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# INCREASING YOUR PROGRAM'S QUALITY IMPROVEMENT POTENTIAL THROUGH EPIC: STUDIES IN PREVENTION AND COST REDUCTION

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## Introduction

With the widespread use of EMR, the ability to rapidly compile and analyze data is unprecedented. EPIC's SlicerDicer is a powerful tool which can be used for identifying patients at high risk for illness and assessing for system-wide monetary dissipation. There are limitless opportunities to directly impact patient care and enhance quality improvement.

## Methods

SlicerDicer systemically adds "slices" to identify the numbers of deidentified individuals meeting specific criteria of demographics, diagnoses, abnormal labs, etc in our outpatient clinic (LMA). We studied the following:

- The number of LMA patients who have elevated STOP-BANG scores without a diagnosis of OSA or sleep apnea.
- Inappropriately ordered laboratory tests within our health system.

## Results

By slicing for BMI > 35, age > 50, and a history of hypertension (3/8 criteria in the STOP-BANG), we identified 1,194 LMA patients in the past two years who are at a moderate to high risk of OSA. Of these 423 (35.4%) have been diagnosed with OSA or unspecified sleep apnea. This slice illustrates potentially missed diagnoses. This may be an opportunity to create a reminder in EPIC to discuss the appropriateness of a sleep study.

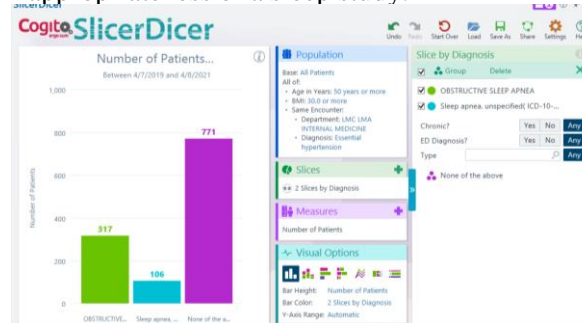
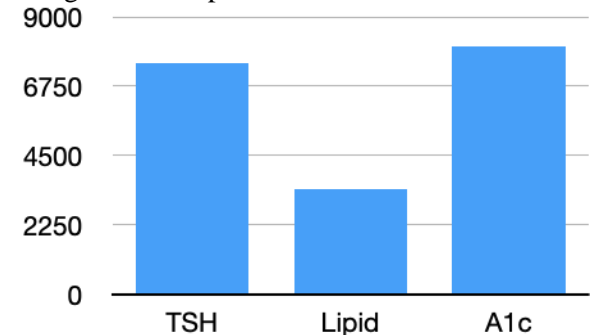


Figure 1. Potential Missed Sleep Apnea Diagnoses

We also analyze how often TSH and lipid panels were repeated within six weeks and hemoglobin A1c within three months over two years.

Total TSH tests ordered: 145,079. Repeated: 7,499. Lipid panels ordered: 154,885. Repeated: 3,407. A1C ordered: 84,007. Repeated: 8,051.

**This slice shows how only three labs have been inappropriately reordered 18,957 times within a two year period.** At our institution, we have recently developed a system to notify users when a lab has already been obtained within a designated time period.



## Conclusion

These studies demonstrate the profound effect EPIC's SlicerDicer can have on the cost and quality of care you provide in your organization. There are ample opportunities for QI research with SlicerDicer which can improve patient health and control costs.