Hematopoietic Stem Cell Transplantation System Capacity Initiative: Assessing the capacity of the pharmacy workforce

Authors: Helen Leather, BPharm; Lyndsey S. Aspaas, BS, CHTc; Jaime Preussler, MS; Pam Robinett; Laura E. Wiggins, PharmD, BCP

SIGNIFICANCE AND BACKGROUND

More than 20,000 hematopoietic stem cell transplants (HSCT) are performed in the U.S. annually and this number is expected to increase. System challenges to the future growth of HSCT include workforce shortages and lack of adequate infrastructure. The System Capacity Initiative convened a working group comprised of thought leaders representing HSCT pharmacists to identify workforce-specific barriers and draft recommendations for addressing those limitations.

SURVEY OBJECTIVES

- To identify challenges to adequate HSCT pharmacist staffing
- To characterize the role of HSCT pharmacists
- To assess HSCT pharmacists’ attitudes on the work environment

METHODS

- This study utilized a 37-item cross-sectional design. Primary data were collected via Internet survey from August 2 – September 16, 2011.
- The survey was emailed to 342 members of the American Society for Blood and Marrow Transplantation and Hematology Oncology Pharmacy Association. Eligible participants included HSCT pharmacists practicing in the U.S.

KEY FINDINGS

The survey elicited a response rate of 27% (N=93; Table 1).

- More than 40% of respondents believe there is currently a shortage of HSCT pharmacists. Most institutions use academic clinical rotations to interest students in HSCT (84%); however, many pharmacists become interested in HSCT through their residency (52%). Of institutions using a metric to hire clinical HSCT pharmacists, physician demand (38%) and pharmacist-to-patient ratios (19%) were the most common metrics used.
- Respondents would attend an HSCT Pharmacy Introductory course if their institution paid the cost of attendance (96%), and 23% if they paid. More interest was shown in attending an advanced course (84% if the institution paid), with 62% willing to pay their own costs. Many pharmacy technicians rotate between inpatient and outpatient units. Most report working 41-60 hours per week (81%), with 12% working more than 60 hours per week.
- Care-delivery models and programs utilized by respondents’ institutions are described in Table 2. Respondents reported pharmacist-to-patient ratios which varied from 1:5 to 1:30 in both inpatient and outpatient units (Figure 2).

KEY FINDINGS CONTINUED

- Overall, 91% of respondents are satisfied with HSCT pharmacy as a career. However, pharmacists identified excessive hours and insufficient time to conduct research, teaching and mentoring as drivers of dissatisfaction with the work environment.

CONCLUSIONS AND WORKING GROUP RECOMMENDATIONS

1. There is a need to define the role of the pharmacist within the HSCT team to improve efficiencies in delivering transplant-related care

Recommendations:

- Establish core functions for various pharmacy team members (e.g., clinical pharmacists, satellite pharmacists, and pharmacy technicians)
- Develop and utilize Collaborative Practice Agreements with physicians
- Bill for the provision of outpatient pharmacy services

2. There is currently an HSCT pharmacist staffing shortage

Recommendations:

- Increase awareness of HSCT pharmacy as a specialized career
- Provide training courses for new HSCT pharmacists
- Increase exposure to HSCT in oncology pharmacy residency training programs

3. Standardize the delivery of care by HSCT pharmacists and provide a staffing benchmark

Recommendations:

- Develop a pharmacoeconomic minimum standard of care
- Promote the use of drug reimbursement/replacement programs
- Implement a best practice for running “fast claims” for expensive medications to help prescribers with insurance coverage

ACKNOWLEDGEMENTS

Pharmacy WorkforceWG: Chair: Helen Leather, BPharm; Vice Chair: Laura E. Wiggins, PharmD, BCP
Members: Joseph Bukala, PharmD, BCP; Julianne Merten, PharmD, BCP; Christopher Faust, PharmD, BCP; Alison M. Galvin, PharmD, BCP; Cindy Ippolito, PharmD; Tipu Khan, PharmD, BCP; Scott Lamer, PharmD, BCP; Aislyn Morris (Engemann, PharmD, BCP); Jerrie Shapin, PharmD, BCP; Jacqueline Shapin, PharmD; Connie Szafter, PharmD; Tracey Walsh-Driessen, PharmD, BCP; Casey Williams, PharmD, BCP
National Marrow Donor Program: Pam Robinett; Lyndsey S. Aspaas, BS, CHTc; Susie Burer; Stacy Stilley, Febergren; MS, LCSW; Ellen Denzen, MS; Tammy Floyd; Shavela Nayyar, BCP; Jaime Preussler, MS; Naimvet Miah, MD; MS; Elizabeth Murphy, SD, RN; Jeffrey W. Clevly, MD

SCI Principal Investigator: Edward L. Snyder, MD

FOR MORE INFORMATION OR FEEDBACK
SystemCapacity@nmdp.org