Session 4: Data-Driven Approaches for Enabling Patients with Chronic Conditions and Enhancing Secondary Prevention

Presenters:

Subject Matter Experts

- **Charles R. Senteio, PhD, MBA, LCSW** – Associate Professor, Department of Library and Information Science, Rutgers University School of Communication and Information
- **Gianni Neil, MD** – Chief Medical Officer, ChenMed
- **Mendel Erlenwein** – Founder and Chief Executive Officer, CareCo
- **Khue Nguyen, PharmD** – Founder, Emprise Health (*Previous submitter* - Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model proposal)

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Charles R. Senteio, PhD, MBA, LCSW

Associate Professor,
Department of Library and Information Science,
Rutgers University School of Communication and Information

~ Physician-Focused Payment Model Technical Advisory Committee (PTAC) ~

Centering Lived Experience in Data-Driven Care: New Tools for Chronic Disease Prevention and Management

PTAC Public Meeting: Session 4
September 9, 2025

Charles R. Senteio

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Associate Professor,
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Academic Researcher Perspective

- Health equity researcher: **psychosocial** + **SDOH** in chronic care
- Licensed clinical social worker: **community** mental health, **primary** care
- Informatics scholar: **digital tools** for eliciting patient perceptions
- NIH, Foundation–funded research
- Academic perspective: **upstream** patient engagement, **complements** downstream coordination (CareCo)

Patients Live with More than Diagnoses

- Chronic illness shaped by **social** + **psychological** context
- Lived experience often **undocumented** in EHRs
- Patients **disclose more** when:
  - Asked with respect
  - Given private, culturally attuned tools
  - Confident disclosure leads to action

AI tools can support this health information exchange

Tools to Help Capture Lived Experience

- Empirical research demonstrating the **efficacy** and **safety** of conversational AI in health contexts is limited, but potential in two areas:

1. Pre-encounter chatbots/avatars
   - Private, empathetic intake of sensitive (social) information
   - Validated in ED for social needs, promise in primary care settings
   - Summarizes vital information needs for providers
2. In-visit AI scripts
   - Context-aware prompts for rapport + guidance
   - Improves comfort in SDOH conversations
   - Can support clinicians summarizing psychosocial information already in EHR (Armitage, 2025)

- AI tools may **elicit sensitive** psychosocial data when designed for privacy + empathy, (Mansoor et al., 2025; Lee et al., 2025; Langevin et al., 2023; Giorgi et al., 2022)

Respect + Technology = Better Data, Better Decisions

- Patients **disclose** more with empathetic digital tools
- Providers **benefit** from contextual prompts
- Health systems **improve care** when they integrate lived experience into care, no matter how the information is collected and made available
- Tools can **augment**, but **cannot replace** human connection (Zongag et al., 2024; Tayal et al., 2025)

Patients can be receptive to AI-enabled tools

Effective Care Requires Use of Relevant Social Information

- Patients **disclose** when they perceive empathy, with humans and AI-enabled tools
- Lived experience is clinically **relevant**—and measurable
- Design that elicits **respect** and **humanity** facilitates disclosure
- AI tools + human empathy → trust, **better** care, and outcomes (Abd-Alrazaq et al., 2021; Lee et al., 2025)

References

Abd-Alrazaq A., Alajlani M., Ali N., Denecke K., Bewick B., & Househ M. (2021). Perceptions and Opinions of Patients About Mental Health Chatbots: Scoping Review. J Med Internet Res., 23(1):e17828. https://doi.org/10.2196/17828

Aggarwal, A., Tam, C. C., Wu, D., Li, X., & Qiao, S. (2023). Artificial Intelligence-Based Chatbots for Promoting Health Behavioral Changes: Systematic Review. Journal of medical Internet research, 25, e40789. https://doi.org/10.2196/40789

Armitage, H. (2025, June 5). Clinicians can 'chat' with medical records through new AI software, ChatEHR. Stanford Medicine. Retrieved from https://med.stanford.edu/news/all-news/2025/06/chatehr.html

Giorgi, E. M., Drescher, M. J., Winkelmann, Z. K., & Eberman, L. E. (2022). Validation of a Script to Facilitate Social Determinant of Health Conversations with Adolescent Patients. International Journal of Environmental Research and Public Health, 19(22), 14810. https://doi.org/10.3390/ijerph192214810

Langevin, R., Berry, A. B. L., Zhang, J., Fockele, C. E., Anderson, L., Hsieh, D., Hartzler, A., Duber, H. C., & Hsieh, G. (2023). Implementation Fidelity of Chatbot Screening for Social Needs: Acceptability, Feasibility, Appropriateness. Applied clinical informatics, 14(2), 374–391. https://doi.org/10.1055/a-2035-5342

Lee, H., Wright, C., Ferranto, J., Buttimer, J., Palmer, C., Welchman, A., Mazor, K., Fisher, K., Smelson, D., O'Connor, L., Fahey, N., & Soni, A. (2025). Artificial intelligence conversational agents in mental health: Patients see potential, but prefer humans in the loop. Frontiers in Psychiatry, 15. https://doi.org/10.3389/fpsyt.2024.1505024

Mansoor, M., Hamide, A., & Tran, T. (2025). Conversational AI in Pediatric Mental Health: A Narrative Review. Children, 12(3), 359. https://doi.org/10.3390/children12030359

Session 4: Data-Driven Approaches for Enabling Patients with Chronic Conditions and Enhancing Secondary Prevention

Gianni Neil, MD

Chief Medical Officer,
ChenMed

Dr. Gianni Neil, MD
Chief Medical Officer

ChenMed

Dr. Gianni Neil, MD

- **Current Role:** Dr. Gianni Y. Neil serves as Chief Medical Officer for ChenMed, where she oversees clinical operations for ChenMed, leading approximately 500 clinicians across 111 medical centers in 12 states. ChenMed is a full risk Medicare Advantage Provider that leads the industry in MLR performance.

- **Education and Credentials:** Dr. Neil earned her Doctor of Medicine from the University of Miami Leonard M. Miller School of Medicine and completed her combined Internal Medicine-Pediatrics residency at Baylor College of Medicine in Houston. She is board-certified by the American Board of Internal Medicine and holds an unrestricted Florida medical license.

- **Leadership and Philosophy:** Dr. Neil's visionary leadership style combines clinical expertise with operational excellence, making her instrumental in ChenMed's continued growth and success in delivering high-quality, cost-effective care to seniors nationwide. She compassionately leads through people, striving to create a work environment for primary care providers that offers both professional and personal growth. Her goal is to create the best destination for providers and patients to practice and receive healthcare, respectively.

ChenMed: InFocus

a company *snapshot*

Exclusively focused on Medicare beneficiaries, who are enrolled in a Medicare Advantage insurance plan

Pioneer in risk: decades-long experience and track record delivering successful clinical, service, and financial outcomes in "2-sided full financial risk" models

Pursuing a vision to be the most influential primary care provider in the cities we serve, transforming care for seniors to achieve better outcomes, lower overall costs, and strengthen communities

Employing hundreds of primary care providers and over 4,000 team members - who are in the urgent pursuit of more good days for our patients

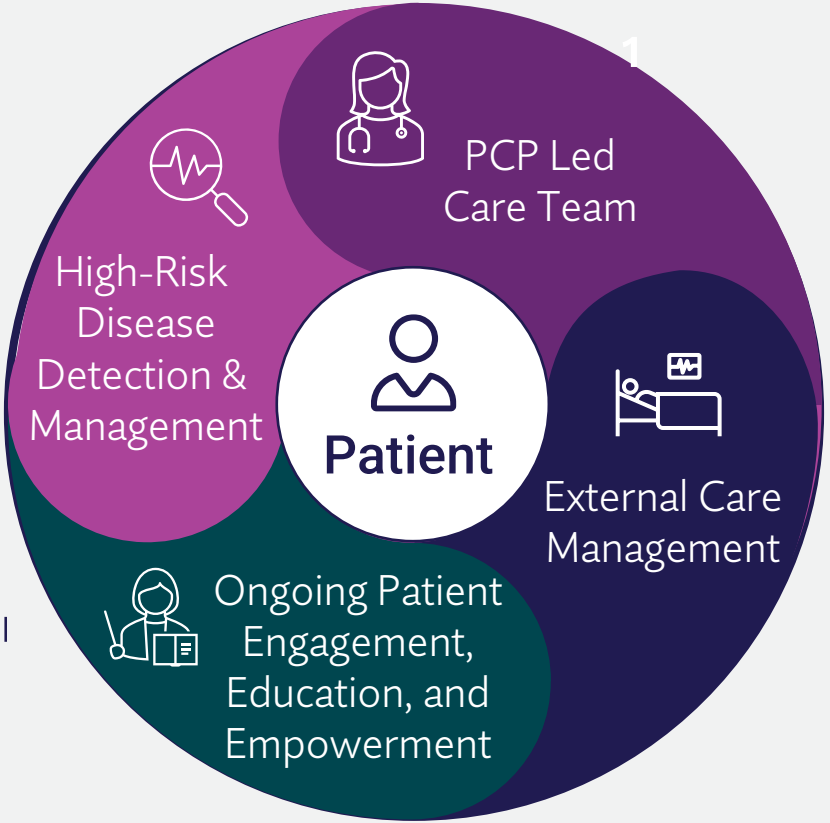
Serving the most medically acute and economically complex patients in the US: Our average patient has 5 major chronic conditions; 30+/-% are partial/full dual eligible; another 40+/-% are LIS eligible; and most patients have multiple, geographically-associated social co-complexities

Honoring seniors and delivering better health through 3 brands (Chen Senior, JenCare Senior, and Dedicated Senior Medical Centers) in 111 locations across 12 states

Source: ChenMed internal data.

Our Purpose: The Urgent Pursuit of More Good Days

- ChenMed cares for some of the sickest and lowest income seniors in the US, most of whom have multiple high-risk chronic conditions that often trigger complex interactions.
- "Our Purpose" informs our strategies, protocols and clinical actions.
- As a provider who is responsible for total-cost-of-care, ChenMed proactively manages the patient engagement lifecycle, including:
  - High-risk Disease Detection and Management
  - PCP Led Care Teams
  - External Specialist, ED and Hospital Care Management
  - Ongoing Patient Engagement, Education, and Empowerment
- Because many our patients experience multiple, non-clinical co-complexities, like income, housing, transportation, and food insecurity, these factors increase barriers to patient engagement and empowerment. Thus, we must employ numerous strategies to overcome these barriers.



Patient Care Journey

TOTAL COST OF CARE PRIMARY CARE HOLDS ACCOUNTABILITY FOR 100% OF THE CARE PROVIDED ACROSS ENTIRE CARE CONTINUUM

ACTIVE, ONGOING PATIENT ENGAGEMENT FROM THE VERY FIRST VISIT

ALL CLINICAL TEAM MEMBERS ARE RESPONSIBLE FOR PATIENT ENGAGEMENT, EDUCATION, AND EMPOWERMENT

ChenMed

Comprehensive Primary Care

- Screening
- Disease Prevention
- Chronic Condition Management
- Wellness Check
- Patient Education
- Social Co-Complexities

PCP and Patient are Co-Pilots: Primary care provider-led teams coordinate the entire patient journey alongside vulnerable seniors

ChenMed Value Add:

When care leaves the primary care setting, ChenMed leverages **internal specialty consultants** and **data-driven insights** to identify where care can be delivered to maximize **value** (right care, price, place, coordination, access, service)

Patient referred to curated network of providers

Patient (and clinical information) returns to ChenMed for ongoing management

Independent Community Providers Services

Inpatient Services

- Emergency
- Inpatient stay
- Complex procedures

Ambulatory or Post-Acute Services

- Specialty
- Imaging
- Home health
- SNF, IRF, LTCH

Ideally when care is delivered in an external-to-the-primary-care setting, it is aligned to PCP-led care management and records of encounters, external provider notes, test results and prescribed medication are transmitted back to the PCP.

Ways in Which ChenMed Empowers Patients

1. PCP-led primary care is the most important way to empower patients - by building a trusted relationship, so together the PCP and patient can work towards improving health outcomes.

2. ChenMed provides door-to-provider transportation and most medical centers have an in-house dispensing pharmacy for commonly prescribed medications.

3. Patients are provided with their PCP's cell phone number, are seen immediately when they need to be seen outside of regular appointments. Additionally, they are provided support via a 24/7 CareLine that is staffed by nurse practitioners.

4. ChenMed has an internal care coordination infrastructure to help patients obtain specialist appointments and navigate external care.

5. Specialist curbside consults are leveraged by PCPs to determine the best clinical path forward for the patient. PCPs present actual patient cases to specialists, but without the patient's name or location. This ensures the patient is triaged to see the right type of specialist at the correct time, thereby ensuring that the patient avoids unnecessary visits and co-pays.*Examples provided in Appendix

6. PCP-to-patient ratios are kept at 400 or below (versus an average of 2,500+ patients for the typical PCP). Small patient panels enable the PCP the capacity to act as trusted clinician, chronic disease manager, and nutrition and health coach.

Callout: Data and Tech Interoperability Barriers to Patient Management, Engagement, and Empowerment

Barriers:

- Two-sided risk providers need access to patient data from along the healthcare continuum to deliver comprehensive care management. (But data is fragmented and hard to access).

- While well-intentioned, a decade of tech and data interoperability planning has yielded few tangible and actionable results. (Faxing in 2025 is unacceptable).

- Lack of access to timely and complete external data drives up the total cost of care and becomes especially critical in managing patients with multiple, complex chronic conditions. (FFS providers are incentivized by volume, therefore timely, actionable data matters less).

Call to Action: Recommendations to Improve Data Access to Enable Patient Management, Engagement, and Empowerment

Calls to Action:

- In addition to traditional Medicare data, CMS should collect, standardize, and make available to treating providers in a timely manner, Medicare Advantage encounter data.

- CMS should promulgate “standard requirements” that all HIE's must follow, with very little deviation. Currently we contract and connect to 100+ HIE networks (in Atlanta alone, there are 3 different ones). And when the various HIE's make changes, upgrades, etc. we must constantly do maintenance to rebuild connections. Additionally, we should not be charged by some HIE's to access the data.

- CMS should require that hospitals and specialists provide complete medical records; including, consult notes, test results, notice of prescribed drugs, etc. to the treating primary care provider within a set timeframe.

APPENDIX

ChenMed Case Highlights
Care Pathways

Arista|MD

Orthopedic Case Highlight - Shoulder Pain M25519

Provider Request

- 80 year old female
- History of osteoporosis
- Fell a couple of months ago and complained of pelvic pain and left shoulder pain
- CT showed acute minimally displaced comminuted fracture of left pubic body extending into left superior pubic ramus, she was treated conservatively
- Should pain has worsened recently - shoulder exam revealed pain with abduction past 90 degrees
- X-ray of shoulder showed fracture of left great tuberosity

Clinical Question

- Can this be managed conservatively with RICE or does this require in person ortho referral?
- Would you recommend repeat x-rays and at what frequency?

Specialist Response

Dr. Aaron Morgenstein reviewed the x-ray image he noted the osteoporosis but did not see an obvious fracture. He suspects that she tore her rotator cuff during the fall or more recently which is causing the more recent pain. The goal is to get the patient through the flare up. He recommends treating this conservatively and to consider the following:

- To help alleviate pain can do an intermittent sling for 2-3 weeks. **Do not limit their mobility** as described in video.
- Tylenol and topical agents for the next 2-3 weeks.
- If pain is not better can try physical therapy and or injections
- Family can also try home exercise program https://www.youtube.com/watch?v=TGpMrYSotIs

Orthopedic Case Highlight - Low Back Pain M5450

Provider Request

- 66 year old male
- Complaining of low back and radiculopathy in the left leg began 2 weeks ago
- Uses a cane
- X-ray normal findings
- Medications
    - Muscle relaxers
    - Anti-inflammatories
    - Steroids

Clinical Question

Medications are not improving pain, please provide additional treatment recommendations

Specialist Response

Dr. Aaron Morgenstein reviewed the x-ray report and stated a more detailed physical examination would be helpful. Based on the details provided, shooting radiculopathy pain without significant weakness, paralysis, progressive gait abnormalities, or change in bowel or bladder function **imaging is not warranted.** Ninety percent of radiculopathy symptoms will go away in 3 months. Conservative treatment for 4-6 weeks is recommended:

- Yoga/stretching
- At home physical therapy
- Encourage mobilization
- Weight loss
- Plant based diet if possible
- Topical agents
- Tylenol

If symptoms have not resolved after 4-6 weeks, appropriate to order an MRI. I am happy to review the results for next steps.

Orthopedic Case Highlight - Knee Pain M25569

Provider Request

- 71 year old obese male
- Complaining of acute left anterior knee pain x2 weeks. Patient feels his knee gives out or pops frequently
- Exam without effusion or warmth. No instability. Negative anterior and posterior drawer test. Quadriceps and hamstring strength 4 or 5 out of 5. Mild crepitus.
- X-ray without degenerative joint disease but demonstrated patella baja

Clinical Question

Treatment recommendations for patella baja

Specialist Response

Dr. Aaron Morgenstein reviewed the images and when a patient has a patella baja and anterior knee pain one of the first things you have to rule out is a quadricep rupture.

Rule out quadricep rupture

- This is usually obvious because the patient would lose the ability to stand or it could be a partial tear.
- It is important to palpate and feel above the patella and see if tenderness is noted.
- If tenderness noted, order an MRI and put patient in knee immobilizer to keep knee straight so his patella does not become worn out

If quadricep rupture is ruled additional differentials include: patellofemoral arthritis, OCD lesion, and/or meniscal pathology. Conservative treatment for 6 weeks is recommended which includes the following:

- Physical therapy
- Nsaids/Tylenol
- Topical agents and ice/heat
- Walker, cane, crutches if needed
- Brace
  - Option 1
  - Option 2

Orthopedic Case Highlight - Pain (R52)

Provider Request

- 57 year old female
- Acute and chronic right hip pain
- Denies any falls or injuries
- Pain 10/10 in office, constant sharp pain that shoots down the back of her leg even when sitting
- Aggravated by any movement or standing
- Tylenol and heat do not provide relief
- X Ray in office initially negative, but I noticed a lucency and had a second opinion read - noted with acute appearing nondisplaced oblique sagittal fracture through the lateral margin of the bony acetabulum with articular surface involvement with no discernible articular cortical bone step-off

Clinical Question

Should additional imaging be ordered?
Treatment recommendations?
Should I refer her to an in person orthopedic?

Specialist Response

Dr. Aaron Morgenstein reviewed x-ray images and stated the images did show a minimally displaced posterior wall fracture but noted there was something different about the posterior wall which makes him think there are some chronic changes:

1. Has patient had prior acetabular fracture?
2. If they have not had a prior acetabular fracture consider ordering an MRI
3. Radiating symptoms down posterior buttocks is generally lumbar pathology or sciatica, which is not hip pain. Dr. Morgenstein stressed the importance of a good physical exam. He explained in his video how to tell determine with a physical exam if this is hip pathology versus lumbar pathology.
4. If MRI is negative and physical exam suggest lumbar spine pathology or sciatica then work that up with lumbar spine x-rays, Physical therapy, and medications (ie: steroid dose pack).

Orthopedic Case Highlight - Osteoarthritis M1990

Provider Request

- 70 year old female
- COPD, Morbid obesity BMI 41
- Complaining of pain to left knee for several months and recently worsening
- MRI
    - Grade 1 medial collateral ligament sprain
    - Complex tear of the body of the medial meniscus which is extruded and there is a longitudinal tear of the posterior horn extending to the inferior articular surface.

Clinical Question

Can I proceed with conservative treatment or does this need surgical intervention?

Specialist Response

Dr. Neel Pancholi reviewed the MRI report and determined that the main diagnosis is severe arthritis. The meniscus tear is secondary to arthritis. The grade 1 sprain is not concerning, this typically heals in 5-7 days and no treatment is needed. He provided the following recommendations for treating the arthritis:

Conservative treatment for 3-4 months

- NSAIDs
- Physical therapy
- Cortisone or gel injections

If patient has failed conservative treatment a referral to ortho to discuss knee replacement is indicated.

Gastroenterology Case Highlight - Elevation of levels of liver transaminase levels

Provider Request

- 76 year old female
- History includes polyneuropathy, morbid obesity, DM2, hyperlipidemia, and HTN, elevated liver enzymes
- Liver ultrasound cholecystectomy and hepatomegaly (19cm) with hepatic steatosis
- Labs
  - April 2023
    - AST 121
    - ALT 123
  - August 2023
    - AST 165
    - ALT 134
    - HCV not detected
    - Hep B Ab non-reactive
    - HIV non-reactive
    - HBsAg negative
    - Hep B core Ab negative
    - Hep A Ab negative

Clinical Question

Do you have any further workup recommendations on this patient or surveillance recommendations?

Specialist Response

Dr. Abhinav Vemula reviewed the patient's medical records and provided the following recommendations:

- **Transaminitis** - Given the history and chronic elevation, most likely is from **fatty liver disease** given the background of metabolic syndrome and obesity. To rule out other etiologies before making this diagnosis please send these labs:
  - Autoimmune hepatitis: ANA/Anti Smooth muscle antibody/Total IgG
  - Hemochromatosis: Iron/TIBC/Ferritin
  - Wilson's disease: Ceruloplasmin
  - Celiac disease: Tissue transglutaminase IgA/Total IgA
  - Alpha 1 antitrypsin deficiency: A1AT level
- **Fatty liver disease**: if all the above labs are normal, then most likely, the elevation in transaminases is from NAFLD vs NASH.
  - Obtain a fibroscan if available to quantify fat in the liver and screen for any significant fibrosis
  - If fibroscan is not available, then can send fibrosure to screen for fibrosis
  - **Weight loss is the mainstay of treatment for the fatty liver and will likely lead to a reduction in the transaminases as well.** It is also the best way to prevent scarring of the liver as a consequence of the fatty liver. 10% total body weight loss is the goal and has been shown to be adequate and significantly reducing the risk of cirrhosis and leading to a regression in fibrosis (if any is present).
  - Given the history of diabetes especially, I would strongly consider switching this patient's metformin to a GLP-1.

Gastroenterology Case Highlight - Abdominal Pain R109

Provider Request

- 68 year old female
- Past medical history of obesity, GERD, celiac disease, HLD, breast cancer, OSA, NAFLD, fibromyalgia and asthma
- Worsening constipation over the last month
- Recent episode of enteritis/diverticulitis earlier this month.
- Abdominal x ray showed mildly dilated loop of small bowel in the left hemiabdomen measuring 3.1 cm
- Current CT did not show significant diverticulitis
- Currently taking Miralax, stool softener, and following high fiber diet
- Colonoscopy 2 years ago showed 3 tubular adenomas less than 6mm

Clinical Question

Should colonoscopy be ordered? Recommendations for constipation management

Specialist Response

Dr. Abhinav Vemula reviewed x-rays and CT scan. Given that the CT did not show any significant diverticulitis and patient had a colonoscopy 2 years ago, **it is reasonable to defer the colonoscopy at this time**. She can remain on schedule for colonoscopy in January 2025 when she will be due for the repeat.

To optimize the stool regimen he recommended the following:

- Increase dose of Miralax to 2 scoops or even 3 scoops daily as needed.
- If constipation not improving, can also switch the Miralax to Linzess 290 mcg daily (warn patients that the first 2 days on this medication they will have diarrhea followed by normalization).

Gastroenterology Case Highlight - Diarrhea R197

Provider Request

- 83 year old female
- DM2
- Complaints of increased bowel frequency with yellow mucous and incontinence
- Labs
  - Total Cholesterol 180
  - HDL 50
  - Triglycerides 173
  - LDL 100

Clinical Question

Would like treatment and testing recommendations for what could be causing the change in bowels.

Specialist Response

Dr. Colin Woodard reviewed the patient's medical records, in his practice he sees this quality stool and frequency with predominantly two issues: exocrine pancreatic insufficiency or IBS-D. He recommended the following:

- Start with checking a fecal elastase, fecal fat and possibly fecal bile acids if you have the ability.
  - If the elastase is low, treat with Creon or Zenpep if not cost prohibitive.
  - Increase in fecal fat usually leads to a broader workup for malabsorptive diarrhea and may lead to referring out.
  - Increase in bile acids usually signals IBS which is treatable with colestipol or cholestyramine.

With the elderly population, increasing soluble fiber helps with stool consistency and incontinence, **can start with 2-3 tsp daily of benefiber.**
If constipation is not an intermittent issue, sometimes treatment with colestipol or cholestyramine is also helpful (I tend to start with 2-4 g daily and titrate up).

Gastroenterology Case Highlight - Abnormal LFTs R799

Provider Request

- 69 year old male
- Past medical history of HTN, DM2, HLD, BPH, alcohol abuse (quit 7 years ago)
- Recent blood work showed transaminitis
  - AST 54
  - ALT 63
  - ALK phosphatase 67
  - Bilirubin, Total 0.8
  - Hepatitis panel negative
- Abdominal CT - diffuse hepatic steatosis with too small to characterize hepatic hypodensity on the right and probable simple 1 cm short axis cyst on the left.

Clinical Question

Should I order FibroScan or liver MRI?

Specialist Response

Dr. Baseer Qazi reviewed lab results, and for patient with mildly elevated ALT and AST made the following recommendations:

Labs:

- Anti-mitochondrial antibody to r/o PBC
- Anti-smooth muscle antibody to r/o autoimmune hepatitis
- Alpha-1-antitrypsin phenotype to screen for abnormality
- Iron studies with ferritin to screen for hemochromatosis.

Imaging

- Start with Fibroscan to get steatosis grading and fibrosis staging
- If there is F3-F4 fibrosis then order MRI liver with contrast

Gastroenterology Case Highlight - Chronic Viral Hepatitis C B182

Provider Request

- 70 year old male
- Past medical history of HTN, substance abuse, COPD, and IV drug use
- Currently on methadone
- Recent test results:
  - Positive for chronic hepatitis C Genotype 1a
  - Fibrosure score F1-F2 fibrosis
  - Negative for hepatitis B surface Ag and surface Ab
  - Positive for hepatitis B core Ab
  - HIV negative
  - Liver ultrasound pending

Clinical Question

Please review recent hepatitis workup, and provide treatment recommendations.

Specialist Response

Dr. Colin Woodard reviewed the patients hepatitis workup and commended the PCP on the comprehensive work up. He made the following recommendations:

Prior to starting treatment

- Check hepatitis B viral load before initiating treatment to make sure there is no inactive hepatitis B given the positive hepatitis B core Ab - unlikely but important to check.
- Check a DNA prior to starting treatment.

Treatment

- Treatment will be one of the pangenotypic medications, specifically Mavyret or Epclusa, depending on insurance. Either is good and has high SVR (Sustained virologic response). The dose of Mavyret would be 3 tablets daily for 8 weeks, and Epclusa, one tablet daily for 12 weeks.

Post treatment

- Check a HCV viral load at 12 weeks after completion of therapy to determine clearance.
- Due to the hepatitis B core Ab, you will want to follow LFTs every 4 weeks during treatment to ensure there is no concern for reactivation of hepatitis B though this is unlikely.

Rheumatology Case Highlight - Pain, unspecified R52

Provider Request

- 62 year old mildly obese African American female
- PMH of DM2, CKD, A-fib, and angina
- Complains of intermittent joint pain and aches mainly in neck and knees for the past year
- CNS normal except for numbness and tingling
- Medications
  - Lantus 21 units daily
  - Furosemide 20mg daily
  - Lisinopril 10mg daily
  - Pregabalin 75mg TID
  - Baclofen PRN 10-20mg BID
- Labs
  - ANA positive
    - Nucleolar Pattern 1:640
    - Speckled Pattern 1:80
  - C3 complement 181

Clinical Question

- Does patient need further work-up?
- What additional labs are needed?
- What medications are needed--aside from steroids?
- What should prompt a referral?

Specialist Response

Dr. Lindsay Ledwich reviewed the patient's medical record and feels the patient may have an inflammatory arthritis, but noted vitamin D deficiency, thyroid dysfunction, and vector borne illnesses can all contribute to joint pain. Dr. Ledwich explained inflammatory arthritis as a tree with two branches.

- One branch is *osteoarthritis*. This is wear and tear or degenerative, everyone has it and it gets worse with age
- Some patients in addition to osteoarthritis have a second branch of arthritis called *inflammatory arthritis*. This occurs when immune system is dysfunctional and produces inflammation when it should not.
  - Rheumatoid arthritis with a positive rheumatoid factor or CCP
  - Rheumatoid arthritis sero-negative rheumatoid
  - Lupus

  Inflammatory arthritis typically feels worse upon awakening, steroids and movement improved inflammatory arthritis

Labs

- Rheumatoid factor and CCP, remember if negative does not roll out and inflammatory or arthritis.
- Hepatitis B surface and core antibody and hepatitis C
- Vitamin D level
- TSH, T4, T3
- Lyme and western blot

Medications

- Plaquenil 200 mg daily, titrate up to 400 mg daily pending normal G6PD level
- Bridge with Prednisone 5mg daily for a month

If Plaquenil is not controlling her symptoms consider rheumatology referral

Rheumatology Case Highlight - Pain in unspecified joint M2550

Provider Request

- 81 year old female
- PMH of polyarthritis, dementia, emphysema, hypertension, Type 2 DM, and gout
- Presenting with chronic severe bilateral hand pain and swelling
- Pain improves with steroids but returns when course is discontinued
- Has tried physical therapy, gabapentin and NSAIDS with no pain relief
- Labs
    - Uric acid <7
    - Positive ANA 1:640
    - C3 223
    - C4 55

Clinical Question

Recommendations for next steps and potential diagnosis

Specialist Response

Dr. Alexander Geevarghese reviewed records. Based off history and clinical presentation he does not think the patients has inflammatory arthritis an active connective tissue disease. The ANA is likely a false positive. The elevated complement level in this case is not clinically relevant from a rheumatological perspective. Typically the complement levels i.e. C3 or C4 are markedly decreased with underlying active connective tissue disease. Patient's current symptomatology is likely osteoarthritic and myofascial in nature. Given the presentation he recommends the following:

- Ultrasound of the hand bilaterally or an MRI without contrast of the hand (which ever is the worst hand) to assess for any underlying synovitis. If there is significant synovitis or erosive disease this may point to a seronegative inflammatory arthritis
- Bilateral hand occupational therapy
- Obtain RF or CCP if not already obtained
- Tylenol for pain management

Rheumatology Case Highlight - RA M069

Provider Request

- 67 year old African American male
- No medical care in 20 years
- History of systemic lupus and HTN
- Labs
  - RH factor 18.2
  - Anti-DNA (DS) antibodies 11
  - Sed rate 48

Clinical Question

Recommendations for next steps

Specialist Response

Dr. Ravi Sutaria reviewed labs and based on history of lupus and now a positive rheumatoid factor can indicate an overlap of lupus and rheumatoid arthritis. Both ESR and Anti-DNA (DS) are elevated which provides clues to an active inflammatory process. Treatment is based on symptoms or RA / SLE which can include migratory joint pain with swelling, ulcers, alopecia, rashes, raynauds, and/or morning stiffness.

Treatment:

- If symptoms are mild and sporadic, consider Meloxicam 15mg PRN
- If symptoms are more daily and more inflammatory in nature, consider adding Hydroxychloroquine 200 mg twice per day for treatment of RA and SLE.

Rheumatology Case Highlight - Raised antibody titer R760

Provider Request

- 71 year old female
- PMH of HTN, T2DM, HLD and chronic abdominal pain
- Presents complaining of erythematous skin rash on face with associated fatigue and chronic abdominal and multiple joint pain
- Following GI for abdominal pain with no improvement
- Labs
    - ANA positive with speckled pattern 1:160
    - C3 204
    - C4 49
    - Other labs WNL

Clinical Question

Is a rheumatology referral recommended given positive ANA with elevated complement?

Specialist Response

Dr. Alexander Geevarghese reviewed labs and clinical presentation, from a connective tissue disease or lupus standpoint t**he positive ANA is likely a false positive.**

The elevated complement levels in rheumatological clinical presentation is not significant. Typically an active connective tissue disease or lupus the complement levels are significantly decreased. The ENA antibodies are essentially negative. No significant cytopenias noted on CBC such as thrombocytopenia or leukopenia which would expect in an active connective tissue disease or lupus.

The rash on the cheeks could be possibly rosacea.

No further work-up from a rheumatological perspective at this time.

Rheumatology Case Highlight - SLE M329

Provider Request

- 68 year old African American female
- History of HTN, lupus, hypothyroid.
- She has been stable until late last year when she was seen in ER for lupus flare.
- She presented to clinic this month with another flare up. butterfly rash, and rash to lower extremities.
- Medications
  - Hydroxychloroquine 200 mg bid
  - Levothyroxine 88 mcg daily
  - Irbesartan/HCTZ 150/12.5 mg daily.
  - Prednisone pack for this flare up
- Labs
  - CRP <1.
  - All other lab was within normal
- She is refusing to go to rheumatology due to a bad experience.

Clinical Question

- What other lab or medications can I place her on safely from my office?
- Will I need to monitor any blood work?

Specialist Response

Dr. Ravi Sutari remembered this case from last year and was happy to hear that the patient had relief from hydroxychloroquine until recently. **Dr. Sutaria explained that autoimmune conditions and inflammatory arthropathies are triggered by cold weather and illness, so patients tend to flare more often during the winter.** Someone who has been stable up until now would be characterized as good disease control with a flare which statistically can happen three times a year even if they are on every medication for lupus and prednisone. **He agrees with the providers approach to start the patient on a Medrol dose pack and see how she does. If this is a reset that brings her back to baseline and she can continue her hydroxychloroquine with good relief then this was just a lupus flare.**

Active Disease

If patient goes back to having active disease in a few weeks consider raising her disease control. He recalled on the previous consult the patient had transaminitis, so avoided medications like methotrexate and leflunomide. At this time her labs do not show transaminitis, he recommended the following:

- Leflunomide 10 mg QD
- Monitor LFTs every 3 months.
- After 3-6 months can titrate to 20mg QD or can be stopped as the weather warms up can be stopped if patient has less disease activity in the spring or summer.
- Check for elevated DSDNA, low c3 c4 complement, or elevated ESR.

Overall, I would treat this as a flare with steroids rather than immediately change medication plans especially given good disease control prior.

Neurology Case Highlight - Seizures G4089

Provider Request

- 71 year old man
- Known seizure disorder and recent behavior changes that are suspicious for breakthrough seizures
- Medications:
  - Keppra 500 mg bid
  - Depakote ER 500 mg qd
  - Seroquel 25 mg daily.
- Medical work-up was unrevealing except for subtherapeutic Keppra level.

Clinical Question

Patient is struggling with finances and unable to undergo an EEG.

- Do you recommend any further workup?
- Should his medications be adjusted?

Specialist Response

Dr. Yvonne Zaharakis reviewed medications and lab results. Since the seizure activity occurred in the setting of low Keppra level, assuming that the seizure semiology is unchanged and the seizure was not focal onset, future work-up is not warranted.

If the patient confirms that he was compliant with the Keppra, **I suggest increasing the dose up to 750 mg bid and checking a level in a week.** If still subtherapeutic or in the low therapeutic range, I suggest going up to 1000 mg bid.

Further levels do not need to be checked unless a breakthrough seizure occurs again in the future.

Neurology Case Highlight - Migraine G43909

Provider Request

- 72 year old female
- Poorly controlled diabetic, non-compliant. chronic back pain, restless leg syndrome
- 20+ year history of migraines
  - Pain is all over her head and can then be on the right and then next on the left.
  - Head always hurts. She does not have much time where it isn't hurting just sometimes more than others.
  - Intermittent nausea and sensitivity to light. sometimes she can feel them coming on and sometimes not
  - Keppra for a time period which helped but due to syncope related to polypharmacy was discontinued
  - Started her on Topiramate but did not provide relief
  - Butalbital at first sign of migraine, may repeat once in 4 hours

Clinical Question

- Can you please provide medication recommendations?
- Could migraines be due to her poorly controlled diabetes?

Specialist Response

Dr. Salam Zughayer does not think the migraines are related to diabetes. Dr. Zughayer made the following medication recommendations:

- Topamax can still be tried at higher doses. Medication list notes the topamax was 25 mg qhs. We often titrate to 50 mg bid and often even to 100 mg bid (increase by 25 mg a week)
- Butalbital would not be recommended for headache acute treatment as this could contribute to medication overuse headaches/rebound headaches and in general is not recommended for headache management
- Botox for chronic migraines can be an option if the higher maintenance dose of topamax is not effective

Neurology Case Highlight - Headache R519

Provider Request

- 66 year old female
- Multiple comorbidities including diabetes, and HTN
- Started having daily headaches, some begin in the mornings
- Medications
    - Topamax did not provide relief
    - Hydrocodone for knee problems
    - Excedrin migraine

Clinical Question

Should I order an MRI (she cannot tolerate contrast)?

Specialist Response

Dr. Salam Zughayer reviewed the medical records and stated that regular use of excedrin and hydrocodone can cause medication overuse headaches (previously known as rebound headaches). This occurs in many patients with use 9 days/month or more. Dr. Zughayer recommended the following:

- MRI without contrast
- Topamax
    - What dose did she take?
    - Consider trialing for a longer period of time

Neurology Case Highlight - Tremor R251

Provider Request

- 76 year old African American male
- PMH of emphysema, HTN, HLD, cardiomyopathy, atrial flutter and CKD
- Tremor
  - Started about a year ago, thought it was due to increased caffeine intake.
  - Over the last 6 months, he has cut back on caffeine to about 3 cups per week.
  - Tremor is noted to be only when he is holding inanimate objects like a cup or pen.
  - Archimedes spiral test completed and was squiggly in nature suggesting an essential tremor

Clinical Question

Would like a second opinion on how to treat what could be an essential tremor or if something else could be going on like vitamin deficiency, stress, fatigue or medications.

Specialist Response

Dr. Yvonne Zaharakis requested the following for further work-up for action tremor:

Labs

- CMP
- LFTs/ammonia
- TFTs
- Parathyroid function
- B12 deficiency

Medications

- Medications that can cause tremor
  - Typically psychotropic (e.g. Adderall, SSRIs, Li, antipsychotics)
  - Can also be immunosuppressants and antibiotics
- If essential tremor is suspected based on exam and or family history, a trial of propranolol 20 mg bid to tid is reasonable. Further titration may be necessary as long as the medication is tolerated

Neurology Case Highlight - Dementia F0390

Provider Request

- 69 year old female
- History of HTN, migraines, OSA, hypothyroid, COPD, angina and hyperparathyroid
- Worsening dementia over the last few months
- MRI normal

Clinical Question

Previously saw neurologist but does not want to go back due to high co-pay. Can you please provide treatment recommendations?

Specialist Response

Dr. Mason Gasper reviewed patients medical records and made the following recommendations:

Medications

- Discontinue Amitriptyline and ativan, it is possible that she is oversedated with these medications.
- Increase trazodone to 75 mg qhs
- Consider adding Namenda and low dose Seroquel

Imaging

- CT brain to rule our subdural hematoma

Labs

- Check for subclinical medical issues such as UTI.

Pain Medicine Case Highlight - Chronic Pain G8929

Provider Request

- 76 year old wheelchair dependent diabetic female
- Reported history of RA, SLE on chronic steroids, substance use disorder, depression, fibromyalgia, recent urosepsis admission. Recently established care.
- Chronic knee and back pain
- Multiple drug allergies to include NSAIDs, duloxetine (headache), tramadol (dyspnea), dilaudid (GI upset/rash)
- Medications:
  - Methylprednisolone
  - Oxycodone 5 mg BID
  - Clonazepam 0.5 -1 mg nightly

Clinical Question

Is she a candidate for buprenorphine or should I continue her oxycodone?

Specialist Response

Dr. Stephan Bamberger reviewed the patient medical record and stated it is challenging to manage pain in elderly patients that have been on opiates for a long time. He recommended 3 different plans to help control her chronic pain:

1. Stick with current plan: I don't think you would be wrong to do this. She is 76 year old with multiple serious painful conditions and not a ton of alternative options. My only concern would be that you mentioned she seems to be drowsy/lethargic last televisit. If you choose to continue this regimen I would want to make sure she is compliant with the 2 a day and not front loading/running out early increasing her risk of complications/overdose. But if you can ensure that she is compliant and also that she is getting reasonable pain control, then keeping her on the current plan until something forces you to change is totally reasonable.
2. Switch to longer acting opiate: MS contin comes to mind. She may not tolerate it for but worth a try if you feel the oxy is not doing much but keeping her out of withdrawal. (15 mg BID to start). I would be more wary of co rx with benzo if you choose this route but if she really is compliant and her liver and kidney function are good then risk of 0.5-1mg of clonazepam even with the higher dose of opiate shouldn't be too much of a concern.
3. Last but not least: switch to buprenorphine. You don't have to worry about tapering or break thru since she has been off her pain meds anyway - just start her the min dose: 10 mcg patch q 7 days. May increase q72 h up to max of 20 mcg/h per week. This would be the safest and simplest option but patient may complain.

Pain Medicine Case Highlight - Shoulder Pain M25519

Provider Request

- 60 year old female
- Dermatomyositis now with significant right shoulder pain.
- Have tried joint injections, anti-inflammatories, and steroids.
- Dermatomyositis is being treated with IVIG and she has just been started on xeljanz.
- Percocet for pain control.

Clinical Question

What would you recommend as the next step in managing her pain?

Specialist Response

Dr. Yi Cai reviewed the patients records and explained that if it is just one shoulder, it's likely musculoskeletal related. It could be rotator cuff tendinosis, subacromial bursitis, labral tear, or osteoarthrosis. The most common issue that causes severe pain that is easily treatable is subacromial bursitis.

Treatment for subacromial bursitis and shoulder osteoarthritis:

- Steroid injection
- Can also try diclofenac gel rubbed over the region of pain, but absorption will be limited by body habitus.

Testing

- Physical exam of the shoulder - https://www.youtube.com/watch?v=VcCAHbiEcZo
- MRI of shoulder

Pain Medicine Case Highlight - Sciatica M5430

Provider Request

- 78 year old female
- PMH of age-related immune deficiency, pulmonary hypertension, chronic obstructive asthma, congestive heart failure, Type II diabetes with peripheral neuropathy, hypertension, and obstructive sleep apnea
- Complaining of severe sciatica flare-up. Epidural shot in the past with relief of pain
- Tried Lyrica and gabapentin in the past and did not help
- Has tried physical therapy
- Prescribing medrol dose pack

Clinical Question

Patient is requesting an epidural pain injection. I will order lumbar MRI. Do you have additional treatment recommendations?

Specialist Response

Dr. Sujin Lee reviewed the patient's medical record and recommended to any new or flare up of chronic pain, taking full pain history helps to narrow down the differential diagnosis and treatment options. The detailed pain history can be taken by using the acronym of OLD CART:

- Onset
- Location
- Duration
- Characteristics of pain
- Aggravating/relieving factor
- Treatments tried

Taking a detailed history often reveals possible etiologies and can guide better treatment options. Dr. Lee stated since it is documented that patient has sciatica and well treated with epidural pain shot, it is reasonable to have an evaluation for repeat injections. Dr. Lee agreed with starting medrol dose pack and ordering the MRI. She also included the following treatment recommendations

- Topical agents such as lidocaine patch/cream, ice or heating pads, or OTC Icy-Hot patch
- Cymbalta 30mg daily for 1-2 weeks, then increase the dose to 60 mg daily
- Verify the dose of Lyrica and Gabapentin to see if the dose of medication was sufficient to have effect on neuropathic pain
- Follow up lumbar MRI results and refer to a pain specialist if her pain does not get better.

Pain Medicine Case Highlight - Radiculopathy M5412

Provider Request

- 65-year-old with neck pain and radicular pain down the left arm.
- Extensive history of alcohol and opioid dependence, previously on oxycodone and benzodiazepines.
- History of bipolar disorder on depakote.
- Neck history includes partial fusion of C4-5
- Recent CT showed multilevel cervical spondylosis with severe right C2-3 and bilateral C5-6 and C6-7 neural foraminal stenosis
- Pain is currently persistent despite
    - Celebrex 200 mg BID
    - Tylenol Q6H
    - Diclofenac topical gel and icy hot patch
    - Pregabalin 75 mg BID.

Clinical Question

Currently in PT but could not continue due to pain. She is seeing pain management in October. Would like help managing pain while waiting to see specialist

Specialist Response

Dr. Yi Cai complemented the provider on a great job managing the patient thus far, that they really almost maxed out her conservative care. She offered the following suggestions

- Osteopathic manual therapy (patients often think of this as massage, but it helps a lot more than just massage; does not hurt like PT)
- Increasing lyrica dosing. With lyrica dosing, if she is having pain in between her doses, can increase frequency to TID. If she is having some minor relief of pain after her doses, can increase dose amount to 100mg BID (two 50mg capsules).
- Some patients do well with an additional amitriptyline at night such as 25mg.

Further Evaluation:

She should go see a spine surgeon. It seems like she is developing adjacent segment disease post fusion, which means the segment above and below the fusion gets cranked on with movement, so there is not only significant disc disease but arthritis pain as well. Oftentimes, when patients complain of more neck than arm pain, that is an indication that the joints are causing more severe pain than the nerve compression (CT also shows significant facet arthropathy). Pain management doctors can do radiofrequency ablations for this particular pain pain but she may need surgery as well to extend the fusion.

Session 4: Data-Driven Approaches for Enabling Patients with Chronic Conditions and Enhancing Secondary Prevention

Mendel Erlenwein

Founder and Chief Executive Officer,
CareCo

Mendel Erlenwein, CEO - CareCo

Empowering the Heart of Healthcare

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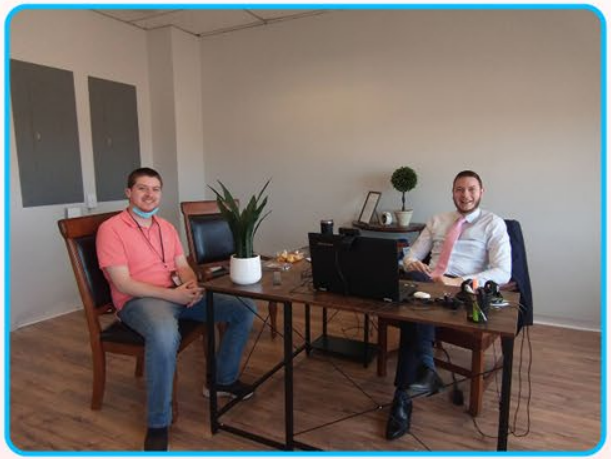

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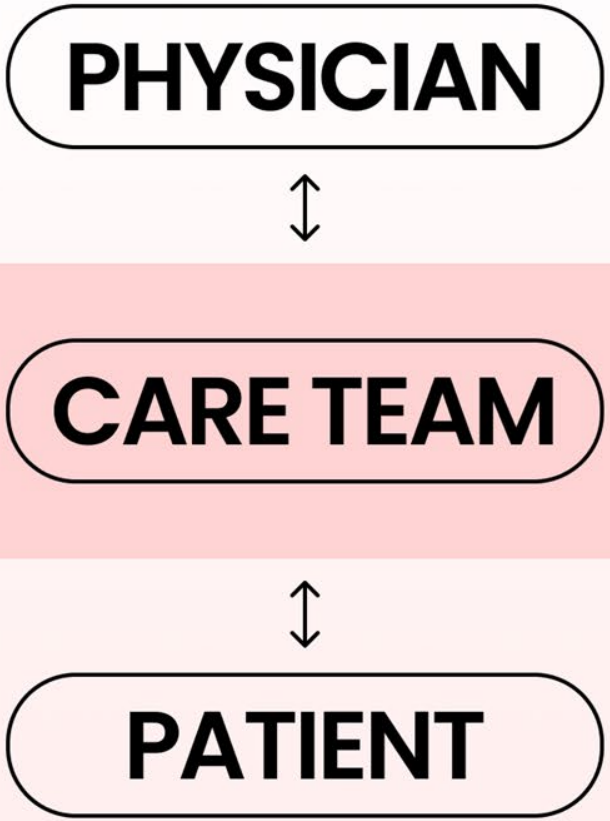
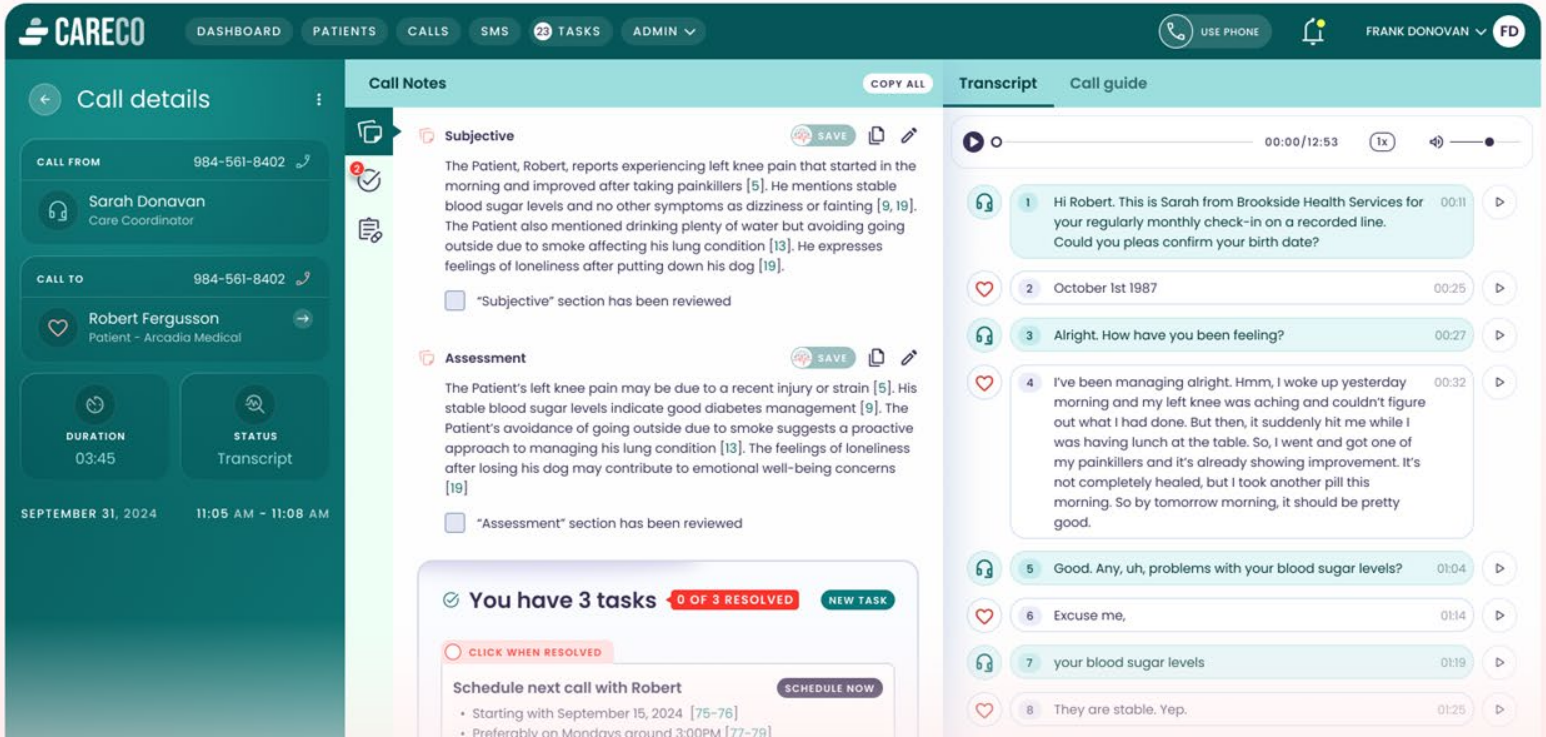
The Middle Layer is Underserved

Care teams—nurses, social workers, care managers—are drowning in manual work



CareCo powers the workflows, guidance, and follow-up that care teams need to thrive



CARECO

Cross-Channel Communication Hub

Telephonic Care Coordination
In-Person Ambient Listening
Text & Video Integration
Unified Patient Intelligence

Augmentation Engine

Separates social conversation from medical relevance
Pre-call intelligence: Complete patient context preparation
During-call guidance: Clinical decision and conversation support
Post-call automation: Documentation, tasks, and communications

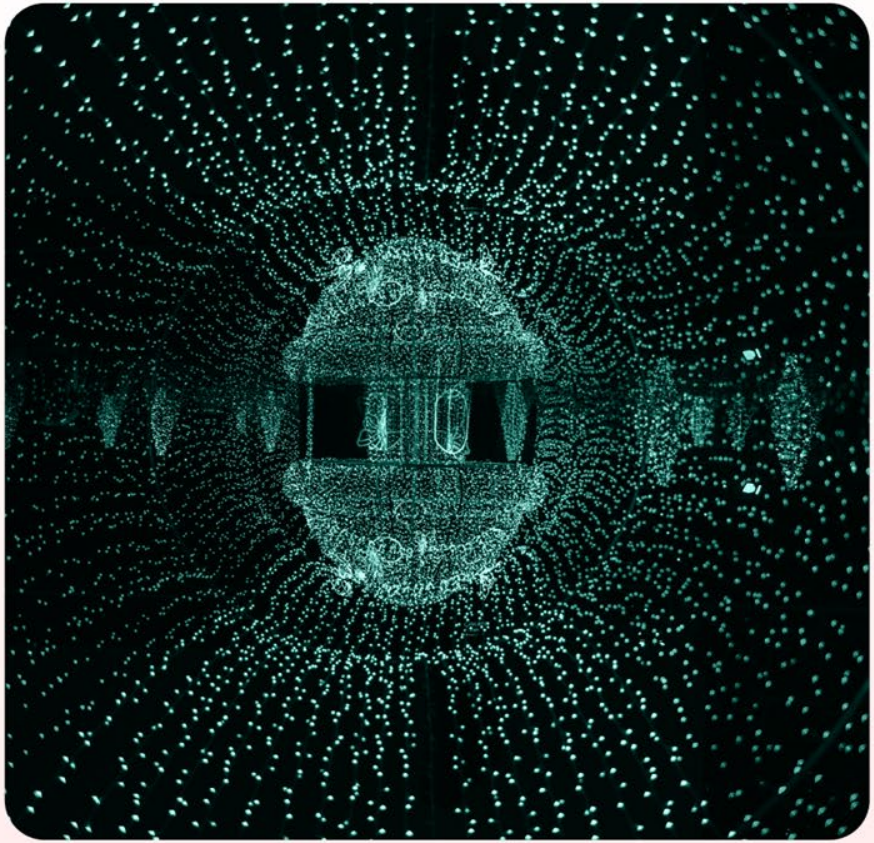
Growth So Far

600k+
Calls

50k+
Patients

30%+
MoM Growth

Build the Brain,



to Amplify the Heart.

Session 4: Data-Driven Approaches for Enabling Patients with Chronic Conditions and Enhancing Secondary Prevention

Khue Nguyen, PharmD

Founder,
Emprise Health

(Previous submitter - *Advanced Care Model (ACM) Service Delivery and Advanced Alternative Payment Model* proposal)

emprise health
ACCELERATING VALUE-BASED CARE

Bridging Data and Impact: Transforming Care with Practical AI

PTAC September 9, 2025 Meeting

Khue Nguyen, Founder

At Emprise Health, we transform provider capabilities through strategic partnerships that unlock operational excellence and sustainable growth

Our Mission

Empowering healthcare providers to deliver exceptional value-based care through proven, scalable solutions that simplify complexity and amplify impact.

Our Experience

Architected one of the largest ACOs in the country, from 0 to 1M+ lives

Principal for $13M HCIA Award to scale advanced illness management

Architected PTAC approved physician payment and care delivery model: the Advanced Care Model

Our Approach

Focus: Distilled strategies targeting the most critical performance drivers

Innovate: Real-time operational adjustments from frontline to boardroom

Adapt: Deep healthcare expertise combined with enterprise agility

Beyond the Old Limits

- Today’s data tools, while helpful, only scratch the surface. We’re still limited to discrete, lagging data points, locked out from the deep, real-time insights buried in unstructured notes and rich patient narratives.
- The interdisciplinary engagement we dream of is stunted, not by lack of effort, but by the overwhelming resource investment required.
- Studies show that only a fraction of actionable insights from EHRs and claims actually reach clinicians in time to affect care.[1]

[1] JAMA, 2020: "Impact of Health IT and Data Overload on Clinician Burnout"

The Richness We’re Missing Unseen, Unused, Untapped

- Vital patient stories, subtle risk signals, and actionable opportunities live in the unstructured data (clinical notes, correspondence, even voice memos) but are invisible to current systems.
- Today’s solutions can't connect these dots at scale. We know there’s untapped potential.
- One health system found that AI-powered review of clinical text uncovered 27% more actionable care gaps than structured data review alone.[1]

[1] NEJM Catalyst, 2022: "AI in Population Health: Prospects for Preventing Chronic Disease”

The Bottleneck of Resource-Intensive Engagement

- Even the best analytics require boots on the ground—intensive, manual outreach that strains teams and budgets.
- The gap between what patients need and what care teams can sustainably provide just keeps growing

From Basics to Breakthroughs: Tapping Into AI's Practical Upside

Now, imagine an environment where AI can:

- Instantly read, interpret, and learn from every word in the EHR, including clinical notes and nontraditional signals.
- Distill oceans of data into pinpoint, timely insights, making invisible risk visible before it's a crisis.
- Orchestrate outreach, automating meaningful, personalized patient engagement, and freeing your team to focus where human touch matters most.
- In real-world pilots, AI-driven engagement tools double patient reponse rates and cut care gap closure time by 40%.[1]

[1] Nature Digital Medicine, 2023: "AI Companions Improve Adherence Outcomes in Diabetes Management

Envision. Demand. Co-create.

Unlocking this opportunity means reconsidering what we expect from our tools, and from ourselves as stewards of change. What will you ask for next, to ensure AI delivers on its potential for meaningful impact?