

## Clinical Conundrums: Three Common Challenges You May Be Facing

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HCCIIntelligence™ Webinar and Virtual Office Hours  
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## Introductions



**Thomas Cornwell, MD**  
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Senior Medical and Practice Advisor, Home Centered Care Institute  
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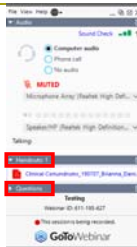


**Brianna Plencner, CPC, CPMA**  
Practice Improvement Specialist, Home Centered Care Institute

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## Housekeeping

- The first 30 minutes of today's Webinar will consist of a slide presentation and all participants will be muted during this time.
- The following 30 minutes will be Virtual Office Hours, and all participants will be able to submit questions via the question box.
- To submit a question, click on the arrow next to Questions, type in your question, press send.
- Handouts can be accessed in the handout box.
  - Click on the name of the file and save to your computer
- All participants will receive a copy of the slide deck, question and responses, and a recording of the presentation.



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## HCCI HOME CENTERED CARE INSTITUTE

Advancing home-based primary care to ensure that chronically ill, medically complex, homebound patients have access to high-quality care in their home

TRAINING | CONSULTING | RESEARCH | ADVOCACY

## Objectives

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## Objectives

- 1 Manage congestive heart failure (CHF) in patients with functional disability and multiple, complex comorbidities that contribute to functional, nutritional and cognitive limitations.
- 2 Apply effective management strategies for homebound patients with chronic obstructive pulmonary disease (COPD).
- 3 Describe the general considerations and recommendations in the treatment of type 2 diabetes mellitus (DM) in complex, frail, elderly patients in the home setting.

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## Case Study – Gertrude 76 y/o

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## Overview



76-year-old female
History of severe COPD (FEV1 0.57 (2011))
Chronic hypoxic and hypercarbic respiratory failure
On 3L NC O2, CAD s/p MI 2004
HFrEF EF 30%
HTN
Anxiety
Atrial fibrillation
Stage 3 CKD
Insulin dependent type 2 DM
Mild dementia (mixed vascular and Alzheimer type)

Seeing at home for increased SOB, cough, wheezing, lethargy, and leg swelling

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## Past Medical History

- Severe COPD
- Respiratory Failure
- CAD MI 2004
- Atrial Fib
- HFrEF 30% EF
- Non-sustained VT
- HTN
- Depression
- Anxiety
- DM
- Colon polyps
- CKD stage 3
- Dementia mixed type
- Hypothyroid
- Vitamin D deficiency
- Hyperlipidemia
- HOH

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## Medications

- Albuterol inhaler 2 puffs QID prn
- Alprazolam 0.25 mg TID
- Atorvastatin 40 mg QD
- Budesonide 0.5 mg/2ml nebulizer BID
- Bumetanide 0.5 mg BID
- Carvedilol 6.25 mg BID
- Cholecalciferol 1000 IU QD
- Guaifenesin 100 mg/5 ml 5 ml QID prn
- Home oxygen 3 liters nasal cannula
- Levothyroxine 25 mcg QD
- Insulin lispro protamine-insulin lispro 100 unit/mL (75-25) suspension 22 units BID
- Lisinopril 10 mg QD
- Mirtazapine 15 mg HS
- Omeprazole 40 mg QD
- Polyethylene glycol 17 g QD
- Potassium chloride 10 mEq 10 mg BID
- Prednisone 5 mg QD
- Senna 8.6 mg BID
- Tiotropium handihaler 18 mcg inhalation QD
- Warfarin 5 mg QD

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## Social History

- Ex-smoker - 50 pack year history
- No alcohol use
- No drug use
- Lives with husband (with chronic illness): picks up meds; shops
- Diet: Packaged pre-made from store or restaurants
- ADLs
  - Able to dress self
  - Can use BR on own
  - Able to feed self
- DME: Hearing amplification device; commode; walker; O2

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## Physical Exam

- **Vitals:** BP 122/64, P 88, RR 26, T 97.8
- **General:** Oriented x 3
- **Neck:** + JVD
- **Card:** IRR, +S3 gallop
- **Resp:** Rales at bases and expiratory wheezes
- **Extremities:** Pitting edema bilaterally, chronic venous stasis changes with drainage from both legs
- **Neuro:** Recall 2/3 items, no focal deficits
- **Psych:** Increased anxiety with worse SOB

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## Laboratory Results

### Laboratory results (from last week's hospital stay):

- H+H 9.8/30
- Na 130
- K 4.9
- CO2 38
- BUN 34
- Creatinine 1.9
- Glucose 288
- Mg 1.6
- A1C 8.6
- proBNP 19,876
- Total cholesterol 108
- Albumin 2.8
- TSH 2.41
- EKG: Atrial fibrillation with premature ventricular or aberrantly conducted complexes
- CXR: COPD changes; + Pulmonary vascular congestion
- Echocardiogram EF 30%; Mild pulmonary HTN

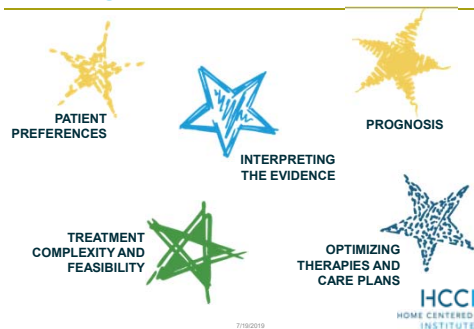
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## Conundrums

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## Guiding Principles



Source: American Geriatric Society's (AGS) Guiding Principles

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## Consider the Following

- What are the potential diagnoses for this patient?
- What testing is possible?
  - Who will perform them?
  - What is the turnaround time?
  - What limits are there to testing in the home?
- What are the patient's goals of care?
- What is the feasibility of care suggested?

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## Management of Type 2 DM: Medication Conundrums

- Cost of medications
- Complexity of medications
- Comorbidities which may impact the proper use of medications
  - Vision
  - Dexterity
  - Cognitive impairment
  - Falls
  - Depression
  - Lack of social support

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## Management of Type 2 DM: Other Conundrums

- The burden of BS monitoring in the context of overall goals of care
- Lifestyle and diet modification if consistent with overall goals of care and physical function/capability

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### Management of HFrEF in Pts with CKD: Medication Conundrums

- Use ACEI and BB in maximum tolerated dosing
- Add MRA (spironolactone or eplerenone)
- Substitute angiotensin receptor neprilysin inhibitor (ARNI) for ACEI for patients with ongoing sx
- Titrate loop diuretic to patient's symptoms and labs
- AICD for those with low EFs and sx if consistent with goals of care
- Metoprolol, bisoprolol and carvedilol can be continued
- If ACEI or ARB is not tolerated, isosorbide dinitrate and hydralazine should be considered

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### Management of HFrEF in Pts with CKD: Medication Conundrums

- **Drugs to avoid:**
  - NSAIDs
  - Trimethoprim-sulfamethoxazole
  - Metformin
  - Thiazolidinedione
  - CCB other than amlodipine

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### Management of HFrEF in Pts with CKD: Conundrums

- Assess burden of care/intervention vs. benefit
- Assess lifestyle modification within context of conditions and goals
- Don't forget to assess and treat anxiety, depression
- Home monitoring of patient's condition including weights if able

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### Management of COPD: Medication Conundrums

- Medication compliance is important in improving symptoms. Have patient identify inhalers, and address barrier to use
- "Alphabet soup" of inhalers in medication types and delivery system method

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### Management of COPD

#### Symptom management strategies for SOB:

- Reposition (sit up)
- Ensure oxygen supply is working
- Increase air flow in room through use of fan
- Antitussives to help with cough
- Anxiolytics to reduce anxiety
- Diuretics for volume overload

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### Management of COPD

#### Reduce hospital readmission through:

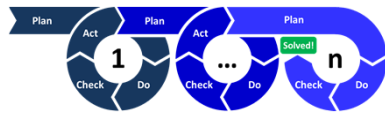
- Determining goals of care
- Hospice referral if appropriate
- Smoking cessation
- Instruction for inhaler use
- Action plans in case of emergencies
- Assessing the need of and availability of oxygen/equipment (including back up O2 and/or power)
- Addressing acute symptoms with appropriate medications
- Follow-up post discharge 48-72 hours via phone
- Provider visit within 7 days

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## Managing Multi-complexity

Quality longitudinal chronic care involves continuous PDCA cycles; this requires providers/practices to be available 24/7 (evening and weekend coverage by phone)



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## Virtual Office Hours: Ask the Experts

*An open forum for questions and answers*

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## HCCI Education and Resources

**GAPNA Pre-Conference** presented by Home Centered Care Institute (HCCI)  
*House Calls: APNs Navigating Challenges & Implementing Solutions*  
October 2, 2019  
Las Vegas, NV

**AAHCM Pre-Conference** presented by Home Centered Care Institute (HCCI)  
*House Calls: Achieving Clinical Excellence and Sustainability*  
October 17, 2019  
Rosemont, IL

**HCCI Advanced Applications of Home-Based Primary Care™ Workshop**  
December 5-6, 2019  
Schaumburg, IL

**E-Learning Modules:** HCCI University™ - Featuring 12 on-demand web-based courses in both clinical and practice management topics. **Available 24/7 at** [www.HCCInstitute.org](http://www.HCCInstitute.org).

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## HCCI Education and Resources

### HCCI Consulting Services

HCCI is pleased to offer affordable consulting services tailored to meet your practice's specific needs.

Our consultants include **providers, practice managers and other professionals** with expertise in HBPC, coding, auditing, strategic planning, marketing, education and training, and quality improvement.

Visit us at [www.HCCInstitute.org](http://www.HCCInstitute.org) to learn about the consulting services we offer.

### HCCIntelligence™ Resource Center

- **NEXT WEBINAR:** August 21, 2019 - *Improving Workflows: Front Office, Back Office, and What it Means for Staffing*
- **Virtual Office Hours:** Follows the HCCIntelligence™ Webinar and provides 30 minutes of open questions with Clinical and Practice Management experts
- **Resource Center:** Contains archived webinars, materials, and tools.
- **Hotline:** (630) 283-9222
- **Email:** [Help@HCCInstitute.org](mailto:Help@HCCInstitute.org)

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