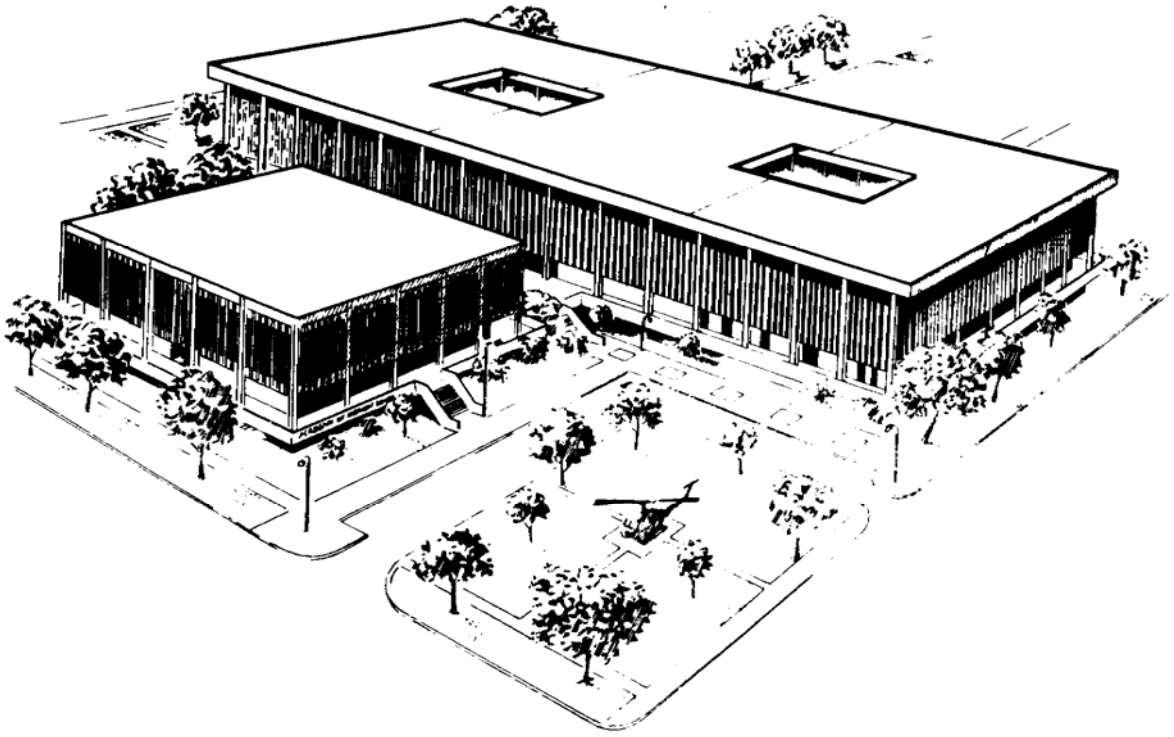
U.S. ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL
FORT SAM HOUSTON, TEXAS 78234-6100



TOPICS IN PHARMACY ADMINISTRATION

SUBCOURSE MD0812 EDITION 100

DEVELOPMENT

This subcourse is approved for resident and correspondence course instruction. It reflects the current thought of the Academy of Health Sciences and conforms to printed Department of the Army doctrine as closely as currently possible. Development and progress render such doctrine continuously subject to change.

ADMINISTRATION

Students who desire credit hours for this correspondence subcourse must enroll in the subcourse. Application for enrollment should be made at the Internet website: http://www.atrrs.army.mil. You can access the course catalog in the upper right corner. Enter School Code 555 for medical correspondence courses. Copy down the course number and title. To apply for enrollment, return to the main ATRRS screen and scroll down the right side for ATRRS Channels. Click on SELF DEVELOPMENT to open the application; then follow the on-screen instructions.

For comments or questions regarding enrollment, student records, or examination shipments, contact the Nonresident Instruction Branch at DSN 471-5877, commercial (210) 221-5877, toll-free 1-800-344-2380; fax: 210-221-4012 or DSN 471-4012, e-mail accp@amedd.army.mil, or write to:

NONRESIDENT INSTRUCTION SECTION
AMEDDC&S
ATTN: MCCS-HSN
2105 11TH STREET SUITE 4191
FORT SAM HOUSTON TX 78234-5064

Be sure your social security number is on all correspondence sent to the Academy of Health Sciences.

CLARIFICATION OF TERMINOLOGY

When used in this publication, words such as "he," "him," "his," and "men" 'are intended to include both the masculine and feminine genders, unless specifically stated otherwise or when obvious in context.

USE OF PROPRIETARY NAMES

The initial letters of the names of some products may be capitalized in this subcourse. Such names are proprietary names, that is, brand names or trademarks. Proprietary names have been used in this subcourse only to make it a more effective learning aid. The use of any name, proprietary or otherwise, should not be interpreted as endorsement, deprecation, or criticism of a product; nor should such use be considered to interpret the validity of proprietary rights in a name, whether it is registered or not.

TABLE OF CONTENTS

CORRESPONDENCE COURSE OF

THE U.S. ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL

SUBCOURSE MD0812

TOPICS IN PHARMACY ADMINISTRATION

INTRODUCTION

Persons who are familiar with the daily operation of a pharmacy know that administrative tasks are a necessary part of life in the pharmacy. Competent and knowledgeable persons make these tasks appear simple and easy.

This subcourse will focus on three administrative areas performed by the pharmacy specialist in the Army pharmacy. Topics such as pharmaceutical jurisprudence, security in the pharmacy, and work count in the pharmacy are presented in this subcourse. It is the goal of this subcourse to give you a brief overview of pharmacy administration to which you might begin self-directed learning efforts to expand your skills and knowledge in this vital area.

Subcourse Components:

The subcourse instructional material consists of the following:

Lesson 1, Pharmaceutical Jurisprudence.
Lesson 2, Security in the Pharmacy.
Lesson 3, Work Count in the Pharmacy.

Study Suggestions:

Here are some suggestions that may be helpful to you in completing this subcourse:

--Read and study each lesson carefully.
--Complete the subcourse lesson by lesson. After completing each lesson, work the exercises at the end of the lesson, marking your answers in this booklet.

--After completing each set of lesson exercises, compare your answers with those on the solution sheet that follows the exercises. If you have answered an exercise incorrectly, check the reference cited after the answer on the solution sheet to determine why your response was not the correct one.

Credit Awarded:

To receive credit hours, you must be officially enrolled and complete an examination furnished by the Nonresident Instruction Branch at Fort Sam Houston, Texas. Upon successful completion of the examination for this subcourse, you will be awarded 3 credit hours.

You can enroll by going to the web site http://atrrs.army.mil and enrolling under "Self Development" (School Code 555).

A listing of correspondence courses and subcourses available through the Nonresident Instruction Section is found in Chapter 4 of DA Pamphlet 350-59, Army Correspondence Course Program Catalog. The DA PAM is available at the following website: http://www.usapa.army.mil/pdffiles/p350-59.pdf.

LESSON ASSIGNMENT

LESSON 1 Pharmaceutical Jurisprudence.

TEXT ASSIGNMENT Paragraphs 1-1 through 1-14.

LESSON OBJECTIVES After completing this lesson, you should be able to:

1-1. Given a group of definitions and one of the following terms: “over-the-counter drug” or “legend drug,” select the correct definition of the given term.

1-2. Given a list, select the schedules of controlled substances as stated in the Controlled Substances Act.

1-3. Given the name of a controlled substance and a list of the schedules from the Controlled Substances Act, select the schedule to which that substance belongs.

1-4. Given a group of statements, select the statement which best applies to the Poison Prevention Packaging Act of 1970.

1-5. Given a group of statements, select the purpose of the Poison Prevention Packaging Act of 1970.

1-6. Given a group of methods, select the method(s) by which a patient can obtain the traditional easy-to-open package for medications.

SUGGESTION After completing the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.

LESSON 1

PHARMACEUTICAL JURISPRUDENCE

Section I. THE FOOD, DRUG, AND COSMETIC ACT OF 1938

1-1. INTRODUCTION

The original Food, Drug, and Cosmetic Act was passed in 1906 and served to protect the public from unethical practices of irresponsible drug manufacturers. In 1938, this Act was revised to expand its coverage. Although this Act was passed in 1938, some elements of it should be very familiar to you. Furthermore, the Act still has great impact upon the practice of pharmacy.

1-2. SECTIONS OF THE FOOD, DRUG, AND COSMETIC ACT OF 1938

a. **Section I.** The first major section of the Act pertains to adulterations of drug products. Adulterating a product refers to changing the quality of a product by adding or taking away ingredients. Hence, this section focuses on the quality of products. A product is considered to be adulterated if any one of the following situations occurs:

(1) A decomposed substance is present in the product.

(2) The product is listed in an official reference (for example, USP/NF) as a specific strength (concentration), but an analysis of the product shows that its strength is not equal to the required strength.

(3) The item has been packaged under unsanitary conditions.

b. **Section II.** The second section of the Act concerns misbranding or errors in labeling, examples of misbranding are:

(1) Labels that contain false or misleading information. For example, some products might be labeled as “cure-alls” for every disease. this is illegal.

(2) Labels that lack required information. For example, a label must contain certain types of information like the manufacturer’s name and address, the name and strength of the drug, and the amount or quality of the drug in the container.

(3) Labels on habit-forming. Labels on habit-forming drugs that are not clearly marked as habit-forming.

c. **Section III.** The third section pertains to new drugs. Before a new drug is marketed, it must be tested, proven safe, and approved by the Food and Drug Administration (FDA).

1-3. ENFORCEMENT OF THE FOOD, DRUG, AND COSMETIC ACT

The Food and Drug Administration is the Government agency responsible for enforcing the Food, Drug, and Cosmetic Act. The FDA employees perform a wide variety of duties to ensure that the foods, drugs, and cosmetics we use are safe and meet prescribed standards. When those standards of purity and safety are violated, FDA officials have the authority to seize products to protect our lives and health. It is not the intent of this subcourse to discuss in detail the FDA or its functions. However, if you have a specific interest in the FDA, you should examine the FDA Consumer, a journal of the organization.

Section II. THE DURHAM-HUMPHREY AMENDMENT

1-4. INTRODUCTION

The Durham-Humphrey Amendment to the Food, Drug, and Cosmetic Act was passed in 1952. The purpose of this amendment was to divide drugs into two basic categories: legend drugs and over-the-counter drugs.

1-5. CATEGORIES OF DRUGS UNDER THE DURHAM-HUMPHREY AMENDMENT

a. **Legend Drugs.** Legend drugs can only be legally obtained by prescription. Legend drugs are those drugs that are not considered safe for use without direct medical supervision (for example, prescribed by a physician). It is against the law to give legend drugs to persons who do not have a valid prescription. Legend drugs must have the following statement printed on their labels: “Caution:Federal law prohibits dispensing without a prescription.”

b. **Over-the-Counter Drugs.** Over-the-counter (OTC) drugs can be legally obtained without a prescription. Generally, OTC drugs are considered safe for use without direct medical supervision. You should remember some important facts about OTC drugs. One, OTC medications are drugs, care should be taken when the drugs are being used. Two, patients should read and follow the label directions for both legend and over-the-counter drugs. Three, patients should inform their health-care providers (for example, physicians and physicians’ assistants) of the OTC and legend drugs they are taking.

Section III. THE HARRIS-KEFAUVER AMENDMENT

1-6. INTRODUCTION

The Harris-Kefauver Amendment was added to the Food, Drug, and Cosmetic Act in 1962. Although, the provisions of this amendment are probably not as well known as the Durham-Humphrey Amendment, the Harris-Kefauver Amendment is still important in the area of pharmacy.

1-7. PROVISIONS OF THE HARRIS-KEFAUVER AMENDMENT

The most important provisions of the Harris-Kefauver Amendment as applied to pharmacy practice are:

a. A drug item must be proven safe and effective before it can be sold.

b. Drug manufacturers must register on an annual (yearly) basis with the Food and Drug Administration (FDA). In addition, these manufacturers must be inspected once every two years.

c. The generic name of the item must be written on the item's label and the generic name must be used in the advertising for the item.

NOTE: The Harris-Kefauver Amendment also has provisions that govern the reporting of adverse drug reactions and the testing of investigational drugs. In the Army, adverse drug reactions are reported following the guidelines of AR 40-2. An investigational drug is a new drug that has not yet been approved by the FDA for general use by the public as a safe and effective drug. No investigational drug will be used without the prior written approval of the Surgeon General. See AR 40-7 (Use of Investigational Drugs in Humans) for specific information about investigational drugs.

Section IV. THE CONTROLLED SUBSTANCES ACT

1-8. HISTORY OF CONTROL OF NARCOTIC SUBSTANCES

a. Controlled substances are legend drugs that have special rules and regulations governing and controlling their use. This has not always been the case. At one time, these substances were easy to obtain. Even in the late 1800s, opiates (derivatives of opium) could be purchased without a prescription in general stores and pharmacies. Opiates could also be ordered by mail. Furthermore, various patent medicines (for example, "Grandma's Tonic") containing opiates could be purchased without a prescription.

b. The Harrison Narcotic Act was passed in 1914 so these types of medications could be better controlled. This Act established specific guidelines for the buying, selling, dispensing, and storing of certain drugs. Drugs covered in this Act were divided into four classes depending upon their abuse potential. These classes were designated as "A, B, M, and X." Class "A" narcotics were considered to be the most dangerous. Interestingly, this Act classified cocaine as a narcotic, although cocaine is not a narcotic substance. As you might suppose, the passage of this Act did not stop the abuse of these substances.

c. Many drugs with high potential for abuse were placed on the market after the Harrison Narcotic Act of 1914. Soon it became obvious that these drugs needed tighter control because of their likelihood of abuse. The Drug Abuse Control Amendment (DACA) was approved in 1965 as an amendment to the Food, Drug, and Cosmetic Act. The primary purpose of the DACA was to identify and regulate the prescribing of drugs that had a high abuse potential (for example, amphetamines and barbiturates).

1-9. PURPOSE OF THE CONTROLLED SUBSTANCES ACT

Before 1970, many laws existed that pertained to the control of drugs. Eventually it became necessary to combine and simplify these laws. Such a simplification became one of the purposes of the Controlled Substances Act of 1970. In addition, the Act transferred enforcement of all laws regulating controlled substances from the Internal Revenue Service (IRS) and the FDA to a new agency, the Drug Enforcement Administration (DEA) which is a part of the Justice Department. The Controlled Substances Act was Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970. The Controlled Substances Act divided abusable drugs into five schedules.

1-10. THE FIVE SCHEDULES OF THE CONTROLLED SUBSTANCES ACT

The drugs specifically covered in the Controlled Substances Act are classified into five schedules according to their abuse potential. These schedules replace the classes of drugs mentioned in paragraph l-8b.

a. **Schedule I Substances.** Drugs in this schedule have no accepted medical use in the United States. Some examples of drugs in this schedule are heroin, marijuana, LSD, peyote, and mescaline psilocybin.

b. **Schedule II Substances.** Drugs in this schedule have a high abuse potential with severe psychic or physical dependence liability. This schedule includes both narcotic and nonnarcotic substances. Some examples of Schedule II substances are cocaine hydrochloride, dextroamphetamine, meperidine hydrochloride, morphine, pentobarbital, secobarbital, methylphenidate, and oxycodone hydrochloride.

NOTE: In the Army, ethyl alcohol, and alcoholic liquors (including wine and beer), although they are not included in any schedule of the Controlled Substances Act, will be received, accounted for, and dispensed in the same manner as Schedule II substances.

c. **Schedule III Substances.** Drugs in this schedule have an abuse potential less than in Schedules I and II. Examples of Schedule III substances are thiopental sodium and paregoric.

d. **Schedule IV Substances.** Drugs in this category have an abuse potential less than the drugs listed in Schedule III. Some examples of drugs in this schedule are chlordiazepoxide, propoxyphene napsalate, flurazepam, diazepam, meprobamate, clonazepam, and phenobarbital.

e. **Schedule V Substances.** Drugs in this schedule have an abuse potential less than the drugs listed in Schedule IV. Some examples of drugs in this schedule are diphenoxylate tablets and elixir of terpin hydrate with codeine.

NOTE: In Army pharmacies, these controlled substances are placed into one of two categories, Note Q or Note R controlled substances, to identify specific storage and handling requirements as outlined in the Federal Supply Catalogs.

(1) Note Q substances are those items classified as Schedules III, IV, or V in the Act.

(2) Note R substances are alcohol, alcoholic beverages, precious metals, and drugs classified as Schedule II substances in the Act.

Section V. THE POISON PREVENTION PACKAGING ACT OF 1970

1-11. INTRODUCTION

Some patients complain about the “child-resistant” prescription containers they receive in the pharmacy. These people say that the containers are too difficult to open. How did this “child-resistant” packaging come about? What was the impact of this Act on the outpatient pharmacy? This section will explore these questions.

1-12. THE POISON PREVENTION PACKAGING ACT OF 1970

The purpose of the Poison Prevention Packaging Act of 1970 was to reduce poisonings among small children. The Act provides that certain household products (such as aspirin and certain other drugs, including oral prescription drugs, furniture polish, oil of wintergreen, antifreeze, some cleaners for drains and ovens, turpentine, and cigarette lighter fluid) which are found to be hazardous or potentially hazardous, must be sold or dispensed in safety packages.

1-13. THE REQUIREMENTS OF THE POISON PREVENTION PACKAGING ACT OF 1970

a. The Act requires the previously mentioned products to be packaged in containers which are sufficiently difficult to open so that they cannot be opened by 80 percent of children under five years of age. However, the containers must allow at least 90 percent of adults to open and properly close the packaging conveniently.

b. The Act requires that the prescription filled in the pharmacy, with the exceptions noted in paragraph 1-14 below, be dispensed in child-resistant containers. The requirements below are especially important:

(1) Prescriptions that are not to be refilled. For a prescription that is not to be refilled, the medication must be dispensed in either a glass or a plastic container with a child-resistant top.

(2) Prescriptions that are to be refilled. For a prescription that is to be refilled, the medication must be dispensed in either a glass or a plastic container with a child-resistant top. If the medication is dispensed in a glass container, a new child-resistant top must be placed on the container whenever the prescription is refilled. If the medication is dispensed in a plastic container, upon refilling, the medication must be placed in a new container with a new child-resistant top. This means that a new label must be prepared for the refill.

c. The law does not require that the packaging be so difficult to open that all children are prevented from gaining access to the contents. If this were true, very few adults could open the package. Therefore, the packaging seen in the pharmacy is a compromise, it must be too difficult for most children to open and it must be easy enough for most adults to open.

1-14. EXCEPTIONS TO THE ACT

Some patients (for example, those with arthritis) may find child-resistant packages too difficult to open. Furthermore, some patients (for example, those with certain types of heart conditions) must obtain their medications in a hurry when they need them. For these types of patients, alternatives to child-resistant packaging are available.

a. **Nitroglycerin.** Nitroglycerin must NOT be dispensed in child-resistant packaging. This drug is for patients who have certain types of heart conditions that require them to obtain their nitroglycerin quickly.

b. **Alternative Packaging.** For over-the-counter medications, the manufacturer can market one size of a product in conventional packaging if the same product is also available in child-resistant packaging. However, the conventional packaging must have a label that clearly states: **"This Package for Households Without Young Children" or "Package Not Child-Resistant."**

c. **Patient or Physician Request.** The prescribing physician or patient may request that prescription medicines be put into ordinary packaging without safety features. Although some pharmacists may ask for a written statement from a patient before providing a conventional closure, this is not a requirement of the Federal law.

Continue with Exercises

EXERCISES, LESSON 1

INSTRUCTIONS: Answer the following exercises by marking the lettered response that best answers the question or best completes the incomplete statement or by writing the answer in the space provided.

After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

1. From the statements below, select the statement that best applies to the Food, Drug, and Cosmetic Act of 1938.

   a. An act that divides drugs into three major categories.

   b. An act that establishes procedures for the adulteration of drugs.

   c. An act that places certain drugs in a controlled status.

   d. An act that pertains to the adulteration of drug products, the misbranding of drugs, and the marketing of new drugs.

2. Select the statement that best applies to the Durham-Humphrey Amendment to the Food, Drug, and Cosmetic Act.

   a. The Durham-Humphrey Amendment divided drugs into five controlled schedules.

   b. The Durham-Humphrey Amendment divided drugs into two basic categories.

   c. The Durham-Humphrey Amendment divided legend drugs into two categories.

   d. The Durham-Humphrey Amendment made it virtually impossible for a person to illegally obtain controlled drugs.

3. Select the statement that best applies to the Harris-Kefauver Amendment to the 1938 Food, Drug, and Cosmetic Act.

   a. This amendment requires that a drug be proven safe and effective before it can be sold.

   b. This amendment requires drug manufacturers to register every five years with the FDA.

   c. This amendment requires that the trade name of a drug appear on its container label.

   d. This amendment divided controlled drugs into five categories.

4. Select the schedules of controlled substances defined in the Controlled Substances Act.

   a. Note Q and Note R.

   b. Codes 3 and 4.

   c. Schedules I, II, III, IV, and V.

   d. Narcotics and non-narcotics.

5. Select the schedule of controlled drugs to which secobarbital sodium capsules are categorized.

   a. Schedule I.

   b. Schedule II.

   c. Schedule III.

   d. Schedule IV.

Check Your Answers on Next Page

SOLUTIONS TO EXERCISES, LESSON 1

1. d (paras 1-2 a, b, c)
2. b (para 1-4)
3. a (para 1-7a)
4. c (para 1-10)
5. b (para 1-10b)

End of Lesson 1

LESSON ASSIGNMENT

LESSON 2 Security in the Pharmacy.

TEXT ASSIGNMENT Paragraphs 2-1 through 2-18.

LESSON OBJECTIVES After completing this lesson, you should be able to:

2-1. Given a list of titles of individuals, select the individual responsible for taking the measures necessary for the safeguarding of controlled substances.

2-2. Given a list of criteria, select the criterion! criteria used to screen individuals for work in and/or around a controlled substance area.

2-3. From a list of time periods, select the time period for a required physical security inspection.

2-4. Given a list of storage sites, select the appropriate storage site for Note R or Note Q items.

2-5. Given a list of definitions, select the definition of the term "controlled access area" or "limited access area."

2-6. From a list of types of facilities, select the type(s) of facility/facilities required to have an Intrusion Detection System.

2-7. Given a list of storage sites, select the site to be used to store controlled substances when the security of a TO&E unit storage area is judged inadequate.

2-8. From a list of definitions, select the definition of the term “forgery.”

2-9. Given a description of a situation that involves a possible forgery of a prescription and a list of indicators, select the indicator(s) of a possible forged prescription.

2-10. Given a suspected forgery situation and a list of numbered actions, select the best sequence of actions that should be taken to apprehend the suspected forger.

2-11. Given a prepared OD Form 1289, Prescription Form, and a signature card, determine whether or not the prescription should be suspected as a forgery as evaluated by the criteria set forth in this subcourse.

SUGGESTION

After completing the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.

LESSON 2

SECURITY IN THE PHARMACY

Section I. INTRODUCTION TO PHARMACY SECURITY

2-1. INTRODUCTION

What does the term security mean? The term security is defined as the safeguarding of materials from danger or risk. Who is responsible for security in the pharmacy? The answer is you. This lesson will describe how pharmacy design can help make the pharmacy secure, but in the final analysis, the best-designed pharmacy cannot be considered secure if you are careless.

2-2. TOPICS DISCUSSED IN THIS LESSON

You have just heard that a new clinic is being planned for a troop area. Headquarters has given you the responsibility of submitting suggestions on the design of the clinic pharmacy. You have many ideas on just how the new pharmacy should be designed. However, wait! What design concepts must be incorporated into the new building for the storage of controlled substances? Where is such information to be found? What requirements are common to both fixed facilities and table of organization and equipment (TO&E) type pharmacies? How can the problem of prescription forgeries be best solved? These questions will be addressed in this lesson.

Section II. SECURITY IN THE FIXED FACILITY PHARMACY

2-3. RESPONSIBILITY FOR SECURITY IN THE ARMY PHARMACY (AR 190-50, PHYSICAL SECURITY FOR THE STORAGE OF CONTROLLED MEDICAL SUBSTANCES)

a. Commanders and individuals that are assigned custody of controlled medical substances are responsible for taking the necessary measures to safeguard these items. These measures should include, but not be limited to:

(1) Ensuring that physical security responsibilities are assigned to individuals who receive, store, issue, transport, use, dispose, turn-in, and account for controlled medical substances.

(2) Providing specific security instructions to individuals who are in the possession and control of, or who are responsible for, controlled medical substances and sensitive items.

(3) Ensuring the careful selection of personnel, including volunteer workers, who are assigned duties that require access to controlled medical substances and sensitive item storage areas, or who have custodianship or possession of keys and combinations to locks securing these areas. These people should be selected on the basis of such characteristics as moral background, prior military service history, maturity, and trustworthiness. Before these people assume duties that involve working around controlled substances, they should have satisfactorily undergone a local file check with area provost marshals, local civilian police, and other agencies that might have information on file that would reflect on the honesty or stability of the persons. Furthermore, these persons should be personally interviewed by their immediate supervisors. The purpose of the interview is to appraise the individual and provide a first-hand assessment of the person's character, judgment, reliability, attitude, emotional or mental maturity, and sense of responsibility. DA Pamphlet 611-1, The Army Interview, may be used as a guide for conducting the interview. Persons who demonstrate financial irresponsibility will be excluded from working with or around controlled substances.

b. Individuals who have responsibility for the custody of non-dispensed controlled medical substances and medically sensitive items are responsible for the security of such property while it is in their possession. If it becomes necessary for people (for example, maintenance personnel or other authorized visitors) to be present or pass through controlled item storage areas on a temporary basis, the commander or his representative will designate appropriate escort personnel, by name or duty position, to provide effective surveillance of authorized visitors.

c. A physical security officer, appointed by the medical facility commander, will ensure that applicable protection is provided for all controlled medical substances and sensitive items.

d. Medical facility commanders have the responsibility for ensuring that a physical security inspection is conducted in accordance with the provisions of AR 190-13 at least every 12 months. In addition, they may request the United States Army Criminal Investigation Division (USACID) to conduct crime prevention surveys for the purpose of detecting crime, evaluating the possibilities of easy criminal activity, and identifying procedures conducive to criminal activity.

2-4. PHARMACY DESIGN CONSIDERATIONS

It is important that the pharmacy be designed in such a way that thefts of controlled substances will be discouraged or prevented. The design characteristics described below can discourage a thief, slow his entry into the area, or prevent his entry into the pharmacy.

a. **Controlled Access Area.** A controlled access area is a storage area to which access is limited to specifically designated individuals.

b. **Security Containers.** Safe, a GSA Class 5 Map and Plans Security Container, Class G Security Filing Cabinet, refrigerator, or freezer, secured with an approved locking device and weighing 750 pounds or more or secured to the structure to prevent removal, may be used to store small quantities of controlled medical substances.

c. **Vault.** A vault is a structure which has the walls, floor, and ceiling constructed of at least eight inches of reinforced concrete, reinforced vertically and horizontally on each face with 1/2-inch diameter reinforcing bars placed nine inches on center. Also acceptable, but less satisfactory, are either 8-inch-thick concrete block walls with 1/2-inch diameter reinforcing bars placed in block cells at 8 inches on center and filled with grout or mortar, or 8-inch-thick walls composed of brick interlocked between inner and outer course. The vault, if required to remain open for frequent access, must be equipped with a self-closing and self-locking “day gate” or its equivalent. If the vault is required to be opened only infrequently, and if it is to be relocked immediately after use, such as during removal of raw material in the morning and when the raw material is returned at night, a “day gate” is not required.

2-5. THE DESIGN OF THE PHARMACY

a. The room or building which composes the pharmacy should have walls constructed of masonry or similar type material, extending from the floor to the ceiling, with reinforced concrete ceiling and floor. If this is not feasible, the structure should be constructed of wood and made as sound as possible. The interior will have the walls, floor, and ceiling lined with 1-inch-thick lumber or 1/2-inch plywood with steel mesh affixed, and with smooth headed bolts or rivets penned on the inside to prevent removal from the outside. Prefabricated cages, such as OCE Standard Drawing 40-21-01, can be used to reinforce storage facilities as an inner liner to help delay forced entry.

b. The number of windows will be limited to the essential minimum, and all windows will be blocked when possible. The remaining windows will be protected with steel mesh or bars or secured to a steel channel frame and fastened to the building by smooth headed bolts, or embedded into the structure itself to prevent expeditious forcible entry. If bars are used, the vertical bars will not be more than four inches apart, with horizontal bars welded to the vertical bars and spaced so that openings do not exceed 32 square inches. The ends of bars will be embedded securely in the masonry of the wall or welded to a steel frame, which is fastened securely to the window casing by bolts through the structure and spot-welded on the inside to prevent removal. Facilities equipped with steel bars will meet the requirements of steel mesh. Number 6-gauge steel mesh with a 2-inch diamond grid may be used in areas where high carbon-manganese-steel-mesh cannot be obtained. If window air conditioning is used, the bar or mesh network will completely enclose the air conditioning unit protruding from the building or storage room exterior. If a window air conditioning unit is mounted through the wall, necessary measures will be taken to ensure that it cannot be removed from the outside.

c. The pharmacy structure (walls, floor, and ceiling) will have the minimum essential openings (doors, vents, ducts, issue counter or windows, and other openings). The pharmacy will have steel mesh or steel bars permanently affixed on all first floor windows providing access to the exterior and on windows opening onto balconies, porches, or roofs. Doors will be constructed of at least solid wood 1 3/4 inches thick with security-type hinges or hinge pins spot-welded to prevent removal. Dispensing windows will be secured with steel mesh, steel bars, or the equivalent during non-operating hours. In new constructions, walls will extend from the pharmacy floor to the underside of the structural slab above. For existing facilities, provisions must be made to prevent access into the pharmacy through the ceiling.

2-6. STORAGE OF NOTE R ITEMS

Items identified as Note R will be stored in an approved safe or vault secured with a Class 6 vault door and will be provided controlled access area protection.

2-7. STORAGE OF NOTE Q ITEMS

Items identified as Note Q may be stored in an approved safe. As a minimum, Note Q items will be stored in a locked metal container if stored in a facility conforming to the minimum requirements in paragraph 2-5b, or in locked cells of automatic counting machines.

2-8. PHYSICAL SECURITY MEASURES AND CONTROL PROCEDURES

The following are minimum standards and controls considered necessary to ensure that positive security is provided for pharmacies:

a. All pharmacy storage areas will be designated as controlled access areas.

b. A pharmacy should have a limited access area. A limited access area is a place limited to staff members involved in patient care or medically related logistical operations, and that is not open or readily accessible to others. When operationally feasible, containers of Note R and Note Q items will be positioned where their locations are not visible to the public during operating hours.

c. Within reasonable limits, containers will be locked when access is not required for operational use. Lock and key control, security procedures prescribed in paragraph 2-9 are applicable and will be followed in pharmacy operations.

d. Pharmacies and their storage areas will be provided with both interior and exterior lighting of sufficient intensity to enable visual surveillance by security forces, duty officers, or other designated persons. Normally, security checks should be at times other than when the pharmacy is open for business or when it is occupied. Particular attention will be directed to doors, windows, and other possible points of entry. All entrance doors will be locked at all times other than duty hours. All instances of suspected theft, loss, illegal entry, open or unlocked facilities or containers, and other incidents of a suspicious origin will be reported immediately to military police and designated authorities. Surveillance will be maintained until responding personnel arrive at the scene.

e. Theft, loss, recovery, or mismanagement of controlled medical substances and other medically sensitive items will be reported in accordance with the provisions of AR 190-40.

f. Intrusion detection systems (IDS) will be provided for all medical center (MEDCEN) and medical department activity (MEDDAC) pharmacies.

(1) These systems are capable of detecting and reporting directly to an alarm monitoring station. These systems can usually detect:

(a) Attempts of unauthorized entry through windows and doors.

(b) Attempts to forcibly penetrate walls, ceilings, or floors by battering, sawing, cutting, burn-barring, torching, or other means.

(c) Intruder's motions within the protected area.

(d) Attempts to touch or tamper with metal safes, cabinets, or other items containing controlled medical substances.

(2) The intrusion detection systems, at a minimum, will be provided at least two types of sensors to meet minimum requirements for a storage area, a means of the alarm's sounding at a supporting police agency from which an armed response force can be immediately dispatched, and electrically supervised circuitry between the two. If the substances are entirely within a container, the container itself may be protected by a capacitance detector instead of a balanced magnetic switch on the door. When construction is not of the quality described in paragraph 2-4, considerations should be given to installing more sophisticated IDS devices, such as vibration detectors or volumetric motion detectors. A SOP for the activation, deactivation, and daily testing of the IDS, including instructions for maintaining an accurate IDS log, will be initiated.

g. A duress switch or holdup button must be provided in a hidden location to permit pharmacy personnel to notify the supporting police agency from which an armed force can be dispatched. Coordination will be made with the installation police to schedule a quarterly test of the system. This test must be performed quarterly at intervals not to exceed 90 days.

2-9. LOCK AND KEY CONTROL IN THE PHARMACY

a. It is the responsibility of the commander to establish procedures for the strict protection of locks and keys to facilities, vaults, and containers where controlled medical substances are stored.

b. Keys and combinations will only be accessible to or known by individuals whose official duties require access to them.

c. Current rosters of the names of individuals authorized access to keys will be maintained. DD Form 727 (Classified Container Information), will be used and posted near all combination locks used. The statement: "THIS DOES NOT CONTAIN CLASSIFIED MATERIAL" must be added in bold letters at the bottom of the form.

d. Locks or combinations will be changed when loss or compromise is suspected, every 12 months, and when personnel having access depart.

e. DA Form 672 (Safe or Cabinet Security Record), will be used to record the times that devices are opened, locked, and checked. When the form is completely filled, it will be retained for 90 days.

f. All combination and key control records will be protected as "FOR OFFICIAL USE ONLY" information.

g. Non-issued keys to storage areas for controlled substances and sensitive items will be stored in an approved safe secured to the structure (at a location other than in the storage area).

h. All keys will be signed in and out on a key register. After duty hours, keys, including IDS keys, will be locked in a container constructed of at least 20-gauge steel or material of equivalent strength and stored away from the storage area, or in the custody of the responsible duty noncommissioned officer (NCO), or change-of-quarters. At no time must keys be left unattended or unsecured.

i. Keys to storage areas must not exceed ten (10) in number.

j. The use of a master key system is prohibited.

NOTE: FM 19-30 and AR 380-5 may be consulted for additional guidance and assistance concerning key and lock control.

2-10. CRASH CARTS AND EMERGENCY TRAYS AND SECURITY CONSIDERATIONS

a. The number of crash carts and emergency trays (essential emergency materials) that contain controlled substances must be kept to a minimum and will be provided with maximum security consistent with requirements for immediate availability.

b. Locking devices on emergency trays and crash carts hinder medical personnel from obtaining controlled medical substances and sensitive items, (for example, syringes), in an emergency. Therefore, locking devices on emergency assemblages will not be used. Appropriate sealing devices will be used to indicate that the cart or tray has undergone tampering, and to assist in inventory. Nevertheless, the contents of the tray or cart must be easily opened without the use of a key, combination, or other time-delaying device.

c. Emergency assemblages containing controlled medical substances will be sufficiently protected, but must not hamper ready and authorized visual inspection and immediate removal for use.

NOTE: The accountability and control requirements of AR 40-2 and TB MED 291 also apply to crash carts and emergency trays.

Section III. SECURITY IN THE TABLE OF ORGANIZATION AND EQUIPMENT (FIELD UNIT) PHARMACY

2-11. INTRODUCTION

As you have read, security in the fixed facility pharmacy is a real necessity. Likewise, security in the Table of Organization and Equipment (TO&E) (field unit) pharmacy is also a necessity. A great deal of emphasis was placed upon pharmacy design and construction (for example, reinforced concrete walls) in the fixed facility pharmacy. Obviously, reinforced concrete construction would be impractical in the field. How is the subject of security in the field type of pharmacy to be addressed? This section will explore the answers to this question.

2-12. SECURITY CONSIDERATIONS IN THE TABLE OF ORGANIZATION AND EQUIPMENT (FIELD UNIT) PHARMACY

a. In Table of Organization and Equipment (field units), it is very difficult to build or find a structure which meets the established specifications of the TDA fixed facility pharmacy. The fixed facility specifications must be followed as closely as the field situation allows. One important security rule is this: Ensure the pharmacy area is a limited access area.

b. Table of Organization and Equipment units are composed of sets, kits, and outfits according to the TO&E. Many of these sets, kits, and outfits contain controlled medical substances or sensitive items. Therefore, any medical assemblage (like a kit) must be stored in a manner that will provide the best security available with the understanding that must be operationally ready.

c. Where it is essential to the operational readiness of TO&E units that controlled medical items in authorized medical assemblages remain in unit possession, the unit commander will store the items (while in garrison) as prescribed in the section on fixed facility pharmacies to the maximum extent possible. A record of controlled medical items will be maintained on a DA Form 3862 (Controlled Substances Stock Record). A monthly inventory and inspection of items will be accomplished by a disinterested officer appointed by the commander.

d. In TO&E units where storage security is judged inadequate and where unit readiness would not be unduly compromised, controlled medical items authorized in medical assemblages should be stored at the first command level that has the requisite storage area, or stocked by the supporting installation medical activity. Where these items are stocked at a medical activity, they will be accounted for as mobilization reserve protectable stocks and stored in accordance with the fixed facility specifications. Plans to facilitate the issue of these items when required for mission accomplishment will be formulated and kept current.

2-13. SECURITY WHILE IN THE FIELD

a. In TO&E (field) units, some time is spent in the field or in deployed situations. How does the unit transport the controlled medical substances to the field? These controlled medical substances must be transported in compliance with appropriate provisions of AR 40-61, Medical Logistics Policies and Procedures or other appropriate Army regulations and command directives. In any event, in-transit security must be such that the spirit and intent of the security requirements are not violated, and that controlled substances are protected from unauthorized possession, use, and theft.

b. One method that has been found to work quite well is to secure the safe containing the controlled substances to the vehicle frame or other non-removable part of the vehicle, in which the safe is being transported. When the safe is in the vehicle, the vehicle must never be left unattended.

c. Each unit must establish a Standing Operating Procedure (SOP) for the storage of controlled medical substances in the field. The SOP should specify the structure to which the safe may be secured. Large trees have been found suitable for this purpose; however, trees have been known to be cut down. With the permission of the unit commander, the center poles of tents may be used. In any event, the safe must never be left unattended at any time. There should be some unit personnel who are designated to be in the area at all times. The unit may not be able to fully comply with the security requirements for a table of distribution and allowances (TDA) fixed facility pharmacy, but the spirit and intent of those requirements must be enforced.

Section IV. FORGERY CONSIDERATIONS

2-14. INTRODUCTION

Some patients will go to great lengths to secure unauthorized controlled substances or unauthorized quantities of controlled substances. The most common method used to obtain these controlled drugs is by the forgery of a prescription or by forgery of certain parts of the prescription. Forgery is a crime under the Uniform Code of Military Justice as well as a crime under Federal law.

2-15. DEFINITION OF THE TERM FORGERY

Forgery is the crime of falsely and fraudulently making or altering a document. An alteration of any part of the prescription (document) constitutes a forgery.

2-16. DETECTION OF A FORGERY

As a pharmacy specialist, you will have your first contact with the forger at the pharmacy outpatient window. How should you evaluate a prescription to determine if it is a forgery? There are some general guidelines you can follow to help you identify a forger or forged prescription.

a. **Appearance of the Patient.** To help you evaluate a person that appears at the pharmacy window with a prescription for a controlled substance, ask yourself these questions:

(1) Is the patient wearing sunglasses on a rainy day or at night? If so, this could indicate the patient is a drug abuser (for example, heroin).

(2) Is the patient wearing a long sleeved shirt on a very hot day?

(3) Is the patient abnormally nervous or disoriented?

NOTE: You should be cautious when making a judgment about a person based strictly upon the questions above. Remember, the patient may just have been released from the hospital after a very severe illness and may not look "normal."

b. **The Appearance of the Prescription.** You should carefully examine each prescription that is presented to you. In particular, you should examine each prescription for a controlled substance and ask yourself these questions:

(1) Does the handwriting and signature on the prescription match that of the prescriber's signature on file in the pharmacy?

(2) Does the prescription reflect the correct rank and social security account number of the prescriber?

(3) Do the directions to the patient correspond to the class of drug for which the prescription is written? For example, a physician probably would not provide the patient with the following directions for secobarbital: "Take 2 capsules 4 times daily as needed for pain."

(4) Does the quantity and drug prescribed correspond to the clinic or ward at which the prescription was written? For example, you would probably not expect a dentist to prescribe Dexedrine tablets or a large quantity of a potent narcotic analgesic.

(5) Does the quantity written on the prescription look as if it has been changed? For example, are some numbers written in blue ink while others are written in black ink? Remember, a line can be added to a quantity of 10 changing it to 40. In addition, does it look as if a zero has been added? For example, was a prescription originally written for 10 tablets changed by the forger to read 100 tablets? It is recommended that on prescriptions for controlled substances the amount prescribed should be shown in both numerals and spelled out in words, that is, #40 (forty), #10 (ten).

(6) Does the refill information fit the use of the drug? Remember, Note R items cannot be refilled. Again, all the above are indicators that a forgery may have taken place.

2-17. AUTHENTICATION OF THE PRESCRIPTION

Suppose you think you have been handed a forged prescription. What do you do? Remember, the prescription may be legitimate. Upon the receipt of a prescription you think is forged, you should immediately give the prescription to the pharmacy officer (or unit commander in a TO&E unit). The pharmacy officer will contact the prescriber and verify whether the prescription is valid. If the prescriber indicates that the prescription is valid, you should make a notation on the back of the prescription form and fill the prescription as you normally would. If the prescriber indicates that he did not write the prescription in question, then a forgery has occurred.

2-18. APPREHENSION OF A SUSPECTED FORGER

You are handed what you suspect to be a forged prescription for a controlled substance. You should not attempt to capture the suspected forger yourself. Instead, the pharmacy officer (or unit commander of a TO&E unit) will notify the local law enforcement authorities (Military Police Support in a TO&E unit). Your role will be to delay the suspected forger. Ensure that the suspected forger does not know that the authorities have been notified. When the military police arrive, the pharmacy officer (unit commander in the TO&E unit) will brief them on the situation. This should be done in an area away from the pharmacy. When the military police are ready to apprehend the suspected forger, you will issue the medication to him as they observe. You should ensure that you check the identification card of the suspected forger to establish ownership of the prescription. Then, issue the medication to the suspected forger as you would to any patient. As soon as the suspected forger has possession of the medication, the military police will arrest him. The military police will require the original prescription for evidence. Copy the prescription on a copy machine or hand-write a copy of the prescription for the controlled substance prescription file. You should hand-receipt the original prescription to the military police on a DD Form 1150 (Request for Issue or Turn-In). The military police will require a statement from all personnel who had any contact with the incident. You should write a Memorandum for Record (MFR) for the pharmacy operational file that explains what happened. This MFR will be used at a future time if questions about the situation arise.

Continue with Exercises

EXERCISES, LESSON 2

INSTRUCTIONS: Answer the following exercises by marking the lettered response that best answers the question or best completes the incomplete statement or by writing the answer in the space provided.

After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

1. Who is the individual responsible for taking the measures necessary for the safeguarding of controlled substances?

   a. Chief, Pharmacy Service.

   b. Hospital Commander.

   c. NCOIC, Pharmacy Service.

   d. Chief, Logistics Division.

2. Which of the following are required to have an Intrusion Detection System?

   a. Medical Center (MEDCEN) pharmacies.

   b. Medical Department Activity (MEDDAC) pharmacies.

   c. TO&E Unit pharmacies.

   d. All the above.

   e. a and b only.

   f. a and c only.

3. Select the definition of the term forgery.

   a. Adding any information to a physician's order for a drug.

   b. Signing your name on a physician's order for a drug.

   c. Falsely and fraudulently making or altering a document.

   d. Falsely writing on any form used in the pharmacy.

4. While working at the outpatient window, a patient, who has his mouth packed with red-colored gauze, presents you with a prescription for a controlled substance that is sometimes prescribed by dentists following a tooth extraction. The patient is wearing a long-sleeved shirt, although it is 101°F outside. What might lead you to suspect the patient is giving you a forged prescription?

   a. The patient is wearing a long-sleeved shirt in hot weather.

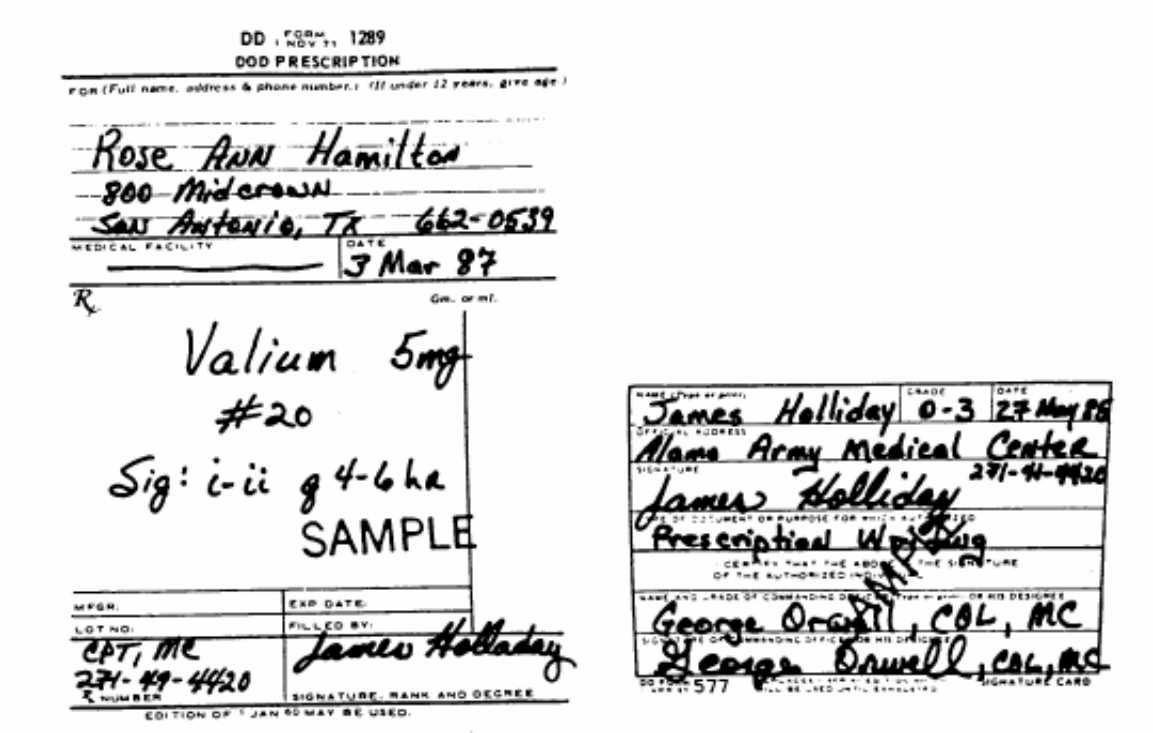
   b. The patient's prescription is for a controlled substance.

   c. The patient's mouth is filled with red-colored gauze.

   d. a and b.

   e. b and c.

   f. a, b, and c.



DD FORM 1289
DOD PRESCRIPTION

FOR (Full name, address & phone number.) (If under 12 years, give age.)

Rose Ann Hamilton
800 Midcrown
San Antonio, TX 662-0539

MEDICAL FACILITY

DATE
3 Mar 87

R

Gm. or ml.

Valium 5mg
#20
Sig: i-ii q 4-6 hs
SAMPLE

MFGR.
LOT NO:
EXP DATE:
FILLED BY:
CPT, MC
271-49-4420
R NUMBER
James Holladay
SIGNATURE, RANK AND DEGREE

EDITION OF 1 JAN 60 MAY BE USED.

NAME (Type or print) James Holliday
GRADE O-3
DATE 27 May 85
OFFICIAL ADDRESS Alamo Army Medical Center
271-41-4420
SIGNATURE James Holliday
TYPE OF DOCUMENT OR PURPOSE FOR WHICH AUTHORIZED Prescriptions Writing
CERTIFY THAT THE ABOVE IS THE SIGNATURE OF THE AUTHORIZED INDIVIDUAL
NAME AND GRADE OF COMMANDING OFFICER (Typed or printed) OR HIS DESIGNEE George Orwell, COL, MC
SIGNATURE OF COMMANDING OFFICER OR HIS DESIGNEE George Orwell, COL, MC
DD FORM 577
SIGNATURE CARD

5. You are presented with the prescription and signature card shown above. Should you suspect this prescription of being forged?

   a. Yes.

   b. No.

Check Your Answers on Next Page

SOLUTIONS TO EXERCISES, LESSON 2

1. b (para 2-3)
2. e (para 2-8f)
3. c (para 2-15)
4. a (para 2-16)
5. a (para 2-16)

End of Lesson 2

LESSON ASSIGNMENT

LESSON 3	Work Count in the Pharmacy.
TEXT ASSIGNMENT	Paragraphs 3-1 through 3-11.
LESSON OBJECTIVES	After completing this lesson, you should be able to:

3-1. Given a group of statements, select the statement that best describes the purpose of the Uniform Chart of Accounts (UCA) as applied DOD wide.

3-2. Given a group of statements, select the statement that best describes the purpose of the UCA as applied to the pharmacy service.

3-3. Given a completed prescription, calculate and select the work count for that prescription as established in HSC Pamphlet 40-5.

3-4. Given a completed DA Form 3875 (Bulk Drug Order) from an outpatient clinic or Troop Medical Clinic (TMC), calculate and select the work count for that DA Form 3875 as established in HSC Pamphlet 40-5.

3-5. Given a completed DA Form 3875, DD Form 1289, or pharmacy sterile products order from a ward, calculate and select the work count for that particular form as established in HSC Pamphlet 40-5.

3-6. Given a completed unit dose order, calculate and select the work count for that unit dose order as established in HSC Pamphlet 40-5.

3-7. Given a ward controlled substances order, calculate and select the UCA work count for that controlled substance order.

SUGGESTION After completing the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.

LESSON 3

WORK COUNT IN THE PHARMACY

Section I. OVERVIEW OF THE CONCEPT OF WORK COUNT

3-1. INTRODUCTION

The Army requires the pharmacy to maintain a record of the work it performs. This "work count" affects staffing and budgeting of money for the pharmacy. Therefore, it is important that the work count accurately reflects the work performed by the pharmacy. The work count concept and how the work count is calculated will be considered in this lesson.

3-2. THE WORK LOAD REPORT

The workload report is submitted to the Patient Administration Division (PAD) and may be reported to the Force Development Office and Comptroller. Until recently, the workload was reported using the guidelines established in AR 40-418, Medical Statistical Reporting. However, recent changes have been made in workload reporting. The reporting system now used is referred to as the Uniform Chart of Accounts (UCA).

3-3. OVERVIEW OF THE UNIFORM CHART OF ACCOUNTS

a. The UCA is a workload reporting system recently established by the Department of Defense. This system is the basis for establishing a uniform reporting methodology. This lesson will address consistent financial and operating performance data to assist managers who are responsible for health care delivery in the military fixed facility medical system.

b. The purpose of UCA is to determine the total cost of the pharmacy operation to include labor, supply, training, and overhead and to distribute that total cost to those UCA work centers (customers) served by the pharmacy. Additionally, the unit cost data obtained reflects the total cost of the pharmacy operations to include military pay, depreciation, and support.

c. Pharmacy financial operations significantly affect the health care facility budgetary process. The UCA, through its reporting methodology, effectively reflects the pharmacy contribution to the overall management system. This contribution makes it imperative that data reported are accurate and uniform throughout the Army.

3-4. SCOPE OF LESSON

This lesson provides you with standard interpretations of UCA definitions and guides to be followed in counting pharmacy procedures. The UCA weighted procedures are work-center oriented. In the work-center method of reporting, the goal is to identify the cost associated with providing pharmacy support to the specific activities (work-centers) of the medical center (MEDCEN) or medical department activity (MEDDAC). The UCA Manual (DOD Manual 6010.l0M Uniform Chart of Accounts) lists criteria for identifying a work-center. The entire pharmacy service is identified as a work-center and the centralized or decentralized activities of the pharmacy service (for example, supply, manufacturing, unit dose, outpatient, and pediatric pharmacy) are not considered separate work-centers. Examples of activities correctly identified as work-centers are provided herein. Much of the material in this lesson was taken directly from HSC Pam 40-5: Uniform Chart of Accounts, Pharmacy Counting Procedures, dated 15 October 1981.

Section II. THE UNIFORM CHART OF ACCOUNTS AND THE PHARMACY

3-5. PHARMACY PROCEDURES DEFINITIONS

a. **Prescription.** Count of a written order for a medication or device prescribed for an individual patient. A refill is counted the same as a prescription. Handouts through the pharmacy will be weighted with a value of 0.6.

b. **Outpatient of Troop Clinic Issue.** Count each handout or pre-pack issued to clinics for reissue to individual outpatients by non-pharmacy personnel.

c. **Sterile Product.** Count each parenteral bottle, bag, or syringe that is prepared by the pharmacy that has any number of additive parenterals and is ready for administration.

d. **Unit Dose.** Count each medication dose filled for inpatients at each filling of the patient’s drawer or the preparation of stat doses.

e. **Bulk Issue.** Count each line item issued to wards or clinics by the pharmacy for day-to-day operation or administration to inpatients or outpatients.

3-6. PHARMACY PROCEDURES VALUES

Weighting factors for determining work counts are given in the chart below.

Pharmacy Procedure	Weighting Factor
Prescription	1.0
Outpatient/Troop Clinic Issue	0.6
Sterile Product	2.0
Unit Dose	0.15
Bulk Issue	2.0

Section III. INTERPRETATIONS AND EXAMPLES OF UNIFORM CHART OF ACCOUNTS PHARMACY PROCEDURES

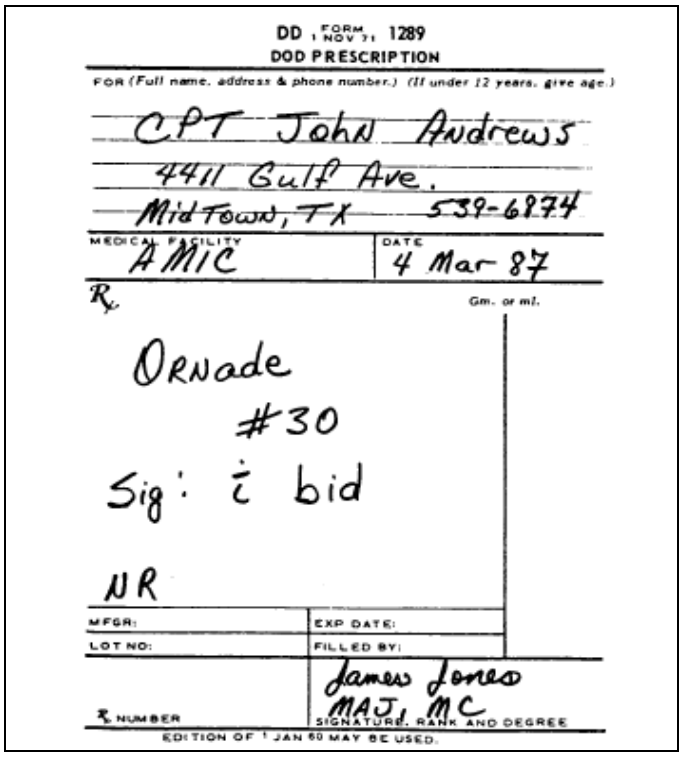
3-7. PRESCRIPTIONS/HANDOUTS

a. **Guideline.** The UCA weighted procedures for prescriptions states: Count a written order for a medication or device prescribed for an individual patient with a weighted value of 1.0. Direct handouts from the pharmacy to individual patients will have a UCA weighted procedure of 0.6 per container of drug product.

b. **Interpretation.** Each outpatient prescription with the exception of multiple item prescriptions will be counted for UCA purposes as 1.0 (one). The number of patients identified on each prescription, the number of units dispensed, the compounding of a prescription, etc., do not affect this count of 1.0. A refill prescription is also counted with a weighted value of 1.0. A UCA weighted value of 1.0 will be awarded for each separate medication identified on the multiple item prescription. If a patient is directly given two bottles of a non-legend cough syrup and two bottles of baby aspirin as part of a pharmacy handout program, then four containers of drug products have been dispensed and the proper UCA value is 2.4 (4 x 0.6). Interpretative examples are provided in figures 3-1--3-5.

c. **Examples: Outpatient Prescriptions.** See the following examples.

(1) Figure 3-1 illustrates a standard prescription used for an outpatient. The UCA weighted procedure value is 1.0.



DD FORM 1 NOV 71 1289

DOD PRESCRIPTION

FOR (Full name, address & phone number.) (If under 12 years, give age.)

CPT John Andrews
4411 Gulf Ave.
Mid Town, TX 539-6874

MEDICAL FACILITY: AMIC

DATE: 4 Mar 87

℞ Gm. or ml.

ORNade
#30
Sig: i bid

NR

MFGR: EXP DATE:

LOT NO: FILLED BY:

℞ NUMBER

James Jones
MAJ, MC
SIGNATURE, RANK AND DEGREE

EDITION OF 1 JAN 60 MAY BE USED.

Figure 3-1. Standard prescription.

(2) Figure 3-2A illustrates a standard prescription with multiple patients. Multiple patients do NOT affect UCA count. The UCA weighted procedure value is 1.0.

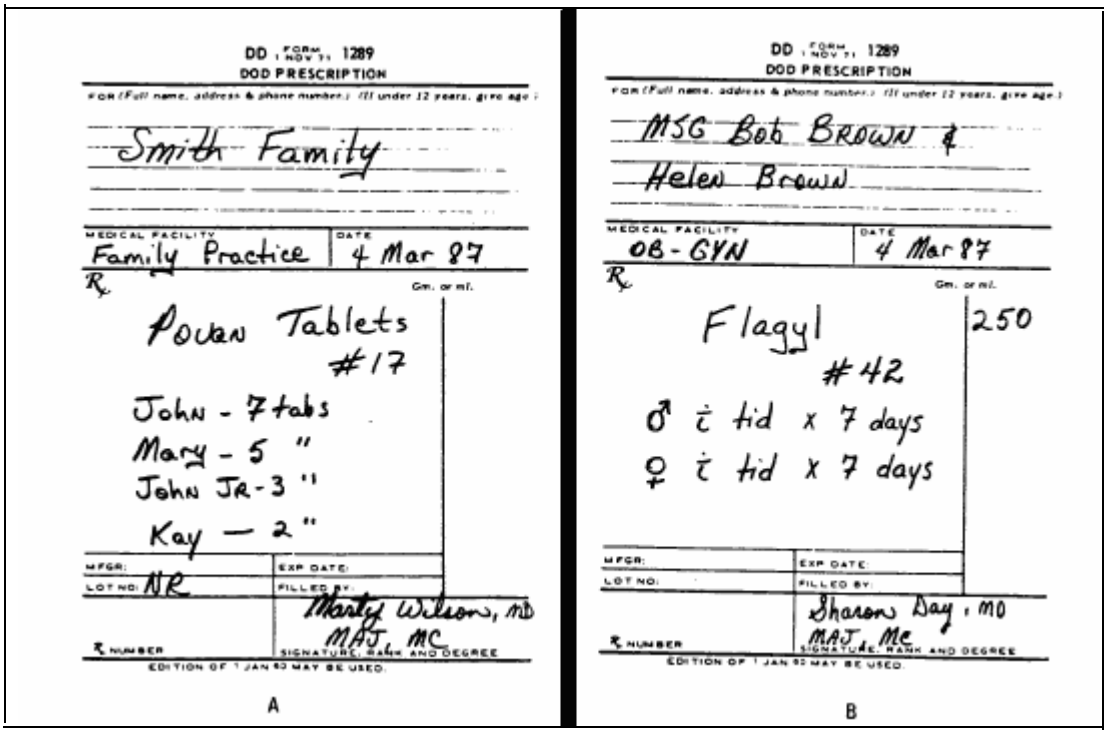


Figure 3-2. Standard prescriptions with multiple patients.

(3) A standard prescription with multiple patients is illustrated in figure 3-2B. The UCA weighted procedure value is 1.0 and is not affected by the number of patients.

(4) Figure 3-3 (A & B) illustrates standard prescriptions with multiple medication units. Both examples have a UCA weighted procedure value of 1.0 that is not affected by the number of medication units.

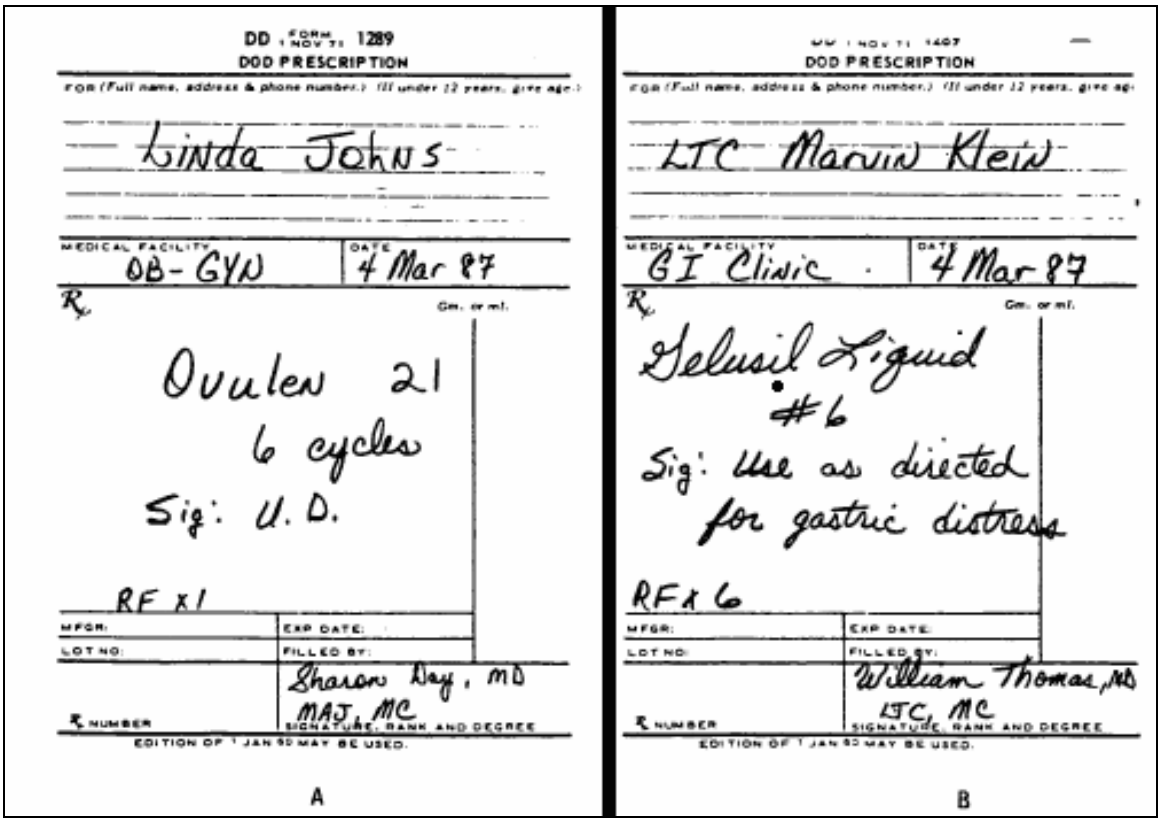
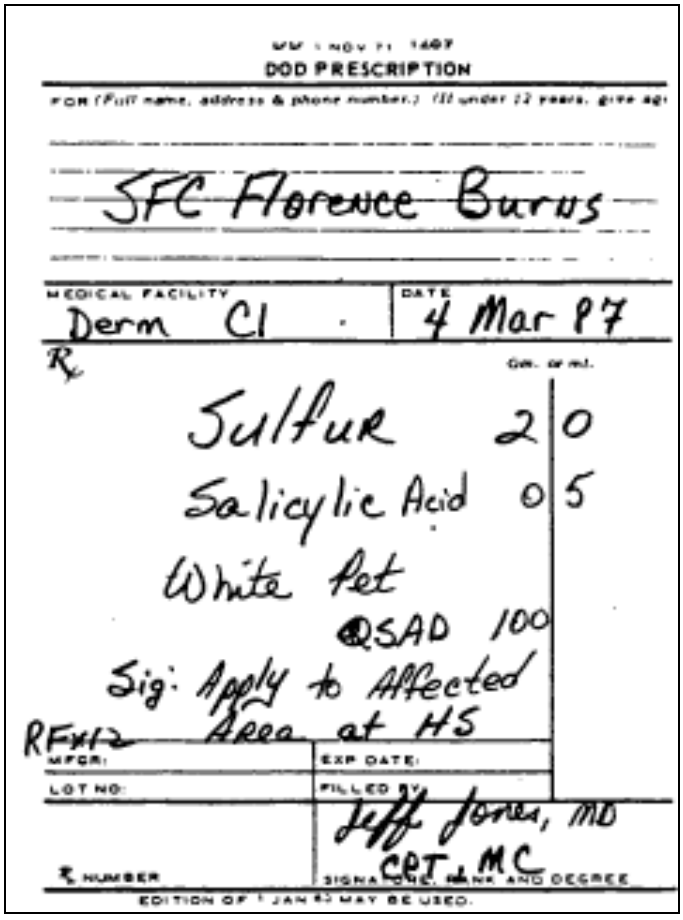


Figure 3-3. Standard prescriptions with multiple medication units.

(5) A standard prescription as shown in figure 3-4 has a UCA weighted procedure value of 1.0. Compounding a prescription does not affect UCA count.


DOD PRESCRIPTION

FOR (Full name, address & phone number.) (If under 12 years, give age)

SFC Florence Burns

MEDICAL FACILITY: Derm Cl

DATE: 4 Mar 97

℞

Gm. or ml.

Sulfur 2 0

Salicylic Acid 0 5

White Pet

QSAD 100

Sig: Apply to Affected Area at HS

RFx12

MFGR: EXP DATE:

LOT NO: FILLED BY

Jeff Jones, MD

CPT, MC

℞ NUMBER SIGNATURE, RANK AND DEGREE

EDITION OF 1 JAN 83 MAY BE USED.

Figure 3-4. Standard prescription in which a compounding is required.

(6) Figure 3-5, BAMC Form 279, Multiple Prescription, represents a multiple prescription with three medications prescribed. Each separate medication identified on the multiple item prescription, that is, 3-line items, is awarded a UCA weighted value of 1.0; therefore, the UCA count is 3.0 (1.0 for each item).

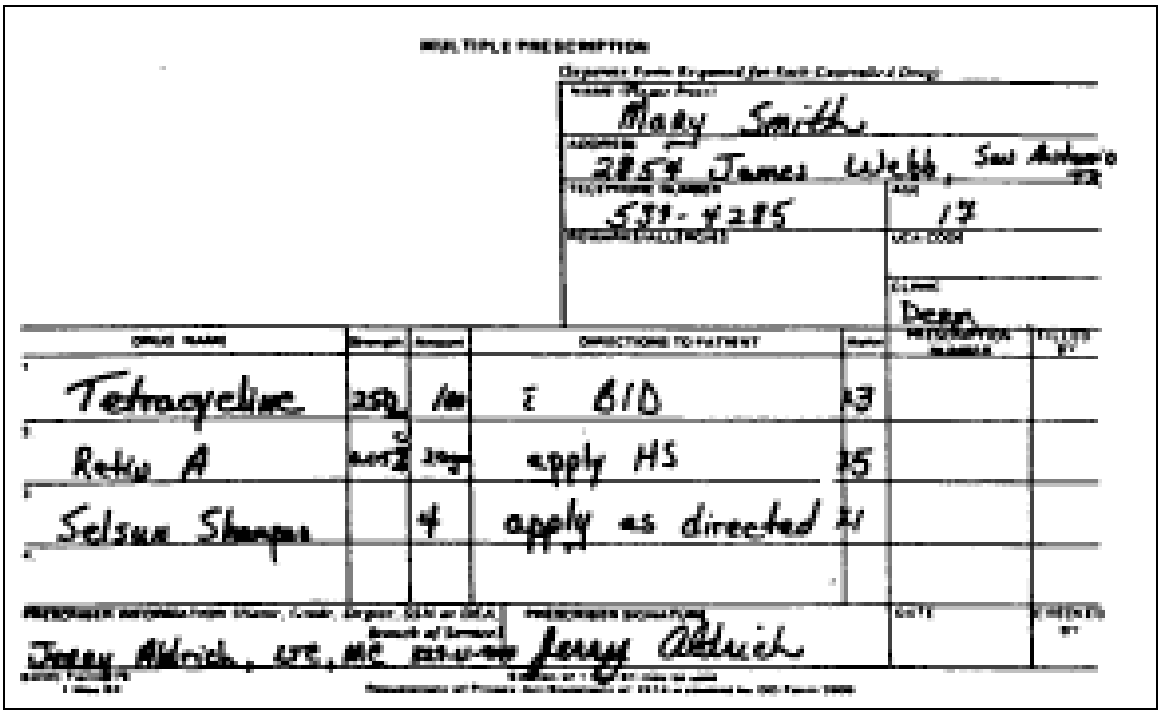


Figure 3-5. BAMC Form 279, Multiple Prescription.

NOTE : Brooke Army Medical Center (BAMC) is located at Fort Sam Houston, Texas.

3-8. OUTPATIENT CLINIC OR TROOP CLINIC ISSUE

a. **Guideline.** Count each handout or pre-pack issued to clinics for individual outpatients by non-pharmacy personnel with UCA weighted value of 0.6. Each line of items intended for clinic use will have a UCA value of 2.0.

b. **Interpretation.**

(1) Clinics routinely order two categories of medications: items for direct reissue to individual patients, and drugs to be used within the clinic. Each item for patient reissue has a UCA weighted value of 0.6. Each line of medications identified for use within the clinic will have a UCA weighted value of 2.0 regardless of the number of bulk issue items ordered. Correctly anticipating the exact disposition of medication ordered by a clinic is extremely difficult, and it is recommended that separate orders be required which identify the items according to use. This separation of drugs, based on anticipated use by the requesting agency, will not totally eliminate variances, but is preferable to having the pharmacy service "guess" about the ultimate disposition of the medications. The specific method of separating these orders lies with the discretion of the Chief, Pharmacy Service.

(2) Transfer of supplies from the main pharmacy to any internal or decentralized dispensing pharmacy, which is part of the hospital pharmacy's TDA, does not generate any UCA weighted procedure count. Each pharmacy work-center, however, will maintain its own UCA count procedures; when the medication is actually dispensed to a patient or reissued within the clinic, a UCA count will be made based on established guidelines. Interpretative examples are provided in figures 3-6--3-l0.

c. **Examples: Clinic Bulk Orders.** Examples with calculations are given below.

(1) A prepared DA Form 3875, Bulk Drug Order Form, shown in figure 3-6 illustrates items ordered for a clinic. Three items have been ordered for the clinic with a UCA value of 2.0 per line, that is, 3 x 2 = 6.0. The number of individual items is irrelevant.

BULK DRUG ORDER

Not to be used for controlled substances, or any other stock record item, or for individual prescriptions. Submit in duplicate to Pharmacy; duplicate copy will be returned with drugs to using agency.

DATE: 4 Mar 87 | PAGE NUMBER: 1 | NUMBER OF PAGES: 1

TO: PHARMACY SERVICE

FROM: (Ward, Clinic, or Department) Ophthamology

	ITEM	UNIT	NO. OF UNITS	PHARMACY ACTION
1	Lidocaine 1% c Epi	Vi	3	3
2	Atropine 1% Oph Oint	Tu	2	2
3	KY Jelly	Tu	2	2
4	Atropine 5% Oph Sol	BT	2	DNS
5				
6				
7	FOR CLINIC USE			
8				
9				
10				
11				
12				
13				
14				
15				

SIGNATURE: Janice Burns MAJ, MC

FOR PHARMACY USE ONLY (Total Work Units)

DA FORM 1 JUN 72 3875

REPLACES DA FORM 8-236, 1 SEP 61, WHICH WILL BE USED.

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General.

UCA Weighted Procedure 6.0				
UCA Calculations				
Factor		**Line**		
2.0	x	1	=	2.0
2.0	x	1	=	2.0
0.0	x	1	=	0.0
2.0	x	1	=	2.0
				6.0

Figure 3-6. DA Form 3815, Bulk Drug Order Form (items ordered for a clinic) with UCA calculations.

(2) A prepared DA Form 3875, Bulk Drug Order Form, shown in figure 3-7, illustrates the ordering of items for reissue to individual patients. Each item has a UCA value of 0.6 and will be appropriately labeled by the pharmacy for reissue. To calculate the UCA weighted value, multiply the factor times the number of items:

BULK DRUG ORDER

Not to be used for controlled substances, or any other stock record item, or for individual prescriptions. Submit in duplicate to Pharmacy, duplicate copy will be returned with drugs to using agency.

DATE: 4 Mar 87
PAGE NUMBER: 1
NUMBER OF PAGES: 1

TO: PHARMACY SERVICE

FROM: (Ward, Clinic, or Department) Derm Clinic

	ITEM	UNIT	NO. OF UNITS	PHARMACY ACTION
1	Westcort Cream	Tb	48	48
2	Selsun Shampoo	BT	12	12
3	Hydrocortisone 1%	Tb	36	36
4	Ampicillin 250mg Prepacks - 40's	BT	48	48
5				
6				
7				
8	Patient Handouts			
9				
10				
11				
12				
13				
14				
15				

SIGNATURE: John Swanson, DO CPT, MC

FOR PHARMACY USE ONLY (Total Work Units)

DA FORM 1 JUN 72 3875

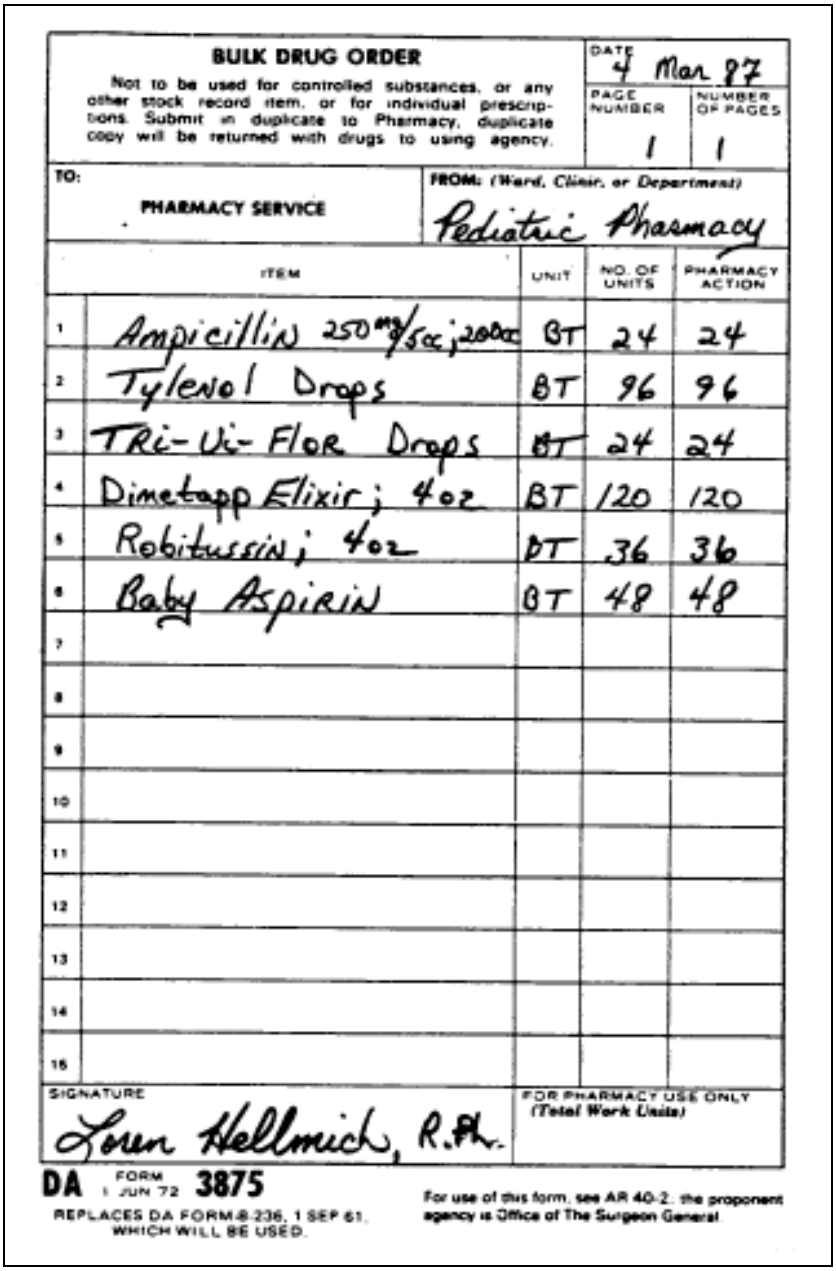
REPLACES DA FORM 8-236, 1 SEP 61, WHICH WILL BE USED.

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General.

UCA Calculations				
Factor		**No. Items**		
0.6	x	48	=	28.8
0.6	x	12	=	7.2
0.6	x	36	=	21.6
0.6	x	48	=	28.8
				86.4

Figure 3-7. DA Form 3875, Bulk Drug Order Form (ordering of items for reissue to patients) with UCA calculations.

(3) Figure 3-8 illustrates a prepared DA Form 3875, Bulk Drug Order Form, used in the movement of supplies from the main pharmacy to dispensing areas. The internal movement, of supplies to dispensing areas, directly subordinate to the main pharmacy generates no UCA procedure count. This applies whether the dispensing area is centralized or decentralized. The pediatric pharmacy in this example should maintain a UCA count on its own based on established UCA guidelines.



BULK DRUG ORDER

Not to be used for controlled substances, or any other stock record item, or for individual prescriptions. Submit in duplicate to Pharmacy, duplicate copy will be returned with drugs to using agency.

DATE: 4 Mar 87

PAGE NUMBER: 1 | NUMBER OF PAGES: 1

TO: PHARMACY SERVICE

FROM: (Ward, Clinic, or Department) Pediatric Pharmacy

	ITEM	UNIT	NO. OF UNITS	PHARMACY ACTION
1	Ampicillin 250mg/5cc; 200cc	BT	24	24
2	Tylenol Drops	BT	96	96
3	TRi-Vi-Flor Drops	BT	24	24
4	Dimetapp Elixir; 4oz	BT	120	120
5	Robitussin; 4oz	BT	36	36
6	Baby Aspirin	BT	48	48
7				
8				
9				
10				
11				
12				
13				
14				
15				

SIGNATURE: Loren Hellmich, R.Ph.

FOR PHARMACY USE ONLY (Total Work Units)

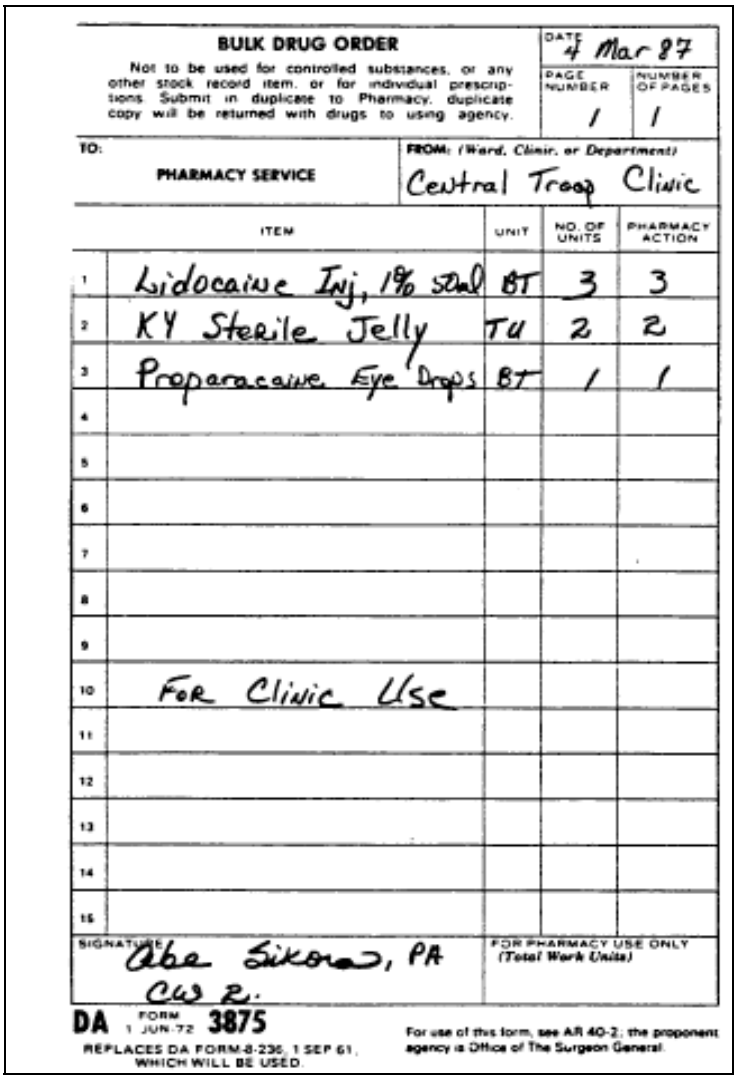
DA FORM 1 JUN 72 3875

REPLACES DA FORM 8-236, 1 SEP 61, WHICH WILL BE USED.

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General.

Figure 3-8. DA Form 3815, Bulk Drug Order Form (movement of supplies from the main pharmacy to dispensing areas).

(4) Figure 3-9 illustrates issuance of supplies to another work-center using DA Form 3875, Bulk Drug Order Form. This TMC is not part of the hospital pharmacy's TDA and issuance of supplies to this work-center generates a UCA count. Three lines of items have been identified for clinic use so the correct UCA count is 6.0 (3 x 2.0).



BULK DRUG ORDER

Not to be used for controlled substances, or any other stock record item, or for individual prescriptions. Submit in duplicate to Pharmacy; duplicate copy will be returned with drugs to using agency.

DATE: 4 Mar 87

PAGE NUMBER: 1 | NUMBER OF PAGES: 1

TO: PHARMACY SERVICE

FROM: (Ward, Clinic, or Department) Central Troop Clinic

	ITEM	UNIT	NO. OF UNITS	PHARMACY ACTION
1	Lidocaine Inj, 1% 50ml	BT	3	3
2	KY Sterile Jelly	TU	2	2
3	Proparacaine Eye Drops	BT	1	1
4				
5				
6				
7				
8				
9				
10	For Clinic Use			
11				
12				
13				
14				
15				

SIGNATURE: Abe Sikora, PA CW2.

FOR PHARMACY USE ONLY (Total Work Units)

DA FORM 1 JUN 72 3875

REPLACES DA FORM 8-236, 1 SEP 61, WHICH WILL BE USED.

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General.

UCA Calculations				
Factor		**Line**		
2.0	x	1	=	2.0
2.0	x	1	=	2.0
2.0	x	1	=	2.0
				6.0

Figure 3-9. DA Form 3875, Bulk Drug Order Form (issuance of supplies to another work-center) with UCA calculations.

(5) A prepared DA Form 3875, Bulk Drug Order Form, shown in figure 3-10, illustrates items ordered for reissue to individual patients. These items have been ordered for issue to individual patients and each item has a UCA value of 0.6. This TMC is not part of the hospital pharmacy's TDA and issuance of supplies to this work-center generates a UCA count. Each box of "Cepacol" represents a unit of issue containing multiple doses; however, each box has a UCA value of 0.6. Notice that on item 6 (Mylanta Liquid), calculations are based on the number of bottles rather than the number of cases ordered.

BULK DRUG ORDER

Not to be used for controlled substances, or any other stock record item, or for individual prescriptions. Submit in duplicate to Pharmacy; duplicate copy will be returned with drugs to using agency.

DATE: 4 Mar 87

PAGE NUMBER: 1 | NUMBER OF PAGES: 1

TO: PHARMACY SERVICE

FROM: (Ward, Clinic, or Department) Central Troop Clinic

	ITEM	UNIT	NO. OF UNITS	PHARMACY ACTION
1	Aspirin Tablets, 325mg, 12's	Tw	144	144
2	Sebutone Shampoo	BT	60	60
3	Cepacol Throat Lozenges	BX	12	12
4	Tylenol Tablets, 325mg, 50's	BT	96	96
5	Analgesic Balm	Tb	244	244
6	Mylanta Liquid, 5oz, 48's	Cs	2	2
7	Bacitracin Oint	Tb	12	12
8				
9				
10	For			
11	Patient Hand Out			
12				
13				
14				
15				

SIGNATURE: Beatrice Jones, PA CW3

FOR PHARMACY USE ONLY (Total Work Units)

DA FORM 1 JUN 72 3875

REPLACES DA FORM 8-236, 1 SEP 61, WHICH WILL BE USED.

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General

Figure 3-10. DA Form 3875, Bulk Drug Order Form (items ordered for reissue to individual patients) with UCA calculations (continued).

UCA Calculations				
Factor		**No. Items**		
0.6	x	144	=	86.4
0.6	x	60	=	36.0
0.6	x	12	=	7.2
0.6	x	96	=	57.6
0.6	x	244	=	146.4
0.6	x	96	=	57.6
0.6	x	12	=	7.2
				398.4

Figure 3-10. DA Form 3875, Bulk Drug Order Form (items ordered for reissue to individual patients) with UCA calculations (concluded).

3-9. STERILE PRODUCTS

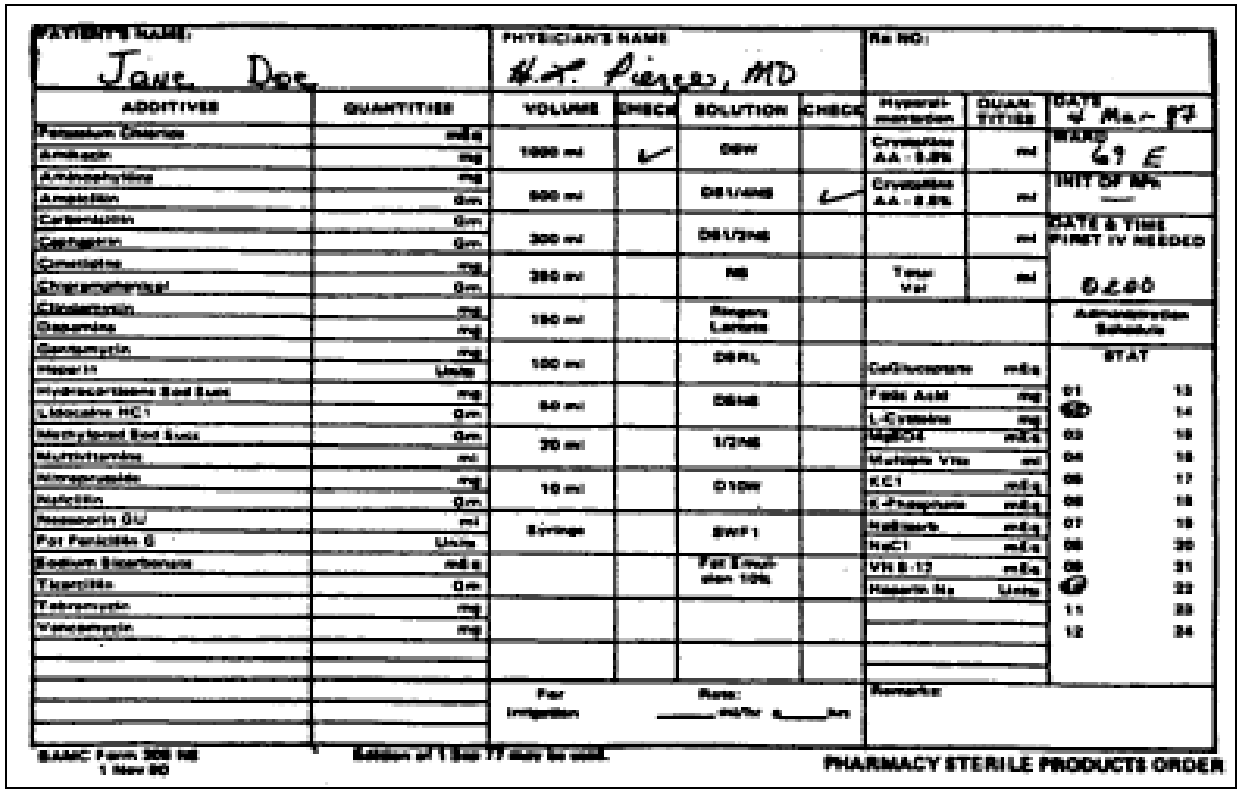
a. **Guideline.** Count each bottle, bag, or syringe that is prepared by the pharmacy, that is, has any number of additive parenterals, and is ready for administration with a count of 2.0.

b. **Interpretation.** Any sterile product identified for a specific patient has a UCA weighted value of 2.0. The presence of additives, the number of additives, or the complexity of preparation has no impact on the UCA count. Interpretative examples are provided.

c. **Examples.** Additive/non-additive orders are shown in figures 3-11 through 3-13.

(1) Figure 3-11 below shows a prepared Brooke Army Medical Center (BAMC) Form 305 NS, Pharmacy Sterile Products Order, illustrating no additive being requested. This solution has no additives but has been identified for a specific patient. The UCA value is 2.0 per unit. Uniform Chart of Accounts weighted procedure value is 4.0.

NOTE: In the block titled Administration Schedule, a solution was prepared for administration at 0200 hours and again at 1000 hours.


PATIENT'S NAME: Jane Doe

PHYSICIAN'S NAME: M.A. Pierce, MD

Rx NO:

ADDITIVES	QUANTITIES
Potassium Chloride	mEq
Amikacin	mg
Aminophylline	mg
Ampicillin	Gm
Carbenicillin	Gm
Cefazolin	Gm
Gentamicin	mg
Chloramphenicol	Gm
Clindamycin	mg
Cefamandole	mg
Kanamycin	mg
Heparin	Units
Hydrocortisone Sod Succ	mg
Lidocaine HCl	Gm
Methylprednisolone Sod Succ	Gm
Multivitamins	ml
Nitroglycerin	mg
Penicillin	Gm
Piperacillin	mg
Potassium Phosphate	ml
Pyridoxine HCl	mEq
Sodium Bicarbonate	Gm
Ticarcillin	mg
Tobramycin	mg
Vancomycin	mg

VOLUME	CHECK	SOLUTION	CHECK
1000 ml	✓	D5W	
500 ml		D5 1/4NS	✓
300 ml		D5 1/2NS	
250 ml		NS	
150 ml		Ringers Lactate	
100 ml		D5 RL	
50 ml		D5NS	
20 ml		1/2NS	
10 ml		D10W	
Syringe		SWFI	
		Fat Emulsion 10%	

For Irrigation — Rate: ____ ml/hr x ____ hrs

Reservoir	QUANTITIES	DATE
Crystalline AA - 5.5%	ml	4 Mar 97
Crystalline AA - 8.5%	ml	WARD 6? E
	ml	INIT OF MD
Total Vol	ml	DATE & TIME FIRST IV NEEDED 0200

Administration Schedule

CaGluconate	mEq	STAT	
Folic Acid	mg	01	13
L-Cysteine	mg	02	14
MgSO4	mEq	03	15
Multiple Vits	ml	04	16
KCl	mEq	05	17
K-Phosphate	mEq	06	18
Halfsalt	mEq	07	19
NaCl	mEq	08	20
VR B-12	mEq	09	21
Heparin Na	Units	10	22
		11	23
		12	24

Remarks:

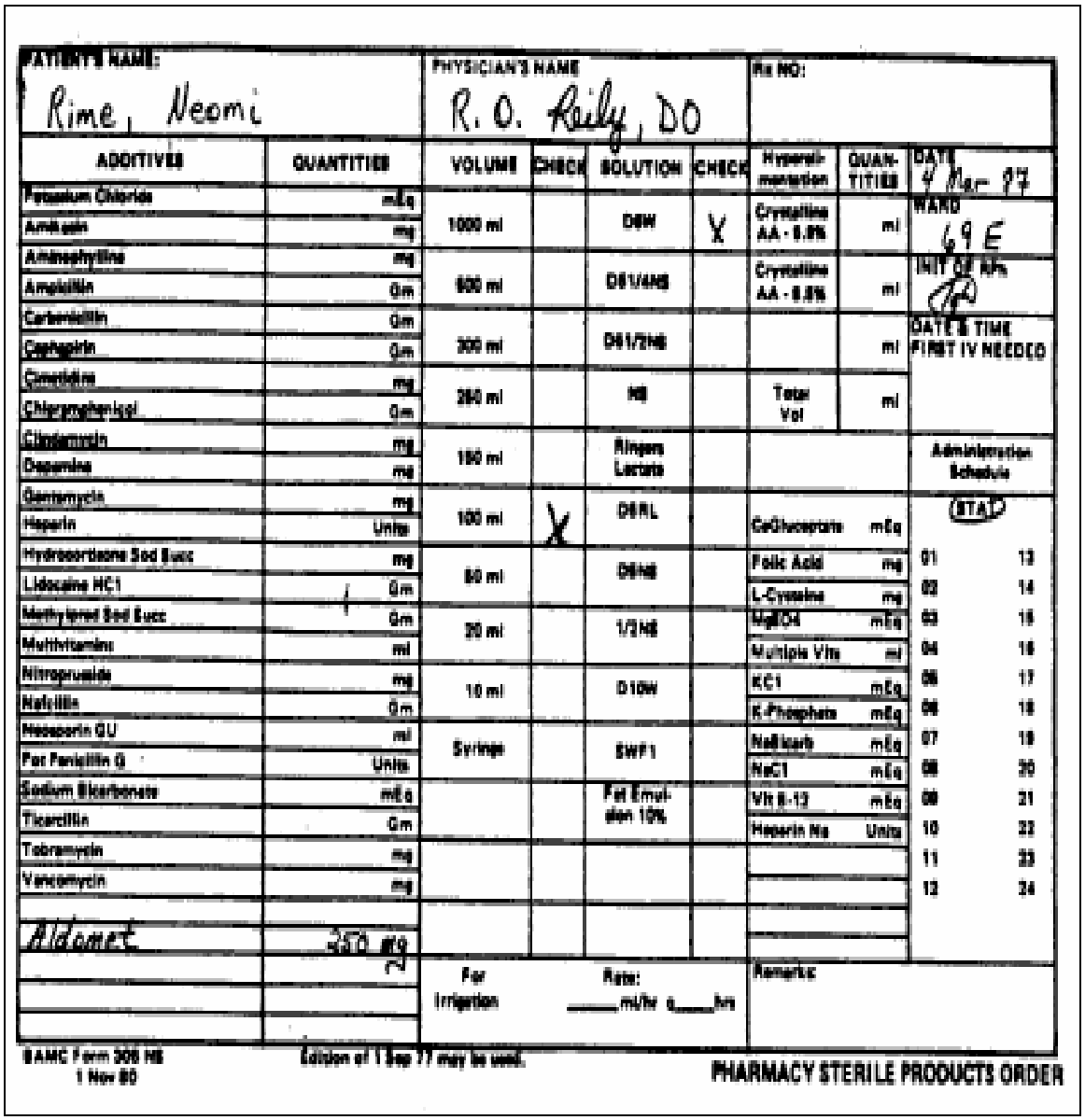
BAMC Form 305 NS 1 Nov 90 — Edition of 1 Sep 77 may be used. — PHARMACY STERILE PRODUCTS ORDER

UCA Calculations

UCA Factor		# of bags (units)	
2	x	2	= 4

Figure 3-11. BAMC Form 305 NS, Pharmacy Sterile Products Order (no additive being requested) with UCA calculations.

(2) Figure 3-12, BAMC Form 305 NS, Pharmacy Sterile Products Order, illustrates an order for an intravenous (I.V.) admixture containing one additive. This solution has one additive, but the UCA value is not affected by the number of additives. The correct value is 2.0. The UCA weighted procedure value is 2.0.



PATIENT'S NAME: Rime, Neomi
PHYSICIAN'S NAME: R. O. Reily, DO
Rx NO:

ADDITIVES	QUANTITIES	VOLUME	CHECK	SOLUTION	CHECK
Potassium Chloride	mEq	1000 ml		D5W	X
Amikacin	mg				
Aminophylline	mg	500 ml		D5 1/4NS	
Ampicillin	Gm				
Carbenicillin	Gm	300 ml		D5 1/2NS	
Cephapirin	Gm				
Cimetidine	mg	250 ml		NS	
Chloramphenicol	Gm				
Clindamycin	mg	150 ml		Ringers Lactate	
Dopamine	mg				
Gentamycin	mg	100 ml	X	D5RL	
Heparin	Units				
Hydrocortisone Sod Succ	mg	50 ml		D5NS	
Lidocaine HCl	Gm				
Methylpred Sod Succ	Gm	20 ml		1/2NS	
Multivitamins	ml				
Nitroprusside	mg	10 ml		D10W	
Nafcillin	Gm				
Neosporin GU	ml	Syringe		SWFI	
Pen Penicillin G	Units				
Sodium Bicarbonate	mEq			Fat Emulsion 10%	
Ticarcillin	Gm				
Tobramycin	mg				
Vancomycin	mg				
Aldomet	250 mg				
		For Irrigation		Rate: ____ml/hr q____hrs	

Hyperalimentation	QUANTITIES
Crystalline AA - 8.5%	ml
Crystalline AA - 8.5%	ml
	ml
Total Vol	ml

CaGluceptate	mEq
Folic Acid	mg
L-Cysteine	mg
MgSO4	mEq
Multiple Vits	ml
KCl	mEq
K-Phosphate	mEq
NaBicarb	mEq
NaCl	mEq
Vit B-12	mEq
Heparin Na	Units

DATE: 9 Mar 97
WARD: 49E
UNIT OF ADM:
DATE & TIME FIRST IV NEEDED:
Administration Schedule: (STAT)

01	13
02	14
03	15
04	16
05	17
06	18
07	19
08	20
09	21
10	22
11	23
12	24

Remarks:

BAMC Form 305 NS 1 Nov 80 — Edition of 1 Sep 77 may be used. — PHARMACY STERILE PRODUCTS ORDER

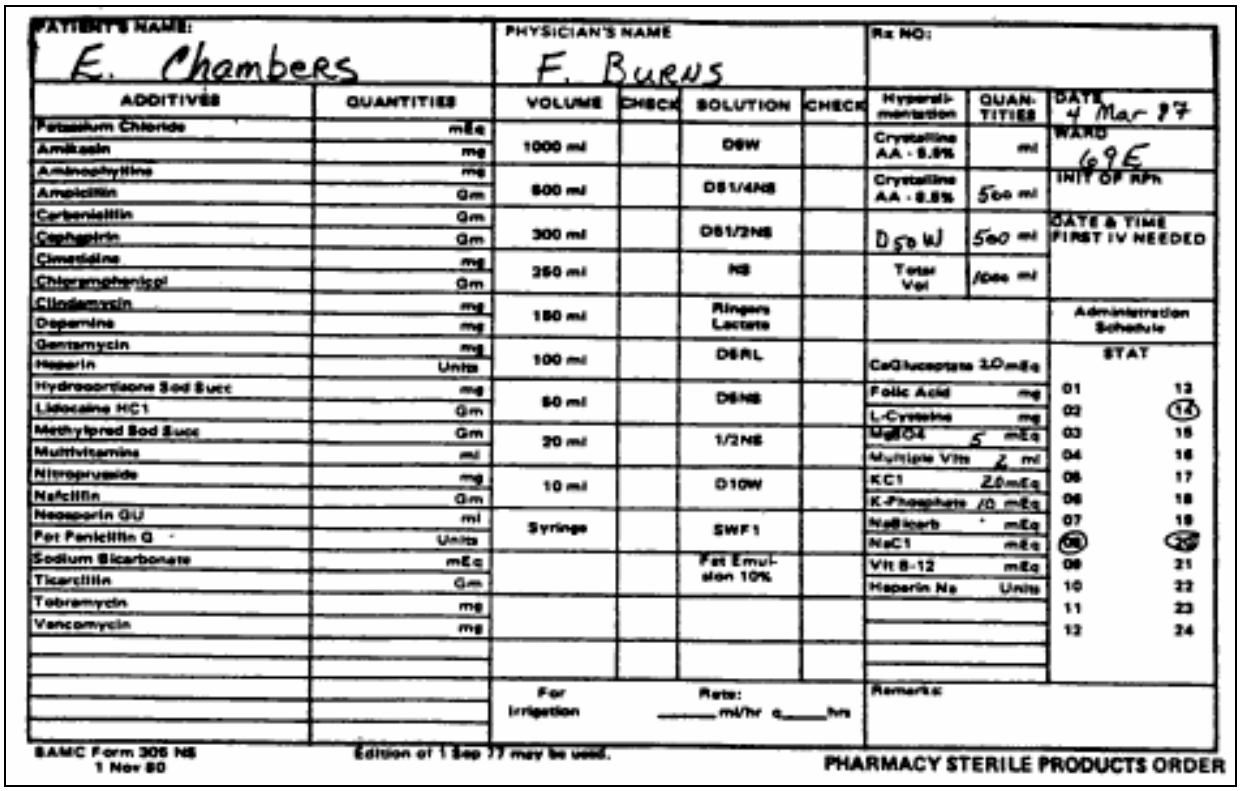
Figure 3-12. BAMC Form 305 NS, Pharmacy Sterile Products Order (order for an intravenous (IV) admixture containing one additive) with UCA calculations.

UCA Calculations

UCA Factor		# of bags (units)	
2	x	1	= 2.0

("stat" means right away and is normally one dose)

(3) A prepared BAMC Form 305 NS, Pharmacy Sterile Products Form, figure 3-13, illustrates an order with several additives. This solution has numerous additives but the complexity of the solution, preparation time, or number of additives have no effect on the UCA value. The correct value is 2.0 per unit. The UCA weighted procedure value is 6.0.



PATIENT'S NAME: E. Chambers
PHYSICIAN'S NAME: F. Burns
Rx NO:

ADDITIVES	QUANTITIES
Potassium Chloride	mEq
Amikacin	mg
Aminophyllins	mg
Ampicillin	Gm
Carbenicillin	Gm
Cephapirin	Gm
Cimetidine	mg
Chloramphenicol	Gm
Clindamycin	mg
Dopamine	mg
Gentamycin	mg
Heparin	Units
Hydrocortisone Sod Succ	mg
Lidocaine HCl	Gm
Methylpred Sod Succ	Gm
Multivitamins	ml
Nitroprusside	mg
Nafcillin	Gm
Neosporin GU	ml
Pot Penicillin G	Units
Sodium Bicarbonate	mEq
Ticarcillin	Gm
Tobramycin	mg
Vancomycin	mg

VOLUME	CHECK	SOLUTION	CHECK
1000 ml		D5W	
500 ml		D5 1/4NS	
300 ml		D5 1/2NS	
250 ml		NS	
150 ml		Ringers Lactate	
100 ml		D5RL	
50 ml		D5NS	
20 ml		1/2NS	
10 ml		D10W	
Syringe		SWFI	
		Fat Emulsion 10%	

For Irrigation
Rate: _____ ml/hr q_____ hrs

Hyperalimentation	QUANTITIES
Crystalline AA - 8.5%	ml
Crystalline AA - 8.5%	500 ml
D50W	500 ml
Total Vol	1000 ml

CaGluceptate 10 mEq
Folic Acid mg
L-Cysteine mg
MgSO4 5 mEq
Multiple Vits 2 ml
KCl 20 mEq
K-Phosphate 10 mEq
NaBicarb mEq
NaCl mEq
Vit B-12 mEq
Heparin Na Units

Remarks:

DATE: 4 Mar 97
WARD: 69E
INIT OF RPh:
DATE & TIME FIRST IV NEEDED:

Administration Schedule
STAT

01	13
02	(14)
03	15
04	16
05	17
06	18
07	19
(08)	(20)
09	21
10	22
11	23
12	24

BAMC Form 305 NS 1 Nov 80 Edition of 1 Sep 77 may be used.
PHARMACY STERILE PRODUCTS ORDER

UCA Calculations

UCA Factor		# of bags (units)	
2	x	3	= 6.0

Figure 3-13. BAMC Form 305 NS, Pharmacy Sterile Products Order (order with several additives) with UCA calculations.

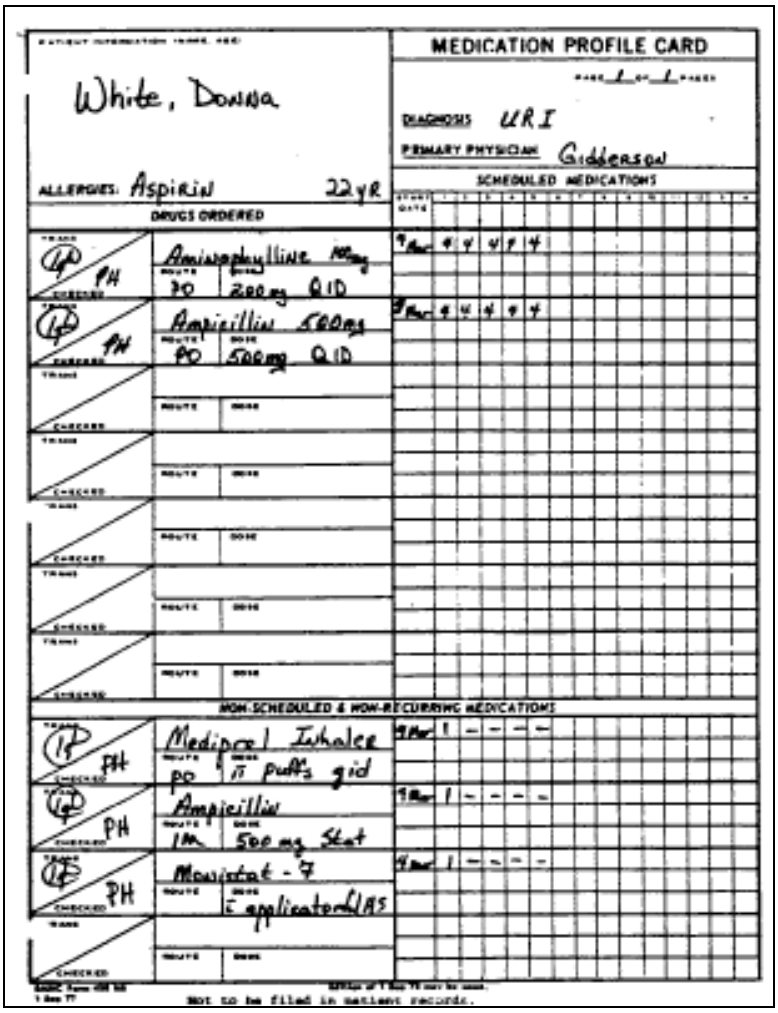
3-10. UNIT DOSE

a. **Guideline**. Count each medication dose filled for inpatients at each filling of a patient's drawer or the preparation of stat doses with a count of 0.15.

b. **Interpretation**. A UCA weighted count of 0.15 is given for each dose or unit of issue dispensed. A unit of issue containing multiple doses, such as an ear/eye drop or an inhaler, has a total UCA value of 0.15. Four antibiotic capsules which are to be dispensed one every 6 hours has a UCA value of 4 x 0.15 = 0.6. Each dose generates a UCA value of 0.15 regardless of the number of units in that dose; that is, 200-mg dose of Aminophylline made up of two 100-mg tablets generates a UCA value of 0.15. I.V. orders or controlled substances ordered for the patient are not counted in the unit dose UCA counts. The sterile products section or bulk issue section will count the items in their UCA counts. They are not counted twice. Interpretative examples are provided in figures 3-14 and 3-15.

c. **Examples: Unit Dose Medication Card Orders.** Examples with calculations are given below.

(1) A prepared BAMC Form 438 NS, Medication Profile Card, with UCA calculation for a patient is shown in figure 3-14. Each dose of Aminophylline is made up of two tablets. Forty tablets are dispensed, which represents twenty doses. The twenty doses of Ampicillin represent a standard unit dose order count. The "Metraprel" and "Monistat-7" represent units of issue containing multiple doses; however, each container has a total UCA value of 0.15. The Ampicillin syringe is a sterile product prepared by the pharmacy. (It may be reported by either the sterile product section or the unit dose section of the pharmacy, but not by both.)



MEDICATION PROFILE CARD

White, Donna

DIAGNOSIS URI

PRIMARY PHYSICIAN Giddersen

ALLERGIES: Aspirin 22yR

SCHEDULED MEDICATIONS

DRUGS ORDERED

Aminophylline 100mg PO 200mg QID

Ampicillin 500mg PO 500mg QID

NON-SCHEDULED & NON-RECURRING MEDICATIONS

Medipred Inhaler po 2 puffs qid

Ampicillin IM 500mg Stat

Monistat-7 1 applicator VAG

Not to be filed in patient records.

UCA Calculations

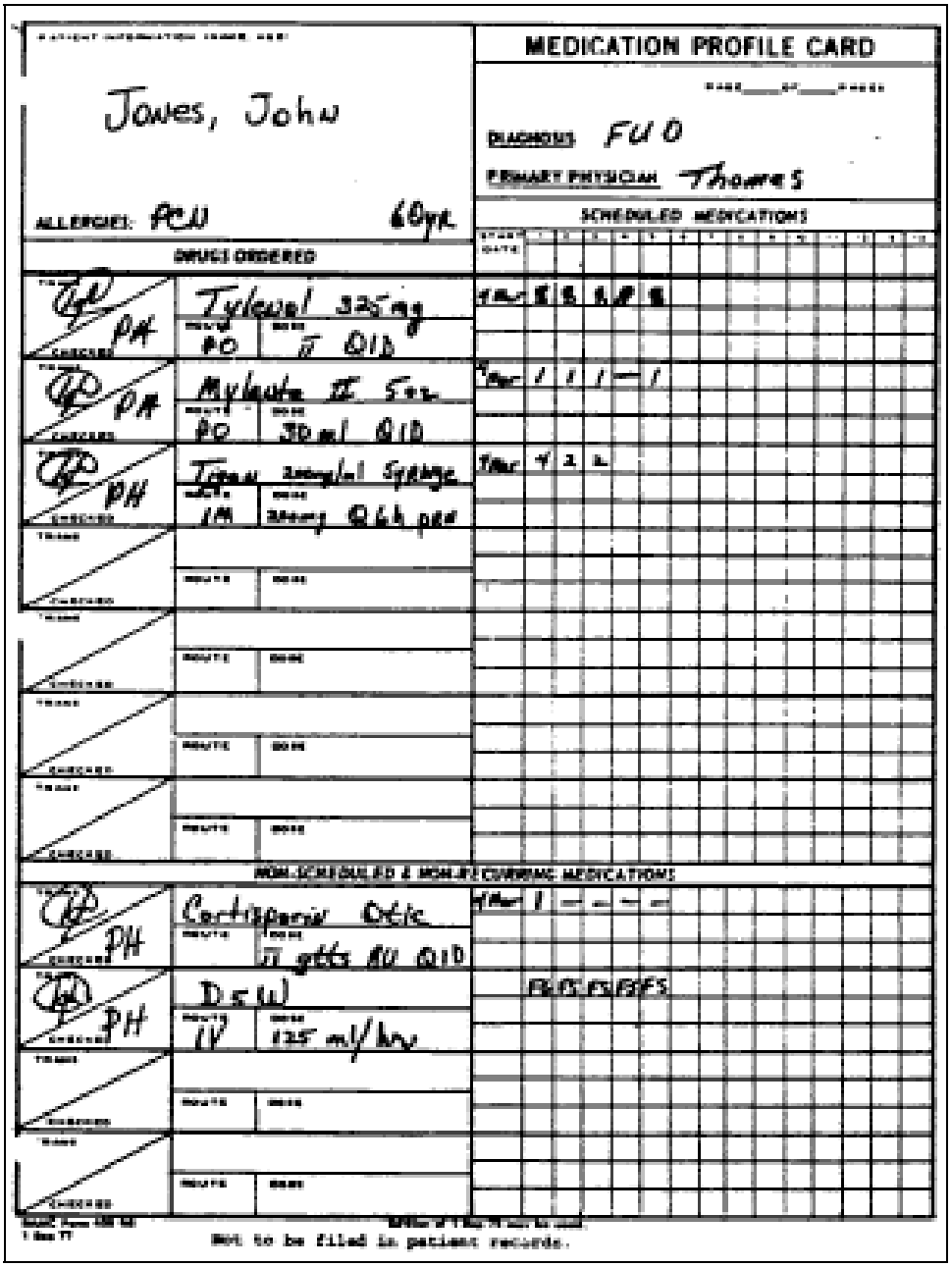
UCA Factor		No.of doses		
.15	x	20	=	3.00
.15	x	20	=	3.00

UCA Calculations

UCA Factor		No.of doses		
.15	x	1	=	0.15
2.0	x	1	=	2.00
.15	x	1	=	0.15

Figure 3-14. BAMC Form 438 NS, Medication Profile Card, with UCA calculations for a patient.

(2) Figure 3-15 illustrates a completed BAMC Form 438 NS, Medication Profile Card, with UCA calculation for a patient. Each dose of “Tylenol” is made up of two tablets. Forty tablets are dispensed, which represents twenty doses.



*The bulk issue section will count these work units when they issue this to the ward as floor stock.

Figure 3-15. BAMC Form 438 NS, Medication Profile Card, with UCA calculations for a patient (continued).

UCA Calculations

	UCA Factor		No.of doses		
Tylenol	0.15	x	20	=	3.00
Mylanta	0.15	x	4	=	0.60
Tigan	0.15	x	4	=	1.20

NOTE: Tylenol given 4 times a day for 5 days = 20 doses.

UCA Calculations

	UCA Factor		No.of doses		
Cortisporin	0.15	x	1	=	0.15
DSW	0			=	0.00

Figure 3-15. BAMC Form 438 NS, Medication Profile Card, with UCA calculations for a patient (concluded).

NOTE: The "Mylanta II" and "Cortisporin" represent units of issue containing multiple doses; however, each container has a total UCA value of 0.15. The Tigan injection is not prepared by the pharmacy; therefore, it is regarded as a unit dose rather than a sterile product. The D5W is a floor stock item and the UCA procedures would be counted when this item was originally issued on the ward on a bulk drug order. The UCA weighted procedure value is 4.95.

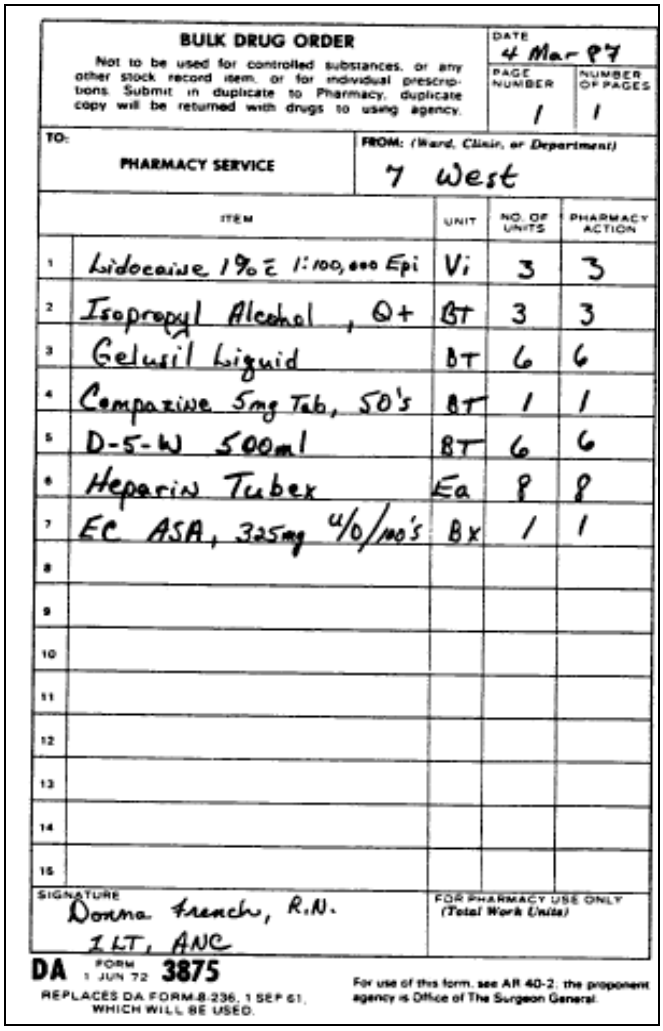
3-11. BULK ISSUE

a. **Guideline.** Count each line item issued by the pharmacy for day-to-day operation for administration to inpatients or outpatients with a UCA weighted value of 2.0.

b. **Interpretation.** Each line of medications on a bulk-drug-order from nonpharmacy work-centers within the hospital will have a UCA weighted value of 2.0 regardless of the number of bulk issue items ordered. The issuance of controlled drugs to a ward on a DD Form 1289 should be regarded as a bulk issue rather than a prescription. Each such bulk order has a UCA weighted procedure of 2.0 regardless of the number of controlled drug units ordered.

c. **Examples.** Ward/Department drug orders and the calculations used to determine their UCA work units are shown in figures 3-16--3-18.

(1) Figure 3-16 illustrates a completed DA Form 3875, Bulk Drug Order Form, showing UCA calculations for an order of ward stock. Each line of items has a UCA value of 2.0 regardless of the number of items issued. UCA weighted procedure value is 14.



BULK DRUG ORDER

Not to be used for controlled substances, or any other stock record item, or for individual prescriptions. Submit in duplicate to Pharmacy; duplicate copy will be returned with drugs to using agency.

DATE: 4 Mar 97

PAGE NUMBER: 1 | NUMBER OF PAGES: 1

TO: PHARMACY SERVICE

FROM: (Ward, Clinic, or Department) 7 West

	ITEM	UNIT	NO. OF UNITS	PHARMACY ACTION
1	Lidocaine 1% c 1:100,000 Epi	Vi	3	3
2	Isopropyl Alcohol, Qt	BT	3	3
3	Gelusil Liquid	BT	6	6
4	Compazine 5mg Tab, 50's	BT	1	1
5	D-5-W 500ml	BT	6	6
6	Heparin Tubex	Ea	8	8
7	EC ASA, 325mg 4/0/100's	Bx	1	1
8				
9				
10				
11				
12				
13				
14				
15				

SIGNATURE: Donna French, R.N. 1LT, ANC

FOR PHARMACY USE ONLY (Total Work Units)

DA FORM 1 JUN 72 3875

REPLACES DA FORM 8-236, 1 SEP 61, WHICH WILL BE USED.

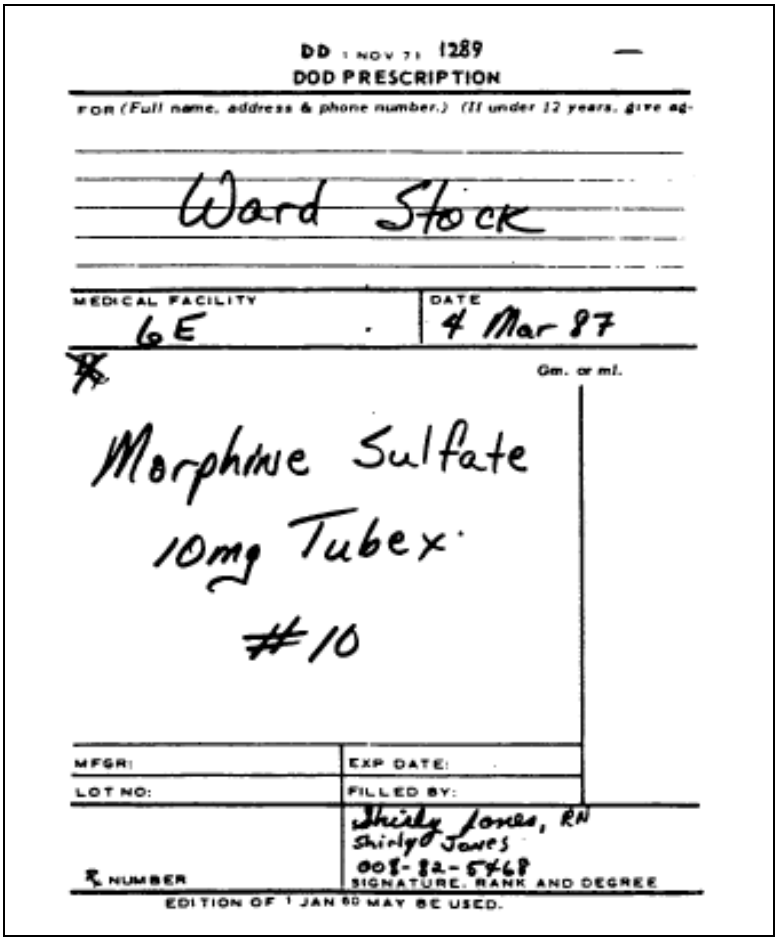
For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General.

UCA Calculations

Factor		Line		
2.0	x	1	=	2.0
2.0	x	1	=	2.0
2.0	x	1	=	2.0
2.0	x	1	=	2.0
2.0	x	1	=	2.0
2.0	x	1	=	2.0
2.0	x	1	=	2.0
				14.0

Figure 3-16. DA Form 3875, Bulk Drug Order Form, showing UCA calculations for an order of ward stock.

(2) DD Form 1289, Prescription Form, prepared as a request for controlled substances for ward stock is shown in figure 3-17. TB MED 291 states that bulk orders for controlled substances will be ordered on a modified DD Form 1289. This order is then regarded equivalent to a single line on a DA Form 3875. It has a weighted value of 2.0 regardless of the number of controlled items issued.


DD 1 NOV 71 1289

DOD PRESCRIPTION

FOR (Full name, address & phone number.) (If under 12 years, give ag-

Ward Stock

MEDICAL FACILITY: 6E

DATE: 4 Mar 87

℞

Gm. or ml.

Morphine Sulfate
10mg Tubex
#10

MFGR:

EXP DATE:

LOT NO:

FILLED BY:

Shirley Jones, RN
Shirley Jones
008-82-5468
SIGNATURE, RANK AND DEGREE

℞ NUMBER

EDITION OF 1 JAN 60 MAY BE USED.

Figure 3-17. DD Form 1289, Prescription Form, illustrating a request for controlled substances for ward stock.

(3) Figure 3-18 illustrates BAMC Form 305 NS, Pharmacy Sterile Products Order, requesting ward stock. This order is equivalent to a single line on a DA Form 3875 and has a weighted value of 2.0. It is <u>not</u> a sterile product order because the items are neither prepared by the pharmacy nor designated for administration to a specific patient. The weighted UCA value is 2.0.

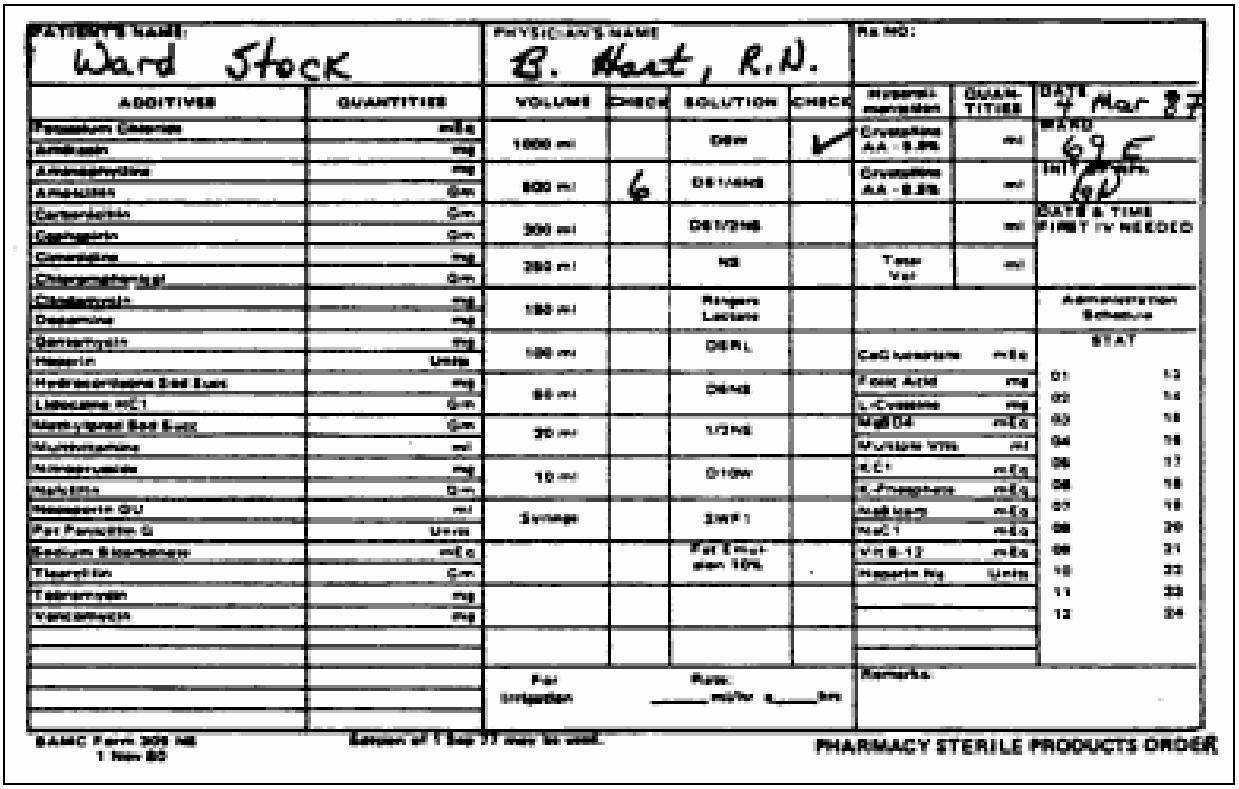

PATIENT'S NAME: Ward Stock
PHYSICIAN'S NAME: B. Hart, R.N.
RX NO:
ADDITIVES | QUANTITIES | VOLUME | CHECK | SOLUTION | CHECK | Hyperalimentation | QUANTITIES
Potassium Chloride mEq
Amikacin mg
Aminophylline mg
Ampicillin Gm
Carbenicillin Gm
Cephapirin Gm
Cimetidine mg
Chloramphenicol Gm
Clindamycin mg
Dopamine mg
Gentamycin mg
Heparin Units
Hydrocortisone Sod Succ mg
Lidocaine HCl Gm
Methylprednisolone Sod Succ Gm
Multivitamins ml
Nitroprusside mg
Nafcillin Gm
Neomycin IM ml
Pen Penicillin G Units
Sodium Bicarbonate mEq
Tigecillin Gm
Tobramycin mg
Vancomycin mg
1000 ml — D5W — ✓
500 ml — 6 — D5 1/4NS
500 ml — D5 1/2NS
250 ml — NS
150 ml — Ringers Lactate
100 ml — D5RL
50 ml — D5NS
25 ml — 1/2NS
10 ml — D10W
Syringe — SWFI
Fat Emulsion 10%
Crystalline AA - 5.5%
Crystalline AA - 8.5%
Trace Vol
CaGluconate mEq
Folic Acid mg
L-Cysteine mg
MgSO4 mEq
Multiple Vits ml
KCl mEq
K Phosphate mEq
NaAcetate mEq
NaCl mEq
Vits B-12 mEq
Heparin Sg Units
DATE: 7 Mar 87
WARD: 6 E
INT: 6D
DATE & TIME FIRST IV NEEDED
Administration Schedule
STAT
01 13
02 14
03 15
04 16
05 17
06 18
07 19
08 20
09 21
10 22
11 23
12 24
Per Irrigation
Rate: _____ ml/hr x _____ hrs
Remarks
BAMC Form 305 NS 1 Nov 85
Supersedes all previous editions which may be used.
PHARMACY STERILE PRODUCTS ORDER

Figure 3-18. BAMC Form 305 NS, Pharmacy Sterile Products Order, requesting ward stock.

Continue with Exercises

EXERCISES, LESSON 3

INSTRUCTIONS: Answer the following exercises by marking the lettered response that best answers the question or best completes the incomplete statement or by writing the answer in the space provided.

After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

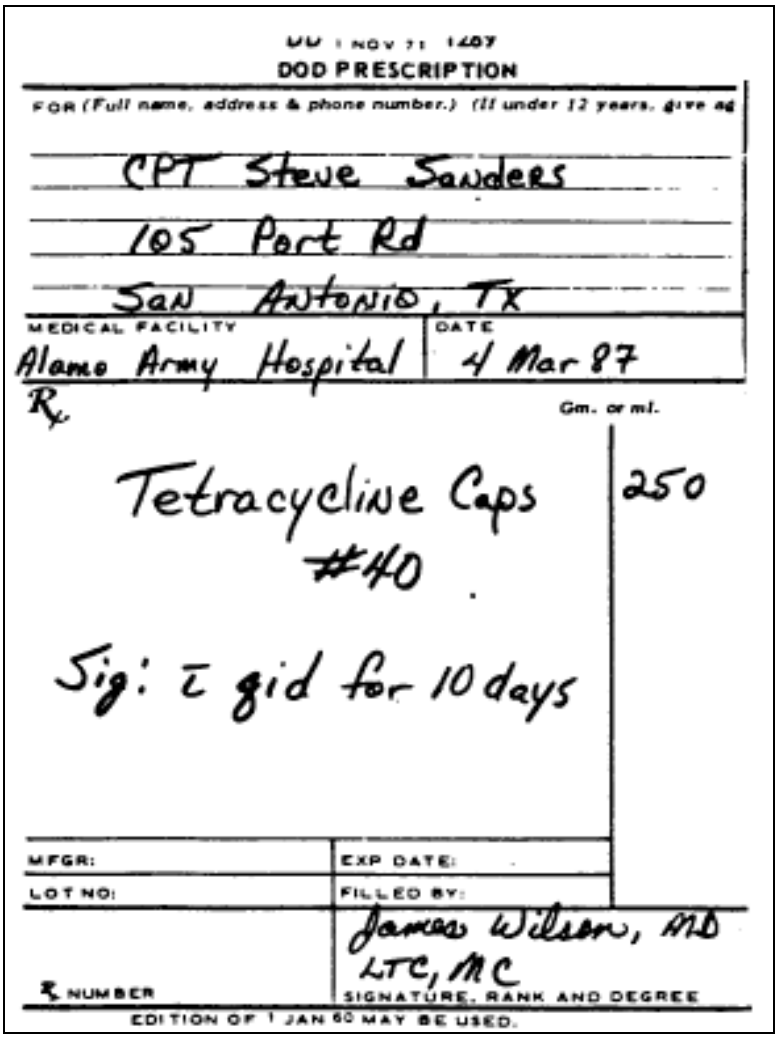
1. From the statements below, select the statement that best describes the purpose of UCA as applied to the pharmacy service.

   a. To identify those areas of the pharmacy that operate most efficiently.

   b. To determine the total cost of the pharmacy operation.

   c. To calculate the amount of money spent in patient care in relation to drugs and drug services.

   d. To identify patients who abuse their medical privileges by receiving more drugs (especially controlled items) than they are entitled.



DD FORM 1289, NOV 71, 1289

DOD PRESCRIPTION

FOR (Full name, address & phone number.) (If under 12 years, give age)

CPT Steve Sanders
105 Port Rd
San Antonio, Tx

MEDICAL FACILITY: Alamo Army Hospital

DATE: 4 Mar 87

℞

Gm. or ml.

Tetracycline Caps #40 — 250

Sig: 1 qid for 10 days

MFGR:

EXP DATE:

LOT NO:

FILLED BY:

James Wilson, MD
LTC, MC

℞ NUMBER

SIGNATURE, RANK AND DEGREE

EDITION OF 1 JAN 60 MAY BE USED.

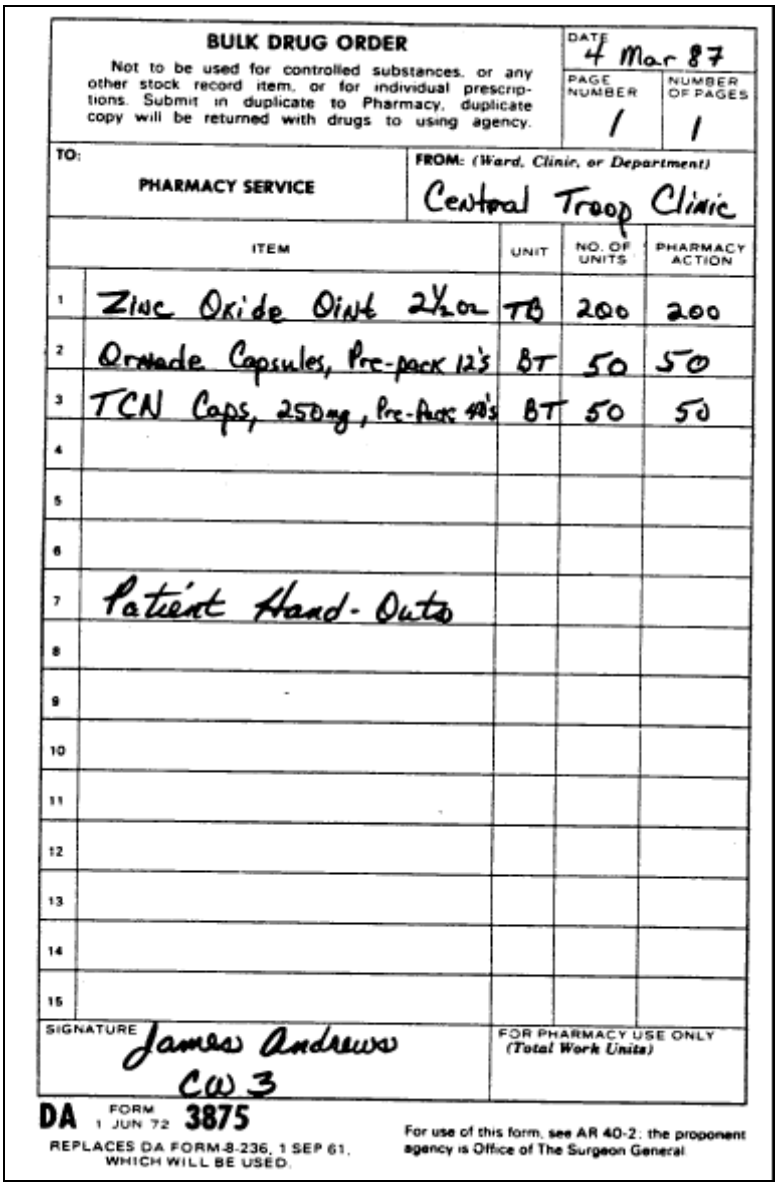
2. Using the prescription shown above, calculate and select the work count for the prescription as established in HSC Pamphlet 40-5.

   a. 1

   b. 4

   c. 8

   d. 40



BULK DRUG ORDER

Not to be used for controlled substances, or any other stock record item, or for individual prescriptions. Submit in duplicate to Pharmacy, duplicate copy will be returned with drugs to using agency.

DATE: 4 Mar 87

PAGE NUMBER: 1 | NUMBER OF PAGES: 1

TO: PHARMACY SERVICE

FROM: (Ward, Clinic, or Department) Central Troop Clinic

	ITEM	UNIT	NO. OF UNITS	PHARMACY ACTION
1	Zinc Oxide Oint 2½ oz	TB	200	200
2	Ornade Capsules, Pre-pack 12's	BT	50	50
3	TCN Caps, 250mg, Pre-Pack 40's	BT	50	50
4				
5				
6				
7	Patient Hand-Outs			
8				
9				
10				
11				
12				
13				
14				
15				

SIGNATURE: James Andrews CW3

FOR PHARMACY USE ONLY (Total Work Units)

DA FORM 1 JUN 72 3875

REPLACES DA FORM 8-236, 1 SEP 61, WHICH WILL BE USED.

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General.

3. Using the DA Form 3815 shown above, calculate and select the work count as established in HSC Pamphlet 40-5.

   a. 3

   b. 150

   c. 180

   d. 300

BULK DRUG ORDER

Not to be used for controlled substances, or any other stock record item, or for individual prescriptions. Submit in duplicate to Pharmacy; duplicate copy will be returned with drugs to using agency.

DATE: 4 Mar 87

PAGE NUMBER: 1

NUMBER OF PAGES: 1

TO: PHARMACY SERVICE

FROM: (Ward, Clinic, or Department) Ophthalmology Clinic

	ITEM	UNIT	NO. OF UNITS	PHARMACY ACTION
1	Atropine 1% Ophth Ointment	tu	4	4
2	Tetracaine Ophth Drops	BT	2	2
3	Visine Eye Drops	BT	12	12
4				
5				
6				
7	Clinic Use			
8				
9				
10				
11				
12				
13				
14				
15				

SIGNATURE: F. Burns, MAJ, MC

FOR PHARMACY USE ONLY (Total Work Units)

DA FORM 1 JUN 72 3875

REPLACES DA FORM 8-236, 1 SEP 61, WHICH WILL BE USED.

For use of this form, see AR 40-2; the proponent agency is Office of The Surgeon General

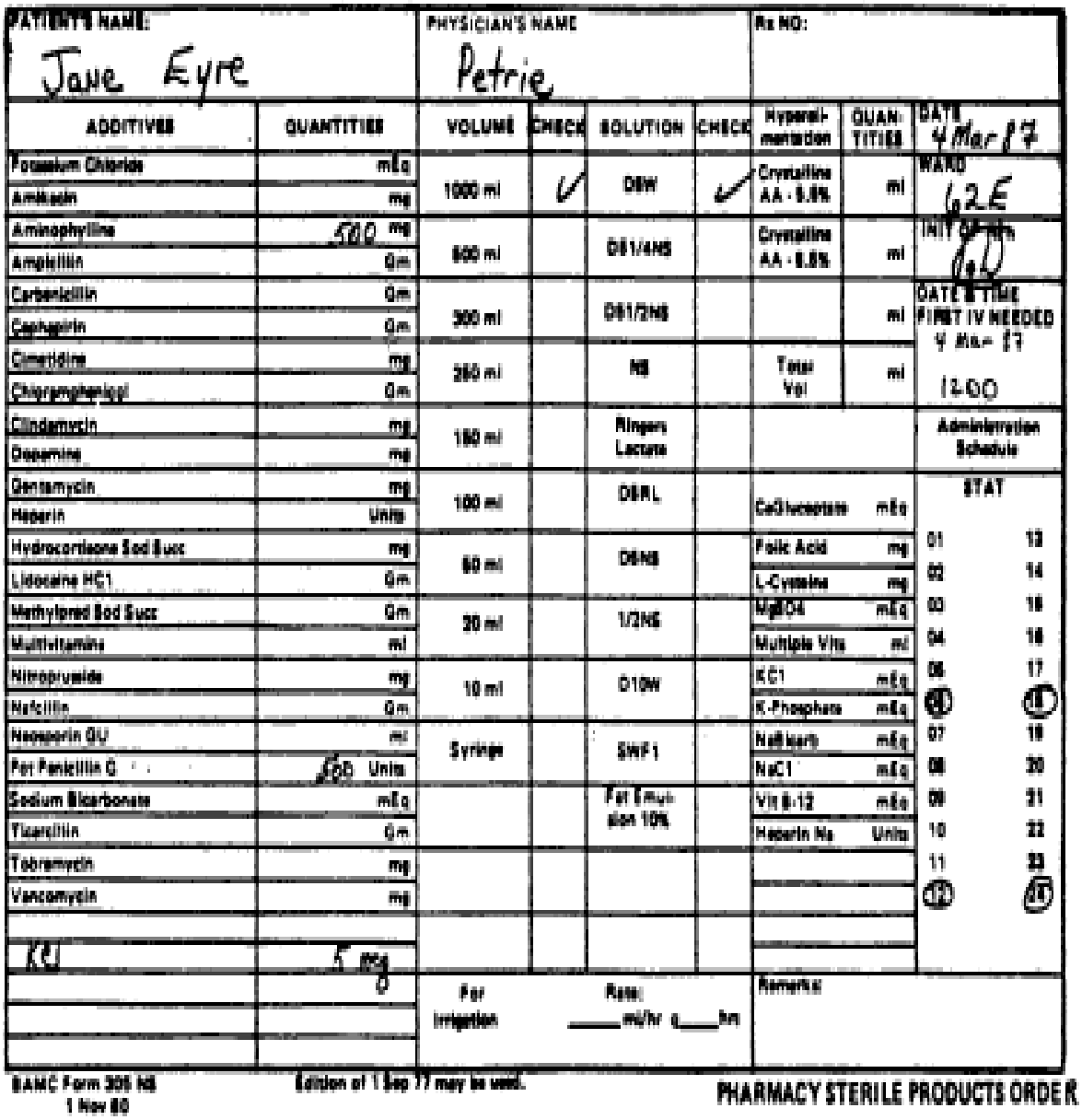
4. Calculate and select the work count for the Bulk Drug Order (Form DA 3815) shown above.

   a. 3

   b. 2.7

   c. 10.8

   d. 6



PATIENT'S NAME: Jane Eyre

PHYSICIAN'S NAME: Petrie

Rx NO:

ADDITIVES	QUANTITIES	VOLUME	CHECK	SOLUTION	CHECK	Hyperalimentation	QUANTITIES
Potassium Chloride	mEq	1000 ml	✓	D5W	✓	Crystalline AA - 5.5%	ml
Amikacin	mg						
Aminophylline	500 mg	500 ml		D5 1/4NS		Crystalline AA - 8.5%	ml
Ampicillin	Gm						
Carbenicillin	Gm	300 ml		D5 1/2NS			ml
Cephalothin	Gm						
Cimetidine	mg	250 ml		NS		Total Vol	ml
Chloramphenicol	Gm						
Clindamycin	mg	150 ml		Ringers Lactate			
Dopamine	mg						
Gentamycin	mg	100 ml		D5RL		CaGluconate	mEq
Heparin	Units						
Hydrocortisone Sod Succ	mg	50 ml		D5NS		Folic Acid	mg
Lidocaine HCl	Gm					L-Cysteine	mg
Methylpred Sod Succ	Gm	30 ml		1/2NS		MgSO4	mEq
Multivitamins	ml					Multiple Vits	ml
Nitroprusside	mg	10 ml		D10W		KCl	mEq
Nafcillin	Gm					K-Phosphate	mEq
Neosporin GU	ml	Syringe		SWFI		NaBicarb	mEq
Pen Penicillin G	500 Units					NaCl	mEq
Sodium Bicarbonate	mEq			Fat Emulsion 10%		Vit B-12	mEq
Ticarcillin	Gm					Heparin Na	Units
Tobramycin	mg						
Vancomycin	mg						
KCl	5 mg						
		Per Irrigation		Rate: ____ml/hr q____hrs		Remarks:	

DATE: 4 Mar 87

WARD: G2E

INIT OF MD: GD

DATE & TIME FIRST IV NEEDED: 4 Mar 87 1200

Administration Schedule

STAT

01	13		
02	14		
03	15		
04	16		
06	17		
09	18		
07	19		
08	20		
09	21		
10	22		
11	23		
12	00		

BAMC Form 305 NS 1 Nov 80 — Edition of 1 Sep 77 may be used.

PHARMACY STERILE PRODUCTS ORDER

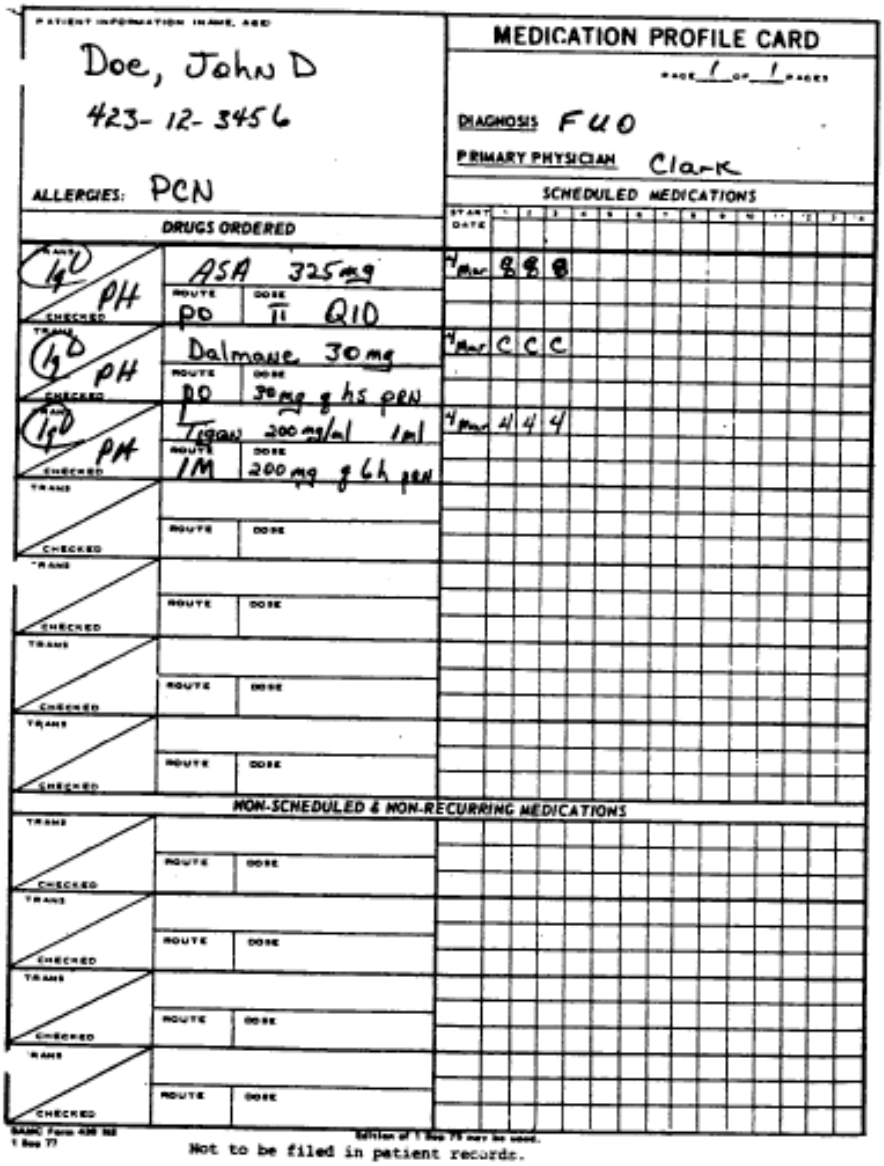
5. Calculate and select the work count for the Sterile Products Order shown above.

   a. 2.4

   b. 8.0

   c. 4.0

   d. 6.0



PATIENT INFORMATION (NAME, AGE)

Doe, John D

423-12-3456

ALLERGIES: PCN

MEDICATION PROFILE CARD

PAGE 1 OF 1 PAGES

DIAGNOSIS FUO

PRIMARY PHYSICIAN Clark

DRUGS ORDERED

SCHEDULED MEDICATIONS

START DATE

4 Mar	4Q PH	ASA 325mg	PO	1 QID
4 Mar	6Q PH	Dalmane 30mg	PO	30mg @ hs PRN
4 Mar	1Q PM	Tigan 200mg/ml	IM	1ml 200mg @ 6h PRN

NON-SCHEDULED & NON-RECURRING MEDICATIONS

Not to be filed in patient records.

6. Calculate and select the work count for the Medication Profile Card shown above.

   a. 3.6

   b. 24

   c. 14.4

   d. 48

Check Your Answers on Next Page

SOLUTIONS TO EXERCISES, LESSON 3

1. b (para 3-3b)

2. a Solution: This is a standard outpatient prescription. The UCA weight is 1.0. (para 3-7c, figure 3-1)

3. c Solution: Each item has a UCA value of 0.6, since each item has been ordered for reissue to individual patients. Each item will be appropriately labeled by the pharmacy for reissue. So:

Factor		No. Items		
0.6	x	200	=	120
0.6	x	50	=	30
0.6	x	50	=	30
				180

(para 3-8b & c(5), figure 3-10)

4. d This is a bulk drug order for clinic use. Therefore the UCA value is 2.0 per line. (para 3-8c, figure 3-6)

UCA		Line		
2.0	x	1	=	2.0
2.0	x	1	=	2.0
2.0	x	1	=	2.0
				6.0

5. b The number of additives has no effect on the UCA value. The correct value is 2.0 per unit. (para 3-9b, 3-9c(3), figure 3-13).

UCA Factor		# of bags (units)	
2.0	**x**	**4**	**= 8.0**

6. a The UCA value is 0.15 per dose. Dalmane is a controlled substance and would be counted by the controlled substances vault (outpatient pharmacy) at the time the order was filled for ward stock. (para 3-10b, figure 3-14).

	UCA Factor		No.of doses		
ASA	0.15	x	12	=	1.8
Dalmane	0.15	x	0	=	0
Tigan	0.15	x	12	=	1.8
			Total	=	3.6

End of Lesson 3