Dialysis in Nursing Homes and Residential Care Facilities: In 2017 and Beyond

Speakers

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Disclosures

- Ms. Markovich and Ms. McMullen work for companies that provide dialysis in nursing homes
- Ms. Payne works for a consulting company that has provided guidance to companies that wish to provide dialysis in nursing homes
Objectives:
- Describe dialysis as provided in long term care (LTC) facilities
- Identify drivers for providing dialysis in LTC facilities
- Discuss regulatory challenges applicable to providing dialysis in LTC facilities
- Describe payment challenges of providing dialysis in LTC facilities
- Recognize current and future trends in the provision of dialysis in LTC facilities

To Be Clear:
- This session is about dialysis in nursing homes
- Not about dialyzing nursing home patients in an outpatient center
- Acronyms we will use interchangeably:
  - LTC: Long term care
  - NH: Nursing home
  - SNF: Skilled nursing facility

What Does Dialysis in LTC Look Like?
1. Structure/Space
2. Staffing
3. Treatment schedules
4. Care Coordination
5. Patient outcomes
1. Structure/Space
- Bedside treatment
- Bariatric patients
- Ventilator dependent patients
- Isolation patients
- Dialysis suite: multiple treatment stations in one room
- Allows staffing economies
- Social advantages for the patients
- Financial “discounts” for the SNF

Structure/Space:
- Space is always at a premium
- Significant storage required
- Regulatory issues with construction
  - In some states, if you spend more than $25,000, the state has to give approval
  - Plumbing/electrical inspections
  - May also require a surveyor visit prior to treatments being provided
- Health Department
- Architectural regulatory agencies

2. Staffing
- Bedside
  - 1:1
  - 1:2 max
- Dialysis suite
  - 1:2 to 1:4
- Payment for staffing:
  - Labor upcharge to the SNF; varies with the ratio
Staffing Considerations

- Requires experienced dialysis staff (RN, MSW, RD, and Techs)
- Fluctuation in census = frequent changes in staffing needs
- Ongoing communication between direct care givers and SNF is critical
- If SNF staff do the treatments
- Training and supervision
- Frequent turnover = retraining

3. Treatment Schedules

- Daily (i.e., 5 X week)
  - NxStage therapy
  - Usually shorter treatment times (average 2.5-3 hours)
  - Recuperation time shorter: ~1-2 hours post treatment
- Conventional (3 X week)
  - Traditional dialysis (3 to 5 hours 3 times a week)
  - For many patients, lower frequency is more desirable
  - Recuperation time longer: ~12-24 hours post treatment

4. Care Coordination

- Admissions
- Education
- Provision of Care (fluid management, weights, transportation to dialysis suite, complications post treatment, administration of phosphate binders)
- Care planning
- QAPI
**Admissions**
- SNF and dialysis provider market to referring hospitals
- Present the program and patient benefits of more frequent therapy
- ESRD qualifications for therapy
- Admissions process
  - The dialysis provider cannot accept the patient until the SNF does
  - Insurance coverage for dialysis therapy must be verified for both the SNF and the dialysis provider

**Education: For Patients and LTC Staff**
- **Patients**
  - Modality education
  - Required topics from CfC
- **LTC Staff**
  - Education on CKD
  - Specific therapy education
  - Extensive if LTC staff are responsible for delivering dialysis treatment

**Provision of Care: Fluid Management**
- LTC generally feel they cannot restrict fluids
- Less of an issue with 5 day/week therapy
- Can be an issue on weekends with 3x/week or Monday-Friday schedules
Provision of Care: Pre/Post Weights

- Establishing a target weight can be difficult
- Variety of scales
- Variety of methods of weighing patients
- Weights not collected

Provision of Care: Transportation to the Dialysis Suite

- Difficult to coordinate
  - Scheduled around resident meals
- Patient arrivals/departures may be significantly delayed
  - Impacts the patient’s other scheduled activities
  - Significantly impacts the providers productivity
  - Stresses the partnership between the SNF and the dialysis provider

Care Planning

- Survey expectation: the ESRD and LTC collaborate on the patient’s plan of care
- May need to include representation from LTC staff in the care planning team
- May need to coordinate input from the LTC SW and nutritionist
Surveyors may expect to see ESRD quality metrics shared with the LTC.

QAPI challenges for patients dialyzed in LTC settings:
- Acuity of patients
- Many require frequent hospitalizations
- Hospitals commonly do not administer ESAs
- Hospitals often will not transfuse a dialysis patient unless hemoglobin is < 7
- Higher catheter rates
- Higher mortality rates
- Higher infection rates

QAPI Challenges:
- Collaboration with SNF:
  - Providing oral meds
  - SNF may expect ESRD to provide meds
  - If medications are sent to the patient at the SNF, MUST coordinate with SNF
  - Patients are not allowed to keep their meds
  - Meds must be administered by the SNF
  - Giving binders with meals
  - Management of vascular access between treatments

5. Patient Outcomes, RRC, 9/13 to 9/16:
- Number of patients treated – 446
- Deaths - 121
- Discharges - 248
- Patients with < 3 months on dialysis – 140
- Deaths with < 3 months on dialysis – 27
- Average age of new patients with < 3 months of dialysis and died – 73.3 years old
- Average number of days til death new patients < 3 months on dialysis – 47 days
5. Patient Outcomes-ADC

### 5. Patient Outcomes--RRC

- **Anemia:**
  - Hgb: Mean 9.5, Average 9.5
  - Tsat: Mean 24, Average 27
  - Ferritin: Mean 765, Average 864
- **Adequacy:** Mean 2.27, Average 2.20
- **Ca:** Mean 8.9, Average 9.0
- **PO4:** Mean 4.1, Average 4.1
- **PTH:** Mean 227, Average 277
- **Albumin:** Mean 3.2, Average 3.1
- **AVF:** 36.7%
- **CVC > 90 days:** 39.5%

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### 5. Patent Outcomes-ADC

#### Baseline characteristics
- **n=6,314 patients**
- **Age (y), mean (range):** 70 (21-100)
- **Gender, n (%):**
  - Female: 2,984 (47%)
  - Male: 3,330 (53%)
- **Race, n (%):**
  - White: 3,614 (50%)
  - African American or Black: 2,240 (35%)
  - Other (Asian; Pacific Islander; American Indian/Alaska Native): 218 (3%)
  - Mixed Race: 54 (1%)
  - Unknown: 638 (10%)

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#### Baseline characteristics
- **n=6,314 patients**
- **Duration of Follow-up in Nursing Home**
  - Mean, mo: 9.6
  - Median, mo: 3.0
  - ≤90d, n (%): 3,253 (51.5%)
  - 90d and <1y, n (%): 1,616 (25.6%)
  - ≥1y, n (%): 1,445 (22.9%)
- **Albumin (g/dL), mean (range):** 3.2 (1.4-5.3)
- **Hemoglobin (g/dL), mean (range):** 10.0 (5.6-15.5)
- **Ferritin (g/dL), mean (range):** 957 (15-8,250)
Co-morbid Conditions

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<th>Condition</th>
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<th>2011</th>
<th>State</th>
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Mortality

- United States Renal Data System Annual Data Report
- Annual mortality rate for nursing home patients was 3.5 times higher than the general ESRD population.
- The survival rate at 6, 12, and 36 months is 85%, 76%, and 52%, respectively in the overall ESRD population, compared to 73%, 59%, and 31% in patients aged 75 and older.

### Table 2. Comparison of survival across studies of patients on dialysis

<table>
<thead>
<tr>
<th>Study Population</th>
<th>Number of patients</th>
<th>3-month survival</th>
<th>6-month survival</th>
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<td>Anderson et al, 1997</td>
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<td>June 1986-June 1996</td>
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<td>37%</td>
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<td>Garg et al, 1997</td>
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<td>June 1992 - Dec 1996</td>
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<td>Reddy et al, 2007</td>
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<td>2001 (Jan 2001 - June 2004)</td>
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<td>59</td>
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<tr>
<td>Yang, et al, 2016</td>
<td>118</td>
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<tr>
<td>2016</td>
<td>HD</td>
<td>NR</td>
<td>82%</td>
<td>74%</td>
<td>63%</td>
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</table>

NR, Not reported; HD, hemodialysis; PD, peritoneal dialysis
Mortality: Incident Patients


Mortality: Conventional vs. Daily Therapy

Yang, et al. 2017

Kaplan–Meier Survival Estimates

Mortality: Conventional vs. Daily Therapy

Compared to the conventional dialysis population, daily hemodialysis patients had similar or lower incident mortality rates.

Yang, et al. 2017
Mortality

“Elderly patients dialyzing in the nursing home center are more similar to the survival rates of the general population dialyzing in-center than the survival rates of previously reported nursing home dialysis patients, a rather remarkable milestone for this especially fragile population.”


Clinical Outcomes

- Incident
  - Mean Albumin
  - Mean Hemoglobin
  - Mean Ferritin
Clinical Outcomes

- Prevalent Population
- Mean Albumin
- Mean Hemoglobin
- Mean Ferritin

What Are The Drivers For Dialysis in LTC Facilities?

- Aging population
  - ”Baby Boomers” are nearing 70...
  - 10.5% of dialysis patients estimated to be in an institutional living setting
- Convenience for the patient
- Managed care may ask for this service
- Marketing tool for the LTC Facility
- Sanity: “40 patients being sent from one NH to dialysis…”
Aging Population

- As of July 1, 2015, 14.9% of the US population was over 65 years of age.*
- Older populations have more health problems...

*US Census Bureau

Convenience for the Patient

- No need to transport to an off-site dialysis facility
- Present to attend more therapy sessions
- Miss fewer medications and meals
- Able to participate in more activities
- More opportunity to visit with family
- Improved quality of life

Yang, et al. (2014)

LTC Facility Interest

- Useful for both long-term and short stay rehab populations
- May = increased census for SNFs
- Competitive advantage, differentiation of services
- Increased therapy minutes/improved revenue
- Fewer hospitalizations due to dialysis complications
- Decreased costs for transportation
- Improved patient satisfaction scores on LTC surveys
What Regulations Apply?

Federal
- Reimbursement regulations
- The current ESRD quality & safety regulations are silent on dialysis in nursing homes
- Official guidance is out-of-date

State
- Vary greatly from state to state
- From none
- To very specific

Federal Guidance for Dialysis IN LTC

Official: Survey & Certification Letters, 2004
- Based on “old” ESRD regulations
- Currently being updated
  - Potential release date of update: maybe “Spring 2017”
Survey & Certification Guidance, 2004

- Separate guidance for:
  - ESRD surveyors
  - LTC surveyors
- Major points:
  - ESRD surveyor expected to visit one or more LTC
  - Contract required between LTC/ESRD
  - Collaboration is expected
  - Infection control practices
  - Machine storage
  - Water treatment
  - Emergency equipment & response

Survey & Certification Guidance, 2004

Staffing requirements
- A qualified ESRD nurse is responsible for training patients/caregivers & LTC staff
- An appropriately trained caregiver provides monitoring of the patient during dialysis
- A licensed health professional “experienced in rendering ESRD care” is on duty to oversee dialysis
- Perform assessments, observe patients pre/post tx, respond to ER situations, administer injectable meds
- Full IDT provides care

Survey & Certification Guidance, 2004

- Patient Care Plans:
  - Individualized
  - ESRD IDT team responsible to develop plan and communicate with LTC to address patient needs
  - Coordinated with LTC care plan
- Patient Rights & Responsibilities:
  - Patient/family informed of options
  - Aware of grievance/complaint procedures
Survey & Certification Guidance, 2004

QAPI
- Patient outcomes are monitored
- Identified problems are addressed
- Incidents and accidents involving dialysis care in the LTC are reported to both the LTC and the ESRD

What Might New Guidance Include?

Draft Letter “released” in 2012:
- A qualified RN, LPN, or Certified PCT must be “present in the room” during dialysis.
- No more than 2 patients in a room where dialysis is done
- At least quarterly reassessment/plan of care
- MSW/RD communicate monthly with LTC staff/patient
- Care coordinator for each LTC dialysis patient
- Weekly audits of treatment records

What Might New Guidance Include?

Draft Letter “released” in 2012:
- Monthly face-to-face contact medical staff/patient
- Monthly home visits
- Quarterly competency checks for caregiver
- A qualified RN on site & available to respond throughout the treatment
- QAPI: compare aggregate outcomes of LTC patients with aggregate outcomes of in-center patients
What About State Regulations?

Important to consider all potentially applicable regulations:
- Nurse Practice Acts (NPA) (all 50 states have these)
- ESRD licensing regulations (~30 states have these)
- Home health (HH) licensing regulations (multiple states have these)

A Couple of Examples

**Texas**
- NPA: Only RN can assess
- ESRD licensing
- HH Licensing
- Must have if care is provided in the home
- Specific rules for HH with “dialysis designation”
- Only licensed nurses can provide dialysis

**Florida**
- NPA: specific language addresses home HD
- Allows non-professionals to give injectable meds as part of home dialysis
- ESRD licensing: No
- HH licensing: No

Survey Risks

- More frequent survey activity
- Annual SNF surveys
- Frequent SNF complaint surveys
- Could result in annual ESRD surveys
- Compliance challenges when using SNF personnel to provide care
Survey Risks

- Lack of understanding of this option by state survey agencies
- Acceptance of staff assisted home hemodialysis (SAHHD) programs varies from state to state
- Breaking news: CMS may limit service area to the state where the facility is located

Payment Challenges
Medicare Limitations

- To be paid by Medicare, program must be part of a facility certified for Home Training and Support
- Payment is limited to the PPS “Bundled Rate”
  - Payor mix with very high Medicare use rate
  - No payment for staff assistance
  - Home regulations require one machine per patient = large capital expense

Payment Issues

- Reimbursement for 5 treatments per week varies by intermediary
  - Each intermediary defines medical justification differently
  - Acuity level, age, co-morbid conditions are reviewed
- Intermediaries may withhold payment for all treatments until medical justification issues are settled
- Appeals process lengthy
- State Medicaid payment delays (varies by state)

Quality Incentive Program Effect

- QIP Scores may = 1.5-2% penalty applied to all Medicare patients
- Dialysis patients admitted to SNF post hospitalization, often have:
  - Low hemoglobin
  - Low albumin
  - Infections
  - Higher catheter use rate
  - Difficult to impact and improve
QIP Challenges

- Rapid turnover of patient population
  - 52% of patient population “gone” within 90 days:
    - Discharged home
    - Return to community dialysis facilities
    - Returned to hospital
    - Expired

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Private Insurance Challenges

- Many insurance companies unwilling to contract
  - Claim there are sufficient dialysis options available for care
- If willing to contract, they contract with rates similar to Medicare rates
- Medicare Advantage Plans paying at Medicare rate
- Managed Care Plans may pay directly to dialysis provider at a fixed rate
- Application process very lengthy (weeks to months) = lost admissions/revenue

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Medicare Billing: Can Be Complex

- LTC Coverage
  - Medicare pays the LTC for 100 days via Part A
  - Bill then goes to Medicaid or self pay
    - Patient may have to “spend down” to be eligible for Medicaid coverage of LTC
- Dialysis coverage:
  - ESRD benefit= Medicare continues via Part B
  - Provide bills Part B directly
  - Spend down not required
Current and Future Trends

Increased Number of Providers
- Small but growing niche for dialysis treatment
- Many states have no provider of nursing home dialysis
- SNF owners in those states frequently contact current providers seeking to provide dialysis in their SNF
- A different twist:
  - Traditional out-patient facility connected to SNF:
    - Allows patients to be more easily transported
    - Allows treatment of patients from the community
    - Requires home and in-center certification

New Machines
## Greater Number of Patients in Need

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<td>26,874</td>
<td>28,067</td>
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</table>

Incident counts of reported ESRD by age, sex, race, ethnicity, & primary cause of ESRD. All patients, U.S. and territories with unknown age dropped.

## Clear Guidance from State & Federal Regulators

- Hopefully in “the Spring...”

## Summary

- Body of evidence growing that home therapy results in better clinical outcomes and quality of life
- When asked, nephrologists and nurses say they would choose home therapy if they needed dialysis
- Providing SAHHD in SNF’s
  - Produces lower margins than outpatient therapy
  - Is an alternative dialysis therapy
  - Is showing significantly improved outcomes for this population
Questions?

References

- United States Renal Data System 2016 Annual Report