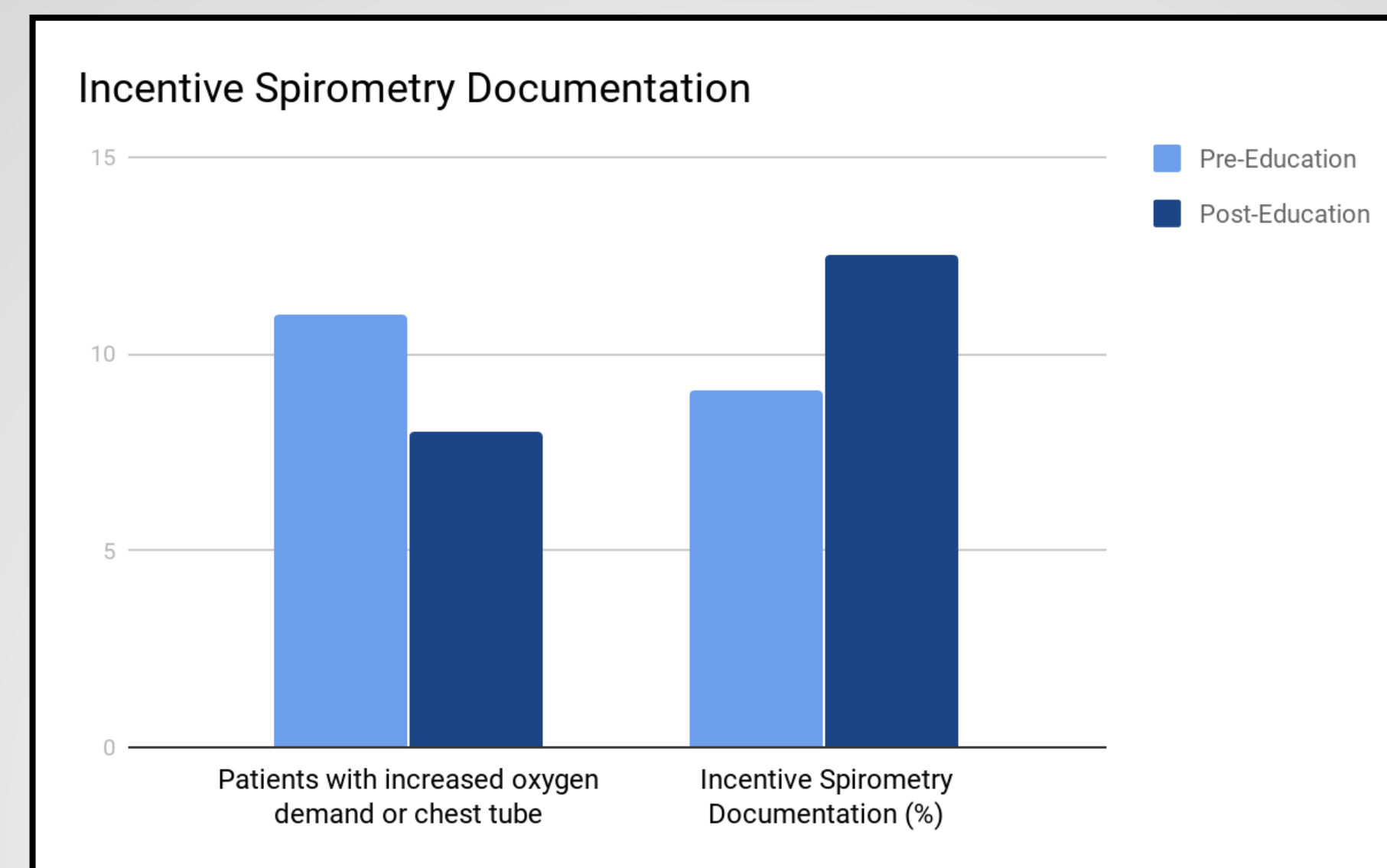


Background

- Incentive spirometry is an effective way to increase lung capacity and prevent pneumonia in patients who have respiratory disease or have had thoracic surgeries.
- Compliance with incentive spirometry has been proven to be poor.
- Many research articles have been deemed inaccurate due to poor documentation from the nurses.
- The aim of the project is to increase compliance with incentive spirometry in patients who have chest tubes and require more oxygen than their baseline

Measures and Results

Pre-Survey Results (n=23)



Educational Pamphlet

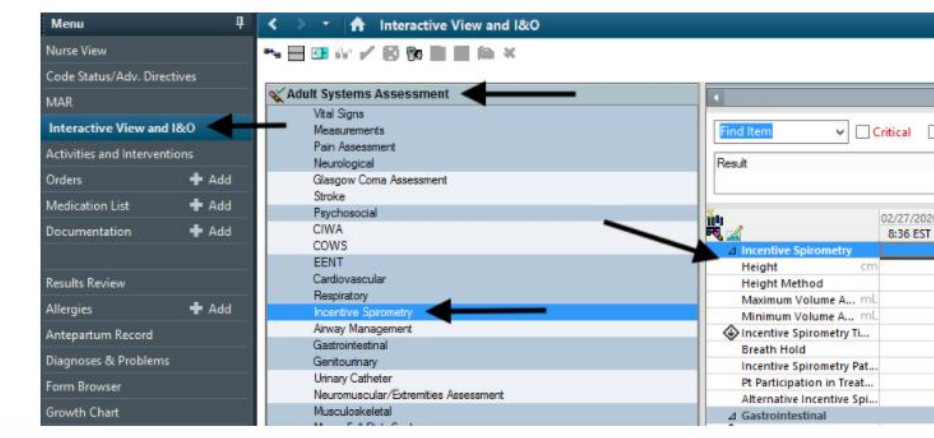
Audit Tool		
Patient	Reason for ISy	Documentation
	Chest Tube/ Increased oxygen demand	Yes/No Last Date Documented:
	Chest Tube/ Increased oxygen demand	Yes/No Last Date Documented:
	Chest Tube/ Increased oxygen demand	Yes/No Last Date Documented:
	Chest Tube/ Increased oxygen demand	Yes/No Last Date Documented:
	Chest Tube/ Increased oxygen demand	Yes/No Last Date Documented:
	Chest Tube/ Increased oxygen demand	Yes/No Last Date Documented:
	Chest Tube/ Increased oxygen demand	Yes/No Last Date Documented:
	Chest Tube/ Increased oxygen demand	Yes/No Last Date Documented:

Charting Patient Incentive Spirometry Use

In patients with respiratory illnesses, incentive spirometry is an effective tool to prevent pneumonia and atelectasis. However, studies have shown that documentation of patient compliance with incentive spirometry is poorly documented for multiple reasons, such as poor patient education, the patient not having access to a device at all, or lack of patient motivation. As part of our evidence based practice project for the nurse residency program, we are attempting to increase documentation of our patient's incentive spirometry use. We are specifically looking to increase the documentation for patients who have an increase in their supplemental oxygen requirement, or who have a chest tube.

A barrier to documentation that we have identified is a lack of staff knowledge of where to chart it. To chart incentive spirometry use for your patient, open PowerChart and go into the Interactive View and I&O tab to the far left. Click on the Adult Systems Assessment tab in iView. In that tab, there is an incentive spirometry category. Once you click on that, you will be able to chart your patient's incentive spirometry use. We appreciate your support and your help with increasing the documentation of incentive spirometry use on our floor.

Thank you,
Aimee Ball, Alexis Lower, and Duncan Kithinji



Summary/Discussion

Next steps

- **Print out information on where to document Incentive spirometry use**
- **Place flyers around staff room and in each mailbox**
- **Assess documentation of patients with chest tubes and increased O2 demand**
- **One month later assess documentation and see if results have improved**
- **Barriers of this Study:**
 - Lack of time to complete a post survey
 - Lack of staff and patient participation

Conclusion

While there was a small increase from 9.1% to 12.5% in incentive spirometry documentation, the results show that there is still a lack of documentation on incentive spirometry use.

However, since there was a small increase in documentation, continuing staff education may further improve incentive spirometry documentation.

References

- Adam E M, et al. "Incentive Spirometry Adherence: A National Survey of Provider Perspectives." *Respiratory Care*, vol. 63, no. 5, 2018, pp. 532-537., doi:10.4187/respcare.05882.
- Hunter B, Raymond A. (2018) *Office of evidence based project Critically appraised topic: Incentive spirometry*. www.childrensmc.org/contentassets/a21c86a9e226413a9bb63174e4e54493/cat-incentive-spirometry-Care.05882.
- kojouri, Kourosh. "US20130066225A1 - Monitoring Incentive Spirometry." *Google Patents*, Google, patents.google.com/patent/US20130066225A1/en.

Practice Change

Increase registered nurses' (RNs') knowledge of where to document incentive spirometry use

Methods

- Discuss plans with Assistant Nurse manager
- Go to staff meeting and allow input from nurses
- Audit documentation on incentive spirometry use
- Administer education flyers throughout the floor
- Re-audit documentation tool one month after administration