

THE COLORADO SOCIETY FOR POST-ACUTE AND LONG-TERM CARE

Welcome

CMDA 27th Annual Conference 2022: Coming Together to Create Success in PALTC, April 29, 2022 Sing Palat MD CMD, President

Gratituale



Corecare

CHCA/ CCAL

ASCP

PPA Event Center

Spectrum AV

Robert Eber

Exhibitors and Sponsors

CMDA Board Members past and present

Our patients

All of you



What to expect

Learn

Eat

Connect

In-person and Livestream

Change

Claim Education Credits



APEX (CME, CMD, ABIM MOC)

Scan QR code or visit:

https://apex.paltc.org/course/view.php?id=1327

ASCP (CPE)

Log into the <u>ASCP Learning Center</u>

None of the planners for this activity have relevant financial relationships to disclose with ineligible companies

Subscribe to emails

Monthly meetings for education and updates

CMDA IDT Podcasts: DVT, Psychotropic medications

CMDA webinar for Foothills Medical Society (2020)

CMDA presentation on COVID monoclonal antibodies with CDPHE and mAb Colorado (Sept 2021)

Advocacy

CMDA Year-Round



Resources Beyond CMDA

Geriatric Journal Club

Ethics Meetings

CDPHE Residential Care Facility COVID Updates

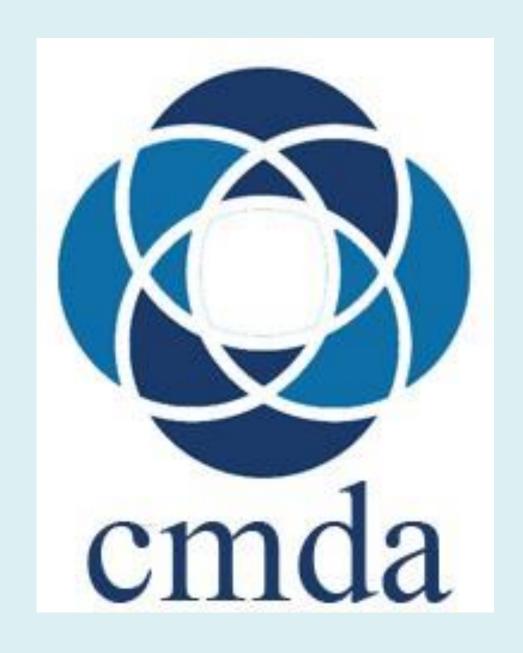
ECHO Colorado

Telligen LTC Office Hours

Geriatric Grand Rounds

PALTC-KNOW

AMDA: AMDA On the Go, webinars, JAMDA, Caring for the Ages, Clinical Practice Guidelines, Mobile App



Become a member Follow us #CMDA22



Enjoy the conference





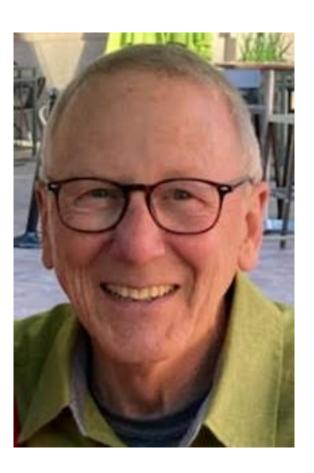


The Colorado PALTC Community
Honors
John Hiner MD
Perry Nisson RPh
Fred M Feinsod MD FACP CMD



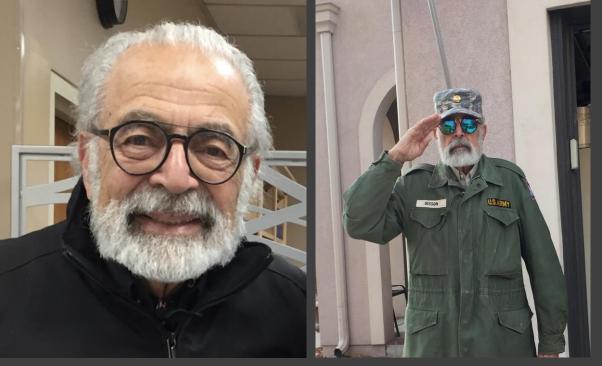
John Hiner MD CMD

- Began full time work in geriatrics at Swedish Medical Center Senior Health Plus Clinic in 1991
- By 1996 he transitioned to half of his time working in nursing homes
- "In 2001, Marsha Jaroch NP and I left the clinic setting and pursued our full-time nursing home practice"
- Provided care in 17 different facilities and medical director in many facilities including Cherrelyn, Cherry Hills and Mariner Greenwood Village
 - Served as Medical Director at Cherrelyn for 16 years!
- In 2016 joined Rocky Mountain Senior Care
- Loved to witness the evolution of PALTC in Colorado
- Words of Wisdom:
 - Never stop listening and learning
 - Be thankful for the very special group that is supporting you.
- Retired in August, 2019











Perry Nisson RPh.

- Became a Consultant Pharmacist in September 1967 and owner of Nisson Pharmacy in Des Plaines, Illinois.
- In 1985 became an Independent Consultant Pharmacist in Colorado.
- Served PALTC communities across Colorado, including Denver, Lakewood, Boulder, Castle Rock, Colorado Springs, Pueblo, Montrose, Delta, Grand Junction, Fruita, Palisade, Craig, Fort Morgan, Brush,
- Involved in pain management at the Hospice of St John in Lakewood, Colorado.
- In 2012, received the Consultant Pharmacist of the Year award from the Colorado Healthcare Association.
- Words of Wisdom: "Respect and embrace the expertise of professionals working within the long-term care industry. Positivity and kindness go a long way towards helping get past the challenges inherent in the industry."
- "I retired as a Consultant Pharmacist in long term care on December 31, 2021 after 37 years."

Fred M Feinsod MD FACP CMD







- Started Practicing in PALTC in 1988
- Started several Community Ethics Committees:
 El Paso, Douglas County, Piñon Community Ethics
 Committee, and the Colorado LTC Community Ethics
 Committee at Vivage
- Founding member of CMDA
 - First VP and later second president of CMDA.
- Member of the Board of Directors of AMDA
- President of El Paso County Medical Society
- JAMDA award for best article series with Steve Levenson MD CMD
- Promoted Bed safety in LTC facilities
 - Multiple publications and promoted the standard of care
- Served and promoted Rural LTC Medicine
- AMDA 2020 Medical Director of the Year
- Words of Wisdom:
 - "Create respect for LTC Medicine among our colleagues in other fields of Medicine and Surgery."
 - Create an atmosphere of mutual respect and support.
- Retiring May 31, 2022

Long-Term Care Industry Update

CMDA Conference – April 29th, 2022

Jenny Albertson, NHA

Director of Quality and Regulatory Affairs



Workforce Shortage

Change – in every way

Competition = Wage & Benefit ?

Since the start of the pandemic, the skilled nursing industry has lost 241,000 workers, or 15.2% of its total workforce.

"It's a profession that is extremely taxing under normal circumstances, he said, but staff are still wearing masks all day, donning personal protective equipment (PPE) and getting tested frequently.

They can walk across the street, go to a Walmart or to an Amazon, they don't have to do that. We're going to have to, when it's appropriate, start relaxing some of those requirements that make it so unpleasant to work in buildings,' Parkinson said."

https://skillednursingnews.com/2022/04/nursing-home-industry-loses-2500-jobs-in-march-deepening-workforce-crisis/

Caring for the Caregiver

We're not a "family," but we are a community.

- •Solve the basics supplies, scheduling, pay equity
- •Make it a person-driven environment
- Listen to the whole person



The Politics

Public Opinion 2 Regulatory Focus

Heating up

Despite having survived a very tough couple of years, this industry is not viewed favorably nor being given a break.

The pressure is already mounting and we must be equal to it.

- Staffing mandate
- Family and Resident focus
- Ownership/Finance transparency
- E.H.R. and Tech leveraging
- Enforcement (e.g. sticks instead of carrots)

Care Model Shift

From "unsustainable and inadequate" to what we all dream is possible

What will we become?

The future is promising and will be an extreme change.



Smaller settings



Private rooms



Funding shifts



Distinguished from home-care

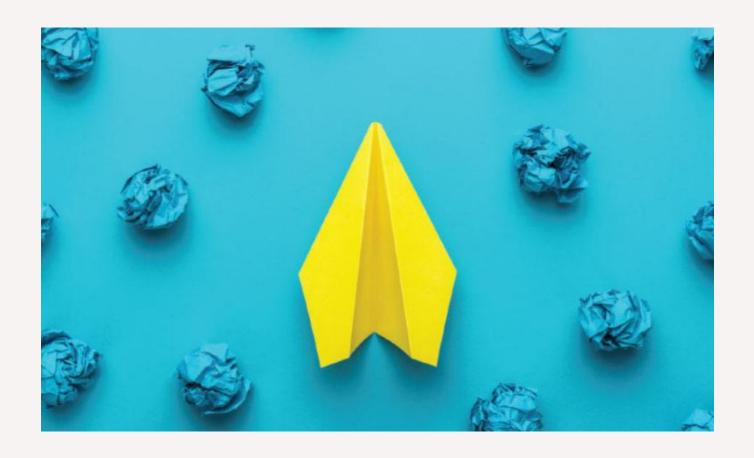


Not skilled care focused



Beyond COVID

Time for Reinvention





2022 CMDA Annual Conference
Denver, CO
April 29, 2022

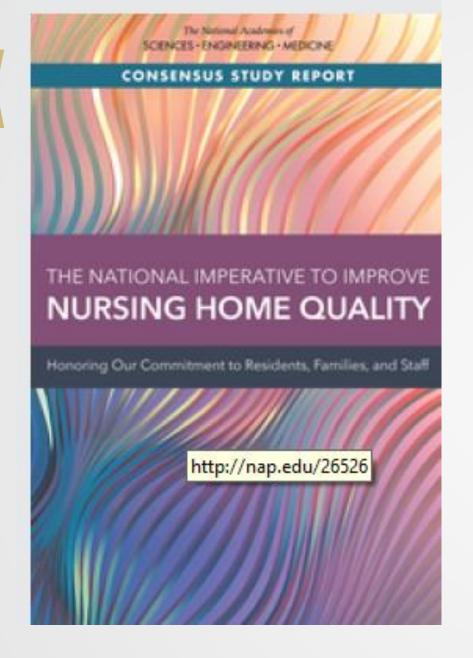
"Innovative" Models of Care



Professor of Medicine, University of Colorado

Department of Medicine, Division of Health Care Policy and Research

April 29, 2022



Models of Care

... research on best practices related to clinical, behavioral, and psychosocial care delivery in nursing homes is <u>scarce</u>. Moreover, nursing homes are often not well <u>integrated into the communities</u> in which they are located nor with the broader health care system. Finally, little is known about how specific factors (e.g., staffing, environment, financing, technology, leadership) affect innovative models of care or how to ensure the sustainability of these approaches. To address these gaps, Recommendation 1B proposes a series of actions including:

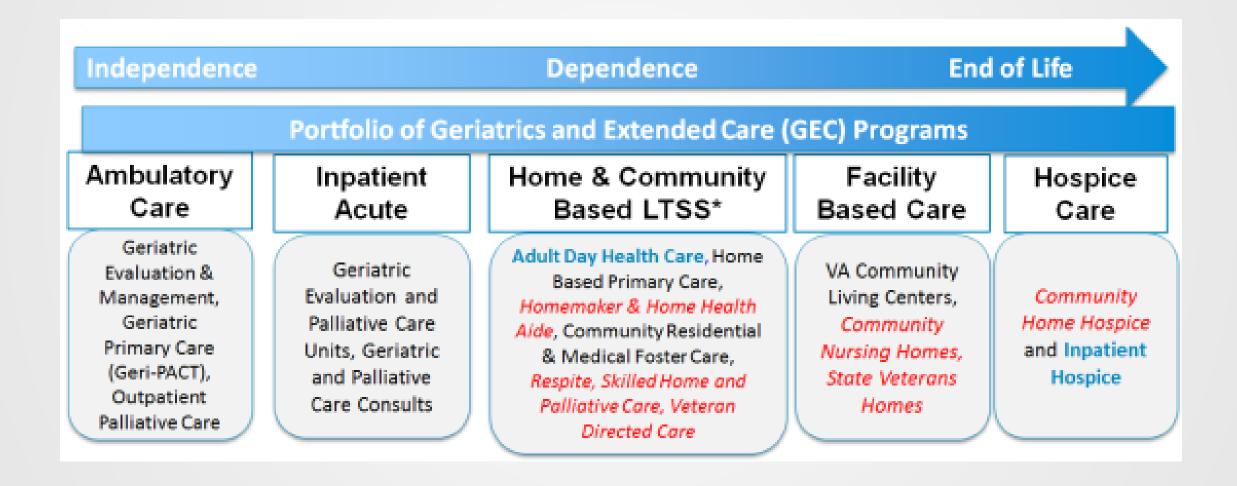
- Translational research and demonstration projects for the most effective care delivery models in nursing home settings;
- Prioritization of models that reduce disparities and strengthen connections to the community and broader health care systems; and
- Evaluation of innovations in all aspects of care.

Innovation Essentials

- Workforce: Invest, train, support, empower
- ▶ Research/QI: Build academic-community partnerships
- Community: Leverage community resources to age in place

Good care for clinically complex older adult populations is not careless, quick or low-cost.

A Continuum of Care with a Single Payer...



A Lecture Tour...

Why innovation is needed

Proposed Innovations

Innovation in the Workforce

Invest, train, support, empower

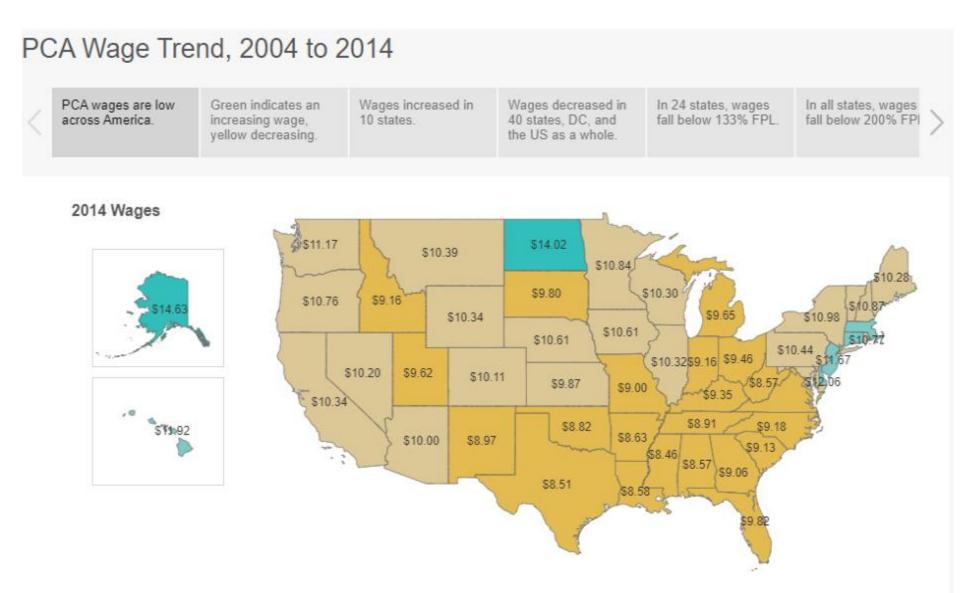


Workforce: Why is innovation needed...

4.6 million home care workers and CNAs in private homes, NHs and residential care

8.2 million job openings will need to be filled by 2028 (loss of existing workers, other sectors, immigration laws)

Workforce: Why innovation...



Workforce: Why innovation...

- Median \$12-13/hour stagnant wage rate(☺ Florida Amendment 2 \$15 from \$8.56)
- Minimal training (75 hours federal requirement)
- Limited support, respect, recognition
- Gender and racial inequalities

Workforce "Innovative" Solutions: Compensation

Base wage indexed to cost of living

Pay tied to time of employment and merit

Access to benefits and wraparound supports

Workforce "Innovative" Solutions: Training

Competency-based training

Uniform credentials recognized across settings

Career ladder based on training and experience

Workforce "Innovative" Solutions: Support

Consistent, supportive supervision

Peer mentorship

Employment-related supports (transportation, daycare)

Workforce "Innovation" Empowerment and Inclusion

Meaningful engagement in care planning

Integrated into fabric of care team

Value time at bedside

Provide QI/Research opportunities

Example: Empower

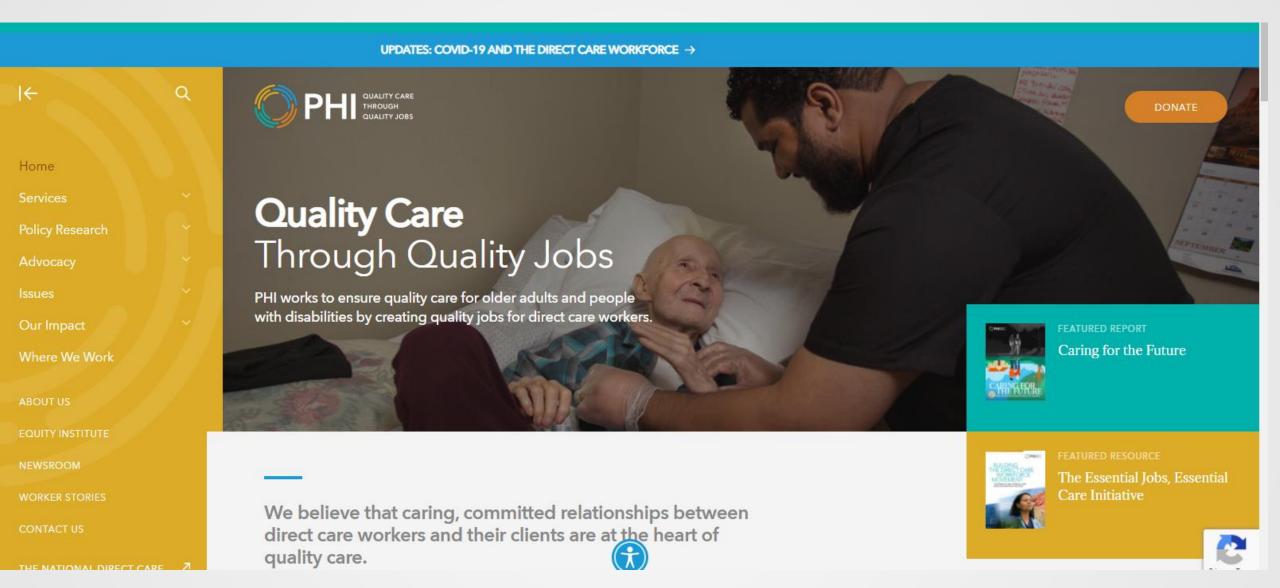


Workforce: Proposed Policy Innovations

▶ THEREFORE BE IT RESOLVED, that AMDA-The Society for Post-Acute and Long-Term Care Medicine, together with likeminded professional organizations such as American Geriatrics Society, American Medical Association, and consumer organizations such as AARP and others, advocate for legislative action directing United States department of Health and Human Services to designate all Post-Acute and Long-Term Care communities, irrespective of their geographic location, as Health professional Shortage Areas and/or Medically Underserved Areas to facilitate recruitment and retention of health professionals using the usual and customary support made available for such designations.

Workforce: Proposed Policy Innovations

▶ THEREFORE BE IT RESOLVED, that AMDA-The Society for Post-Acute and Long-Term Care Medicine, together with likeminded professional organizations such as American Geriatrics Society, American Medical Association, and consumer organizations such as AARP and others, advocate for legislative action to create a pathway to immigration for undocumented noncitizens in the United States, who show their commitment to their intended homeland by working as Certified Nursing Assistants and/or Nurses in Post-Acute and Long-Term Care settings for a minimum of five years.



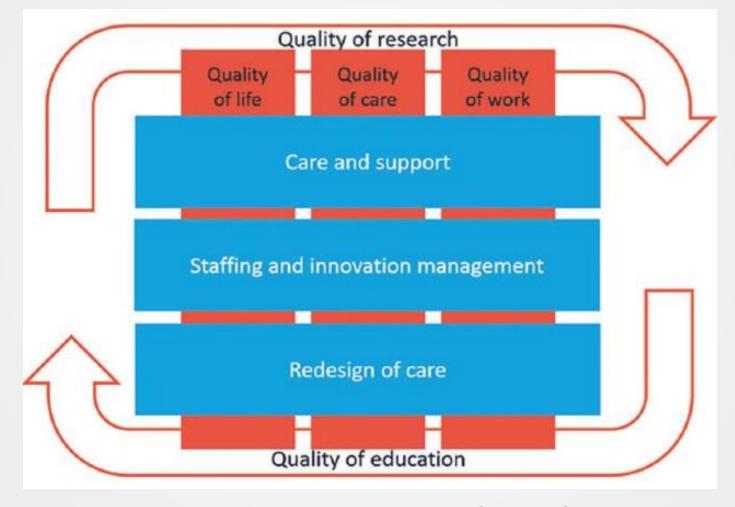
https://phinational.org

Innovation in QI/Research

Build academiccommunity partnerships



Living Lab Conceptual Framework



Verbeek H, et al. The Living Lab In Ageing and Long-Term Care: A Sustainable Model for Translational Research Improving Quality of Life, Quality of Care and Quality of Work. J Nutr Health Aging. 2020;24(1):43-47. doi: 10.1007/s12603-019-1288-5. PMID: 31886807; PMCID: PMC6934630.

Warning

- ▶ Failure to pre-assess organizational strain when implementing organizational change runs the risk of counterproductivity, **exacerbating** *resource poverty, inhibiting care delivery, and undermining the soundness* of facilities like nursing homes.
- ▶ Just as oncologists assess patient status prior to chemotherapy... we **propose** that the *stamina and structural integrity of nursing homes be similarly assessed* before implementing research innovations



Potential of Research Innovation to Uphold Living Lab Pillars

"When I hear research, I think of somethin' to try and either change or make things better."

"There could be potentially something lacking. Through research, ... they come back and say, 'We feel like you're missing A, B and C.' You can then take that and create your own plan to implement what the research found. I think anything that could potentially improve quality for the residents and the staff is always a good thing."

Quality of Life

"On the other side [of research], I see hope. Because the more you do the research, the more you will resolve problems."

Quality of Care

Quality of Work

"I love projects. I think they're beneficial ... Through the state, we have quality management plans. You are doing your own little study, research, you know, you have eight steps, ... I think that you learn from those. Things I do every day, I'm like, 'Oh, my gosh. This is why this is happening.' I've done it for the past week, but now it finally clicks, and I find a solution and it betters the care, the staffing [to address] that situation. It's all a learning experience. I think health care is a learning experience every day."

"We need to participate [in research], ... For me, I am so glad to meet and talk, to [share] what I feel, what I see, what I know. The purpose is very important. If you know the purpose, if that purpose is yours, it's a must, I would say."

QI/Research: Local Innovations

Vision for PALTC-KNOW:

A Post-Acute and Long-Term Care Knowledge Network for Older Adults and Workforce "Success will look like a network of experts focused on meaningful ways to enhance the joy of life and work in PALTC. Collectively, our workforce, our providers, our residents and caregivers make up the experts of PALTC."



For those who want to "Be In the KNOW"

Please email:

- You can also email:
 - Kate.Ytell@cuanschutz.edu
 - Kathryn.Nearing@cuanschutz.edu
 - Cari.Levy@va.gov



"Innovation" in Community-based Models of Care

Leverage community resources to age in place



Community: Why it matters...

Premature placement in institutions due to:

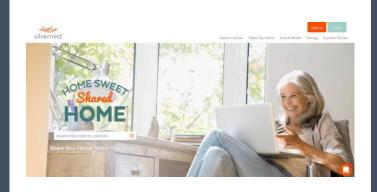
- A lack of affordable housing (4-year waiting list), rising property taxes
- A shortage of affordable in-home services

55,000 >65yo with extra space in their home to rent

- Avg senior income \$25,000/yr
- 1 bedroom = \$1,325/mo avg
- 1 in 5 homeless in Denver are >55yo (Taxpayer cost= \$40,000/yr)
- Only 1/3 receive help to stay at home before nursing home placement
- \$23/hr avg cost of in-home services

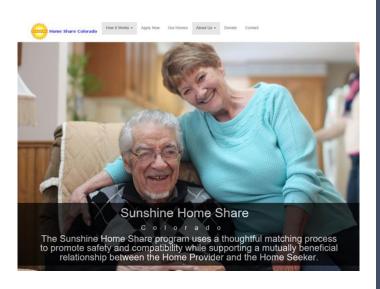
The Ultimate Goal:
Honor the preference of 90% to age-in-place with increased independence, safety, reduced loneliness.











Community "Innovations": Homeshare

High-touch vs. passive matching

Scaling

Funding

Magid KH, Galenbeck E, Hazelwood J, Shanbhag P, Joucovsky AL, Levy CR, Lum HD. Sharing Space to Age in Community: A Mixed-Methods Study of Homeshare Organizations. J Aging Soc Policy. 2022 Feb 6:1-29. doi: 10.1080/08959420.2022.2029266. Epub ahead of print. PMID: 35129098.

Independence at Home CMS Demonstration

Good care for clinically complex older adult populations is not careless, quick or low-cost.

Findings at a Glance

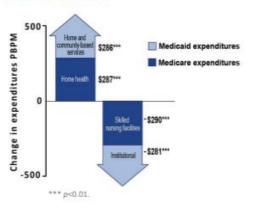
HOME-BASED PRIMARY CARE FINDINGS FOR SUBGROUPS

We analyzed the spending patterns of fee-for-service beneficiaries dually eligible for Medicare and Medicaid and for Medicare beneficiaries near the end of life. Both groups of beneficiaries met IAH eligibility criteria and received home-based primary care from any primary care clinician, not only those in IAH practices.

DUALLY ELIGIBLE BENEFICIARIES

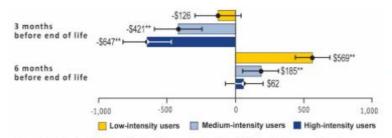
Compared with dually eligible beneficiaries who did not receive home-based primary care, those who received home-based primary care had after one year:

- An increase in expenditures for home health and home and community-based services.
- A decrease in expenditures for skilled nursing and other institutional facilities.
- No decreases in total Medicare, total Medicaid, or combined expenditures.



BENEFICIARIES IN THE LAST THREE AND SIX MONTHS OF LIFE

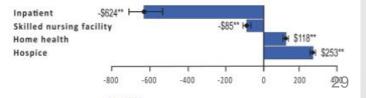
Compared with beneficiaries who also died but did not receive home-based primary care, home-based primary care users had the following differences in Medicare expenditures:



** p<0.05. Intensity of use is defined as follows using tercile cutoffs: low (visits every 11 weeks or less); medium (visits more often than every 11 weeks and less often than every 5 weeks); and high (visits more often than every 5 weeks).</p>

- Lower Medicare expenditures during the last three months of life.
- Higher expenditures during the last six months of life.
- For both the last three and six months of life, users with the highest frequency of home-based primary care visits had the lowest expenditures.

In the last three months of life for all users (regardless of visit frequency), lower total Medicare expenditures of -\$391 PBPM were driven by lower inpatient expenditures of -\$624 PBPM.







Home Based Primary Care James A. Haley Veterans' Hospital Mail Code: 111E 13000 Bruce B. Downs Blvd. Tampa, Florida 33612 (727) 697-5142







Medical foster home is less costly than traditional nursing home care

Cari Levy MD, PhD^{1,2} | Emily A. Whitfield PhD¹ | Roee Gutman PhD³

¹Denver-Seattle Center of Innovation at the Denver VA Medical Center, Denver, Colorado

²Division of Health Care Policy and Research, University of Colorado School of Medicine, Aurora, Colorado

⁹Brown University, Providence, Rhode Island

Correspondence

Cari Levy, MD, PhD, Rocky Mountain Regional Veterans Affairs Medical Center, 1700 Wheeling St, Aurora, CO 80045. Email: Cari.Levy@VA.gov

Funding information

Health Services Research and Development, Grant/Award Number: 12-029

Abstract

Objective: To compare the costs of Community Nursing Homes (CNHs) to Medical Foster Homes (MFHs) at Veteran Health Administration (VHA) Medical Centers that established MFH programs.

Data Sources: Episode and costs data were derived from VA and Medicare files (inpatient, outpatient, emergency room, skilled nursing facility, dialysis, and hospice).

Study Design: Propensity scores matched 354 MFH to 1693 CNH Veterans on demographics, clinical characteristics, health care utilization, and costs.

Data Extraction Methods: Data were retrieved for years 2010-2011 from the VA Corporate Data Warehouse, VA Health Data Repository, and the VA MFH Program through the VA Informatics and Computing Infrastructure (VINCI).

Principal Findings: After matching on unique characteristics of MFH Veterans, costs were \$71.28 less per day alive compared to CNH care. Home-based and mental health care costs increased with savings largely attributable to avoiding CNH residential care. When average out-of-pocket payments by Veterans of \$74/day are considered, MFH is at least cost neutral. Mortality was 12 percent higher among matched Veterans in CNHs.

Conclusions: MFHs may serve as alternatives to traditional CNH care that do not increase total costs with mortality benefits. Future work should examine the differences for functional disability subgroups.

Community Innovations: Accessory Dwelling Units "Senior Studios"

Eligibility: Zoning laws (wheels vs. foundation), occupancy standards, housing authority/HOA

▶ Size: 80-400 sq ft

▶ Cost: \$40,000-125,000







A "virtual companion" that would relay health-related messages ("It's time to take your medication") and play music, movies and games.



A video system that would monitor the floor at ankle level, so the patient would have privacy but a caregiver would know if there was a problem.



Pressurized ventilation that can keep airborne pathogens in (if the patient is quarantined) or keep outdoor air out (if a patient has a compromised immune system).



A lift, attached to a built-in track in the ceiling, that would move a patient from bed to bathroom so the caregiver could avoid heavy lifting.



In addition to regular ambient light, lighting at knee height would line the walls, illuminating the floor. Tripping over objects on the floor is the most common cause of falls.

Community: Cherry Creek West



Innovation Essentials

- Workforce: Invest, train, support, empower
- ▶ Research/QI: Build academic-community partnerships
- Community: Leverage community resources to age in place



Lea C. Watson, MD, MPH Geriatric Psychiatry Consultation and Training, LLC

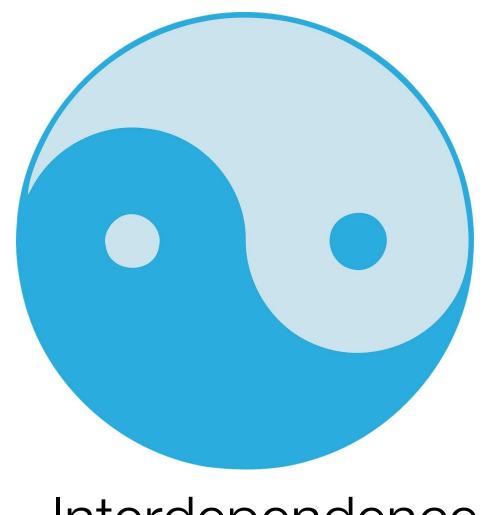
Dementia Care Through Every Stage

10 ways to nurture compassionate, dignified, individualized care



"Aging is a team sport. If you're playing alone, you're going to lose."

Bill Thomas, MD, Co-founder of the Eden Alternative



Interdependence

Is dementia one thing or many?

How does it change over time?

What Can I do to Prevent Dementia?

SLEEP is the #1 controllable risk factor (that we ignore!)

• read "Why We Sleep" by Dr. Matthew Walker - it will change your life

EXERCISE DAILY - OUTSIDE IF POSSIBLE

EAT MOSTLY PLANTS - TO FUEL THE GUT/BRAIN HIGHWAY

TAKE AS FEW MEDICATIONS AS POSSIBLE

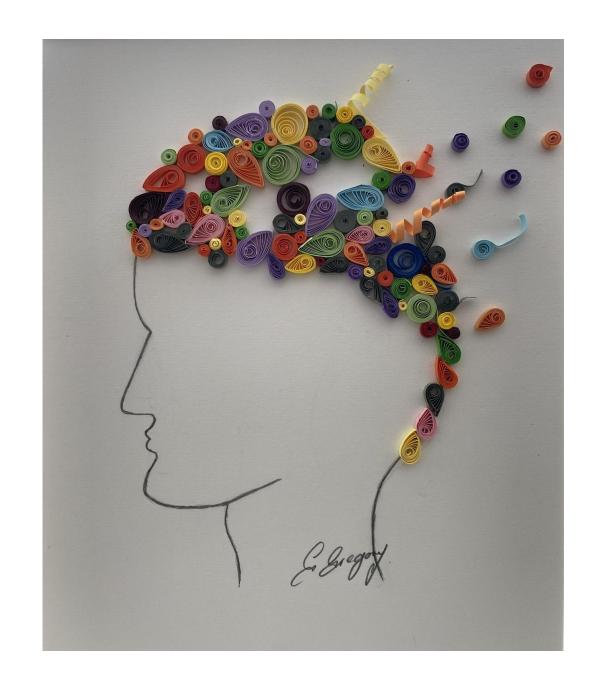
CONNECT WITH OTHER LIVING BEINGS

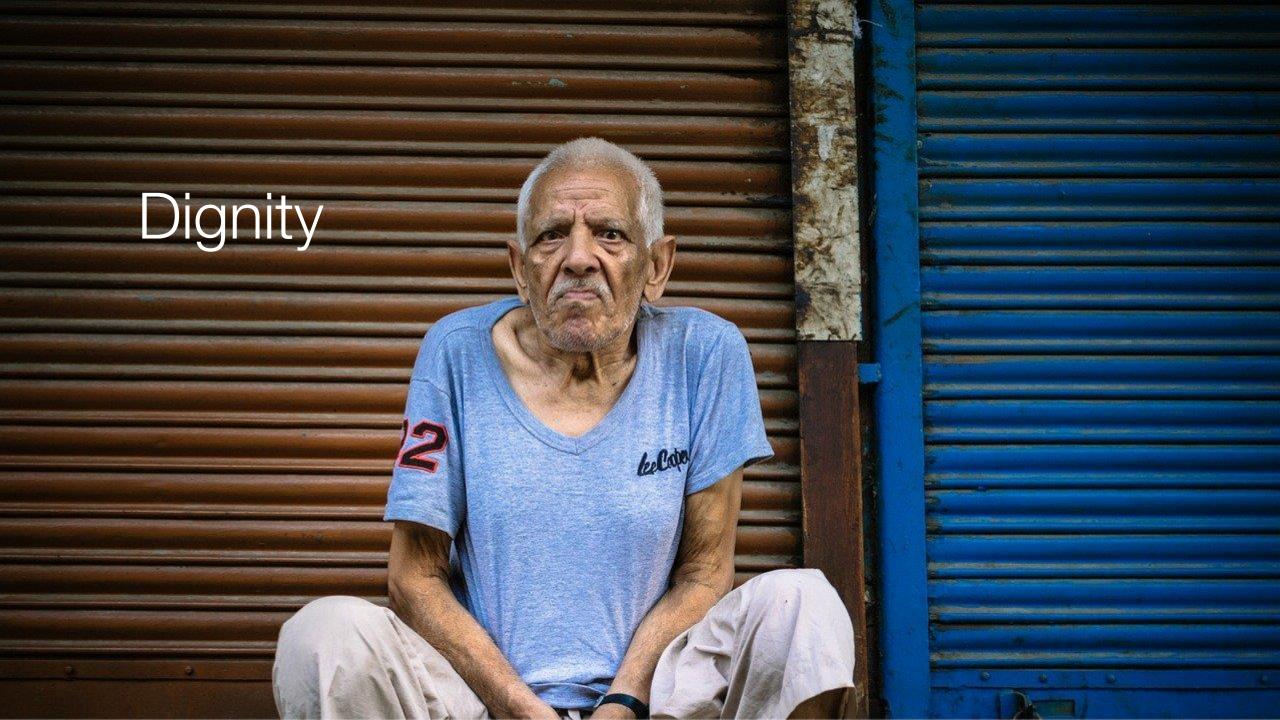
People with mild – moderate dementia can lead fulfilling lives.

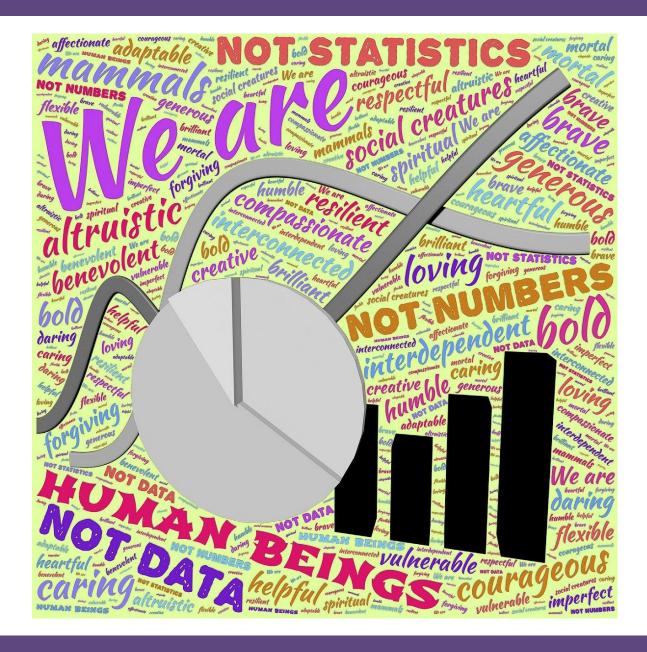
The biggest barriers are ageism and limited access to affordable resources.

"Dementia Inside My Head"

by Gail Gregory (living with dementia)







Unique

Unmet needs

- Boredom
- Comfort: pain, hunger, thirst, constipation, fatigue, touch
- Response to change in environment
- Acute medical illness (is the change sudden?)
- Medication side effects/interactions

• Is the patient declining in general? Is it time for a more structured environment? to revisit goals of care?

Bad for dementia (and everyone else...)

Loud, artificially bright, limited privacy

Crowded, chaotic mealtimes

Inflexible activities and times

No spontaneous access to outdoors High staff turnover, inconsistent care



Alzheimer's Communication

1. Never Argue. Instead Agree. 6. Never say "I Told You." Instead Repeat.

2. Never Reason. Instead **Divert**.

7. Never say "You Can't." Instead say what they Can Do.

3. Never Shame. Instead Distract.

8. Never **Demand**. Instead **Ask**.

4. Never Lecture.
Instead Reassure.

9. Never Condescend. Instead Encourage.

5. Never say
"Remember."
Instead Reminisce.

10. Never Force.
Instead Reinforce.

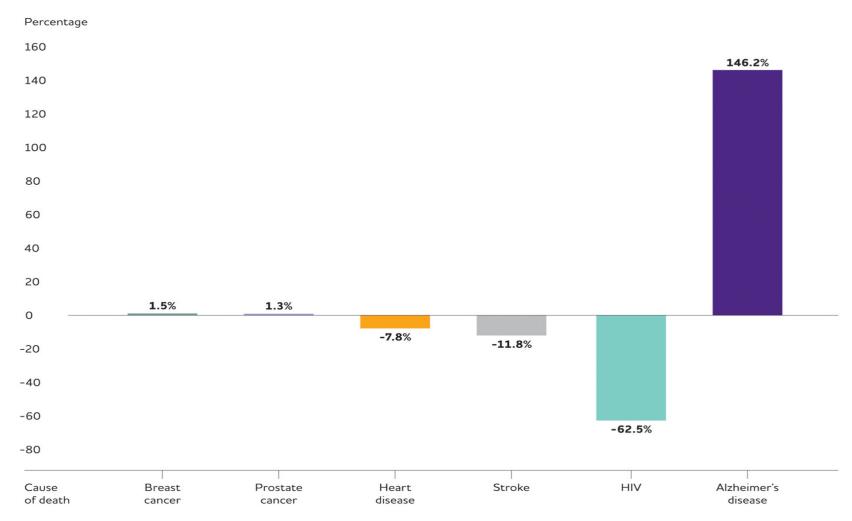








Percentage changes in selected causes of death (all ages) between 2000 and 2018. Created from data from the National Center for Health Statistics



2020 Alzheimer's disease facts and figures

Things people say as dementia progresses

- She will not take her meds, is falling more and seems depressed.
- Her agitation is bothering others.
- He lashes out during cares.
- He can't sit still, won't sleep at night and looks mad all the time.
- She is constantly exit-seeking.

Healthy Severe Brain Alzheimer's



Normal (expected) events as brain dies

 Swallowing becomes impaired

Appetite goes down

Unable to balance, walk

• Pneumonia

• Falls

Weight loss

• Immunity declines

70% of people with dementia die in nursing homes

 Nursing homes are a dementia end-of-life setting

 How much do you discuss/plan for this?

 If you do not have a "memory unit," how do you approach care?

What is high quality end-oflife care?

Avoid hospital and emergency department visits

Fewer pressure ulcers

Pain addressed

Die in preferred setting

Why are pain symptoms underreported and undertreated in dementia?

Residents lose ability to communicate

Caregivers and clinicians become habituated to "behaviors" as being part of dementia or an infection

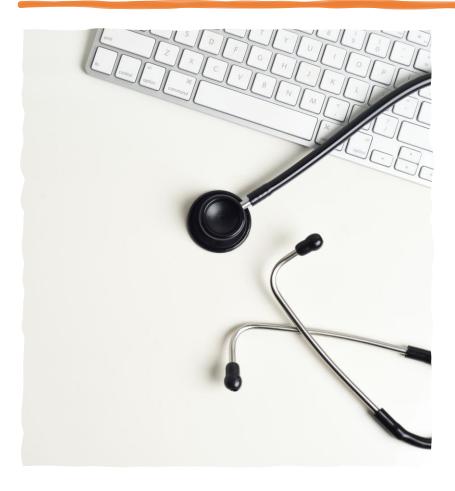
Requires systematic assessment of non-verbal cues

EOL outcomes are better when facilities have:

- Dedicated dementia units
- Higher licensed staff ratios
- Non-profit designation
- Higher market competition

Orth J, Li Y, Simning A, Zimmerman S, Temkin-Greener H. End-of-Life Care among Nursing Home Residents with Dementia Varies by Nursing Home and Market Characteristics. J Am Med Dir Assoc. 2021 Feb;22(2):320-328.e4.

Things to avoid:



- Finger sticks and lab draws that are no longer serving goals
- Continuing medications that are no longer needed
- Showing alarm about weight loss when it is expected
- Sending to the hospital for "behaviors"
- Using antipsychotics when pain meds might be better
- Using sleeping pills when the resident prefers to sleep intermittently, not necessarily at night

Forecast the path and promise to care until the end

Educate

Educate family (and staff) about progression of dementia

Give

Give examples of what to expect

Establish

Establish goals of care and discuss specific ways to achieve them

Tell

Tell them your plan to keep resident comfortable



- 1. Each human has a unique story.
- 2. Dignified care is what happens when no one is watching.
- 3. Tone of voice and body language matter more than words.
- 4. Turning down sensory input solves many problems.
- 5. Take nothing personally.

- 6. Social isolation can be deadly.
- 7. Purpose drives happiness.
- 8. Less is more on medications and medical care.
- 9. End of life is a sacred time, and a good death is possible.
- 10. Best care is grounded in compassionate presence. Without it, nothing else works.

Balancing Innovations and Passion in Healthcare to Strengthen the Team Fabric

Objectives

- 1. Describe the role of innovations in upgrading healthcare quality in PALTC
- 2. Recognize the burdens of innovations for healthcare team members, particularly in the pandemic
- 3. Engage in innovation and implementation processes that are sensitive to team member burdens and burnout

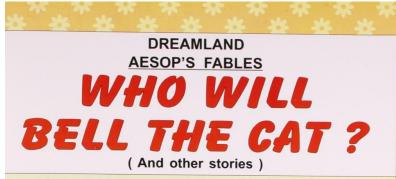
Way to Go
"Champion"!
Stretching the Team
Fabric Too Thin!

Arif Nazir MD

President, SHC Medical Partners

CMO, Signature HealthCARE





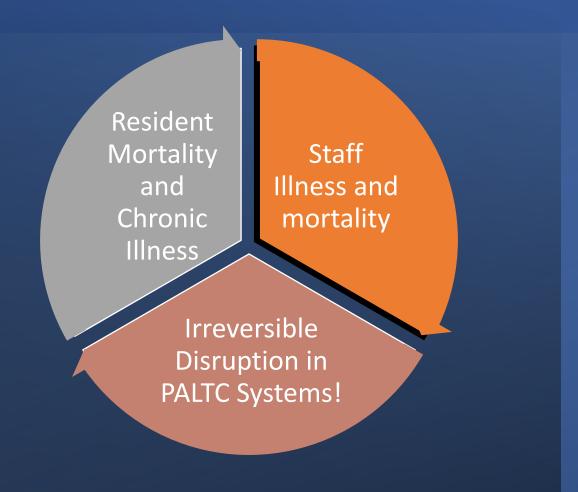


Dr. Tedros Adhanom Ghebreyesus

March 2020



Pandemic's Impact on Long-Term care



Pandemic: Making the Invisible, Visible!

Issue# 1



NEWS

Long-term care workforce challenges remain at 'crisis' level

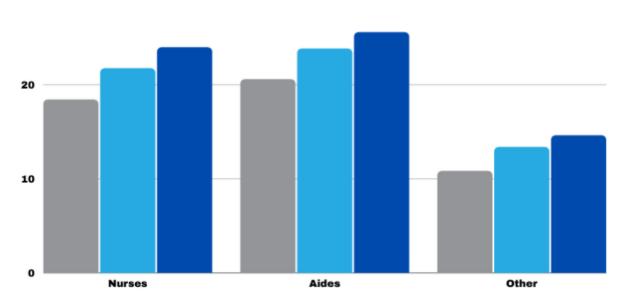


FEBRUARY 11, 2022

SHARE V

- Long-term care workforce levels lowest in 15 years
- >400K jobs lost between February 2020 and January 2022
- Worst (15%) decline in SNFs

Percent of US Nursing Homes Reporting Shortage of Nurses, Aides, and Other Staff 2020 vs 2021 vs 2022

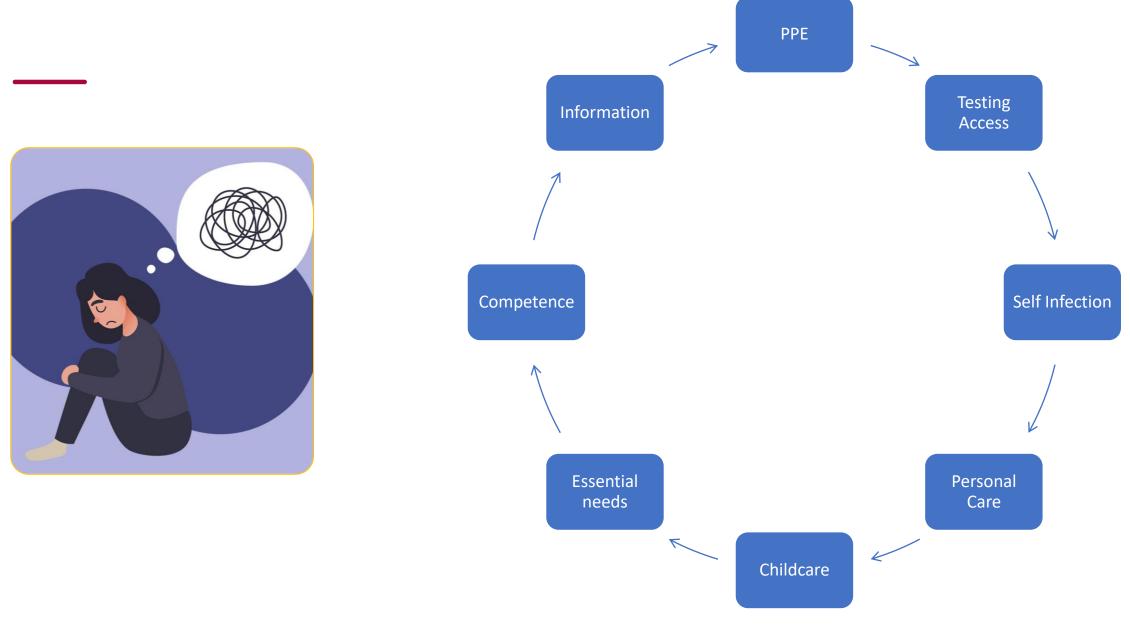


Dark blue columns represent 2022 data for skilled nursing homes claiming shortages. Light blue represents 2021 and grey 2020.

Source: Xtelligent Healthcare Media

30

Burnout and turnover: >400K staff left the setting!



Shanafelt T, Ripp J, Trockel M. Understanding and Addressing Sources of Anxiety Among Health Care Professionals During the COVID-19 Pandemic. JAMA. 2020;323(21):2133–2134. doi:10.1001/jama.2020.5893



Countering Frontline Burnout







HEAR ME

PROTECT ME

PREPARE ME





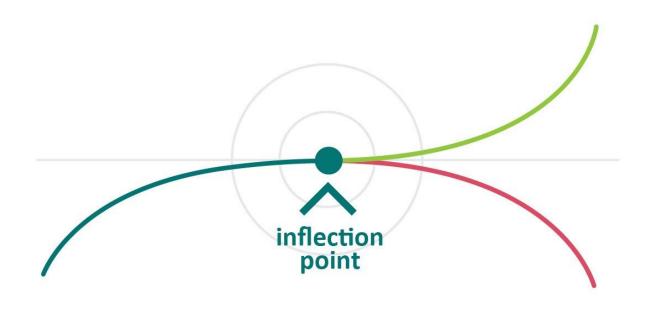
SUPPORT ME

CARE FOR ME

Issue# 2



- PALTC Expertise Must Be Included when Policy Is Being Developed That Affects PALTC
- Do Not Look for One-Size-Fits-All Solutions
- Collaboration across
 Healthcare Sectors Must
 Become the Norm
- Federal Policy Leadership
 Must Be Proactive, Not
 Reactive; and Supportive, Not
 Punitive
- The Nursing Home Industry and Regulatory Process Need Massive Restructuring



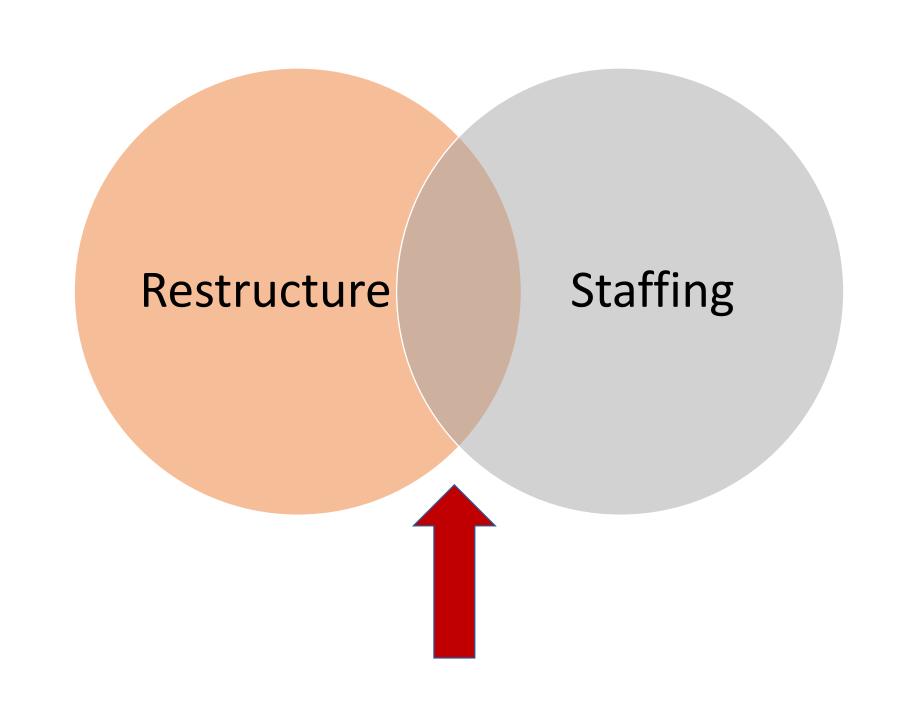
Laxton C., Nace D., Nazir A. Solving the COVID-19 Crisis in Post-Acute and Long-Term Care, Journal of the American Medical Directors Association, Volume 21, Issue 7, 2020,

Pandemic-driven Zeal for Restructuring! Many federal waivers e.g., 3-day stay

COVID-19 Taskforces and commissions

Private Equity funding and Tech Start Ups

Technology "Solutions" already in SNFs (sensors, infection control, others)



Health Agencies Update



January 25, 2022

Increased Use of Medicare Telehealth During the Pandemic

Melissa Suran, PhD, MSJ

JAMA. 2022;327(4):313. doi:10.1001/jama.2021.23332

"2020 telehealth visits increased to 52.7 million from approximately 840 000 in 2019"

Telehealth "Unintended" Issues and Impact

System Level

- Equipment and software issues (some were addressed by waivers that allowed personal phones and FaceTime as options)
- Wi-Fi issues at many SNFs, particularly rural
- Difficulty to include a family/ third party
- No best practices literature on appropriate physical exam approaches
- Restrictions on frequency

Staff Level

- Staff and resident literacy regarding tech
- Frustrated nursing staff who were stretched to begin with
- Licensed nurse practitioners asked by physicians to facilitate calls



Another Intervention Without much "Tooth"



Restructuring Burdens Added by the Pandemic

- Universal precautions and PPE requirements
- New and ever-changing testing requirements
- New and ever-changing reporting requirements
- Taking on the role of family for residents
- Others



CAUTION!

Innovative Restructures Risk Staff Burnout





Introducing Implementation Etiquette

- Its not about the ideas or solutions, its about the implemented approaches that defines success
- Attempts to shorten the 17 years implementation journey are crucial but come at a price for the staff
- Need to upgrade implementation approaches with more sensitivity to true frontline partnerships

Etiquette:

The customary code of polite behavior in society or among members of a particular profession or group

- Be yourself and allow others to treat you with respect
- Say "Thank You"
- Give Genuine Compliments
- Listen Before Speaking
- Speak with Kindness and Caution
- Do Not Criticize
- Be Punctual

Implementation Etiquette: Where Do We Start?

- Need to closely assess our approaches in current implementation strategies
- Must devise approaches with no or minimum added burdens on staff (assess organizational readiness)
- Funding the implementation adequately
- Facilitating a positive implementation "culture"
 - Understanding own and societal biases (+/-) towards PALTC
 - Setting realistic expectations
 - Adequate lingo



Levy, Cari, et al. "Pragmatic Trials in Long-Term Care: Implementation and Dissemination Challenges and Opportunities." *Journal of the American Geriatrics Society* (2022).

Levy, Cari, David Au, and Mustafa Ozkaynak. "Innovation and Quality Improvement: Safe or Sabotage in Nursing Homes?." *Journal of the American Medical Directors Association* 22.8 (2021): 1670-1671.

Assessing Current Implementation Etiquette: Proven Trial

- A pragmatic cluster randomized trial of ACP video interventions to reduce hospital transfers and burdensome treatments or increase hospice enrollment over 12 months among residents
- Showed no benefit
- Authors explanation for no impact:
 - "Overall intervention fidelity was low and highly variable across nursing homes"
 - The low fidelity to the intervention highlights... need to ensure the highest level of engagement from key stakeholders, including front-line providers, when conducting pragmatic trials in this setting.

Deep Dive into PROVEN
Methods
Utilized for Implementation



At each NH, 2 ACP video program champions, typically social workers, were identified and charged with showing videos to patients and families



Champions were instructed to complete these reports whenever a video was offered



To further enhance fidelity: Champion meetings were increased to monthly, and PMs to investigate reasons for non-adherence and low engagement

Assessing Current Implementation Etiquette: INTERACT Trial

- Each intervention NH selected a project "champion" and "co-champion" who were responsible for:
 - 1. Facilitating INTERACT training and implementation,
 - 2. Periodic submission of facility-based data, and
 - 3. Participation in monthly phone calls and follow-up webinars.
- Low "motivation" and staff "attitudes" as cited reasons for no impact
- NHs... did not take full advantage of the training or adhere to requirements for data submission in their signed participation agreements
- This incomplete participation was unexpected...all NHs received free INTERACT program materials and training, and participation agreements outlining their responsibilities were signed by administrators, directors of nursing, and medical directors

Common Themes Among Two Examples?

- Researches designed interventions on shoulders of "champion" (shifting upon them responsibility of motivation and culture change)
- Adding of unfunded responsibilities
- Both initiatives were critical to enhancing quality but designed as isolated "initiatives" (As opposed to integrating within the fabric of quality care)
- Research teams not taking responsibility of the implementation design failures
- Casting of negativity on an already marginalized setting (terms used included "disengaged", "unmotivated", and "unable to maintain fidelity")

Possible Additions to "Discussion" Sections

- "Our implementation design failed"
- "We failed to grasp the challenges frontline staff face meeting all the complex regulatory and care structures they are expected to comply with"
- "We learned never to shift most critical responsibilities to the busiest and most lowly paid professionals"
- "Successful implementation will require appropriate funding at all levels"
- "Every staff member is already a "Champion" and an "Advocate"; assigning them one more label failed to have a sustained benefit"
- "Future implementation designs should focus on holistic care restructure rather than introducing "projects" that add additional (and parallel) layers to already tedious daily care processes"

Addressing Implementation Etiquette: Role of Leaders

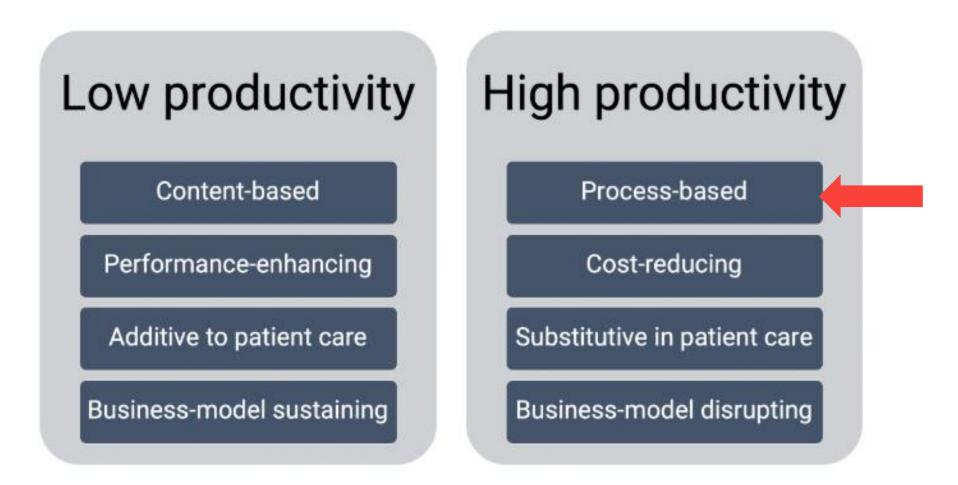
- Shed biases as much as possible and questions all assumptions
- Spent time in frontlines to hear, understand and learn staff challenges
- Process-based innovation, or even better process-tech innovations over tech-based innovations
- Assess organizational strain
- Local and federal advocacy to improve staff work environment including pay, regulatory and much more
- Partnerships between real world organizations (corporate) and academics to flip "evidence-based" to "Practice-based" medicine!

Issue of Organizational Strain

- Failure to pre-assess organizational strain when implementing organizational change runs the risk of counterproductivity, **exacerbating** resource poverty, inhibiting care delivery, and undermining the soundness of facilities like nursing homes.
- Just as oncologists assess patient status prior to chemotherapy... we **propose** that the *stamina and structural integrity of nursing homes be similarly assessed* before implementing research innovations



Exhibit 1: Relative productivity of innovation subtypes



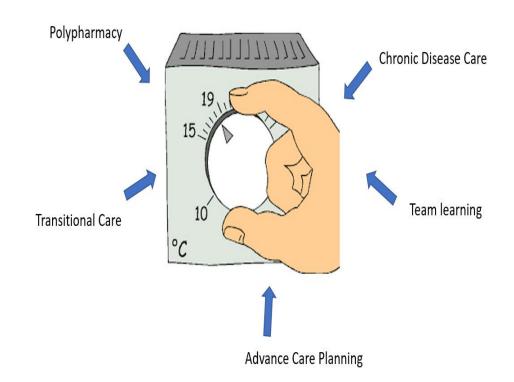
Why Isn't Innovation Helping Reduce Health Care Costs? Eli M. Cahan, Robert Kocher, Roger Bohn

Implementation Etiquette Examples at Signature HealthCARE

- Signature Research Institute
 - Led by a collaborative group to assure that ideas/ projects fullfili the implementation etiquette checklist (operational, clinical, regulatory, legal, compliance, financial)
 - Indiana University Center for Aging research partnership on pragmatic trial on Advance Care Planning- APPROACHES (ongoing iterations to assure no duplication of processes)
 - Base10 Genetics partnership to create digital automation around COVID-19 issues (shared staff burden for testing supplies, recording and reporting)
 - Care Hub Program
 – A Geriatric Thermostat!
- Siggy500 Polypharmacy Optimization and Deprescribing Initiative

Care Hub Program Model for Medicine-based Evidence

- 1. An NP-based care model that offers a "parallel" support platform to assure risk-based geriatric care delivery
- Provide SNF control over geriatric care processes and outcomes— a <u>geriatric</u> thermostat for the SNF
- 3. Utilize proactive & ethical services to fund the model and enhance outcomes e.g., ACP, CCM, prolonged services
- 4. Medical **Hub** to fully supplement and align with staff clinical workflows
- 5. After multiple iterations, now accepted by the frontline



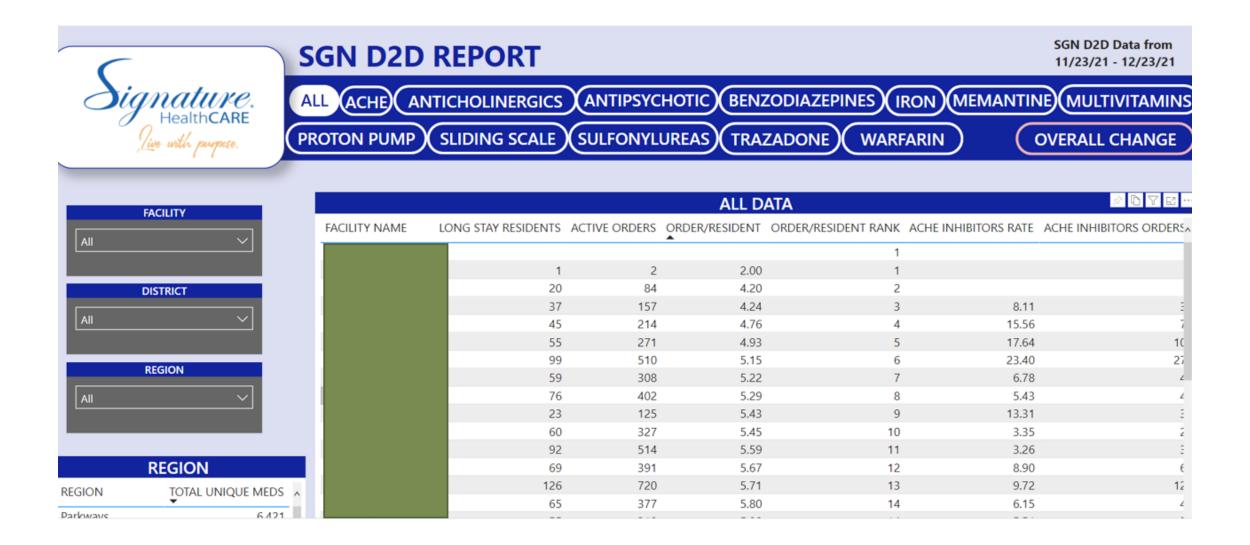
Siggy500 Implementation Strategies from Signature HealthCARE

- Need for a campaign/ branding approach; just education is not enough
 - Simplify a consistent message
 - Highlight what's in it for them?
- Buy-in from top leadership and messaging to the field
- Weekly data feeds with gamification approach
- Disseminate success stories from early adapters to inspire others
- Ongoing education

- "Siggy500" campaign in parallel to D2D
- Simple messaging
- Gamification
- Weekly data and updates



Analytic Dashboards and Reporting: Overall Ranks



Sample Communication to the Field:

Subject

Siggy500 Q1 Deprescribing Results

Dear colleagues:

Let us celebrate the New Year with the good feeling that we have kicked off the Siggy500 real well, getting rid of 1.3% of unnecessary pills for our long-stay residents since September 2021! This is immensely meaningful work. Congratulations on all of you nurses, pharmacists, practitioners and medical directors and other staff working together to improve quality of care for our residents.

Of course, we all are just warming up, as there is a whole lot more to achieve in 2022! Happy New Year, and enjoy great time with family and friends!

Arif Nazir MD CMO, Signature HealthCARE

Siggy500 Q1 Deprescribing Results:

1.3% decrease overall



Engaged versus other SNFs at Signature HealthCARE

	Facilities	Results
1.	Total facilities	106
2.	SNFs' overall cuts in medications since 9/2022	-4.2%
3.	Total SNFs with any improvement (engaged group)	65/106= 61%
4.	Average meds cuts among engaged SNFs ONLY	-12.4%
5.	Total SNFs that made a >5% decrease	26 (24%)
6.	Avg. improvement among top 20 with most cuts	-18%
7.	Most cuts in any SNF	-31%

Implementation Tips I Learnt in My Journey

- Understand the problem well, before we execute solutions
- Academic success or failures may not be always relevant in real world
- Tech innovative bandages will not fix foundational elements of teamwork and communication
- Not all that glitters is gold! Shiny tech innovations get most attention and resources, but can be expensive and taxing
- In any solution, "budget" for workflow disruptions and burnout exacerbation
- Messaging is crucial—Need to be sensitive in selecting our words

DREAMLAND AESOP'S FABLES WHO WILL BELL THE CAT? (And other stories)



Leaders Need to Step Up: Time to Bell the Cat!

- Leadership is not just about passionate statements; action is needed
- As leaders we all need to reflect on our own biases, attitudes and lingo-- are we part of the solution or the problem?
- Besides blaming policy, politicians and others, are we doing all we can to understand the frontline issues, and then facilitating change?
- On any given day, what can WE do differently, how can WE create positivity, and who can WE support and train?

Summary

- Quality of PALTC care continues to be below par and pandemic has created an urgency for restructure
- Without focus on the implementation "etiquette" and culture, we risk staff burdening and further drop in quality
- Implement efforts not accounting for true staff burden should be restructured or stopped
- PALTC corporate and academic leaders should seek robust collaborations, and focus on new ideas to discover sustainable implementation approaches
- Time for "Practice-based evidence"



Update on Diabetes Care in Older Adults

David Saxon, MD

Assistant Professor of Medicine
University of Colorado, Division of Endocrinology, Metabolism, and Diabetes
Chief of Endocrinology, Rocky Mountain Regional VA Medical Center
Director, University of Colorado Lipid Clinic

CMDA Conference, 4/29/22

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Disclosures

None

Learning Objectives

1. Review the most recent American Diabetes Association guidance on care of older adults with diabetes.

2. Understand the risks and benefits of newer antihyperglycemic agents in the nursing home setting.

3. Recognize the utility of continuous glucose monitoring devices for the elderly population.

Epidemiology of Diabetes in Older Adults

- >25% of adults >65 years old have diabetes
 - ~50% have prediabetes
- 2016: 1.3 million adults in nursing homes
 - 25-34% with diabetes

Guidelines on Diabetes Management in Older Adults

2013

Guidelines Abstracted from the American Geriatrics Society Guidelines for Improving the Care of Older Adults with Diabetes Mellitus: 2013 Update

American Geriatrics Society Expert Panel on the Care of Older Adults with Diabetes Mellitus

CLINICAL PRACTICE GUIDELINE

2019

Treatment of Diabetes in Older Adults: An Endocrine Society* Clinical Practice Guideline

Derek LeRoith, ¹ Geert Jan Biessels, ² Susan S. Braithwaite, ^{3,4} Felipe F. Casanueva, ⁵ Boris Draznin, ⁶ Jeffrey B. Halter, ^{7,8} Irl B. Hirsch, ⁹ Marie E. McDonnell, ¹⁰ Mark E. Molitch, ¹¹ M. Hassan Murad, ¹² and Alan J. Sinclair ¹³

2022

13. Older Adults: Standards of Medical Care in Diabetes—2022

American Diabetes Association Professional Practice Committee*

Diabetes Care 2022;45(Suppl. 1):S195-S207 | https://doi.org/10.2337/dc22-S013

Recommended Glycemic Targets in Older Adults

American Geriatrics Society (2013):

A1c 7.5-8% if moderate co-morbidities and life expectancy <10 yrs

American Diabetes Association (2022):

- Healthy: A1c <7-7.5%
- Complex/Intermediate: A1c <8%
- Community dwelling in skilled nursing or very complex: Avoid reliance on A1c

Endocrine Society Conceptual Framework for Determining Glycemic Targets

Overall Health Category	Group 1: Good Health	Group 2: Intermediate Health	Group 3: Poor Health
Patient characteristics	No comorbidities or 1-2 non-diabetes chronic illnesses* and No ADL [€] impairments and ≤1 IADL impairment	3 or more non-diabetes chronic illnesses* and/or Any one of the following: mild cognitive impairment or early dementia ≥2 IADL impairments	Any one of the following: End-stage medical condition(s)** Moderate to severe dementia ≥2 ADL impairments Residence in a long-term nursing facility
		ucose target ranges and H	

2022 ADA Standards of Medical Care: Older Adults Main Points

1. Framework for considering glycemic treatment goals

- 1. Simplification of complex insulin regimens
- 1. Considerations for diabetes treatment regimen simplification and deintensification/deprescribing in older adults

Why Is Less Tight Glycemic Control Recommended in Older Adults?

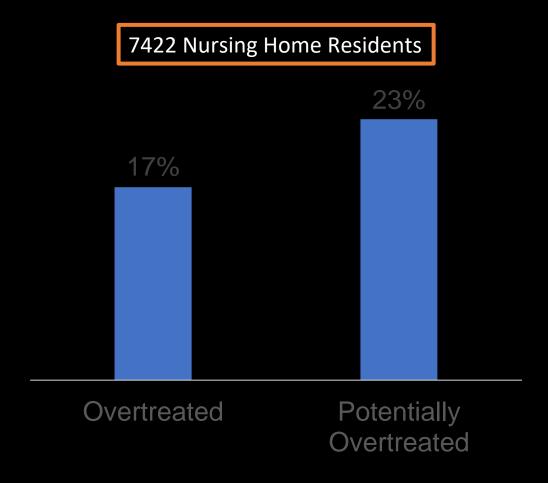
Lack of macrovascular benefit from tight control

Long duration of treatment needed to decrease microvascular complications

Documented harms of tight glycemic control (i.e. hypoglycemia)

Glycemic treatment deintensification practices in nursing home residents with type 2 diabetes

- VA nursing home residents (2013-2019)
- "Overtreatment" = HbA1c < 6.5 with any insulin use.
- "Potential overtreatment" = HbA1c < 7.5 with any insulin use <u>or</u> HbA1c < 6.5 on any glucose-lowering medication other than metformin alone.

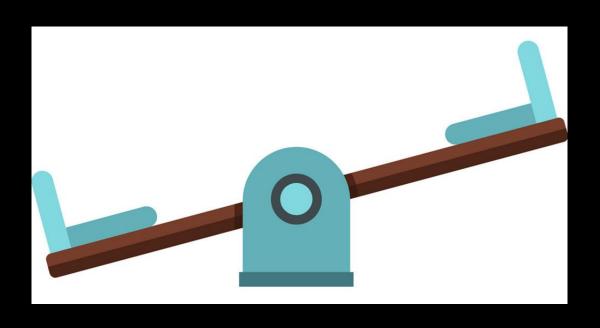


Lederle LI, et al. J Am Geriatr Soc. 2022 Mar 23.

Glycemic treatment deintensification practices in nursing home residents with type 2 diabetes

Were medications de-intensified within 14 days of A1c result? 7422 Nursing Home Residents 23% 17% 27% De-intensified 19% De-intensified Potentially Overtreated Overtreated

But in 2022, Should "Deintensification" Really Be Our Primary Focus in Older Adults?......



.....my opinion: "deintensification" is too simplistic in light of new developments in diabetes management.

- We can now often avoid hypoglycemia while maintaining tight glucose control.
- By <u>adding or switching</u> certain medications we can improve clinical outcomes that are important for older adults.
- We can monitor glucoses in a more patient-centered and informative way.

What's Changed in Diabetes Care Since 2013?

Short Answer = Almost Everything!

- Cardiovascular outcome trials:
 - 2015 EMPA-REG Trial (empagliflozin)
 - 2016 LEADER Trial (liraglutide)
- 3 once-weekly GLP-1 agonists: exenatide ER, dulaglutide, semaglutide
- 1st oral GLP-1 agonist (oral semaglutide)
- Huge improvements in continuous glucose and flash glucose monitoring (Dexcom G6, Freestyle Libre) and evidence for their use
- Benefits of GLP1 agonists and SGLT2i for CVD, renal disease, and HF
- Expansion of evidence of SGLT2i benefits in patients with and without diabetes

Let's Review 4 Things

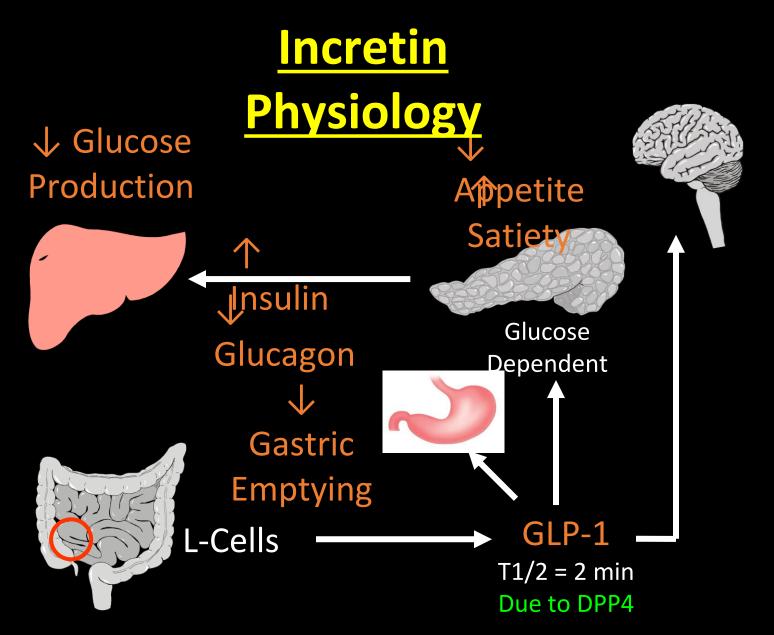
DPP4 Inhibitors

GLP1 Agonists

SGLT2

Inhibitors

Continuous Glucose Monitors



GLP-1 = Glucagon Like Peptide-1
DPP4 = Dipeptidyl Peptidase 4

Incretin Based



GLP-1 Analog / Agonist

Prolonged Duration of Analog Action

DPP4 Inhibitor

Prolongs Duration of Native GLP-1 Action

Incretin Based Therapy

Exenatide (Byetta) Bus (SQ)

Liraglutide (Victoza) QD

Lixisenatide (Adlyxin) QD

Exenatide QW (Bydureon) Weekly

Dulaglutide (Trulicity) Weekly

Semaglutide (Ozempic) Weekly

Combinations

Liraglutide + Degludec (Xultophy) Lixisenatide + Glargine (Soliqua) Blood Glucose

\$\sqrt{\psi}\$

Weight Loss

Incretin Based Therapy DPP4 Inhibitors (PO)

Sitagliptin (Januvia)

Saxagliptin (Onglyza)

Linagliptin (Tradjenta)

Alogliptin (Nesina)

<u>Combinations</u>
Many

Weight Neutral

Oral Semaglutide (Rybelsus) FDA Approved Sept 2019

Sodium N-(8-(2-hydroxybenzoyl) Amino) Caprylate (SNAC)

- Co-formulation of semaglutide with an absorption enhancer is necessary to achieve adequate bioavailability of oral administration
- The absorption enhancer, SNAC, is a small fatty acid derivative that promotes absorption across the gastric epithelium
- Oral semaglutide is co-formulated with 300 mg SNAC

SNAC, Sodium N-(8-(2-hydroxybenzoyl) amino) caprylate. Buckley ST et al. Sci Transl Med 2018;10:pii: eaar7047.

Some Practical GLP-1RA Tips

- Nausea is very common
 - Usually gets better w/in a month
 - Reduce meal size by ~50%
 - If vomiting, stop the med!
- Reduce insulin ~20% if starting when diabetes is already fairly well-controlled
- It's an injection lots of videos online to educate
 - Needle is small!

Sodium Glucose Transporter 2

Kidneys Filter + Reabsorb Glucose: 180 g/day

SGLT2 (proximal tubules): 90%

Normal



Glycosuria

BG > 180 mg/dl

SGLT2

Inhibitor



Glycosuria

BG > 80 mg/dl

Glucose Loss

80-100 g/day 320-400 kcal/day

Blood Glucose ↓
Weight Loss

No Renal Damage

GU Infections / UTI

Sodium/Glucose Co-Transporter 2 Inhibitors

<u>Generic</u>	Trade Name	<u>Doses</u>
Canagliflozin	Invokana	100, 300
mg		
Dapagliflozin	Farxiga	5, 10 mg
Empagliflozin	Jardiance	10, 25 mg
Ertugliflozin	Steglatro	5, 15 mg

DKA with BG 150-250 mg/dl Occasionally with These Agents

Most Common Precipitants: Low Carb Diets, Fasting

Cardiovascular Disease Benefit Proven

High Risk ASCVD Patients SGLT2 Inhibitors

- Empagliflozin (Jardiance)
- Canagliflozin (Invokana)
- Dapagliflozin (Farxiga)

GLP-1 Analogs

- Liraglutide (Victoza)
- Semaglutide (Ozempic)
- Dulaglutide (Trulicity)

Heart Failure Benefit Proven SGLT2 Inhibitors

- Empagliflozin (Jardiance)
- Canagliflozin (Invokana)
- Dapagliflozin (Farxiga)
- Ertugliflozin (Steglatro)

Chronic Kidney Disease Benefit

Proven SGLT2 Inhibitors

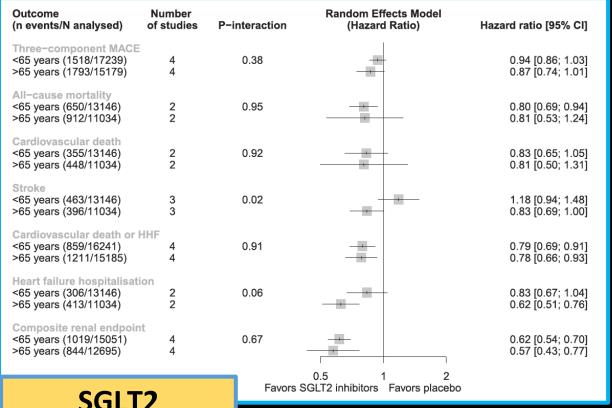
- Empagliflozin (Jardiance)
- Canagliflozin (Invokana)
- Dapagliflozin (Farxiga)
- Ertugliflozin (Steglatro)

Meta-Analysis of GLP-1 Agonist and SGLT2 **Inhibitors in Older Adults**

11 studies with >91,000 patients were included

0.89 [0.76; 1.03] 0.86 [0.80; 0.92]
0.80 [0.42; 1.51] 0.81 [0.67; 0.99]
0.77 [0.61; 0.98] 0.82 [0.68; 0.98]
0.81 [0.58; 1.13] 0.86 [0.72; 1.02]
1.14 [0.73; 1.77] 0.86 [0.71; 1.04]

GLP1 Agonists



SGLT2

Review of GLP-1 Agonist and SGLT2 Inhibitors in Older Adults

Table 2 – Meta-analysis results versus placebo for patients 75 years or older and patients younger than 75 years.						
Outcome	Number of trials	Age categories (n events/N analyzed) ^a	HR	95% CI	P-interaction	I ²
GLP-1 receptor agonists versus	placebo					
3-p MACE	2	All patients <75 years (2598/22,006) ≥75 years (448/2086)	0.87 0.92 0.75	0.79 to 0.97 0.85 to 0.99 0.61 to 0.92	0.07	40%
SGLT2 inhibitors versus placebo	00					
3-p MACE	2	All patients <75 years (2075/22,432) ≥75 years (256/1748)	0.91 0.93 0.77	0.83 to 0.99 0.85 to 1.02 0.60 to 0.99	0.16	4%
CVD	2	All patients <75 years (691/22,432) ≥75 years (112/1748)	0.78 0.79 0.77	0.58 to 1.06 0.52 to 1.20 0.40 to 1.46	0.94	71%
CVDHHF	2	All patients <75 years (1089/22,432) ≥75 years (187/1748)	0.75 0.76 0.71	0.62 to 0.90 0.63 to 0.91 0.40 to 1.27	0.83	52%
ннг	2	All patients <75 years (607/22,432) ≥75 years (102/1748)	0.71 0.72 0.64	0.61 to 0.83 0.61 to 0.84 0.36 to 1.12	0.70	0%
Renal composite outcome	2	All patients <75 years (1147/21,667) ≥75 years (133/1668)	0.59 0.59 0.51	0.52 to 0.65 0.51 to 0.68 0.36 to 0.65	0.49	0%
111 1 1 1 mm 1 1 1 1 mm	C1 1 orn 4 1	1:1		T 0 i-tit f.		

Abbreviations: HR, hazard ratio; CI, confidence interval; GLP-1, glucagon-like peptide-1; SGLT2, sodium-glucose co-transporter 2; 3-p MACE, 3-point composite of major adverse cardiovascular events; CVD, cardiovascular death; CVDHHF, cardiovascular death or hospitalization for heart failure; HHF, hospitalization for heart failure. and placebo arms.

What About CGMs in Older Adults?

 Medicare expanded CGM coverage and rule changes have made it easier to prescribe

 CGMs can aide "deprescribing" by helping to focus on how diet impacts glucose readings

CGMs can make insulin use safer

Polling Question

PollEv.com/travisneill338

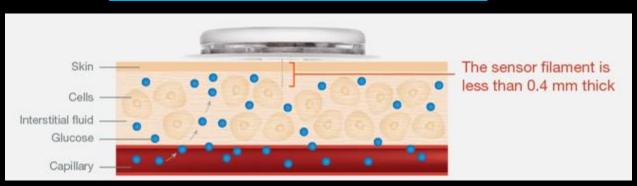
Do you currently prescribe continuous glucose monitors (i.e. Dexcom CGM or Freestyle Libre) to your patients >65 years old?

```
[ ] Yes
[ ] No
```

Freestyle Libre & Dexcom G6



Interstitial Glucose Readings





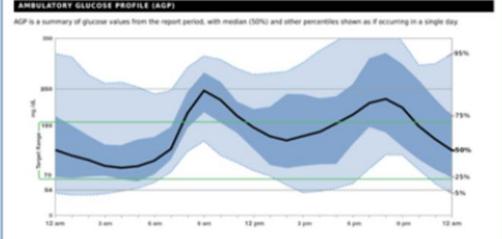


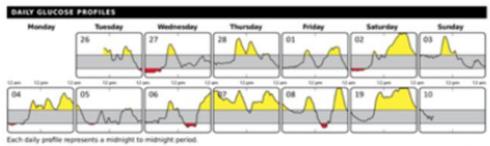
Ambulatory Glucose Profile

26 Feb 2019 - 10 Mar 2019 % Time CGM is Active		13 days 99.9%
Gilucose Ranges Targets (% of Reading Targets Range 70-180 mg/dl. Below 70 mg/dl. Below 54 mg/dl. Less than 1% (34min) Less than 1% (34min) Less than 1% (34min) Less than 5% (31r 12n Each 5% increase in time in range (70-180 mg/dl.) is clinical		% (16hr 48min) 8min) 4min) hr 12min)
Average Glucose Glucose Management In Glucose Variability Defined as percent coefficient of v		173 mg/dL 7.6% 49.5% et s.36%



captürAGP'





GLUCOSE STATISTICS AND TARGETS

26 Feb 2019-10 Mar 2019 % Time CGM is Active 13 days 99.9%

173 mg/dL

7.6%

49.5%

Glucose Ranges Targets [% of Readings (Time/Day)]

Target Range 70-180 mg/dLGreater than 70% (16h 48min)

Below 70 mg/dL.....Less than 4% (58min)

Below 54 mg/dL....Less than 1% (14min)

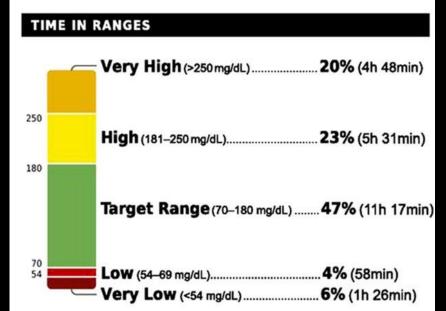
Above 180 mg/dLLess than 25% (6h)

Above 250 mg/dL.....Less than 5% (1h 12min)

Each 5% increase in time in range (70-180 mg/dL) is clinically beneficial.

Average Glucose Glucose Management Indicator (GMI) Glucose Variability

Defined as percent coefficient of variation (%CV); target ≤36%

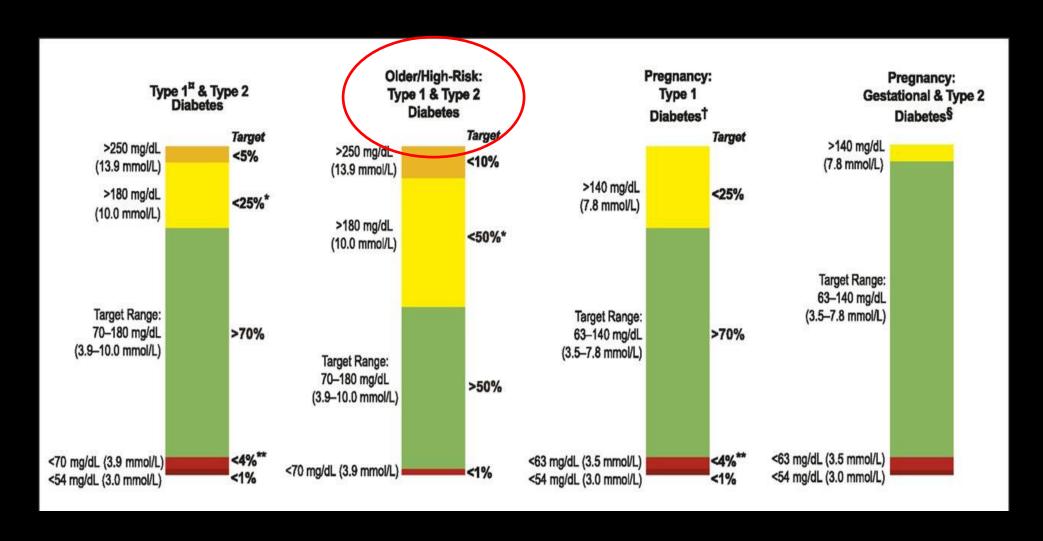


Time In Range (TIR): time between 70-180mg/dL

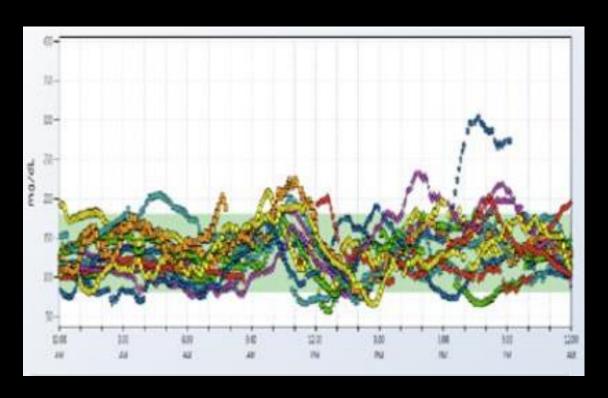
70% TIR ~ 7.0% HbA1c

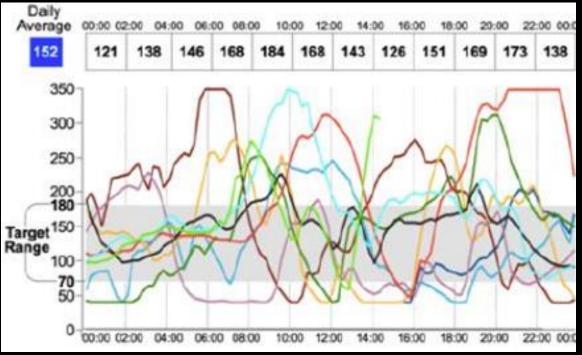
TIR increase 10% ~ HbA1c decrease 0.8%

CGM Data: Beyond A1c Targets



Case example: CGM overlay from two different patients with A1C 6.8%





Wireless Innovation for Seniors with Type 1 Diabetes Mellitus (WISDM) Study

- 203 participants (median age 68, 52% female)
- A1c 7.5%, 53% on insulin pumps

With CGM:

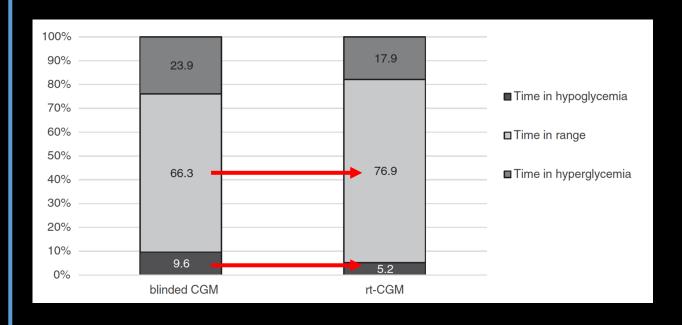
- Median time with glucose levels less than 70mg/dL was 5.1% (73 minutes per day) at baseline and 2.7% (39 minutes per day)
- Mean HbA1c decreased in the CGM group compared with the standard BGM group (adjusted group difference, −0.3%; 95%Cl, −0.4% to −0.1%; P <.001).

Acceptability of Continuous Glucose Monitoring in Elderly Diabetes Patients Using Multiple Daily Insulin Injections

MDI-treated elderly (n = 25, mean age 67.6 – 1.2 years, HbA1c = 7.1% – 0.2%, 56% type 1 diabetes) were instructed to use a CGM device.

Results

- Satisfaction w/ CGM was "high" and annoyance was "modest"
- 95% had improved sense of security with CGM use
- 68% with improved sleep quality
- 82% wanted to use CGM after study completion



Potential Benefits & Disadvantages of CGM in Elderly

Benefits

- 1. Reduction in fingerstick glucose checks (comfort)
- 2. Alarms to detect hypoglycemia and hyperglycemia
- 3. Remote monitoring by caregivers / family
- 4. Better glycemic control

Disadvantages

- 1. "Too much data": alarm fatigue and anxiety
- 2. Cost
- 3. Technological challenges

Summary

- Several guidelines exist regarding management of diabetes in older adults
- Deintensification is important, but that's not all we should do
 - "Intensify to de-intensity" in some patients
- SGLT2 inhibitors and GLP-1 RAs at the forefront of our care
 - Think about these meds based on co-morbidities
- New technologies like Freestyle Libre & Dexcom CGM are revolutionizing glucose monitoring and management
 - Great way to mitigate hypoglycemia risk

Thank you!

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Treatment of Diabetes in Older Adults: An Endocrine Society* Clinical Practice Guideline (2019)



CGM Time in Range Webinars

Psychosis in Late Life

Understanding the Underlying Cause and How to Treat It



What is Psychosis?

loss of contact with reality, including hallucinations, delusions and disorganized thinking

Psychosis is a SYMPTOM

In PALTC, the most common underlying causes are:

Dementia

Delirium

Substance Intoxication or Withdrawal

Schizophrenia

Schizoaffective disorder

Major Depressive Disorder

TBI

Combinations of the above!

Primary Psychotic Disorders



Common presenting symptoms

- Delusions
 - Persecutory
- Hallucinations
 - · Auditory, can be command
- Disordered thinking
 - Different from general "confusion"



Schizophrenia

DEFINITION

Represents a heterogeneous syndrome of disorganized and bizarre thoughts, delusions, hallucinations, inappropriate affect and impaired psychosocial functioning.

EPIDEMIOLOGY

- Life time prevalence ranges from 0.6-1.9 %
- Worldwide prevalence is remarkable among all cultures
- Most commonly, onset is in late adolescence or early adulthood.
- Prevalence is equal in male and female
- Onset earlier in males
- Males- first episode early 20s
- Females late 20s to early 30s.



Major Mental Illness (MMI) often requires long-term psychotropics!

CONTEXT, CONTEXT, CONTEXT

MDD, schizophrenia, schizoaffective disorder, bipolar disorder

You are not required to do a GDR if resident is stable on the lowest effective dose and without new/concerning side effects – DOCUMENT.

Schizophrenia (and most MMI) does not develop in late life.

Example risk v. benefit statement for Schizophrenia

"Mr. Garcia has a Level II classification for schizophrenia, which is a lifelong condition for which he resides in a NH. Zyprexa 20 mg daily is the dose that helped reduce his command hallucinations and as such is the least effective maintenance dose. A reduction would be unsafe. He is not sedated, nor experiencing side effects that would outweigh benefits."

Provider role for people with Primary Psychotic Disorders (how to be a good team player with facility)

History

Get good history and confirm that you agree with diagnoses.

Documentation

Be responsive to pharmacist and psych pharm committee to write "risk vs. benefit" statements, also known as "contraindication to reduce."

Lowest dose

Try to achieve the "least effective dose" of all psychotropics.

Match PASRR

Make sure the indication for psychotropic medications is the same as the PASRR diagnoses (surveyors want these to match).

Primary psychotic disorders and dementia

People with primary psychotic disorders can get dementia.

People with dementia DO NOT develop primary psychotic disorders.

For those with both, they may need less psychotropic medication over time as their brain becomes more vulnerable *but not always.

Diagnostic clarity matters

• Schizophrenia does not develop in late life, nor after dementia onset.

 Using a primary psychotic disorder diagnosis in someone with dementia to justify use of an antipsychotic is fraud and the NH can be penalized.

• If someone with dementia has a justified need for an antipsychotic (*distressing psychosis and/or unprovoked aggression causing a safety concern), it is ok to use one; DOCUMENT well and revisit need every quarter.

Example risk v. benefit - primary dementia on antipsychotic

"Mr. Kaplan was placed on risperidone 1mg qhs 3 months ago after an escalating pattern of paranoia that resulted in him assaulting a peer he believed to be an intruder. Since that time he has expressed little to no paranoid thoughts, has improved food intake and is more easily engaged in activities. His family is relieved and in agreement with continuing the medication. He is tolerating the medication without issue. We plan to revisit his behaviors and consider a GDR at the 6-month mark, but currently feel the benefits outweigh the risks."

Rule out
Substances
or Medical
Causes

If NEW SX even in KNOWN dementia

If NEW SX even in KNOWN primary psychotic disorder

NEW psychotic symptoms often = DELIRIUM

Substances and medications with capacity to induce psychosis

Substance or medication	Examples	
Alcohol and sedatives/hypnotics	Alcohol (intoxication or withdrawal), barbiturates, and benzodiazepines (particularly withdrawal)	
Anabolic steroids	Testosterone, methyltestosterone	
Analgesics	Meperidine, pentazocine, indomethacin	
Anticholinergics	Atropine, scopolamine	
Antidepressants	Bupropion, others if triggering a manic switch	
Antiseizure medications	Zonisamide, other antiseizure medications at high doses	
Antimalarial	Mefloquine, chloroquine	
Antiparkinsonian	Levodopa, selegiline, amantadine, pramipexole, bromocriptine	
Antivirals	Abacavir, efavirenz, nevirapine, acyclovir	
Cannabinoids	Marijuana, synthetic cannabinoids (ie, "spice"), dronabinol	
Cardiovascular	Digoxin, disopyramide, propafenone, quinidine	
Corticosteroids	Prednisone, dexamethasone, etc	
Hallucinogens	LSD (lysergic acid diethylamide), PCP (phencyclidine), ketamine, psilocybin-containing mushrooms, mescaline, synthetic "designer drugs" (eg, 2-CB, "N-Bomb" [25I-NBOMe]), salvia divinorum	
Inhalants	Toluene, butane, gasoline	
Interferons	Interferon alfa-2a/2b	
Over-the-counter	Dextromethorphan, diphenhydramine, some decongestants	
Stimulants	Cocaine, amphetamine/methamphetamine, methylphenidate, certain diet pills, "bath salts" (MDPV [methylenedioxypyrovalerone], mephedrone), MDMA (3,4- methylenedioxymethamphetamine)/ecstasy	
Toxins	Carbon monoxide, organophosphates, heavy metals (eg, arsenic, manganese, mercury, thallium)	



Types of Hallucinations give Clues

Auditory classic for Primary Psychotic Disorders

Always ask about command AH to harm self or others – safety assessment

Visual common for Parkinsonian disorders and medical/substances delirium

Tactile common for DT's and for delusional parasitosis

Rule Out Delirium

<u>Sharon Inouye MD</u> has published more than 140 papers on delirium and is a leading researcher on this topic - her definition:

"an acute, temporary change in cognition characterized by relatively rapid onset and variable symptoms, including difficulty maintaining attention"

Studies show the prevalence of psychotic symptoms is ~ 40-50%

Of those -1/3 have visual hallucinations, 1/5 have auditory hallucinations, and $\frac{1}{4}$ have delusions. The presence of visual hallucinations is significantly associated with more active medical diagnoses and multiple etiologies causing the delirium.

Learn how to spell it! D-E-L-I-R-I-U-M (one E, two I's... I know, right??)



Treatment for Primary Psychotic Disorders

"What gets you well keeps you well"

Choose 2nd gen over 1st AP's when you can

Consider long-acting injectables early

Clozapine is superior for refractory psychosis and SI

• Must allow blood draws, and be medically stable

Make choice based on patient preference, side effect profile, availability, and insurance

• Start with Risperidone or Olanzapine if AP-naïve

Selected adverse effects of antipsychotic medications for schizophrenia^[1,2]

	1 /		•									
	Weight gain	Glucose abnormalities	Hyperlipidemia	Akathisia	Parkinsonism	Dystonia	Tardive dyskinesia	Prolactin elevation	Sedation	Anticholinergic	Orthostatic hypotension	QTc prolongation
Second-generati	on agents	3										
Aripiprazole	+	+	+	++	+	+	+	+	+	+	+	*
Asenapine	++	++	++	++	+	++	++	++	++	+	++	+
Brexpiprazole [¶]	+	+	++	++	+	+	+	+	++	+	+	*
Cariprazine [¶]	++	+	+	++	+	+	+	+	++	++	+	*
Clozapine∆	+++	+++	+++	+	+	+	+	+	+++	+++	+++	++
Iloperidone	++	++	+	+	+	+	+	++	++	+	+++	+
Lumateperone ¶	+	+	+	+	+	+	+	+	+	+	+	*
Lurasidone	+	++	++	++	++	++	++	+	++	+	+	*
Olanzapine	+++	+++	+++	++	++	+	+	++	+++	++	++	++
Paliperidone	++	+	++	++	++	++	++	+++	+	+	++	+
Pimavanserin	-	+	+	+	+	+	+	+	+	+	++	+
Quetiapine	++	++	+++	+	+	+	+	+	+++	++	++	++
Risperidone	++	++	+	++	++	++	++	+++	++	+	++	++
Ziprasidone	+	+	+	++	+	+	+	++	++	+	++	+++
First-generation	agents											
Chlorpromazine	++	++	+	++	++	++	+++	+	+++	+++	+++	+++
Fluphenazine	++	+	+	+++	+++	+++	+++	+++	+	+	+	+
Haloperidol	++	+	+	+++	+++	+++	+++	+++	+	+	+	Oral: ++ IV: +++
Loxapine	+	+	+	++	++	++	++	++	++	++	++	*
Molindone	+	+	+	++	++	++	++	++	++	+	+	*
Perphenazine	++	+	+	++	++	++	++	++	++	++	++	*
Pimozide	+	+	+	+++	+++	++	+++	+++	+	+	+	++ >
Thioridazine [§]	++	+	+	+	+	+	+	++	+++	+++	+++	++
Thiothixene	+	+	+	+++	+++	+++	+++	+++	+	+	+	*
Trifluoperazine	++	+	+	++	++	++	++	++	+	++	+	*

Adverse effect rankings, with the exception of the QTc classifications, are consistent with American Psychiatric Association practice guidelines for the treatment of schizophrenia. [1] The QTc classifications are determined by Lexicomp according to US Food & Drug Administration guidance. [2,3] Other sources may use different classification systems resulting in some agents being classified differently.

IV: intravenous.

- * Clinically significant QTc prolongation was not detected in preliminary studies or reported in the manufacturer's labeling.
- ¶ Based upon limited experience.

 Δ Clozapine also causes granulocytopenia or agranulocytosis in approximately 1% of patients requiring regular blood cell count monitoring. Clozapine has been associated with excess risk of myocarditis and venous thromboembolic events including fatal pulmonary embolism. These issues are addressed in the UpToDate topic review of guidelines for prescribing clozapine section on adverse effects.

- ♦ Although the available evidence concerning the average QTc prolonging effect of pimozide is consistent with a classification of moderate significance (ie, ++), label warnings have characterized the QTc effect and cardiovascular risks as severe and sudden deaths in patients on pimozide have been reported.
- § Thioridazine is also associated with dose-dependent retinitis pigmentosa. Refer to UpToDate text.

Clozapine

Superior treatment for resistant psychotic disorders and serious SI

Serious potential side effects: neutropenia, seizures, cardiomyopathy

Common side effects: drooling, weight gain, sedation; less likely to cause EPS

Requires pretreatment EKG, CBC with ANC and weekly/monthly monitoring for ANC; must enroll in REMS registry

Slow titration: 25mg qd 1 week, then 50 mg qd 1 week, etc ;target dose 300 mg/d – maintenance dose 300-600, with average 400 mg/d

Check levels at 300 mg before proceeding; goal = 250 to 350 ng/mL

Extra Pyramidal Side Effects (worse for FGA's)

<u>Akathisia</u> is suggested by a sensation of restlessness, frequent pacing, a compelling urge to move, or an inability to sit still.

<u>Parkinsonism</u> is suggested by finding of masked facies, bradykinesia, tremor, or rigidity.

<u>Dystonia</u> is a tonic contraction of a muscle or muscle group that is typically disturbing to the patient and obvious to the examiner.

Abnormal involuntary movement scale

Public Health Service Alcohol, Drug Abuse, and Mental Health Administration National Institute of Mental Health

KEY: 0 = None 1 = Minim 2 = Mild	nal, may be extreme normal	NAME:			
3 = Mode 4 = Sever		Prescribing practitioner:			
occur upon activ	TNGS: Rate highest severity vation one less than those ob ell as code number that appli		RATER Date		
Facial and oral movements	 Muscles of facial expre- eg, movements of forehe cheeks, including frowning 	0 1 2	3 4		
	Lips and perioral area eg, puckering, pouting, s	0 1 2	3 4		
	Jaw eg, biting, clenching lateral movement	0 1 2	3 4		
	Tongue Rate only increa out of mouth. NOT inabil Darting in and out of mo	0 1 2	3 4		
Extremity movements	5. Upper (arms, wrists, h Include choreic moveme purposeless, irregular, sp (ie, slow, irregular, comp INCLUDE TREMOR (ie, re	0 1 2	3 4		
	Lower (legs, knees, areg, lateral knee movement foot squirming, inversion	0 1 2	3 4		
Trunk movements	7. Neck, shoulders, hips pelvic gyrations	0 1 2	3 4		
Global	8. Severity of abnormal me	0 1 2	3 4		
judgments	9. Incapacitation due to	0 1 2	3 4		
	10. Patient's awareness of Rate only patient's report of No awareness 0 - Aware, no distress 1 - Aware, mild distress 2 - Aware, moderate distress Aware, severe distress	0 1 2	3 4		
Dental status	11. Current problems wit	. Current problems with teeth and/or dentures?			
status	12. Are dentures usually	No	Yes		
	13. Edentia?				
	14. Do movements disap	No	Yes		

Meds for Akathisia

Propranolol 10 mg bid up to 60 mg bid

Benztropine 1mg bid up to 3 mg bid (remember, highly anti-cholinergic)

Clonazepam 0.5 mg tid up to 3mg

Psychosis and Parkinsonism

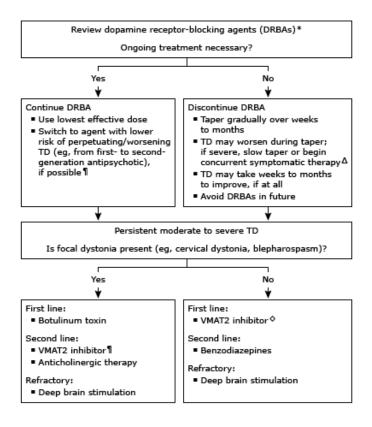
- Discern whether PD, LBD or primary medication side effect and assess that symptoms cause *subjective* distress or *safety* concern
- In PD, must weigh balance of movement v. psychosis
- Best intervention is to reduce +DA meds if possible
 - Sinemet, amantadine, pramipexole, ropinirole
- FDA approved for PD Psychosis: <u>Pimavanserin</u> (Nuplazid) but data are concerning for study design, increased mortality, limited efficacy and approval process*
- Clozapine least likely to cause EPS, but rarely worth risk
- <u>Seroquel</u> best bet for minimizing EPS; dose 12.5 bid/tid and increase as tolerated; sedation/falls main risk (half life ~5h so not good just at night)

^{*}Schubmehl S, Sussman J. Perspective on Pimavanserin and the SAPS-PD: Novel Scale Development as a Means to FDA Approval. Am J Geriatr Psychiatry. 2018 Oct;26(10):1007-1011. doi: 10.1016/j.jagp.2018.06.001. Epub 2018 Jun 14. PMID: 30072306.

Tardive Dyskinesia

- TD develops from chronic antipsychotic use, worse from 1st generation exposure, characterized by the following features:
- Sucking, smacking of lips
- Choreoathetoid movements of the tongue
- Facial grimacing
- Lateral jaw movements
- Choreiform or athetoid movements of the extremities and/or truncal areas

Management of new-onset tardive dyskinesia (TD)



The most common manifestations of TD involve spontaneous movements of the mouth and tongue; the arms, legs, trunk, and respiratory muscles can also be affected. Less commonly, the prominent feature is dystonia involving a focal area of the body such as the neck. TD can be irreversible and lifelong, with major negative impacts on psychologic health and quality of life. TD is important to recognize, since early discontinuation of the offending drug offers the best chance of recovery. In patients who require ongoing antipsychotic drug therapy for management of psychiatric disorders, symptomatic therapies for TD can help lessen movements.

FDA approved meds for TD

Vesicular Monoamine Transporter Type 2 Inhibitors (VMAT2) reduce dopamine release presynaptically

- Valbenazine (Ingrezza) 1st choice
 - 30-40% reduction in AIMS scores sustained at 48 weeks
 - Start 40 mg q week x 1 week up to 80 mg q week
 - Serious reactions: QT prolongation, Parkinsonism
 - Common reactions: somnolence, anticholinergic, balance probs, HA, akathisia
 - GoodRX cost ~\$7000.00/mo.
- <u>Deutetrabenazine</u> (Austedo)
 - Harder to dose: start 6 mg/d up to 48 mg/d but max 18 mg/dose
 - Black box for SI in HD
 - GoodRX cost ~\$4000.00-\$6000.00/mo

Worst SGA for weight gain:

Clozapine Olanzapine

Recommendations for metabolic risk factor monitoring in patients with severe mental illness or on antipsychotic medication

	Timing of assessment								
Risk factor	First	t year of	Ongoing monitoring*						
	Baseline	6 weeks	3 months	12 months	Quarterly¶	Annually¶			
Personal and family history of diabetes, hypertension, or cardiovascular disease	х					Х			
Smoking status, physical activity, ${\sf diet}^{\Delta}$	X	X	X		х				
Weight, body mass index [∆]	Х	Х	х		Х				
Blood pressure $^{\Delta}$	Х	Х	Х		Х				
Fasting glucose or HbA1c [♦]	Х	Χ§	х	х		Х			
Lipid profile (fasting or nonfasting)	Х		х	x		Х			

^{*} In subsequent years of antipsychotic and in patients with severe mental illness.

 Δ Assess regularly as part of general health maintenance.

HbA1c is usually more practical to obtain than fasting glucose but either can be used.

§ Fasting glucose at 6 weeks is only recommended by European guidelines, but given evidence for rapid-onset hyperglycemia in some individuals starting antipsychotics, this represents prudent monitoring, especially for clozapine and olanzapine.

Adapted from: De Hert M, Detraux J, van Winkel R, et al. Metabolic and cardiovascular adverse effects associated with antipsychotic drugs. Nature Rev Endocrinol 2011; 8:114.

[¶] Ongoing quarterly and annual monitoring is appropriate when health indicators are within the normal range. More frequent monitoring is indicated when health indicators are out of range.

Practical summary

Psychosis is a symptom, not a disorder.

Primary psychotic disorders require maintenance treatment, and monitoring.

For delirium and dementia, risks typically outweigh benefits (and evidence) for antipsychotic use, unless very *short-term* for safety or subjective distress.

Antipsychotic use must be well documented in a "risk v. benefit" statement by regulation.

Misusing diagnoses to justify antipsychotic use is fraud.















Health Facilities & Emergency Medical Services Division

Colorado Medical Directors Association April 29, 2022



Our Mission

Protect the health, safety and welfare of all health care system users

Ensure access to quality health care for all Coloradans







HFEMSD's Philosophy of Regulation

eliable to all stakeholders, citizens and visitors fficient, effective and elegant in all service interactions ccountable, transparent and collaborative interactions ompliant through balanced sanctions and fair practices elpful whenever possible





Nursing Facilities

- 225 Currently licensed nursing facilities
- 3 Closures Prospect Park, Estes Park, Yuma Life Care, Yuma, Bonell Good Samaritan Home, Greeley
- 128 Recertification surveys were conducted 1/21 12/21
- 589 federal complaint investigations completed 1/21 12/21
- 65 state complaint investigations completed 1/21 12/21





Nursing Facilities

Federal Updates

- CMS is requiring 20% of all nursing homes receive a stand alone infection control survey between October 2021 and the end of September 2022.
- CMS has identified these areas for special consideration during survey: Behavioral Health, Immunizations, Language and Communication and an optional area identified on survey



Initial Inspections

State Fiscal Year 19-20: 120 State Fiscal Year 20-21: 123

Re-Licensure Inspections

State Fiscal Year 19-20: 341 State Fiscal Year 20-21: 254

Licensure Infection Control Inspections

State Fiscal Year 20-21: 470

Occurrences Investigations

State Fiscal Year 19-20: 5,389 State Fiscal Year 20-21: 4,330

Complaint Intakes

State Fiscal Year 19-20: 1,610

State Fiscal Year 20-21: 1.841





Health Facility Enforcement

(4/1/2021 - 3/28/2022)

- Initial fitness reviews 150
- Change of Ownership Fitness Reviews 158
- Cease and desist letters for facilities operating without a license - 0
- Intermediate conditions including fines and/or requirements to retain a consultant - 221
- License Summary Suspensions/Revocations 1
- Conditional Licenses Issued 7
- License Denials/Invalid License Notices 38
- Appeals of Nursing Home Discharges Handled by Department 1
- Matters referred to the Office of Administrative Court 16





Recent Projects

Home & Community Facilities

- New Branch Chief Dr. Steve Cox, RN following Cheryl McMahon's retirement
- New Home Care/Hospice Section Manager- Erica McClurg RN
- Assisted Living Facilities developing a new technical guidance website
- A new offsite Quality Management Program survey has begun for Assisted Living facilities

Education & Quality

- Marshall Fire Response
- New Health Facility Provider Training Course Catalog
- New Training Section Manager Noah Begley





Recent Projects (cont.)

Behavioral Health & Community Services Branch

- Behavioral Health Entity project update:
 - Phase 1 regulations effective June 14, 2021
 - Transition year started July 1, 2021 for current BH providers obligated to move into the new BHE regulations
 - All providers must move into the new BHE licensing chapter by July 1, 2023
 - 11 BHE's have successfully completed the required transition to date
 - Created the <u>BHE website</u> with provider resources, toolkits and FAQs
- Ch. 8 Group Home and ICF regulations:
 - Robust stakeholder process completed
 - New regulations in effect as of January 14, 2022
 - Had been nearly 10 years since comprehensively being updated





Recent Projects (cont.)

Behavioral Health & Community Services Branch (cont.)

- Secure Transportation stakeholder process:
 - Facilitated a robust and involved stakeholder process since late summer 2021
 - Rulemaking resulting from the passage of HB-21-1085
 - Establishes the minimum standards required for the provision of secure transportation services for persons in behavioral health crisis
 - In the final stages of the stakeholder process
 - Must be adopted by June 2022
 - Counties must then establish a licensing & permitting process by Jan.
 2023



Recent Projects (cont.)

Emergency Medical & Trauma Services

- Rules implemented in January 2021 allow EMS Providers, under physician medical direction, to practice within their full scope in clinical settings
- EMS personnel with a bachelor degree in health sciences are now eligible to be licensed in Colorado
- Aligned with changes implemented by ACS, hybrid (remote/on-site) trauma designation reviews successfully implemented





Some Leadership Changes!

- Retirement of Randy Kuykendall
- Elaine McManis
 - Serving as Interim Division Director
- Kara Johnson-Hufford
 - Serving as Interim Deputy Division Director
- Currently recruiting for full-time permanent Division Director





The Health Facilities and EMS Division wishes to thank all of Colorado's health facility providers for their cooperation and dedication to the care of Colorado citizens!!







Questions?

Elaine McManis
Interim Division Director

Elaine.mcmanis@state.co.us



WELCOME TO THE 2022

CaMbucky Derby!

THE FASTEST 20 MINUTES OF THE DAY!





THE RULES

- 1. Everyone can participate, but you'll have to be on Zoom and be quick!
- 2. Explain how to enter your answers
- 3. There will be about 30 45 seconds / question. No repeats
 - 4. Questions are from education / participation at CMDA and Vivage Geriatric Journal Club meetings, so there is a distinct advantage to those who took the time to participate!



SO... IF YOU'RE IN YOUR SADDLE...

HERE WE GO!!!

Monthly CMDA and Geriatric Journal Club Meetings are held:

- A. Monthly, first Tuesday at noon and first Thursday from 12:30 1 PM via Zoom
- B. Monthly, second Tuesday at 1 PM and second Thursday from 12:30 1 PM via Zoom
- C. The 5th Friday of any month with 5 Fridays, 9 AM at the Art Museum
- D. Sundays at 2 PM, September through December at CDPHE

2021 saw a large increase in the use of Azithromycin for nursing home residents. The RECOVERY trial was done to test potential treatments for Covid-19. Which of the following is TRUE about the RECOVERY trial results:

- A. Azithromycin reduced death by 1/3 in ventilated patients
- B. Azithromycin reduced death by 1/5 in patients receiving oxygen
- C. Azithromycin showed beneficial effects on the risk of progression to mechanical ventilation
- D. The Azithromycin arm of the trial was closed early showing no beneficial effects on all measured endpoints

The formula for calculating the Positive Predictive Value of a test is:

- A. True Positives divided by sum of True Positives + False Negatives
- B. The sum of True + False Positives divided by True Positives
- C. True Positives divided by the sum of True + False Positives
- D. True Positives divided by sum of True Positives + True Negatives

Which of the following statements is **FALSE** regarding antibiotic resistance in the US:

- A. According to CDC data at least 2.8 million resistant infections are occurring each year causing over 35,000 deaths
- B. The CDC estimates economic impact of antibiotic resistance in 2017 at \$4.8 billion
- C. The antibiotic pipeline is an area of hope with many major pharmaceutical companies investing in new antibiotics
- D. The effect of stewardship programs regularly show a reduction antibiotic prescriptions and incidence of C. diff

True and False Positive Predictive values depend on the prevalence of the condition in the population

A.True

B.False

Which of the following statements is **TRUE** regarding the Colorado MOST form:

- A. Completion of a MOST form can be a mandatory requirement for admission to a nursing facility
- B. The MOST form is portable; a new one is not needed upon admission to a nursing facility if a patient's preferences remain unchanged
- C. Photocopies of MOST forms are not valid, an original must be on file
- D. The MOST form has to be entirely filled out to be valid

Monoclonal antibodies that have received EUA approval in the past year include:

- A. Sotrovimab; Remdesivir; Bebunivab
- B. Casirivimab plus imdevimab; Bebunivab, Sotrovimab
- C. Casirivimab plus imdevimab; Sotrovimab; Bebtelovimab
- D. Bamlanivimab; Bebtelovimab; Remdesivir; Sotrovimab

Which of the following is the criteria for **severe** protein calorie malnutrition in the presence of chronic illness:

- A. Unintended weight loss of 5% in 1 month + consuming <50% of estimated nutritional needs for a month or longer
- B. Unintended weight loss of 5% in 1 month + consuming <75% of estimated nutritional needs for a month or longer
- C. Unintended weight loss of 10% in 1 month + consuming <50% of estimated nutritional needs for a month or longer
- D. Unintended weight loss of 10% in 1 month + consuming <75% of estimated nutritional needs for a month or longer</p>

What did Dr. Watson tell us was the one question persons with Personality Disorders have and ask themselves all the time / 24 X 7:

- A. Everyone owes me, how can I make them pay?
- B. My life is miserable, why can't someone else be miserable like me?
- C. Which medications / combinations will finally make me feel better?
- D. Will you be there for me?

TRUE or FALSE: Albumin and Prealbumin may correlate with prognosis, but are not considered sensitive indicators of nutritional status.

A.TRUE

B. FALSE

Dr. Watson shared an acronym for dealing with persons with Personality Disorders which was:

- A. BoPeEP (Borderline Personalities Expect Privileges)
- B. CONDOR LiPs ("C" Often; No Drugs Or Remedies; Limit Providers)
- C. BOLD (Be the calm; One quarterback; Limit-setting; Dependable)
- D. MEAN (Manipulative, Exhausting, Angry; Nasty)

One of the most common F-Tags per the OIG is F757 - Drug Regimen is Free from Unnecessary Drugs. Following a patient's repeated falls, which of the following would be the most appropriate intervention by the patient's provider:

- A. Document a fall risk assessment
- B. Ordering prn lorazepam since the falls are due to patient's dementiarelated agitation
- C. Review the patient's medications and discontinue any that may be contributing to falls or that may increase mortality due to falls
- D. Document a risk vs benefit for all of the patient's medications

The major problem with use of Paxlovid is:

- A. Limited efficacy
- B. Many potentially dangerous drug-drug interactions
- C. At present, unable to attain through pharmacies
- D. Dangerous Side Effects

Which of the following is NOT the role of the Medical Director:

- A. Lead the QAPI team in review and analysis of all pertinent issues
- B. Review all residents care plans each month for relevance to their current condition
- C. Review and approve facility Policies and Procedures
- D. Review AMDA guidelines for medical directors

In regard to steroids for COPD, the 2021/22 GOLD Guidelines conclude:

- A. Long-term monotherapy with Inhaled Corticosteroids is <u>not</u> recommended
- B. Long-term treatment with Inhaled Corticosteroids <u>may be</u> considered in association with LABAs for patients with a history of exacerbations despite appropriate treatment with LABAs
- C. Long-term therapy with Oral Corticosteroids is not recommended
- D. All of the above
- E. None of these are part of the GOLD Guidelines

The ACIP hearing from September 2021 released all of the following statements about Covid-19 vaccination **EXCEPT**:

- A. Covid-19 vaccines should be timed at least 7 days away from high dose influenza vaccines
- B. The magnitude of the effect of boosters given to nursing home residents depends largely on staff vaccine coverage
- C. Even with highly effective boosters, cases in nursing homes will persist when community transmission is high
- D. Maximizing Covid-19 vaccination coverage among staff remains a critical tool for preventing cases in nursing homes

In regard to Pneumococcal vaccines, patients >65 who have had none previously should receive:

- A. Pneumovax
- B. Prevnar 15 followed by Pneumovax 1 year later, or Prevnar 20
- C. Prevnar 13 followed by Pneumovax 1 year later
- D. Prevnar 15 or 20 followed by Pneumovax 1 year later

All of the following are <u>true</u> about the risks of Tramadol in the elderly **EXCEPT**:

- A. Unpredictable metabolism increases risk for death or ineffectiveness
- B. Has serious drug interactions, especially with psych drugs
- C. Particularly concerning side effects in the elderly, e.g., seizures and hypoglycemia
- D. Despite the risks, Tramadol is still thought of as a "safer" opioid

A study of 154,000 veterans with Covid [Nature] looking at long-term CV outcomes at 1 year showed that when compared to controls:

- A. Cardiovascular complaints were up significantly in the first 90 days, then regressed to normal levels by 1 year
- B. There were almost 80 more diagnosed cardiovascular conditions/1000 people in those with moderate to severe Covid
- C. There were almost 80 more diagnosed cardiovascular conditions/1000 people in the Covid group regardless of the severity of infection

In response to a concerning trend among clinicians using an inaccurate diagnosis of schizophrenia to justify use of antipsychotics in LTCFs, AMDA released a white paper on diagnosing Schizophrenia in the PA/LTC setting. Which of the following common diagnoses should be ruled out before diagnosing schizophrenia?

- A. Delirium
- B. Dementia
- C. Major Depression with psychotic features and/or Bipolar Disorder
- D. All of the above
- E. None of the above

In the Women's Health Study, the effect of <u>low-dose</u> aspirin on occurrence of VTE (**V**enous **T**hrombo**E**mbolism) was studied in a randomized-controlled trial over 10 years. They found:

- A. VTE rates were no different between the 2 groups, but aspirin use was associated with an increased risk of GI bleeding
- B. VTE rates were higher in the control group, but were offset by bleeding side effects in the aspirin group
- C. VTE rates were no different between the 2 groups and there was no difference in bleeding outcomes
- D. VTE rates were higher in controls with no difference in bleeding outcomes

TIEBREAKER

Dr. Paul Fishman has been practicing in Denver-area Nursing Homes for a long time. On what date did he make his first ever nursing home visit?

Email your answer with your name in the subject line* to: ggahm@vivage.com

*If your name is not in the subject line, the email and your response will be deleted

THANK YOU FOR RACING!

ANSWER KEYS, RESULTS AND
PRIZES WILL BE AVAILABLE LATER
THIS AFTERNOON!

References for CaMDucky Derby 2022

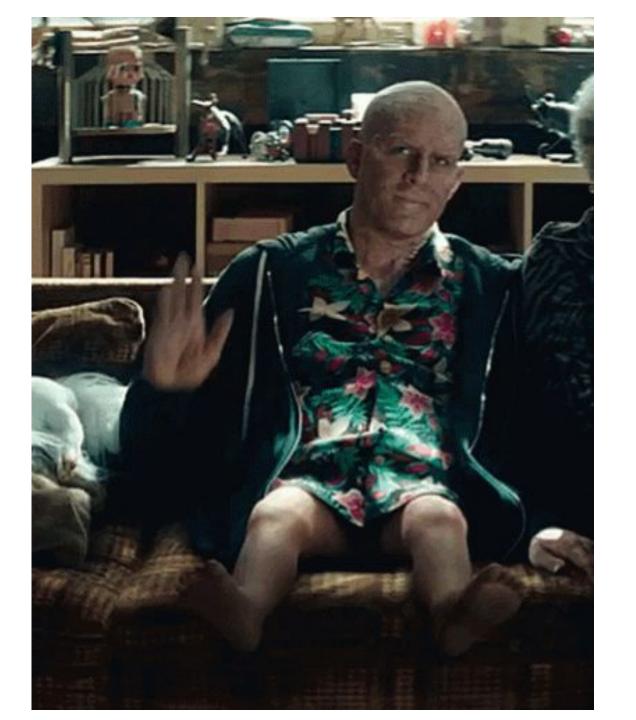
- 1. Dexamethasone in Hospitalized Patients with Covid-19; The RECOVERY Collaborative Group; February 25, 2021; N Engl J Med 2021; 384:693-704; DOI: 10.1056/NEJMoa2021436
- 2. CDC Antibiotic Resistance; https://www.googleadservices.com/pagead/aclk?sa=L&ai=CBB_qZ_NeYqvhL-m8tOUP5Z2J4AvcjvXAadyXza7yDYOijcKTCwgAEAEguVRgyc6Oh8yjwBegAeT4i-MDyAEByAPYIKoEWU Qm8drigE-
 - Hc1gqLhtOMb2xrYsNR9ujYRkvvGRNu7idUQ0VuFyWbZ_xDGezqcwuCgCdY2CVpZSdXXM4vD8VrlLonUKZreN9tKazzZsxRWDRAeKQxGq4A_DwASa7s7gygOABZBOiAW889CsMKAGZoAHkKT5zQKIBwGQBwGoB6a-G6gHuZqxAqgH89EbqAfu0huoB_-
 - csQKoB8rcG6gHzaOxAqgH2KaxAqAljomnBLAIAdIIDBACIIQBMgKCQDoBAJoJOmh0dHBzOi8vd3d3LnRoZXJtb2Zpc2hlci5jb20vcHJvY2FsY2l0b25pbi93by9lbi9ob21lLmh0bWyxCS8vtKdVMgM4uQkvL7SnVTIDOPgJAZgLAaoMAggBuAwB6AwGghQdCAISGWNkYyBhbnRpYmlvdGljIHJlc2lzdGFuY2WIFAPIFOTV16jYoaXsL9AVAZgWAfgWAYAXAZIXCBIGCAEQAxge&ae=2&ved=2ahUKEwjRi8Ks1aD3AhXtLTQIHUeSCnoQ0Qx6BAgDEAE&dct=1&cid=CAASFeRouS0ohKAfggpzP1wkswnatjhyVA&dblrd=1&sival=AF15MEDvf095Fw9JDKLvxeb68N1Hfu19s6SX96L1xjkO161r5T1ws-
 - VCH_1nsdUkRRHiYSacXWaz5vxXbIGI8NuiCrRXftsV126ISKFRNYR6zX5wqqHQ7Dht1zZBdmCkkMImRaz7iTX XXEs5OAPoDM44XmKoRDCEnU4sdBT2PIcNN6T7TMHMQVm8Pq3WcgxVY5H4_BxQe_QE&sig=AOD64_2 8ZGg2Qb6NayPBvSjI0TY7U9KiBw&adurl=https://www.thermofisher.com/procalcitonin/wo/en/home.ht ml%3Fcid%3D0se gaw 18112021 9XYYWN
- 3. NIH / CDC Anti-SARS- CoV-2 Monclonal Antibody Approvals; https://www.covid19treatmentguidelines.nih.gov/therapies/anti-sars-cov-2-antibody-products/anti-sars-cov-2-monoclonal-antibodies/
- 4. CMS F-Tag 757; https://oig.hhs.gov/oei/reports/oei-07-08-00150.asp
- 5. 2022 GOLD Guidelines; https://goldcopd.org/2022-gold-reports-2/
- 6. ACIP Recommendations; September 2021; https://www.cdc.gov/vaccines/acip/index.html
- 7. Use of 15-Valent Pneumococcal Conjugate Vaccine and 20-Valent Pneumococcal Conjugate Vaccine Among U.S. Adults: Updated Recommendations of the Advisory Committee on Immunization Practices United States, 2022
- 8. Morbidity and Mortality Weekly / January 28, 2022 / 71(4);109–117; Miwako Kobayashi, MD¹; Jennifer L. Farrar, MPH¹; Ryan Gierke, MPH¹; Amadea Britton, MD¹,²; Lana Childs, MPH³; Andrew J. Leidner, PhD¹; Doug Campos-Outcalt, MD⁴; Rebecca L. Morgan, PhD⁵; Sarah S. Long, MD⁶; H. Keipp Talbot, MD⁶; Katherine A. Poehling, MD⁶; Tamara Pilishvili, PhD; https://www.cdc.gov/mmwr/volumes/71/wr/mm7104a1.htm
- 9. Long-term cardiovascular outcomes of COVID-19; Yan Xie, Evan Xu, Benjamin Bowe & Ziyad Al-Aly; https://www.nature.com/articles/s41591-022-01689-3
- Effect of Aspirin on All-Cause Mortality in the Healthy Elderly; John J. McNeil, M.B., B.S., Ph.D., Mark R. Nelson, M.B., B.S., Ph.D., Robyn L. Woods, Ph.D., Jessica E. Lockery, M.B., B.S., Rory Wolfe, Ph.D., Christopher M. Reid, Ph.D., M.P.H., Brenda Kirpach, C.C.R.A., Raj C. Shah, M.D., Diane G. Ives, M.P.H., Elsdon Storey, M.B., B.S., D.Phil., Joanne Ryan, Ph.D., Andrew M. Tonkin, M.B., B.S., M.D., et al., for the ASPREE Investigator Group? October 18, 2018; N Engl J Med 2018; 379:1519-1528; DOI: 10.1056/NEJMoa1803955
- 11. Effects of Aspirin for Primary Prevention in Persons with Diabetes Mellitus; The ASCEND Study Collaborative Group; October 18, 2018; N Engl J Med 2018; 379:1529-1539; DOI: 10.1056/NEJMoa1804988

Wound Care Panel

CMDA Annual Conference April 29, 2022



Moderated by Travis Neill, PA-C



Panelists



Pradeep Raj Rai, MD



Lauren KraemerRN, WCC, RAC-CT



Chad Worz, PharmD



Jenny AlbertsonNHA



Sheldon Goldberg, MD

Learning objectives

- 1. Describe distinguishing features among wounds associated with COVID, calciphylaxis, diabetes, and pressure injury
- 2. Document the assessment and treatment of incontinence-associated dermatitis
- 3. Discuss interdisciplinary approaches to wound prevention
- 4. Integrate diverse perspectives on wound care from interdisciplinary team members.



Case #1: Mr. Teflon

- Mr. Teflon is a 65 yo man with end stage renal disease on dialysis with a hx of left lower extremity DVT
- He lives in LTC and is frequently non-adherent with medications and nursing care.
- He is independent with transfers and toileting
- His medications include: vitamin D, sevelamer, warfarin and metoprolol.

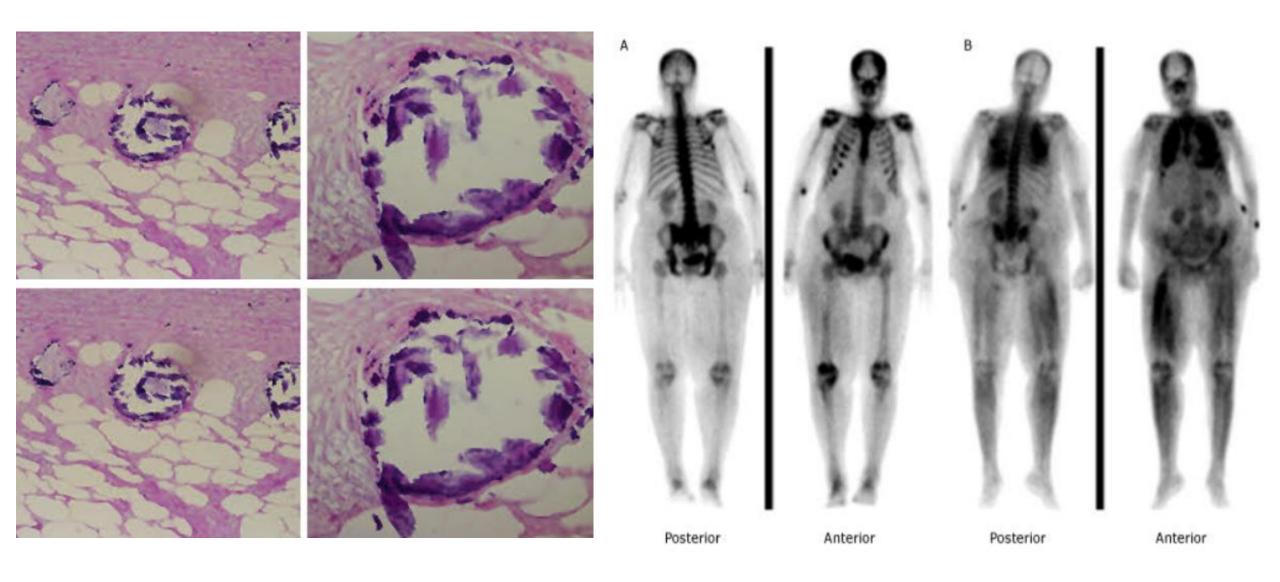
Case #1: Mr. Teflon

He has a developed painful, necrotic ulcerations with eschar on the back of his calves





Case #1: Mr. Teflon



Case #2: Ms. Pealot

- Ms. Pealot is a 91yr old woman who has recently enrolled in hospice for end-stage dementia. The C.N.A reports her buttocks are more red than usual and has open wounds.
- She experiences incontinence, is moderate assist with transfers but is max assist with repositioning and toileting
- She has an air mattress
- Her medications include: morphine sulfate, acetaminophen, lorazepam



Case #2: Ms. Pealot

The C.N.A reports the patient's buttocks are more red than usual and has open wounds.

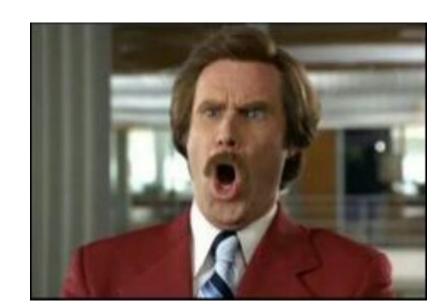


Case #3: Mr. Hysugar

- Mr. Hysugar is a 79yr old man with long standing diabetes mellitus type 2, venous insufficiency, CHF with chronic lower extremity edema
- He has been living at the NH for one year, is non-compliant with his diet and often refuses care
- He is independent with transfers and toileting, ambulatory, has been wearing the same old shoes since admission and started complaining of foot pain two days ago
- His medications include: glipizide, metformin, aspirin, losartan and metoprolol.

Case #3: Mr. Hysugar

- He develops a wound on the plantar aspect of the right foot with a 1.2cm depth with 1cm undermining.
- Scant exudate
- No odor





Case #4: Ms. Saculcer

- Ms. Saculcer is a 63yr old woman with multiple medical problems including relapsing MS and CAD who was just admitted to your nursing facility following a hospital stay for Covid-19 pneumonia
- She is unvaccinated for Covid-19 and is her own responsible party
- Her medications include: fingolimod, gabapentin, baclofen, metoprolol, apixaban, and vitamin D
- The admitting nurse is told "she has a wound on her sacrum that is covered with a dressing" but is not given any more information about the wound

Case #4: Ms. Saculcer

You remove a heavily saturated

dressing



- The wound measures 4.5 x 5.0 x
 0.4cm
- You notice subcutaneous granulation



Case #5: Mr. Ohnomytoe

- Mr. Ohnomytoe is a 82yr old man with poorly controlled DM, HTN,
 COPD from smoking, CAD, and severe PVD
- He says he noticed worsening bluish discoloration and pain in his left foot for the past several months but did not seek medical attention
- He was admitted to the facility following a hospital stay for a COPD exacerbation with a non-tender eschar on his left toe. He is his own responsible party
- His medications include: metformin, glipizide, apixaban, lisinopril, metoprolol, atorvastatin, tiotropium bromide inhaler, and acetaminophen

THEY SAY TIME **HEALS ALL** WOUNDS ...

Case #5: Mr. Ohnomytoe

On admission the eschar was non-tender and left foot was cold

Pt refused surgical interventions: toe at 3 weeks

At 6 weeks







Me: Don't talk about gross nursing stuff at this social event.

Me to me: Describe in detail the infected weeping wound your patient had today





Updates from Telligen – Your Quality Innovation Network-Quality Improvement Organization (QIN-QIO)

Jane Brock, MD, Telligen Medical Director CMDA's Annual Conference 2022: Coming Together to Create Success in PALTC April 29, 2022

This material was prepared by Telligen, the Quality Innovation Network-Quality Improvement Organization, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. This material is for informational purposes only and does not constitute medical advice; it is not intended to be a substitute for professional medical advice, diagnosis or treatment. 12SOW-CO-GOAL5-01/21/22-4311

Objectives

>>> Summarize data and outcomes from our work together through the COVID-19 pandemic

- Identify current focus areas and explain how we assist homes to improve quality using the framework of QAPI
- Describe the role of Telligen, Colorado's Quality Innovation Network-Quality Improvement Organization (QIN-QIO), and the opportunities you have to patriciate with us at no-cost





Nearly 50 years providing expertise and support for measurable results in population health improvement



More than **600 clinical and technical** professionals supporting clients nationwide



A 100-percent employee-owned company



Comprehensive quality improvement program = Telligen QI Connect™



Rapid response to nursing homes

- » Weekly referrals from CMS
 - » Outbreak
 - » High community transmission rate
 - » Infection control deficiencies
- » To support you in working through your specific situation
 - » Dedicated QI specialist
 - » Signed commitment
 - » CDC-developed assessment modified to a fillable form
 - » Assessment results ———— RCA
 - » SMART goal
 - » Establish QI plan
- » 4-week Rapid Learning Collaborative





Results

- » 802 facilities assisted since April 2020 123 in Colorado
 - » 110 walk-throughs/site visits
- » Common recommendations
 - » Increasing effectiveness of screening at entry
 - » Managing staff break rooms
 - » Managing access to time clocks
 - » Adapting training and materials for environmental services
- » Well-received:

"We greatly appreciated your support in talking through our specific situations and how we can work through them. In addition, the tools provided to us were of great use to our team in order to have thorough audits. We re-pulled them out this week to ensure we were still up to date on our IC areas we were previously deficient in."

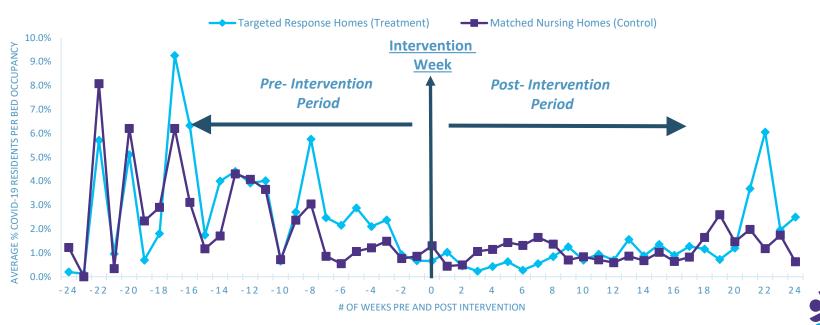
Vanessa Zabojnik, LNHA Executive Director Life Care Center



Analysis of effectiveness

REGIONWIDE

NURSING HOME RESIDENT COVID-19 CASES PER BED OCCUPANCY PRE AND POST PERIOD NORMALIZED AT INTERVENTION WEEK=0



» Criteria

» Changed over time – CMS set specific targets, changed over time, in beginning targets were inclusive, getting more and more targeted – present criteria is nursing homes with less than 40% residents boosted

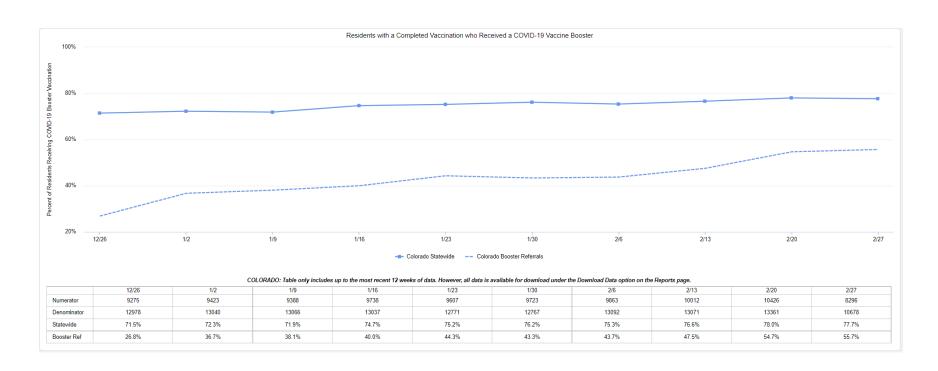
» Support/process

- Tailored customer service interview to provide the right resources not just offering training to someone who knows what to do
- » Customized assessment developed by national experience of QIN-QIO working in every state with 1000s of homes to offer specific tools, advice, support and interventions

» Data



Resident booster vaccination rates in CO

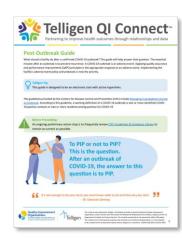


COVID-19 Resources

We developed resources to support nursing homes with infection prevention and control









Check out all our resources: www.telligenqiconnect.com/resources

Nursing Home Technical Assistance and Support

- Quality Improvement
 - » Root Cause Analysis (RCA) interactive sessions
 - » Plan, Do, Study, Act (PDSA) trainings
 - » Quality Assurance and Performance Improvement (QAPI) classes and workshops
 - » Directed Plan of Correct assistance for F880 deficiencies
- >> National Healthcare Safety Network (NHSN) reporting assistance
- >> Timely, relevant and useful events, tools, and resources



QAPI Classes 11

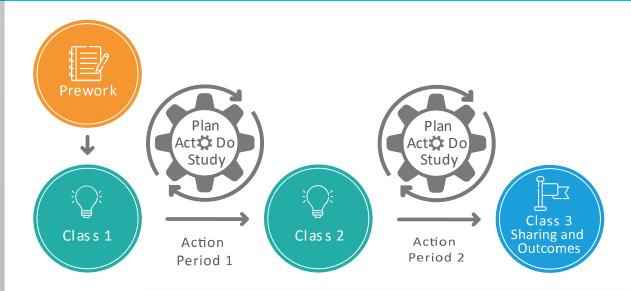
- » QAPI 101 Workshops
- » QAPI Reboot Classes
- » Quality Improvement Trainings (RCAs, PDSAs, QI Power Hours)

QAPI Reboot Cohort Topics

- Reducing Readmissions and ED Visits
- Reducing Urinary Tract Infections (UTIs)
- Reducing Antipsychotic Medication Use
- >>> Preventing *C. difficile*



On-going Interactive QAPI Classes and Workshops



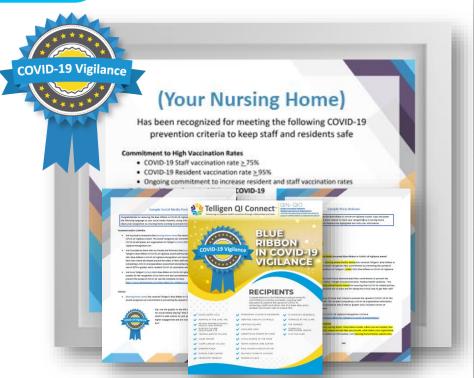


Check out the next class dates and times on our website: www.telligenqiconnect.com/calendar

Blue Ribbon in COVID-19 Vigilance



- » Recognizes efforts nursing homes have made to prevent the spread of COVID-19
- » Nursing homes who are awarded the Blue Ribbon in COVID-19 Vigilance receive comprehensive marketing package
- » Information and Toolkit: www.telligenqiconnect.com/blue -ribbon-in-covid-19-vigilance



Colorado Recipients



Quality Innovation Network -

Quality Improvement Organizations CENTERS FOR MEDICARE & MEDICAID SERVICES **IQUALITY IMPROVEMENT & INNOVATION GROUP**



RIBBON IGILANCE

COLORADO RECIPIENTS

Congratulations to the following nursing homes for committing to policies, processes, ongoing staff education to prevent the spread of COVID-19, achieving a staff vaccination rate of at least 85%, and a resident vaccination rate of at least 95%*

- ✓ BERKLEY MANOR CARE CENTER
- ✓ BETH ISRAEL AT SHALOM PARK
- BROOMFIELD SKILLED NURSING AND REHABILITATION CTR
- CENTRE AVE HEALTH & REHAB
- COLUMBINE WEST HEALTH ✓ AND REHAB FACILITY
- CRESTMOOR HEALTH AND REHABILITATION CENTER
- FRASIER MEADOWS HEALTH CARE CENTER
- ✓ GOOD SAMARITAN SOCIETY - FORT COLLINS VILLAGE
- GRACE POINTE CONT CARE SR CAMPUS, SKILLED NURSING
- HARMONY POINTE NURSING CENTER

- HERITAGE PARK CARE CENTER
- HOLLY HEIGHTS CARE CENTER
- LARCHWOOD INNS
- LIFE CARE CENTER OF EVERGREEN
- LIFE CARE CENTER OF GREELEY
- NORTH SHORE HEALTH ✓ & REHAB FACILITY
- ✓ PARKMOOR VILLAGE HEALTHCARE CENTER
- ✓ PINE RIDGE EXTENDED CARE CENTER
- ✓ PROMEDICA SKILLED NURSING
- AND REHABILITATION ✓ RIO GRANDE INN

- RIVER VALLEY INN NURSING HOME
- SKYLINE RIDGE NURSING AND REHABILITATION CENTER
- SPANISH PEAKS VETERANS COMMUNITY LIVING CENTER
- THE SUITES AT SOMEREN GLEN CARE CENTER
- TRINIDAD INN NURSING HOME
- ✓ VALLEY MANOR CARE CENTER
- VETERANS COMMUNITY LIVING CENTER AT FITZSIMONS
- VISTA GRANDE INN
- ✓ WALSH HEALTHCARE CENTER
- ✓ WESTLAKE CARE COMMUNITY

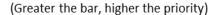
*As of January 2, 2022

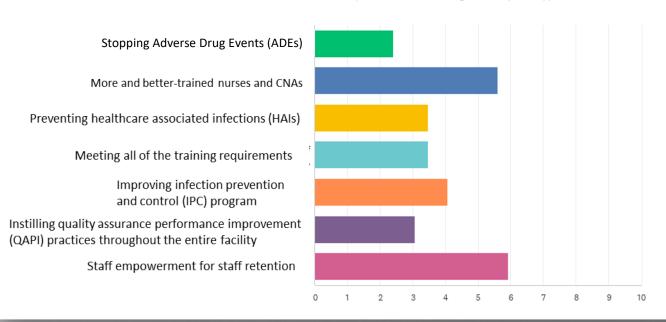
Adapting to a new reality

- » Survey of priorities
- » Focus groups
- » Adapted resources
 - » Spotlight Events
 - » QAPI Classes
 - » 1:1 Customized TA



Q7 Rank the following priorities for focused improvement in your nursing homes priority)





What Do QIN-QIOs Do?

QIN-QIO Program Statutory Purpose

To improve the efficiency, effectiveness, economy and quality of services delivered to Medicare beneficiaries

QIN-QIOs

- Bring people from across the care continuum together in data-driven initiatives that increase patient safety, make communities healthier, enhance care coordination and improve healthcare quality
- Provide technical assistance and convene learning and action networks at no cost to support healthcare quality improvement (QI) at the community level



Additional Focus Areas and Support – At No Cost!



- » QI expertise, including comprehensive COVID-19 support
- » Customized 1:1 technical assistance
- Actionable data, analytics support and national benchmarking



Secure Portal



Events

Access learning events that provide education, tools and evidence-based models to support quality improvement strategies.



Resources

Access quality improvement toolkits, change packages, PDSA cycle templates, COVID-19 tools, driver diagrams and more.



Data Collection & Reporting

Securely upload your hospital, nursing home or community data and access data reports to assist with quality improvement efforts.



Network of Promising Practices

We share practices from our network of hospitals, nursing homes and community partners from across the country – ones that you can adapt to meet your



- » View state, national and community level data reports
- » Connect with Telligen QI Connect™ members in your community
- » Access exclusive resources to support learning events



Questions?



Thank You! 21



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Pearls for Anti-Coagulation Optimization in Older Adults

Chad Worz, PharmD, BCGP, FASCP
Chief Executive, ASCP

Learning Objectives

1. Describe common indications for anticoagulation therapy in older adults in PALTC

- 2.Identify risks and benefits of anticoagulation therapy in older adults in PALTC
- 3. Criticize approaches to different anticoagulation treatments in PALTC



Disclosures

None

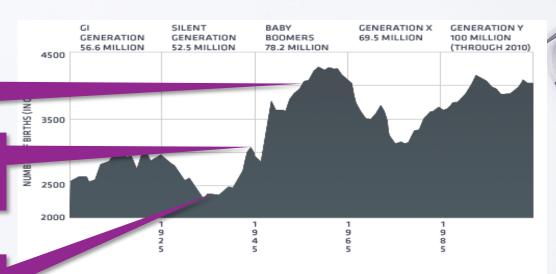


US BIRTHS 1905-2002



2022 Born 1942 80 yoa

2018 Born 1938 80 yoa



GENERATION: 1905-1924 56.6 MILLION
SILENT GENERATION: 1925-1944 52.5 MILLION
BABY BOOMERS: 1945-1964 78.2 MILLION
GENERATION X: 1965-1984 69.5 MILLION
GENERATION Y: 1985-2004 79.5 MILLION
GENERATION Z: 2005-2024 = 16 MILLION (THUSFAR)
GENERATION BLEND*: 2025-2044! UNKNOWN

*ACC HAS CHOSED THE MONIKER "GENERATION BLEND" BECAUSE THIS WILL BE THE MOST ETHNICALLY ASSIMILATED U.S. GENERATION EVER.



Anticoagulation is common in long term care.

87% of strokes are ischemic¹

- Atrial Fibrillation impacts
 - 5.2 million today²
 - 12.1 million people by 2030³
- Treatment on Venous Thromboembolism (VTE)
- Prophylaxis of VTE



^{3.} Colilla S, Crow A, Petkun W, Singer DE, Simon T, Liu X. Estimates of current and future incidence and prevalence of atrial fibrillation in the U.S. adult population. *Am J Cardiol*. 2013;112:1142–1147. doi: 10.1016/j.amjcard.2013.05.063.



Anticoagulation is common in long term care.

A large study in 2010 evaluated warfarin use for Afib in LTC¹

- INRs were suboptimal
- 17%-57% of Afib residents on Warfarin
- Challenges outweigh benefits

Rates in a study in LTC in 2017²

- 38% Warfarin
- 32% NOACs
- 30% None



^{1.} Neidecker M, Patel AA, Nelson WW, Reardon G. Use of warfarin in long-term care: a systematic review. *BMC Geriatr*. 2012;12:14. Published 2012 Apr 5. doi:10.1186/1471-2318-12-14

^{2.} Rojas-Fernandez CH, Goh J, Hartwick J, Auber R, Zarrin A, Warkentin M, Hudani Z. Assessment of Oral Anticoagulant Use in Residents of Long-Term Care Homes: Evidence for Contemporary Suboptimal Use. Ann Pharmacother. 2017 Dec;51(12):1053-1062. doi: 10.1177/1060028017723348. Epub 2017 Jul 26. PMID: 28745065.

"I Walk the Line"



Warfarin is the most common drug involved in error in 2012.1

- 32,176 medication error incidents reported over a 2-year period
 - 1,623 (5%) were anticoagulant medication errors
 - 2% of these errors (n=29) resulted in patient harm.
 - Anticoagulant medication errors had higher odds of patient harm when compared with other errors (OR 1.79)

The most litigious medication in long term care

- The nursing staff does not ensure the labs are drawn daily as ordered.
- The physician forgets to order the daily labs.
- The nurse does not report the labs to the physician and the two medications are used together for too long.



1. Desai, R., Williams, C.E., Greene S.B., Pierson S. and Hansen R.A. "Anticoagulant medication errors in nursing homes: characters, causes, outcomes and association with patient harm", Journal of Healthcare Risk Management, (accepted for publication November 2012)

Use of NOACs in LTC

Effectiveness and safety of oral anticoagulants in elderly patients with atrial fibrillation

- 30 401 patients ≥75 years identified (median age 82 years, 53% women, mean CHA₂DS₂-VaSc score 4.5)
- Reduced (renal) doses in 49% of patients
- Efficacy similar between NOACs and warfarin
- Bleeding risk reduced or similar with NOACs vs. warfarin



Rutherford OW, Jonasson C, Ghanima W, et al Effectiveness and safety of oral anticoagulants in elderly patients with atrial fibrillation *Heart* 2022;**108**:345-352.

Comparison of NOACs



	RE-LY (dabigatran)	ROCKET-AF (rivaroxaban)	ARISTOTLE (apixaban)	ENGAGE AF-TIMI 48 (edoxaban)
No. of patients	18,113	14,264	18,201	21,105
Study population	Patients with NVAF CHADS₂ score ≥1 (mean 2.1) Mean age: 72 years	Patients with NVAF CHADS₂ score ≥2 (mean 3.5) Mean age: 73 years	Patients with NVAF CHADS₂ score ≥1 (mean 2.1) Mean age: 70 years	Patients with NVAF CHADS₂ score ≥2 (mean 2.8) Mean age: 72 years
Study design	Double-blind randomized, non-inferiority trial	Double-blind randomized, non-inferiority trial	Double-blind randomized, non-inferiority trial	Double-blind randomized, non-inferiority trial
Dosage	150 mg (110 mg) twice daily	20 mg (15 mg) once daily	5 mg (2.5 mg) twice daily	60 mg (30 mg) once daily
Control drug	Warfarin (INR 2-3) TTR 64%	Warfarin (INR 2-3) TTR 55%	Warfarin (INR 2-3) TTR 62%	Warfarin (INR 2–3) TTR 68.4%
Primary efficacy outcome	Stroke (ischemic or hemorrhagic) or systemic embolism	Stroke (ischemic or hemorrhagic) or systemic embolism	Stroke (ischemic or hemorrhagic) or systemic embolism	Stroke (ischemic or hemorrhagic) or systemic embolism
Principal safety endpoint	Major bleeding	Composite of major and non-major bleeding	Major bleeding	Major bleeding
Results	Efficacy of dabigatran 110 mg vs. warfarin (0.91; 95% CI, 0.74–1.11; P<0.001 for non-inferiority) Efficacy of dabigatran 150 mg vs. warfarin (0.66; 95% CI, 0.53–0.82; P<0.001 for superiority) Safety of dabigatran 110 mg vs. warfarin (0.80; 95% CI, 0.69–0.93; P=0.003)	Efficacy of rivaroxaban 20 mg vs. warfarin (0.88; 95% CI, 0.74–1.03; P<0.001 for non-inferiority; P=0.12 for superiority) Safety of rivaroxaban 20 mg vs. warfarin (1.03; 95% CI, 0.96–1.11; P=0.44)	Efficacy of apixaban 5 mg vs. warfarin (0.79; 95% CI, 0.66–0.95; P<0.001 for non-inferiority; P=0.01 for superiority) Safety of apixaban 20 mg vs. warfarin (0.69; 95% CI, 0.60–0.80; P<0.001)	Efficacy of edoxaban 60 mg vs. warfarin (0.87; 97.5% CI, 0.73–1.04; P=0.08 for superiority Efficacy of edoxaban 30 mg vs. warfarin (1.13; 97.5% CI, 0.96–1.34; P=0.10 for superiority Safety of edoxaban 60 mg vs warfarin (0.80; 95% CI, 0.71–0.91; P<0.001)
	Safety of dabigatran 150 mg vs. warfarin (0.93; 95% CI, 0.81–1.07; P=0.31)			Safety of edoxaban 30 mg vs warfarin (0.47; 95% CI, 0.41–0.55; P<0.001)

ARISTOTLE, Apixaban for reduction in Stroke and Other Thromboembolic Events in Atrial Fibrillation; CI, confidence interval; ENGAGE AF-TIMI 48, Effective Anticoagulation with Factor Xa Next Generation in Atrial Fibrillation-Thrombolysis in Myocardial Infarction 48; NVAF, mon-valvular atrial fibrillation; RE-LY, Randomized Evaluation of Long-Term Anticoagulation Therapy trial; ROCKET-AF, Rivaroxaban Oncedaily, oral direct factor Xa inhibition Compared with vitamin K antagonism for prevention of stroke and Embolism Trial in Atrial Fibrillation; TTR, mean percent of time in the therapeutic range. Other abbreviations as in Table 3.

Indolfi, Ciro & Santarpia, Giuseppe & Curcio, Antonio & Sibilio, Gerolamo. (2015). Atrial Fibrillation and anticoagulation. 10.13140/RG.2.1.2372.5602.

Cost

- ·Warfarin \$20 a month
- Dabigatran \$475 a month (generic in June? 2022)
- Rivaroxaban \$550 a month (generic in litigation)
- Apixaban \$550 a month (generic after 2026)
- Edoxaban \$380 a month (Generic)



Covid-19



- For non-hospitalized patients with COVID-19, anticoagulants and antiplatelet therapy should not be initiated for prevention of venous thromboembolism (VTE) or arterial thrombosis unless there are other indications (AIII).
- Hospitalized adults with COVID-19 should receive VTE prophylaxis per the standard of care for other hospitalized adults (AIII).
- Hospitalized patients with COVID-19 should not routinely be discharged on VTE prophylaxis (AIII).
- Using Food and Drug Administration-approved regimens, extended VTE prophylaxis can be considered in patients who are at low risk for bleeding and high risk for VTE as per protocols for patients without COVID-19 (BI)

Q&A





A LONG JOURNEY: COVID-19 REHABILITATION & RECOVERY

Daniel Malone PhD, PT
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Physical Medicine & Rehabilitation
Physical Therapy Program
University of Colorado Anschutz Medical Campus

CMDA Conference, 4/29/22



Disclosures

I have no disclosures to report

SESSION OBJECTIVES

1. Describe the sequelae of "Long COVID" (i.e., Post-Acute Sequelae of SARS-CoV-2 infection (PASC)) with an emphasis on physical, cognitive and mental health.

2. Review current concepts for the rehabilitation management of patients with "Long Covid".

3. Illustrate the importance of interprofessional teams in the holistic management of the varied sequalae of "Long Covid".

Post-Acute Sequelae of SARS-CoV-2 infection (PASC))

 "Post COVID Conditions": an umbrella term for the wide range of physical and mental health consequences experienced by some patients that are present four or more weeks after SARS-CoV-2 infection, including by patients who had initial mild or asymptomatic acute infection.

Long Haul COVID

Long Hauler Syndrome

Post-COVID Syndrome

Long COVID

Long-term COVID



COVID-19 severity

- Asymptomatic
- Mild illness
- · Moderate illness
- Severe illness
- · Critical illness



Susceptibility

- Female
- Age
- Immune response
- Autonomic response
- Genetics
- Underlying health status
- Variant



Other factors

- · Recovery from acute infection
- · Quarantine
- Vaccination status

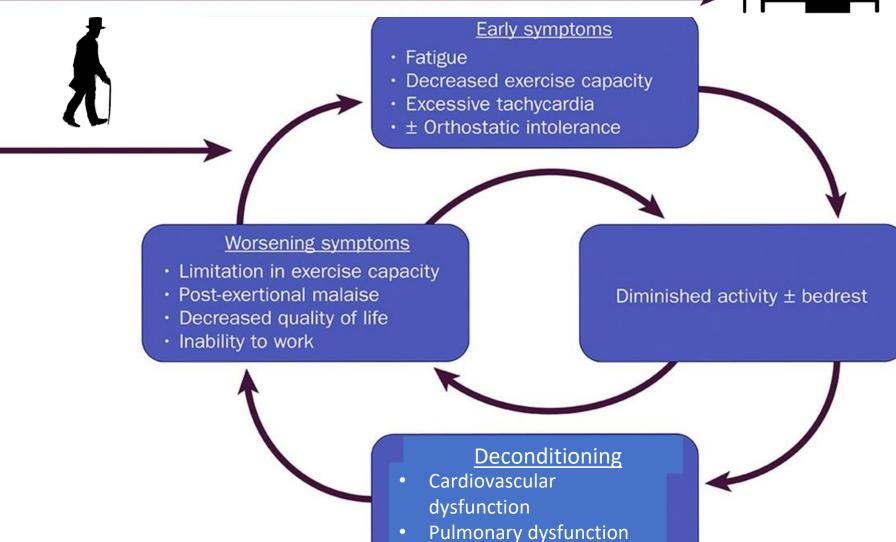
Potential mechanisms

- · Immune dysregulation
- Inflammation
- Viral persistence

- Triggering of latent viruses
- Endothelial dysfunction
- Metabolic dysregulation

- · Bedrest deconditioning
- Autonomic dysregulation
- Mitochondrial dysfunction

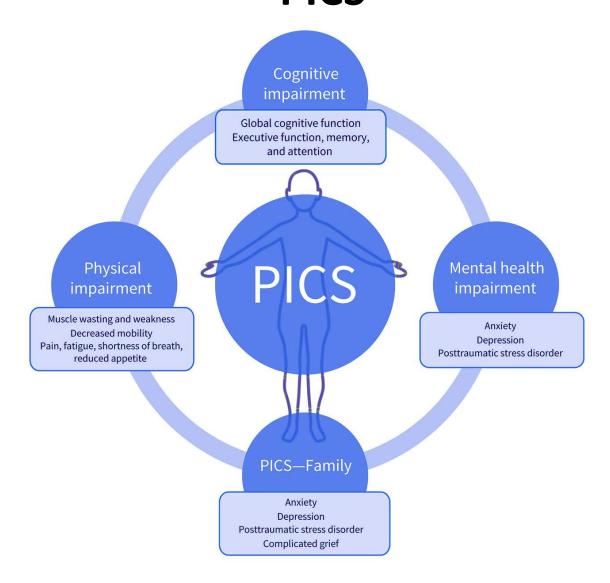




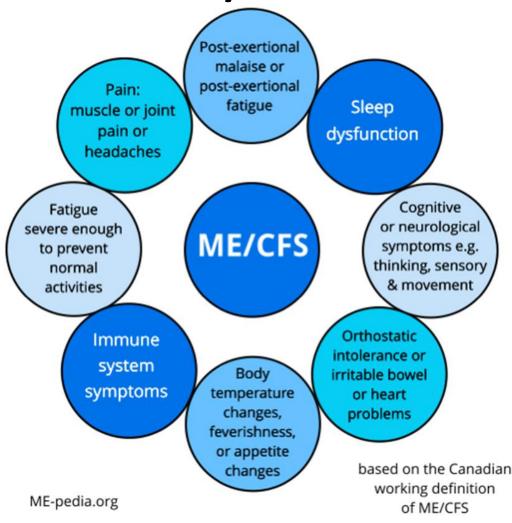
Muscular atrophy

Gluckman et al. J Am Coll Cardiol 2022

Post Intensive Care Syndrome -PICS-



Myalgic Encephalomyelitis Chronic Fatigue Syndrome -ME/CFS-

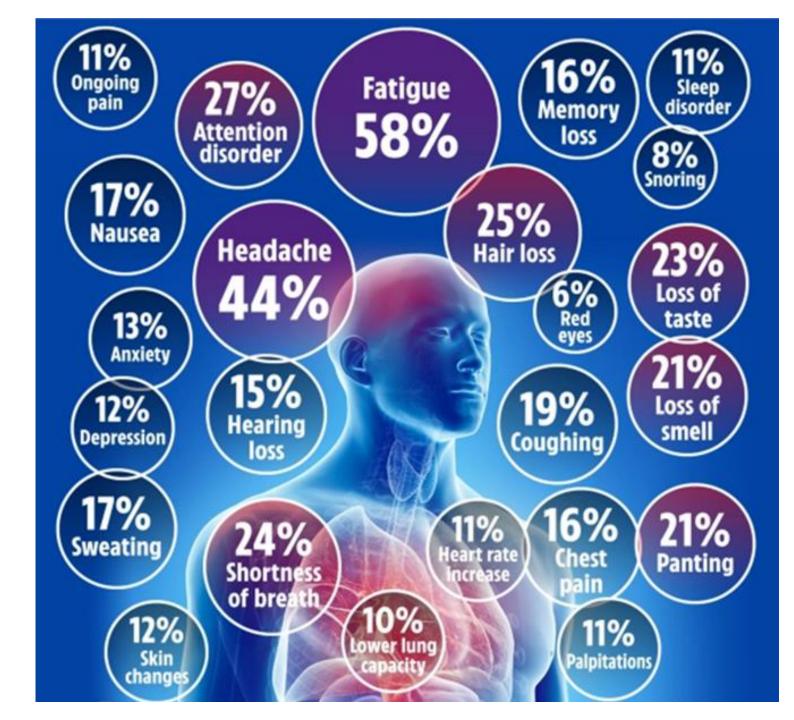


Common PASC Symptoms

Over 50 have been identified:

- Fatigue
- Myalgia/ Arthralgia
- DOE/SOB
- Brain Fog/ Attention
 Disorder
- Headache
- Depression

Lopez-Leon S et al. Sci Rep. 2021. Image adapted from: https://www.the-sun.com/news/2246680/graphic-reveals-most-commonsymptoms-long-covid/.

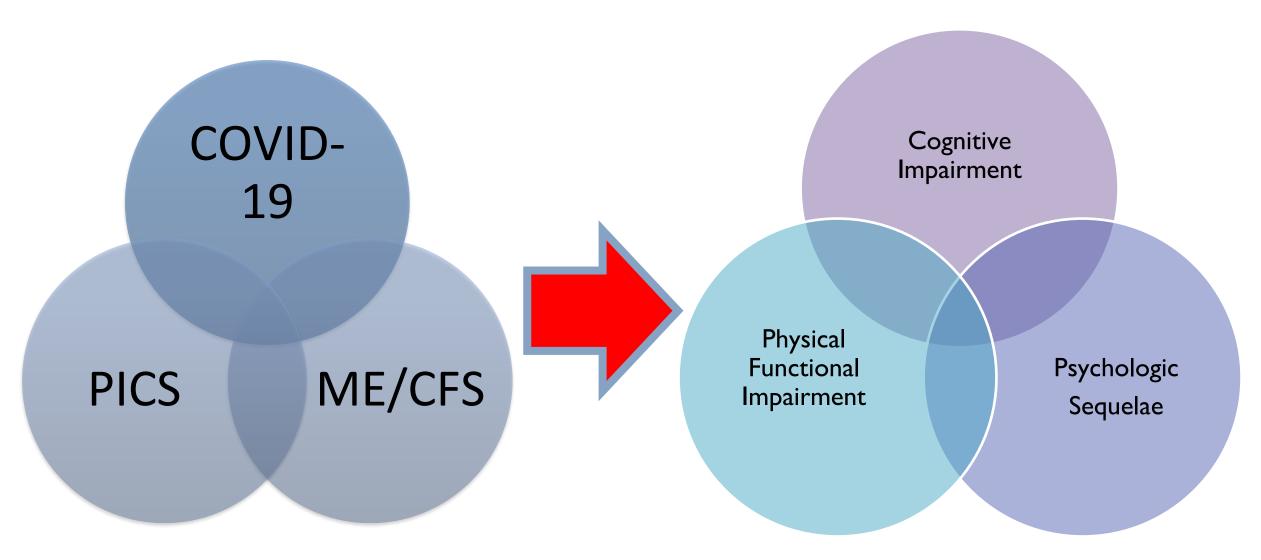


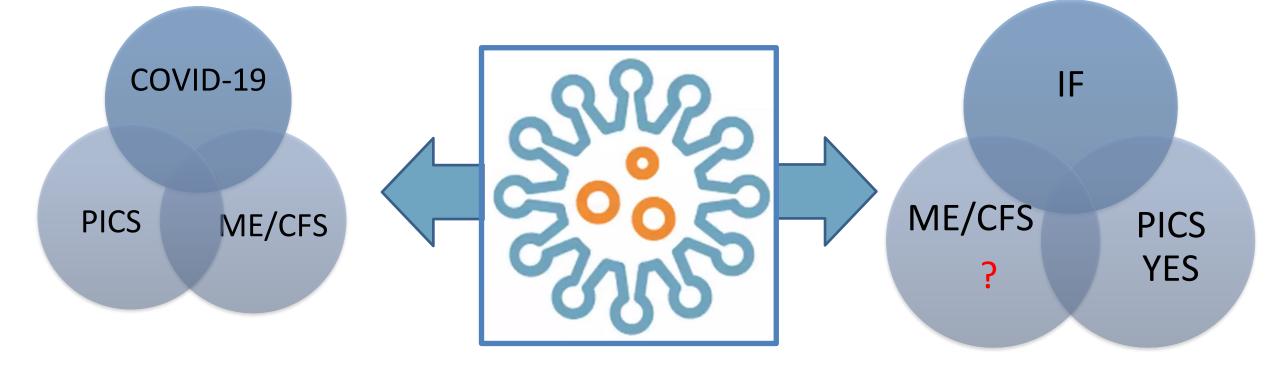
COVID-19 disease trajectories among nursing home residents

Most common signs & symptoms:

- Fever of 99F or higher (74%)
- Malaise (62%)
- Anorexia (62%)
- Hypoxia (55%)
- Cough (51%)
- Altered MS (32%)
- Dyspnea (26%)

PASC, Common Symptoms & Rehab





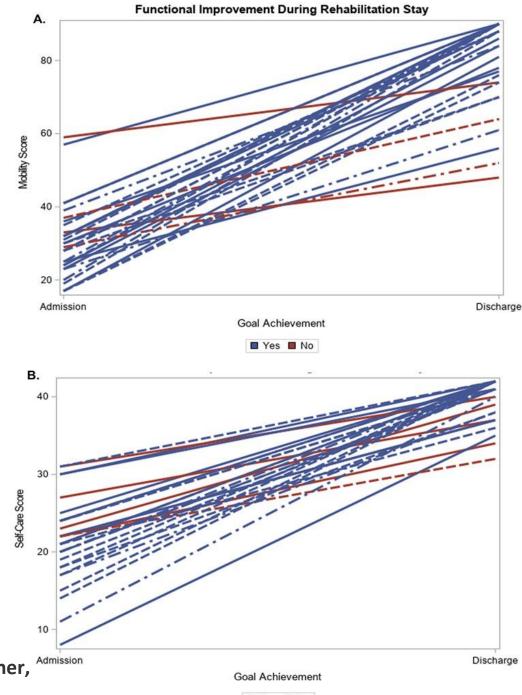
Should patients with PASC engage in rehabilitation?

If YES

Are there specific precautions?

PACS & IRF

- 30 patients admitted to IRF
 - 90% required critical care (25% MV ~ 18.8 days)
- Average mobility score at admission: 30.4
- Average mobility score at discharge: 79.6
- Average self-care score at admission (21.4)
- Average self care score at discharge: 39
- Frequent & longer duration rehab
 (approximately 3 h/d and at least 900 min/wk) is safe and feasible





More Outcomes in the IRF Setting

Outcome Measure	Admission Assessment	Discharge Assessment	p-value a <0.001*	
Berg Balance Scale, mean (SD), (n = 24)	22.6 (18.5)	43.7 (14.0)		
10 Meter Walk Test, mean meters per second (SD), (n = 17)	0.25 (0.25)	0.86 (0.57)	< 0.001*	
6 Minute Walk Test, mean meters (SD), (n = 19)	206.6 (258)	764.5 (276.1)	< 0.001*	
Functional Independence, No. (%)				
Transfer independence $(n = 29)$	1 (3.4%)	27 (93.1%)	<0.001*	
Ambulation independence $(n = 29)$	0 (0%)	25 (86.2%)	< 0.001*	
Functional Communication Measure, median (IQR)				
Voice $(n = 6)$	4 (4-5)	6.5 (4.75-7)	0.032*	
Swallowing $(n = 18)$	4 (3-5)	7 (7–7)	< 0.001*	
Attention $(n = 19)$	4 (4-5)	7 (6–7)	< 0.001*	
Memory $(n = 18)$	4 (4-5)	7 (6.25–7)	< 0.001*	
Problem Solving (n = 18)	4 (4-5)	7 (6.25–7)	< 0.001*	

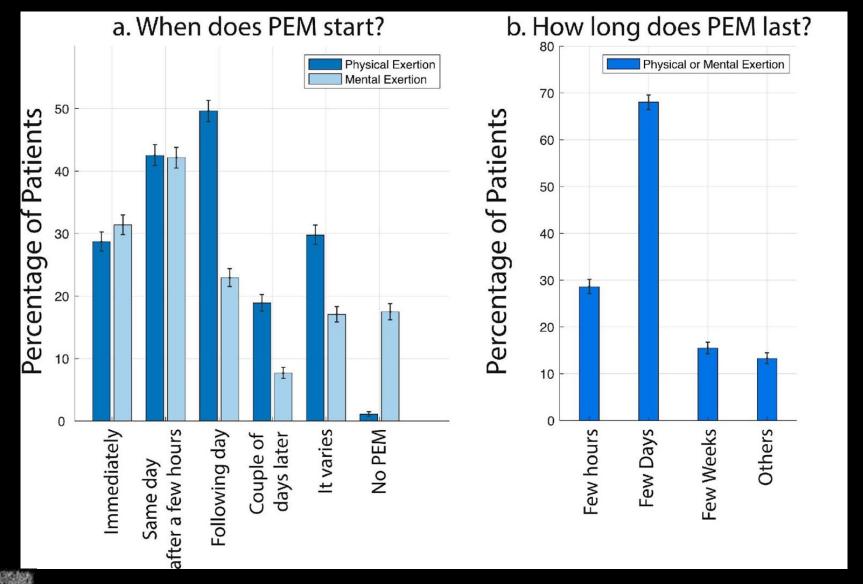
Treatment Recommendations

- Individually <u>titrated</u>, <u>symptom-guided</u> program
 - Initial Goal: restore patients to previous levels of activity and improve quality of life.
 - Until those goals have been achieved, the rehabilitation program should not focus on high intensity interventions
- Continually assess for Post Exertional Malaise (PEM)
 - RPE Scales are useful
- Fatigue Assessment
- Abnormal cardiopulmonary responses

Post-Exertional Malaise (PEM)

Post-exertional malaise is characteristic of ME/CFS and most ME/CFS patients experience it

- Malaise includes feeling bad, sick, tired as well as fatigued
- Patients describe this as "crash" or "relapse" of illness, as all symptoms are worsened, not just fatigue
- Exertion could be physical or mental
- The malaise persists for more than 24 hours
- Leads to additional limitation in activities

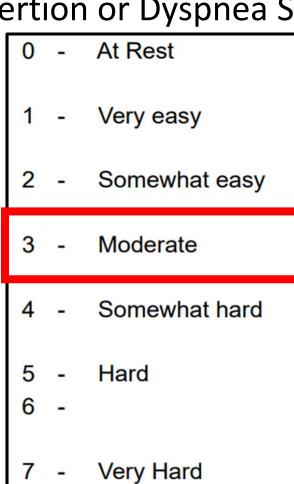




Treatment Recommendations

- Initial Activity Goals: ~ 3-5 METs (similar workload for ADL's)
- Progression
 - If symptoms worsen, activity should be returned to the previously tolerated level.
- Energy Conservation
 - "Four Ps": Pacing, Prioritizing, Positioning, & Planning
 - Use of adaptive equipment
 - Identification of "energy windows"
- Encourage healthy sleep & dietary patterns and hydration.

Modified Borg Scale (Exertion or Dyspnea Scales)



PASC Rehab

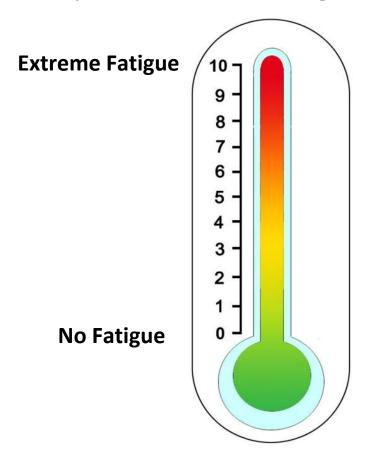
Special Considerations: Fatigue

Fatigue is a feeling of weariness, tiredness, or lack of energy. It can be
physical, cognitive, or emotional, mild to severe, intermittent to
persistent, and affect a person's energy, motivation, and
concentration.

Fatigue is "multi-dimensional"

Fatigue Thermometer

Pick a number (0-10) that best describes how much fatigue you have been experiencing in the past week including today.



Example of Fatigue Tools

One Item Fatigue Scale

- "Since your last visit, how would you rate your worst fatigue on a scale of 0 to 10?"
- Categorical description as follows:
 - 0: No fatigue
 - 1-3: Mild fatigue
 - 4-6: Moderate fatigue
 - 7-10: Severe fatigue

Example of Fatigue Tools:

Brief Fatigue Inventory (BFI)

invantant html

THE UNIVERSITY OF TEXAS



https://www.mdanderson.org/research/ departments-labsinstitutes/departmentsdivisions/symptom-research/symptomassessment-tools/brief-fatigue-

STUDY ID#			Brief F	atigu	ıe Inv	vento	ory	HOSE	PITAL #	
Date: /_	/_								Time:	
	ast			Firs	st	_	Middle	e Initial		
Throughout of Have you felt										r fatigued. No
Please rate that best of	e your f lescribe	atigue es you	(wearing fatigue	ness, ti e right	redne NOW.		circlir	g the	one n	umber
0 No Fatigue	1 2	3	4	5	6	7	8	9		10 As bad as ou can imagine
2. Please rat best desc										number that
0 No Fatigue		2 ;	3 4	5	6	7		3	9	10 As bad as you can imagine
3. Please rat best desc										umber that
0 No Fatigue		2	3 4	5	6	3 7	7 {	3	9	10 As bad as you can imagine
4. Circle the fatigue h					how, o	during	the pa	st 24	hours	·,
A. Gene	ral activ	vity								$\overline{}$
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C. Walk		itv							Oom	olotory interiores
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Special Considerations

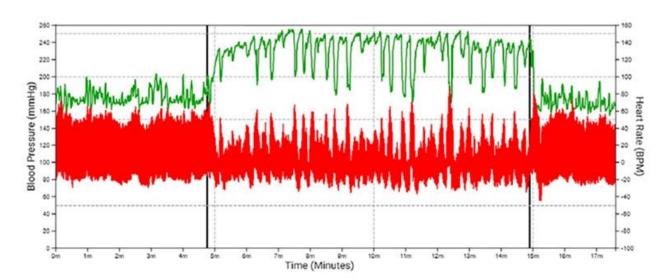


- Hypoxemia/ Silent Hypoxemia
 - Hypoxemia: a below-normal level of oxygen in the blood
 - Silent: an individual has a lower oxygen saturation level than anticipated, however, the individual does not experience any breathing difficulty
- Pulse Oximetry
 - Assess for accuracy
 - Pulses & digital perfusion
 - Review pulse waveform (pleth)



Special Considerations

- Tachycardia & Postural Orthostatic Tachycardia Syndrome (POTS)
 - Characterized,
 - Complaints of lightheadedness, palpitations, headaches, nausea/vomiting, fatigue
 - A sustained heart rate (HR) increment of ≥30 beats/min within 10 min of standing



Tachycardia:

• Δ42 bpm

Labile BP:

• ΔSBP~ 14-34 mmHg

Shouman K et al. 2021 Dani M et al. 2021 Freeman R et al. 2018

Special Considerations

- Tachycardia & POTS
 - Education:
 - Avoid hot baths/showers, Valsalva, large meals; dehydration; HOB elevation;
 - To do (counter pressure maneuvers): isometrics; crossing & uncrossing UE/LE; squatting
 - Other Considerations: hydration, sodium intake, compression garments,
 & progressive exercise
 - Referral

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COVID-19

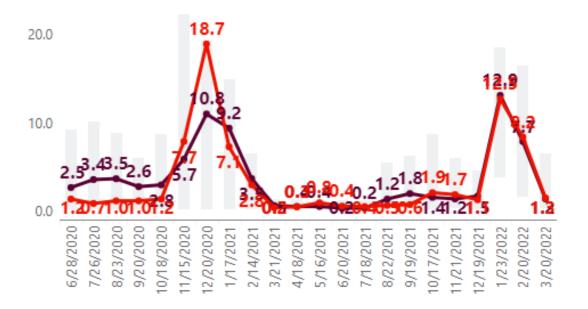
Statistics, Therapies, Impact, and the Future

COVID statistics

- U.S. Total Cases-80,998,091
- U.S. Deaths-990,367
- CO Total Cases-1,382,091
- CO Deaths-13,201

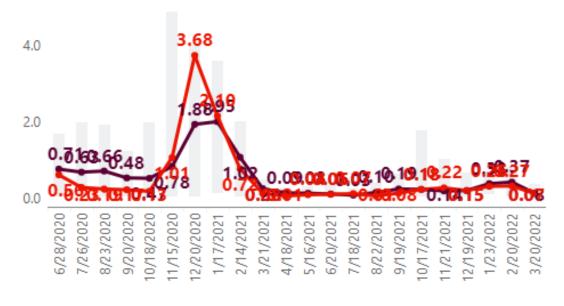
Nursing Home Resident Cases

COVID-19 cases per 100 residents



Nursing Home Resident Deaths

(COVID-19 deaths per 100 residents)



COVID-19 Nursing Home Resident and Staff Deaths: AARP Nursing Home Dashboard

Deaths from COVID-19 in the U.S. are broken down as follows by age as of January 2022: Ages 0–4: 0% of total deaths Ages 5–11: 0% 12–15: 0% 16–17: 0% 18-29: 0.8% 30-39: 1.8% 40-49: 4% 50-64: 17.6% 65-74: 22.1% 75-84: 26% 85+: 27.7%

Therapeutics

Brief Overview

NOT IN THE HOSPITAL

Symptoms for 5 days or less

- Paxlovid™: This medication is taken by mouth (as a pill) to treat mild to moderate symptoms of COVID-19. It must be given within 5 days after the first symptoms of COVID-19 appear. Paxlovid is for adults and children who are 12 years of age and older, weighing at least 88 pounds. Paxlovid may interfere with hormonal contraceptives (such as pills, an implant, an intrauterine device [IUD], injections, vaginal rings, and skin patches), so other contraceptive methods are advised. Paxlovid is not recommended for people with serious kidney or liver disease.
- Lagevrio (molnupiravir): This medication is taken by mouth (as a pill) to treat mild to moderate symptoms of COVID-19. It must be given within 5 days after the first symptoms of COVID-19 appear. Lagevrio is for adults 18 years and older. Lagevrio is not recommended during pregnancy or when breastfeeding. Also, additional contraceptive methods are required for a short while after the last dose.

Symptoms for 7 days or less

- **Bebtelovimab:** This is a mAb for adults and children 12 years or older (weighing at least 88 pounds) who have tested positive for COVID-19, have mild to moderate symptoms, are not in the hospital, and are at high risk for serious COVID-19. Bebtelovimab must be given within 7 days after the first symptoms of COVID-19 appear.
- Remdesivir: This antiviral treatment is also known as Veklury[®]. It is for patients staying in the hospital *and* patients who are not in the hospital must go to an IV infusion center to receive this treatment. Remdesivir must be given within 7 days after first symptoms of COVID-19 appear.

IN THE HOSPITAL

- COVID-19 convalescent plasma: Convalescent plasma is blood plasma taken from people who have recovered from COVID-19. It contains antibodies that treat SARS-CoV-2, the virus that causes COVID-19; it also contains other components that may improve a person's immune response to the virus. Convalescent plasma is for patients staying in the hospital and who have a weakened immune system.
- Baricitinib (Olumiant®): This mAb treatment is for patients 2 years of age or older who require supplemental oxygen, invasive mechanical ventilation, or extracorporeal membrane oxygenation (ECMO) to treat COVID-19.
- Tolcilizumab (Actemra®): This is a mAb treatment for adults and pediatric patients (2 years of age and older) who are receiving corticosteroids and who require supplemental oxygen, a ventilator, or ECMO. Actemra may decrease the risk of death for patients in the hospital with COVID-19.
- **Remdesivir:** This antiviral treatment is also known as Veklury. It is for patients staying in the hospital *and* patients who are not in the hospital. Remdesivir must be given within 7 days after first symptoms of COVID-19 appear.

The U.S. Food and Drug Administration (FDA) has authorized these treatments for emergency use. Learn more about <u>remdesivir</u>, <u>Actemra</u>, <u>bebtelovimab</u>, <u>Paxlovid</u>, and <u>Lagevrio</u>.

Remdesivir



Remdesivir should be given as a 200 mg intravenous infusion on Day 1, followed by remdesivir 100 mg intravenously on Days 2 and 3. Infusion should occur over 30 to 120 minutes.



Treatment should be initiated as soon as possible and within 7 days of symptom onset in all patients.



Perform hepatic laboratory and prothrombin time testing in all patients before starting remdesivir and during treatment as clinically appropriate.



The PINETREE trial showed that 3 consecutive days of IV remdesivir resulted in an 87% relative reduction in the risk of hospitalization or death compared to placebo

Paxlovid

Paxlovid is composed of two distinct agents; nirmatrelvir an inhibitor of coronavirus protease and ritonavir, an inhibitor of CYP3A (ritonavir is also an HIV-1 protease, not related to its action against SARS-CoV-2). Ritonavir is needed to slow the metabolism of nirmatrelvir.

A normal Paxlovid dose consists of 300 mg nirmatrelvir (two 150 mg tablets) AND 100 mg of ritonavir (one 100 mg tablet). These three tablets will be packaged together and all three taken together as a single dose.

Paxlovid is taken orally with or without food.

Paxlovid is taken twice daily for 5 days for a complete a course. As noted above each dose consists of three tablets.

Paxlovid has been shown to reduce severe disease or death by 88%.

Molnupiravir

- MOV is an oral prodrug with activity against SARS-CoV-2. After intracellular metabolism, the MOV metabolic byproduct is incorporated into viral RNA causing lethal viral mutagenesis and inhibition of viral replication.
- A normal MOV adult dose is 800 mg (four 200 mg tablets) taken orally every 12 hours for 5 days.
- MOV is taken orally with or without food.
- Molnupiravir has been shown to reduce severe disease or death by 30%.
- MOV may cause fetal harm in pregnancy.
 - MOV is not recommended for use in pregnancy.
 - Advise women of childbearing potential of the potential risk to a fetus during treatment with molnupiravir and for 4 days after the final dose.
 - Advise sexually active males with partners of childbearing potential of risks during treatment and for at least 3 months after the last dose of molnupiravir.
 - Breastfeeding is not recommended during treatment with MOV and for 4 days after the final dose.

Monoclonal Antibodies

Bebtelovimab is an investigational neutralizing immunoglobulin G1 (IgG1) mAb that binds to the SARS-CoV-2 spike protein.

Laboratory testing showed that bebtelovimab retains activity against both the omicron variant and the BA.2 omicron subvariant.

- Clinical trials did NOT include persons at high-risk for severe COVID-19.
- Clinical trials did NOT show a reduction in death or progression to severe disease.
- Clinical trials did NOT involve any patient infected with Omicron.
- EUA was authorized solely based on laboratory efficacy vs Omicron.

Bebtelovimab is administered as a single 175 mg intravenous dose over at least 30 seconds.

5. Bebtelovimab should be administered as soon as possible after a positive test for symptomatic COVID-19 and within 7 days of symptom onset.

Other Monoclonals are not effective against BA.2 variant

Evusheld does retain activity, but is not for treatment, only pre-exposure prophylaxis

Post-Exposure Prophylaxis and Treatment Across the COVID-19 Spectrum

Exposure

Asymptomatic/ Presymptomatic

+ SARS-CoV-2 test but no symptoms

Mild Illness

Mild symptoms (e.g., fever, cough, taste/smell changes); no dyspnea

Moderate Illness

O₂ saturation ≥ 94%, lower respiratory tract disease

Severe Illness

O₂ saturation <94%, respiratory rate >30/min; lung infiltrates >50%

Critical illness

Respiratory failure, shock, multi-organ dysfunction/failure

Viral replication

Casi/imdev (high risk, not fully vaccinated or immunosuppressed)

Bebtelovimab for BA.2
Sub-Variant

Therapeutic anticoagulation?

Remdesivir

Dexamethasone
In some patients: IL-6 inhibitor
or Jak inhibitor

ability

PATIENT DISPOSITION

Does Not Require Hospitalization or Supplemental Oxygen

PANEL'S RECOMMENDATIONS

All patients should be offered symptomatic management (AIII).

For patients who are at high risk of progressing to severe COVID-19,^a use 1 of the following treatment options:

Preferred Therapies

Listed in order of preference:

- Ritonavir-boosted nirmatrelvir (Paxlovid)^{b,c} (Alla)
- Remdesivir^{c,d} (Blla)

Alternative Therapies

For use <u>ONLY</u> when neither of the preferred therapies are available, feasible to use, or clinically appropriate. Listed in alphabetical order:

- Bebtelovimab^e (CIII)
- Molnupiravir^{c,f} (Clla)

The Panel recommends against the use of dexamethasone⁹ or other systemic corticosteroids in the absence of another indication (AIII).

Rating of Recommendations: A = Strong; B = Moderate; C = Weak

Rating of Evidence: I = One or more randomized trials without major limitations; IIa = Other randomized trials or subgroup analyses of randomized trials; IIb = Nonrandomized trials or observational cohort studies; III = Expert opinion

COVID-19 and Vitamin D

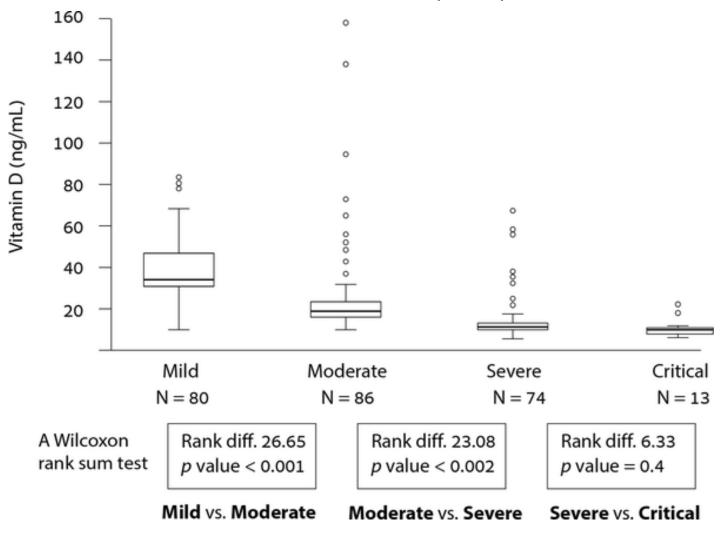
Evidence to show that Vitamin D deficiency does correlate with greater risk of severe disease

Patients with vitamin D deficiency (<20 ng/mL) were 14 times more likely to have severe or critical disease than patients with 25(OH)D ≥40 ng/mL

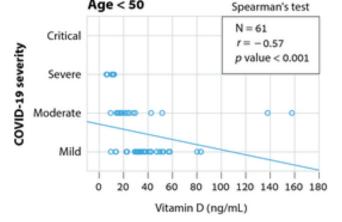
Vitamin D is a known regulatory component of the innate immune system and adaptive response to viral infections.

Other studies demonstrated NO benefit to treatment with Vitamin D

Fig 2. Box-and-whisker plots of the most recent pre-infection serum 25(OH)D levels before hospitalization were collected as a baseline (N = 253).



Dror AA, Morozov N, Daoud A, Namir Y, Yakir O, et al. (2022) Pre-infection 25-hydroxyvitamin D3 levels and association with severity of COVID-19 illness. PLOS ONE 17(2): e0263069. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0263069



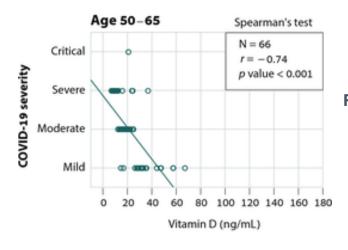
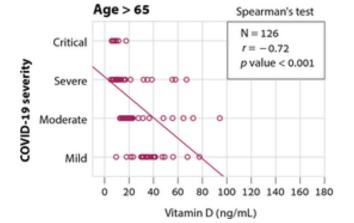


Fig 3. Correlation between pre-infection vitamin D deficiency status and COVID-19 disease severity stratified by three different groups of age (<50, 50–64, ≥65).



Dror AA, Morozov N, Daoud A, Namir Y, Yakir O, et al. (2022) Pre-infection 25-hydroxyvitamin D3 levels and association with severity of COVID-19 illness. PLOS ONE 17(2): e0263069. https://doi.org/10.1371/journal.pone.0263069

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0263069



Infection Control

Renewed Focus

— C. S. Lewis

• "Of all tyrannies, a tyranny sincerely exercised for the good of its victims may be the most oppressive. It would be better to live under robber barons than under omnipotent moral busybodies. The robber baron's cruelty may sometimes sleep, his cupidity may at some point be satiated; but those who torment us for our own good will torment us without end for they do so with the approval of their own conscience."

FACT SHEET: Protecting Seniors by Improving Safety and Quality of Care in the Nation's Nursing Homes, Feb.2022



- A set of reforms from HHS through CMS
- Improve quality and safety of nursing home care
- Hold nursing homes accountable
- Make the quality of care and facility ownership more transparent
 - "resident outcomes are significantly worse at private equity-owned nursing homes"
 - "Another <u>study</u> found that private equity-backed nursing homes' COVID-19 infection rate and death rate were 30% and 40% above statewide averages, respectively."
 - "despite depriving residents of quality care, private equity-owned nursing homes actually led to an <u>uptick</u> in Medicare costs"

FACT SHEET: Protecting Seniors by Improving Safety and Quality of Care in the Nation's Nursing Homes | The White House

White House Statement Quotes

The pandemic has highlighted the tragic impact of substandard conditions at nursing homes,

failure to comply with Federal guidelines at nursing homes is widespread

82% of all inspected nursing homes had an infection prevention and control deficiency, including a lack of regular handwashing,

White House action points



Minimum Staffing requirements

Single occupancy rooms

SNF-VBP-payment changes based on staffing and staff retention, resident experience

Reinforce Safeguards against unnecessary meds

\$500 million for increased inspections

Increased scrutiny of poor performers (more frequent inspections)

Change 1-time fines to daily until issue corrected and increase max penalty from \$21K to \$1 million dollars

White House Statement Continued

- Initiatives around increasing transparency
- Initiatives for workforce sustainability including Unionization
- Pandemic preparedness-
 - COVID testing and vaccinations
 - Increase requirements for on-site IP
 - Enhanced Pandemic Preparedness
 - Integrate Pandemic Lessons into Nursing Home requirements



Is Medicare Running Out of Money?

• Medicare may be in trouble, but it is not going bankrupt. According to a 2021 report by the Biden administration, the Medicare Hospital Insurance (HI) trust fund will be depleted if healthcare expenses continue to exceed money flowing in. Without new legislation, it's estimated that by 2026, Medicare Part A may only be able to pay for 91% of the costs it covers today.

Is Medicare Going to Run Out of Money? (verywellhealth.com)

AMDA Response

- AMDA Response to SOTU Final.pdf (paltc.org)
- "We welcome some of the proposed initiatives the President has outlined, including reduced occupancy or singleoccupancy resident rooms, full-time infection preventionists, launching a Nursing Home Career pathway and greater ownership transparency in our setting. Unfortunately, some of the proposed policies appear to double down on the same punitive measures that for the last three decades have not materially improved the patient or resident experience in PALTC."
- The Society has embraced this bold vision and strategy in a special issue of our medical journal, JAMDA
- (https://www.jamda.com/issue/S1525-8610(21)X0011-4)



"Do, or it will be done to you!"

Clay Watson, MD

- Many of these proposals require congressional approval
- You have an advocate in AMDA, use them, get involved, fund them, use other effective Organizations
- Though CMS is running low on dough, there are other sources. Seek out grants from Federal, State and private entities to fund IP/IC initiatives.
- Mandate IP networking, collaboration,
- Find the "easy wins" in IC, take them and become the expert
- Reach out to partners who understand the space, other operators, researchers, Optum (payors). We have an IP program ready and willing to assist.

G CHAN

Compiled and Presented by: Allison Villegas, PA-C Galin Hartsuiker, PA-C

Caring for the Caregivers.....

- a. Solve the basics: supplies, scheduling, pay equity
- b. Make it a person-driven environment
- c. Listen to the whole person

Workforce innovative solutions can look like....

- a. Career ladder based on training and experience
- b. Meaningful engagement in care planning
- c. Value time spent at the bedside
- d. Tie pay to length of employment and merit



CMS is requiring 20% of all nursing homes receive a stand alone infection control survey between October 2021 and the end of September 2022.



When communicating with someone with dementia, never demand. ASK.



Things to avoid at the end of life

- Finger sticks and labs
- Continuing medications that are no longer beneficial
- Showing alarm about weight loss when it is expected (document this!)
- Sending the person to the hospital for behaviors
- Using antipsychotics when pain medication might be more effective/necessary
- Using sleeping pills when the resident prefers to sleep intermittently, not necessarily at night



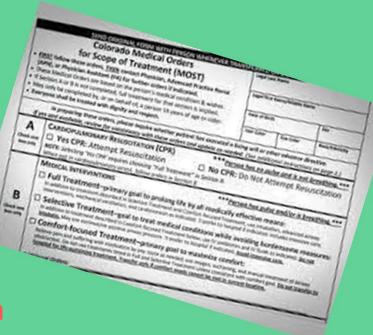
Warfarin is the most common drug involved in error in 2012.

The medication in long term care

For non-hospitalized patients with COVID-19, anticoagulants and antiplatelet therapy should not be initiated for prevention of venous thromboembolism (VTE) or arterial thrombosis unless there are other indications

The Colorado MOST form is portable; a new one is not needed upon admission to a nursing facility if a patient's preferences remain unchanged.

Photocopies of MOST forms are acceptable and completion of a MOST form <u>cannot</u> be a mandatory requirement for admission.



Common Post-Acute Sequelae of SARS-CoV-2 infection (PASC) include:







Fatigue 58%

Headache 44% Attention Disorder 27%

- 1. Each human has a unique story.
- 2. Dignified care is what happens when no one is watching.
- 3. Tone of voice and body language matter more than words.
- 4. Turning down sensory input solves many problems.
- 5. Take nothing personally.

Dr. Watson's TOP TEN:

- 6. Social isolation can be deadly.
- 7. Purpose drives happiness.
- 8. Less is more on medications and medical care.
- 9. End of life is a sacred time, and a good death is possible.
- 10. Best care is grounded in compassionate presence. Without it, nothing else works.



With regards to diabetes, consider newer medications such as SGLT-2s and GLP-1s as well as continuous glucose monitoring to reduce risk of hypoglycemia and improve outcomes

The most important question a person with a personality disorder wants to know is:



Will you be there for me?

SAVE THE DATE CMDA 2023! APRIL 28, 2023



This is the most important takeaway that everyone has to remember.

What you do is important and makes a difference. Thank you.