive political advocacy for regulations. Adding impetus to this need for action are the unrelenting profit pressures on investor-owned LDOs (Hall & Conover, 2006), and the strong possibility that social workers will be squeezed even further to enhance profit margins (Blades, 2010).

NKF-CNSW would appear to be in a good position to spearhead such an effort because of its 800 members and 42 local Chapters, strategically situated across the United States. Utilizing their relationship skills as social workers, Chapter members could gradually begin to reach out to elected officials and policy makers, at both the state and Federal levels of government. Initiatives in each state are particularly important because it is at a level of government which has the jurisdiction to regulate patient workloads, as happened in the state of Texas. (State of Texas. Department of State Health Services Regulatory Licensing Unit Facility

Licensing Group, 2010). Such action by nephrology social workers would be consistent with the National Association of Social Workers' (2008) *Code of Ethics*, which mandates that these professionals should be aware of the impact of politics on their practices, and advocate for policies which advance the best interest of those served. In addition, because joining forces through coalitions can multiply the influence for change (Berkowitz & Wolff, 2000), the NKF-CNSW can potentially team up with other professional groups like the NKF Council on Renal Nutrition (CRN), the NKF Council of Nephrology Nurses and Technicians (CNNT), and American Nephrology Nurses Association (ANNA), all of which also have major concerns about staffing. Finally, because patients have been the real victims of inadequate staffing in terms of suffering from its adverse effects (e.g., unaddressed depression and increased infection risks), perhaps the American Association of Kidney Patients (AAKP) would also be interested in joining a political advocacy effort for improvements in this neglected, but critical area of care.

DISCUSSION

There has been an historic tendency in the ESRD program for recommendations to be made and evidenced-based guidelines to be issued (e.g., the KDOQI Clinical Practice Guidelines), with little or no consideration of how they are actually going to be implemented. An Institute of Medicine (1992) report observed the consequences of this, stating, "While guidelines may be meticulously developed and clearly presented they are without value if not successfully applied." Illustrative of this, when the KDOQI Clinical Practice Guidelines for Nutrition were issued (NKF, 2000), it was not remotely considered that renal dietitians would not be able to fully implement the 21 Adult Nutrition Guidelines component, due to inadequate staffing (Burrowes et al., 2005; Vergil & Wolf, 2009). Similarly with nephrology nurses, while the Centers for Disease Control and Prevention (2001) has issued guidelines for preventing infection among ESRD patients, research has shown that nurses are not able to consistently adhere to them, again because of inadequate staffing (Arenas et al., 2005; Shimokura, Weber, Miller, Wurtzel, & Alter, 2006). Finally, with regard to nephrology social workers, while presentations and papers have continued to justifiably tout how these professionals can intervene with depression and other psychosocial problems, little consideration is typically given to how often overwhelmed social workers in dialysis clinics are going to find the time to actually implement what is presented (Bogatz et al., 2005; Callahan et al., 1997; King, 2003; Merighi & Collins, 2011; Merighi & Ehlebracht, 2002; Merighi & Ehlebracht, 2005; Wolfe, 2011). While these broad tendencies have continued, there has been a simultaneous festering of underlying staffing problems with nephrology nurses (O'Brien, 2011; Flynn, Thomas-Hawkins, & Clark, 2009), renal dietitians (Gutekunst, 2012), and nephrology social workers (Merighi & Collins, 2011), that has been largely ignored. This study endeavors to fur-

ther elevate the staffing issues of nephrology social workers by highlighting their multiple ramifications, and raising questions not previously considered. On the optimistic side, pragmatic strategies are suggested, which could help to mitigate the crisis in staffing.

REFERENCES

- Abdel-Kader, K., Unruh, M. L., Weisbord, S. D. (2009). Symptom burden, depression and quality of life in chronic and end-stage kidney disease. *Clinical Journal of the American Society Nephrology*, 4(6), 1057–1064.
- Abuelo, J. G. (1998). Large interdialytic weight gains: Causes, consequences and corrective measures. *Seminars in Dialysis*, 11(1), 25–32.
- Arenas, M. D., Sanchez-Paya, J., Barril, G., Garcia-Valdecasas, J., Gorriz, J. L., Soriano, A., et al. (2005). A multicenter study of the practice of hand hygiene in hemodialysis units: factors affecting compliance. *Nephrology Dialysis and Transplantation*, 20(3), 1164–1171.
- Ashker, V. E., Penprase, B., & Salman, A. (2012). Work-related emotional stressors and coping strategies that affect the well-being of nurses working in hemodialysis units. *Nephrology Nursing Journal*, 34(3), 231–236.
- Bakir, A. A., & Dunea, G. (2001). Renal disease in the inner city. *Seminars in Nephrology*, 21(4), 334–345.
- Battistella, M. (2012). Management of depression in hemodialysis. *The Canadian Association of Nephrology Nurses and Technologists Journal*, 22(3), 29–34.
- Beder, J., Mason, S., Johnstone, S., Callahan, M. B., & LeSage, L. (2003). Effectiveness of a social work psychoeducational program in improving adherence behavior associated with risk of CVD in ESRD patients. *Journal of Nephrology Social Work*, 22, 12–22.
- Berkowitz, B., & Wolff, T. (2000). *The spirit of the coalition*. Washington, D.C.: American Public Health Association.
- Bhat, P. & Bhat, J. G. (2012). Tackling pay-for-performance: Current and future challenges. *Nephrology News and Issues*, 26(1), 27–29.
- Blades, B. C. (2010). Social work in a for-profit renal dialysis unit. In T. S. Kerson & J. L. M. McCoyd (Eds.), *Social work in health settings: Practice in context* (pp.167–178). New York: Routledge.
- Bogatz, S., Colasanto, R., & Sweeney L. (2005). Defining the impact of high patient/staff ratios on dialysis social workers. *Nephrology News and Issues*, 19(2), 55–60.
- Browne, T. (2006). Nephrology social work: History in the making. *Journal of Nephrology Social Work*, 25, 11–29.
- Burrowes, J. D., Russell, G. B., & Rocco, M. V. (2005). Multiple factors affect renal dietitians' use of the NKF-K/DOQI Adult Nutrition Guidelines. *Journal of Renal Nutrition*, 15, 407–426.
- Cabness, J., Miller, C., & Martina, K. (2007). Mastering hemodialysis to reverse patterns of missed and shortened treatments. *Journal of Nephrology Social Work*, 27, 45–51.

- Callahan, M. B., Moncrief, M., Wittman, J., & Maceda, M. (1998). Nephrology social work intervention and the effect of caseload size on patient satisfaction and rehabilitation interventions. *Journal of Nephrology Social Work, 18*, 66–73.
- Callahan, M. B., Witten, B., & Johnstone, S. (1997). Improving quality of care and social work outcomes in dialysis. *Nephrology News and Issues, 11*(2), 40–43.
- Centers for Disease Control and Prevention. (2001). Recommendations for preventing transmission of infection among chronic hemodialysis patients. *Morbidity and Mortality Weekly Report, 50*, 1–143.
- Centers for Medicare and Medicaid Services (CMS). (2008). Medicare and Medicaid Programs: Conditions for Coverage for End-Stage Renal Disease Facilities; Final Rule 42 CFR Parts 405, 410, 413, et al. 73 *Fed Reg.* 20369 (April 15, 2008). Retrieved from <http://www.gpo.gov/fdsys/pkg/FR-2008-04-15/html/08-1102.htm>
- Daugirdas, J. T. (2012). Dialysis time, survival, and dose targeting bias. *Kidney International, 83*, 9–13.
- Davenport, U., Itschaki, N., & Siegal, B. (1993). Adequacy of social work staffing in nephrology: A study. *Nephrology News and Issues, 7*(11), 44, 54, 56, 58.
- Department of Health, Education, and Welfare (HEW). (1976). Renal disease: Implementation of coverage of supplies of end-stage services. *Federal Register, 41*(108), 22510–22512.
- Department of Health and Human Services (DHHS). (2003). Centers for Medicare and Medicaid Services (CMS) Program: Revisions to payment policies under the physician fee schedule for calendar year 2004. Final rule with comment period. *Federal Register, 68*, 63195–63395.
- Department of Health and Human Services (DHHS). (2012). Centers for Medicare and Medicaid Services (CMS) Program: End-stage renal disease prospective payment system, quality incentive program and bad debt reductions for all Medicare providers. *Federal Register, 77*, (218), 1–83.
- Dolecek, T. A., Olson, M. B., Caggiula, A. W., Dwyer, J. T., Milas, N. C., Gillis, et al. (1995). Registered dietitian time requirements in the modification of diet in a renal disease study. *Journal of American Dietetic Association, 95*(11), 1307–1312.
- Donabedian, A. (1966). Evaluating the quality of medical care. *Milbank Memorial Fund, 44*, 166–203.
- Erickson, K. F., Tan, K. B., Winkelmayer, W. C., Chertow, G. M., & Bhattacharya, J. (2013). Variation in nephrologist visits to patients in hemodialysis across dialysis facilities and geographic locations. *Clinical Journal of American Society Nephrology, 8*, 1–8.
- Erickson, K. F., Winkelmayer, W. C., Chertow, G. M., & Bhattacharya, J. (2014). Physician visits and 30-day hospital readmission in patients receiving hemodialysis. *Journal of the American Society of Nephrology*. Epub ahead of print retrieved August 15, 2014, from jasn.asnjournals.org/content/early/2014/05/02/ASN.2013080879.full doi:10.1681/ASN.2013080879
- Fink, J. C., & Henrich, W. L. (2001). The outcome of the urban renal patient: The importance of social factors and center effects. *Seminars in Nephrology, 21*(4), 356–361.
- Fischer, M., J., Kimmel, P. L., Greene, T., Gassman, J. J., Wang, X., Brooks, D. H., et al. AASK Study Group. (2010). Sociodemographic factors contribute to the depressive affect among African Americans with chronic kidney disease. *Kidney International, 77*, 1010–1019.
- Fishbane, B., Miller, I., Danko, H., & Masani, N. (2012). The QIP: Will it improve dialysis care? *Nephrology News and Issues, 26*(1), 22–24, 26.
- Flynn, L., Thomas-Hawkins, C., & Clark, S. P. (2009). Organizational traits care processes and burnout among chronic hemodialysis nurses. *Western Journal of Nursing Research, 31*(5), 569–582.
- Ford, J. M., & Kaserman, D. L. (2000). Ownership structure and the quality of medical care: Evidence from the dialysis industry. *Journal of Economic Behavior and Organization, 43*, 279–293.
- Foster, M. (2008). Treating patients with CKD who are violent or homeless: A need for further study. *Nephrology Nursing Journal, 35*(1), 96.
- Gardner, J. K., Thomas-Hawkins, C., Fogg, L., & Latham, C. E. (2007). The relationship between nurses' perception of the hemodialysis unit work environment and nurse turnover, patient satisfaction, and hospitalization. *Nephrology Nursing Journal, 34*(3), 271–281.
- Gordon, E. J., Leon, J. B., & Sehgal, A. R. (2003). Why are hemodialysis treatments shortened and skipped? Developing a taxonomy and relationship to patient subgroups. *Nephrology Nursing Journal, 30*(2), 209–217.
- Greipp, M. E. (2002). Forces driving healthcare policy decisions. *Policy, Politics, and Nursing Practice, 3*(1), 35–42.
- Grieco, P., & McDevitt, R. C. (2012). Production and quality in healthcare: Evidence from the dialysis industry. [working paper]. Retrieved February 10, 2013 from <http://scholm.google.com/scholar?hl=grieco+o2c+mcdevitte>
- Gutkunst, L. (2012). Call to arms. *Journal of Renal Nutrition, 22*(1), 72–74.
- Hall, M. A., & Conover C. J. (2006). For-profit conversion of Blue Cross plans: Public benefit or public harm? *Annual Review of Public Health, 27*, 443–463.
- Harley, K. T., Streja, E., Rhee, C. M., Molnar, M. Z., Kovesdy, C. P., Amin, A. N., & Kalantar-Zadeh, K. (2013). Nephrologist caseload and hemodialysis patient survival in an urban cohort. *Journal of the American Society of Nephrology, 24*(10), 1678–1687.
- Hegde, A. V., Vels, J. H., Seidman, A., Khan, S., & Moore, J. Jr. (2000). High prevalence of alcoholism in dialysis patients. *American Journal of Kidney Diseases, 35*(6), 1039–1043.
- Himmelfarb, J., Berns, A., Szczech, L., & Wesson, D. (2007). Cost, quality and value: The changing political economy of dialysis care. *Journal of the American Society of Nephrology, 18*, 2021–2027.

- Hoffart, N., & Nissenon, A. R. (1998). The future of end-stage renal disease care: Nephrology enters a new millennium. *Advances in Renal Replacement Therapy*, 5(4), 257–266.
- Institute of Medicine. (1992). *Guidelines for clinical practice*. Washington, D.C.: National Academy Press.
- Johnstone, S. (2007). Depression management for hemodialysis patients: Using DOPPS data to further guide nephrology social work intervention. *Journal of Nephrology Social Work*, 26, 18–31.
- Johnstone, S., & Halshaw, D. (2003). Making peace with fluid: Social workers lead cognitive behavioral intervention to reduce health-risk behavior. *Nephrology News and Issues*, 17, 13, 20–27, 31.
- Just, P. M., de Charro, F. T., Tshosik, E. A., Noe, L. L., Bhattacharyya, S. K., & Riella, M. C. (2008). Reimbursement and economic factors influencing dialysis modality choice around the world. *Nephrology Dialysis Transplantation*, 23(7), 2365–2373.
- Kalantar-Zadeh, K., Regidor, D. L., Kovesdy, C. P., Van Wych, D., Bunnapradist, S., Horwich, T. B., et al. (2009). Fluid retention is associated with cardiovascular mortality in patients undergoing long-term hemodialysis. *Circulation*, 119(5), 671–679.
- Kimmel, P. L., Fwu, C. W., & Eggers, P. W. (2013). Segregation, income disparities, and survival in hemodialysis patients. *Journal of the American Society Nephrology*, 24(2), 93–301.
- Kimmel, P. L., & Peterson, R. A. (2008). Depression in patients with end-stage renal disease treated with dialysis: Has the time to treat arrived? *Clinical Journal of the American Society Nephrology*, 1(3), 349–352.
- King, K. (2003). The inside word on communication in the dialysis unit. *Family Focus*, 12(4), 1–2.
- Kucirka, L. M., Grams, M. E., Lessler, J., Hall, E. C., James, N., Massie, A. B., et al. (2011). Association of race and age with survival among patients undergoing dialysis. *Journal of the American Medical Association*, 306(6), 620–626.
- Kutner, N., Bowles, T., Zhang, R., Hung, Y., & Pastan, S. (2008). Dialysis facility characteristics and variations in employment rates: A national study. *Clinical Journal of American Society Nephrology*, 3(1), 111–116.
- Lacson, E. Jr., & Brunelli, S. M. (2011). Hemodialysis treatment time: A fresh perspective. *Clinical Journal of the American Society of Nephrology*, 6(16), 2522–2530.
- Lopes, A. A., Albert, J. M., Young, E. W., Satayathum, S., Pisoni, R. L., Andrevcci, V. C., et al. (2004). Screening for depression in hemodialysis patients: Association with diagnosis, treatment, and outcomes in the DOPPS. *Kidney International*, 66(5), 2047–2953.
- Mark, B. A., Harless, D. W., Spetz, J., Reiter, K. L., & Pink, G. H. (2013). California's minimum nurses staffing legislation: Results from a national experiment [Part 1]. *Health Services Research*, 48(2), 435–454.
- Mentari, E. K., DeOreo, P. B., O'Connor, A. S., Love, T. E., & Sehgal, A. R. (2005). Changes in Medicare reimbursement and patient-nephrologist visits, quality of care and health-related quality of life. *American Journal of Kidney Diseases*, 46(4), 621–627.
- Merighi, J. R., Browne, T., & Bruder, K. (2010). Caseloads and salaries of nephrology social workers by state, ESRD Network, and National Kidney Foundation Region: Summary findings for 2007 and 2010. *Journal of Nephrology Social Work*, 34, 9–51.
- Merighi, J. R., & Collins, K. (2011). Critical concerns and challenges in nephrology social work practice: Reactions to the 2008 Conditions for Coverage. *Journal of Nephrology Social Work*, 35, 9–16.
- Merighi, J. R., & Ehlebracht, K. (2002). Changing roles and responsibilities of nephrology social workers: Are they appropriate? *Nephrology News and Issues*, 16(5), 59, 74.
- Merighi, J. R., & Ehlebracht, K. (2004). Unit-based patient services and supportive counseling provided by renal social workers in the U.S. *Nephrology News and Issues*, 18(7), 55, 59–63.
- Merighi, J. R., & Ehlebracht, K. (2005). Emotional exhaustion and workload demands in renal social work practice. *Journal of Nephrology Social Work*, 24, 14–20.
- Meyer, K. B., & Kassirer, J. R. (2002). Squeezing more cost and care out of dialysis: Our patients would pay the price. *American Journal of Medicine*, 112, 232–234.
- National Association of Social Workers (NASW). (2008). *Code of ethics*. Retrieved from <http://www.naswdc.org/pubs/code/codeeasp>
- National Kidney Foundation (NKF). (2000). KDOQI clinical practice guidelines for nutrition in chronic renal failure. *American Journal of Kidney Diseases*, 39(Suppl 2), S1–S140.
- National Kidney Foundation Council of Nephrology Social Workers (NKF-CNSW). (1987). *Practice guide for nephrology social work*. New York: National Kidney Foundation.
- National Kidney Foundation Council of Nephrology Social Work (NKF-CNSW) Executive Committee (1989). Quality and accessibility of social work services to dialysis patients: A study. *Nephrology News and Issues*, 3(12), 26, 27, 31, 32, 36.
- Obialo, C. I., Bashir, K., Garing, S. Robinson, B., Quarshie, A., Al-Mahmoud, A., et al. (2008). No-shows on Saturdays: Implications of the weekly hemodialysis schedules on nonadherence and outcomes. *Journal of the National Medical Association*, 100(4), 412–419.
- Obialo, C. I., Hunt, W. C., Bashir, K., & Zager, P. G. (2012). Relationship of missed and shortened hemodialysis treatments to hospitalization and mortality: Observations from a U.S. dialysis network. *Clinical Kidney Journal*, 5, 315–319.
- O'Brien, J. L. (2011). Relationships among structural empowerment, psychological empowerment, and burnout in registered staff nurses working in outpatient dialysis centers. *Nephrology Nursing Journal*, 38, 475–481.

- Pace, R. C. (2007). Fluid management in patients on hemodialysis. *Nephrology Nursing Journal*, 34(5), 557–559.
- Patzer, R. E., Perryman, J. P., Schragger, J. D., Pastan, S., Amaral, S., Gazmararian, J. A., et al. (2012). The role of race and poverty in steps to kidney transplantation in the Southern United States. *American Journal of Transplantation*, 12, 358–368.
- Peace, L. (personal communication) April 12, 2013.
- Plantinga, L. C., Fink, N. E., Harrington-Levey, R., Finkelstein, F. D., Hebah, N., Powe, N. R., et al. (2010). Association of social support with outcomes in incident dialysis patients. *Clinical Journal of American Society Nephrology*, 5, 1480–1488.
- Plantinga, L. C., Jaar, B. C., Fink, N. E., Sadler, J. H., Levin, N. W., Coresh, J., Klag M. J. & Powe, N. R. (2005). Frequency of patient-physician contact in chronic kidney disease care and achievement of clinical performance targets. *International Journal of Quality in Healthcare*, 17(2), 115–121.
- Priest, C. (2012) Advocacy in nursing and healthcare. In D. J. Mason, J. K. Leavitt & W. Chaffer (Eds). *Policy and politics in nursing and healthcare* (pp. 31-38). St. Louis, MO: Elsevier.
- Rahman, M., Fu, P., Sehgal, A. R., & Smith, M. C. (2000). Interdialytic weight gain, compliance with dialysis regimen, and age are independent predictors of blood pressure in hemodialysis patients. *American Journal of Kidney Diseases*, 35(2), 257–265.
- Renal Business Today. (2013). Fresenius wins Modern Healthcare Award for quality of life program. Retrieved June 1, 2013 from <http://www.renalbusiness.com/news/2013/05/fresenius-wins-modern-healthcare-award-for-qualit.aspx>
- Rettig, R. A., & Levinsky, N. E. Institute of Medicine. (1991). *Kidney failure and the federal government*. Washington, D.C.: National Academy Press.
- Rosner, M., Abdel-Rahman, E., Williams, M. E. (2010). Geriatric nephrology: Responding to a growing challenge. *Clinical Journal of the American Society Nephrology*, 5, 936–942.
- Russo, R. (2002). The role of the renal social worker in the 21st century. *Nephrology News and Issues*, 16(3), 38, 40.
- Santos, P. R., & Arcanjo, F. P. (2013). Social adaptability and substance abuse predictors of depression among hemodialysis patients? *BMC Nephrology*. Jan 15, 14:12 doi:10.1186/1471-2369-14-12.
- Saran, R., Bragg-Gresham, J. L., Rayner, H. C., Goodkin, D. A., Keen, M. L., Van Dijk, P. C., et al. (2003). Nonadherence in hemodialysis: Associations with mortality, hospitalization and practice patterns in the DOPPS. *Kidney International*, 64, 254–262.
- Saxena, A. K., & Panhotra, B. R. (2004). The impact of nurse understaffing on the transmission of hepatitis C virus in a hospital-based hemodialysis unit. *Medical Principles and Practice*, 13(4), 129–135.
- Sehgal, A. R., Grey, S. F., DeOreo, P. B., & Whitehouse, P. J. (1997). Prevalence, recognition, and implications of mental impairment among hemodialysis patients. *American Journal of Kidney Diseases*, 30(1), 41–49
- Sehgal, A. R., Snow, R. J., Singer, M. E., Amini, S. B., DeOreo, P. B., Silver, M. B., et al. (1998). Barriers to adequate delivery of hemodialysis. *American Journal of Kidney Diseases*, 31(4), 593–601.
- Shimokura, G., Weber, D. J., Miller, W. C., Wurtzel, H., & Alter, M. J. (2006). Factors associated with personal protection equipment use and hand hygiene among hemodialysis staff. *American Journal of Infection Control*, 34, 100–107.
- Shotan, A., Dacca, S., Shochat, M., Kazatsker, M., Blondheim, D. S. & Meisel, S. (2005). Fluid overload contributing to heart failure. *Nephrology Dialysis and Transplantation*, 20 (Suppl 7), vi24–vi27.
- Siegel, B. R., Witten, B., & Lundin, A. P. (1994). Patient access and expectations of nephrology social workers. *Nephrology News and Issues*, 8(4), 32–33, 40.
- Slinin, Y., Guo, H., Li, S., Liu, J., Ensrud, K., Gilbertson, D. T., et al. (2012). Association of provider-patient visit frequency and patient outcomes on hemodialysis. *Journal of the American Society of Nephrology*, 23, 1560–1567.
- State of Texas. Department of State Health Services Regulatory Licensing Unit Facility Licensing Group. (2010). Title 25 Texas Administrative CODE. Chapter 117. End-Stage Renal Dialysis Facilities Licensing Rules. Retrieved from http://www.esrdnetwork.org/assets/pdf/regulations/2010_esrdruleschapter117_07_2010.pdf.
- Sullivan, J. D. (2009). Economic correction and the potential impact on the dialysis industry. *Nephrology News and Issues*, 23(8), 14–16.
- Tapolyia, M., Fulop, T., Uysal, A., Lengvarszky, Z., Szarvas, T., Ballard, K., et al. (2010). Regional differences in nonadherence to dialysis among Southern dialysis patients: A comparative cross-sectional study to the Dialysis Outcomes and Practice Patterns Study (DOPPS). *American Journal of Medical Sciences*, 339(6), 516–518.
- Thong, M. S. Y., Kaptein, A. A., Krediet, R. T., Boeschoten, E. W., & Dekker, F. W. (2007). Social support predicts survival in dialysis patients. *Nephrology Dialysis and Transplantation*, 22, 845–850.
- Vergil, J. M., & Wolf, R. L. (2009). Nutrition practices of renal dietitians in hemodialysis centers throughout the United States: A descriptive study. *Journal of Renal Nutrition*, 20, 8–16.
- Watnick, S., Kirwin, P., Mahnensmith, R., & Concato, J. (2003). The prevalence and treatment of depression among patients starting dialysis. *American Journal of Kidney Diseases*, 41, 105–110.
- Wellington, M. R. (2000). Hemodialysis and homelessness: A literature review and call for research. *Nephrology Nursing Journal*, 27(3), 305–310.

- White, R. B. (2004). Adherence to the dialysis prescription: Partnering with patients for improved outcomes. *Nephrology Nursing Journal*, 31(4), 432–435.
- Wolfe, W. A. (2011). Adequacy of dialysis clinic staffing and quality of care: A review of evidence and areas of needed research. *American Journal of Kidney Diseases*, 58(2), 166–176.
- Wolfe, W. A. (2012). Moving the issue of renal dietitian staffing forward. *Journal of Renal Nutrition*, 22(5), 515–520.
- Wolfe, W. A. (in press). Are word-of-mouth communications contributing to a shortage of nephrology nurses? *Nephrology Nursing Journal*.