

# Let suppliers help plan purchase needs

By Judith Smith

Most materials managers say they forecast supply requirements, a necessity to avoid running out of needed items.

A step beyond forecasting is demand planning.

In the typical hospital, materials managers look at last year's supply use by month, and take either the highest monthly usage or a very high average to calculate future demand. The same hospital could save a minimum of 10% of its supply costs by forecasting more accurately. It could develop monthly predictions of par levels for each cart in use.

## Help from technology

Keeping such close track of supply use, and using that information to predict exactly how much of what items to order in the future, requires extensive data.

That is where demand planning software can help.

There are actually software packages that allow tracking of expiration dates at different storage sites. This life cycle planning feature eliminates the hunting down of expired products.

The system flags the item for removal from current stock. It considers storage constraints for both hospitals and suppliers.

Other factors to track include the product shipping point and delivery location, multiple product mix (to build custom packs for instance), multiple delivery locations, multiple distribution points, multiple accounts and customers.

Unlike other industries, hospitals rarely use such tracking systems.

The primary reason is that health care is unlike most industries. For most businesses, fluctuations in demand can be linked to specific factors, and those factors can be controlled to some extent.

A hospital has very little control over the demand for supplies, which are based on patient needs and the restrictions of insurers, and often, physician preference.

## Let the distributor help

Still, a few healthcare and pharmaceutical suppliers and distributors currently use demand planning software. A hospital can take advantage of that information by choosing such vendors whenever possible.

Materials managers should make it known that demand planning ability is a factor in supplier choice.

Distributors, especially, will see a benefit in providing demand information to customers.

A distributor who can actually predict future supply needs will have added relevance in the hospital supply chain.

The vendor that can project future ordering levels will plan more easily for truck capacity, weight and transportation methods.

Be aware, however, that a supplier can also use this

software to prioritize inventory assigned to customers. In a time of shortage, it can assist in filling orders of "more valuable" customers.

This may sound harsh, but there is another way to look at it: Materials management departments are famous for filling the order of the unit or clinic that screams the loudest in times of low supply.

Distributors utilizing this software are able to predict seasonal fluctuations in demand much more quickly, if not by hospital, then by region. This ability alone could save any materials manager a lot of headaches.

In other words, a hospital need not go out and buy demand planning software; it just needs to find a supplier with that capability.

## Wanted: systems designed for health care

A three-month independent study showed that currently, there is no demand planning system designed specifically for the needs of hospitals.

A review of Internet sites, journal articles and interviews with software vendors led researchers to a company that indicated it plans to develop such a system.

The company is i2 Technologies, Irving, Texas. If i2 follows through, hospitals will soon be able to buy specially designed demand planning systems that take health care variables into account.

These systems will offer the security and speed needed for integrated delivery networks.

In manufacturing, to forecast supply needs or plan future demand, companies install software that creates complex models based on different supply chain scenarios.

In manufacturing, the goal is to have the smallest number of supplies on hand to maintain efficient production schedules.

These software packages allow manufacturers to look across their supply chain, into their suppliers' schedules and requirements. These models allow for more accurate planning of distribution and replenishment activities of suppliers.

For a hospital or IDN such a capability would be a major benefit. The ability to forecast par levels, by item, by month, may be available in the long term.

## Some savings available now

Producers of demand planning software readily admit that they could do a better job of customizing their products for hospital use.

But even the standard software used by manufacturers has been shown to save 5% to 20% of transportation costs. Considering that average transportation costs account for between 2% and 15% of supply costs, these savings alone are worth going after.

Supply chain efficiencies provide additional benefits that can be applied to hospital operations.

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This year, additional data were provided by ECRI, a non-profit health services research agency in Plymouth Meeting, Pa.

ECRI's ongoing surveys of 400 hospitals cover a wide range of products. ECRI surveyed many different product codes from the three major manufacturers, and several were added to the table on page 16 to provide comparison data.

#### **Suppliers: few and big**

Topping the list of suppliers this year is Abbott Laboratories, Abbott Park, Ill. Abbott has traditionally split 80% of the market with rival Baxter International, Deerfield, Ill.

A third company, once a partner of Baxter, has been McGaw Inc., Irvine Calif. In February 1998, McGaw was acquired by the German company B. Braun, and is now known as B. Braun McGaw.

If the new merger has made any impact on the I.V. solution market, that was not reflected in the *HMM* survey. Fewer respondents reported using McGaw products than in previous years.

One possible competitor of the future may be ALARIS Medical Inc., San Diego, formerly Advanced Medical Inc.

It produces the IMED® and IVAC® I.V. therapy products and a needleless valve called SmartSite™ that is now part of the company's disposable pump sets and other

components. But ALARIS was not mentioned in any of the survey responses.

Baxter, which in 1996 spun off its distribution business under the name of Allegiance Healthcare Corp., retained its I.V. business under the Baxter name.

In 1931 the Don Baxter Intravenous Products Corp. was founded. It offered the first commercial solutions in glass containers and provided a measure of safety in a previously haphazard manufacturing process.

The following year Don Baxter made an arrangement with Foster G. McGaw of American Hospital Supply Corp. to have American distribute the solution to hospital customers.

#### **Contracts and competition**

The *HMM* data reflect information from hospitals, systems and group purchasing organizations, representing 400 hospitals totalling 115,500 beds.

Those who indicated purchasing volume for I.V. solutions spend an average of \$1,059 per bed annually, up from last year's average of \$300 per bed.

This indicates that I.V. solutions represent the type of product that is important, not because of its unit price, but because of its impact on a hospital's overall budget.

The increase may also reflect the fact that more small hospitals responded this year, and there were fewer beds to share the I.V. expense.

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For instance, the demand model can be used to improve the predictive abilities units that maintain stock for themselves alone. Such closely guarded inventories are sometimes called "silos."

Breaking down silos is a big help in newly created integrated delivery networks.

When the intensive care unit at one hospital runs out of winged intravenous catheters, the nursing supervisor will be able to check the computer and locate the closest unit that has a ready supply.

It is about time hospitals acquired this ability. At very least, materials managers have an opportunity to eliminate the "just-in-case" concept of inventory management in favor of true just-in-time inventory systems.

Imagine having the ability to look into a manufacturer's supply chain for information about potential back orders or lot recalls.

If he or she knew in advance that a supplier were out of a critical item, the materials manager could plan to have the item replaced, with a clinician approved substitute.

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#### **Landry new AHRMM president-elect**

Renee Landry is the new president-elect of the Association for Healthcare Resource & Materials Management (AHRMM), Chicago. She will take office Jan. 1, 1999, and will become AHRMM president a year later.

Landry is assistant director of materials management at the University of Texas Medical Branch, Galveston, Texas, 900 beds. She prevailed in the fall election over opponent Dennis Jordan, director of materiel services, Miami Children's Hospital, Miami, 188 beds.

Also in the fall election, the following were elected to the board:

- Region 1, John Gaida, Partners Healthcare System, Somerville, Mass.
- Region 2, Barbara Friedman, Kingsbrook Jewish Medical Center, Brooklyn, N.Y., 343 beds
- Region 4, Marc Westerman, Orlando Regional Health System, Orlando, Fla., 1338 beds
- Region 5, Vicki Jones, Spectrum Health, Grand Rapids, Mich.
- Region 7, Al Cook, St. Francis Medical Center, Monroe, La., 450 beds
- At-Large, Dee Donatelli, Concepts in Healthcare, Conifer, Colo., and Anita L. Phipps, Chesapeake General Hospital, Chesapeake, Va., 260 beds.

In other regions, current board terms did not expire this year. In 1999, current president-elect Mary Starr will take office as president. Starr is director of materials management at MedPartners North Suburban Clinic, Hoffman Estates, Ill. ❖