

Dispensing During Off-Hours

The dispensing of medication when the pharmacy is closed is called dispensing during off-hours. It may be during closing of the pharmacy after an 8-hours duty or during a holiday. The pharmaceutical services are integral part of the total care provided by the hospital, and the services of a pharmacist should be available at all times. But this depends largely on the availability of sufficient number of personnel, budgets and the size of a hospital. In the instances, when these are not available, other procedure may be adopted for dispensing of the medication. Before discussion of these ways, the requirements of the good pharmaceutical practice dealing with this sort of dispensing would be of worth. These are:

1. A non-pharmacist must not dispense drugs to outpatients, hospital staff or emergency room patient while the pharmacy is open.
2. Where around-the-clock operation of the pharmacy is not feasible, a pharmacist should be available on an "on-call" basis.
3. The use of "night cabinets" and drug dispensing by nonpharmacists should be minimized, and eliminated wherever possible.
4. If it is necessary for nurses to obtain drugs when the pharmacy is closed and the pharmacist is unavailable, following guidelines must be followed:
 - 4.1 Written procedures covering dispensing by nurse should be developed.
 - 4.2 A nurse should provide a limited supply of the drugs most commonly needed in such instances
 - 4.3 The drugs should be in proper single-dose packages
 - 4.4 A log should be maintained of all drugs and doses removed. This log must contain the date and time the drugs were removed from the container, a complete description of the drug product(s), name of the (authorized) nurse involved, and the patient's name.
5. For emergency room patients, when no pharmacist is available
 - 5.1 The drugs must be delivered in packaged, to the extent possible, in single unit packages
 - 5.2 Not more than a single day's supply of doses should be dispensed
 - 5.3 Use of an emergency room "formulary" is recommended.

MEANS FOR OFF-HOUR DISPENSING

There are various means whereby a hospital can provide around-the-clock or 24-hour a

day pharmacy coverage. These are:

PHARMACIST-ON-CALL

In case of shortage of pharmacy personnel, pharmacist may be assigned an on call duty during off-hours. Giving some fringe benefits to the on-call pharmacist may encourage this type of coverage. Many institutions have developed bonus or extra pay plans to compensate the pharmacist delegated for such duty. A mobile phone or a pager can also be provided to the personnel on call. In a hospital with a number of pharmacists recruited, a rotational plan of on-calls can be instituted which will not burden any single individual. In advanced countries with the severe shortage of qualified pharmacists, in communities where more than one hospital is in operation, the pharmacists join forces in providing twenty-four hour on-call services. Under such a system, one pharmacist is assigned to on-call duty in two institution for any one period of time and he, therefore, will answer the needs of both institutions. This type of cooperation will spread out the frequency of on-call duty and, at the same time, acquaint a second person with the routine of each hospital in case of an emergency or sick leave and vacation coverage.

EXTENDING PHARMACY SERVICE HOURS

The extension in time of pharmacy services for a broader pharmaceutical coverage is another way to dispense during off-hours. The emergency after-hour pharmacy services are now being replaced by around the clock coverage by staff pharmacists but need more number of pharmacists, which is a problem for smaller hospitals. The availability of pharmacist is much more and the hospital administrations of such hospitals can be convinced to financially support the broader pharmaceutical coverage. A hospital pharmacist can utilize the following reasons to convince management to support the extension of services:

1. Provision of continuity for the I/V admixture program.
2. Provision of continuity for the unit dose program.
3. Provision of medication to night shift that is least experienced and newest to the hospitals; reluctance or refusal by, and the time constraints on the night nursing supervisor allowed more involvement with nursing rather than pharmacy problems.
4. Provision of continuity with the drug information service.
5. Provision of continuity for the drug monitoring system.
6. Helping to prevent serious medication error(s) at night.

DISPENSING FROM PHARMACY BY A NURSING SUPERVISOR

A commonest method under which the evening and night nursing supervisor is allowed to enter pharmacy and provide a limited type of service. But realizing the basic fact that dispensing is not the nursing area some quarters think it illegal and not free from inherent risks. One may think the selection of a medicine from the drug cabinet on the patient-care area by a nurse would be same as selecting it from the pharmacy. The inconsistency of this view is the fact that medications delivered to the nursing station are in ready-to-use form and have already been packaged, handled and labeled by a professionally trained pharmacist.

However, in case of shortage of personnel, prohibitive costs and size of the hospital, this method can be practiced but with caution. A clear-cut policy should be made regarding

this system and a nursing personnel serving in this category should be bound to dispense medications from the selection of pre-labeled and prepackaged items in the pharmacy for such purpose. However, the nurse is prohibited to compounding of mixtures.

EMERGENCY BOX

The emergency box is an integral part of a twenty-four-hour a day pharmacy coverage and is necessary for a quick treatment in situations where time is of the essence. The emergency, or as it is often called the "STAT" box, must have such dimensions that it can accommodate the necessary supplies and yet sufficiently compact to facilitate handling them. The box should be kept in a readily accessible place, known to all ward personnel, and should be ready for use at all times. In order to accomplish this goal, the pharmacy should have reserve boxes prepared so that the units may be handled on an exchange basis and thereby reduce the period of time a ward may be without a ready-to-use emergency box.

If it is the hospital's policy to make a charge for the supplies used from the emergency box, then the nurse should prepare a charge ticket and submit it to the pharmacy along with the "used" box.

The emergency box concept can be expanded to the concept of "emergency cart" or "resuscitation cart."

EMERGENCY OR RESUSCITATION CART

The emergency or resuscitation carts are mobile units containing, along with emergency medicines and supplies, facilities for the administration of oxygen, the application of suction, and a cardiac pacemaker. This is the extension of the emergency box which contains only the emergency medicines and supplies.

A list of the pharmaceuticals and ancillary supplies that should be available in emergency box, emergency cart or resuscitation cart must be prepared collaboratively. Where the services of a pharmacy and therapeutics committee are available, the pharmacist should consult with the Committee prior to the adoption of a specific list of supplies.

Once an emergency box system is put into effect, a system of regular checking must be implemented by the pharmacist because of the fact that most of the emergency drugs may expired if not used within a reasonable period of time. After checking, the outdated medicines are to be removed and replaced.

This system requires placing of an inventory and product control card in the box. This card serves: as an inventory of the emergency box; shows when the unit was last checked; and provides the nursing personnel with adequate directions for replenishing of any item used.

Emergency Medication Supplies

A policy to supply emergency drugs when the pharmacist is off of the premises or when there is insufficient time to get to the pharmacy should exist. Emergency drugs should be limited to those whose prompt use and immediate availability is regarded by physicians as essential in proper treatment of sudden and unforeseen patient emergencies. The emergency drug supply should not be a source for normal "stat" or "p.r.n." drug orders. The medications included should be primarily for the treatment of cardiac arrest, circulatory collapse, allergic reactions, convulsions, and bronchospasm. The pharmacy

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and therapeutics committee should specify the drugs and supplies to be included in emergency stocks.

Emergency drug supplies should be inspected by pharmacy personnel on a routine basis to determine if contents have become outdated and are maintained at adequate levels. Emergency kits should have a seal, which visually indicates their opening. The expiration date of the kit should be clearly indicated on it.

NIGHT DRUG CABINETS

A night drug supply cabinet is basically an adjunct to the charge floor stock medications already on the patient-care area. These units also range from a simple cabinet with drawers to large elaborated installations, which include narcotic vaults and refrigerated compartments. The large cabinets are usually constructed in a wall of the pharmacy with two side opening so that the unit may be serviced from within the pharmacy yet is accessible from the corridor side to authorized nursing personnel also.

The night drug supply cabinet should be stocked with pre-packaged and labeled containers of the drug listed in hospital formulary as advised by the pharmacy and therapeutics committee. In addition, many hospitals also store certain medical and surgical supplies such as Foley catheters, oxidized cellulose and elastic hosiery.

The nursing supervisor opening the unit is required to leave a properly identified charge ticket listing the item removed and to whom it was administered. The next morning, pharmacy personnel restock the unit and forward the charge tickets to the accounting office.

Although the cost of purchase and installation of a night service cabinet may be high yet it provide a better control of inventory that will more than offset its initial purchase and installation. Any plans for the construction of a new pharmacy or the renovation of existing quarters may include such a unit.

DISPENSING BY PHYSICIANS

Next to the use of registered pharmacists, a safe administrative and legal practice require that the physician enter the pharmacy and obtain any special medication not provided through the floor stocks, night cabinets or emergency box. This method prohibits the nurse from entering the pharmacy after hours.

The major drawbacks to this method are (a) physician might waste a great deal of time searching for a product in unfamiliar surroundings, and (b) it can be an unfair burden to place upon their already heavy work load.

This system does, however, possess one major advantage in that rather than entering the pharmacy, the physician may be influenced to use a drug that will accomplish the same purpose, yet is more readily available in the pharmacy.

PURCHASED SERVICE/PART TIME PHARMACIST SERVICE

Hospitals employing only one staff pharmacist has found a practical solution to dispensing during off hours by contracting with the local community pharmacy or academic pharmacist for night, holiday and vacation relief for the staff pharmacist.

This method is a safe and legal one, which, while protecting the drug needs of the hospital and patient, establishes goodwill in the community and perhaps a better understanding of the efforts of the hospital to safe-guard the health needs of the area on

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around-the-clock basis.

Where there is more than one pharmacy in the community, care should be taken to avoid any claims of favoritism or politics. One method by which this may be accomplished is to develop a set of specifications and requirements concerning the desired service and request the local establishments to submit their bids (offers). Obviously, the specifications should be so prepared that only the retail pharmacies with adequate staff, inventory, and delivery service can qualify to this.

In recent years, much has been done to make drugs available on patient areas in order to cope with every emergency. Some of these methods include the use of mechanical dispensing units, self-medication programs and centralized unit dose dispensing system available around the clock.