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Effect of Clinician 'Nudges' on Heart Failure Prescribing

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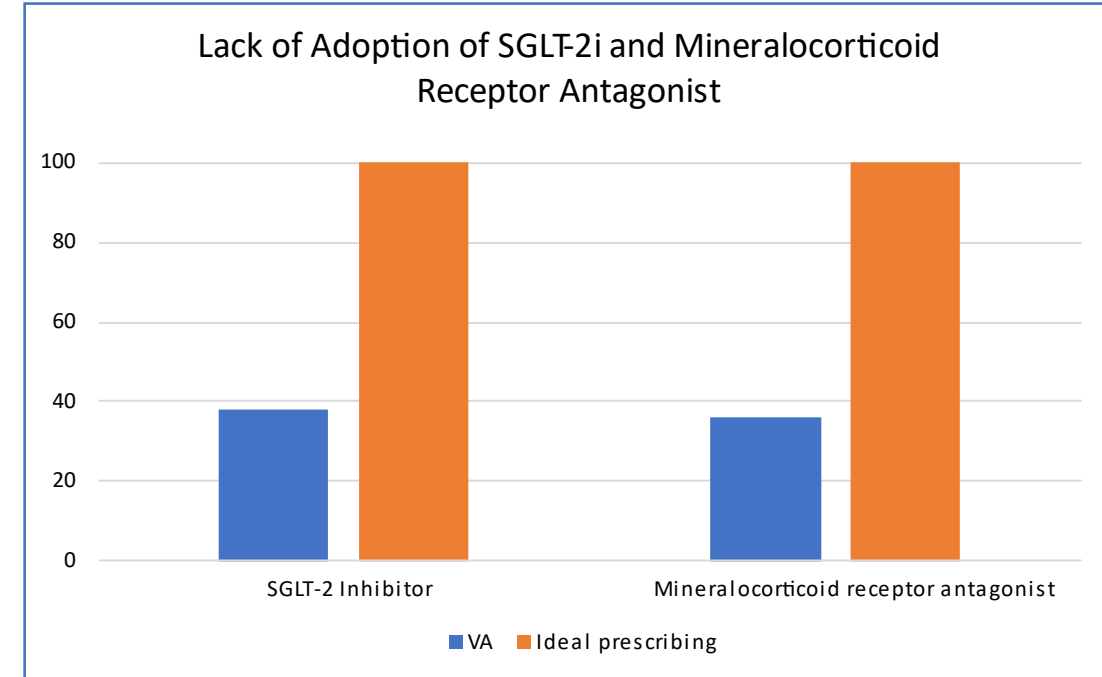
Institute for Future Health - Arizona State University/University of Arizona

In collaboration with ASU (Seltzer, Stecher), Cleveland VA (Hearns, Ball, Subramaniam, LaForest), and Tucson VA (Guzman, Pollock)

Problem: Under Prescribing of Heart Failure (HF) Therapies

HF is a leading cause of hospitalization in patients > 65 years of age

- Only 1/3 of patients, including Veterans, with HF are receiving SGLT2i* or mineralocorticoid receptor antagonists (MRA)
 - In contrast, beta blocker and ACE/ARB/ARNI prescribing is high
- Clinical reminders are not rigorously studied
- Nudge theory suggests that small changes in the choice environment can influence behavior
- Question: Can clinician-directed nudges improve HF prescribing behavior (informational alert alone vs. peer comparison feedback alone vs. both)?



* SGLT2i = sodium glucose transporter inhibitor

Tools – Two Nudge Interventions

Informational alerts exert effects through *salience, cold-state priming, active choice* whereas peer comparison acts through *social norms*.

Figure 1. Two Nudge Prototypes.

A. Informational alert	B. Peer comparison Email (Adapted ¹³)
<p>Your patient has been identified in VA HF Dashboard as potentially eligible for an SGLT2 inhibitor. This alert is provided for informational purposes.</p> <p>SGLT2 inhibitors are indicated in the 2022 ACC/AHA HF Guidelines (URL link provided) for patients with HFrEF (EF≤40%, NYHA class II-IV HF). Contraindications include urinary tract infection, eGFR < 25, type I diabetes.</p> <p><u>Relevant data for this patient include:</u> Prescription for beta blocker No prescription for ACE inhibitor LVEF 40% BNP 1550 Renal function: eGFR > 25</p> <p><u>Suggested actions:</u> Prescribe empagliflozin 10mg daily Alert primary care</p> <p><u>If prescribing:</u> Recommend checking renal function after starting therapy: reduce diuretic: watch for dehydration</p>	<p>Dear Dr. _____,</p> <p>SAVACHS Cardiology is working on new ways to help clinicians improve their patient’s HF treatment. Based on AHA/ACC guidelines and the VA HF Dashboard, you have patients who could be on an SGLT2 inhibitor but have not been prescribed one.</p> <p>Among eligible patients, your rolling 90-day SGLT2 prescribing rate: XX% [one of the following] Average of your peers at SAVAHCS: XX% Your top performing peers at SAVAHCS: XX%</p> <p>If you have any questions, please email study coordinator XXX</p> <p>Sincerely, XXXX Clinical Research Coordinator XXXX Study Principal Investigator</p>

Study design			
	Peer comparison		
Information alert		Yes	No
Yes			
No			

We will randomize primary care and cardiology clinicians to each nudge arm

Study Evaluation Plan

New prescribing of SGLT2 and MRA by treatment (nudge) group is the primary Effectiveness outcome

Practical Robust Implementation and Sustainability / RE- AIM Model

PRISM Dimension	Measure
Intervention: organizational	<ul style="list-style-type: none"> • Clinician view on intervention, strength of evidence, experience with drug, barriers & gaps in care
Recipients: organizational	<ul style="list-style-type: none"> • Clinician view on management support, workflow
External environment	<ul style="list-style-type: none"> • Regulatory environment
RE-AIM Measures	Measure
Reach	<ul style="list-style-type: none"> • Clinician alerts and peer comparisons delivered • Total patients and clinicians in each intervention group • Proportion of eligible patients encounters receiving alert
Effectiveness	<ul style="list-style-type: none"> • Proportion of new prescription of SGLT2 or MRA by treatment group within 30 days
Safety	<ul style="list-style-type: none"> • Discontinuation of target medication within 30 days
Adoption	<ul style="list-style-type: none"> • Interviews
Implementation	<ul style="list-style-type: none"> • Adaptations • Agreement between nudge and clinician for identification of eligible patient • Acceptability, Appropriateness, Feasibility of Intervention Measures



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