

# Utilizing Senti7® as a tool to identify parenteral to oral transition opportunities for patients treated with linezolid

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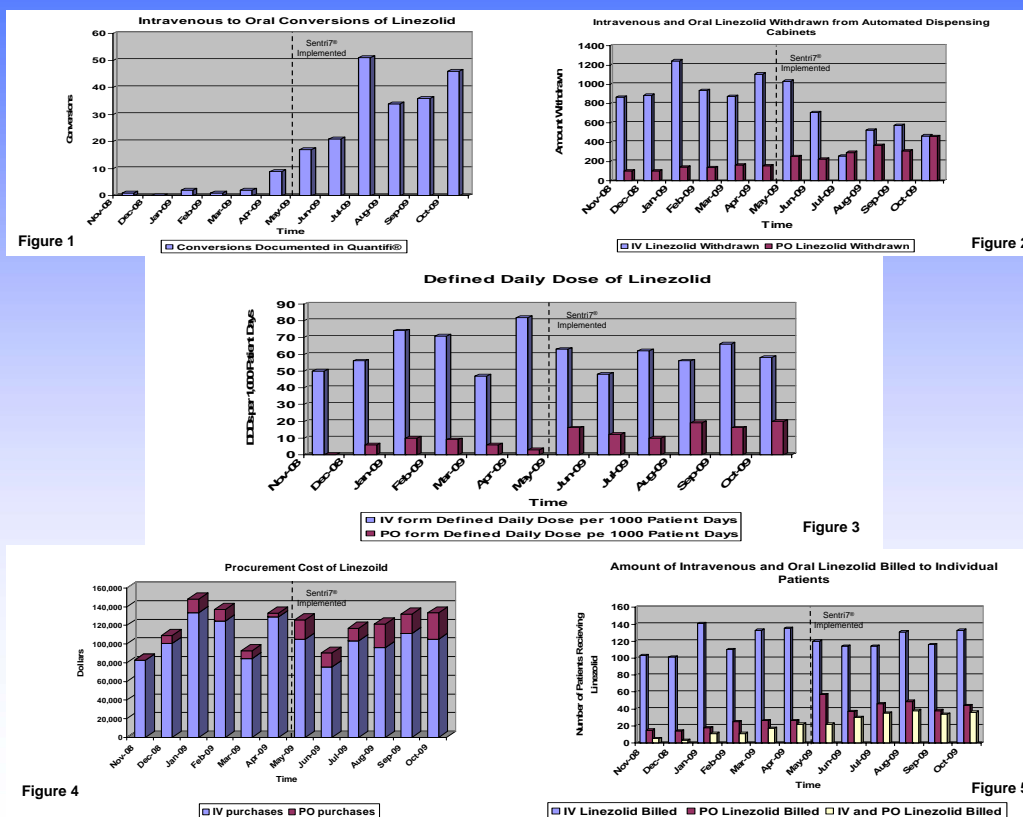


## Introduction / Objectives

The objective of this analysis is to determine Senti7®'s effect on identifying parenteral to oral linezolid transition opportunities thus fostering antimicrobial stewardship within a community hospital. In order for an antimicrobial stewardship to be effective there must be prospective surveillance that ultimately leads to clinical interventions. An important tool of antimicrobial stewardship is having an efficient means of identifying and evaluating patients that may qualify for pharmacotherapy interventions. This institution's antimicrobial stewardship activities have previously been based upon patient data gathered from an Access® database tool which is not real time but is updated with patient data every 24 hours yet now Senti7® serves this function as an active patient surveillance system with real time patient data updates.

## Methods

- Based on institutional review committee criteria this analysis received expedited review
- Analysis from November 2008 through October 2009
- Sources include an Access® database, Senti7® surveillance system, Quantifi® documentation tool, automated dispensing cabinet printouts, and institutional financial data
- Findings to be analyzed:
  - number of parenteral to oral conversions of linezolid
  - number of patients receiving linezolid
  - procurement cost of linezolid
  - amount of linezolid withdrawn from the automated dispensing cabinets
  - defined daily doses (DDDs) of linezolid per 1000 patient-days



## Results

- Greater number of intravenous to oral conversions of linezolid documented in Quantifi® post-Senti7® implementation (Figure 1)
- Increased trend of oral linezolid withdrawn and decreased trend of intravenous linezolid withdrawn from automated dispensing cabinets post-Senti7® implementation (Figure 2)
- Higher numbers of linezolid tablets utilized and decreased intravenous linezolid infusions occurred based on DDDs per 1,000 patient-days post-Senti7® implementation (Figure 3)
- Additional linezolid tablet procurement costs were noted post-Senti7® implementation (Figure 4)
- Both oral and intravenous linezolid patient charges increased post-Senti7® implementation (Figure 5)

## Conclusions

As evidenced by the increasing trends in parenteral to oral conversions, oral tablets withdrawn from the automated dispensing cabinets, oral tablet DDDs per 1,000 patient-days, oral tablet procurement costs, and oral tablet billed to patients Senti7®'s implementation has helped identify intervention opportunities and promote current antimicrobial stewardship activities.

## Disclosure

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation:  
Dr. Jessica Dana: Nothing to disclose  
Dr. Edward Eiland: Nothing to disclose