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INTRODUCTION

Telemetry is a commonly used tool in the hospital setting to monitor patients.

Ancillary staff are constantly monitoring patient's heart rhythm.

On average, nurses spend 20 minutes per day on telemetry related tasks.

While telemetry is a tool that can further diagnose patients with arrhythmias and other cardiovascular diagnoses, over-utilization of telemetry can lead to poor patient care and significant costs which can be a burden to patients, staff, and hospitals.

Previous independent reviews have demonstrated a substantial cost savings and improved patient outcomes with appropriate utilization of telemetry.

OBJECTIVES

Our goal is develop an easily navigatable order set to ensure appropriate use of telemetry in the hospital setting for adult, non-cardiac units.

METHODS

Previous telemetry order sets were reviewed.

Appropriate criteria for implementation and renewal of telemetry were determined by physicians.

An EPIC order set is being created and will be reviewed for implementation through the Saint Francis Health System including OSU.

The order set will be concise and should reduce any possible EMR fatigue by requiring minimal but concise user input.

FUTURE RESULTS

We anticipate that with a telemetry order set:

Patient comfort and satisfaction should increase.

Hospital costs, staff fatigue, and unnecessary patient testing should decrease.

Telemetry order set examples:

This form must be filled out by medical services ordering or renewing telemetry. Check all indications for Telemetry Monitoring below:

Class I (must be renewed after 72 hours):

<input type="checkbox"/>	Syncope with one of the following: congestive heart failure, ventricular tachycardia, systolic blood pressure less than 90, second or third degree heart block, heart rate less than 45, or heart rate greater than 120
<input type="checkbox"/>	Asymptomatic second or third degree heart block
<input type="checkbox"/>	New onset atrial fibrillation/flutter, uncontrolled chronic atrial fibrillation/flutter, or sustained ventricular tachycardia
<input type="checkbox"/>	Post-operative patients with one of the following: angina, new EKG changes, positive pre-operative stress test, systolic blood pressure less than 90, or heart rate greater than 130
<input type="checkbox"/>	Initiation of antiarrhythmic medications
<input type="checkbox"/>	Monitoring while adjusting antiarrhythmic medications
<input type="checkbox"/>	Drug toxicity with arrhythmia
<input type="checkbox"/>	External pacemaker

Class II (must be renewed after 48 hours):

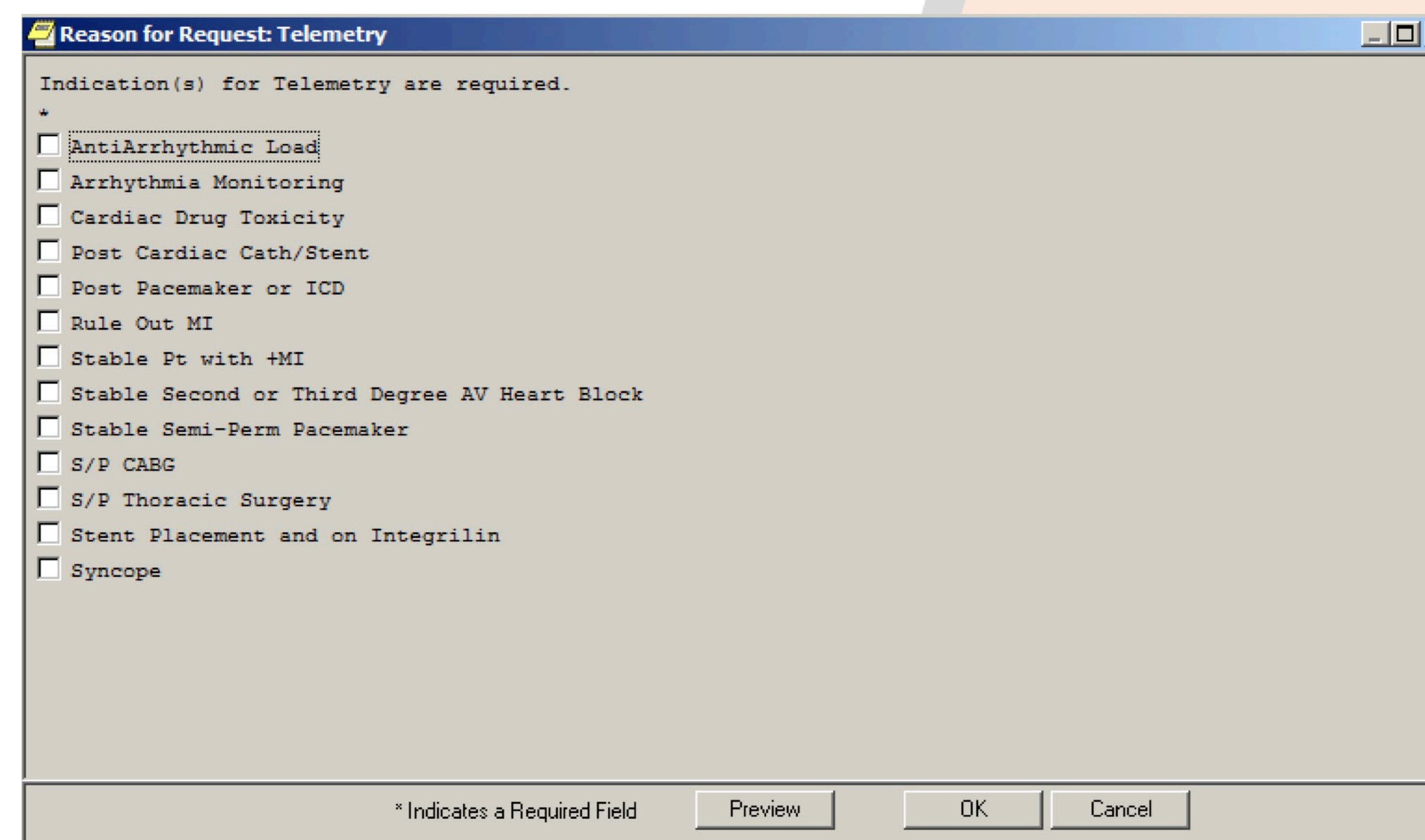
<input type="checkbox"/>	Acute myocardial infarction, chest pain, rule out myocardial infarction, or unstable angina
<input type="checkbox"/>	Decompensated congestive heart failure
<input type="checkbox"/>	Syncope with normal physical exam, normal EKG, or previously normal echocardiogram
<input type="checkbox"/>	Post-operative patients with one of the following: previous history of coronary artery bypass graft(s), percutaneous coronary intervention(s), or valve repair/replacement
<input type="checkbox"/>	Symptomatic bradycardia (heart rate less than 45) or symptomatic tachycardia (hear rate greater than 120)
<input type="checkbox"/>	Cardiac contusion
<input type="checkbox"/>	Major ischemic or hemorrhagic strokes (with potential for arrhythmia)
<input type="checkbox"/>	Myocarditis or pericarditis
<input type="checkbox"/>	Step down from intensive care with recent cardiac or respiratory arrest

Class III (must be renewed after 24 hours):

<input type="checkbox"/>	Post coronary angiography, post ablation/cardiobversion, or post defibrillator/pacemaker placement
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Other Diagnosis (must be approved by medical director on call; must be renewed after 24 hours):

<input type="checkbox"/>	Other (list here):
<input type="checkbox"/>	Justification for telemetry monitoring (list here):



CONCLUSION

An order set for telemetry will reduce the over-utilization of cardiac monitors in the hospital.

Our goal is to improve patient comfort and remove unnecessary telemetry monitors throughout the hospitals in the Saint Francis healthcare system including OSU Medical Center.

This should reduce the cost burden associated with telemetry due to over-utilization of inappropriately implemented telemetry.

REFERENCES

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