Intervention

Within 3 months of implementation of our

per 24 hours, per critically ill patient, by 20%.

To reduce the frequency of blood draw events,

Aim Statement

Introduction

• Phlebotomy practices contribute to the frequency of red blood cell transfusions, and is associated with higher

• We recognized the need to decrease the frequency of blood draws among critically ill patients in our ICU.

Measure of Success

• Our team collected 4 weeks of baseline data to determine

• We then collected an additional 3 months of data.

PLAN the Improvement

DO the Implementation

Communication

• Enhance communication among ICU team, Use of the daily rounding checklist

Education

• Education of all staff members through in-services. Give autonomy to key staff members

Awareness

• Increase overall awareness including the necessity of labs to be done daily and the complications of frequent lab draws

STUDY the Results

Return on Investment

• Decrease costs associated with laboratory tests

• Reallocation of resources (LLTs)

• Decrease in PRBC transfusions

• Decrease in costs and complications of PRBC transfusions

• Decrease in catheter related blood stream infections

• Improved ICU “throughput”

• Improved communication among the team

Challenges and Barriers

• Difficulty with data collection

• Multiple causes of variation

• Inconsistent support from leadership

• “Open” ICU

ACT on Next Steps

Create a decision support tool for use on daily rounds to address laboratory ordering strategies

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Explore other process steps that were identified by the team

Expand scope of project to include critically ill surgical patients

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Figure 1: Ishikawa Diagram

Figure 2: Sample Data Collection Spreadsheet

Figure 3: Process for Lab Ordering

Figure 4: Sample Data Collection Spreadsheet

Figure 5: Patients for Lab Ordering

Graph 1: Average Daily Volume of Blood Draws

Graph 2: Average Frequency of ICU Blood Draws

Figure 1: Ishikawa Diagram

Figure 2: Sample Data Collection Spreadsheet

Figure 3: Process for Lab Ordering

Figure 4: Sample Data Collection Spreadsheet

Figure 5: Patients for Lab Ordering

Graph 1: Average Daily Volume of Blood Draws

Graph 2: Average Frequency of ICU Blood Draws

Return on Investment

• Decrease costs associated with laboratory tests

• Reallocation of resources (LLTs)

• Decrease in PRBC transfusions

• Decrease in costs and complications of PRBC transfusions

• Decrease in catheter related blood stream infections

• Improved ICU “throughput”

• Improved communication among the team

Challenges and Barriers

• Difficulty with data collection

• Multiple causes of variation

• Inconsistent support from leadership

• “Open” ICU

ACT on Next Steps

Create a decision support tool for use on daily rounds to address laboratory ordering strategies

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Explore other process steps that were identified by the team

Expand scope of project to include critically ill surgical patients

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Figure 1: Ishikawa Diagram

Figure 2: Sample Data Collection Spreadsheet

Figure 3: Process for Lab Ordering

Figure 4: Sample Data Collection Spreadsheet

Figure 5: Patients for Lab Ordering

Graph 1: Average Daily Volume of Blood Draws

Graph 2: Average Frequency of ICU Blood Draws

Return on Investment

• Decrease costs associated with laboratory tests

• Reallocation of resources (LLTs)

• Decrease in PRBC transfusions

• Decrease in costs and complications of PRBC transfusions

• Decrease in catheter related blood stream infections

• Improved ICU “throughput”

• Improved communication among the team

Challenges and Barriers

• Difficulty with data collection

• Multiple causes of variation

• Inconsistent support from leadership

• “Open” ICU

ACT on Next Steps

Create a decision support tool for use on daily rounds to address laboratory ordering strategies

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Explore other process steps that were identified by the team

Expand scope of project to include critically ill surgical patients

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Figure 1: Ishikawa Diagram

Figure 2: Sample Data Collection Spreadsheet

Figure 3: Process for Lab Ordering

Figure 4: Sample Data Collection Spreadsheet

Figure 5: Patients for Lab Ordering

Graph 1: Average Daily Volume of Blood Draws

Graph 2: Average Frequency of ICU Blood Draws

Return on Investment

• Decrease costs associated with laboratory tests

• Reallocation of resources (LLTs)

• Decrease in PRBC transfusions

• Decrease in costs and complications of PRBC transfusions

• Decrease in catheter related blood stream infections

• Improved ICU “throughput”

• Improved communication among the team

Challenges and Barriers

• Difficulty with data collection

• Multiple causes of variation

• Inconsistent support from leadership

• “Open” ICU

ACT on Next Steps

Create a decision support tool for use on daily rounds to address laboratory ordering strategies

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Explore other process steps that were identified by the team

Expand scope of project to include critically ill surgical patients

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Figure 1: Ishikawa Diagram

Figure 2: Sample Data Collection Spreadsheet

Figure 3: Process for Lab Ordering

Figure 4: Sample Data Collection Spreadsheet

Figure 5: Patients for Lab Ordering

Graph 1: Average Daily Volume of Blood Draws

Graph 2: Average Frequency of ICU Blood Draws

Return on Investment

• Decrease costs associated with laboratory tests

• Reallocation of resources (LLTs)

• Decrease in PRBC transfusions

• Decrease in costs and complications of PRBC transfusions

• Decrease in catheter related blood stream infections

• Improved ICU “throughput”

• Improved communication among the team

Challenges and Barriers

• Difficulty with data collection

• Multiple causes of variation

• Inconsistent support from leadership

• “Open” ICU

ACT on Next Steps

Create a decision support tool for use on daily rounds to address laboratory ordering strategies

Efforts to improve communication and coordination of laboratory ordering among the healthcare team

Explore other process steps that were identified by the team

Expand scope of project to include critically ill surgical patients