New USDeN Deprescribing Research

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Deprescribing Bisphosphonates in Nursing Home Residents with Dementia

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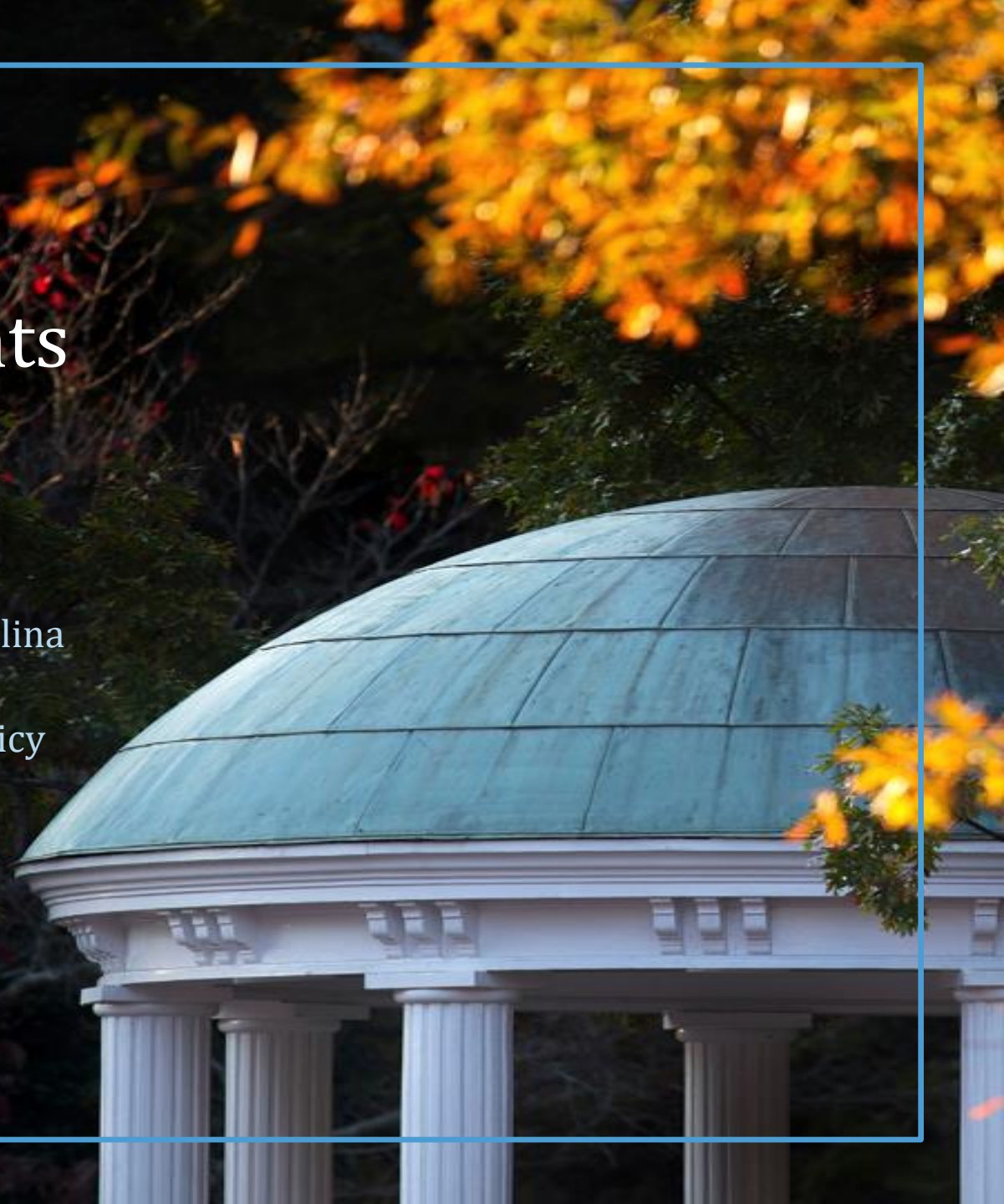

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Background

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- Prescribers face difficult decisions when prescribing fracture prevention medications in the nursing home (NH) setting.
- Limited evidence for the benefits of bisphosphonates for fracture prevention in NH residents with dementia
  - Potential side effects (dysphagia)
  - Time-to-benefit (1-2 years)
  - Benefits after discontinuation (1-2 years)

<u>Overall Goal</u>: Evaluate patterns of deprescribing oral bisphosphonates in NH residents with dementia.

<u>Aim 1</u>: Develop definition for deprescribing bisphosphonates in NH residents with dementia using prescription refill data.

<u>Aim 2</u>: To identify factors associated with deprescribing versus continuing bisphosphonates in NH residents with dementia.

Design and Measures

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Design: National retrospective study of 2015-2016 Medicare claims, Part D, and Minimum Data Set (MDS)

Sample: NH residents with dementia receiving oral bisphosphonates (n=5,312)

Dependent Variable: Deprescribing of bisphosphonates (gap in medication supply)

Independent Variables:

Domain	Measures
Demographics	Age Sex, Race/ethnicity, Newly admitted
Mobility	Mobility devices, ADL locomotion, ADL transfer
Comorbidity burden	Number of medications, Comorbidities, Hospitalizations
Life-limiting conditions	Dementia severity, ESRD, Heart failure, Cancer
Adverse Effects	Weight loss/appetite loss, Swallowing difficulty, Mechanically altered diet
NH Facility	Region, Bed size, Rurality, CCRC facility, Staffing ratio, Ownership
Provider	Provider type

Aim 1

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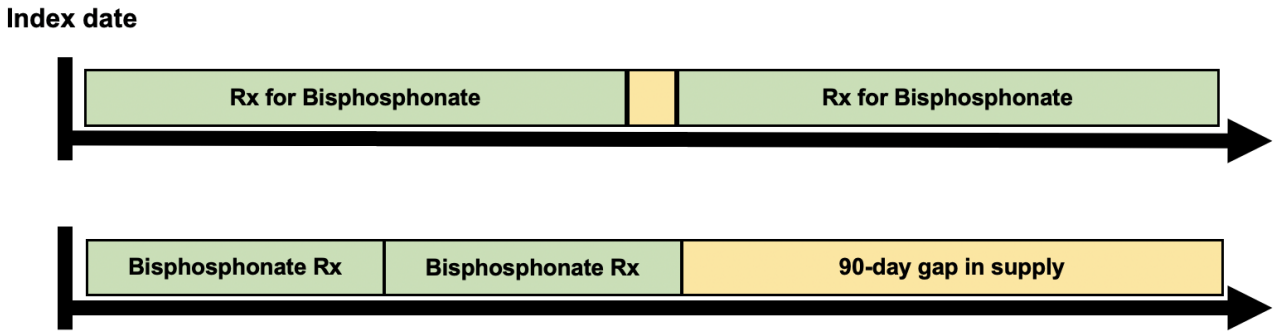
Analysis - Examine rate of deprescribing using different gap lengths in medication supply and evaluate agreement between potential definitions.



Definition (gap length in days)	Rate of Deprescribing (180d Cumulative Incidence)	Rate of restarts (30d Cumulative Incidence)	Agreement (vs. 180d gap)
30d (n=6308)	55.6%	45.9%	0.25
90d (n=5312)	29.9%	12.1%	0.64
180d (n=4357)	11.7%	2.5%	-

Aim 2

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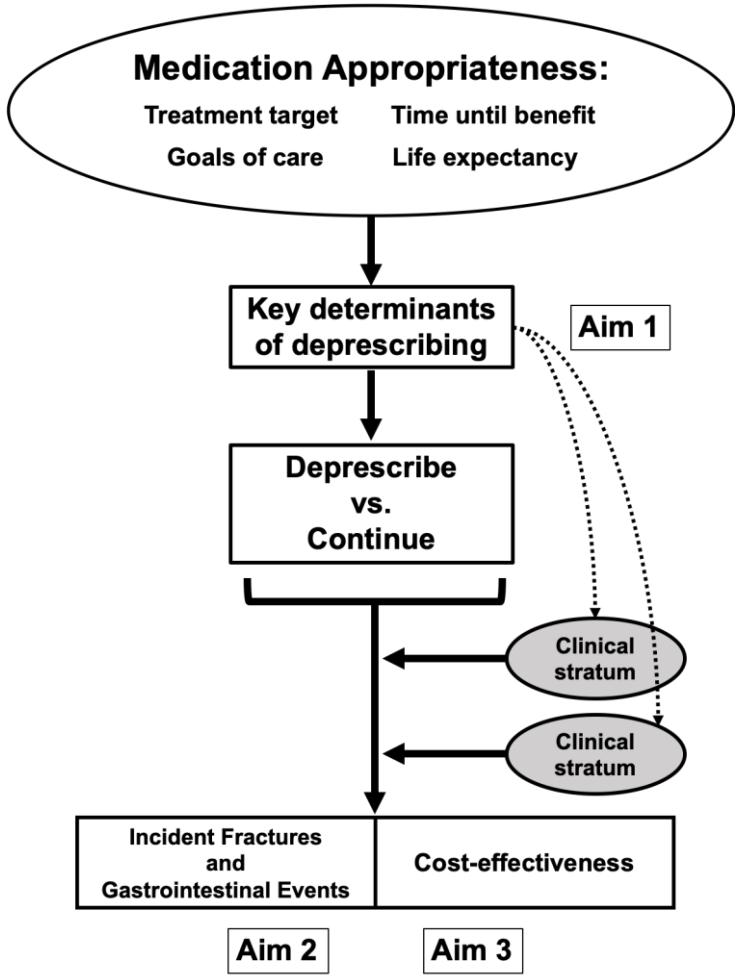
Competing Risks Regression Models

Variable	Adjusted Hazards Ratio (95% CI)
Age 90+ (vs. 65-69)	1.78 [1.18-2.68]
Swallowing difficulty	1.61 [1.09-2.38]
Severe mobility dependence (vs. none-mild)	1.45 [1.14-1.84]
Moderate mobility dependence (vs. none-mild)	1.30 [1.02-1.66]
Newly admitted (vs. prevalent stay)	1.36 [1.13-1.63]
CCRC Facility (vs. not)	1.29 [1.01-1.66]
Nurse practitioner provider (vs. MD provider)	1.27 [1.08-1.50]
6-10 medications (vs. 0-5)	0.85 [0.72-0.99]
>10 medications (vs. 0-5)	0.77 [0.62-0.96]
Cancer	0.68 [0.47-0.98]

Conclusions

- Approximately 20% of residents with dementia had bisphosphonates deprescribed.
- Resident characteristics associated with deprescribing suggested decision-making based on prognosis and likelihood for benefit.
- Associations of deprescribing with facility and provider characteristics suggested organizational-level influence on deprescribing.
- Prescribing inertia, as evidenced by polypharmacy, may be a barrier to deprescribing preventive medications like bisphosphonates.

Future Directions (K award)



Aim 1. Identify determinants of deprescribing bisphosphonates in older NH residents with AD/ADRD from the perspectives of caregivers and prescribers.

Aim 2. Quantify the benefits and harms associated with deprescribing bisphosphonate therapy in older NH residents with AD/ADRD.

Aim 3. Determine the cost-effectiveness of deprescribing bisphosphonates in NH residents with AD/ADRD, considering medication-related costs and utilization for adverse effects and fractures.

Thank you!

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To continue or to stop?

Surrogate perspectives on anticoagulation for atrial fibrillation in individuals with dementia

Gregory M. Ouellet, M.D., M.H.S.

Research Team and Mentorship: Alexandra Hajduk, PhD, MPH; Meredith Campbell-Britton, MSW; Mary Tinetti, MD

Assistant Professor, Section of Geriatrics

May 27, 2021

US Deprescribing Research Network

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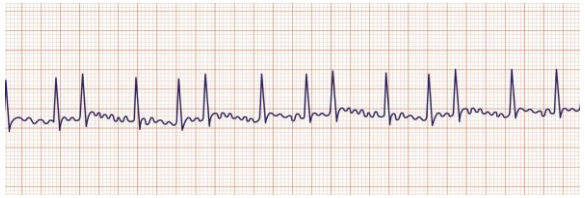
Background



Atrial fibrillation affects almost 20% of those with dementia

Most meet the guideline-supported risk threshold to receive anticoagulation

It is unclear whether, and when, the potential harms of anticoagulation outweigh the benefits

Objective: How do surrogate decision-makers of persons with atrial fibrillation and dementia make decisions about anticoagulation?

Methods

Semi-structured interviews (n=23)

Target population: Surrogate decision-makers for patients with moderate to advanced dementia and atrial fibrillation

Sampling: Purposive sampling

Content of interviews:
- Attitudes toward prescribing/deprescribing
- Goals of care
- Understanding of dementia trajectory
- Factors considered in making anticoagulant decisions

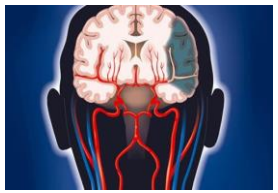
Analysis: Content and thematic analysis

Participant Demographics	
	N (%)
Female sex	21 (91.3%)
Nonwhite race	2 (8.7%)
Relationship	
Spouse	4 (17.4%)
Child	17 (73.9%)
Other	2 (8.7%)

Results: Major themes

Reliance on clinicians for decision-support

Fear of stroke



Dementia as a progressive, terminal illness

Decisions in times of crisis

Reliance on clinicians for decision-support

For the most part, I feel we're pretty trusting of the doctors. […] If we find out that there's anything dangerous that's obviously something that we'll consult with the doctor about with our concerns and see what they have to say.

His primary doctor he's had for about 10 years, actually longer. I don't think the guy would steer me wrong. The last year I've gotten very close with him, so I trust him more than anybody, and usually if somebody changing something I will call him and ask him.

I have been worried about the many medications that she's taking. I think she's taking about ten right now. Every time they wanna add something to that regimen, I'm always like, why? I ask questions about the reason for it. Will it replace another one? Things like that.

Fear of stroke

That she would be immobile. Right now, she's still able to move around. I don't think that with the dementia and a stroke, I don't know if she could come back from that, like be able to relearn how to walk or anything like that.

I don't want her to become a vegetable. I don't want her to become, I don't want her to lose her state of mind or her abilities. I really don't want her life to become more difficult.

You know, I'm not too, too concerned about it [stopping her anticoagulant]. She seems to be okay. She's being very well cared for. I'm more concerned about other things like her anxiety more than anything at times.

Dementia as a progressive, terminal illness

I think as far as her memory goes, they were very happy with her last check-in. They thought things were not progressing. [..] I think my mother's got several more years.

I don't think they [doctors] could know this [prognosis]. My best friend had a mother who has died recently, who, many years ago, [...] was—bedridden in her home, demented, unable to choose food for 12 years, without developing so much as a bedsore.

I think for myself too, I know that this dementia is not going to go away, so prolonging her life in the fashion that she's—in what she's dealing with right now, I don't know. I'd rather her just be happy and comfortable and able to enjoy what she has.

Decisions in times of crisis

Then last year right around Memorial Day she ended up taking a bad fall, and she ended up at Yale New Haven. She came in with a neck brace on. Her face was very bruised. [...] She had a brain bleed.

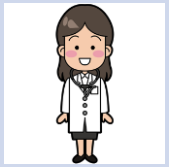
We had to weigh the benefits of taking the blood thinner because he had a stomach bleed And that's where we kind of said, "We don't want him really to take it anymore." Because we thought that it was so much more of a detriment to him if he fell, hit his head.

They (doctors) are fully on board with the fact that less is better and that we don't do anything unless it's really necessary. They do give me choices, give us choices, and they do explain things, but at his age and his condition, they know that we don't want to mess around with any potential side effects

Conclusions

Decision-making about anticoagulation for persons with atrial fibrillation and dementia often favors the status quo.

Empiric evidence to clarify the benefits and harms of anticoagulation in this population is needed to facilitate shared treatment decision-making.



Interventions to tailor decision-making to patients and surrogates' goals require the buy-in of trusted physicians.

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Words Matter

Deprescribing in Primary Care

Ariel Green, MD, MPH, PhD
Division of Geriatric Medicine and Gerontology

May 27, 2021

Why Do Words Matter?

- Vast majority of older adults want to stop a medication if their doctor says it is possible
- Yet patients and caregivers often do not recognize potential harms of medicines or know deprescribing is possible
- Goal-aligned deprescribing is difficult to achieve

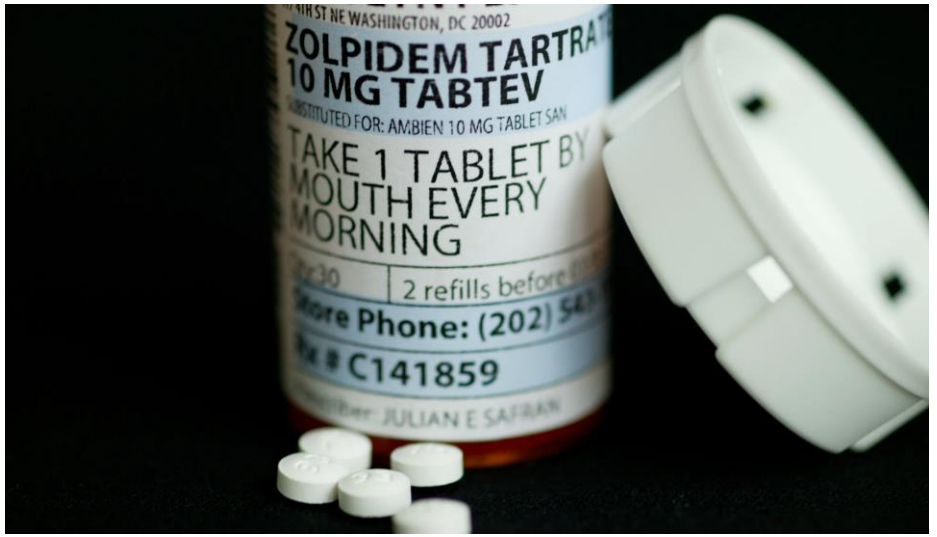
Reeve, et al. JAMA Intern Med 2018. Kerns, et al. Gerontologist 2018. Green et al. J Gen Intern Med. 2020 (Jan and July).

Deprescribing communication survey

- How clinicians discuss deprescribing may affect patients' understanding and acceptance
- Objective: To assess older adults' preferred communication strategies for clinicians to use when discussing deprescribing
- 835 people ≥65 years; designed to be nationally-representative
  - 70% response rate

Methods

- Tested 7 phrases doctor may use to explain why patient should reduce or stop medicine
  - Best-worst scaling method
- Preventive: Statin for primary prevention
- Symptomatic: Zolpidem
- Refined based on stakeholder feedback



Characteristics of study participants

Characteristic	Percent
Age, mean, years	73
Female	50
Non-white race / ethnicity	20
Completed high school or less	36
Fair or poor health	17
Ever used statin	60

Hypothetical patient: statin

- Multiple serious health problems, functional impairment, 10 pills/day

- **“Pick the explanation most/ least likely to make you stop the medicine.”**

Pick the explanation most/ least likely to make you stop the statin

Explanations … to explain why someone should reduce/ stop
The benefits of this medicine do not clearly outweigh the risks for people like you.
I do not feel that you need this medicine anymore.
Given your age and other health problems, I do not think this medicine will help you.
Given your age and other health problems, I'm worried that you are at increased risk of side effects from this medicine.

Pick the explanation most/ least likely to make you stop the statin

Explanations … to explain why someone should reduce/ stop
Taking this medicine requires extra effort for you. It's another pill to swallow, costs you money, and requires periodic blood tests.
I think it could be harmful for you to be on this many medicines.
I think we should focus on how you feel now rather than thinking about things that might happen years down the road.

Older adults' preferences for how to explain deprescribing statins

Conclusions and next steps

- Major driver of willingness to deprescribe: side effects
- Older adults may react negatively to language that conveys they no longer stand to benefit from prevention
- Variability in preferences
- Explanations focused on treatment burden and prioritizing "how you feel now" were least preferred, but may resonate with different subgroups
- Testing pragmatic approaches to deprescribing in primary care, informed by rationales from this study

Thank you!

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