Environmental Scan and Literature Review: APM for Improved Quality and Cost in Providing Home Hemodialysis to Geriatric Patients Residing in Skilled Nursing Facilities

METHODS

This environmental scan includes an annotated bibliography and summary information related to the proposal submitted by Dialyze Direct. The research questions and search strategy are described in detail in Appendix A. The environmental scan will provide a brief overview of the proposed model and submitter. The annotated bibliography will group sources by proposal-specific subtopics organized within five topics relevant to PTAC. Each subtopic will be followed with a brief explanation of relevance to the proposed model. Each source will include a citation and an outline of relevant key points, as well as a link if the source is publicly available. This report will conclude with topics which PTAC may consider relevant to the proposal and may be included in future discussions with the submitting organization or other stakeholders involved in model evaluation.

BRIEF DESCRIPTION OF THE PROPOSED MODEL

The proposed model entitled APM for Improved Quality and Cost in Providing Home Hemodialysis to Geriatric Patients Residing in Skilled Nursing Facilities, aims to provide staff-assisted on-site hemodialysis (HD) to SNF patients with end-stage renal disease (ESRD). Currently, ESRD SNF patients travel off-site to receive HD. The proposed model would allow 'dialysis dens" to be set up within SNFs, which would eliminate the need for SNF patients to travel off-site three times per week (typically) to receive their treatment. Additionally, the savings accrued from redirecting the cost of transportation can be used to provide HD five times per week as opposed to the current standard of three times per week. More frequent hemodialysis regimens are thought to cause smoother fluid fluctuations that more closely approximate natural kidney function.

DIALYZE DIRECT

Dialyze Direct is a private organization that provides staff-assisted home HD services to the geriatric population with ESRD. Its programs operate in rehabilitation facilities and residential/long term care (LTC) facilities. They provide services to patients in six different states (Florida, New Jersey, New York, Ohio, Pennsylvania, and Texas). They seek to improve quality of care, experience, and patient outcomes in regards to a high-quality dialysis treatment. Dialyze Direct is experienced with the use of collaborative healthcare professional teams. Additionally, it has a formalized alliance with NxStage, the organization that created the dialysis machine included in the proposed model.

PROPIETARY TOOLS

- NxStage System One- Dialyze Direct has an alliance with NxStage Medical Inc. They use their NxStage Home HD system in their model.
- Protocols- Dialyze Direct has proprietary dialysis protocols suited to the special needs of geriatric patients with multiple co-morbid conditions
- Visionex Clarity- Dialyze Direct uses this dialysis-specific EMR system.



Annotated Bibliography

CURRENT PRACTICE AND STANDARD OF CARE

Kidney Disease

US Renal Data System 2016 Annual Data Report: Epidemiology of Kidney Disease in the United States

Saran, R., Robinson, B., Abbott, K.C., Agodoa, L.Y.C., Ayanian, J. & Bragg-Gresham, et al. (2017). US Renal Data System 2016 Annual Data Report: Epidemiology of Kidney Disease in the United States. *American Journal of Kidney Diseases*, 69(3), A7-A8. DOI: 10.1053/j.ajkd.2016.12.004 (Link)

Key Points

- Medicare costs for beneficiaries ages 65 and older with chronic kidney disease (CKD), including ESRD, have exceeded \$50 billion. This cost represents 20% of all Medicare spending for the age group.
- There were 120,688 new cases of ESRD reported in 2014 (a 1.1% increase compared to 2013). A
 total of 678,383 individuals were treated for ESRD at the end of 2014 (up 3.5% from 2013), a
 number that continues to rise due to falling mortality rates among those with ESRD. On a
 positive note, large net reductions in mortality among patients with ESRD were observed.

Home Dialysis

The proposed model aims to increase access to "home" (or within nursing homes where patients live) HD for patients in SNFs.

Federal Register Notice 2016

Final CY 2017 ESRD PPS Update. 81 Fed. Reg. 77865 (November 4, 2016) (to be codified at 42 C.F.R. Parts 413, 414, 494). (Link)

Key Points

- Medicare ESRD beneficiaries who meet home dialysis requirements under 42 CFR 494.100, and permanently reside in a nursing home or LTC facility are considered home dialysis patients.
- Several organizations, including small dialysis organizations, cite benefits of patients receiving home HD in the nursing home (either SNF or NF) rather than being transported to an ESRD facility to receive HD. These benefits include lower hospital admission and readmission rates, decreased lengths of stay during hospitalizations, and improved social outcomes.
- Staff-assisted home dialysis using nurses is not currently a Medicare covered service, nor are these services covered in the ESRD PPS.

Care of Patients with ESRD in Nursing Homes

The proposed model discusses the need for ESRD patients to be provided hemodialysis services within the nursing home.



End-Stage Renal Disease in Nursing Homes: A Systematic Review

Hall, R.K., O'Hare, A.M., Anderson, R.A & Colón-Emeric, C.S. (2013). End-Stage Renal Disease in Nursing Homes: A Systematic Review. *Journal of American Medical Directors Association*, 14(4), 242-247. DOI: 10.1016/j.jamda.2013.01.004 (Link)

Key Points

- A systematic review based on older studies and data (before 2000) found that 1% or less of nursing home residents had ESRD. This number is likely increasing and higher now, though current information is lacking.
- Nursing home patients with ESRD are a particularly vulnerable population and have poor survival rates of 26-42% at one year—survival was better for those who had been on dialysis longer.
- Conflicting evidence exists regarding dialysis modality (peritoneal dialysis [PD] vs. HD) and relationship to poor outcomes.
- Predictors of poor outcomes include older age, white race, cerebrovascular disease, dementia, hospitalization at time of dialysis initiation.

Frequency and Modalities

The proposed model aims to increase HD from the Medicare standard of three times per week to five times per week. Several studies have evaluated the effects of increased dialysis treatment frequency on social and health outcomes.

Intensive Hemodialysis: Time to Give the Therapy Greater Consideration

Collins, A.J. & Chan, C.T. (2016). Intensive Hemodialysis: Time to Give the Therapy Greater Consideration. *American Journal of Kidney Diseases 68*(5), S1-S4. DOI: https://doi.org/10.1053/j.ajkd.2016.05.027 (<u>Link</u>)

- Among the 470,000 dialysis patients in the US in 2013, 90% received in-center HD. It is predicted that there will be 700,000 dialysis patients by 2025.
- There are shortages of nephrologists and nurses capable of providing thrice-weekly care to incenter HD patients.
- An increase in the frequency of HD has demonstrated evidence of improvements in fluid volume, blood pressure, and phosphorous level controls. Additionally, patients receiving more frequent HD were found to have significantly reduced post-treatment fatigue and recovery time.
- Vascular access procedures were needed more frequently for patients who received home HD six times per week (compared to less frequent regimens), which may result in increased infectious complications.
- The popularity of three HD sessions per week was based on its effectiveness compared to twiceweekly treatments—not the result of demonstrated clinical superiority over newer regimens.
- More studies are needed to definitively prove the influence of dialysis frequency on mortality, but research suggests patients receiving home HD six times per week have a modest survival advantage compared to those receiving thrice-weekly in-center HD.



Effects of Frequent Hemodialysis on Measures of CKD Mineral and Bone Disorder

Daugirdas, J.T., Chertow, G.M., Larive, B., Pierratos, A., Greene, T., & Ayus, J.C. (2012). Effects of Frequent Hemodialysis on Measures of CKD Mineral and Bone Disorder. *Journal of the American Society of Nephrology, 23*, 727-738. DOI: 10.1681/ASN.2011070688 (Link)

Key Points

- Among patients who received dialysis six times per week, 23% required phosphorus binders at month 12, compared to 92% for patients who received dialysis three times per week.
- Patients who received dialysis during the day had sessions lasting 1.5-2.75 hours. Patients who received nocturnal dialysis had sessions lasting 6-8 hours. Sessions occurred six time per week for all patients.
- Among patients who received nocturnal dialysis, 60% required phosphorus supplementation to the dialysate to prevent hypophosphatemia.

Effects of Frequent Hemodialysis on Blood Pressure: Results From the Randomized Frequent Hemodialysis Network Trials

Kotanko, P., Garg, A.X., Depner, T., Pierratos, A., Chan, C.T., & Levin, N.W., et al. (2015). Effects of Frequent Hemodialysis on Blood Pressure: Results From the Randomized Frequent Hemodialysis Network Trials. *Hemodialysis International*, 19(3), 386–401. DOI: 10.1111/hdi.12255 (Link)

Key Points

- After two months of dialysis, the group of patients who received frequent or nocturnal HD had a lower pre-dialysis blood pressure than the patients who received dialysis three times per week.
- Frequent HD resulted in significantly reduced need for antihypertensive medications.

Dialysis Modality and Survival: Done to Death

Trinh, E., Chan, C.T. & Perl, J. (2018). Dialysis Modality and Survival: Done to Death. *Seminars in Dialysis*. doi: 10.1111/sdi.12692 (Link)

- No clear benefit of one dialysis modality over another (PD vs. HD).
- About 80% of patients still use catheters, associated with infections and increased mortality, as the main vascular access at initiation of hemodialysis.
- Seventeen percent of patients used an arteriovenous fistula exclusively at dialysis initiation, which increased to 65% by end of one year on hemodialysis.
- Early care coordination between nephrologists and primary care is associated with improved outcomes.

Care Coordination

The proposed model recommends care coordination through an on-site interdisciplinary team that includes a senior registered nurse (RN) home dialysis coordinator, trained home HD caregivers, dieticians, and social workers that all work together to enhance the total quality of care.

Going Upstream: Coordination to Improve CKD Care

Johnson, D.S., Kapoian, T., Taylor, R. & Meyer, K.B. (2016). Going Upstream: Coordination to Improve CKD Care. *Seminars in Dialysis*, 29(2), 125-34. doi: 10.1111/sdi.12461 (Link)

Key Points

- Care coordination for patients with CKD has been shown to be effective in improving outcomes and reducing costs.
- Few patients with CKD receive care coordination for their kidney disease. As a result, suboptimal outcomes and costs for patients with kidney disease are increased.
- The effectiveness of treatments to delay progression of kidney disease in contemporary clinical practice does not match the efficacy of these treatments in clinical trials.
- Opportunities for early and even pre-emptive transplantation are missed, as are opportunities for home dialysis. The process of dialysis access creation is rarely optimal.

CONCERNS WITH CLINICAL CARE

Effects of Payment on Care

The proposed model identifies a lack of nephrologist incentive as a culprit for the shortcomings of clinical care. Studies show how changes in payment reform affect provider decisions regarding dialysis treatments.

End-Stage Renal Disease Medicare Payment Refinements Could Promote Increased Use of Home Dialysis

U.S. Government Accountability Office. (2015, October). End-Stage Renal Disease: Medicare Payment Refinements Could Promote Increased Use of Home Dialysis (Report No. 16-125). (Link)

- Medicare's monthly physician payments may discourage physicians from prescribing home dialysis. In 2013, the rate of \$237 for managing home patients per month was lower than the average payment (\$266) and maximum payment (\$282) for managing in-center patients.
- Medicare physician payments related to training may provide incentives for prescribing home dialysis. Physicians may get paid in the first month of treatment, rather than the fourth month, for training patients for home dialysis.
- Medicare makes a one-time payment of up to \$500 for each patient who completes home dialysis training under the physician's supervision.

Effects of Physician Payment Reform on Provision of Home Dialysis

Erickson, K.F., Winkelmayer, W.C., Chertow, G.M., & Bhattacharya, J. (2016). Effects of Physician Payment Reform on Provision of Home Dialysis. American Journal of Managed Care, 22(6), e215-223. (Link)

Key Points

DIALYZE DIRECT LITERATURE REVIEW

- After the physician payment for in-center hemodialysis care shifted from a capitated to a tiered fee-for-service model in 2004, fewer patients received home dialysis.
- The 2011 ESRD Prospective Payment System resulted in higher Medicare payment to dialysis facilities for home therapies, for which peritoneal dialysis is the most common modality. This coincided with a substantial increase in peritoneal dialysis versus hemodialysis.

Hemodialysis Hospitalizations and Readmissions: The Effects of Payment Reform

Erickson, K.F., Winkelmayer, W.C., Chertow, G.M., & Bhattacharya, J. (2016). Hemodialysis Hospitalizations and Readmissions: The Effects of Payment Reform. American Journal of Kidney Diseases, 69(2), 237-246. DOI: 10.1053/j.ajkd.2016.08.033 (Link)

Key points

- A Medicare reimbursement policy designed to incentivize more frequent provider visits during outpatient hemodialysis may have been costly but actual costs unknown.
- The policy was associated with fewer hospitalizations and re-hospitalizations for fluid overload, but had little effect on other patient outcomes, including all-cause hospitalizations or rehospitalizations.

Variation in Nephrologist Visits to Patients on Hemodialysis across Dialysis Facilities and Geographic Locations

Erickson, K.F., Tan, K.B., Winkelmayer, W.C., Chertow, G.M., & Bhattacharya, J. (2013). Variation in Nephrologist Visits to Patients on Hemodialysis across Dialysis Facilities and Geographic Locations. Clinical Journal of the American Society of Nephrology, 8(6), 987-994 DOI: 10.2215/CJN.10171012 (Link)

Key points

- Variation in the frequency of physician visits to patients receiving hemodialysis was examined to measure the relative importance of provider practice patterns and patient health in determining visit frequency.
- More recent dialysis initiation and recent hospitalization were associated with decreased visit frequency.
- Provider visit frequency depends more on geography and facility location and characteristics than patients' health status or acuity of illness.
- The magnitude of variation unrelated to patient health suggests that provider visit frequency practices do not reflect optimal management of patients on dialysis.

Comparing Mandated Health Care Reforms: the Affordable Care Act, Accountable Care Organizations, and the Medicare ESRD Program

Watnick, S., Weiner, D.E., Shaffer, R., Inrig, J., Moe, S. & Mehrotra, R. (2012). Mandated Health Care Reforms: the Affordable Care Act, Accountable Care Organizations, and the Medicare ESRD Program. *Clinical Journal of the American Society of Nephrology, 7*(9), 1535-1543. doi: 10.2215/CJN.01220212 (Link)

Key points

- The ESRD program operates under a fully bundled, case-mix adjusted prospective payment system and has implemented Medicare's first-ever mandatory pay-for-performance program: the ESRD Quality Incentive Program. Other mandated health care reforms are now legislating similar programs.
- As ACOs develop, they may benefit from the nephrology community's experience with the relatively novel ESRD program model for health care payment and delivery reform.
- The new ESRD payment system and the Quality Incentive Program are compared and contrasted with ACOs.
- Better understanding of similarities and differences between the ESRD program and the ACO program will allow the nephrology community to have a more influential voice in shaping the future of health care delivery in the United States.

CURRENT PAYMENT METHODOLOGY

Payment Centered around Dialysis Treatment Episodes

The proposed model recommends that the Medicare bundled payment be adjusted to accommodate five treatments per week. The current Medicare standard is based on three treatments per week.

Outpatient Dialysis Services Payment System

Medicare Payment Advisory Commission (2017, October). Outpatient Dialysis Services Payment System. *Payment Basics*. (Link)

- The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) expanded the
 payment bundle to include dialysis drugs, lab tests, and other ESRD-related items and services
 that were previously separately billable.
- About 90% of all dialysis patients undergo HD in dialysis facilities.
- The base payment was intended to cover the costs incurred by providers for providing dialysis treatment episodes in dialysis facilities or in the patients' homes. The base payment rate for 2018 was proposed at \$233.31 for freestanding and hospital-based facilities.
- The labor-related portion of the ESRD PPS payment rate was calculated at 50.7% for both freestanding and hospital-based facilities.
- In 2018, the dialysis training add-on was set at \$95.60 per treatment.

Medicare Benefit Policy Manual Chapter 11 – End Stage Renal Disease (ESRD)

Centers for Medicare and Medicaid Services, CMS Pub. 100-02 (2018, January). Medicare Benefit Policy Manual: Chapter 11 – End Stage Renal Disease (ESRD). (Link)

Key Points

- Physician services are excluded from the ESRD PPS.
- Dialysis and certain dialysis-related services, including covered ambulance transportation, are excluded from SNF consolidated billing, and reimbursed separately under Medicare Part B.
- Medicare ESRD beneficiaries who permanently reside in a nursing home or long term care facility, and meet the home dialysis requirements will have all home dialysis items and services paid under ESRD PPS.
- If HD treatments occur more than three times per week, the Medicare Administrative Contractor (MAC) will assess appropriateness and payment for the additional treatments.

Payment Centered around Ambulance Transport

The proposed model intends to reduce cost by eliminating transportation to dialysis facilities and providing dialysis treatment at the SNF where the patient resides. Transportation by ambulance adheres to specific Medicare reimbursement rules.

Medicare Ambulance Transports

Centers for Medicare and Medicaid Services. (2017). Medicare Ambulance Transports. *Medicare Learning Network*. (Link)

Key points

- Transportation via ambulance for dialysis patients who are also SNF residents is not covered under SNF Part A.
- Transportation would be covered if SNF or ambulance supplier bills MAC separately under Part B.

High Cost of Dialysis Transportation in the United States: Exploring Approaches to a More Cost-effective Delivery System

Stephens, J.M., Brotherton, S., Dunning, S.C., Emerson, L.C., Gilbertson, D.T., & Gitlin, M., et al. (2014). High Cost of Dialysis Transportation in the United States: Exploring Approaches to a More Cost-effective Delivery System. *Journal of Health Economics and Outcomes Research*, 1(2), 134-150. (Link)

- Dialysis transportation costs about 3 billion dollars per year, about half of which is ambulance costs.
- Medicare covers emergency transport by ambulance for dialysis patients.
- There are concerns about misuse and overuse of ambulances for patients with ESRD.
- New legislation increases payment for emergency transportation by ambulance while reducing payment for non-emergency transportation for patients with ESRD.



QUALITY METRICS OR OUTCOMES

Quality Metrics or Outcomes

The proposed model mentions several methods to report quality outcomes as well as to establish appropriate quality outcomes. There are several established guidelines for quality metrics and outcomes for ESRD patients.

KDOQI Clinical Practice Guideline for Hemodialysis Adequacy: 2015 Update

National Kidney Foundation. (2015). KDOQI Clinical Practice Guideline for Hemodialysis Adequacy: 2015 Update. DOI: https://doi.org/10.1053/j.ajkd.2015.07.015 (Link)

Key Points

- The 2015 update of the KDOQI Clinical Practice Guideline for Hemodialysis Adequacy is intended to assist practitioners caring for patients in preparation for and during hemodialysis.
- The literature reviewed for this update includes clinical trials and observational studies published between 2000 and 2014.
- New topics include high-frequency hemodialysis and risks; prescription flexibility in initiation timing, frequency, duration, and ultrafiltration rate; and more emphasis on volume and blood pressure control.
- Appraisal of the quality of the evidence and the strength of recommendations followed the Grading of Recommendation Assessment, Development, and Evaluation (GRADE) approach.

Outpatient Dialysis Services Payment System

Medicare Payment Advisory Commission. (2017, October). Outpatient Dialysis Services Payment System. *Payment Basics*. (Link)

Key Points

- The bundled payment rate would be reduced by up to 2% for facilities that do not achieve or make adequate progress toward specific quality measures outcomes.
- There are 11 outcome measures tied to payment including efficient dialysis frequency, vascular
 access, unexpected vs. expected 30-day hospital readmission, quality of care provided by staff,
 and pain assessment.
- There are five process measures tied to payment including reporting patients' hemoglobin/hematocrit levels and staff's vaccination status.

ESRD Quality Incentive Program

Centers for Medicare and Medicaid Services. (2017). ESRD Quality Incentive Program. Retrieved from the Centers for Medicare and Medicaid Services website. (Link)

- The ESRD QIP establishes incentives for dialysis facilities serving the ESRD population to meet CMS's performance standards.
- The ESRD QIP will tie quality measures to payment. Facilities' performance on quality of care measures will directly link to a portion of payment.



SIMILAR OR PRE-CURSOR MODELS

Comprehensive End-Stage Renal Disease Care (CEC) Model

Marrufo, G., Negrusa, B., Ullman, D., Melin, C., Hirth, R., & Messana, J. et al. (2017, October). Comprehensive End-Stage Renal Disease Care (CEC) Model: Performance Year 1 Annual Evaluation Report (Contract #: HHSM-500-201400033I). Lewin Group, Inc. (Link)

Key Points

- The CEC Model created incentives for dialysis facilities and nephrologists to coordinate care for Medicare beneficiaries with ESRD across settings by making them responsible – financially and clinically – for care delivered in other health care settings.
- The CEC Model showed lower spending and improvements on utilization and quality measures. Savings were primarily been generated through a reduction in total hospitalizations and readmissions.
- New models of CEC care that tied payment to performance have resulted in improved care and lower costs from reduced inpatient hospitalizations.

NOTABLE AREAS FOR FURTHER CLARIFICATION

- What are the qualifications and roles required for the members comprising the Dialysis Team?
- What are the responsibilities and role of the nephrologist during treatment of dialysis patients?
- There is conflicting information within the proposal that references, without distinction, skilled nursing homes, nursing homes, and long-term care facilities as well as patients who transfer among these facilities over time. Who comprises the eligible patient population?
- What are the proprietary protocols suited to the special needs of geriatric patients with multiple co-morbid conditions? How will this affect scalability?
- Is the use of NxStage System One necessary for this model to work? How will this affect scalability?
- Is the use of Visionex Clarity necessary for this model to work? How will this affect scalability?



Appendix A: Methods

	Research Questions Guiding Search	Sources (Last 5 years unless otherwise stated)	Keywords and Search Terms (Used individually or in combination)
1	Who or what is the submitting organization?	Google, Wikipedia, organization websites and proposal links and citations	Dialyze Direct
2	What is the clinical care "problem" the proposed model is trying to solve or address?	Proposal, key references cited in the proposal, Google/Scholar, PubMed	Transportation (off-site)Frequency of dialysis
3	What is the payment "problem" the proposed model is trying to solve or address?	Proposal, key references cited in the proposal, Google/Scholar, PubMed	Medicare payment rateNephrologist payment incentivesESRD payment
4	What is current practice/ standard of care/evidence- based guidelines? Adherence to guidelines?	National Guideline Clearinghouse, PubMed, Cochrane, AHRQ, USPSTF, relevant professional organizations/ associations/ societies, NQF	 Medicare/CMS PPS quality measures SNF Dialysis transportation Medication pill-burden Patient Reported Outcomes Measures (PROM) Health Related Quality of Life (HRQoL)
5	What proportion of SNFs/LTCs, if any, are specifically for HD/PD care? What proportion of SNFs/LTCs provide HD/PD care?		SNF/LTC SNF dialysis Medicare population Access to care (home hemodialysis)
6	What are the current payment methodology and relevant regulations/rules, legislative environment, controversies?	MedPAC, Federal Register, Google/Scholar, PubMed, CMS	 Outpatient dialysis services payment system Medicare Physician Fee Schedule ESRD Prospective Payment System (PPS) Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) Outlier payment Cost (onsite versus offsite) Frequency of dialysis Coverage (onsite versus offsite)

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7	Is there evidence that current practices and payments are problematic?	Google/Scholar, Pubmed	 Higher staff ratio Patient safety Patient choice Quality of life Transportation (off-site, risk) Continuity of care Integration of care Medication Pill-Burden ED or inpatient hospitalization
8	What are the effects of payment reform on patients receiving home dialysis?		Home dialysis trendsPayment influence on home dialysis
9	What is the basis/evidence that problem is relevant to Medicare: i.e., size of population within Medicare and/or costs	Google/Scholar, Pubmed	 Hemodialysis in SNFs More frequent mode of dialysis technology (MFD) ESRD SNF patient population ESRD SNF cost (overall and transportation)
10	Are there evaluations of the model or similar models of care and/or payment? Pilot studies?	Google, Pubmed, CMS.gov, Medicare Limited Data Sets, Renal Physicians Association (RPA), NxStage Medical, Inc.	 Renal Physicians Association (RPA) NxStage Medical, Inc. Patient education payment Transportation avoidance payment Medicare payments for preventive care Cost-avoidance-based payment versus cost-of-care-based payments
11	Have there been alternative models/ solutions to the problem(s) and any evaluations of these?	Google, PubMed, CMS.gov, Lewin Group, Medicare Limited Data Sets	 Comprehensive ESRD Care model Outpatient dialysis services payment system Hemodialysis trials
12	Is there support for the validity of quality metrics or outcomes used in the model?	Google/Scholar, NQF, NCQA, Commission on Cancer (COC), CMS.gov, MedPAC, PubMed	 Outpatient dialysis services payment system Local Coverage Determination (LCD) ESRD variation Nephrology quality of care ESRD quality metrics ESRD outcomes measures ESRD PROMs



DIALYZE DIRECT LITERATURE REVIEW

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13	Are there tools (proprietary or non-proprietary) involved in the model? Evidence for use, costs, effectiveness of such tools?	Google/Scholar	NxStage System OneVisonex Clarity
14	How are patient characteristics related to choice of modality of dialysis? Age, etc.	PubMed, CMS.gov	 Patient choice Clinical practice guidelines Dialysis modality Factors affecting ESRD outcomes Adherence barriers Geriatric ESRD Care Hemodialysis outcomes
15	Role of dietitian in dialysis care and dietary compliance	Google/Scholar, PubMed	 Dietitian integration of care for ESRD patients Role of dietitians in ESRD ESRD dietary compliance
16	Miscellaneous – Any evidence behind statements and claims in proposal?	References cited in proposal, Google/Scholar	 Vascular Access complication Frequent hemodialysis schedules

Our search methodology was guided by these research questions. We found answers to these questions by using the listed keywords to search through the identified sources. Due to the quick pace of change regarding the problems this proposal attempts to identify and solve, the vast majority of sources published more than five years ago were omitted. However, in instances where sources outside of the five-year window were identified as relevant or pertinent, they would be included and noted as an exception. Although the environmental scan includes multiple categories of sources, the annotated bibliography was limited to only include peer-reviewed sources. Any exceptions to this are noted.

Questions to and responses from Dr. Joel Glickman on Dialyze Direct Proposal (Questions sent 7/31/18; Responses Received 8/6/18)

One of the criteria we are evaluating the proposal against is "patient safety." We have come to understand that the majority of patients who would receive MFD in the nursing facility under this proposal may turn out to be short-term SNF patients rather than long-term NF patients. Moreover, it is possible that a large percentage of the patients would be placed on 5-day hemodialysis during the SNF stay and then switch to (or return to) 3-day hemodialysis in a traditional dialysis center following discharge from the SNF.

Question 1: Is it correct that the switch from 3-day to 5-day to 3-day would likely involve significant changes in medications, such as blood pressure medication?

Answer: Absolutely correct. Managed correctly, 5 day per week therapy will lower blood pressure within a few days and will continue to lower blood pressure for the next 30-60 days in most patients. As noted in the original proposal, 5 day/ week therapy saves medication cost and most of the saving is for blood pressure medication. Converting back to 3 day per week therapy will increase blood pressure and blood pressure medication requirements. The timing is more difficult for me to estimate but my sense is 2-4weeks. Most other medications are not dramatically adjusted and would not result in a safety issue. Electrolyte levels might change but usually not significantly.

Question 2: How problematic would the changes in drugs be for these patients (many of whom would be frail and therefore at risk of poor outcomes)?

Answer: It depends on how experienced the responsible physician is and how carefully the patient is monitored by the physician. An experienced dialysis nurse should be able to alert the physician but an LPN or patient care technician may not have the insight to alert the physician. Nevertheless, even with a very experienced and informed nephrologist blood pressure management with changing dialysis schedules can be difficult.

Question 3: Does the answer to the question above depend on whether the patient is under the care of:

- The same nephrologist in the SNF and in the pre-/post discharge settings?
- Different nephrologists for each setting?

Answer: Anytime there is a "handoff" from nephrologist to nephrologist or dialysis staff (especially nurses) or dialysis facility to facility there is a risk of error and adverse event. Even if the nephrologist is the same in SNF and post discharge setting, as noted above, if the nephrologist is not experienced with 5 day per week therapy there is risk of a poor outcome. In

my opinion switching dialysis modality (3 to 5 and then 5 to 3 days) in a short period of time requires multiple adjustments in blood pressure management and does not provide significant short or long term benefit.

Question 4: Another criterion is "flexibility" for the physician. We are struggling with whether having this specific staff-assisted home hemodialysis option available in only some nursing homes would be perceived by nephrologists as increasing their flexibility to deliver high-quality health care to patients or not, and we would appreciate your input on that.

Answer: I don't understand why a nephrologist would consider the option of 5 day per week hemodialysis for a short period of time to be an opportunity to deliver high quality care. The opportunity to provide 5 day per week therapy needs to be long term. It is conceivable, but not proven that 5 vs 3 day per week hemodialysis might improve post dialysis fatigue and therefore improve rehab outcomes. I wonder how many nephrologists would think of that- I doubt many would.

PHYSICIAN-FOCUSED PAYMENT MODEL TECHNICAL ADVISORY COMMITTEE (PTAC)

PRELIMINARY REVIEW TEAM (PRT)

CONFERENCE CALL WITH NEPHROLOGY EXPERT FOR THE DIALYZE DIRECT PROPOSAL

Friday, July 6, 2018

12:30 p.m.

PRESENT:

HAROLD MILLER, PTAC Committee Member JEFFREY BAILET, MD, PTAC Committee Member RHONDA MEDOWS, MD, PTAC Committee Member

SARAH SELENICH, Assistant Secretary for Planning and Evaluation ANJALI JAIN, MD, Social & Scientific Systems

JOEL D. GLICKMAN, MD, FACP, University of Pennsylvania, Perelman School of Medicine

1 PROCEEDINGS 2 [12:34 p.m.] So I'm Harold Miller. I'm 3 MR. MILLER: 4 CEO of the Center for Healthcare Quality and 5 Payment Reform, member of the PTAC, and I am leading this particular Preliminary Review Team. 6 7 Jeff? DR. BAILET: Yeah. Jeff Bailet. I'm with Blue 8 9 Shield of California. I previously was with Aurora Health 10 Care, leading their physician group. I'm an ENT surgeon, and I am the chair of the PTAC. 11 12 MR. MILLER: Rhonda? 13 DR. MEDOWS: Hi. I'm Rhonda Medows. I'm a 14 family physician. I'm the executive vice president of 15 Population Health at Providence St. Joseph Health on the 16 West Coast. Nice to meet you. Thank you. 17 MR. MILLER: And, Dr. Glickman, do you want to introduce yourself and tell us a little bit about your 18 19 background? 20 DR. GLICKMAN: Yeah, absolutely. So I actually 21 started out in private practice. I was in private practice

nephrology for about 20 years, and about 15 years ago, I started -- I was going to pursue some other things.

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I was always interested in home dialysis

therapies, started giving lectures on home therapies and then through a series of introductions became DaVita's national medical consultant to peritoneal dialysis. Then I advised them that they needed to start home hemo, and I became their consultant for home hemo.

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Then I started one of seven pilot programs for home hemodialysis for DaVita in 2004, and it was really successful.

From there, I was actually recruited to come to the University of Pennsylvania to be director of the Home Dialysis programs, and I've been here for about 11 years now and have seen tremendous growth in our programs. We used to have about 28 patients on home dialysis. That includes PD. And now we have about 115 or 120, which accounts for about 25 percent of our dialysis population, so those are actually pretty good numbers.

I really consider myself an advocate for home hemodialysis. I think it's been one of the most rewarding parts of my career. I've lectured on it frequently and always try to make sure people are on home therapies.

For a short period of time, I was on the Scientific Advisory Board for NxStage. I think the NxStage has done an incredible job at promoting home therapies.

The machine that they developed is -- was developed for

simplicity to enable patients to do it at home, and I think they've really done a great job.

MR. MILLER: Great. Okay, thanks.

So let me sort of just maybe frame up the discussion today, and then, you know, we'll ask you some questions. And each of us on the Committee will have -- probably have different questions to ask.

I just want to clarify.

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MS. SELENICH: Harold, really quickly.

MR. MILLER: Yes, Sarah.

MS. SELENICH: I'm sorry. I just want to interrupt just to remind everyone that the call is being transcribed, and for the purposes of the transcription, it will be helpful if you all remember to say your names.

MR. MILLER: Okay. Hopefully, there's not enough of us that there will be -- hard to remember whose voice is what, but we can -- we can certainly do that. So I am Harold Miller.

So, Dr. Glickman, it's our job to evaluate the proposal. So we're not really looking for you to, you know, sort of say yes or no as to whether you think it is a good idea or not. We want to get your sort of education for us about some of the issues that we're facing with this, since we are not nephrologists ourselves and not

deeply involved in this kind of care.

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We obviously -- and when we get a proposal from someone, we tend to hear all of the positive things about it. So, in a sense, we have to do our own due diligence to try to find out is all of that true, are there any sort of negatives associated with this thing that we haven't heard about, are there any unintended consequences.

It may well be in many cases that the payment model that's being proposed could help good things be done. We have to also be thinking about, though, how it could potentially be misused and whether there is someone who might not have the best intentions and whether or not the way the payment is structure or the entrance criteria or whatever could potentially lead to things that really weren't anticipated.

So some of the questions that we'll ask you will really be intended to get at that. So we're not in any fashion always necessarily skeptical about the entity that brings us the proposal, but we want to be sure that since we're approving a payment -- we're talking about recommending a payment model for Medicare broadly, it's not just Dialyze Direct that would be participating, and it could be almost anyone, depending on how the eligibility criteria are defined. So that's part of why we have to

sort of probe these things and understand how this might work under different scenario.

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And it struck me that it might be useful if we broke the discussion into two pieces. One is to talk about this from the patient perspective, and the other is to talk about it from the nephrologist perspective. So I'll try to keep those two parts separate. They may overlap to some degree.

But on the patient perspective, I think it's been somewhat hard, at least for me and maybe for Jeff and Rhonda too, to sort out -- there's multiple pieces to this. So they're talking about trying to do dialysis in the nursing home rather than having somebody transported to a center. They're talking about doing something with more frequent dialysis rather than three times a week. They're talking about using home hemodialysis equipment and methods rather than traditional dialysis equipment.

So maybe we could just start. If you could sort of explain what you think in terms of each of those things, sort of what your actions are to that, and what's good and what's potentially bad about each of those changes and how well they line up.

DR. GLICKMAN: All right. That's great.

So from the patient perspectives, for the most

- part, people would choose more frequent hemodialysis 1 2 because they need to or want to, to maintain quality of 3 life, so, for example, for the patient working or has commitments, family commitments, and not having to go to a 4 5 dialysis unit is a critical time saver. And they need that, again, to maintain quality of life, not talking about 6 7 any metric of medical care, if you will, blood pressure, et 8 cetera. 9 Now, it is absolutely true that patients on more 10 frequent hemodialysis feel better, no question about it.
 - Now, it is absolutely true that patients on more frequent hemodialysis feel better, no question about it.

 The more frequent dialysis patients that do nocturnal home hemo feel the best. So that's where the quality of life improved.
 - MR. MILLER: Let me just pause. So why, why nocturnal is better?
 - DR. GLICKMAN: Yeah. So the nocturnal patients are doing six- to eight-hour treatments typically four to five nights a week. That is a tremendous amount of hours.
 - MR. MILLER: Okay.
 - DR. GLICKMAN: And removal of toxins is much, much better and --
- 22 MR. MILLER: Because it's longer at night --
- DR. GLICKMAN: Exactly.

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MR. MILLER: -- than it would be during the day?

Okay.

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DR. GLICKMAN: Yeah.

So for the home patients, though, the negative on quality of life is the work they need to do. They need to do their own treatments. They need to set up a machine, et cetera. They draw their own labs, have to come to clinic once a month. So that's kind of like the negative part, but the balance is always in the positive in terms of quality of life and how they feel.

And also, a little bit off the topic, though, the money-saving for more frequent hemodialysis programs is that the patient is going their own treatment, so you don't have salaries to pay for the treatments themselves.

If a patient was in a facility, a nursing home, there is certainly going to be benefit of not having to travel to a dialysis unit three days a week, and it takes time, and it's a distraction, right? You'd rather be in your own home, if that's what it is.

The downside is after getting treatments five days a week instead of three, though the time overall would be saved if you factor in transportation time, they still have to get stuck or be connected to a machine five days a week.

But the other -- my concern and perspective is

the question, "Well, you know, I'm only in this SNF for a short term. It's" -- I don't know -- "for rehab or for a set period of time before I move someplace else. Then what am I going to do when I'm done? Am I going back" --

MR. MILLER: Well, just to clarify, so they appear to be doing this, they're going to do this both for short-term SNF stays as well as for long-term nursing home residents?

DR. GLICKMAN: Right. So, in terms of the short term specifically, then, right?

MR. MILLER: Mm-hmm. Okay.

DR. GLICKMAN: What happens at the end of the short term? And if I -- let's say I've been on three times a week. I know about home hemo. I don't want to do it, but you could do it from here. Yeah, I guess so, but then at the end, if I feel better, I still have to go back to three days a week. So that is something to think about.

For the long-term resident, I don't see any other issues other than having to be tethered to a machine five times a week, and hopefully, the quality-of-life benefits override --

MR. MILLER: Just to clarify, the total time tethered to the machine, how does that -- because these are shorter each day --

DR. GLICKMAN: Right.

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MR. MILLER: -- but every day?

DR. GLICKMAN: Right. So it's a five-day -- it's typically five days, and the treatments are typically two and a half to three hours. So the total dialysis time is usually about -- it is usually about twelve and a half-ish hours, maybe a little bit more. In center, typically people get four-hour treatments three days a week. So the dialysis time is roughly the same. It's just more frequent. That's all.

MR. MILLER: Okay.

DR. GLICKMAN: Right? And patients have different emotions about that. Some patients say, "I don't want to be reminded every day that I have dialysis needs," and others say, "Well, this is worth it because it's so much better for me in terms of quality of life, and I don't have to travel to a dialysis unit." And the patients I take care of, the counter always is "This is a trade-off I'm willing to do."

MR. MILLER: So talk about the nature of the patients in the nursing facilities because the implication of the proposal statement is that most of those patients would in fact be appropriate for more frequent dialysis on medical criteria, and you raised some concern about that in

the one message I saw that you sent.

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DR. GLICKMAN: Right. So I actually think, you know, there was -- I just saw those follow-up responses from today --

MR. MILLER: Mm-hmm.

DR. GLICKMAN: -- and there was a question about they fit something in -- the therapy may not be appropriate for every patient, and I think that probably every nursing home patient would qualify. There would not be any major contraindication medically to dialyzing patients in a nursing home.

My point really was, if I remember correctly, is the benefits of more frequent dialysis --

MR. MILLER: Mm-hmm.

DR. GLICKMAN: -- and that if you look at all the studies done, reported on more frequent dialysis, the average age was about 52. The average age of a Medicare hemodialysis patient is about 62.

The comorbidity scores, as administered by

Charlson, are lower for home hemo patients. So the outcome

data is not the same population as the nursing home

population, and I think it would be a little bit of a leap

of faith to think that we would drive the same benefits, be

it how they feel after treatment, be it blood pressure

control, savings on medications, et cetera.

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MR. MILLER: So I got -- and, Jeff and Rhonda, just jump in if you have questions.

DR. BAILET: Yeah.

MR. MILLER: But I got the impression, at least in reading this, that what they were saying was that people in nursing homes, again, in general, were -- had sufficient disease burden, multiple diseases, advanced disease, et cetera, that the normal three-day-a-week frequency of dialysis was even more problematic for them in terms of the strain on their bodies than others. And so they may not have been studied in the context that you're looking because of the fact they were nursing homes rather than a home.

But to what extent is that true, you know, is that these patients, in fact, really would be better off less likely to die, less likely to have other kinds of complications develop because they're on more frequent dialysis than getting dialysis three days a week, wherever it happens to be.

DR. GLICKMAN: Right. So I absolutely agree that, physiologically, one would think that a patient would do much better on more frequent dialysis, and I actually don't doubt that. But I can't prove that.

MR. MILLER: But for -- and just to be clear, for these kinds of patients who were in nursing home, is that -- do you think that that is more true or less true? Again, I don't -- and you may not evidence -- but is your sense that they would be -- it would be more likely to be important for them to get more frequent dialysis because of their overall level of disease burden?

DR. GLICKMAN: Yeah. So talking about an academic point of view or an opinion point of view taking care of patients? From --

MR. MILLER: Well, if they differ, give us both.

DR. GLICKMAN: Right, yeah. Well, because if I was -- if I was giving a talk and you asked me what's the evidence that these patients do better, I'd say I have no evidence that they do better.

MR. MILLER: Mm-hmm.

DR. GLICKMAN: In your professional opinion, having taken care of people like this, do you think they would do better? Absolutely, I think they would do better. I think three -- and one of the things I clearly agree with in their proposal is that a three-day-a-week dialysis is inadequate. It definitely is.

I also think that what we do with prescriptions three days a week is inadequate also.

MR. MILLER: Yeah.

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DR. GLICKMAN: But I don't think there's any comparison, really, in terms of -- and the physiologic changes during dialysis that occur three days a week versus five days a week. I mean, for certain, in my mind, that is true. I would just caution not to make assumptions about any cost savings of it --

MR. MILLER: Right.

DR. GLICKMAN: -- or the other benefits. But if I could get all my patients to do five-days-a-week dialysis, I am certain the majority of them would feel better and do better.

MR. MILLER: Yeah.

DR. MEDOWS: That's great to hear.

MR. MILLER: So, in part, they also made a case not only for the more frequent dialysis related to the physiologic impact, but also transporting these patients back and forth to centers --

DR. GLICKMAN: Yeah.

MR. MILLER: -- three days a week. And because they have comorbidities, there are other interventions that they need, other medications and other treatments for their other diseases. That moving these patients out and back disrupts that and makes that much more difficult.

So I'm trying to take a holistic approach to their proposal in fact, bring all that in, and does that matter, in your opinion, those other -- those other variables that they call out?

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DR. GLICKMAN: So trying to provide rehab for patients on hemodialysis is very difficult. Their hemodialysis schedules will interfere with their occupational therapy and physical therapy.

Medications might be an issue. Eating is definitely an issue. Patients will miss meals when they need to travel for dialysis when they're on that dialysis. So it is clearly less than ideal to have a patient travel to dialysis, get a four-hour dialysis treatment, come back and get their physical therapy.

Even for those patients that we have a higher level skilled care, where the OT/PT is provided on site, they will miss some OT/PT sessions because they're at a dialysis treatment.

MR. MILLER: And so just to be clear, then, on the other side, do you think that it is in fact the case that if they're getting dialysis five days a week for a somewhat shorter dialysis period, but with no transportation, that then it would be significantly more likely that they would be able to get appropriate rehab

1 services, et cetera? 2 DR. GLICKMAN: Yes. 3 MR. MILLER: I understand this is just sort of your sense as a clinician. I'm not asking about evidence. 4 5 Just, you know --DR. GLICKMAN: Yes, but there are other 6 7 modalities also, dialysis modalities that would also afford 8 a nursing home patient to get more physical therapy, 9 occupational therapy too. 10 MR. MILLER: Meaning? 11 DR. GLICKMAN: Well, you know, like peritoneal 12 dialysis. 1.3 MR. MILLER: Mm-hmm. 14 DR. MEDOWS: Yep. DR. GLICKMAN: There is -- there is -- we do 15 16 thrice weekly nocturnal eight-hour treatment dialysis, 17 which is physiologically much better, and we see some improved outcomes. And that would be three times a week, 18 not five days a week. 19 20 So, you know, one of -- I don't want to get off 21 topic because I know you're going somewhere with this, but,

you know, one of -- when I read these proposals, one of the

things I asked myself is what exactly is the goal of this

proposal. Is it to provide the most cost-effective

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therapy, improve quality of life and outcomes for patients, you know? Is it to promote more frequent dialysis in this population and measure outcomes? You know, so --

MR. MILLER: That's probably what we're trying to sort through too, and I think where you were just going is actually a useful place to go because one of the things I was going to ask is they have a particular approach in mind that they are proposing. They're not saying give us the flexibility to do a variety of different things. They're - basically, they have a proposal written around a particular approach to dialysis with a particular piece of equipment, et cetera, and so it is helpful to hear what you think the other options might be and how they compare.

DR. MEDOWS: Yeah.

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DR. GLICKMAN: Yeah.

MR. MILLER: Do you want to elaborate on that?

DR. GLICKMAN: Absolutely. So I will say that a lot of dialysis providers are interested in this, to use the business term, "space," right? And that a lot of dialysis providers are trying to set up PD programs in nursing homes. Other people are doing what Dialyze Direct is doing for many, many reasons, but I don't think anyone has taken a holistic look at the dialysis patient in a SNF or nursing home and say, "How do we provide the ideal

therapies for those patients?" knowing full well that there is not one right therapy for everybody. That we try to really individualize therapies for patients.

So if you were to ask me the more generic question, "Joel, what should we think about in terms of dialysis options for the nursing home SNF patient?" I would say, "Well, why don't we think about peritoneal dialysis." Why don't we think about, like I said, nocturnal dialysis? Do dialysis while patients sleep on hemodialysis for eight hours. Ultrafiltration rates, which they point out in their study, are lower, which is a good thing. Outcomes are better, and it's multitasking. Now the patients have their entire day free very day, right? That would be an option.

MR. MILLER: Well, so take -- just take peritoneal dialysis in contrast to this model, and in particular, so their proposal is -- at least their model is that they will send their staff to the facility to sort of do this as a turnkey service, and the nursing home has limited involvement, other than providing the space. And so contrast peritoneal dialysis to their model in terms of how it would be staffed also.

DR. GLICKMAN: So we could take actually the same concept of staff-assisted peritoneal dialysis which, by the

way, is being done in some other countries. You would have a staff person who is trained in peritoneal dialysis, just like we would train patients to do it by themselves at home, who would go to a nursing home, which had whatever number of patients. Then they would set up the machines, and they would attach the patients. And they would come back in the morning and take the patients off the machines, and there would have to be some training of the nursing home staff to deal with alarms that may come about, right? So if the treatment isn't going smoothly because of flow problems, et cetera, just to know what to do with it.

MR. MILLER: Or they could conceivably have somebody there all night?

DR. GLICKMAN: Or, conceivably, they could have somebody there all night. That is exactly right. Exactly correct.

So, yes, we could develop a staff-assisted peritoneal dialysis program in a nursing home, especially for the long-term patient, right?

The short-term, they're a little bit more difficult because you have to have a PD catheter in place, and if it's a short term, no one is going to switch from hemo to PD to do that, right? But that's not going to work.

But for a long-term patient, that would work well, and we actually have significant experience in geriatric patients on peritoneal dialysis. You know, my pride and joy is a woman who we started at age 84 who is now 88 and has not been hospitalized, and we adjust her goals not to phosphate levels but to quality of life. Keeping her out of the hospital, that's our plan, and she has quality of life, and she enjoys it. And that's okay.

So there is experience with geriatric patients on peritoneal dialysis, and it can be very successful. And I'm not going to tell you it's going to be successful in every patient, but it is an option.

MR. MILLER: Mm-hmm. But it would have to be -it wouldn't be something that one could do with the same
staff in the same way because it would be at night rather
than during the day. So you sort of -- the two are
somewhat disparate in that sense. You couldn't do both and
with the same staff.

DR. GLICKMAN: You couldn't do it with the exact same staff. If you wanted to -- if you wanted someone there all night long, that is correct, but you might be able to do something where you're staff that does the hemo treatment late in the day, at the end of the day, they then switch over to putting people on PD. And then in the

morning, the staff that comes in to start the morning hemo patients take the patients off PD.

MR. MILLER: But I meant -- I meant in terms of the same equivalent burden on the nursing home staff in the sense that if you said, "You don't really have to worry about doing dialysis or training your staff. You know, we'll do all of that" --

DR. GLICKMAN: Yeah.

MR. MILLER: -- you would really have to have somebody there at night, and it would sort of be then you would have to be working on a 24-hour staffing basis rather than just the daylight.

DR. GLICKMAN: If -- if -- yeah, I -- I imagine so, yeah.

DR. BAILET: Harold, this is Jeff. Could I -- could I ask a more --

MR. MILLER: Yeah.

DR. BAILET: So when you take the nursing home population that are on dialysis, are most of those patients entering the nursing home on hemodialysis already and this is -- or is it -- and you may not know, but are these patients actually going on dialysis when they're residents? Do you have a sense of that?

DR. GLICKMAN: So I don't know the answer. My

sense is most patients are on dialysis already when they 1 2 transfer to a --3 DR. BAILET: Okay. 4 DR. GLICKMAN: -- nursing home. 5 DR. BAILET: And where --They just sent us answers, Jeff, 6 MR. MILLER: 7 that basically imply that sort of they're going to be on 8 dialysis if they're coming for a short stay. Some people 9 may actually progress to dialysis if they're on a long-stay 10 nursing home, but they're saying -- I think it was about --11 there are about 60 percent, I think they said were short-12 stay patients that they had. 1.3 MS. SELENICH: Yeah, that's right. 14 DR. BAILET: Oh, okay. Thank you. 15 MR. MILLER: Let me -- Rhonda, any other questions on sort of this? I want to switch to the 16 17 nephrologist sort of aspect to this, but any other questions on the patient side? 18 19 I do. So it was really good to hear DR. MEDOWS: 20 and really helpful to understand the different alternatives 21 that are already available to people in the nursing home. 22 Whether or not they're used at the optimal level is

probably the greater issue, right, in terms of actually

making the decision that will actually help them feel the

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best --

DR. GLICKMAN: Yeah.

DR. MEDOWS: -- have a better quality of life?

What keeps people from eventually being able to have access to those options? Is it the cost? Is it the willingness of providers to provide them? Is it just tradition? Do you have an idea?

DR. GLICKMAN: Yeah. So in the nursing home specifically -- yeah. So I don't believe it's calling this --

DR. MEDOWS: Okay.

pr. GLICKMAN: I'll tell you that many, many years ago, I tried to do a -- start a patient on PD in a nursing home. I didn't have support really to do it. I didn't have a company behind me on it, and we didn't do well because we didn't have a critical mass of patients to make it worthwhile to keep the staff trained, et cetera, but, you know, if you had the resources started correctly, I think the infrastructure could be done. And, actually, it has been done.

So why aren't more people on it? Why aren't more people on PD in the United States in general, while only 10 percent of people on peritoneal dialysis, when some countries it's many, many-fold higher?

I think our nephrologists in this country are not educated on peritoneal dialysis. They don't feel comfortable with it. It's easier for them to see people in-center. For a long time, the dialysis companies felt that they made more money on in-center hemos, so they didn't promote it.

And now the tide is turning a little, and again, I think that's really for economics.

So I think that people haven't taken the initiative, haven't made it a priority, and haven't -- and nephrologists have not developed the skills they need to feel comfortable managing a patient on peritoneal dialysis.

I think if the dialysis companies decided that it was in their interest to do it, I think we might see a lot more of it.

DR. MEDOWS: So I know we don't have that data on the home dialysis and the skilled nursing facilities because we haven't had enough volume to actually do a study like that, but from the home dialysis that you do yourself in your process, you have a quantifiable quality improvement with this method, right? Clinical quality measures, outcome measures, consumer experience, quality-of-life measures; is that correct?

DR. GLICKMAN: So -- yeah. You know, when it

comes to quality of life --1 2 DR. MEDOWS: Yeah. DR. GLICKMAN: -- I -- and this is subjective on 3 my part, okay? 4 5 DR. MEDOWS: Yeah. Yep. DR. GLICKMAN: I think if you look at studies and 6 7 quality of life, I think it -- personally, I think it's a 8 little bit more difficult to interpret those studies 9 because of the way the questions are asked and also a lot 10 of -- you know, there's a lot of survey -- as you know, I 11 mean, there's a lot of methodologic issues on survey studies --12 13 DR. MEDOWS: But that's subjective, right? Yeah. 14 DR. GLICKMAN: -- and as well as the patients you 15 choose to study. So -- and I -- I believe that the studies 16 do show improvement in quality of life in PD programs. 17 DR. MEDOWS: Okay. DR. GLICKMAN: Again, no data on the nursing home 18 19 patient as far as I know. 20 DR. MEDOWS: Okay. And the non-nursing home 21 patient, again, home dialysis, what about the clinical 22 quality of patients --23 MR. MILLER: Distinguish home dialysis versus the 24 more frequent dialysis.

DR. GLICKMAN: Yeah. So, for me, "home dialysis" is a generic term referring to patients on any dialysis therapy at home.

DR. MEDOWS: Right.

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DR. GLICKMAN: That would include home hemodialysis or peritoneal dialysis, and home hemodialysis can be more frequent, five days a week for short treatments. It could be nocturnal, six- to eight-hour treatments, anywhere from three to, you know, five nights a week. And some people actually do traditional thrice weekly four-hour treatments at home. Historically, that was probably the most popular therapy before Medicare started paying for dialysis treatments in-center, so --

MR. MILLER: But I think you said -- let me just feed this back. I want to focus on the moment on the more frequent dialysis versus the traditional frequency. You said that in terms of patient outcomes -- sort of put the quality of life per se aside and talk about, you know, medical complications, et cetera. People do better on more frequent dialysis. You would expect that nursing home patients would do better. There may not necessarily be evidence of that, but that you would expect that that would be the case?

DR. GLICKMAN: Yes.

1 MR. MILLER: Okay. So I think that -- we have to 2 distinguish here we're not talking about home dialysis in 3 the traditional sense. We're talking about doing dialysis in the nursing home --4 5 DR. MEDOWS: Yep. MR. MILLER: -- but using home hemodialysis 6 7 equipment and staff, right? I mean, that's kind of the 8 narrow issue. So -- that we're focusing on right now. 9 And I think what you're suggesting is that it 10 would be -- there are other options besides just the particular staffing model that they are using that could be 11 12 used to -- this is now a question to Joel. There are other 1.3 methods that they could use to deliver dialysis in the 14 nursing home drawing on other approaches to home 15 hemodialysis beyond this particular approach in this 16 particular proposal? 17 Right. And that there's no data at DR. MEDOWS: 18 all on the SNF population, period. So it's -- I'm trying 19 to ask him about any data from the other populations, even 20 though it's not the same. 21 MR. MILLER: Mm-hmm. Right. 22

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DR. MEDOWS: Right?

DR. GLICKMAN: Yes.

DR. MEDOWS: I'm just trying to figure out, you

know, do the -- we're tasked with identifying those models 1 2 that will improve quality, and quality could be broadly 3 defined, right, whether it's clinical quality of patient safety, the consumer experience, quality of life. 4 5 DR. GLICKMAN: Right. DR. MEDOWS: We're tasked to look at whether or 6 7 not it will either -- if it's going to improve quality, at least -- and not reduce cost, that's fine, but if it's 8 9 going to maintain quality and then reduce cost, it's the 10 second option. And I'm not quite sure that I see that, but I'm probably getting ahead of the discussion here. 11 12 I wanted to ask about whether or not there was 13 any data about patient safety being improved or clinical 14 quality being improved in the other population, understanding that the SNF population, there is no data. 15 16 DR. GLICKMAN: Right. And this is for the more 17 frequent hemodialysis. Is that what you're saying? 18 DR. MEDOWS: Right. 19 DR. GLICKMAN: Right. 20 DR. MEDOWS: For the more frequent for what is 21 being proposed --22 DR. GLICKMAN: Yeah.

DR. MEDOWS: -- in the -- in the candidate

submission, the more frequent home-based, right, or SNF-

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1 based? 2 DR. GLICKMAN: And I'm just asking, could you 3 repeat for me which outcomes are you interested in knowing about? You said patient safety? 4 5 DR. MEDOWS: Patient safety --DR. GLICKMAN: Yeah. 6 7 DR. MEDOWS: -- would be number one. 8 clinical quality measures that would typically be used to 9 respond, end-stage renal disease patients, okay? 10 DR. GLICKMAN: Sure. Right. So the quote -- let me do the latter first. 11 12 DR. MEDOWS: Okay. 13 DR. GLICKMAN: So for sure in the more frequent 14 hemodialysis studies show improvement in blood pressure 15 control --16 DR. MEDOWS: Okay. 17 DR. GLICKMAN: -- universally decreased blood 18 pressure medications. Most studies show that you can stop 19 blood pressure medications in about two-thirds of patients, 20 and in the one-third who are still on it are on less. So 21 there's no question that blood pressure control improves

The other parameter that we look at is phosphate levels, and phosphate levels --

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dramatically.

DR. MEDOWS: Yep.

DR. GLICKMAN: -- improve the more frequent hemodialysis. Not so much in my clinical experience with the short treatment that they propose, more so with the nocturnal treatments. Some of these patients actually feel so much better. They're eating better, and any improvement in phosphate removal is counteractive by their increased intake of phosphate-containing foods.

They talk about postdialysis fatigue syndrome being better.

DR. MEDOWS: Mm-hmm, mm-hmm.

DR. GLICKMAN: That is absolutely true. The average recovery time after dialysis is about eight hours for patients. In short daily hemodialysis, the average is about 60. For nocturnal, it's about 30 minutes. After dialysis, most instances, three-times-a-week dialysis patients, after dialysis, they feel completely washed out. People describe it as feeling hung over, and it essentially renders the rest of the day useless.

But patients on the more frequent therapies, as I said, very rarely have any post-dialysis fatigue, and it doesn't interfere with their ability to do things. So from that perspective, you know, being in a SNF, that would be advantageous, obviously.

And I would -- you know, the rest of the data is a little bit soft. I think those are the major things.

There is regression of left ventricular hypertrophy --

Yes.

DR. GLICKMAN: -- which is a surrogate marker for survival, but we always are a little bit suspicious of surrogates. I think it's true, but again, you know, we're talking about a different population, right? We're talking about an --

DR. MEDOWS: Right.

DR. MEDOWS:

DR. GLICKMAN: -- elevated population. How much increase in longevity do you think is significant at that age? I mean, that's not the measure we're especially interested in. It's more the quality of life. So those are the major clinical quality measures.

In terms of patient safety, again, the patient safety now, it's a little bit different when patients dialyze on their own than staff-assisted, right?

DR. MEDOWS: Yeah.

DR. GLICKMAN: But -- and the patient safety, in my mind, is really a function of the quality of the home dialysis program, you know, how well do we train when we train our patients. And there's been some studies anecdotal looking at it, and the safety qualitatively is

very good. It's clearly no worse than in-center dialysis, and almost every single event in the home was due to patients who did not adhere to policy procedures and made some stupid mistake, which, you know, theoretically is modifiable by better training.

But so, for me, my program, patient safety, is not an issue.

DR. MEDOWS: Okay.

DR. GLICKMAN: But, again, it's apples and oranges comparing the patient doing the therapy at home versus the staff-assisted.

DR. MEDOWS: The nursing home, yeah.

Thank you. That was very helpful.

MR. MILLER: So let me switch to the nephrologist because one of the somewhat perplexing aspects of this proposal was that there was no change in payment at least proposed for the actual dialysis service itself. The proposal was to change the way the nephrologist was paid, partly to try to offset some concern, I guess, about whether patients would come to see the nephrologist in the office and the nephrologist's lack of desire to go see the patient in the -- in the nursing home and some concern about whether or not nephrologists would actually recommend or encourage this.

So when you had said earlier that you thought that neurologists' incentives and familiarity were a barrier to more -- you know, to greater use of peritoneal dialysis, et cetera. So talk a little bit about -- imagine that this kind of -- this kind of a program, you know, is being put -- is trying to be put in place. How do you see nephrologists reacting to it, and what kinds of incentives or disincentives would they face?

DR. GLICKMAN: Yeah. So I think a good way to start is kind of explain what we do now and how we get reimbursed because there's -- I think that's kind of important for the physician who has home hemodialysis patients, right, and then the challenges of someone who doesn't.

So for the physician doing home hemodialysis, there -- when a patient starts, there's an initial fee of \$500 which is a training fee, and that's paid for the physician participation in training the patient. And after that --

MR. MILLER: Just one quick pause. So what's your sense of -- is that a reasonable -- too low, too high -- fee?

DR. GLICKMAN: I actually think it's a -- I actually think it's a reasonable fee. I actually think

that it is meant to be an inducement to have patients do dialysis at home because you get it for PD also. So I --

MR. MILLER: But the level of work involved --

DR. GLICKMAN: I think it's fine.

MR. MILLER: -- in educating it, so it's not like as if it's really -- and it's not an incentive to do it.

It's basically compensating them for the time that they do have to put in the patient education.

DR. GLICKMAN: Yes. For education, once they made the decision to do home, not the decision up to making home -- up to that point, right?

MR. MILLER: Okay.

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DR. MEDOWS: Okay. Good.

DR. GLICKMAN: So the effort we put into teach patients about modalities before they start dialysis or even if they're on dialysis and they're thinking of switching, but the effort that we do to make patients aware and understand their options for dialysis and getting them onto a home therapy is not compensated, and again, off topic, but if you're going to ask me how do we get more patients at home, that would be -- that would be the barriers that we would need to fix, is making sure doctors get reimbursed enough to convince patients to go home. But that's completely, completely different, right?

MR. MILLER: Well, not necessarily, so that's relevant. So you're saying that basically there is more effort to get somebody to accept these nonconventional approaches to -- or not common approaches to dialysis, and so that sort of leads people to sort of take the default, which is to go to a center?

DR. GLICKMAN: That is correct. Right. It's much easier to put someone in the center.

MR. MILLER: Okay.

1.3

DR. GLICKMAN: Much less work.

Once a patient is on home therapy, so conditions of coverage mandate a nursing visit every month. So our patients have to come to the clinic; therefore, my motto is that our physicians see patients in the clinic with the nurse. And many home dialysis programs have that model.

Alternatively, the patient can see the nurse in the facility and then have a separate visit with the doctor in their office, and that is what they're referring to as that separate visit to the doctor in the office.

The nurse -- the mandated nursing visit in the clinic, I imagine would be done in the home, in the nursing home, right? So I think that's how they take care of that part.

But the physician needs to see that patient once

Now, I think that's important because when I see a patient in my clinic, I have a full half day or a full day of home patient scheduled for me. So one drive to my dialysis unit, I spent all day there. I see all my patients, and then I'm done for the day and drive home. If I'm seeing patients in my office, again, it's part of my office

schedule, right? So I have my whole clinic schedule with

patients. I don't have any travel overhead, if you will.

a month also, be it in the clinic or be it in their office.

1.3

So now you have to ask me, well, what's it going to take you to leave your clinic, get in your car, drive to a nursing home, see one patient, two patients -- I don't know -- and then drive back? And I think that incentive --

DR. MEDOWS: Right. Yeah.

DR. GLICKMAN: -- is one to really be examined.

I will tell you that I have had -- I had a patient who was respirator-dependent on home hemo, and I drove to the patient's house for a visit. It wasn't worth my while. I did it -- I don't want to sound like a, you know, martyr here, but I did it because of my sense of commitment to this particular patient. But it really, you know, was not sustainable for me to drive, you know, to the patient's house to see my patient at home.

MR. MILLER: But you -- so you would ordinarily -

- the nephrologist would not ordinarily go to the patient's 1 2 home to see them. 3 DR. GLICKMAN: No. They would come to the clinic. 4 MR. MILLER: 5 So what they're saying here is they're trying to eliminate that one visit to the nephrologist per month for 6 7 these nursing home patients, and I guess I'm trying to 8 understand. So how important is that to eliminate that 9 They would -- the nursing home patient who was going 10 to a center would see the nephrologist in the center. 11 DR. GLICKMAN: Correct. 12 MR. MILLER: But they'd be taking an ambulance, 13 you know, three times a week to go there. 14 DR. GLICKMAN: Right. MR. MILLER: So if they had to see a nephrologist 15 16 once a month and they had to go to a clinic for that, is 17 that somehow disrupting the whole advantage of this Because it doesn't seem to me that it is. 18 program? 19 DR. GLICKMAN: It's -- it's one-half day a month 20 for the patient to go to the dialysis clinic. 21 MR. MILLER: Mm-hmm. 22 DR. BAILET: Right. Versus three times a week. 23 DR. GLICKMAN: Correct. Versus three times a 24 week.

But I think -- I think that's -- I don't think
that's necessarily the issue. I think -- I thought the
issue more is how do we get patient -- how do we get
doctors, nephrologists, to buy into the five-day-a-week
modality in the nursing home and save transportation costs?
It sounds like, well, we can take money away from the
transportation cost and just give that to nephrologists to
incentivize them to buy into this more frequent
hemodialysis therapy, right? Trying to make it --

MR. MILLER: Well, there's two pieces to it, and that's kind of what we're trying to sort out here.

So there is the notion that you don't want the patient to even have to go to see the nephrologist in the clinic --

DR. GLICKMAN: Right.

MR. MILLER: -- and that you would pay them what the transportation fee would be. We are not completely clear on whether Medicare even pays for those transports to the nephrologist's office in all cases, but a separate issue there.

So there's that piece, and then there's a separate piece that basically says that if they were on home hemodialysis, true home-home hemodialysis, they would be getting the training fee, and they don't get if they're

in the nursing home because they don't need training. So they want to give them that to be able to encourage them to send the patient to the nursing home or to recommend this as part of -- sort of those two pieces.

DR. GLICKMAN: Yeah.

1.3

MR. MILLER: So I was trying to focus first on this issue of why is this such a burden, if you've taken away three transports to the center every week, why it would be a real problem for them to have to go to see the nephrologist once a month.

DR. GLICKMAN: Right.

MR. MILLER: And it sounds like the answer is not clear that it would be.

So then the second piece is, do you think that giving the nephrologist essentially the home training fee without having to do home training is enough reason for the nephrologist to suddenly start encouraging more patients to use this nursing home or that they would resist doing it otherwise, I guess?

DR. GLICKMAN: Yeah. So I think that's a great question.

By the way, just -- you know, they said that there was -- that it wouldn't cost anything. There's an offset that they would have gotten the training fee if they

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did home hemo training in-center, but if the patient wasn't
 1
    doing more frequent dialysis or home dialysis at all, if
 2
 3
    they were doing three times weekly in-center, you wouldn't
    get a training fee. So that money isn't appearing
 4
 5
    necessarily, right? It's not moving from one hand to the
    other.
 6
 7
              MR. MILLER: Right.
              DR. GLICKMAN: Right. So the question then is --
 8
 9
              MR. MILLER:
                           They were -- they were trying to, I
10
    think, basically equalize this, this nursing home dialysis
11
    with home -- true home hemodialysis --
12
              DR. GLICKMAN: Right.
13
              MR. MILLER: -- and say you get the 500 bucks, no
14
    matter what.
15
              DR. GLICKMAN: Absolutely, yeah.
16
              MR. MILLER: That's why I was asking sort of was
17
    the 500 bucks actually really paying for time that the
    doctor would spend there or was it just an incentive.
18
    Okay.
19
20
                                     So I, again, don't know --
              DR. GLICKMAN:
                            Yeah.
21
    I don't know if you had -- let me take a different tack.
22
              To make it worthwhile for me to do that, I would
23
    need to see several patients at the same time in a nursing
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home. To make that worthwhile for me, I --

1 MR. MILLER: If you had to go to the nursing 2 home. 3 DR. GLICKMAN: Exactly. MR. MILLER: Yeah. 4 5 DR. GLICKMAN: Right? And that occurred to me that some nephrologists may say, "You know what? For this 6 7 one patient, it doesn't -- it doesn't pay for me. You 8 know, if that's what they want to do, fine. 9 nothing I can do about that. Someone else will have to take care of them." 10 Well, what if you took -- take away 11 MR. MILLER: 12 that for a second. Say, okay, the patient is still going 1.3 to come see you in your clinic, as if they were a regular home-home, true personal --14 15 DR. GLICKMAN: Correct. MR. MILLER: -- private home --16 17 DR. GLICKMAN: Right. MR. MILLER: -- patient. But now you wouldn't be 18 19 getting the \$500 training fee because they don't need 20 training because they're getting staff-assisted dialysis in 21 the nursing home. 22 DR. GLICKMAN: Right. 23 MR. MILLER: How do you think about that as a 24 nephrologist?

DR. GLICKMAN: Well, if I'm doing home hemo 1 2 already and I'm seeing patients in my office already, 3 that's fine, right? MR. MILLER: Mm-hmm. 4 5 DR. GLICKMAN: That's fine. MR. MILLER: You wouldn't have -- you wouldn't 6 7 have the initial training fee, but that's a one-time fee, 8 anyway, right? And you'd still be getting an E&M for the 9 patient coming to the -- or sorry -- the monthly, the 10 monthly capitation. 11 DR. GLICKMAN: You would get the monthly 12 capitation. That is correct. That is absolutely correct. 13 MR. MILLER: Okay. So --14 DR. GLICKMAN: But is -- is part of this plan 15 maybe to have nephrologists who are the nursing home, more 16 frequent hemodialysis nephrologist, right? And they say, 17 well, the nephrologists don't want to participate. We have nephrologists who are willing, and we would just funnel the 18 patients over to them, let's say, right, to make it --19 20 MR. MILLER: Mm-hmm. 21 DR. GLICKMAN: Right? So --22 MR. MILLER: Potentially. Or it depends on how 23 often -- I mean, in some areas, it may be the same nephrologist taking care of all the patients, anyway, so --

1 DR. GLICKMAN: That's true too. Yeah. 2 MR. MILLER: That wouldn't necessarily be true in 3 an urban area, but it might be true in a more rural area. DR. GLICKMAN: Yes. 4 5 MR. MILLER: Okay. So is there any other barrier? Let's suppose the patient was still coming to the 6 7 clinic to see the nephrologist. So, you know, nothing has 8 changed from there. Is there any other reason why the 9 nephrologist would have any resistance to this model 10 compared to any resistance that they might have to normal home hemodialysis? 11 12 DR. GLICKMAN: Right. So for the -- so yes. 1.3 for the -- for the home hemodialysis nephrologist, I think the only other thing that I would -- so right now, my 14 nurses in the dialysis facility take first call for all 15 16 patients, and, you know, obviously I've trained them. 17 we have a working relationship, and they kind of filter the calls that I need to know about or not need to know about. 18 19 And they kind of execute the plan. So --20 MR. MILLER: This is if a patient calls with a 21 problem, you mean? 22 DR. GLICKMAN: Exactly.

MR. MILLER: Mm-hmm.

DR. GLICKMAN: Right.

23

in a nursing home. The thing that I was a little bit confused about in the proposal is that the dialysis staff that were actually the staff-assisted were actually not RNs. They were LPNs or maybe patient care technicians. There was this coordinating nurse, the home dialysis coordinating nurse at the nursing home, but I didn't know if that nurse knew about home hemodialysis or not. So I wasn't certain if that nurse had the capacity to troubleshoot issues and inform me of that. You see what

1.3

I'm saying?

MR. MILLER: Yes. So if I'm in a private home and I'm getting home hemodialysis and I have a problem, I have no clinician there of any kind at all, and I have to call one of your on-call nurses for --

DR. GLICKMAN: Correct.

MR. MILLER: So the question here is, if the patient is getting this nursing home-based home hemodialysis and they have a problem, what -- what is the staff there capable of dealing with? What is this sort of floating nurse capable of doing, and who else is going to deal with that problem? Right? And we have to figure out kind of what those problems are and how they expect to deal with them.

DR. GLICKMAN: Right. Because the last thing I want as a nephrologist is more phone calls.

MR. MILLER: Mm-hmm. Well, and that gets to Rhonda's safety issue, is what kinds of issues can come up. So, quickly, what would be -- what would be an example of something that might come up in this particular scenario they're proposing that you would be worried about whether or not the staff there could handle?

DR. GLICKMAN: Yeah. So, I mean, in the -- in the treatment itself, you know, there is a lower incidence of hypotension, but it's not zero. You know, we train our patients to recognize what they need to change in their therapy to avoid hypotension, and I assume that the staff would be trained the same way. So the treatment itself would be no different than our patients -- they may have mechanical issues with the machine. That shouldn't be really an issue at all, but it's the overall monitoring.

So, you know, my nurses will look over the treatment sheets, and they'll call me and say, "I noticed in the last week, the blood pressure is going down. What do you want to do about it?" Right? So it's that surveillance of the -- of the treatment itself and getting feedback on that.

And then, you know, labs are drawn. I depend on

my nurses to -- when the labs come in to look at them and make sure there's nothing that I need to address right away, so that would be an issue.

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And I think that covers like the major things. You know, I'll get calls about social issues in the home, but that wouldn't apply to the nursing home.

MR. MILLER: Okay. So we're almost out of time. Rhonda, other questions?

DR. MEDOWS: No. I was going to say that I would think similar conditions, similar concerns, but perhaps maybe a little bit more frequent given the frailty of the population that we're talking about, and I -- you know, I was just wondering whether or not the nephrologist would go, you know, "Do I really want to take on a more higher risk, even higher risk than end-stage renal disease already is?" Right?

DR. GLICKMAN: Yeah.

DR. MEDOWS: And whether or not --

MR. MILLER: But they're not going to be in a center where they've got somebody with eyes on, right there, multiple people, right? You're saying that they'd be in a nursing home and sort of --

DR. MEDOWS: Yep. So maybe that's part of the reason why they're talking about this incentive or

something. I don't know if that's enough to make up for it, but I guess if you were so inclined to help the more frail seniors in nursing homes, that would be one of the responsibilities you'd be taking on, is that you probably would get more call. You might get more questions about them because they have other complicating factors in addition.

MR. MILLER: But this is a one-time offset for that, right? It's nothing that says you get more per month to be able to deal with that.

DR. MEDOWS: Yeah.

DR. GLICKMAN: No, no, no. I thought you do get more per month. I thought that you share in the transportation cost savings.

DR. BAILET: Right.

MR. MILLER: Well, that's if they don't come to your office.

DR. GLICKMAN: Right, if they don't come to your office. Right. Yeah, that's correct.

MR. MILLER: But I was trying to separate those two.

DR. GLICKMAN: Okay.

MR. MILLER: So if they still come into your office, but you're dealing with lots of stuff over the

1 telephone --2 DR. GLICKMAN: Right. 3 MR. MILLER: -- then there's no real compensation for that. 4 5 DR. GLICKMAN: Right. DR. MEDOWS: We're going to find out whether or 6 7 not those transportation costs are covered by Medicare or 8 Medicaid, right? 9 MR. MILLER: Yes. Medicare has been working on 10 that. 11 DR. MEDOWS: Okay. I still think the answer is somewhat 12 MR. MILLER: 13 iffy, but --14 DR. BAILET: Yeah. 15 DR. MEDOWS: And then it's how much that actual 16 fee is because I'm worried whether or not the shared 17 savings would actually amount to much, to be honest with 18 you. 19 MR. MILLER: Well, or enough. I mean, if you're 20 offsetting the fact that the nephrologist had to go to the 21 nursing home in order to get that, that doesn't offset the 22 fact that they're getting more telephone calls every month too, right? 23 24 DR. MEDOWS: Yeah.

1 MR. MILLER: So that's the issue there. 2 But that's helpful to think about that because 3 it's not just going to see the patients. It's once a month. 4 5 DR. MEDOWS: That --It's also responding to the kind of 6 MR. MILLER: 7 problems and the changes in meds and everything else that 8 may come up during the course of the month. 9 DR. MEDOWS: Yeah. 10 DR. BAILET: Right. DR. MEDOWS: 11 We don't want to discourage them 12 from offering more options, you know, to patients, but I 1.3 just have to wonder whether or not there's really going to be significant financial incentive. 14 15 MR. MILLER: Right. 16 DR. GLICKMAN: Yeah. 17 MR. MILLER: Jeff, any other questions, final questions from you? 18 19 DR. BAILET: No, Harold. I found this to be 20 really helpful. 21 MR. MILLER: Yeah. 22 DR. BAILET: I guess the last -- oh, I will make 23 one comment about reimbursing the nephrologists for their

efforts. I think that I'm still -- I still believe, based

on what I'm hearing and reading, that the patients are better off not only for quality of life, but there are — there are better outcomes which drive lower costs because of fewer complications over time. So while the nephrologist might not benefit directly from this model in certain — you know, with all of the elements we talked about to the level that maybe they need to, to provide support for their efforts, the cost to Medicare over time in this model potentially is less.

MR. MILLER: Mm-hmm.

DR. GLICKMAN: Based on data from younger, healthier patients, correct.

DR. MEDOWS: Right.

DR. BAILET: That's correct. Okay. So thank you for that.

DR. GLICKMAN: Yeah.

And I do want to point -- I'm sorry. Just one thing on the payment. So, you know, there is a huge, huge problem now getting paid for more frequent dialysis. You know, it varies from fiscal intermediary to fiscal intermediary. CMS recently came out with, you know, a plan for just paying for three treatments, but if you -- and I - if you look at on average across the country, as far as I know, for five treatment a week, most providers for

Medicare are getting paid about four-ish treatments. 1 it's variable from location to location, but on average, 2 five Medicare treatments -- five treatments are not being 3 paid for by Medicare. It's more like four. 4 5 MR. MILLER: So you're saying that you --DR. MEDOWS: So that needs to be addressed too, 6 7 right? MR. MILLER: You think that -- but what you're 8 9 saying, that they don't either say you can only do three or 10 you can do five and be paid for them, you're saying they 11 let you be paid for more than three, but they're only 12 authorizing four? 13 DR. GLICKMAN: No. What I'm saying is that each -- across the country, the fiscal intermediaries for 14 15 Medicare are paying differently. At some point, some were 16 paying five, and some were paying three, but if you were to 17 look at a national average, it was about four. So if you get five treatments and you submitted billing, you would 18 get paid for four of them. The most recent recommendation 19 20 from CMS was to only pay three times a week. 21 MR. MILLER: Regard -- with no exceptions, you 22 mean? 23 DR. GLICKMAN: And the only exception would be

just like they do in-center. If a patient is volume-

overloaded or hyperkalemic or -- and there's a couple other 1 2 indications for doing -- a medical indication for doing an 3 extra treatment a week. 4 MR. MILLER: Okay. 5 DR. MEDOWS: That needs to be updated to reflect what we believe to be the more appropriate managed care, 6 7 right? 8 DR. GLICKMAN: Yeah. 9 MR. MILLER: Okay. Well, Dr. Glickman, thank you 10 very much. This was, I think, extremely helpful for us. 11 We appreciate you sharing your expertise with us. 12 If you have any follow-up thoughts afterwards 13 that occur to you, don't hesitate to just send them on. 14 They don't have to be in any kind of fancy form, but if you 15 think one more thing I thought of, that would be certainly, certainly welcome. 16 17 But, other than that, thank you for the time 18 today. 19 DR. GLICKMAN: Oh, you're welcome. 20 DR. MEDOWS: Thank you. 21 Thank you all. MR. MILLER: 22 DR. BAILET: Thank you. 23 [Whereupon, at 1:34 p.m., the conference call 24 concluded.]