

BETTER CARE-Heart Failure:

Best practice alert (BPA) and in-basket message both increased MRA prescribing

PROBLEM: Guideline-directed medical therapy (GDMT) can significantly reduce mortality and hospitalization for patients with heart failure with reduced ejection fraction (HFrEF). The majority of patients with HFrEF are not prescribed GDMT, leading to an estimated 68,000 deaths per year nationwide. The biggest risk is caused by lack of mineralocorticoid receptor antagonist (MRA) prescribing.

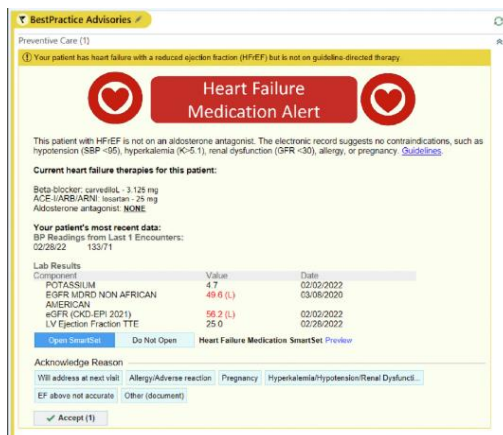
INTERVENTIONS:

BPAs are prompts delivered for a single patient during an encounter. In-basket messages are usually viewed between encounters and can include information for multiple patients at once.

We tested the effectiveness of a BPA vs in-basket message vs usual care on the primary outcome of MRA prescribing for eligible patients with HFrEF.

Patients were cluster-randomized in a 1:1:1 proportion at the level of the cardiologist (60 per arm).

Best practice alert



In-basket message



RESULTS:

	New MRA (%)	Risk Ratio (95% CI)		
	N	Alert vs Control	Message vs Control	Alert vs Message
Alert (n=755)	224 (29.6)	2.53 (1.77-3.62)	1.52 (1.04-2.21)	1.67 (1.21-2.29)
Message (n=812)	127 (15.6)	P<.0001	P=0.029	P=0.002
Control (n=644)	75 (11.7)			

New MRA prescribing occurred in 29.6% of patients in the alert arm, 15.6% in the message arm, and 11.7% in the control arm. The alert more than doubled MRA prescribing compared to usual care (relative risk: 2.53; 95% CI: 1.77-3.62; p<.0001) and improved MRA prescribing compared to the message (relative risk: 1.67; 95% CI: 1.21-2.29; p=0.002). On average, for every 6 patients who triggered an alert, one extra patient received a new MRA prescription.