

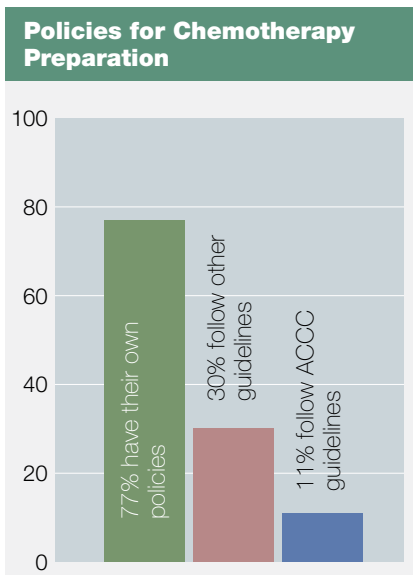
ACCC Survey Reveals Need for Standardization of Pharmacy Service Orders and Protocols

Survey also shows that one in three oncology pharmacists are not included in drug dose-adjustment decisions.

A survey of oncology pharmacists by the Association of Community Cancers (ACCC) reveals that about 41 percent of respondents do not have standardized orders or protocols for more than 80 percent of their chemotherapy orders.

“Pharmacies need to do better,” said study co-author Philip E. Johnson, MS, RPh, FASHP. “There are several components to a complete medication order, and more complex orders like chemotherapy that include multiple drugs given in varying doses and in a required sequence are especially prone to errors. It has been demonstrated that pre-printed orders reduce the chance of errors, and also make the ordering process more efficient.” Johnson is the founding director of pharmacy at the H. Lee Moffitt Cancer Center & Research Institute in Tampa, Fla.

Of the 49 percent who say they do have standardized orders or pre-

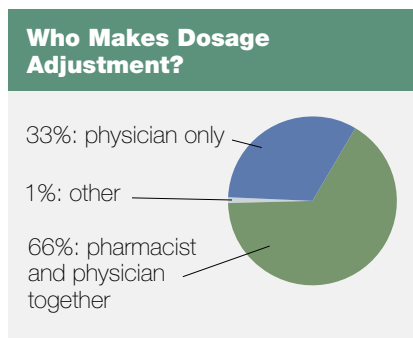
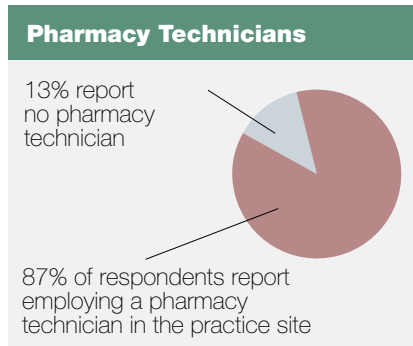


printed orders; 14 percent have order protocols built into the computer software; and 15 percent have a combination of pre-printed or computer-based order protocols.

ACCC’s Pharmacy Survey was conducted in March 2007. Close to 1,000 oncology pharmacists were surveyed, and 144 responses were received. The survey was sponsored by Cardinal Health.

The survey also reveals that when a drug dose requires adjustment, about 33 percent of respondents report they are *not* involved in the decision, which is made by a physician. Two out of three respondents indicate that a pharmacist approves all adjustments prior to drug administration or that the pharmacist calculates all adjustments prior to physician approval.

“It is highly recommended that all dose calculations be checked at least twice, and if possible by a pharmacist and another practitioner,” said study co-author Ernest R. Anderson, Jr., MS, RPh, FASHP. “Checking the dose calculation should include also verifying that the patient’s height and weight are accurate, and that labs or organ functions have not changed



and require a dose modification.” Anderson is ACCC president-elect and practices in the pharmacy at the Lahey Clinic in Burlington, Mass.

The majority of respondents (78 percent) practice in the hospital setting (or hospital-based cancer center), while 17.5 percent practice in the physician office or clinic. Other practice sites include specialty pharmacy (3.5 percent) and other (1 percent), including a mixed general/hospital setting.

Overwhelmingly, at 97 percent of respondents, pharmacists review the chemotherapy order. In addition to the pharmacist, 46.2 percent of respondents indicate that chemotherapy orders are reviewed by the nurse, and just 20.3 percent indicate that the physician is involved in reviewing the order. Two respondents indicate that the order is reviewed by whoever is available.

Survey results are available on ACCC’s website at www.accc-cancer.org.

Staffing and Services

- Average number of full-time equivalent pharmacists employed is 5.5. The median number is 2.
- Average number of full-time equivalent pharmacy technicians is 1.2. Median is 2.
- Average number of cancer patients who receive drug therapy per day is 11. Median is 20.
- Average number of chemotherapy preparations administered per day is 15.5. Median is 27.