



The Use of Rocephin (Ceftriaxone) IVP in the Emergency Care Center (ECC)

BACKGROUND

- Timely initiation of antibiotics in patients with Sepsis/SIRS criteria decreases morbidity and mortality.
- Rocephin (ceftriaxone), a broad-spectrum antibiotic is frequently used in the emergency setting.
- Rocephin is often the first drug given in patients receiving multiple antibiotics.
- May be administered IM or IV piggyback (IVPB); literature supports administration IV push (IVP) over 5 minutes.
- Rocephin IVPB requires a 30-minute wait time prior to discharge to monitor for adverse drug reactions.
- Rocephin is frequently the last order given prior to discharge from the emergency department.

PURPOSE

The two-fold purpose of this project is:

- To evaluate the administration time and total length of stay in the ECC associated with IVPB administration of Rocephin versus IV push.
- Determine cost associated with IVPB versus IVP in the ECC (supplies, time, and length of stay).

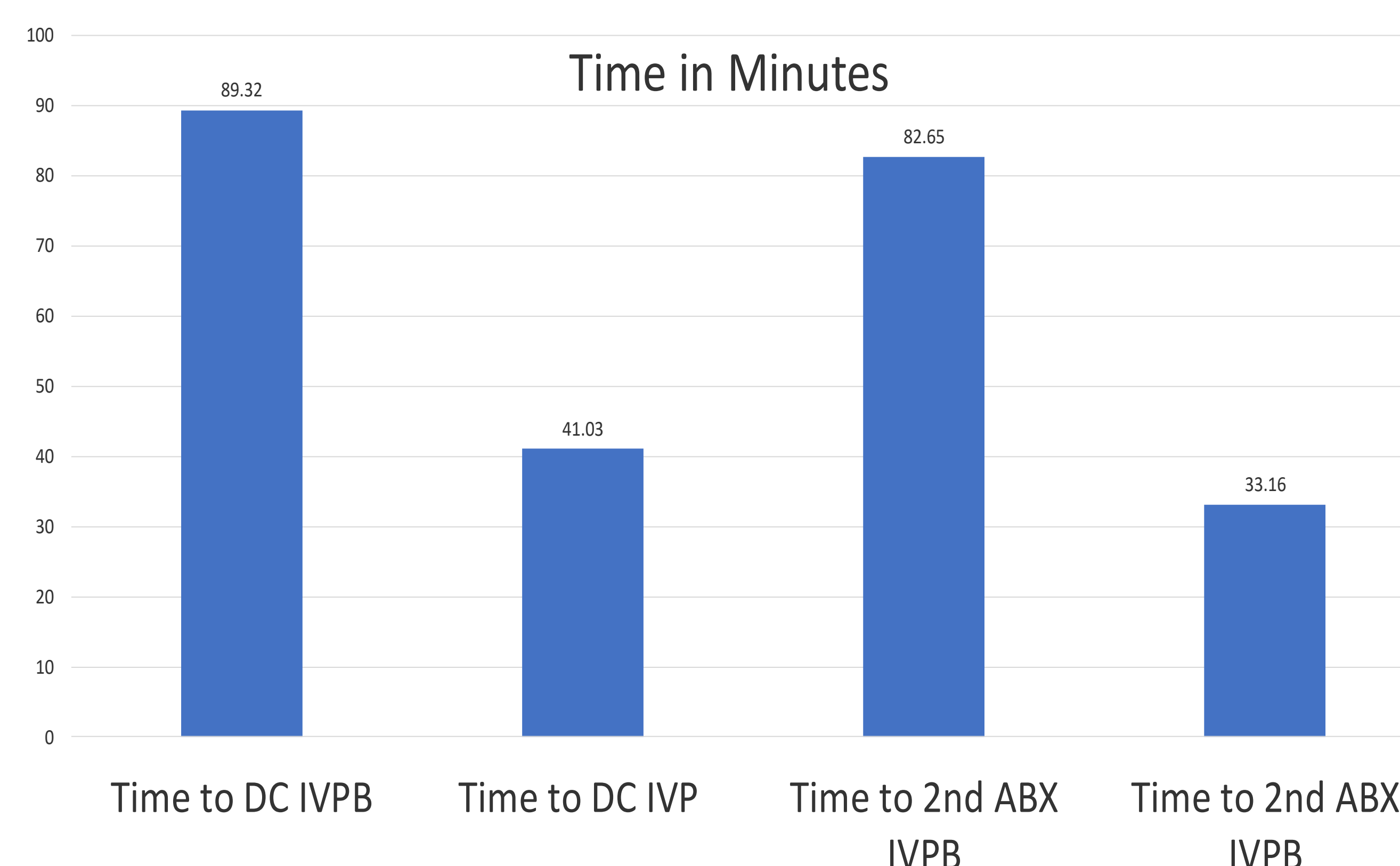
REFERENCES

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METHODS

- Design: Evidence-based, quality improvement project.
 - Setting/Participants: SJO ECC; patients who received Rocephin IVPB or IVP for 3-months in 2018 and 3-months in 2019.
- Procedure:
- Key stakeholders contacted – physicians, pharmacists, nursing leadership to discuss and approve change in practice.
 - Audited 2018 data for Rocephin IVPB as last order before discharge and with multiple antibiotics.
 - Audited 2019 data for Rocephin IVP as last order before discharge and with multiple antibiotics.

RESULTS



RESULTS (continued)

Length of stay:

- Average time to discharge with IVPB = 89.32 minutes
- Average time to discharge with IVP = 41.03 minutes

Time from administration of 1st antibiotic (Rocephin) to 2nd antibiotic:

- IVPB = 82.65 minutes
- IVP = 33.16 minutes

Cost of IVPB versus IVP:

- IVPB total cost = \$7.20/dose
- IVP total cost = \$1.29/dose

IMPLICATIONS FOR PRACTICE

- Use of alternative routes of administration to decrease delays and costs while improving efficiency is imperative to providing care in an emergency setting.
- Safety and satisfaction must be in the forefront when changes are considered and made.

CONCLUSIONS

- During 3 months in 2019, the ECC administered 1,428 doses of Rocephin with a cost savings of \$8,439.
- Annualized estimated yearly doses: 5,712.
- Annualized estimated savings received after converting to IVP from IVPB: \$33,758.