## Choices Influenced by Defaults Are More Likely to be Overridden **Evidence from End-of-Life Care Preferences**

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### Introduction

- Advance directives (ADs) are documents that allow patients to pre-specify their end-of-life healthcare wishes.
- Prior research has found default options in ADs strongly influence documented care preferences, but do not influence the course of care or clinical outcomes.<sup>1,2</sup>
- We explore a novel explanation for this discrepancy: defaults reduce confidence in documented preferences, increasing the likelihood that preferences are overridden.

#### Procedure

- Participants (N = 1706) were randomized to the role of a patient or patient's spouse and were paired together.
- Patients were randomized to complete an AD with or without comfort care defaults (ex: no feeding tube).
- Spouses viewed the patient's completed AD and were informed if the AD had a comfort care default.
- Patients & spouses rated confidence in patient's choices.
- Patients & spouses imagined the patient was seriously ill and would die without life-sustaining treatment but had a reason to extend life (ex: granddaughter's birth).
- Patients & spouses decided to accept or forgo lifesustaining care, potentially overriding the patient's AD.

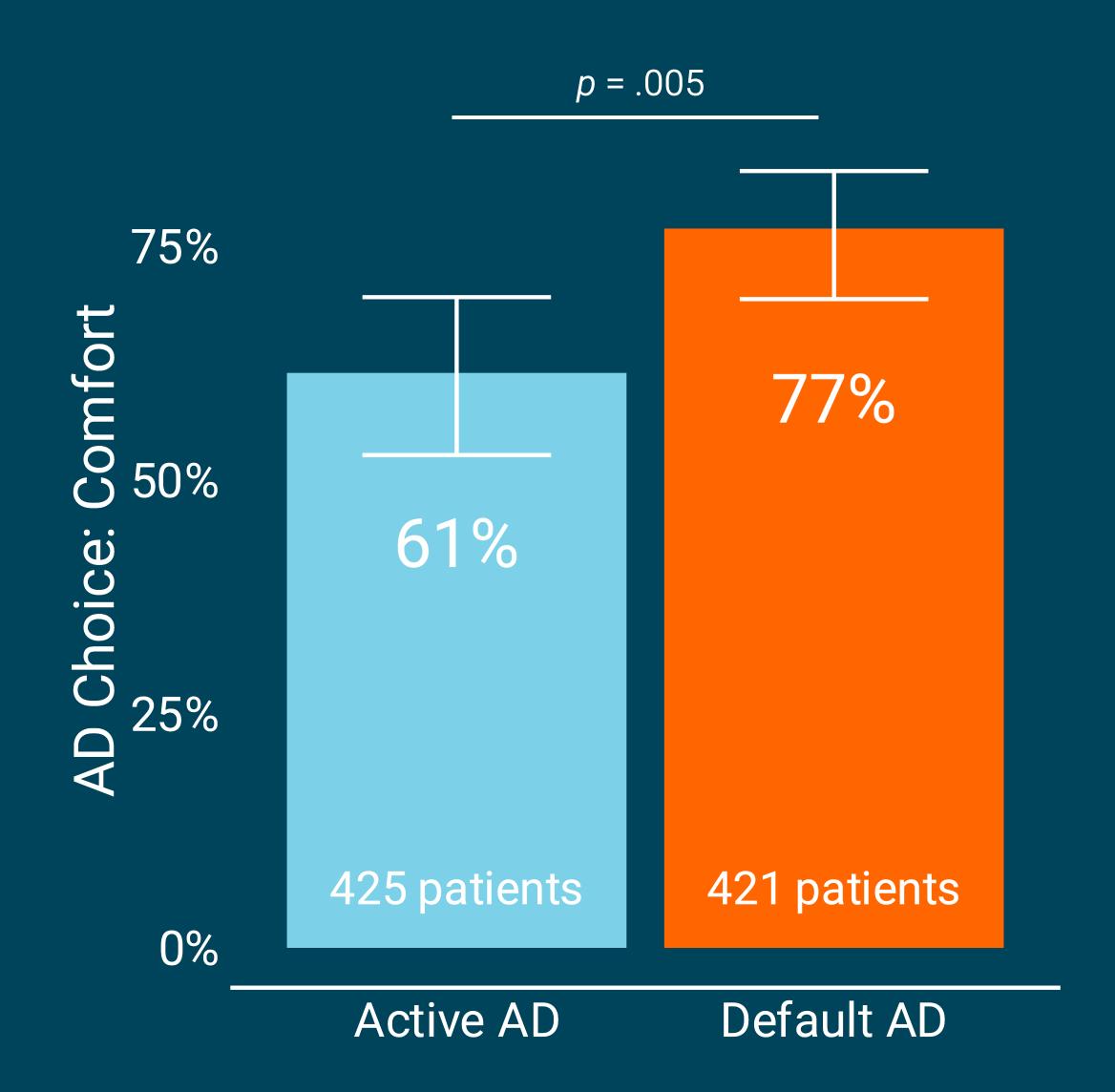
## Hypotheses

- Patients completing a comfort default AD (vs. no default) will be more likely to document comfort care preferences.
- Patient preferences will be more likely to be overridden when the patient completes a default AD (vs. no default).
- The effect of defaults on overriding will be mediated by reduced confidence in the documented care preferences.

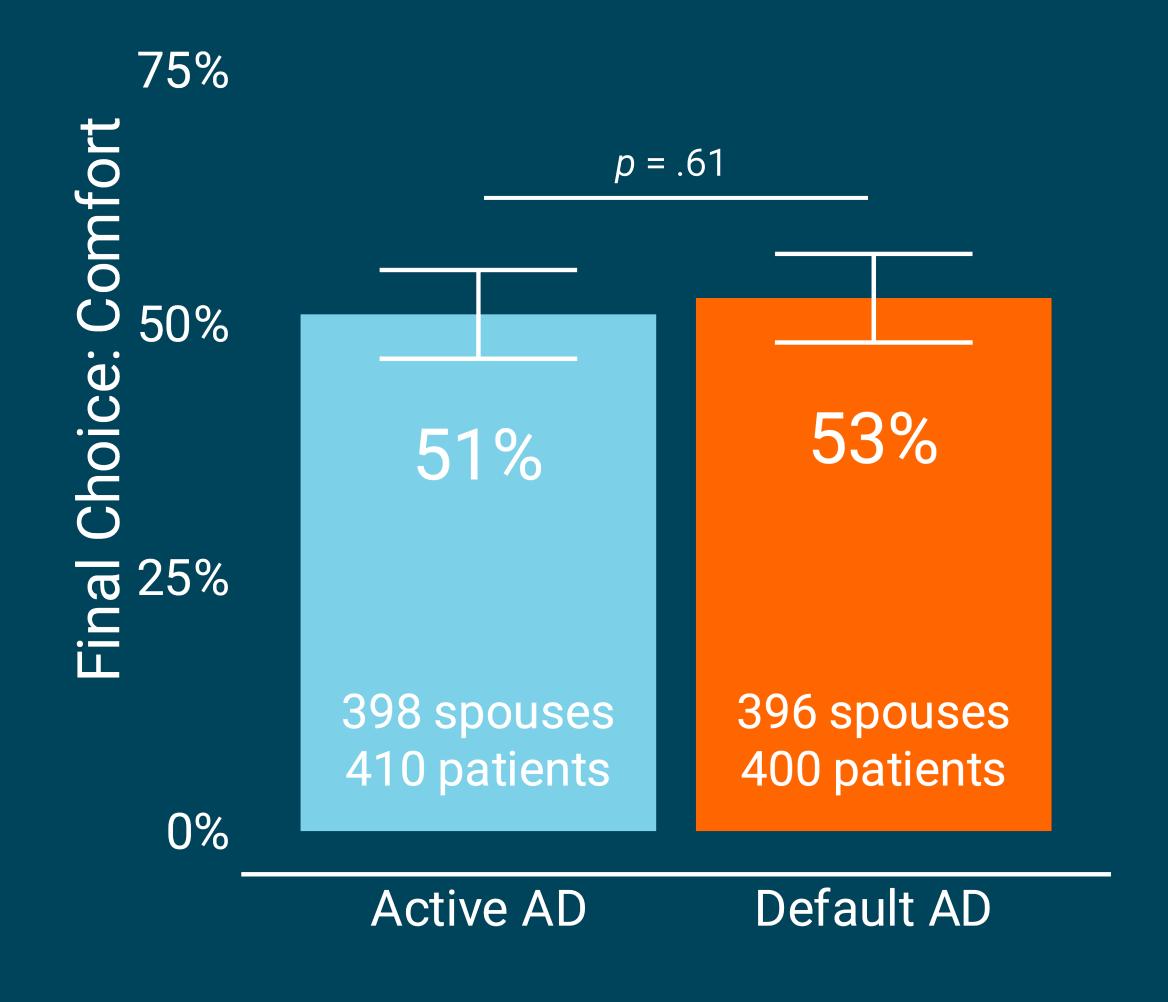
### **Key Results**

- Completing an AD with comfort defaults (vs. no defaults) increased documentation of comfort care preferences: OR = 2.1, 95% CI [1.3, 3.5], p = .005.
- Completing an AD with comfort defaults (vs. no defaults) increased the likelihood that patient preferences were overridden: OR = 1.3, 95% CI [1.1, 1.6], p = .014.
- Reduced confidence mediated the effect of defaults on overriding (see Mediation Analysis panel).

# Defaults increase the probability that patients prefer comfort care

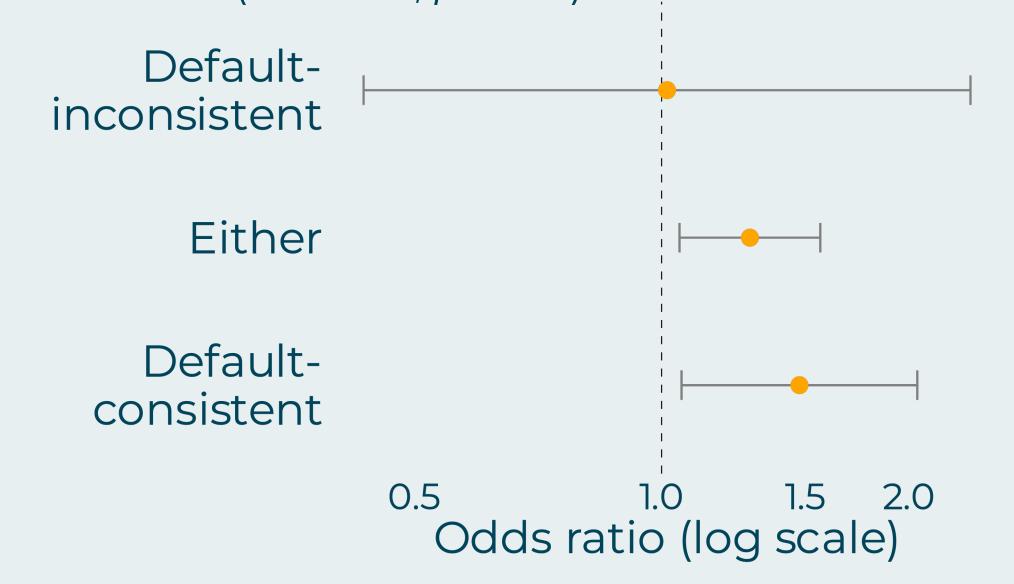


# But defaulted choices are overridden more often, erasing the default effect



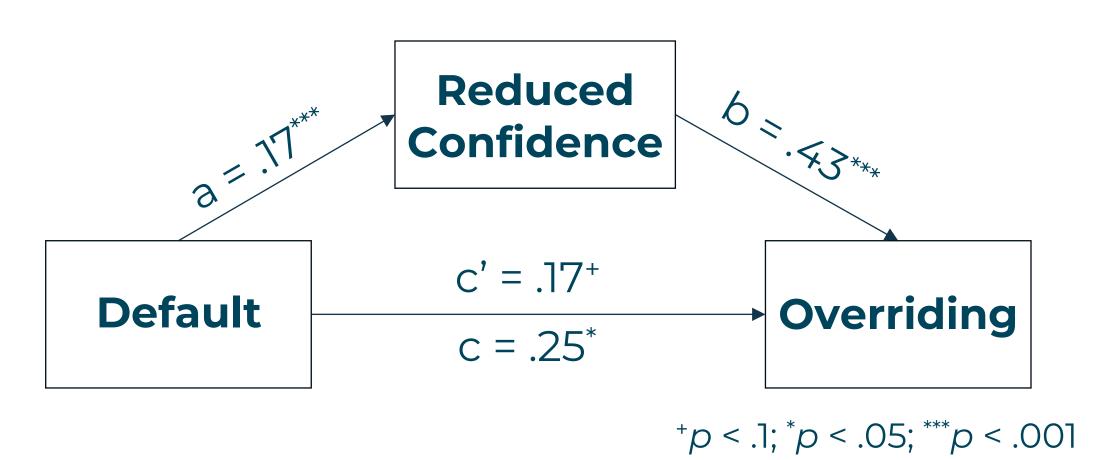
## Overriding Preferences

Preferences on a default AD (vs. standard AD) were more likely to be overridden when the patient documented a default-consistent (comfort care) preference (OR = 1.5, p = .02), but no effect was detected when the patient documented a default-inconsistent (life-sustaining treatment) preference (OR = 1.0, p = .97).



### **Mediation Analysis**

Completing an AD with comfort defaults reduced confidence in patient preferences, increasing overriding when the choice was revisited: Indirect Effect = .01, 95% CI [.004, .02], p = .002



### Conclusion

- While defaults influence documented care preferences, increased overriding at the point of care offers a novel explanation as to why clinical outcomes are unaffected by default ADs.
- Assessing the generalizability of these findings to other domains, such as organ donation, is an important next step.
- Future work may seek to increase confidence in preferences stated on defaulted forms.

### References

- 1. Halpern, S. D., Loewenstein, G., Volpp, K. G., Cooney, E., Vranas, K., Quill, C. M., Mckenzie, M. S., Harhay, M. O., Gabler, N. B., Silva, T., Arnold, R., Angus, D. C., & Bryce, C. (2012). **Default Options In** Advance Directives Influence How Patients Set Goals For End-**Of-Life Care**. *Health Affairs*, *32*(2), 408-417.
- 2. Halpern, S. D., Small, D. S., Troxel, A. B., Cooney, E., Bayes, B., Chowdhury, M., Tomko, H. E., Angus, D. C., Arnold, R. M., Loewenstein, G., Volpp, K. G., White, D. B., & Bryce, C. (2020). Effect of Default Options in Advance Directives on Hospital-Free Days and Care Choices Among Seriously III Patients: A Randomized Clinical Trial. JAMA Network Open, 3(3), e201742.

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