

Supplementary Online Content

Montoy JCC, Coralic Z, Herring AA, Clattenburg EJ, Raven MC. Association of default electronic medical record settings with health care professional patterns of opioid prescribing in emergency departments: a randomized quality improvement study. *JAMA Intern Med*. Published online January 21, 2020. doi:10.1001/jamainternmed.2019.6544

eMethods. Treatment Assignment Schedule

eTable. Percentage of Prescriptions Written for a Given Quantity Prescribed According to Default Setting

eFigure. Distribution of Dispense Quantities According to Default Setting

This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Treatment Assignment Schedule

The following schedule shows the start date for each of the treatment assignments. The current number of tabs is set at 20 for each of these (“current”) at UCSF, and 12 at Highland.

Starting on 11/28/16 we will make changes to the dispense quantity of opioid-containing pills. Every four weeks the dispense quantity will be changed according to the treatment assignment schedule. On 4/17/17 the dispense quantity will return to the original default quantity, 20 tabs. These start date for each treatment assignment corresponds to the midway point in the rotation for emergency medicine residents.

Table A. UCSF study schedule

Treatments	10/3/16: Start data collection				End data collection: 6/12/17		
	Current	11/28/16	12/26/16	1/23/17	2/20/17	3/20/17	4/17/17
Norco 5/325	20	5	5	15	10	0	20
Norco 10/325	20	10	5	5	0	15	20
Oxycodone 5	20	0	5	10	15	10	20
Percocet 5/325	20	10	10	5	0	15	20
Percocet 10/325	20	5	10	10	15	0	20

Table B. Highland study schedule

Treatments	12/5/16: Start data collection					End data collection: 9/3/17			
	Current	1/30/17	2/27/17	3/27/17	4/24/17	5/22/17	6/6/17	6/26/17	7/10/17
Norco 5/325	12	5	5	15	10	0	5	0	12
Norco 7.5/325	12	15	10	0	5	10	0	10	12
Norco 10/325	12	10	5	5	0	15	5	15	12
Oxycodone 5	12	0	5	10	15	10	12	10	12
Percocet 5/325	12	10	10	5	0	15	12	15	12
Percocet 10/325	12	5	10	10	15	0	16	0	12

Note: brand names and generics are used interchangeably, and both will be studied according to the same schedule. E.g., Norco 5/325 = hydrocodone 5mg – acetaminophen 325mg

Norco = hydrocodone – acetaminophen

Percocet = oxycodone – acetaminophen

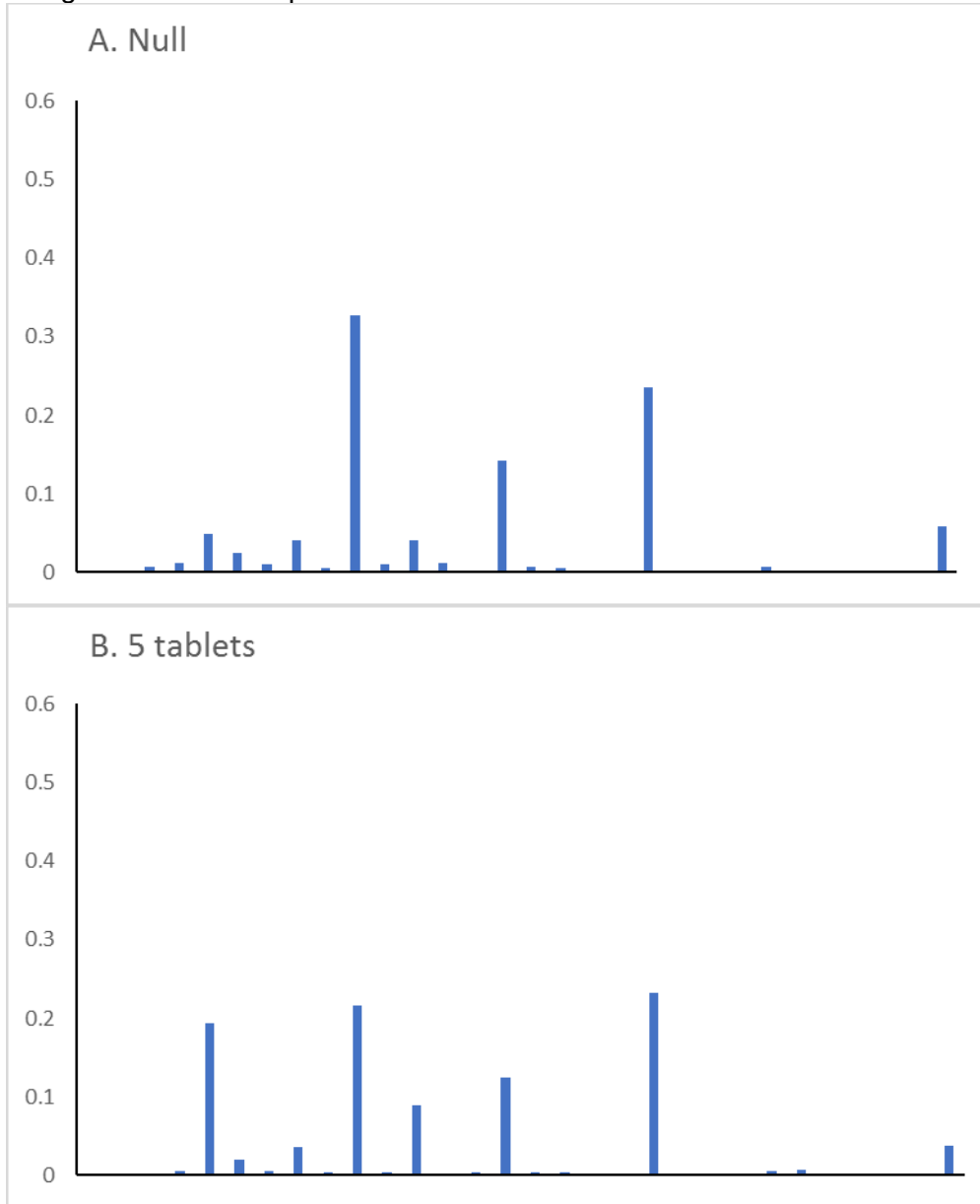
An unanticipated change was made to the Highland study schedule. An error during a software upgrade on 6/6/17 caused the defaults to change to incorrect values. This error was brought to my attention on 6/24/19; we resumed the study schedule on 6/26/17. The data from dates with non-protocol default settings (6/6/17 – 6/25/17) were excluded from our analysis.

eTable. Percentage of Prescriptions Written for a Given Quantity Prescribed According to Default Setting

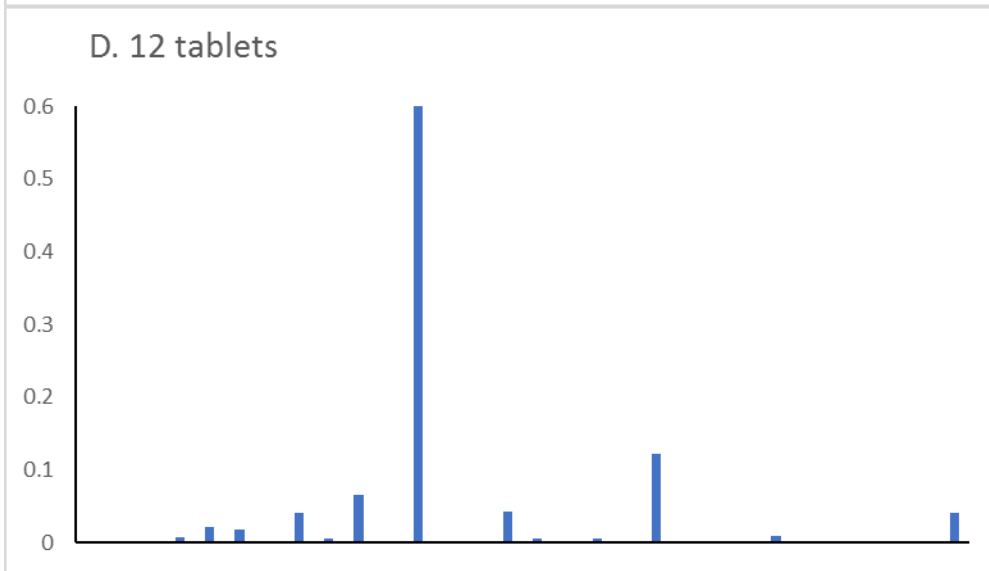
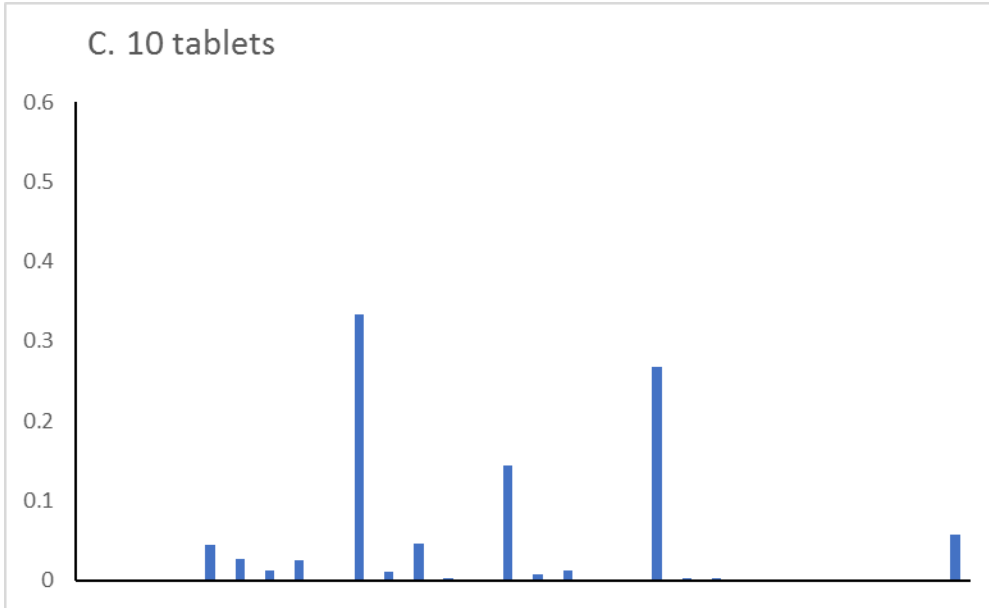
	Quantity prescribed	Default setting					
		none	5	10	12	15	20
	1	0%	0%	0%	0%	0%	0%
	2	0%	0%	0%	0%	0%	0%
	3	1%	0%	0%	0%	1%	0%
	4	1%	0%	0%	1%	0%	1%
5	5	5%	19%	4%	2%	5%	5%
	6	2%	2%	3%	2%	2%	2%
	7	1%	0%	1%	0%	1%	1%
	8	4%	4%	2%	4%	4%	4%
	9	0%	0%	0%	1%	0%	1%
10	10	33%	22%	33%	7%	15%	16%
	11	1%	0%	1%	0%	1%	1%
12	12	4%	9%	5%	60%	3%	5%
	13	1%	0%	0%	0%	0%	1%
	14	0%	0%	0%	0%	0%	1%
15	15	14%	12%	14%	4%	39%	10%
	16	1%	0%	1%	1%	1%	1%
	17	0%	0%	1%	0%	1%	0%
	18	0%	0%	0%	1%	0%	0%
	19	0%	0%	0%	0%	0%	0%
20	20	24%	23%	27%	12%	21%	47%
	21	0%	0%	0%	0%	0%	0%
	22	0%	0%	0%	0%	0%	0%
	23	0%	0%	0%	0%	0%	0%
	24	1%	0%	0%	1%	0%	1%
	25	0%	1%	0%	0%	1%	0%
	26	0%	0%	0%	0%	0%	0%
	27	0%	0%	0%	0%	0%	0%
	28	0%	0%	0%	0%	0%	0%
	29	0%	0%	0%	0%	0%	0%
≥30	≥30	6%	4%	6%	4%	5%	4%
		100%	100%	100%	100%	100%	100%

eFigure. Distribution of Dispense Quantities According to Default Setting

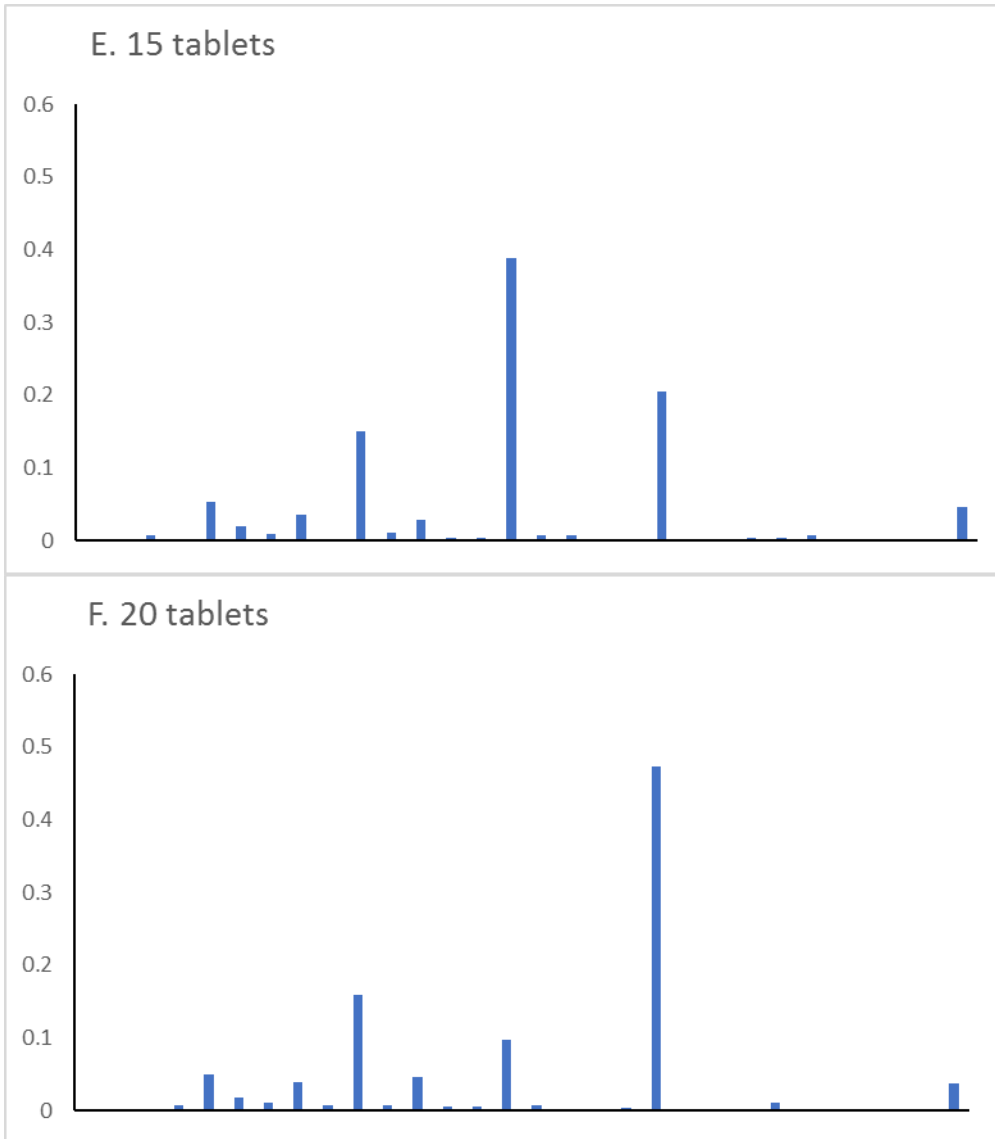
The y-axis represents the percentage of prescriptions written for each quantity of pills along the x-axis. Each panel A-D shows the results from one of the default settings.



Quantity of opioid-containing pills prescribed



Quantity of opioid-containing pills prescribed



Quantity of opioid-containing pills prescribed