



# Clinical Integration IMPROVEMENT BULLETIN



Health Provider Services Organization

## Reducing COPD Readmissions through Appropriate Patient Classification

**Sponsors:** Matt Weiss, MD, South Shore Hospital (SSH); Holly Thomas, MD, Harvard Vanguard Medical Associates (HVMA)

**Project Owner:** Mark Berenberg, MD, Pulmonologist and CMO, Granite Medical Group

**Team Members:** Justin Briones, MD, ED, SSH; Paula Cassford, APC, HVMA; Richard Breen, RN, ED, SSH; Kelly O'Neil, Care Progression, SSH; Greg Garafolo, IS, SSH; Sharon Fairweather, Respiratory Therapist, SSH; Christine Manning, Coding, SSH; Barbara MacLellan, Clinical Documentation, SSH; Jacqui Owens, Care Progression, SSH; Christine Murray, IS, SSH; Monique Nugent, MD, Hospitalist, SSH; Cathy Nelson, Quality, SSH; Brittany Reese, HPSO, SSH

**Background:** As part of a larger Value Stream effort to reduce SSH COPD re-admissions, Project #1 ("kaizen") focuses on improving the precision of our classification (diagnosis) of patients presenting to the SSH ED with respiratory complaints, and increasing the use of follow-up testing to confirm a suspected COPD diagnosis. Imprecise classification can result in less than optimal treatment pathways and follow-up care, and increase the probability of patients re-admitting within 30 days. By looking at data and observing current care processes, the kaizen team identified opportunities for improvements in the following areas:

- The "Gold standard" for COPD diagnosis requires a spirometry screening, yet a low number of patients (20% of Atrius Health patients) with COPD risk factors and symptoms have been previously screened.
- Frequent co-morbidities complicate the COPD diagnosis, specifically CHF, asthma, pneumonia, and chest pain.
- There is significant variation by provider in diagnostic approach and documentation during classification.

**Goals (by January 24, 2015):**

- Reduce the number of ways ED MDs document their clinical impression for patients suspected of having COPD, from 42 to 2.
- Increase the percent of Atrius Health patients suspected of COPD in the SSH ED or inpatient units, who get follow-up confirmatory (spirometry) testing in the community, from 0 to 100%.

GOALS				
Measure	Baseline	Target	Confirmed State (Dec'14)	% Change
# of ways ED providers describe COPD as their clinical impression (diagnosis) having or suspected of having COPD	42	2	5	88%
% of ED providers who use the PCP "magic buttons" within Meditech, to access relevant, primary care records for Atrius Health, Partners, and Harbor Medical patients	70%	90%	TBD	TBD
% of ED and Hospitalist providers who add COPD or Suspected COPD to the active Problem List in Meditech as appropriate	90%	100%	<50%*	TBD
% patients with suspected COPD for whom ED providers or Hospitalists request tests to confirm COPD diagnosis	0%	100%	60%	60%
% of SSH requested, COPD confirming tests completed within 60 days at HMVA and Granite Medical	N/A	TBD	TBD	TBD

\*In some cases COPD exacerbation entered rather than Suspected, and vice versa

**Questions?** Contact Mark Berenberg, MD at [mberenberg@granitemedical.com](mailto:mberenberg@granitemedical.com)

See page 2 for examples of process improvements.

# Clinical Integration IMPROVEMENT BULLETIN



Health Provider Services Organization

Problem	Solutions	Results	Next Steps
Too many selections possible for COPD clinical impression when using free text, leading to potential misdiagnosis	<ul style="list-style-type: none"> <li>Limit the number of clinical impressions for COPD to “Acute COPD” and “Suspected COPD” via drop down menu; discourage use of free text</li> </ul>	Free text use has drastically decreased with implementation and communication about the change	<ul style="list-style-type: none"> <li>Continue to communicate and educate staff on this change</li> <li>IT to modify Meditech to make two COPD drop-down choices default for respiratory patients</li> </ul>
ED Staff largely unaware of “magic button” access to Atrius and Partners, where additional pulmonary information may be available	<ul style="list-style-type: none"> <li>Survey staff on current knowledge of button awareness</li> <li>Educate staff on where to find information and how to use the buttons</li> </ul>	Pending – initial survey had a low response rate and was not enough to fully gauge awareness	<ul style="list-style-type: none"> <li>Re-survey ED staff via email and also address at staff meeting on 11/19</li> </ul>
Handoff’s from ED staff to Hospitalists may influence diagnostic momentum, resulting in an inaccurate COPD diagnosis	<ul style="list-style-type: none"> <li>Determine the number of Hospitalists who read ED reports and their satisfaction with the ED department’s accuracy of COPD diagnosis</li> </ul>	Hospitalists generally satisfied with diagnosis, especially after limiting the clinical impression to “Acute” or “Suspected” COPD	<ul style="list-style-type: none"> <li>Meet with Hospitalists and re-educate on purpose of changes as well as suggested treatment paths for Acute vs Suspected COPD</li> </ul>
Once Hospitalists are ready to discharge a patient with suspected COPD, there was no method to suggest confirmatory testing be done during follow-up in the community	<ul style="list-style-type: none"> <li>IS to modify Discharge Summary template so there is an option to recommend follow-up pulmonary testing</li> </ul>	15/18 patients discharged with suspected COPD had recommended follow-up testing requested in their discharge summary	<ul style="list-style-type: none"> <li>Continue to survey the number of patients that have follow-up testing requested to confirm COPD diagnosis</li> <li>Modify Discharge Summary template language to indicate “GOLD” standard</li> </ul>
No follow-up testing to confirm COPD diagnosis is being done out in the community once a patient is discharged from SSH	<ul style="list-style-type: none"> <li>HVMA-Braintree and Granite Medical Group to perform recommended confirmatory COPD testing during follow-up with patients</li> <li>Measure number of patients who have testing ordered within 14 days and completed within 60 days of discharge</li> </ul>	TBD - haven't seen any patients come through yet, and no process in place yet to ensure completion	<ul style="list-style-type: none"> <li>Communicate with HVMA-Braintree and Granite staff and set-up daily/weekly tracking for measures</li> </ul>

Find more bulletins on the Clinical Improvement Corner on the Medical Staff website.  
Email us at: [hpso@sshosp.org](mailto:hpso@sshosp.org). **For internal distribution only.**