EXAMINING THE ROLE OF INSULIN PEN DEVICES IN ACUTE CARE SETTINGS: A REVIEW AND ANALYSIS OF HEALTH RESOURCE UTILIZATION

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RESULTS (cont’d)

- For the base case scenario, input parameters for the MUHC unit (bed size, type of syringes) were used. As such, these results represent the estimated budget impact of moving from non-safety syringes and vial to a passive-safety insulin pen device.

- The model estimates that for a 52-bed unit currently using non-safety syringes, the estimated total cost savings from using insulin pens is expected to be $46,413.

These savings are expected based on a reduction in NSI ($48,237) and an expected reduction in insulin volume ($2,134). Nursing efficiency was estimated to save $5,113, based on a time savings (i.e. potential time that can be redistributed) of 191 hours annually. Finally, the cost increase attributable to supplies was $7,031.

OBJECTIVE

- The aim of this study was to conduct a budget impact analysis to evaluate the economic impact of adopting passive-safety-engineered insulin pens (which do not require activation) in the acute care setting, as it relates to patient and healthcare worker safety, and health resource utilization (HRU).

RESULTS

- For a 52-bed unit using safety syringes, the move to a passive-safety pen device would result in total estimated cost savings of $122,762 annually.

CONCLUSIONS

- Potential benefits of implementing insulin pen devices in acute care settings include reducing the risk of adverse events such as NSI medication errors, and achieving tighter glycemic control as a result of shorter needle length availability (reduction in intramuscular injections and improved adherence).

- Insulin pen devices in the acute care setting may also decrease waste and inefficiencies such as insulin waste and nursing time. The implementation of insulin pen devices in acute care results in cost savings, as well as time savings for nurses that may be redirected to increased time at the patient bedside.

REFERENCES

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