COVID-19: Considerations in the Home Dialysis Setting
Welcome and Opening Remarks

JEFFREY PERL, MD
Division of Nephrology
St. Michael's Hospital
Associate Professor of Medicine
University of Toronto
@PD_Perls
Jeffrey Perl

• Has received speaking honoraria from Astra Zeneca, Baxter Healthcare, DaVita Healthcare Partners, Fresenius Medical Care, Dialysis Clinics Incorporated, Satellite Healthcare

• Has served as a consultant for Baxter Healthcare, DaVita Healthcare Partners, Fresenius Medical Care, and LiberDi
National COVID-19 Dialysis Patient Data as of April 8, 2020

<table>
<thead>
<tr>
<th>National COVID-19 Dialysis Patient Data</th>
<th>Last Update: 04/08/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>COVID-19 Positive (+) Patients</td>
</tr>
<tr>
<td>Patients Admitted to Hospital/ receiving treatment in hospital</td>
<td>COVID-19 Positive Patients receiving treatment in outpatient facility</td>
</tr>
<tr>
<td>2738</td>
<td>1206</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

based on a total 537,929 ESKD patients receiving treatment as of April 8, 2020
National COVID-19 Dialysis Patient Data by State as of April 8, 2020

based on a total 537,929 ESKD patients receiving treatment as of April 8, 2020

* Please note the CMS cell size suppression policy sets minimum thresholds for the display of CMS data. The policy stipulates that no cell (e.g., admissions, discharges, patients, services, etc.) containing a value of 1 to 10 can be reported directly. In addition, no cell can be reported that allows a value of 1 to 10 to be derived from other reported cells or information. For example the use of percentages or other mathematical formulas that, in combination with other reported information, result in the display of a cell containing a value of 1 to 10 are prohibited. The cell suppression policy also applies to the reporting of excluded cases.

CMS standards for minimum cell sizes aim to protect the confidentiality of Medicare and Medicaid beneficiaries by avoiding the release of information that can be used to identify individual beneficiaries. The policy applies to any output in tables and texts describing any of the following: beneficiaries, procedures, and diagnoses. The CMS policy applies to the use of CMS research identifiable files (RIF) and limited data sets (LDS). Any documents (manuscript, table, chart, study, report, etc.) created using CMS data must adhere to the minimum cell sizes set forth in this policy.
Advantages of Home Dialysis Compared to Facility-based HD During the COVID-19 Pandemic

- Less frequent trips to the dialysis clinic
- Fewer interactions with healthcare workers
- Better able to adhere to social distancing measures
Optimal infection prevention and control practices

- PPE shortages and PPE conservation strategies
- Management of COVID-19 positive home dialysis patients
- A credible, timely and evidence-based source of information
- Collaborating with the CDC
Lower the risk of exposure through support for the home-based ESKD Care:

• Remove barriers increase home-based care

• Reduce the spread of COVID-19 and make patients more resilient in the future

• Ensure safety and high-quality care for existing home dialysis patients

Advocacy: David White : https://www.kidneynews.org/
Home Dialysis Subcommittee

Education:

- Use of PD for acute kidney injury
- Urgent start PD pathway
- Telemedicine/Telehealth strategies

David White: https://www.kidneynews.org/
Home Dialysis and COVID-19 Disease

SUZANNE WATNICK, MD, FASN
Chief Medical Officer, Northwest Kidney Centers and
Professor of Medicine, Division of Nephrology, University of Washington

JAYSON HOOD, RN
Clinical Director for Home Dialysis
Northwest Kidney Centers
Late on Friday evening, February 28th 2020, we were informed of the first reported patient death from COVID-19. He was our dialysis patient.
Three Guiding Principles

• We have an obligation to provide dialysis to our patients
  • If stable, we will provide service in the outpatient setting

• We make best effort to lean into the known science
  • Keep patients and staff safe, provide effective care with appropriate personal protective equipment (PPE) for respiratory illness

• We will provide leadership
  • Through transparency, communication and support
Patient entry & screening

• We understand that our practices may differ from yours
• We partnered with our local community public health officials and CDC to develop our process
• Recognize that above all, the community is providing:
  • Safe and effective care to our patients
  • Safe environment for our staff
Patient entry & screening

• Messaged to patients - contact us ahead of time with symptoms
• Does patient need to come to clinic? If yes:
  • Optimally avoid contact with patients
  • Screen for symptoms - Fever, new cough, new SOB, sore throat
  • If symptoms, brought back immediately, not in waiting area
    • Surgical mask for patient, Modified droplet contact for staff caring for patient
Staff Screening

- Same screening as patients, same as in-center HD staff
- If positive screen, refer for COVID-19 testing by PCP
  - Allows for more rapid return to work
- If positive COVID-19, return to work if:
  - 72 hours since asymptomatic and at least 7 days since symptoms started
Development of Organizational Change

• Home patients
  ‘Quick Visits’ Established
  • Get supplies
  • Get bloodwork drawn
  • Medication Administration
  • HHD Patients send Blood directly to Lab

Monthly Phone Assessments
• Contact via telephone or telehealth
Rapid Resource Acquisition

• PPE
  • Issues around sourcing
  • Creative solutions
    • Masks
    • Bandanas

• Hand Sanitizer
Current State

• Training
  • Continued training using newly established infection control
• Increased Home Visits for Deliveries
  • Assist with vendor delivery COVID-19 policies
• Remote Care Management
  • Larger units to align with Social Distancing
    • Encourage clinic staff to work from home when possible
A Crisis Can Create Opportunity

• Telehealth has never stood up so quickly!
• New infection prevention & control policies could benefit patients in future (e.g. influenza prevention)
• Community is a remarkable resource - learning from everyone
Infection Prevention and Control in the Home Setting

SHANNON NOVOSAD, MD, MPH
Centers for Disease Control and Prevention (CDC)
Strategies to Optimize the Supply of PPE and Equipment

Personal protective equipment (PPE) is used every day by healthcare personnel (HCP) to protect themselves, patients, and others when providing care. PPE helps protect HCP from potentially infectious patients and materials, toxic medications, and other potentially dangerous substances used in healthcare delivery.

PPE shortages are currently posing a tremendous challenge to the US healthcare system because of the COVID-19 pandemic. Healthcare facilities are having difficulty accessing the needed PPE and are having to identify alternate ways to provide patient care.

CDC’s optimization strategies for PPE offer options for use when PPE supplies are stressed, running low, or absent. Contingency strategies can help stretch PPE supplies when shortages are anticipated, for example if facilities have sufficient supplies now but are likely to run out soon. These strategies can be considered during severe PPE shortages and should be used with the contingency options to help stretch available supplies for the most critical needs. As PPE availability returns to normal, healthcare facilities should promptly resume standard practices.

Key Concepts

HCP and facilities—along with their healthcare coalitions, local and state health departments, and local and state partners—will have to work together to develop strategies that identify and extend PPE supplies, so that recommended PPE will be available when needed most. When using PPE optimization strategies, training in PPE use, including proper donning and doffing procedures, must be provided to HCP before they carry out patient care activities.

Reporting PPE Shortages

- If your facility is concerned about a potential or imminent shortage of PPE, alert your state/local health department and local healthcare coalition, as they are best positioned to help facilities troubleshoot through shortages.
  - Link to identifying your state HAI coordinator: https://www.cdc.gov/hai/state-based/index.html
  - Link to healthcare coalition/preparedness: https://www.phe.gov/Preparedness/planning/hpp/Pages/find-hc-coalition.aspx
**Strategies to Optimize the Supply of PPE and Equipment**

- All facilities should begin using PPE contingency strategies now
  - Includes PPE used by staff during care of home dialysis patients and PPE used by home dialysis patients

- Facilities experiencing PPE shortages may need to consider crisis capacity strategies, which must be carefully planned before implementation

- As PPE becomes available, healthcare facilities should promptly resume standard practices

- When using PPE optimization strategies, training on PPE use, including proper donning and doffing procedures, must be provided to staff and patients before they carry out care activities
Use of Masks During PD Exchanges

- Patients wear facemasks during PD exchange to reduce the risk of contamination of the PD catheter while the transfer set is open.

- In countries such as the UK, it is not usual practice for patients and nurses to wear mask during a PD exchange unless upper respiratory tract symptoms are present (i.e. sneezing, coughing).

- 2016 International Society for Peritoneal Dialysis Guidelines
  - Wearing masks is optional

Optimizing PPE Used by Patients and Care Partners During PD Exchanges

- Have discussions with patients and care partners about mask conservation strategies

- Consider mask re-use for extended period unless visibly wet or soiled

- Discuss performing exchanges without masks if no respiratory symptoms are present
  - Could reserve several masks for use during periods of possible future respiratory symptoms
Home Visits: Staff Screening and Face Coverings

- Ensure staff who perform home visits are included in staff education efforts and know to monitor themselves for fever and symptoms suggestive of COVID-19 (e.g., cough, shortness of breath, sore throat, myalgias, malaise)

- If active symptom monitoring is being performed at the facility, ensure staff who perform home visits are included

- If staff have fever or symptoms, they should not be coming to work

- Staff should wear face coverings when performing home visits
  - Use of face coverings for source control doesn’t replace need to wear PPE when indicated
Home Visits: Patient Screening and Face Coverings

- Staff should call prior to arrival to confirm if someone in the home has fever or symptoms suggestive of COVID-19 (e.g., cough, shortness of breath, sore throat, myalgias, malaise)
  - They should also ask if anyone in the home has been told they have suspected or confirmed COVID-19
- On arrival, staff should ask about anyone in the home with fever, symptoms, or suspected or confirmed COVID-19
- If anyone in the home screens positive, consider delaying the visit if safe to do so
  - If not able to delay visit, staff should wear all appropriate PPE
- Everyone in the house should wear a face covering (if tolerated) during the entire visit
Home Visits: PPE and Hand Hygiene

- Ensure staff have needed supplies including hand hygiene supplies such as alcohol based hand sanitizer with 60-95% alcohol for use during and following home visits
- Home health staff should don appropriate PPE immediately upon arrival at the patient’s home
- A lined trash receptacle should be placed near the exit door of the residence for disposal of PPE
- PPE should be selected according to the clinical care activities being performed and taking into account whether anyone in the home has fever, symptoms, or suspected or confirmed COVID-19
  - If anyone in the house has fever, symptoms, or suspected or confirmed COVID-19, staff should wear eye protection (goggles or faceshield), an N-95 or higher-level respirator (or a facemask if respirators are not available or staff are not fit-tested), gown, and gloves
  - If no one in the house has fever, symptoms, or suspected or confirmed COVID-19, staff should at a minimum wear a facemask or face covering
    - Use of face coverings for source control doesn’t replace need to wear PPE when indicated
Home Visits: Environmental Cleaning and Disinfection

- Provide EPA-registered disposable disinfectant wipes so that high touch surfaces and equipment can be wiped down

- As much as possible, dedicate equipment to clients and limit the equipment that is used for multiple home visits

- If equipment cannot be dedicated to a client make sure it is cleaned and disinfected prior to a shift and following each visit according to manufacturer’s instructions
  - If equipment cannot be cleaned and disinfected, it should be discarded
Considerations for Home Dialysis

- Dialysis is a lifesaving therapy and patients cannot postpone treatments

- Home dialysis routines should continue as usual
  - Patients should continue to check access sites for signs of infection and keep treatment areas clean
  - Continue to dispose of effluent as currently instructed

- Dialysis facilities are encouraged to increase the use of telephone management and other remote methods of care
  - Visits by telephone, secure text monitoring, video appointments, or telemedicine may be used to reduce exposure
Delivery Safety

- Deliveries should be accepted without in-person contact whenever possible
  - Have them left in a safe spot outside your house, with no person-to-person interaction
  - Otherwise, stay at least 6 feet away from the delivery person
- After receiving deliveries, wash hands with soap and water for 20 seconds. If soap and water are not available, use a hand sanitizer with at least 60% alcohol
- Consider providing a larger supply of medicines so patients do not have to visit the pharmacy as often
  - Encourage patients to consolidate orders and pick up all prescriptions at the same time
  - Encourage patients to call prescription orders in ahead of time
  - Use drive-thru windows, curbside services, mail-order, or other delivery services

Considerations for Patient Education

- Provide information about COVID-19
  - Inform patients they are at high risk
- Provide education about hand hygiene, respiratory hygiene, and cough etiquette
- Remember to instruct patients to wear a face covering prior to leaving their home
  - This will include any medical appointments as well as any outings within the community
- You may need to spend some time re-educating patients and caregivers on hand washing technique if hand sanitizer shortages are an issue
- Provide instructions on cleaning and disinfecting the home
- Provide facility contact information
Tools for Patient Education

Cleaning And Disinfecting Your Home

- Avoid touching your face.
- Wash your hands often with soap and water or use an alcohol-based hand sanitizer. People should wash their hands with soap and water for 20 seconds.
- Stay home if you are sick.
- Cover your mouth and nose with a tissue when you cough or sneeze. If you do not have a tissue, use your sleeve or a tissue. Do not put fingers or other objects in your mouth. Clean your hands with soap and water or use an alcohol-based hand sanitizer immediately after touching your nose, mouth, and/or eyes.

Coronavirus Disease 2019 (COVID-19)
Keeping Patients on Dialysis Safe

What is COVID-19?
Coronavirus disease 2019 (COVID-19) is a respiratory illness that can spread from person to person, similar to influenza.

Take Everyday Precautions
- Wear a face mask when you are out.
- Avoid close contact with people who are sick.
- Wash your hands frequently, using soap and water for at least 20 seconds.
- Avoid touching your eyes, nose, and mouth.

Setting up your home
- Wear a face mask in your home, including when you are cleaning or doing chores.
- Avoid close contact with other people, even when you are at home.
- Avoid crowds and large gatherings.
- Cover your mouth and nose with a tissue when you cough or sneeze.
- Clean and disinfect frequently touched objects and surfaces like doorknobs, light switches, and countertops.

Preparing the facility
You may see changes as the dialysis facility prepares to keep you safe during treatment.

Preparing your home
- Avoid touching your face.
- Wash your hands often with soap and water or use an alcohol-based hand sanitizer.
- Avoid close contact with people who are sick.
- Wear a face mask when you are out.
- Avoid crowds and large gatherings.
- Clean and disinfect frequently touched objects and surfaces like doorknobs, light switches, and countertops.

CDC COVID-19
Regulatory Guidance for Home Dialysis in the COVID-19 Crisis

JEFFREY SILBERZWEIG, MD
Co-Chair, COVID-19 Response Team
American Society of Nephrology
Chief Medical Officer
The Rogosin Institute, New York, NY
Weill Cornell Medical College
Practice Across State Lines:

• A licensed professional may practice across state lines if they have an equivalent license from another State and:
  • They are not affirmatively barred from practice in that state
  • There is no law in that State prohibiting practice across State lines
CMS Waivers
March 22, 2020

• QIP Waivers:
  • If data from Q4 2019 is not submitted, penalties will not be assessed; data from Q1-3 will be used to calculate 2019 payment and performance
  • If Q1 2020 data is not submitted, penalties will not be assessed; data from Q2-4 will be used to calculate 2020 payment and performance
• CROWNWeb reporting deadlines are suspended for January through June 2020
CMS Waivers
March 28

• Delay of patient assessments for initial and follow up comprehensive assessments within 30 days of admission and 90 days later

• Home dialysis machines may be used for more than one patient with proper cleaning between patients
CMS Waivers
March 28
Telehealth

• CMS is waiving the requirement for monthly in-person visit if the patient is considered stable and is recommending use of telehealth to ensure patient safety.

• Periodic dialysis home visits to assess adaptation and home dialysis machine designation are waived.

• CMS has waived the requirement for telehealth to be initiated from any specific location.

• If two-way videoconferencing is not available, some consult codes can be billed but will be paid at a lower rate than videoconferencing.
CMS Waivers
March 30, 2020

• CMS has issued blanket waivers of sanctions under the physician self-referral law

• Facilities with home programs may open nursing home programs without additional survey.

• Facilities can add home programs by completing forms if a patient is trained or being trained by the program; change requires a survey.

• CMS issued guidance that vascular access and PD catheter procedures are not elective procedures

Open Questions

• What about monthly labs for home dialysis patients?
  • Question asked many times; no clear answer provided

• Transportation waivers:
  • Need clarification that ambulance transportation will be permitted
  • Need clarification that no one will be prosecuted under Stark laws or anti-kickback statutes

• Telehealth:
  • Continued advocacy for equal payment for telephone services if two-way video conferencing is not available
Open Questions

• Facility Surveys
  • CMS has stated that they will continue to perform safety surveys
  • They have indicated that their focus will be infection prevention

• Training for Home Dialysis:
  • Will CMS waive the rule barring payment for home dialysis for patients with acute kidney injury; i.e., patients started on PD for AKI who wish to continue after hospital discharge?
  • Will CMS provide payment for partners to perform home dialysis?
Telemedicine and Cohorting: Considerations in the Home Dialysis Settings

MARTIN J SCHREIBER, MD
Chief Medical Officer
DaVita Home Modalities
TELEMEDICINE AND COHORTING: CONSIDERATIONS IN THE HOME DIALYSIS SETTINGS

- Telemedicine Hurdles and Effective Strategies
- Home Cohort Management

The views and opinions expressed in this presentation are those of the speaker in this evolving pandemic and do not necessarily reflect the official policy and positions of DaVita.
## Dialysis Organization Telehealth Summary

<table>
<thead>
<tr>
<th>Platform</th>
<th>DaVita</th>
<th>FKC</th>
<th>Satellite</th>
<th>US Renal</th>
<th>DCI</th>
<th>NKC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consent Required</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Population</td>
<td>PD/HHD/ICHD</td>
<td>PD/HHD/ICHD</td>
<td>HHD/PD ICHD</td>
<td>PD/HHD/ICHD</td>
<td>PD/HHD</td>
<td>PD/HHD</td>
</tr>
<tr>
<td>Functionality</td>
<td>Multi-way video visits, secure messaging, scheduling, educational resources</td>
<td>Multi-way video visit, patient scheduling</td>
<td>Multi-way video visits, document sharing, reminders</td>
<td>Multi-way video visits</td>
<td>Multi-way video visits, scheduling, separate system for document sharing</td>
<td>Multi-way video visits</td>
</tr>
</tbody>
</table>

### Platforms
- **DCC™/ WebEx**
- **Microsoft Teams**
- **Doxy.me**
- **Google Duo**
- **Zoom**
- **WebEx**
DaVita Care Connect™ for Home Modalities

• Multiparty inter-disciplinary, plus family/caregiver video chat (up to 10 parties)
• Secure messaging and photo sharing
• Scheduling and appointment reminders
• Educational resources

DaVita has a telehealth platform for home dialysis patients that is HIPAA compliant, has multiple patient engagement features, and is scalable after the COVID-19 response
COVID-19 Accelerate Virtual Care*

1) Includes visits with the patient, care team and/or physician
2) % of total Falcon Silver monthly TH encounters

*DaVita Home Telehealth Growth
Telehealth: Potential Use Cases

- Avoid unnecessary patient visits to home program per medical director
- Increase nurse, social worker and dietitian video visits w/patient
- Remote physician interaction with a patient in the home or at monthly lab draws when in unit
- Post training assessment
- Video assessment of vascular access and PD catheter exit site
- Interdisciplinary Team rounds
- Training on Home days (cohort positive unit, patient negative)
- WebEx for CKD education
Practical considerations in conducting a telehealth visit in the COVID-19 pandemic.

• Is the patient stable?
• Is the viral exposure risk high?
• How would you rate the patient’s issue as high complexity?
• Does the problem warrant a physician: F-F/exam/testing?
• Is telehealth the best option for the individual patient in his/her geography?
• Consider what constitutes a visit if seen in the office
• Can you evaluate the issue confidently remotely?
• Does the patient / care partner have a smart phone, internet?

...............if not telephonic?
Telehealth Challenges & Lessons Learned

**Infrastructure**
- System not **designed** for sudden significant increase in access,
- **Lesson Learned**: comprehensively review of all infrastructure capacity, system alerts, and internal IT communications for system

**Support Desk**
- Significant uptick in **service desk calls** in light of DCC™ expansion. Needed to quickly bring in and train additional resources
- **Lesson Learned**: sharpen your service desk job aids and resources and establish frequent touchpoints on incident trends

**Enhancements & Reporting**
- Platform **enhancements** took on heightened importance as DCC™ use expanded. Demands for more refined and localized reporting also became a priority
- **Lesson Learned**: daily communication between business and IT partners to document, discuss, and reconsider development-related priorities
What is and the Why for Cohorting: Home Patients?

• “Use of a dedicated team to care for patients infected with a single infectious agent in a specific geography” ..........................COVID-19
• Minimizes exposure, both patient and healthcare team, to COVID-19
• Infection control whenever possible
• Team focuses on specific populations warranting PPE
• Cohorting allows teams to “focus care”
Visits types to consider for Home Dialysis Patients

1. New Patient Training
2. Lab Draws
3. Home patient urgent need such as infection, catheter complication, etc.
4. Initial Home Visit
5. Medication Administration
6. Routine Patient Maintenance
7. After-hours Support
HOME COHORT MANAGEMENT

When a visit to the clinic is absolutely needed*:

- Visits during specific timeframe when in-center is dialyzing COVID+ or PUI patients ..........
- Potential suggestions for **Urgent TTS visits** (co-joined unit)
  - Have patient travel temporarily to another home program (<90 mins one way)
  - Meet patient at local non-COVID/non-PUI in-center facility that has an open exam room
  - Consider using waiver: Special Purpose Renal Dialysis Facilities (SDRDF)
  - Consider home visit with full PPE
  - Consider working with another local service provider

* Possible examples: Active peritonitis (post po bridge therapy), catheter dysfunction/poor drain/hole, painful draining CES infection, SOB with increase wt. and decrease UF etc.
Challenges

• Finding the **right balance** between unique Home patient needs and how to operationally scale the guidance.

• The strength of cohort guidance is only as strong as the **field team** executing against those guidelines.

• Ability to leverage **in-center HD operations** to treat Home patients, when necessary.

• Identifying **new locations as needed** for alternate sites of care.
Summary

- COVID-19 has accelerated the adoption of virtual practices across all providers to improve patient safety and reduce the risk for viral transmission.
- During COVID-19 a number of CMS waivers have been released easing limitations on telehealth use.
- The Care Model for providing Home Dialysis will be recreated post COVID-19.
- Cohorting is essential to focus care and minimize exposure.
- Decisions regarding the optimal approaches to cohorting reflect the available local options and viral transmission risk.
Questions

DARLENE RODGERS, BSN, RN, CNN, CPHQ
Nurse Consultant
American Society of Nephrology (ASN)
Closing Remarks

JEFFREY PERL, MD
Division of Nephrology
St. Michael's Hospital
Associate Professor of Medicine
University of Toronto