Online Supplement

Original Research
Clinical Interventions Following Escalations from a Continuous Respiratory Monitoring Service in Patients With Chronic Obstructive Pulmonary Disease

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Table S1: Frequency of notification types associated with specific clinical interventions in outpatient visits resulting from escalations.

	Respiratory Rate (Relative)	Respiratory Rate (Absolute)	Pulse Rate (Relative)	Pulse Rate (Absolute)	Non-Adherence	Step Count (Activity)
Total Distinct Office Visits Associated with Notification Type	177	11	46	0	14	11
Corticosteroids	50.8%	45.5%	39.1%	N/A	50.0%	45.5%
Antibiotics	34.5%	18.2%	43.4%	N/A	28.6%	27.2%
Inhaled Medication	25.4%	9.1%	23.9%	N/A	28.6%%	0.0%
Additional Testing, Scan, or Referral	39.5%	36.3%	30.4%	N/A	42.9%	18.1%
Other Symptomatic Treatment	13.5%	0.0%	8.7%	N/A	0.0%	9.1%
ER Referral by Provider	2.3%	0.0%	0.0%	N/A	2.3%	0.0%
Clinical intervention consistent with management of an AECOPD	70.2%	45.5%	61.7%	N/A	71.4%	54.5%

The likelihood of an office visit coded as having been positively coded for each of the categories defined in Table 3 conditional on that office visit being preceded by a notification of a certain type.

Table S2: Escalated office visits and notifications per year by sex, GOLD status, and comorbidities

Category	Value	N	Escalated Office Visits per Year, mean (SD)	Escalated Notification per Year, mean (SD)
Sex Assigned at Birth				
	Female	91	1.07 (0.61)	2.04 (2.47)
	Male	77	1.00 (0.55)	2.47 (3.09)
GOLD Status				
	GOLD 1: Mild (FEV1 >= 80% Predicted)	18	0.94 (0.40)	2.16 (2.13)
	GOLD 2: Moderate (50% <= FEV1 < 80%)	48	1.01 (0.58)	2.38 (2.60)
	GOLD 3: Severe (30% <= FEV1 < 50%)	33	1.00 (0.55)	1.92 (1.71)
	GOLD 4: Very Severe (FEV1 < 30%)	7	1.27 (0.81)	0.92 (1.08)
	Patients without lung function data available	62	1.09 (0.62)	2.47 (3.55)
Comorbidities				
	Hypertension	109	1.03 (0.54)	2.15 (2.39)
	Obesity	76	1.11 (0.63)	2.01 (2.34)
	Supplemental Oxygen Use	74	1.02 (0.53)	1.95 (2.41)
	Sleep apnea	66	1.10 (0.69)	2.03 (2.46)
	Asthma	65	1.10 (0.52)	1.88 (1.79)
	Depression	43	1.06 (0.53)	1.76 (1.57)
	Diabetes	41	1.16 (0.59)	2.62 (2.82)
	CAD (coronary artery disease)	37	0.95 (0.52)	1.59 (1.24)
	Atrial fibrillation	24	1.12 (0.63)	3.71 (4.10)
	CHF (Congestive heart failure)	21	1.04 (0.59)	2.13 (2.31)
	Stroke or cerebrovascular accident	20	1.04 (0.57)	2.35 (3.83)
	Thyroid disease	17	1.08 (0.55)	3.11 (4.13)
	ILD (interstitial lung disease)	7	1.02 (0.40)	2.89 (5.57)
	PVD (peripheral vascular disease)	6	1.18 (0.78)	2.33 (1.08)
	Cardiomyopathy	5	1.07 (0.55)	2.52 (3.27)

Table S3: Correlation matrix of clinical interventions made in escalated office visits

Variable		Corticosteroids	Additional Testing, Scan, or Referral	Antibiotics	Inhaled Medication	Other Symptomatic Treatment	ER Referral by Provider
Corticosteroids							
	r	1	-0.143	0.480	-0.006	0.033	-0.058
	P-value	---	.025	<.001	.930	.612	.369
Additional testing, Scan, or Referral							
	r	-0.143	1	-0.091	-0.106	-0.023	-0.102
	P-value	.025	---	.157	.097	.752	.113
Antibiotics							
	r	0.480	-0.091	1	0.017	-0.059	-0.022
	P-value	<.001	.157	---	.796	.360	.731
Inhaled Medication							
	r	-0.006	-0.106	0.017	1	0.081	-0.077
	P-value	.930	.097	.796	---	.206	.232
Other Symptomatic Treatment							
	r	0.033	-0.023	-0.059	0.081	1	-0.049
	P-value	.612	.752	.360	.206	---	.445
ER Referral by Provider							
	r	-0.058	-0.102	-0.022	-0.077	-0.049	1
	P-value	.369	.113	.731	.232	.445	---