COST OF PLATELET PURCHASE AND PRODUCTION: A SURVEY OF U.S. HOSPITALS

Lyons NM1, Prioli KM2, Pizzi LT2

1Thomas Jefferson University, Philadelphia, PA, USA
2Rutgers University, Piscataway, NJ, USA

INTRODUCTION

- Platelet transfusions are commonly utilized to treat or prevent bleeding. In 2011, an estimated 2.2 million platelet units were transfused in the U.S.1
- Platelet inventory management is challenging:
  o Platelets are stored at room temperature and have a short (5-day) shelf life.
  o Conventional processing of platelets entails bacterial testing, a time-consuming process that diminishes usable shelf life.2
- Costs associated with platelet purchase and/or production and dynamics of platelet utilization in the hospital setting remain opaque.

OBJECTIVE

- The objective of this project was to survey U.S. hospital transfusion directors to determine basic facility characteristics and quantity, type, and cost of conventionally-processed platelets (CP) purchased, produced, and/or dispensed.

METHODS

- The survey was developed with input from 2 research methodologists and 2 transfusion directors, and consisted of 29 questions (25 quantitative, 4 qualitative).
- The sample frame included U.S. hospitals of varied region, bed size, and type.
- Survey administration occurred in June to August 2016 by email or telephone, depending on respondent’s preference.
- Responses were analyzed using descriptive statistics.

RESULTS

- 160 invitations were issued resulting in 27 hospital interview completions.
- Of the 27 hospital respondents:
  o Bed sizes ranged from 196 to 1,157 (mean 638, SD 307).
  o 19 (70.4%) had trauma centers, 6 (22.2%) were pediatric centers, and 6 (22.2%) had a cancer center (Figure 1).
  o 16 (59.3%) were located in the Northeast geographic census region, 6 (22.2%) were located in the South, 3 (11.1%) in the Midwest, and 2 (7.4%) in the West.

CONCLUSIONS

- The variability of hospital platelet management strategies and the small sample size (n=27) limits generalizability.
- Some hospital respondents did not actively track one or more of the aspects covered by the survey.
- Responses in these cases were informed by estimation rather than hard data.

REFERENCES


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