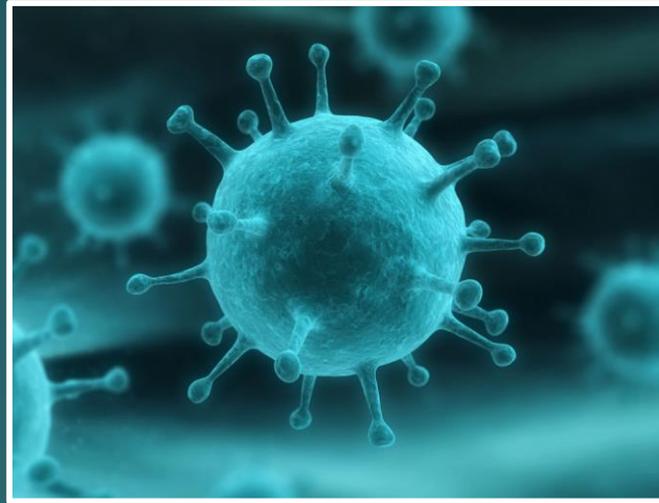


# COVID-19

An End Stage Renal Disease (ESRD) National Coordinating Center (NCC)  
Professional Education Quickinar

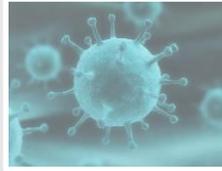


August 19, 2020

COVID-19 = Coronavirus Disease 2019



# Agenda



- What is this call about?
- Today's speaker:
  - Ashutosh Shukla, MD  
Associate Professor, Director of Advanced CKD Program,  
Director of Home Dialysis Program, University of Florida
  - Topic: Home Dialysis in COVID-19 Pandemic: A Bittersweet Combo
- Questions and Answers (Q&As) from chat and Q&A panels

CKD = chronic kidney disease

# What Is This Call About?



- Hear from stakeholders and peers in the ESRD community who are adapting to COVID-19.
- Share examples and provide real-world strategies for facilities to use.
- Engage in weekly calls on varying topics.



Ashutosh M Shukla, MD  
Associate Professor  
Director of Advanced CKD Program  
Director of Home Dialysis Program  
University of Florida

# Home Dialysis in COVID-19 Pandemic 'A Bittersweet Combo'

# Outline ...

- **Advantages of Home Dialysis in COVID-19 Pandemic**
  - A majority of discussion will focus on PD, with few areas for difference for HHD
- **Concerns and Cautions for Home Dialysis**
- **Practice of Home Dialysis in COVID-19 pandemic**
- **Departing words...**

# Epidemiology of COVID-19 in ESRD

- **ESRD is a high-risk population for COVID-19 related complications**
  - Multiple comorbidities
  - Immunosuppression
  - Frequent need for medical care...

# Epidemiology of COVID-19 in ESRD:

No well-published studies; Most data available from cohorts

- Incidence rate: reported between 2.5%~15–20%
- Wide range of symptoms
- High incidence of milder disease/asymptomatic carrier
- Data on clearance is not encouraging
  - Evidence for longer persistence of virus
- High mortality, about 30%
  - In many cases, mortality is preceded by rapid deterioration
- Overall lower reports on home dialysis

# Advantages of Home Dialysis in COVID-19 Pandemic

- Avoids the recurrent visits to healthcare facility
- Limited exposure to other vulnerable groups
- Limited exposure to the healthcare workers
- Independence of lifestyle

# Goals/Concerns of Home Dialysis in COVID-19 Pandemic

## Goals of Care

- Safety of the patients, staff, and facility
- Establish efficient triaging and reporting roles
- Ensure that the facility continues to provide the highest standards of care

## Pragmatic concerns

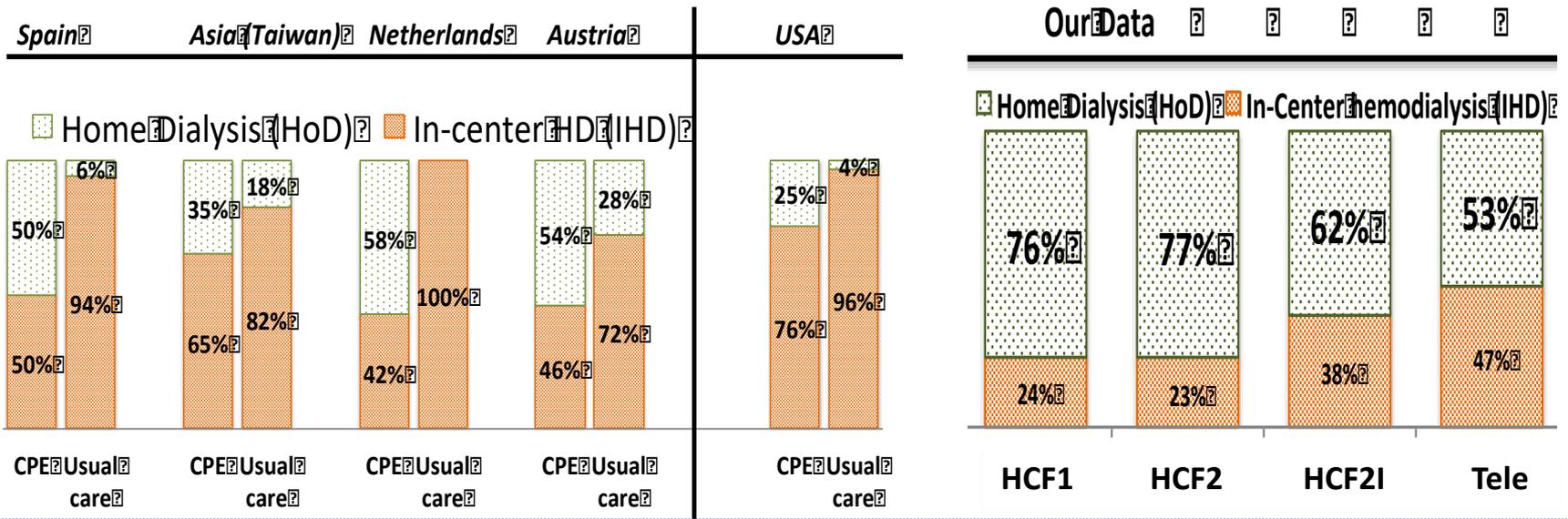
- Provision of the care
  - Initiation of home dialysis
  - Routine follow-up care of home dialysis
  - Special procedures and labs
- Maintaining the supplies
- Social and economic burdens
- Staffing issues

# Considerations for New Patient Initiation ...

- **Selection: Patient Education**
- **Pre-initiation procedures: Catheter Insertion or Fistula creation**
- **Training: PD or HHD training**

# Considerations for New Patient Initiation ... Patient Education

- When provided with a comprehensive education (CPE), it appears that about 50% of patients prefer some form of home dialysis



# Considerations for New Patient Initiation ...

## Patient Education

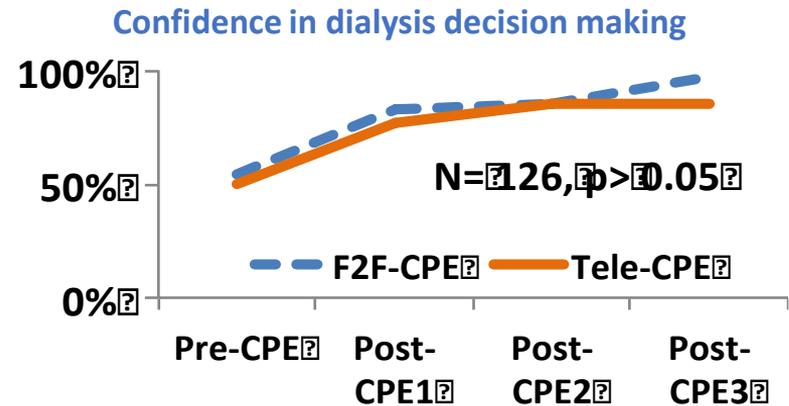
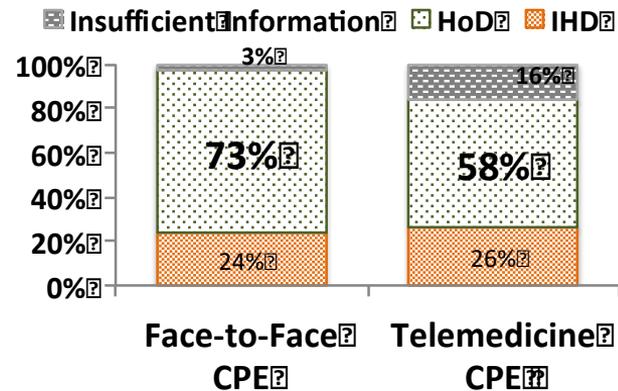
- **Kidney Disease Education (KDE) utilization is low in CKD**
  - Nearly half of all incident ESRD do not have renal care
  - Few practices provide KDE to all patients
  - KDE is commonly provided to patients with higher likelihood of starting home dialysis
- **One of the earliest things that got sacrificed in the Pandemic!**

# Considerations for New Patient Initiation ... Patient Education

- Unfortunately, home dialysis without education is unlikely ...
  - Force of practice keeps churning out more IHD
- Keeping education alive in COVID-19 pandemic is important ...
- Telemedicine provides an optimal method for KDE in the current situations

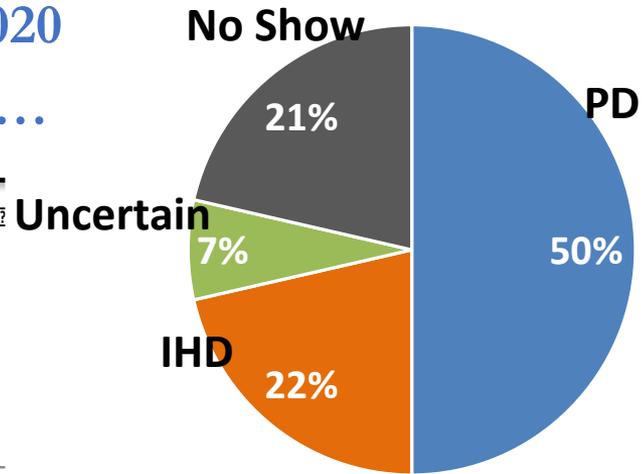
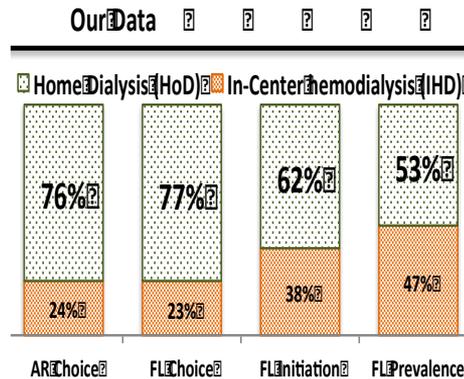
# Considerations for New Patient Initiation ... Patient Education

## Use of telemedicine in comprehensive pre-ESRD education



# Considerations for New Patient Initiation ... Patient Education

- Our experience during pandemic:
  - All activities ceased on March 17, 2020
  - CPE program restarted April 23, 2020
  - Total numbers remain low till date...
    - 21% no show
    - 50% (63%) PD



# Considerations for New Patient Initiation ...

- Selection: Patient Education
- Pre-initiation procedures: Catheter Insertion or Fistula creation
- Training: PD or HHD training

# Pre-initiation Procedures: Catheter Insertion or Fistula Creation

- Most medical centers stopped non-urgent procedures in March
- By the end of March, CMS issued all dialysis related procedures as the essential procedures
  - Included specific instruction about the PD catheter insertion
- Our Center:
  - Close collaborations with PD catheter and vascular surgeon
  - Patients are referred as usual.
  - Dialysis accesses is an essential procedure/surgery.
  - No delay related to COVID-19

# Considerations for New Patient Initiation ...

- Selection: Patient Education
- Pre-initiation procedures: Catheter Insertion or Fistula creation
- Training: PD or HHD training

# New Patient Initiation ...

## Training: PD or HHD training

- **Though, PD training is easier than HHD**
  - We have no particular policies against training HHD
- **Training principles:**
  - Dialysis being essential services, trainings are not postponed
  - CAPD is usually shorter training
  - APD training should be flexible and hybrid
  - Use of telemedicine approaches for the educational component
  - Use of in-person clinic visits for the practical hands-on training

# New Patient Initiation ...

## Training: PD or HHD training

- Training practice:
  - All involved wear full PPE throughout the entire session in the facility
  - Treatment room terminal cleaned at the end of each day.
  - Cleaning crew should be educated for COVID-19 cleaning techniques, with extra attention to high touch areas
  - Additional training for the use of Video-assisted clinic visits (Zoom™)
- Home Visit:
  - Telemedicine home visit, approved by CMS
  - Unless conducted prior to training initiation, patient can be instructed on last day of training

# Goals/Concerns of Home Dialysis in COVID-19 Pandemic

## Goals of Care

- Safety of the patients, staff, and facility
- Establish efficient triaging and reporting roles
- Ensure that the facility continues to provide the highest standards of care

## Pragmatic concerns

- **Provision of the care**
  - Initiation of home dialysis
  - **Routine follow-up care of home dialysis**
  - Special procedures and labs
- Maintaining the supplies
- Social and economic burdens
- Staffing issues

# Routine Follow-Up Care of Home Dialysis:

- **Telemedicine vs. In-person visits**
- **Use/Reuse of PPE**

# Telemedicine vs. In-person Visits

- Many, if not most, patients on home dialysis can be efficiently managed with telemedicine
  - We routinely add the training of telemedicine visit on patient equipment in the initial trainings ...
- The intensity of follow up and need for in-person visit can be individualized
- CMS has facilitated expanded use of telemedicine
  - Telemedicine and Telehealth Toolkit for ESRD providers
- Use of remote monitoring can enhance the timely recognition of a new problem ...

# Payment Considerations ... Telehealth

- **Monthly visit:**
  - MCP modifications allow for 2 out of 3 visits to be done by telemedicine ...
  - Waiver for the part B copayments ...
  - Audio only telephone visits approved for the same rate as audio-visual (AV) visit,
    - We document that we can't establish the AV connection ...
  - HIPAA waiver for popular, i.e., 'Facetime™'
    - Doximity dialer allows for a HIPAA compliant visit
    - Follow your dialysis/healthcare facility guidelines

# Payment Considerations ... Telehealth

- Telehealth based training ...
  - Especially not labor oriented training ...
- Telehealth based home visit ...
- Monthly education ...
- Infection protocol reviews
- Supplies and technology-related issues

# In-person Visit to the Facility

- Preferably at least once every 3 months
- Patients who have difficulty connecting on video calls
- Patients with infectious complications
- Poor functioning of the access
- Patients with fluid or cardiovascular uncertainties
- Significant change from baseline
  - Large changes in weight, laboratories etc.

# In-person Visit to the Facility

- All triage procedures must be HIPAA-compliant
- Multi-step patient screening
  - Prior to arrival:
    - Patients check temperature and put on a mask regardless of symptoms before leaving home
    - Notify staff before arriving if febrile or symptomatic
  - Upon arrival:
    - Staff member near all entrances,
    - Waiting can be outdoors for all or symptomatic patients, if weather permits (at our clinic, the lobby waiting has been eliminated)
    - All patients/staff to wear facial coverings
    - Temperature measurements, if significant community transmission
    - Avoid or minimize caregivers, can wait outside in the vehicle if appropriate
    - Separate patient units by at least 6 feet in the waiting areas
    - Avoid mixing symptomatic and asymptomatic patients

# In-person Visit to the Facility

- **Screening staff**
  - Remain 6 feet from the patient until cleared
  - Wear face mask unless separated by a shield/glass barrier
  - Keep interactions brief
  - Use N95 or higher-level respirator, gloves, and, eye protection, if distance cannot be maintained
  - Should wear N95 respirator with shield while training ...
- **Screening protocol: patients, caregiver or staff ...**
  - CDC Questionnaire
  - Institutional Questionnaire
  - UF Health Questionnaire (Local surveys may be preferable)
  - Positive screening: requires negative test or 10 days without worsening to be admitted into the facility

# In-person Visit to the Facility: Our Protocol

- **Stand-alone Home-Only Unit**
  - All patients call upon arrival
  - Wait in the vehicle; No lobby waiting
    - Shared Units can use similar process for home patients to avoid mixing
  - Met by a staff at the entrance: All interacting members masked
  - Screen: Survey, temperature, and O<sup>2</sup> saturations (probe needs cleaning)
  - Post-screening direct to patient room
    - No huddling of the patients or providers
- **Monthly nursing visits: Usually kept brief**
  - Mainly used for Blood draws, IV meds
  - Education preferred over telehealth modality
- **Positive Screen:**
  - Inform provider
  - Tests through primary care or healthcare facility

# Goals/Concerns of Home Dialysis in COVID-19 Pandemic

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- **Maintaining the supplies**
- **Social and economic burdens**
- **Staffing issues**

# In-person Visit to the Facility: Special Procedures

- All care interactions outside clinic visit, require full PPE
- Special considerations can be developed for infrequently scheduled procedures:
  - PET test, Transfer set change
- QAPI/Care Plans—through telehealth to limit unnecessary staff contact
- Medicine pick ups:
  - Passive: no need for signature, 2 staff cosign ...

# Additional Nurse Manager Responsibilities:

- Weekly IC audits
- Stagger meal/break times to have no more than 1 staff in break room at a time.
- Utilize other rooms (conference rooms, empty offices, etc. or staff automobiles for breaks)
- Facilities are monitoring the CDC website for information and resources per CMS guidelines
- PUI (persons under investigation) and positive patients tracking
- Participate in public health and corporate webinars

# Goals/Concerns of Home Dialysis in COVID-19 Pandemic

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- **Staffing issues**

# Routine Follow-Up Care of Home Dialysis: PPE Supplies

- Weekly inventory counts of PPE for tighter control/track usage
- Order alternate products if available
- Consider reuse of the face mask and N95 respirator
  - More than 48 hours of period in-between reuse
  - Special techniques for cleaning and reusing across personnel

# Routine Follow-Up Care of Home Dialysis: Dialysis Supplies

- Lock-downs and stay-in orders can disrupt supply chains.
  - Many times it is similar to hurricane season but, here problems in remote areas can lead to loss of supply
- Restrictions in place for supply quantities
- Vendor approval to add 1 bottle of Alcavis and 1 box of masks to each patient's monthly order (Baxter, FMC)
- Transfer of supplies between sister clinics
- We advise at least 4 weeks supply on hand

# Goals/Concerns of Home Dialysis in COVID-19 Pandemic

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# Special Situations 1 ... Loneliness and Lack of Social Support Structure

- 36 yr. old woman with diabetes, depression, and ESRD on PD for 2 years, good residual renal function, prior history of non-adherence ...
- Did not want to come to clinic in March, not an unusual thing ...
- Intermittent phone calls with the nurse
- April 2020 nurse visit laboratory showed, increase in creatinine (12 → 19), reduced bicarb (23 → 12), feeling down,
  - Lost the job in hospitality, outpatient psychiatry closed due to COVID, children could not come back home, and eventually she stopped taking meds
  - Admitted to hospital with suicidal ideation, re-initiated on dialysis
  - Discharged 7 days later with full recovery with new psychiatry follow-up
  - Doing well after 4 months ...

# Special Situations 1 ... Loneliness and Lack of Social Support Structure

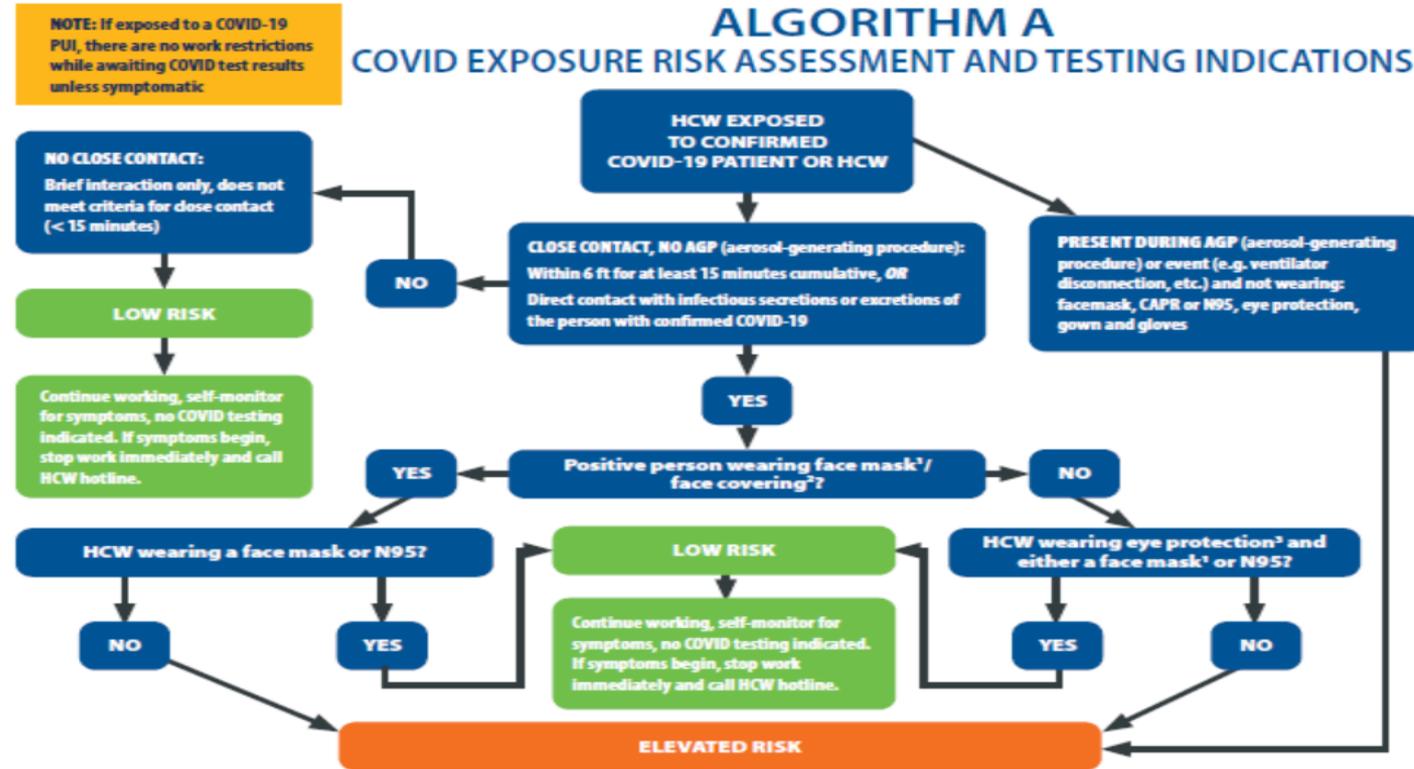
- Loss of income or job
- Decreased assessment of self-worth
- Isolation and depression
- Lack of medical support
- Lack of medications or copay amount ...

## Special Situations 2 ... Staff exposures

- Employees need screening every day prior to work
- Positive screens require testing
- Positive test require extended absence ...
- This can disrupt a planned work of the home dialysis unit

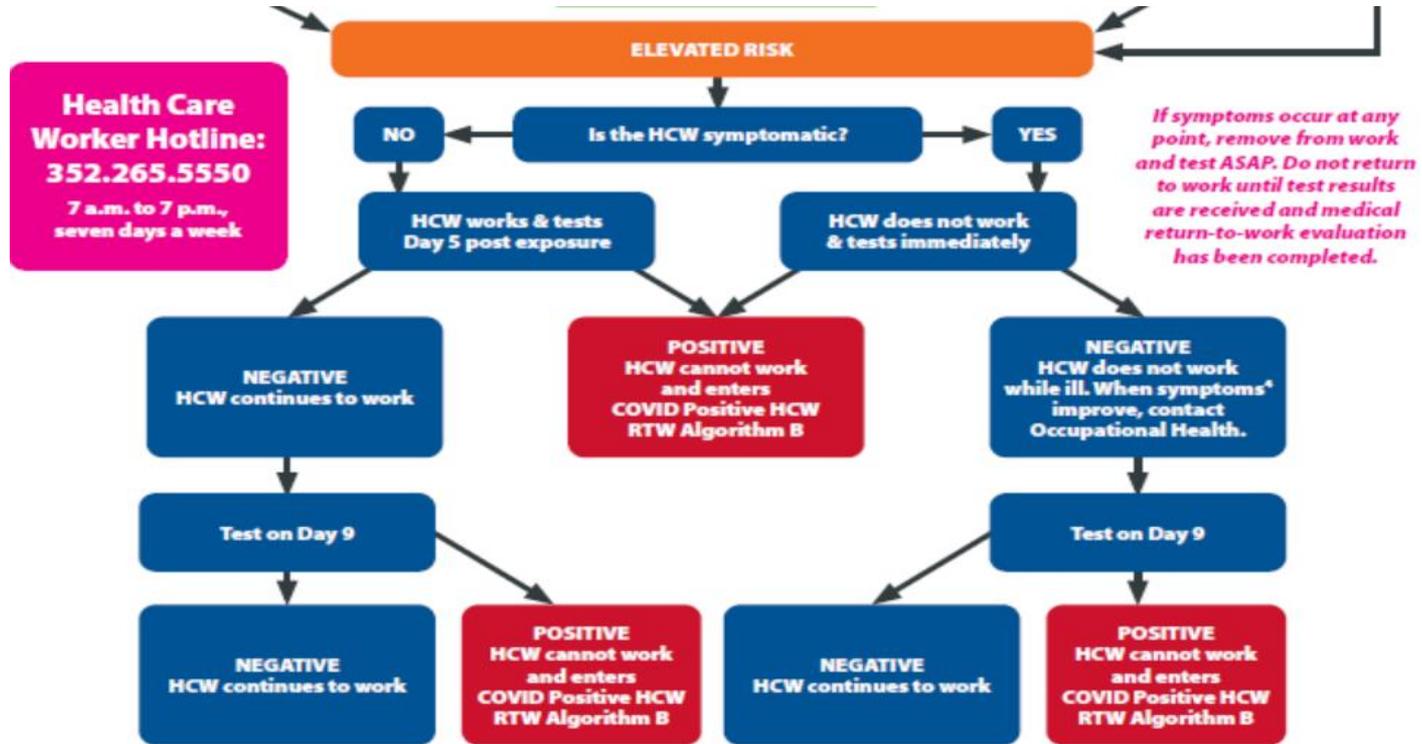
# Special Situations 2 ... Staff Exposures

Courtesy: Dr. Kartik Chherabuddi, MD  
UF Health COVID-19 Response team



# Special Situations 2 ... Staff Exposures

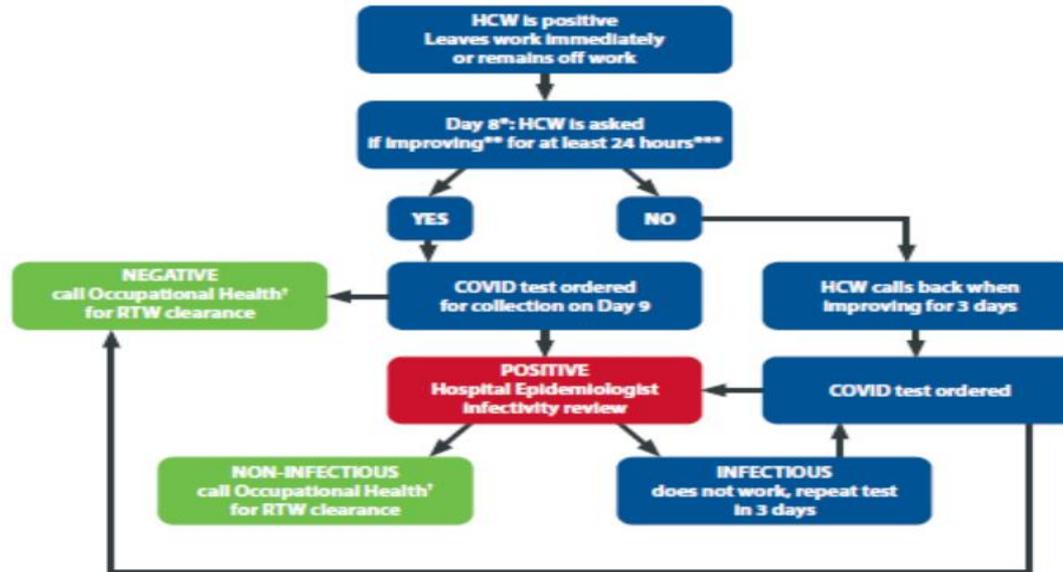
Courtesy: Dr. Kartik Chherabuddi, MD  
UF Health COVID-19 Response team



1 – Face mask: a medical grade mask; 2 – Face covering: cloth covering or mask; 3 – Eye protection: goggles, face shield or fluid shield mask, but not eyeglasses; 4 – Afebrile without antipyretics and improved respiratory symptoms for at least 24 hours.

# Special Situations 2 ... Staff Exposures

**ALGORITHM B**  
**COVID POSITIVE HCW RETURN-TO-WORK (RTW)**

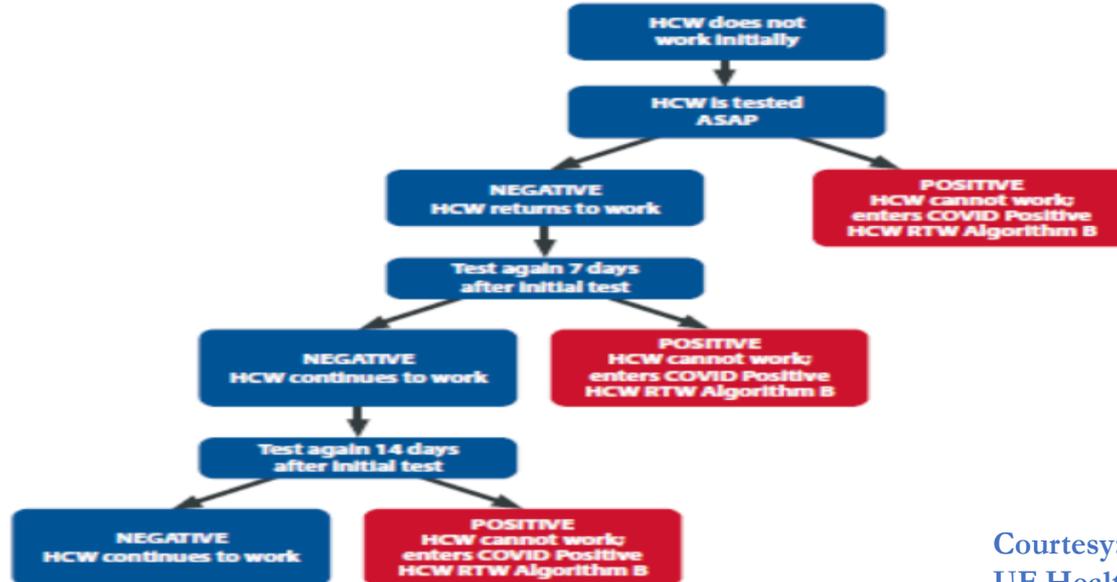


- \* Day 8 = 8 days from symptom onset or collection date of positive test, whichever is earlier
- \*\* Afebrile off antipyretics and improvement in symptoms
- \*\*\* The CDC suggests that at least 24 hours of improvement should elapse before RTW can be considered.
- † UF Health Shands Occupational Health: 352.594.4798 | UF employees: 352.294.5700

Courtesy: Dr. Kartik Chherabuddi, MD  
UF Health COVID-19 Response team

# Special Situations 2 ... Staff Exposures

## ALGORITHM C HCW EXPOSURE TO COVID POSITIVE HOUSEHOLD MEMBER OR INTIMATE PARTNER RETURN-TO-WORK (RTW)



*If symptoms occur at any point, remove from work and test ASAP. Do not return to work until test results are received and medical return-to-work evaluation has been completed.*

Courtesy: Dr. Kartik Chherabuddi, MD  
UF Health COVID-19 Response team

# Special Situations 3 ...Technical Challenges

- About 10% of the patients are unable to participate through telemedicine for monthly MD appointments
  - Electronic literacy
  - Poor infrastructure
- Even more are unable to show the exit site or fluid status
- Appointments take longer for completion
  - we do a comprehensive appointment with the whole team together
- May require audio-only appointments
- Consider F2F appointments for those with challenging conditions

# Special Situations 4 ...

## Additional CMS Waivers

- **Waivers in audit**
  - Water & dialysate quality
  - Equipment maintenance & fire safety inspections
  - Emergency preparedness
  - Requirement for maintenance of CPR certification
- **Waiver in documentation**
  - Initial and follow-up comprehensive examination
  - Care plans allowed with telemedicine

# Special Situations 4 ...

## Additional CMS Waivers

- **Special permissions:**
  - Expansion of the facility services into the NH, ALF or LTEC, requires dialysis staff to provide service though ...
  - Machine portability, uncommon, likely in use of the same machine in more than one person within a habitation ...
  - Accelerated payments
  - Delays in initial and follow up comprehensive examinations for the multidisciplinary team ...
  - Across state boundaries and facility credentialing ...

# Special Considerations 5 ... How Applicable Are the IHD Guidelines for Home Dialysis?

- Is a negative test for SARS-CoV-2, the virus that causes COVID-19, required before a hospitalized PD patient can be discharged to receive care at an outpatient dialysis facility?
  - No, follow local or CDC guidelines for care within HC facilities
- Are there any special recommendations for the effluent disposal for PD?
  - No, conventional disposal standards with adequate precautions is recommended
  - Avoid splash contaminations ...
- Disinfection of the machine
  - Most PD and HHD machines do not have internal circuits; hence, do not need special disinfection
  - Follow CDC recommendations for disinfection material
  - Special precautions may be needed if the machine is shared (uncommon)

# Medical Director's Responsibilities:

- Develop procedures for keeping patients healthy at home
  - Social distancing and PPE
    - Limit societal excursions, or do it at odd hours ...
    - Interact with family by electronic means
  - Hand washing—even more important now ...
  - Don't allow visitors to stay over
    - Disinfect any time self or the family comes in contact with society ...
  - Extra supplies may come in handy ...
- Creating protocols for patients suspected to have COVID-19 so that they do not end up in the facility
  - Work with your medical center and primary care providers

# Medical Director's Responsibilities:

- **Screening procedures:**
  - HIPAA-compliant in terms of location and interactions ...
  - Decide on the severity of the engagement needed, questionnaires, temperature, pulse oximetry ...
  - Discuss with the Nurse manager for patient triaging ...
    - Stand-alone vs. attached home unit
- **Post-screening clinic visits**
  - Policies on the caregivers and visitors
  - Need for in-clinic procedures ... nursing education, IV iron, transfer set exchange, blood work
  - Patient transition procedures ...
- **Home management**
  - Suspected peritonitis and exit site infection (ESI) management
  - Suspected COVID-19 management
  - Follow up on chronic conditions
- **Policies on the patients refusing PPE or telemedicine ...**

# Conclusion ...

- There are obvious advantages of the home modalities of dialysis during this Pandemic ...
- But, similar to any natural calamity, special precautions are needed to ensure that the quality of care does not suffer ...
- Most “Important Take-Aways”
  - Invest in educating patients on how to use telehealth
  - Ensure the supply chains are stable
  - Encourage the patients for additional telephone-only visits
  - Evaluate and attend to the social and psychological needs
  - Support unit staffs, especially nurses—they can be truly stressed ensuring that everything works well ...
- When in doubt, reach out to corporate or Network representatives ...

# Acknowledgements ...

**Michelle Thomas, RN**  
**Nurse Manager,**  
**UF-DCI Home dialysis Program,**  
**Gainesville, FL**

**Teri Martinez, PA**  
**University of Florida,**  
**UF-DCI Home dialysis Program,**  
**Gainesville, FL**

**And the entire team of Home Dialysis Program**

# Additional Resources:

- **ASN resources:** <https://www.asn-online.org/covid-19/CMS>
- **CDC Dialysis Resources:** <https://www.cdc.gov/coronavirus/2019-ncov/hcp/dialysis/home-dialysis.html>
- **CMS Flexibilities and Waivers:** <https://www.cms.gov/about-cms/emergency-preparedness-response-operations/current-emergencies/coronavirus-waivers>
- **PD Catheter Essential Service:** <https://www.kidneynews.org/policy-advocacy/leading-edge/critical-clarification-from-cms-pd-catheter-and-vascular-access-placement-is-essential>
- **ESRD Telemedicine Toolkit:** <https://www.cms.gov/files/document/esrd-provider-telehealth-telemedicine-toolkit.pdf>

# Let Us Hear From You

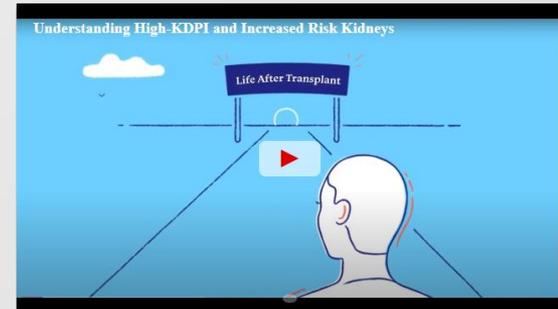
Q&As from chat and Q&A panels



# TheKidneyHub.org

## Introducing TheKidneyHub.org.

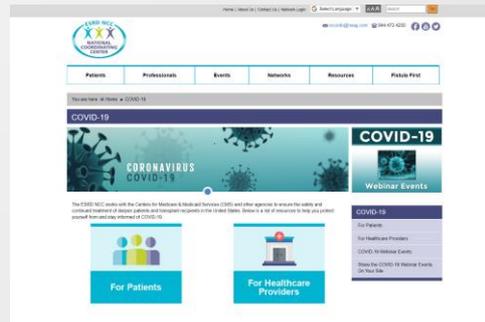
- Secure, mobile-friendly web tool for patients and professionals.
- Developed by the ESRD NCC with assistance from patient subject matter experts.
- Links to important resources, such as:
  - COVID-19, infection prevention, transplant, home dialysis, and new ESRD patient education.
  - **New features include access to the Patient Grant Library, an informative Understanding High-Kidney Donor Profile Index (KDPI) and Increased Risk Kidneys video, and more.**
- Visit today and bookmark to your device's home screen.



# Our Next COVID-19 Webinar Events



- Save the dates for our next events.
  - Patient-focused event:  
August 26, 2020, at 4 p.m. ET
  - Provider-focused event:  
September 2, 2020, at 3 p.m. ET
- Visit [www.kidneyCOVIDinfocenter.com](http://www.kidneyCOVIDinfocenter.com) for information and to register.



# Thank You!

[NCCinfo@hsag.com](mailto:NCCinfo@hsag.com)

844.472.4250

813.865.3545

[www.esrdncc.org](http://www.esrdncc.org)

Additional COVID-19 resources for patients and providers:



<https://www.kcercoalition.com/en/covid-19/>



[www.kidneyCOVIDinfocenter.com](http://www.kidneyCOVIDinfocenter.com)

This material was prepared the End Stage Renal Disease National Coordinating Center (ESRD NCC) contractor, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy nor imply endorsement by the U.S. Government. Publication Number FL-E FL-ESRD NCC-7N56TD-08172020-01

