

PN-ABX-622



# LATIN AMERICA AND CARIBBEAN HEALTH AND NUTRITION SUSTAINABILITY:

Technical Support for Policy,  
Financing and Management

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Community Systems  
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Development Group, Inc. (DGI)

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URC is the prime contractor under  
Contract No.  
LAC-0657-C-00-0051-00  
with the U.S. Agency for  
International Development.

**IN-PATIENT PRESCRIBING:  
IN SELECTED PUBLIC SECTOR  
HOSPITALS IN JAMAICA**

**SEPTEMBER 1995**

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## ACKNOWLEDGEMENTS

This acknowledgement extends the authors gratitude to those named for the sturdy collaboration and support as noted below.

In Jamaica:

Mrs. Grace Allen-Young, Director, MOH/PSD for her vision, inspiration and leadership;  
Mrs. Princess Osborne, Scientific Officer, MOH/PSD, for her field coordination of data collection;

Dr. Eugenie Brown, Program Director, CAST, for her field coordination of data collection and work on the prescriber interview;

Regional Pharmacists: Gloria Cowan, Judith Atkinson-Linton, Yvonne Amair and Irma Champagne for their supervision of data collection by staff, resident and intern pharmacists;

Mrs. Berwyn Miller, Principal Pharmacist, MOH/PSD for her collaborative support; and  
Mrs. Betsy Brown and Dr. James Sheppard, USAID/Jamaica Health Officers, for their guidance;

In the United States:

Sylvia Megret, Project Officer, Institute for Science and Technology for solid administrative backstopping;

Aida LeRoy and PharmMark staff for data cleaning, tabulation and analysis;

Data entry personnel: Karen Watkins, PharmD, Sherrie L. Wilburne, and Darlette Jeannot;  
Lori McCray for typing services; and

Clinical Pharmacy Associates for verification of drug therapy entries.

This work is dedicated to all who need to benefit from the provision of pharmaceuticals in Jamaica: we trust it will be useful. The opinions expressed herein are not necessarily those of the funding agencies. They are the responsibility of the author.

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**September, 1995**

**Rosalyn C. King, Pharm.D., MPH**

**Prepared for the U.S. Agency for International Development  
LAC Health and Nutrition Sustainability Project  
Contract No. LAC-0657-C-00-0051-00  
International Science and Technology Institute  
University Research Corporation  
7200 Wisconsin Avenue, Suite 600  
Bethesda, MD 20814**

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## **1.0 INTRODUCTION**

The Health Sector Improvement Project, funded by the United States Agency for International Development (USAID), has supported cost containment strategies especially those centered on pharmaceutical procurement and the widespread use of generic drugs. It has also promoted the rationalization of pharmaceuticals. Through the promotion of a more rational use of drugs costs can be contained and management improved. Continuing education of providers and social marketing campaigns can serve as mechanisms for this promotion. Under the Latin America and Caribbean Health and Nutrition Sustainability (LAC/HNS) project, assistance is provided to the Health Sector Improvement Project (HSIP) and the Ministry of Health in pharmaceutical management with a special focus on cost containment.

This report is the final component of activities undertaken in performance of an assignment issued by International Science and Technology Institute (Jamaica TSO #25) pursuant to contract no. LAC-0657-C-00-0051-00 (LAC/HNS) to provide technical assistance to HSIP in pharmaceutical cost containment.

This assignment follows a 1993 analysis of prescribing practices for outpatients in Jamaica and, as required, uses the same data collection and analysis approach. This phase provides some demographic insight into prescribing patterns within selected hospitals. Prescribing practices for in-patient services in ten public hospitals are herein described after a brief background presentation of hospital types and results of other pertinent assessments.

## **2.0 BACKGROUND**

### **2.1 Public Sector Hospital Types and Service**

In Jamaica, hospitals are classified as specialist hospitals, regional hospitals, general hospitals and parish hospitals. Specialist hospitals (S) provide referral services in a single speciality. Regional hospitals (A) provide referral services in several specialties and sub-specialties. General hospitals (Type B) provide referral service in several specialties but limited in sub-specialty referral. Parish hospitals, Type (C), offer general care services in maternity, general medicine, child health and general surgery. A more detailed description is included as Appendix A.

### **2.2 Related Evaluations and Results**

The interim evaluation of the Jamaica Health Sector Improvement Project (HSIP), funded by the United States Agency for International Development (USAID), indicates that in 1991 the Government of Jamaica identified the promotion of generic drugs as a strategy to help protect vulnerable groups from the effects of deregulation of the economy. Additionally, institutional strengthening was selected as a priority of the Ministry of Health. In accord with this direction strategic objectives for cost containment were set and several studies carried out. A

Pharmaceutical Management Indicators Survey was conducted between September, 1992 and March, 1993 which confirmed, among other things, the MOH/PSD-identified need to analyze prescribing patterns in Jamaica health facilities.

Findings in a May, 1993 study on health care cost recovery indicated that 37.9% of respondents did not agree with a statement that generic drugs were the same as brand drugs even when prescribed by a doctor. In 1993, through the LAC/HNS project, the LeRoy analysis detailed prescribing for out-patients in 12 hospitals and 21 health centers. This study provided an overview on prescribing practices and problems which could contribute to increased costs. Nearly 61% of all prescriptions were written according to brand name. The top five drug products were classified as an analgesic, an antihistamine, a diuretic, a non-steroidal anti-inflammatory agent and an anti-infective. The average number of prescriptions per patient reported, 2.4, was considered high for minor, self-limited illnesses but low for chronic conditions. 65% of prescriptions were written for females and 35% for males. Just over 49% of prescriptions (49.2%) were written for adults (13 - 64 years old), 30.3% for geriatric patients (over 65 years old) and 20.5% for pediatric patients (1-12 years old). The percentage of drugs not dispensed as indicated was 8%. The average cost per patient was J\$50.

A PAHO funded, island-wide study in 1994 found that there was a low awareness of generic drugs in the population. Fully 78% were not aware of generic drugs and when the concept was explained to them, roughly half still did not indicate a strong disposal to use generic drugs. Most who were aware of the concept received their information from doctors, friends and relatives. Only 7% received this information from a pharmacist. Further, 60% of those surveyed who had been on medication report receiving information on appropriate medication use from pharmacists but only 4% reported having the significance or importance of the appropriateness of use explained to them.

The 1994 LAC/HNS supported Shepard study on cost recovery in primary health care in Jamaica reveals that the average price per pharmaceutical item in primary care clinics is J\$24.81, a modest figure. The range of cost per pharmaceutical item studied is, however, J\$9.68 to J\$48.62. Shepard concludes that the upper range is deemed well below prices in the private retail sphere.

The HSIP Interim Evaluation report also states that the MOH should implement the primary recommendation of the 1992 HSIP Strategy concerning pharmaceutical rationalization, especially with respect to: development of inservice training for doctors and nurses, establishment of committees responsible for drug use in both secondary and primary care facilities, pharmaceutical use analysis for in-patients, management training for pharmaceutical staff at hospitals, implementation of pharmaceutical education and training in primary and secondary facilities throughout the country and development of social marketing activity focussed on education pharmacists and consumers concerning pharmaceutical and drug use.

This work, therefore, continues to provide technical assistance in pharmaceutical cost containment through an assessment of in-patient prescribing in selected hospitals in Jamaica.

### **3.0 PURPOSE**

The purpose of this assessment is to obtain descriptive information on the nature of in-patient prescribing and drug use which can serve as the basis for the development of:

- ↳ pharmacy-based and pharmacist-led cost containment strategies; and
- ↳ training recommendations for medical and pharmaceutical providers.

### **4.0 COMPONENTS**

Initially, this assessment was to serve as a second phase of a study on out-patient prescribing conducted in 1993. This phase would use the methods and analysis parameters used in the out-patient study and would yield a descriptive overview of prescribing in hospitals of the public health system of Jamaica. However, under guidance from the Director of the Ministry of Health Pharmaceutical Services Division, this phase also provides additional information on (1) elements of rationale prescribers use in treating selected health problems and (2) prescriber perspectives on needed additional pharmacy service useful to the pharmacotherapy procedure.

Accordingly, this descriptive overview is composed of two sections: an assessment of (1) current inpatient prescribing and (2) current provider considerations and practices with regard to 4 types of drug therapy: intravenous fluids, anti-infectives, anti-hypertensives and hypoglycemics. Early plans included a review of the cost of in-patient drug therapy. However, the cost of drugs to the public sector has been recently studied (Shepard and LeRoy) and reported. Further, detailed cost data per pharmaceutical item could not be derived within the timeframe allowed for this study. This portion of the study was omitted with the permission of the MOH/PSD.

### **5.0 METHODS**

#### **5.1 Site Selection**

Hospitals to be included in the sample were chosen by the MOH/PSD in consultation with the director, secondary care. Selected sites were to constitute at least a 50% sample of all hospitals in Jamaica and represent all types of hospitals, all regions and selected parishes. Table 1 presents the sites selected. Figure 1 provides a view of the geographic dispersion of the sites initially selected.

The MOH/PSD chose 16 of the 22 hospitals in Jamaica as sites for data collection. Of this number, 1 was deselected by the Ministry. A total of 12 hospitals participated in the prescribing practices portion while 13 participated in the prescriber interview segment. Table 1 presents the listing of participating sites whose data were analyzed. Data was collected for two sites (Bustamonte and Cornwall Regional Hospitals) but are not included in this report. Part of the data for Spanishtown was received in time for tabulation and analysis. All four

**SELECTED FOR DRUG USE EVALUATION**

SITE NAME	SITE CODE***	REGION	PARISH	SURVEY PARTICIPATION		TYPE			
				Prescriber Interview	In-Patient Analysis	S	A	B	C
Kingston/VJH	4001	S. East	Kingston/St. Andrew	X	X		.		
Bustamonte Childrens	4031	S. East	Kingson/St. Andrew	X	DNR	.			
National Chest	4032	S. East	Kingston/St. Andrew	X	---	.			
Bellevue	4033	S. East	Kingston/St. Andrew	---	X	.			
University	4002	S. East	Kingston/St. Andrew	---	---		.		
Spanishtown	4011	S. East	St. Catherine	X	X			.	
Princess Margaret	4021	S. East	St. Thomas	X	X				.
St. Anns Bay**	2011	N. East	St. Ann	X	X		.		
Port Antonio*	2021	N. East	Portland	X	---				.
Annotto Bay*	2022	N. East	St. Mary	X	DNR				.
Cornwall Regional**	1001	Western	St. James	X	X		.		
Sav-La-Mar	1011	Western	Westmoreland	X	X			.	
Falmouth*	1021	Western	Trelawny	X	X				.
Mandeville**	3011	Southern	Manchester	X	X			.	
Black River	3021	Southern	St. Elizabeth	X	X				.
Maypen	3022	Southern	Clarendon	---	---				.

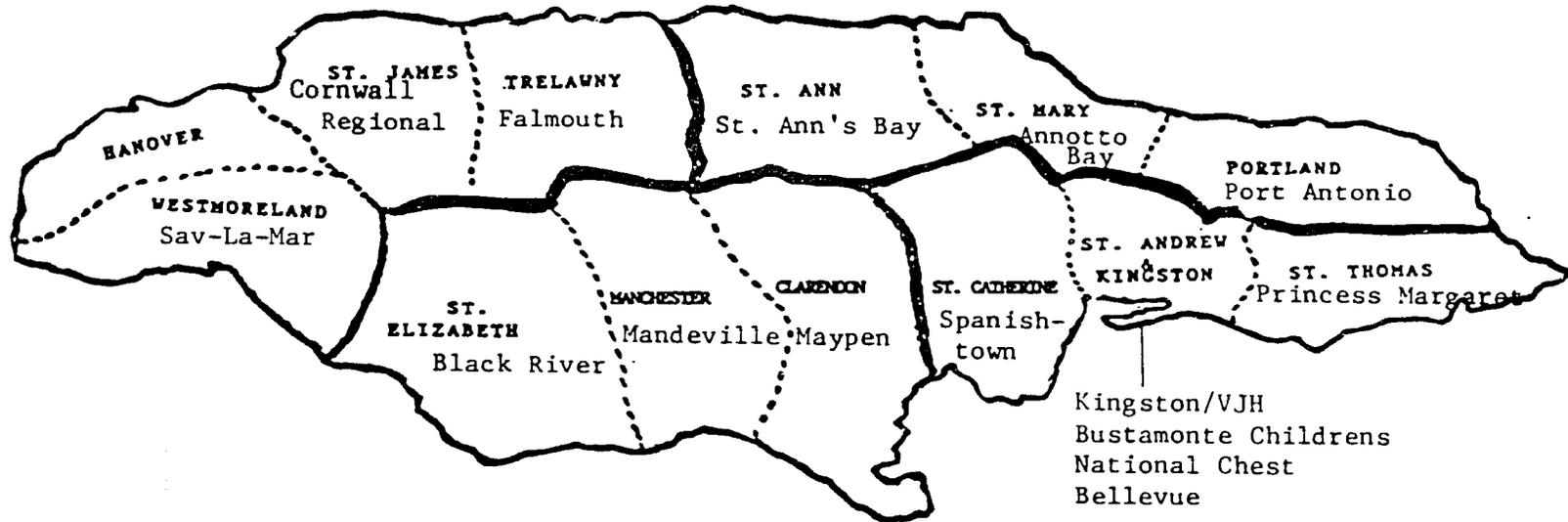
DNR Data Not Reported

\*\*\* The Site Code Legend:

.  
.. Pharmacists not routinely present  
Site for pilot testing

Region = First Number, 1-4  
Type = A-00; B-01, C-02, S-03  
The final number indicates the number of type of hospitals in the region.

MAP OF JAMAICA SHOWING HEALTH REGION



SOURCE: 1. STATIN Population Census 1991 - Preliminary Report  
2. Health Information Unit - Ministry of Health

regions of Jamaica are represented as well as all types of hospitals and most parishes.

## **5.2 Data Collection and Analysis**

Data was collected between January and March, 1995 using pre-tested forms for both parts of the survey (Appendix B and C). At each site, four different days of each of four weeks was selected for data collection. The days were to be chosen to enable a representative sampling of days on which there was heavy and light prescribing and dispensing. Patients whose drug therapy would be reviewed were chosen randomly from drug orders presented to the Pharmacy from all wards of the hospital.

The data collection form used in the 1993 out patient survey was adopted and expanded to include patient diagnosis, as well as information on dispensing and administration. A questionnaire was structured based on the areas of interest to the MOH/PSD and results of the pre-test. Providers willing to collaborate were interviewed.

A workshop was held in January, 1995 to train data collectors and provide general guidance to field coordinators. A notebook was compiled to serve as a reference to the data collection process.

Data on diagnosis, drugs ordered, drugs dispensed and drugs administered were gathered from the following source documents:

- þ Patient docket
- þ Treatment tickets
- þ Other Pharmacy records
- þ Nursesþ cardex

Field Coordinators gave leadership and oversight to the team of regional hospital pharmacists, resident and intern pharmacists who collected data for both components of the assessment. Data collected was organized and transmitted by international express mail service by the field coordinators to the consultant between April, 1995 and July, 1995. The consultant then organized data entry, data tabulation and analysis. Experienced persons and a pharmacy student were used to perform data entry tasks. A group specializing in clinical pharmacy, Clinical Pharmacy Associates, verified data entry of drug therapy. The services of the PharMark Corporation, a consulting group which specializes in drug use analysis, whose members conducted the analysis of the outpatient data collected in 1993 performed data cleaning, tabulation and analysis. Descriptive information was provided by the use of SAS software.

## **6.0 SUMMARY OF FINDINGS**

Findings from both components of the assessment were preliminarily presented in a national workshop in September, 1995. The format used for the workshop, high visual presentation of

results, is purposefully used in this report with a view toward facilitation use of the findings by local hospital committees.

## **6.1 In-Patient Prescribing**

The final sample consisted of 609 drug orders for 203 patients for 4293 pharmaceutical items. Findings presented include reference to the frequency on which the finding is based. Findings provide demographic insight into prescribing patterns and are presented according to major themes of analysis: drug ordering activity, brand/generic prescribing, dispensing activity and most frequently prescribed drug products. These findings provide one baseline for continued assessment by region and/or site.

### **6.1.1 Drug Order Activity**

The concentration of population and the largest hospital is in the South East region. Drug Order Activity appears to be consistent with this fact. Of the total number of drug orders (N=603), 112 were from the North East region, 229 from the south east, 178 from the Southern region and 84 from the Western region (Table 2 )

Kingston/VJH contributed the highest number of orders (N=102) followed by Mandeville (N=101), St. Ann's Bay (N=82), Bellevue (N=79), Savannah-La-Mar (N=78), and Black River (N=77). (See Table 3 and 4)

In 84% of the drug orders, the frequency of number of orders per patient were from 1 and 10 (Table 5). In the remaining part of the sample, there are instances of patients receiving as many as 50 orders on the days sampled. Caution should be taken in using this finding as it is not related to diagnosis and is meant to give perspective on the magnitude of orders only.

When age notations were made, orders for Adults (14 - 65) constituted nearly 56% of orders, children (3-13) 5.5%, infants (0-2) 7.5%, geriatric patients (>65) 23.3% and age unspecified 81% (Table 6). When the sex of patients was specified (N=508), 61% of the drug orders were for females and 39% for males (Table 7).

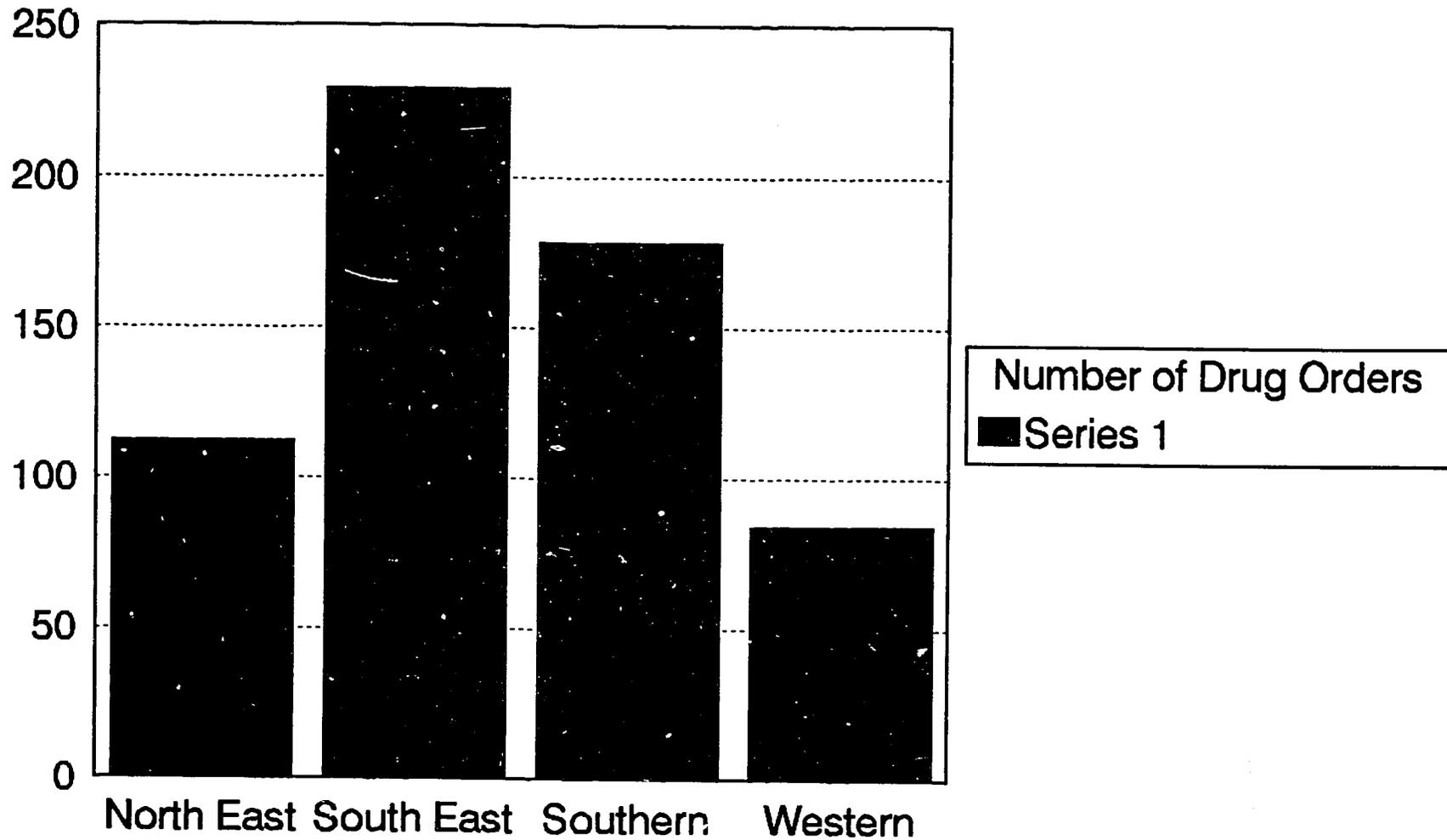
Internal Medicine wards were the source of 29.9% of drug orders, surgery 20.4%, ob/gyn 16.7%, pediatrics 9.2%, and ICU 2.2% All other wardcodes were the source of 17.3% of drug orders and 4.3% were of unknown wardcode when drug orders are tabulated by wardcode (Table 8).

### **6.1.2 Brand/Generic Prescribing and Dispensing**

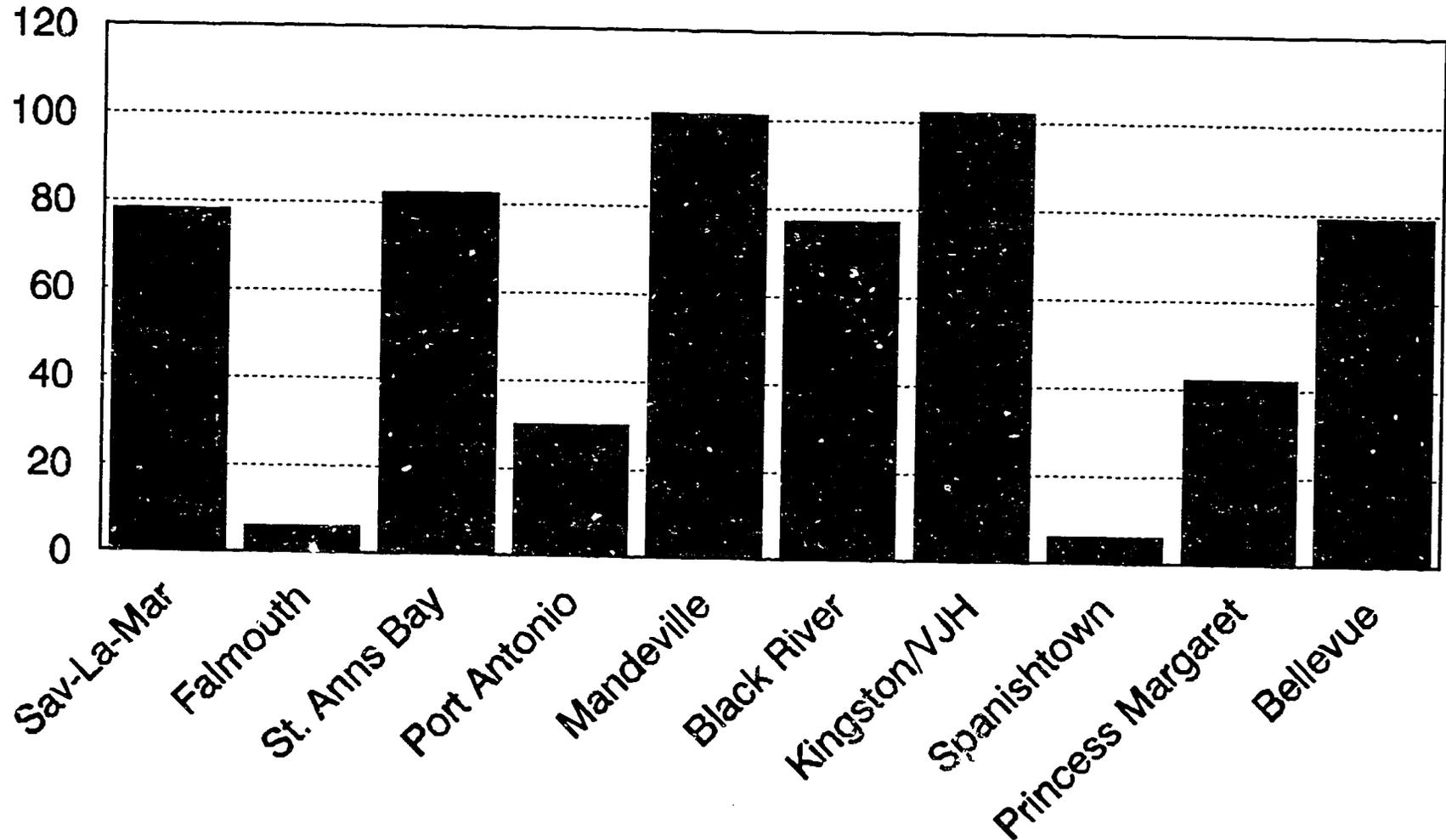
#### **Brand Generic Prescribing**

A total of 4111 pharmaceutical items requested were classified according to brand/generic or unknown designation. In all, 56.1% of drugs are requested by brand name, 41.3% by generic name. Unknown designation accounts for 2.6%. (See Table 9) Jamaica adheres to a policy

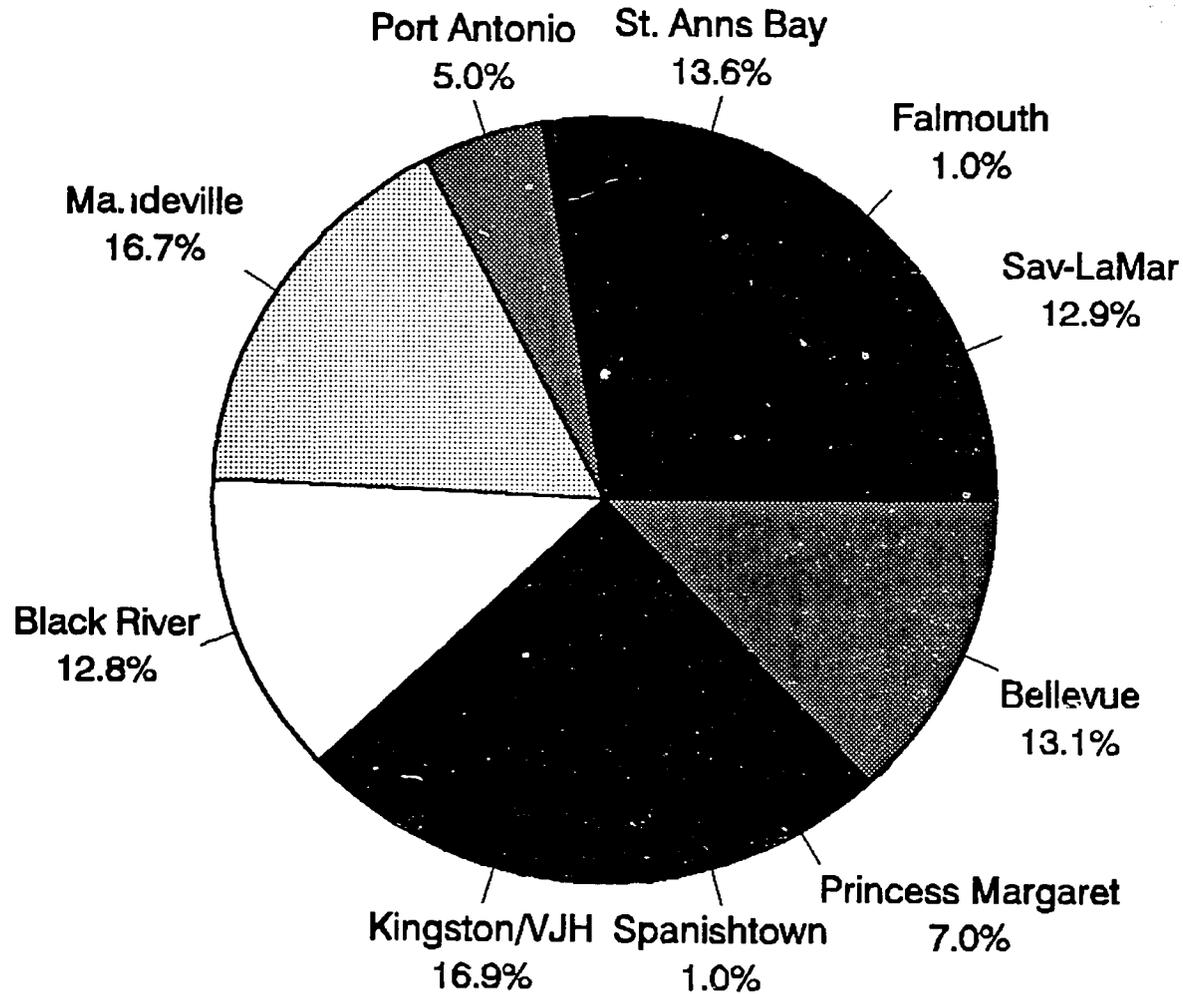
# Drug Order Activity by Region



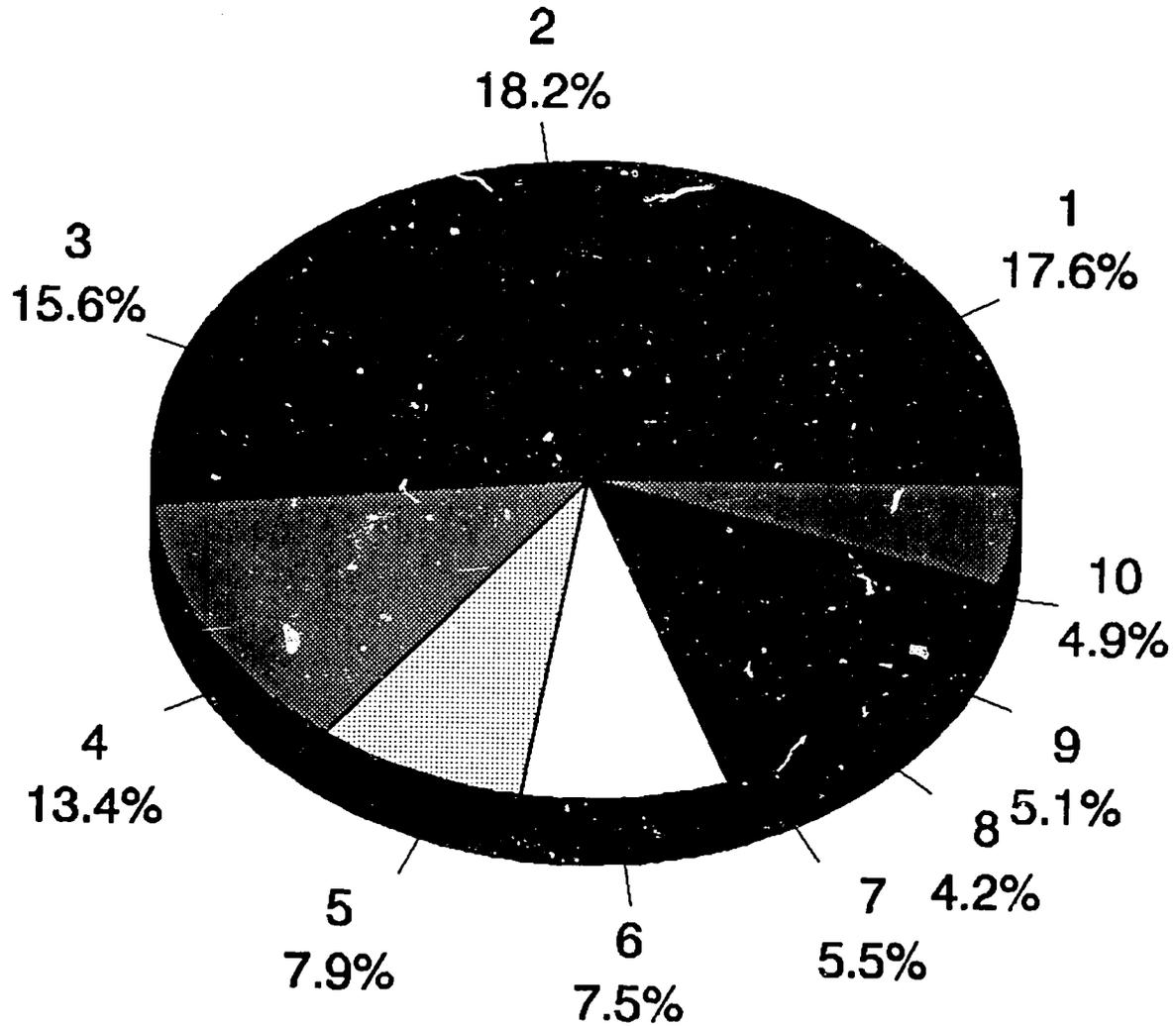
# Number of Drug Orders By Site



# Percent of Drug Orders By Site



# Number of Drug Orders Per Patient Across All Sites



84% of drug orders

# Number of Drug Orders by Age Range

## All Sites

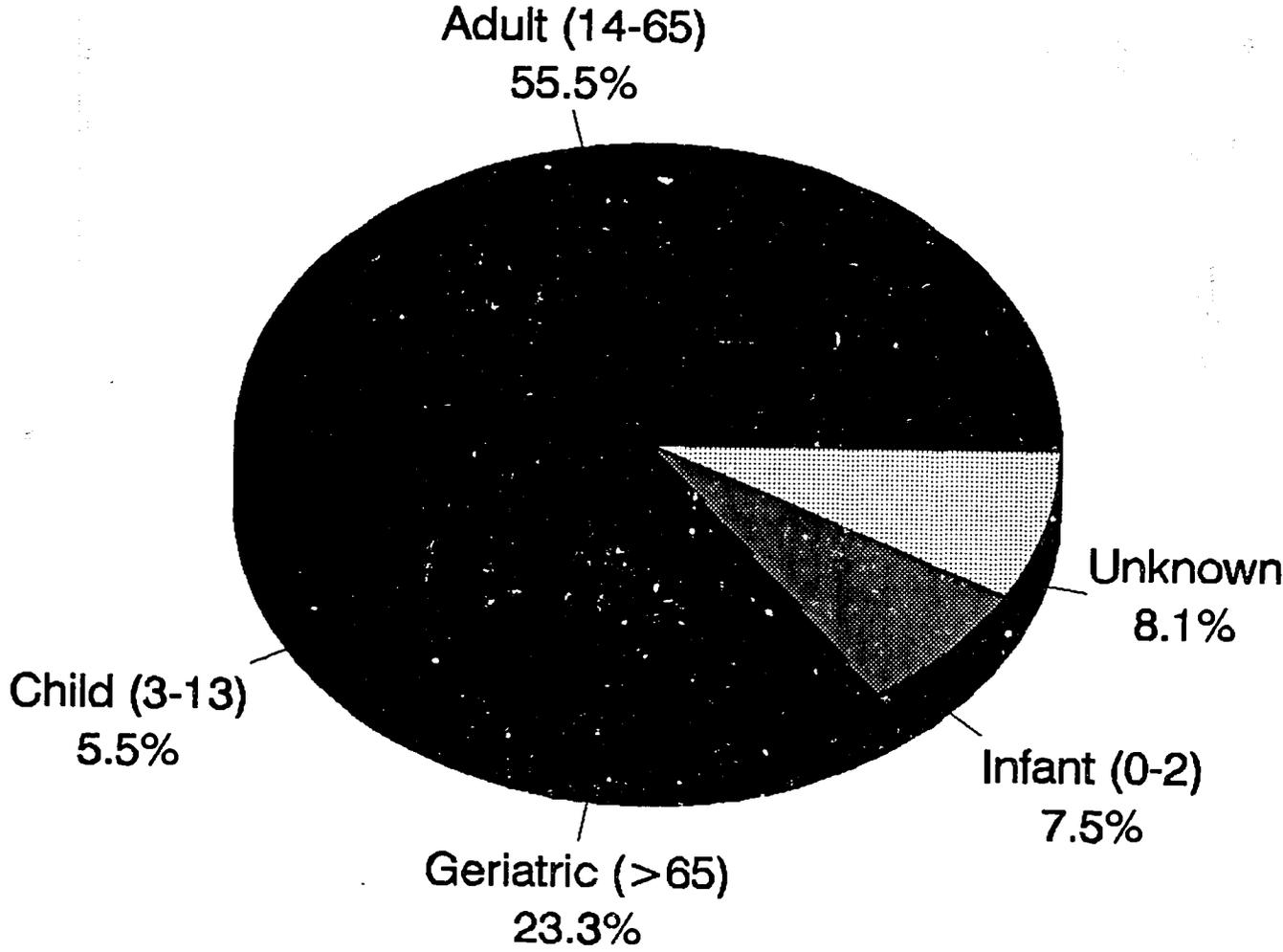
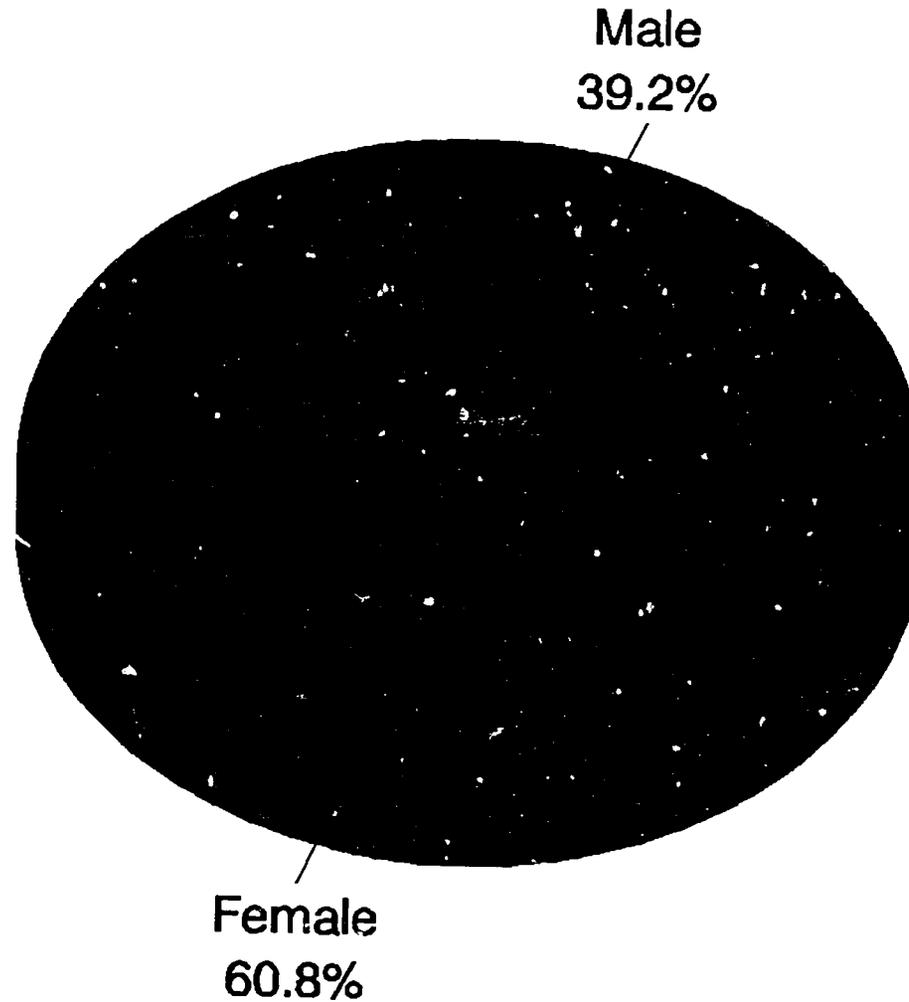


Table 6

# DRUG ORDER ACTIVITY BY SEX

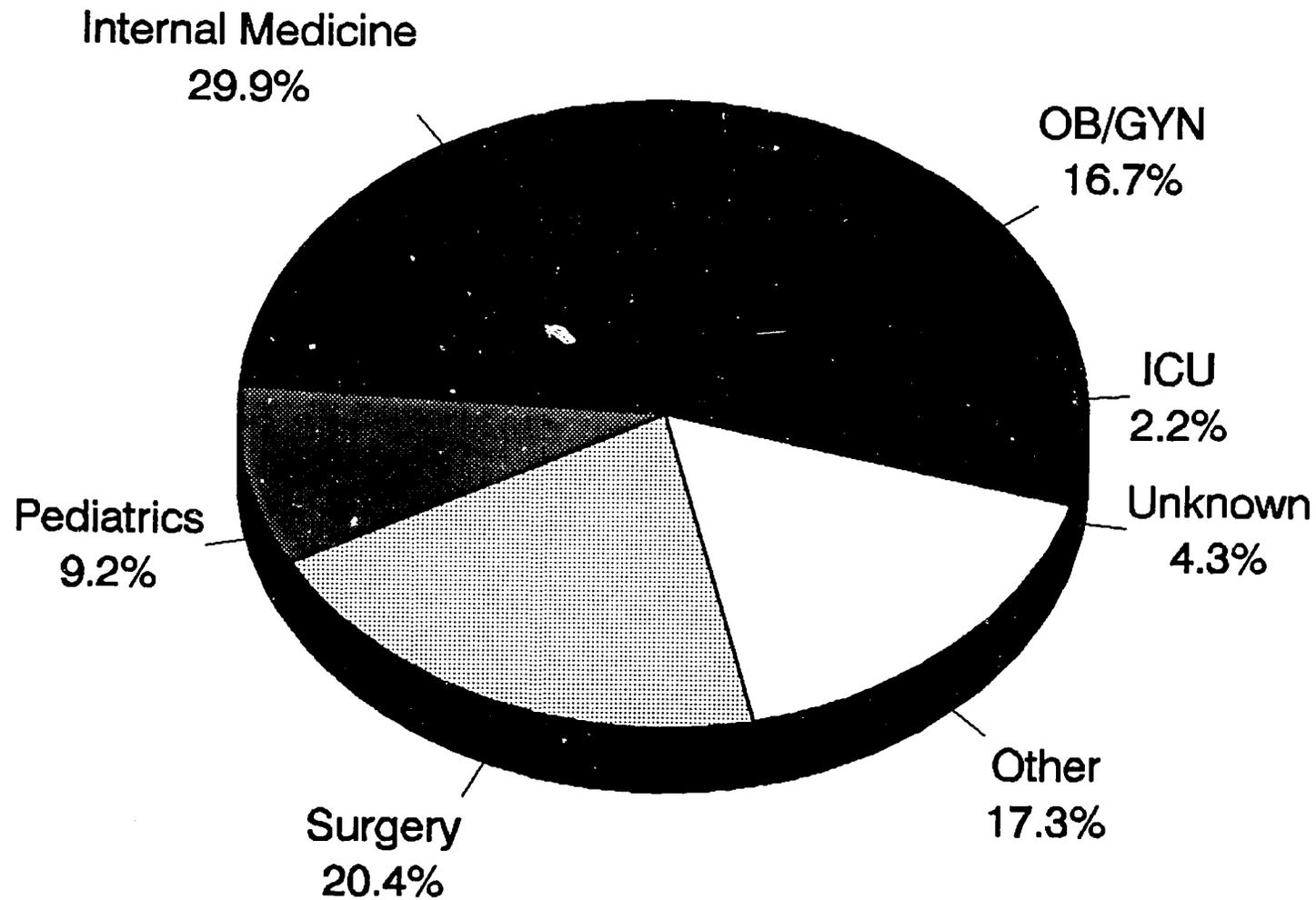
All Sites



n=508

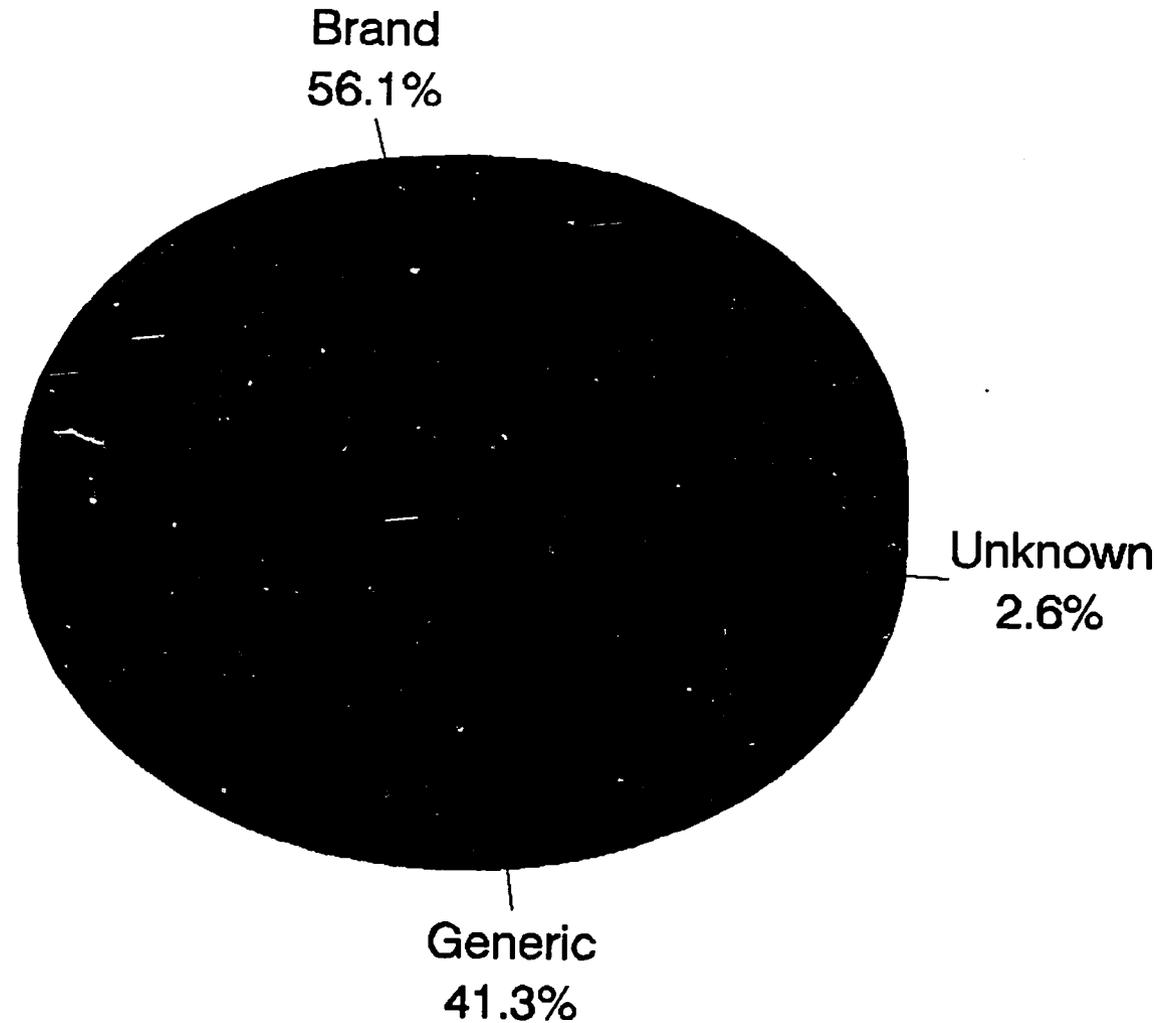
# % Drug Orders by Wardcode

All Sites



# Brand/Generic Prescribing

All Sites



many countries use and designates pharmaceuticals officially using generic nomenclature. Accordingly, one could expect to see a larger percentage of prescribing which used generic names of pharmaceuticals in the in-patient setting.

The number of requests by brand name, where brand/generic and age range were specified (N=1920), are adults 1080, children 127, geriatrics 548, infants 87 and 78 of unknown classification. Requests by generic name and age range are given (N=1476) are adults 828, children 90, geriatrics 413, infants 83 and unknown 62. (Table 10).

By sex (N = 3509), pharmaceutical items were requested by brand name for females 54.1% of the time and by generic name 43.5% of the time. Drugs for male patients were described by brand name 55.8% of the time, by generic name 40.2% of the time with unknown designation accounting for 2.4%. (Table 11)

A review of Table 12 indicates that when brand/generic citations are tabulated by wardcode, internal medicine, surgery and ob/gyn wards use brand designations more consistently than other wards. By site, Savannah-La-Mar, Falmouth, Mandeville and Bellevue drug item orders were more frequently described by brand name. (See Table 13)

### **Brand/Generic Dispensing**

Brand/Generic dispensing could be determined for about half of the drug items requested (N=2264). Of this number 54.8% were dispensed according to brand requested and 37.7% by generic name (Table 14). This finding is mitigated by the supply problems. Prescribers simply might be using the names of brands known to be in stock.

#### **6.1.3 Dispensing**

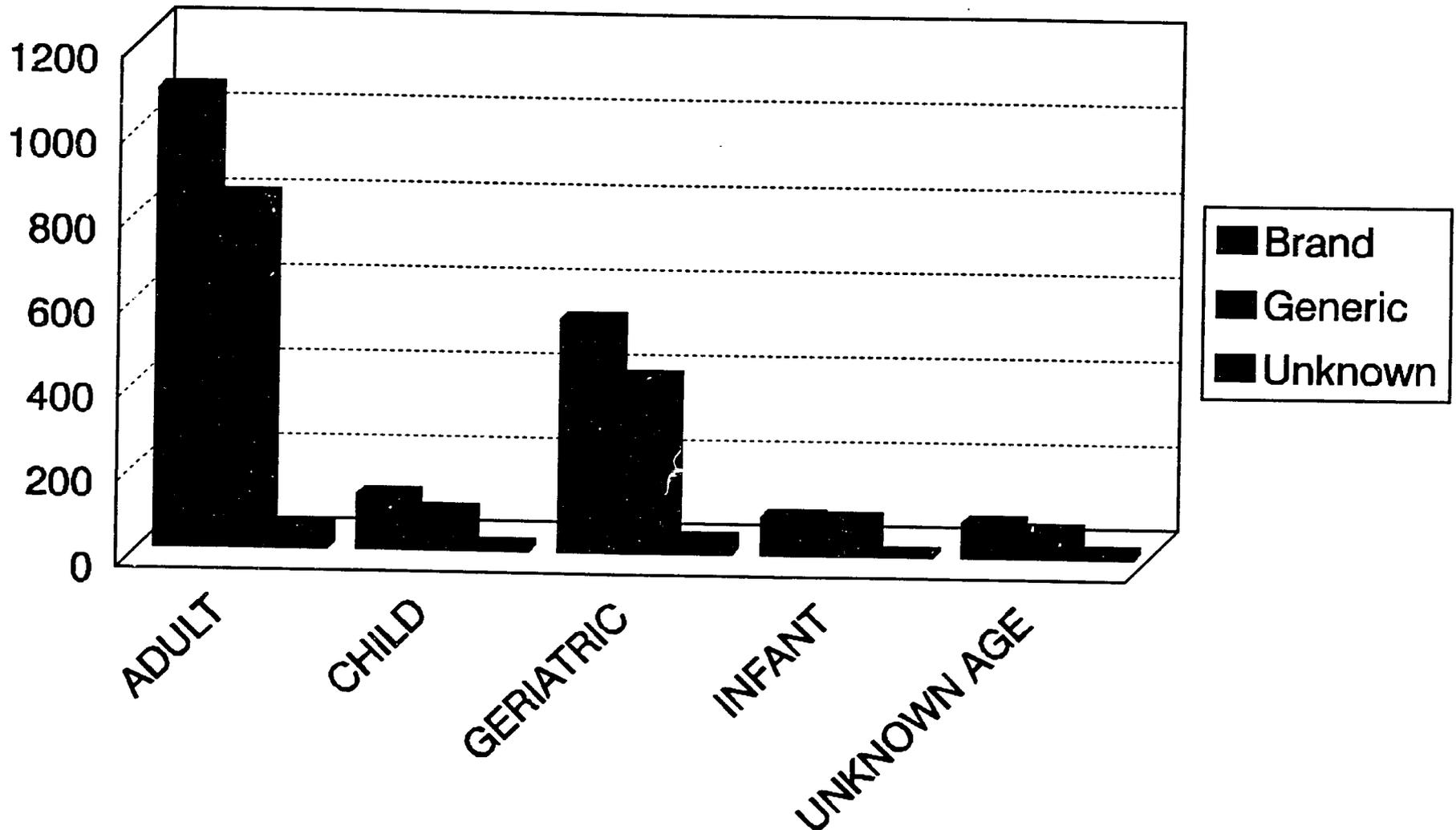
Of the 4293 drugs ordered, 3536 (82.4%) were dispensed and 662 (15.4%) were not. No determination could be made for 94 (2.2%). According to tabulated data, the percent of drugs ordered but not dispensed were over 20%. They were Savannah-La-Mar (22.9%), Mandeville (28.4%), and Kingston/VJH (20.4%). (Table 15). In internal medicine wards, a major source of drug orders, had just over 19% of their orders not dispensed. Similarly, 20% of the ICU drug orders were unfilled. (Table 16). Considering the issues with shortages of pharmaceuticals, this finding is remarkable as one could expect to find a higher percentage. Yet, this finding should not lessen the need to attend to reducing a shortages of pharmaceuticals. Absence of a dispensed drug product could mean unavailability of a more cost-effective therapeutic strategy.

#### **6.1.4 Frequently Prescribed Pharmaceutical Products**

The top 20 drug products across all sites and by region are listed in Tables 17, 18, 19, 20 and 21. Amoxicillin and Meperidine are in the top 5 products prescribed in 3 of the 4 regions with Meperidine appearing on the list of the top 5 in all 4 regions. This finding was followed up by the MOH/PSD immediately by discussion with regional pharmacists. The drug is a narcotic

# BRAND/GENERIC PRESCRIBING BY AGE RANGE

All Sites

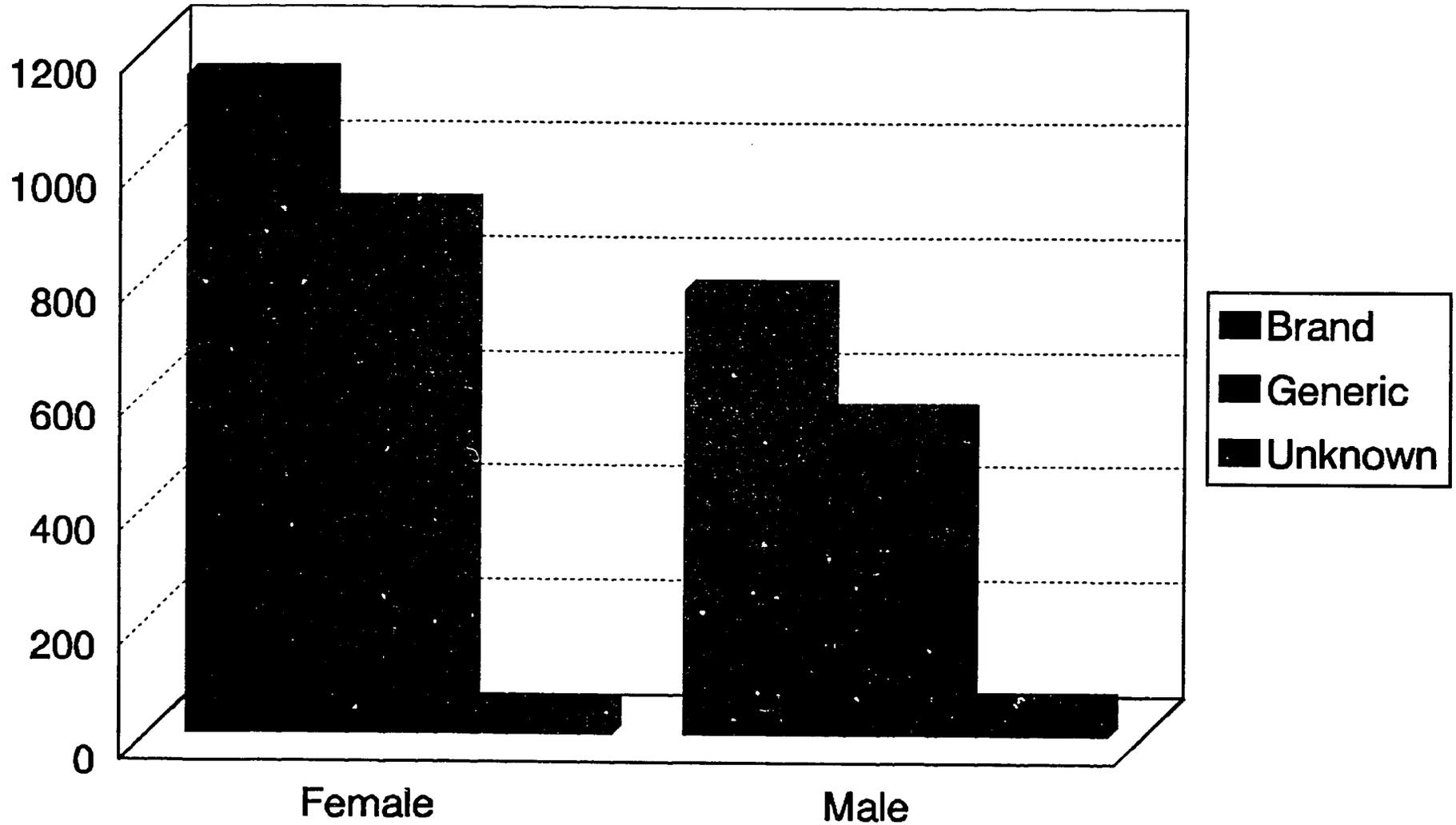


-17-

N=3500

# BRAND/GENERIC PRESCRIBING BY SEX

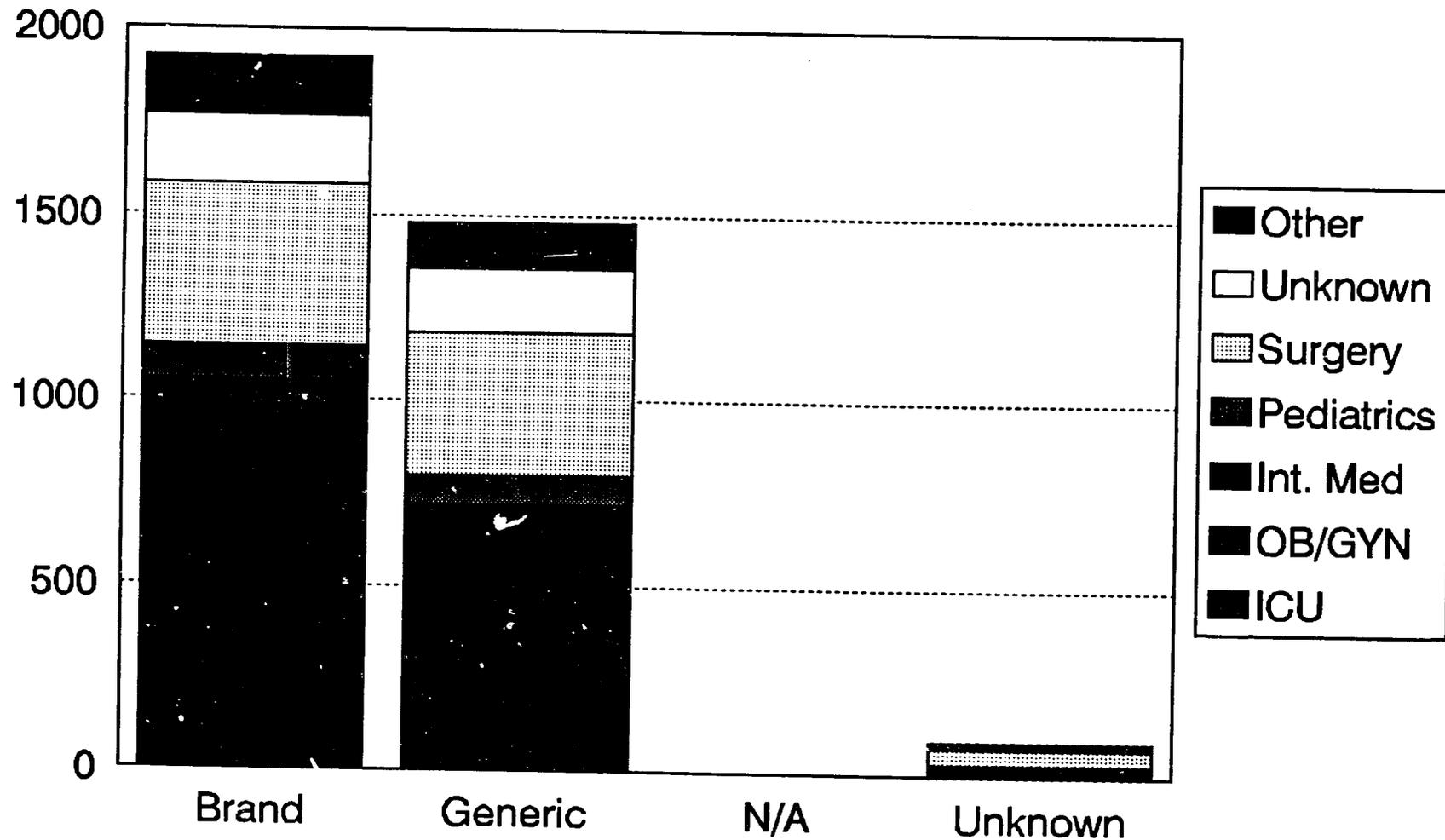
## All Sites



N=3509

# Brand/Generic Prescribing - by Wardcode

All Sites

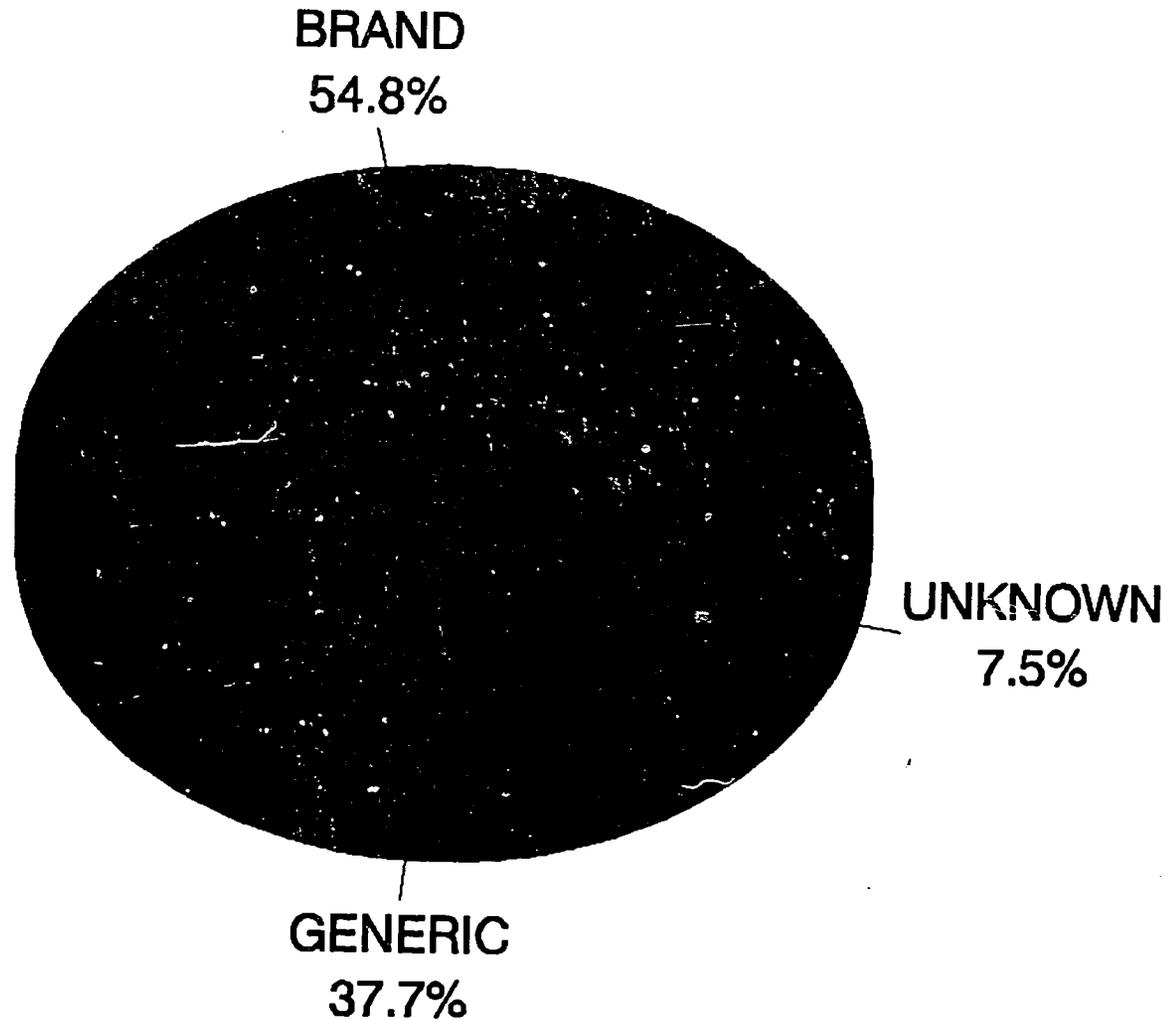


# BRAND/GENERIC PRESCRIBING BY SITE

	Sav-La-Ma r	Falmouth	St. Ann's Bay	Port Antonio	Mandevill e	Black River	Kingston/ VJH	Spanishtown	Bellevue
BRAND	113	22	130	100	586	404	430	148	357
GENERIC	54	16	88	82	351	461	316	121	192
UNKNOWN	8	0	36	20	3	14	19	9	1
TOTAL	175	38	254	202	940	879	765	278	550

n=4111

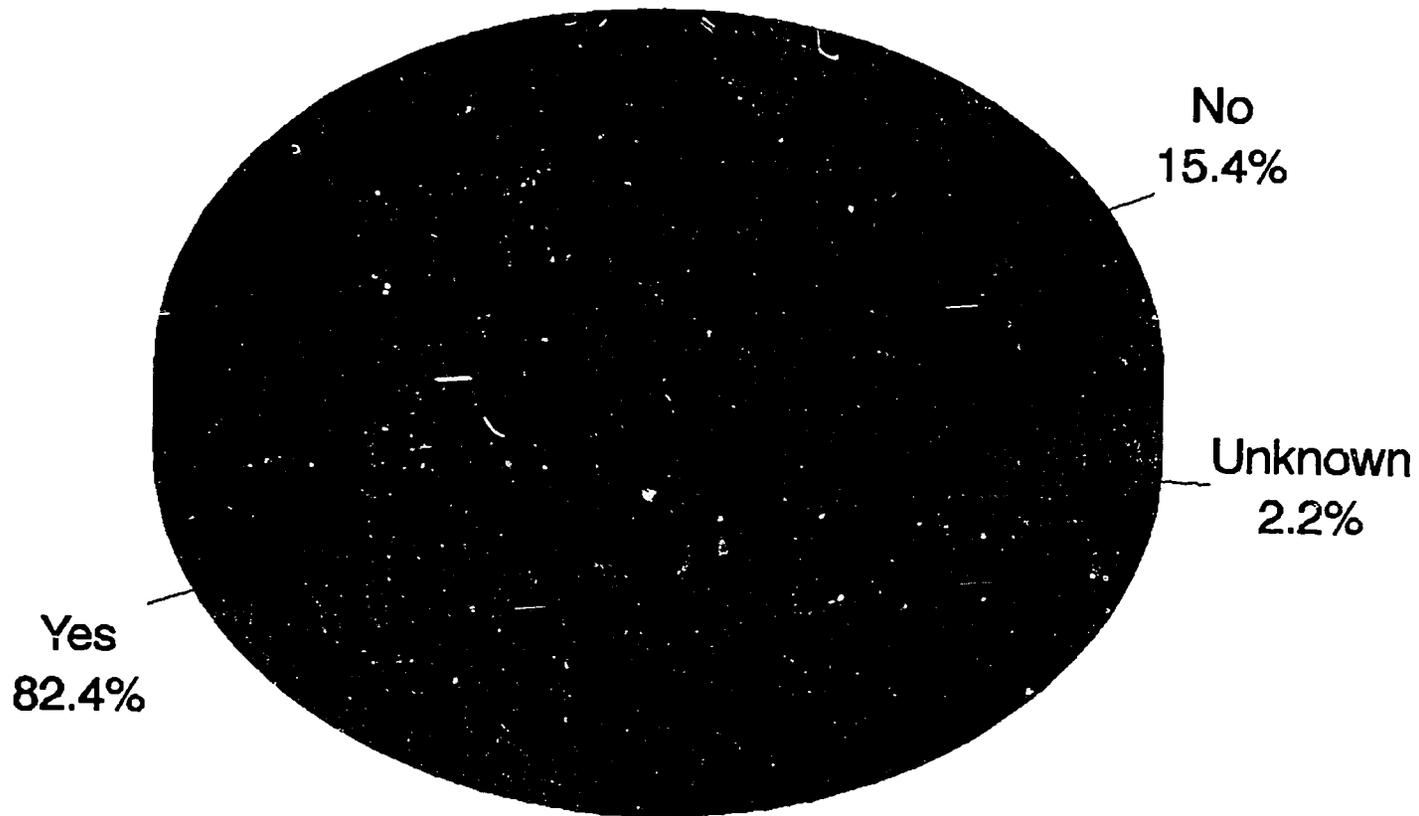
# BRAND/GENERIC DISPENSING



N=2264

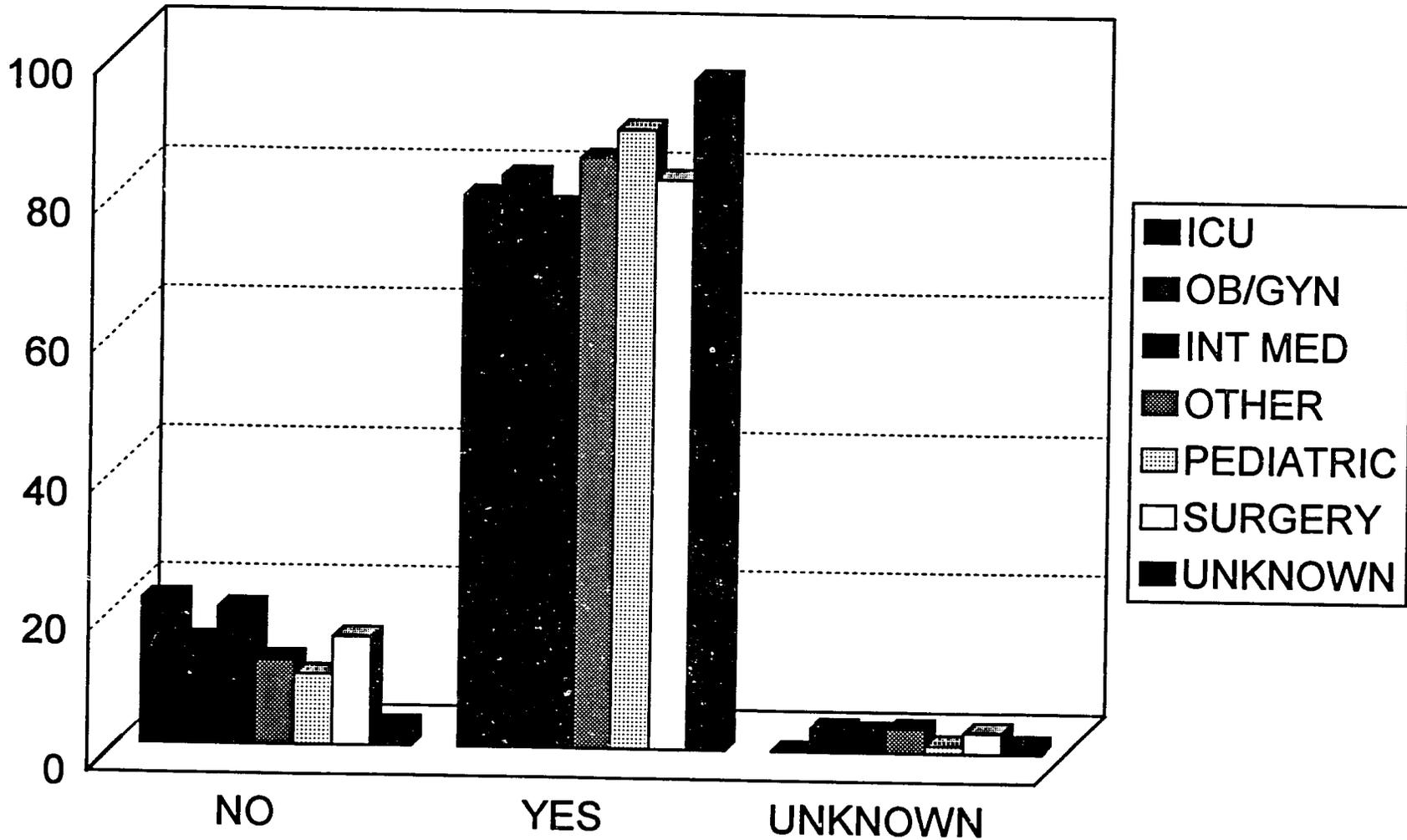
# Drugs Ordered but Not Dispensed

All Sites



# % DRUGS ORDERED BUT NOT DISPENSED BY WARDCODE

## ALL SITES



22-1A

# Mbst Frequently Prescribed Drug Products - Top 20

## All Sites

	Drug Product Name	Number of Rx's	Percent
1	Amoxicillin	266	6.52
2	Meperidine	182	4.46
3	Methyl dopa	162	3.97
4	Chlorpromazine	134	3.28
5	Furosemide	128	3.14
6	Chloramphenicol Oral Cap	126	3.09
7	Ibuprofen	115	2.82
8	Hydralazine	112	2.75
9	Trihexyphenidyl	111	2.72
10	Gentamicin Sulfate	97	2.38
11	Insulin	96	2.35
12	Fluphenazine	95	2.33
13	Mefenamic Acid	85	2.08
14	Metronidazole	81	1.99
15	Co-Trioxazole Oral Susp	76	1.86
16	Dextrose 5% Water	72	1.76
17	Acetanophen	69	1.69
18	Digoxin	66	1.62
18	PE Pyrophos/Vit B Comp/	66	1.62
20	Magnesium Trisilicate Oral Susp	62	1.52
184		4063	

# Most Frequently Prescribed Drugs - Top 20

## North East Region

	Name of Drug	Number of Orders	Percent
1	Amoxicillin	52	11.02
2	Gentamicin Sulfate	21	4.45
3	Meperidine	20	4.24
4	Hydralzine	17	3.6
5	Methyldopa	16	3.39
6	Dextrose 5% Water	16	3.39
7	Acetaminophen	15	3.18
8	Ampicillin	15	3.18
9	Furosemide	14	2.97
10	Metronidazole	14	2.97
11	Mefenamic Acid	13	2.75
12	Magnesium Trisilicate Oral Susp	11	2.33
13	Chloramphenicol Oral Cap	11	2.33
14	Ringers Solution, Lactated	9	1.91
15	Insulin	9	1.91
16	D5NS/Potassium Chloride	9	1.91
17	Diazepam	8	1.69
18	Trihexyphenidyl	8	1.69
19	Ibuprofen	8	1.69
20	Co-Trimoxazole Oral Susp	8	1.69

# Most Frequently Prescribed Drug Products -Top 20

## South East Region

	Name of Drug	Number of Orders	Percent
1	Amoxicillin	111	6.94
2	Chlorpromazine	102	6.38
3	Trihexyphenidyl	91	5.69
4	Fluphenazine	88	5.5
5	Meperidine	60	3.75
6	Gentamicin Sulfate	50	3.13
7	Metronidazole	50	3.13
8	Methyldopa	48	3
9	Ibuprofen	48	3
10	Magnesium Trilicate Oral Susp	32	3
11	Diazepam	30	3.88
12	Furosemide	29	1.81
13	Mefenamic Acid	26	1.63
14	Insulin	25	1.56
15	Ergonovine Maleate	25	1.56
16	Unknown	25	1.56
17	Fe Pyrophosphate/Vit B.mp	23	1.44
18	Cloxacillin	23	1.44
19	Co-Trimoxazole Oral Susp	23	1.44
20	Hydralazine	22	1.38

# Most Frequently Prescribed Drugs - Top 20

## Western Region

	Name of Drug	Number of Drug Orders	Percent
1	Methylidopa	11	5.31
2	Meperidine	9	4.25
3	Acetaminophen	9	4.35
4	Furosemide	9	4.35
5	Gentamicin Sulfate	8	3.86
6	Diphenhydramine	8	3.86
7	Albuterol	7	3.38
8	Ibuprofen	6	2.9
9	Cephalexin	6	2.9
10	Co-Trimoxazole Oral Susp	6	2.9
11	Digoxin	5	2.42
12	Potassium Chloride Oral Tab/Soln	5	2.42
13	Ampicillin	5	2.42
14	Amoxicillin	5	2.42
15	Chloramphenicol Oral Cap	5	2.42
16	Magnesium Trisilicate Oral Susp	4	1.93
17	Prednisolone	4	1.93
18	Unknown	4	1.93
19	Mebendazole	4	1.93
20	Aminophylline	3	1.45

# Most Frequently Prescribed Drugs - Top 20

## Southern Region

	Name of Drug	Number of Orders	Percent
1	Amoxicillin	98	5.44
2	Meperidine	93	5.16
3	Chloramphenicol Oral Cap	88	4.89
4	Methyldopa	87	4.83
5	Furosemide	76	4.22
6	Hydralizine	71	3.94
7	Insulin	62	3.44
8	Ibuprofen	53	2.94
9	Dextrose 5% - Water	49	2.72
10	Digoxin	48	2.67
11	Mefenamic Acid	43	2.39
12	Co-Trimoxazole Oral Susp	39	2.17
13	Folic Acid	38	2.11
14	FEPyrophos/VitB Comp/FA	35	1.94
15	Acetaminophen	35	1.94
16	Spironolactone	32	1.78
17	Potassium Chloride Oral Tab/Soln	29	1.61
18	Atro/Scopolamine/Hyoscine/PB	29	1.61
19	Clindamycin HCL	29	1.61
20	Sodium Chloride 0.9%	28	1.55

analgesic. It was determined that the high use of meperidine reflected issues in supply. Implications for societal and health care costs can be minimized by the prompt supply of an alternative product.

In an ideal situation, the top 20 drugs prescribed for a given population should correspond to the major health problems of that population. Where there is decreased correspondence, there is room for added drug therapy monitoring and system wide drug use evaluation in order to have economically sound use of drug product resources.

#### **6.1.5. Therapeutic Problems**

RationalMed(R), a software package used to review drug use, aids in identifying patterns of drug use which place patients at risk for adverse health outcomes. Using this software, alerts were generated on eight patients and one therapeutic conflict reported. Alerts signal the need for closer monitoring and conflicts indicate the need for intervention to correct the situation. A sample patient profile indicating the conflict is in Appendix D. Although form had space to collect data on diagnosis and administration, entries were irregular and most deemed not useable in order to adequately assess the drug-disease relationship of patients in the study.

### **6.2 Prescriber Interviews**

A total of 75 prescribers in 13 sites were interviewed using a structured questionnaire. As expected, 28 were from Kingston/VJH (Table 22).

Prescribers were between the ages of 21 and 30 years, male and in practice 0-5 years and identified themselves as medical residents. (See Tables 23, 24, 25, and 26). Provider rationale and practices regarding the 4 selected classes of drug therapy and perspectives on pharmaceutical service are given below.

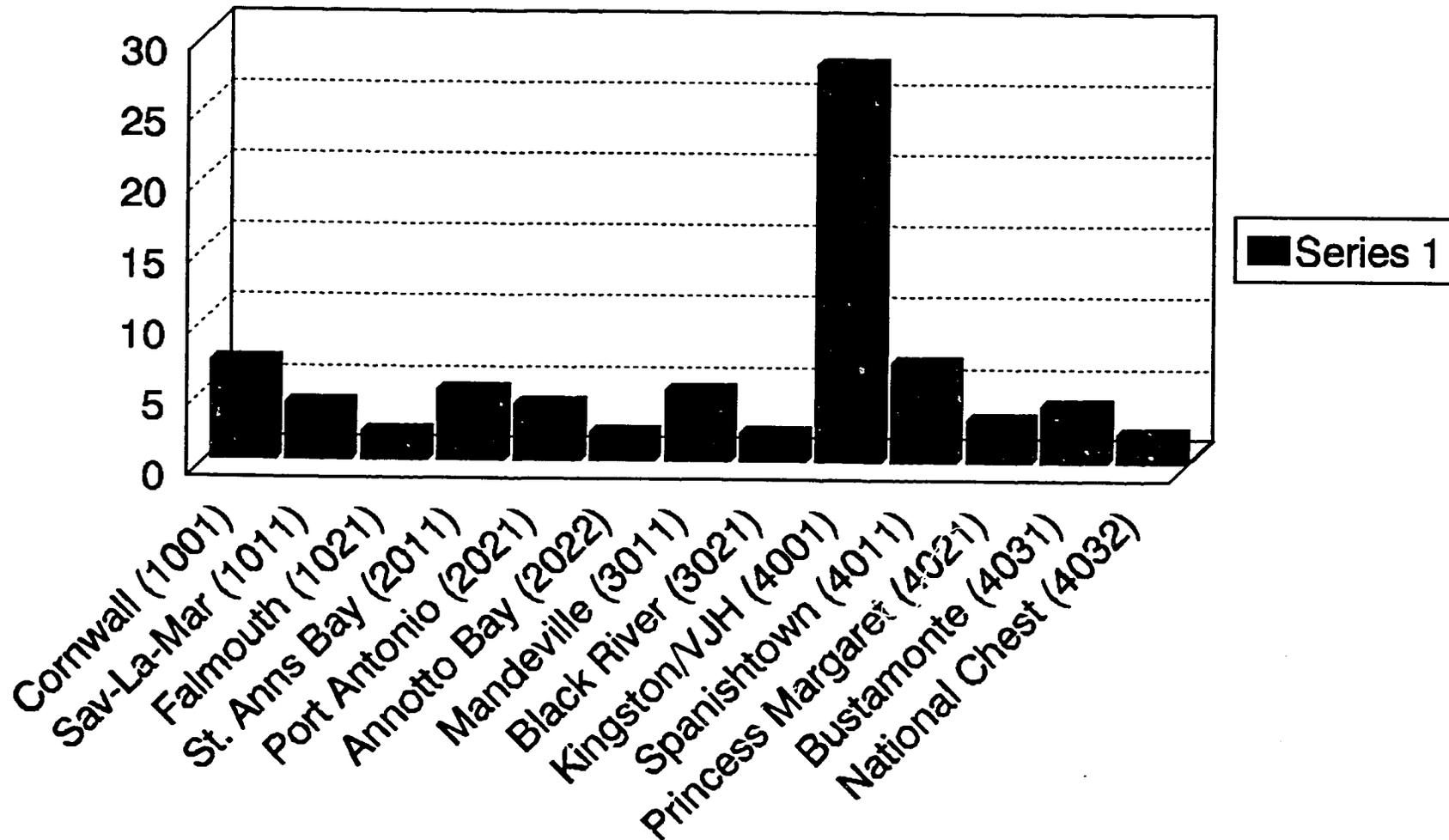
#### **6.2.1 Intravenous Therapy**

From among the choices given, prescribers ranked diagnoses warranting intravenous fluid therapy. Dehydration was ranked first, followed by sepsis, diabetes, gastroenteritis and then labor. Prescribers were asked to indicate whether a patient's condition, drug availability or some other factor were criteria used to determine IV fluid type ordered (Table 27). Just under half the number who indicated the patient's condition was a determining factor in drug product selection indicated that drug availability was the determining criterion. However, twenty-five prescribers interviewed (34.3%) indicate that orders for IV fluid therapy are filled 81 - 100% of the time. Twenty percent (20) of the responding prescribers indicate they are filled between 41 and 80% of the time. (See Table 28)

These findings are consistent with those who say that prescribers are overly influenced in their therapeutic decisions by supply issues. Findings also indicate that the pharmacist can play a great role in assuring the cost-effectiveness of care by helping to keep needed IV fluids in

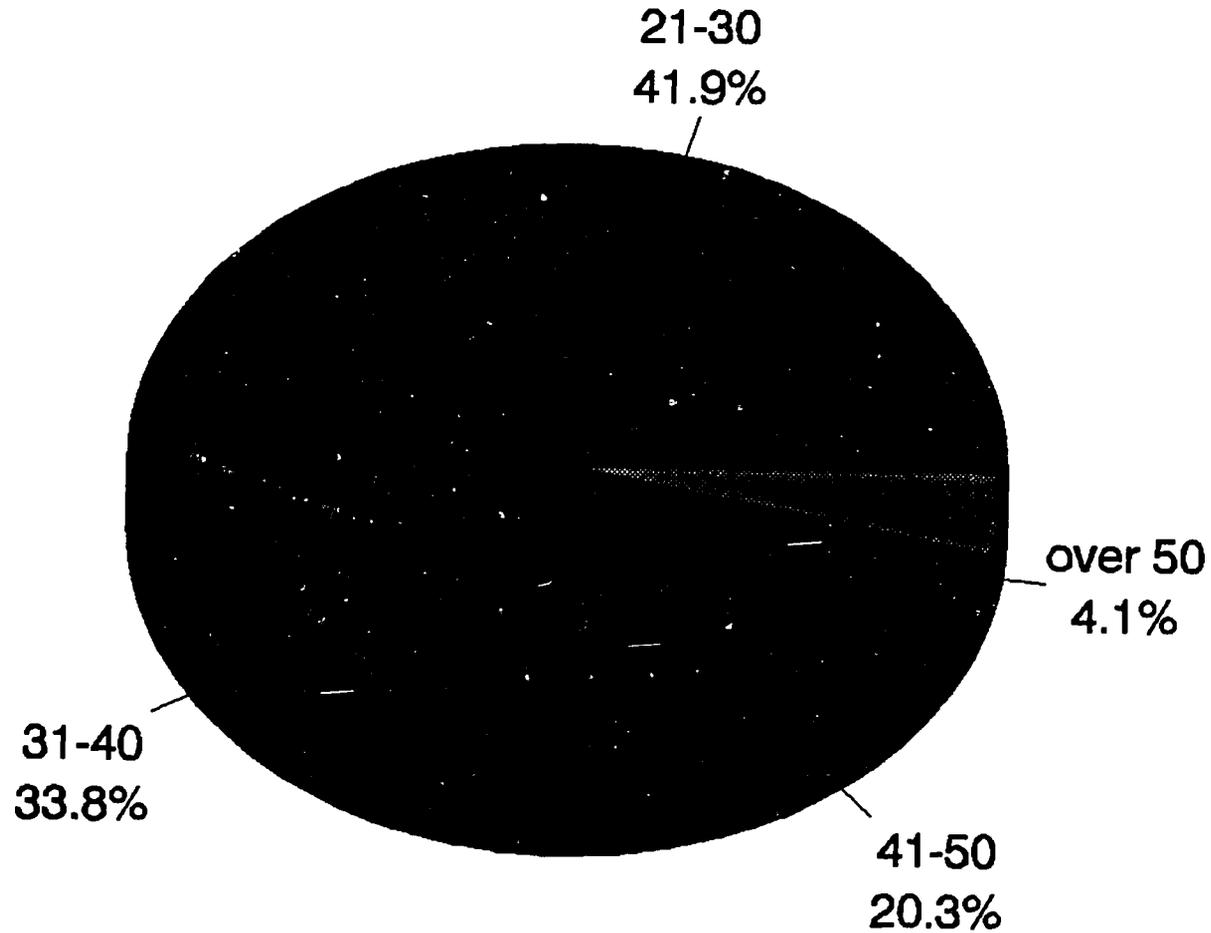
# Number of Prescriber Participants

All Sites



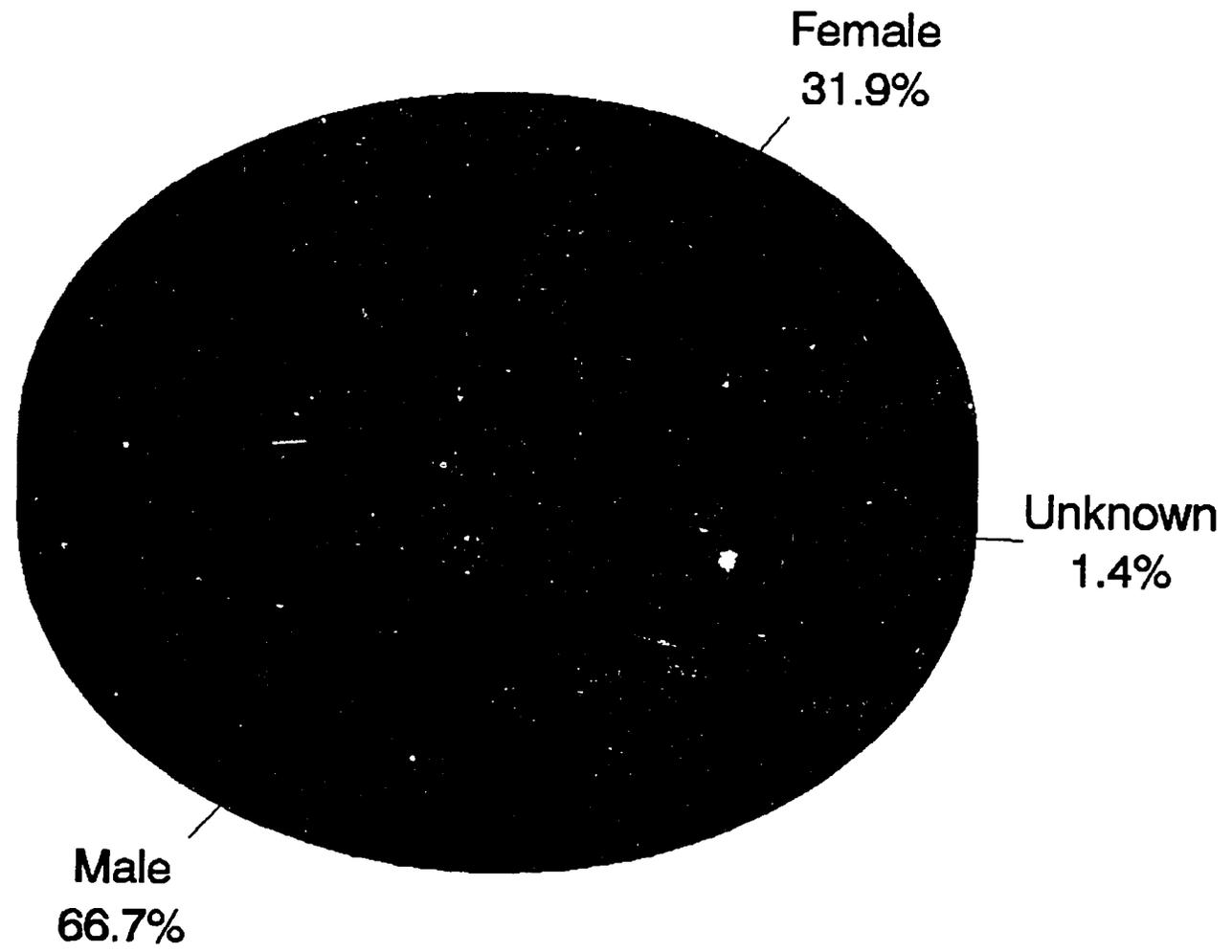
# Prescriber Age Range

All Sites



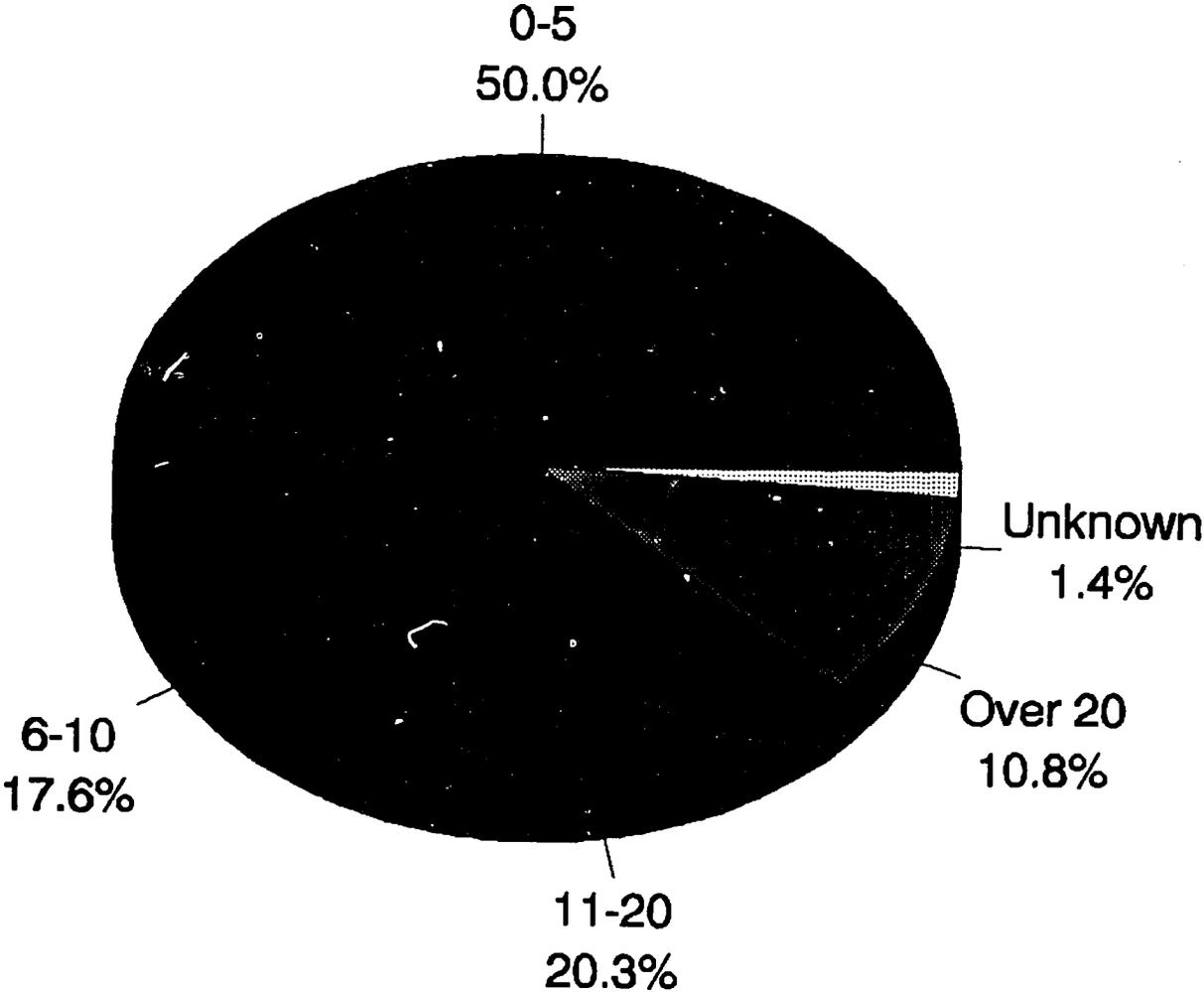
# Prescriber - Sex

All Sites



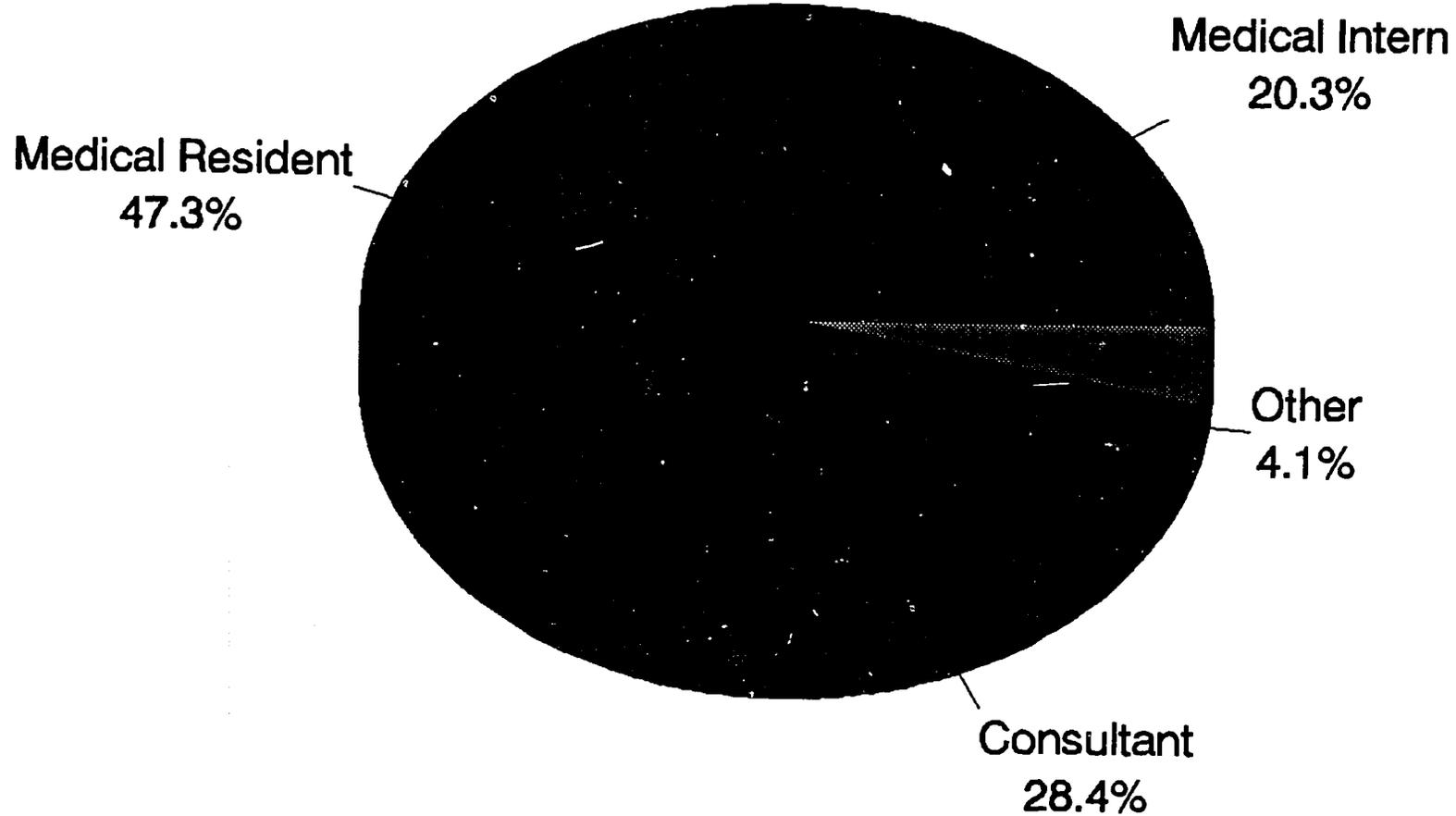
# Prescriber - Years of Practice

All Sites



# Level of Practice

All Sites



# IV Fluid Therapy Criteria

## By Site

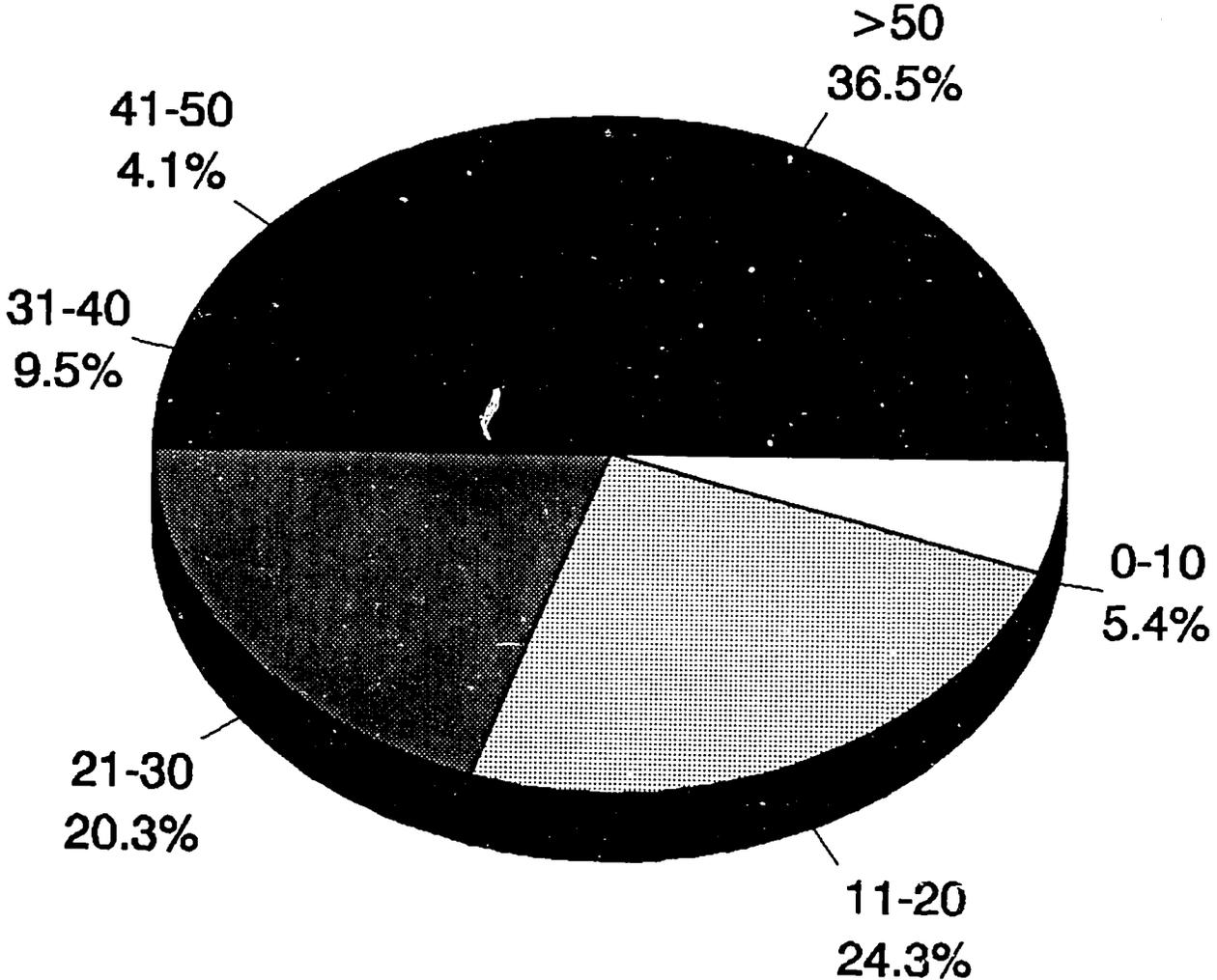
Site	Patient Condition	Fluid Availability	Other
Cornwall Regional	0	0	0
Sav-La-Mar	4	1	0
Falmouth	0	0	0
St. Ann's Bay	0	0	0
Port Antonio	1	1	1
Annotto Bay	2	1	1
Mandeville	5	2	0
Black River	1	1	0
Kingston/VJH	13	9	4
Spanishtown	0	0	0
Princess Margaret	1	0	1
Bustamonte Childrens	0	0	0
National Chest	2	1	0
<b>TOTAL</b>	<b>29</b>	<b>16</b>	<b>7</b>

# Prescriber Estimates of IV Fluid Orders Filled When Written

## All Sites

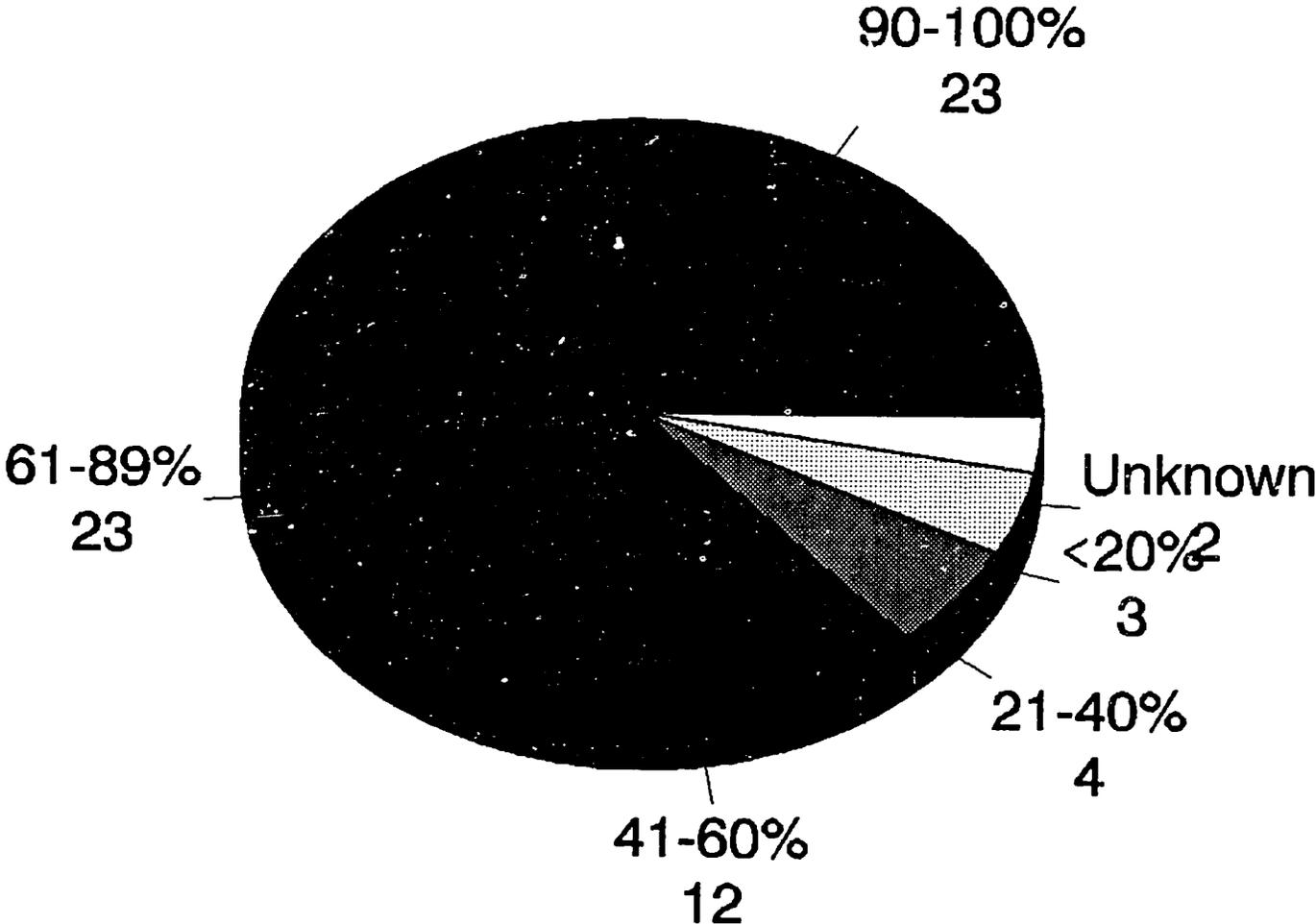
Site	81-100%	61-80%	41-60%	21-40%	<20%	Total Responses
Cornwall Regional	4	3	0	0	0	7
Sav-La-Mar	2	1	0	0	1	4
Falmouth	1	1	0	0	0	2
St. Ann's Bay	2	2	1	0	0	5
Port Antonio	1	1	2	0	0	4
Annotto Bay	0	0	2	0	0	2
Mandeville	0	1	1	1	2	5
Black River	2	0	0	0	0	2
Kingston/VJH	5	7	11	3	0	26
Spanishtown	1	2	3	1	0	7
Princess Margaret	2	1	0	0	0	3
Bustamonte Childrens	3	1	0	0	0	4
National Chest	2	0	0	0	0	2

# Prescriber Estimation of Average # Patients Seen Weekly Requiring Antibiotics Across All Sites



N=74

# Prescriber Estimation of % of Time Antibiotic Orders Filled as Written Across All Sites



N=67

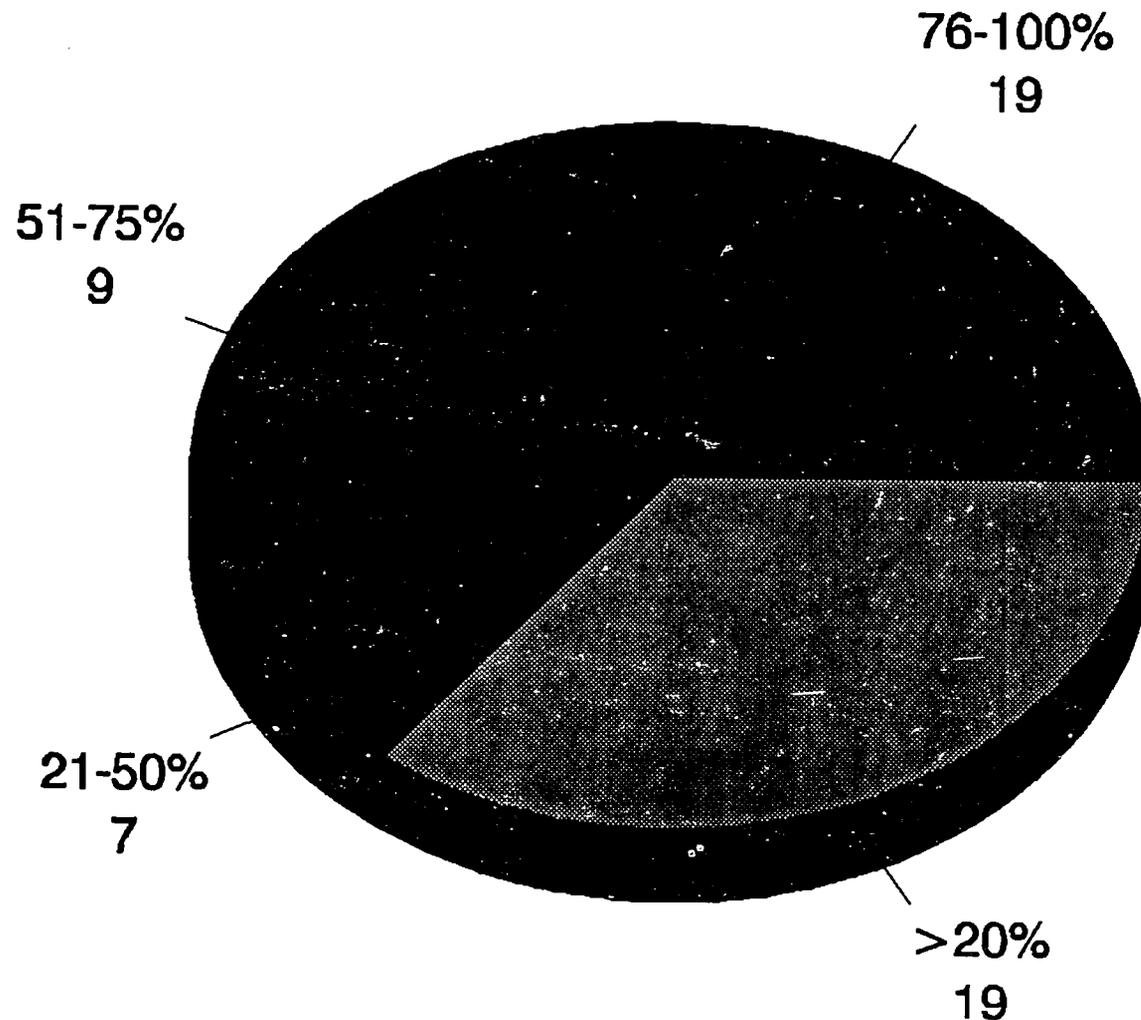
## Prescriber Estimation of % of Time Generic Name Used for Anti-hypertensives By Site

Site	75-100%	50-75%	25-50%	<25%	Unknown	Total
Cornwall Regional	1	0	0	0	0	1
Sav-La-Mar	0	0	0	0	0	0
Falmouth	1	0	0	1	0	2
St. Ann's Bay	2	2	0	0	0	4
Port Antonio	1	0	0	0	1	2
Annotto Bay	0	0	0	0	0	0
Mandeville	0	0	0	0	1	1
Black River	0	1	0	0	0	1
Kingston/VJH	5	1	1	3	1	11
Spanishtown	1	2	0	3	0	6
Princess Margaret	0	1	0	0	0	1
Bustamonte Childrens	1	0	1	0	0	2
National Chest	0	0	0	0	0	0

N=32

# Prescriber Estimation of % of Time Generic Name Used for Hypoglycemics

Across All Sites



N=54

analgesic. It was determined that the high use of meperidine reflected issues in supply. Implications for societal and health care costs can be minimized by the prompt supply of an alternative product.

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These findings are consistent with those who say that prescribers are overly influenced in their therapeutic decisions by supply issues. Findings also indicate that the pharmacist can play a great role in assuring the cost-effectiveness of care by helping to keep needed IV fluids in

stock. When this is out of the control of the pharmacist, the giving of information on the best alternative is a positive contribution. Findings show that pharmacists do. When orders for IV fluids cannot be filled, the alternative actions seen by the prescriber on the part of the pharmacy are, in this order, sourcing from another hospital, ward or emergency source. Explanations given for non-filled orders relate to the unavailability from the health corporation (19) or that minimal quantities were sent (28).

### **6.2.2 Anti-Infective Therapy**

Over a third of prescribers (27) see more than 50 cases a week which are perceived to require anti-infective therapy (Table 29). The top 4 indications, ranked from among those given, for antibiotic therapy are respiratory infections (other than cold and flu), urinary tract infections, prophylaxis and septicemia.

In response to the question "What criteria do you use for selection of drug product?", 57 prescribers chose clinical presentation. The next choice of response for 45 prescribers was provisional diagnosis followed by laboratory results (34 prescribers).

Sixty-nine percent of respondents indicated that antibiotic orders are filled as written more than 61% of the time (Table 30). But, frequently, patients are asked to purchase antibiotic drugs. Yet, 57 of the 67 prescribers who responded, stated that therapeutic endpoints were achieved.

### **6.2.3 Anti-hypertensive Therapy**

When prescribers were asked to state criteria used to select antihypertensive drug therapy, 49 chose patient's condition as a response, 45 the availability of the drug, 30 the economic ability of the patient and 3 cited other reasons.

Only 31% of prescribers indicated the pharmacy response when an antihypertensive drug order cannot be filled as written. The first pharmacy action is to recommend an alternative drug and the second is to obtain it from another source.

Forty-three percent of prescribers indicated that they write anti-hypertensive medication orders by generic name or state "generic dispensing permitted" (Table 31).

### **6.2.4 Hypoglycemic Therapy**

The number of prescribers who indicate they seen Type I and Type II patients are 13 and 47 respectively. Twenty-eight of the responding prescribers (N=54) indicate that their prescriptions for hypoglycemics are written generically 51 - 100% of the time. (Table 32). Only 45 prescribers responded when asked if they always prescribed hypoglycemic drugs on the VEN list. Twenty-three percent said yes.

## 6.2.5 Perspectives on Pharmaceutical Service

For this section of the interview, there was a lower overall number of responses (N= 35). Less than half of the number of prescribers from Kingston/VJH in the sample responded to this section which may contribute to the lower number of responses. Twenty prescribers (57%) expressed satisfaction with pharmacy/pharmacists at their hospital and 14 (40%) expressed dissatisfaction. (Table 33). Areas suggested for improvement at this time are the availability of pharmacists (more than twice a week as at Falmouth) and availability of stock.

Prescribers indicate that they have to call the Pharmacy in order to know which drugs are available (Table 34). Only two sites reported the use of a newsletter to inform prescribers and of these one site used newsletters as often as the telephone to communicate with prescribers.

Thirty-two prescribers indicated whether or not there was a policy-setting committee at their hospitals (Table 35). Fourteen (43.8%) said yes, 8 (25%) said no, 2 (6.25%) said the committee was not applicable to their setting and 8 (25%) did not know. Policy committees such as pharmacy and therapeutics committees are generally helpful in assuring the best use of strained pharmaceutical resources. They generally form a decision on which drugs are needed to treat the health problems and conditions seen most frequently. Pharmacy can then stock drugs more rationally and promote their appropriate as a part of the pharmacotherapeutic team with other health professional staff.

The capstone question asked prescribers to indicate what additional services pharmacists can provide to improve the quality of care for their patients. Prescribers from 8 sites offered recommendations for additional pharmacy services (Table 36 ).

## 7.0 RECOMMENDATIONS

Major recommendations made during the workshop on preliminary findings of this assessment still hold. They were made to the medical, pharmaceutical and nursing personnel who were in attendance. While there are many subsets of the recommendations which follow, two major streams of action are offered. It was suggested that the MOH/PSD through its central and local staff:

1. Continue to evaluate prescribing patterns yearly using a modified version of the process established as a result of this assessment. Modifications could include greater assurances to increase the consistency of data collected. The services of resources at the University of the West Indies could probably assist with data analysis. Participation in an assessment of prescribing patterns should be required training for pharmacy students and interns who serve their preceptorship in the public sector. The process should be given validity through the establishment of supporting policies and procedures, especially standard treatment protocols.

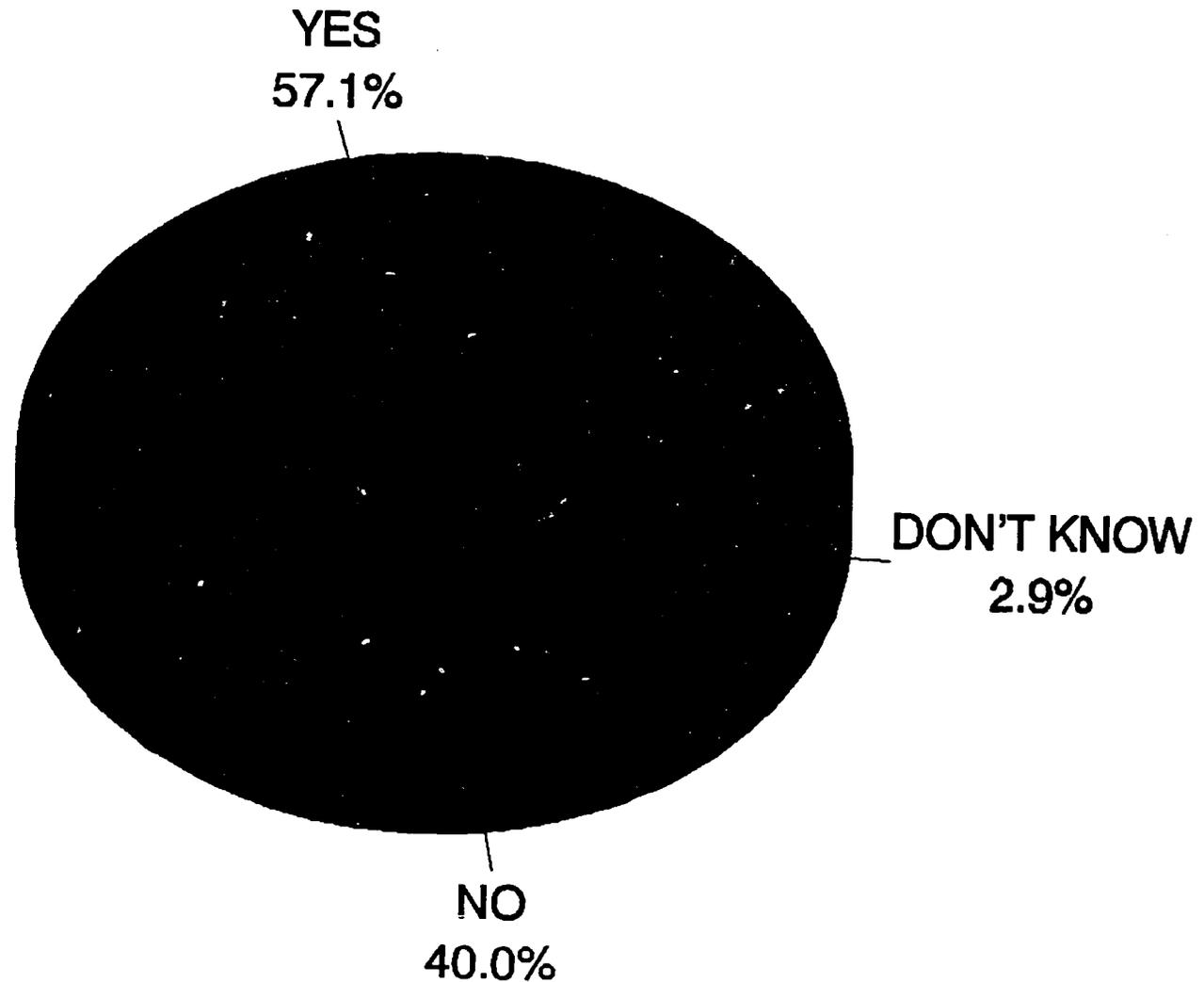
2. **Seek the strengthening through training of local hospital pharmacy and therapeutics committees in order (a) to establish formal and routine communications with prescribers around pharmacotherapy and (b) to form joint agreements on ways to assure the best use of available medicines. Approaches considered should include several cost-containing strategies such as routine and structured provision of drug product availability and drug information, the installation of medication error prevention systems, specific drug use evaluations, patient drug therapy monitoring and counseling other services as indicated by the above findings.**

**Pharmacists have a unique body of knowledge and training and they have the ability to form constructive teams with other health professionals. Prescribers wish to assure cost-effective, high quality of care for their patients. Joining the forces of both sets of expertise for the betterment of health care delivery is, in and of itself, a cost-containing strategy. This is especially true in the in-patient setting.**

**In-Patient Prescribing in Selected Hospitals in Jamaica  
Reference List**

1. Aida Le Roy, Pharm.D. *Prescribing Analysis Survey Results and Recommendations, Ministry of Health, Jamaica, October, 1993.*
2. J.A. Young Research Ltd, *A Research Study on Health Care Cost Recovery, May, 1993*
3. Hope Enterprises Ltd, *Findings of a Survey on Rational Drug Use: Jamaica, October, 1994*
4. Donald S. Shepard, Ph.D, Dennis Brown, Ph.D and Thalia Ruddock-Kelly, M.Sc. *Patient Satisfaction in Jamaican Hospitals, February 1995.*
5. Stanley Lalta. *Review of Health Financing in Jamaica and a Survey of the Feasibility of National Health Insurance, September 1995.*
6. Donald S. Shepard, Ph.D and Beverley E. Russell, R.N., M.P.H. *Access to Health Care in Jamaica: Impact of the Health Sector Initiatives Project, February 1995.*
7. Donald S. Shepard, Ph.D and Brandeis University. *Cost Recovery in Jamaican Health Facilities: Impact on Revenue, Satisfaction and Access, August 1995.*
8. Donald S. Shepard, Ph.D, Van Essayan, M.A. and Howard Lynch. *Cost Recovery in Primary Health Care in Jamaica (DRAFT), May 1994.*
9. Donald S. Shepard, Ph.D. *Cost Recovery in Jamaican Health Facilities, March 1993.*
10. Rational Pharmaceutical Management Project, *Rapid Pharmaceutical Management Assessment: An Indicator-Based Approach, July 1995.*

# PRESCRIBER SATISFACTION WITH SERVICE



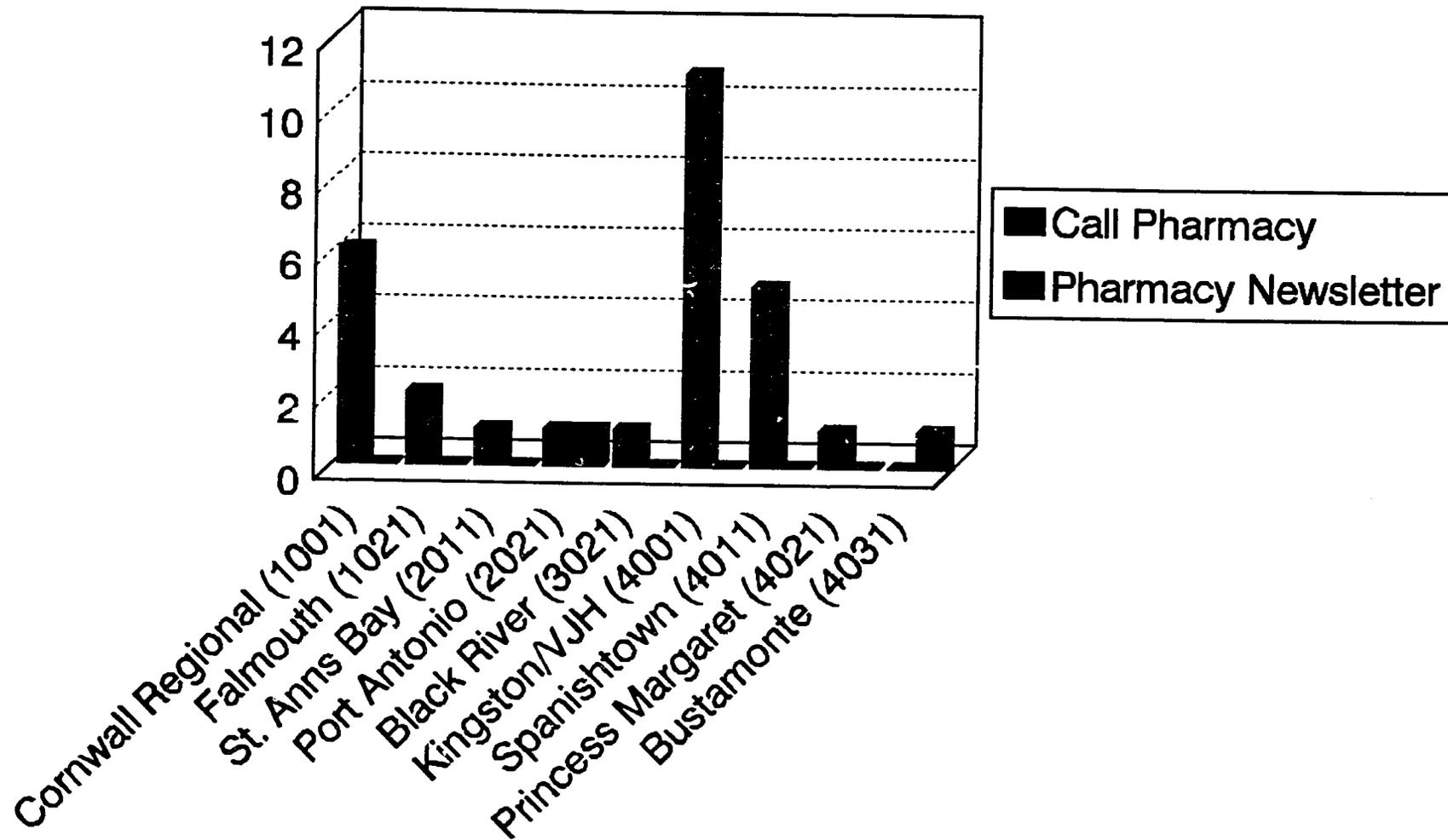
N=35

46  
3/1/20

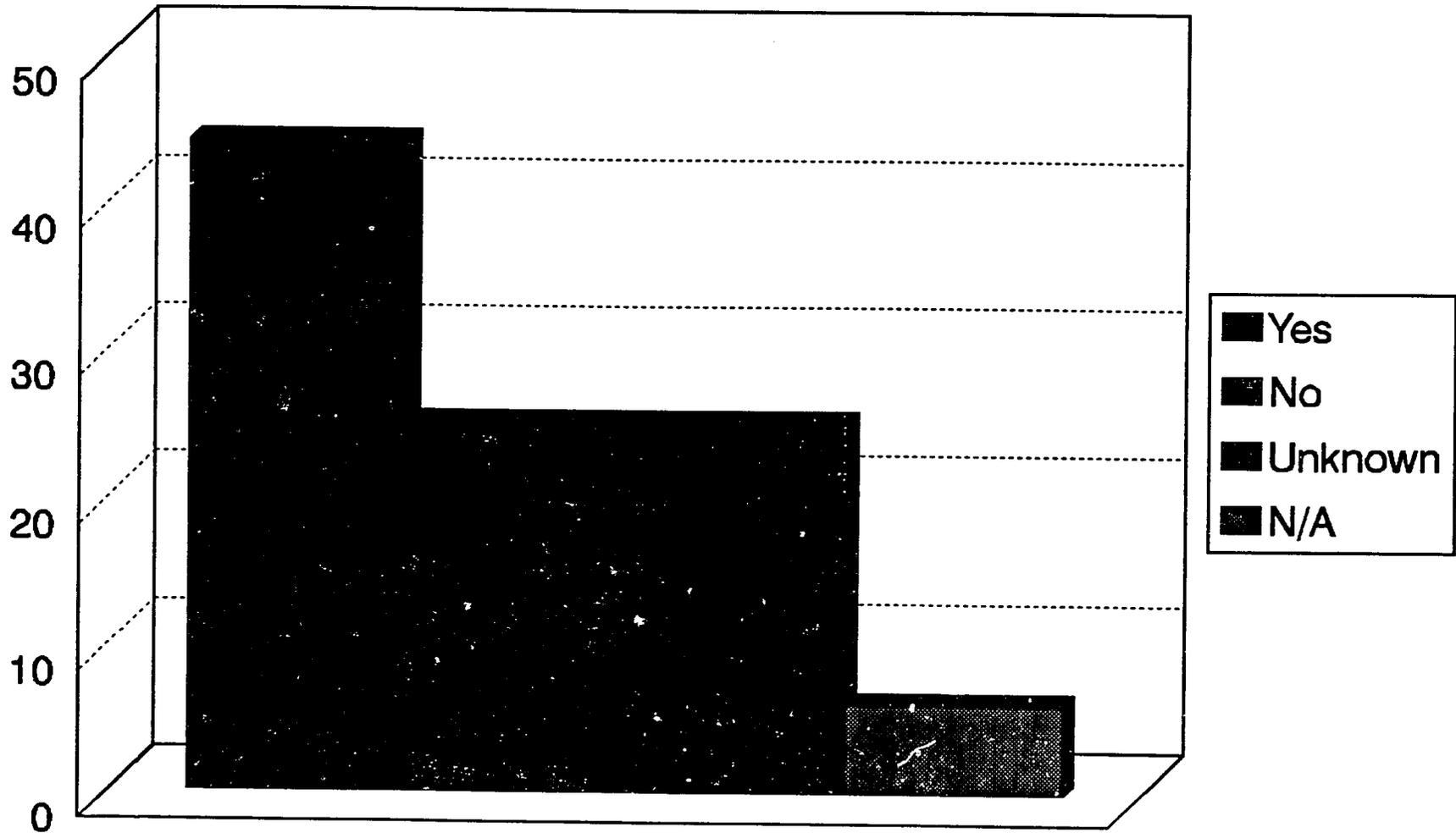
# Prescriber Informed of Drug Availability

## Availability

By Site



# % Presence of Policy - Setting Committees All Sites



8h  
44-48

SITE NAME	ADDITIONAL PHARMACY SERVICES SUGGESTED
1021	Pharmacist on duty round the clock
1001	Inform doctors about new drugs Education of Patients concerning drugs Increase speed of dispensing chemotherapeutica agents Attend doctors ward rounds at least once a week
4001	Keep doctors aware of drug information i.e. more seminars More communication especially on new drug updates Circular on available drugs Twice a week circulars Mixing of IV fluids especially the uncommon ones Weekly drug review on each ward
4011	Increase stock of necessary drugs Sessions on prescribing practices for new interns Monthly list of drugs available in Pharmacy Increased communication with pharmacist administrator
4021	Weekly update on availability of drugs
2011	Daily list of availability of drugs Group discussions with doctors Longer hours open - including weekends Counseling of patients
2021	Basic education of patients on taking drugs
3021	Inpatient counseling

2. **Seek the strengthening through training of local hospital pharmacy and therapeutics committees in order (a) to establish formal and routine communications with prescribers around pharmacotherapy and (b) to form joint agreements on ways to assure the best use of available medicines. Approaches considered should include several cost-containing strategies such as routine and structured provision of drug product availability and drug information, the installation of medication error prevention systems, specific drug use evaluations, patient drug therapy monitoring and counseling other services as indicated by the above findings.**

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# **APPENDIX**

## **A**

### **CLASSIFICATION OF HOSPITALS**

## CLASSIFICATION OF HOSPITALS

1. Hospitals are classified as specialist hospitals, regional hospitals, general hospitals, and parish hospitals according to the following schedule.

(a) Type S hospitals being specialist hospitals providing specialist referral services in a single specialty e.g. psychiatry, paediatrics, respiratory diseases, obstetrics and gynaecology.

(b) Type A hospitals being regional general hospitals providing specialist referral services in most but not necessarily all of the following:

24 hour Casualty/Emergency service

Obstetrics

General medicine	Dermatology	Cardiology
		Neurology
		Respiratory
		Nephrology

Psychiatry

Paediatric medicine		Neonatology
---------------------	--	-------------

General surgery	ear, nose and throat	Vascular
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Paediatric surgery	ophthalmology	plastic
	urology	cardiothoraci
	orthopaedic	neurology

Anaesthesiology

Pathology laboratory		intensive care
----------------------	--	----------------

.. and		microbiology
--------	--	--------------

Radiology		haematology
		chemical pathology
		radiotherapy
		nuclear (medicine)

(c) Type B1 hospitals being general hospitals providing specialist referral services in most but not necessarily all of the following:

24 hour Casualty/Emergency service

Obstetrics and gynaecology

Casualty/on call Emergency resuscitation

Laboratory (basic)

X-ray

2. Following is the classification of hospital according to type as set out in 1 above.

(a) Type 'S' hospitals

Bustamante Hospital for Children Kingston

Hope Institute Kingston

Mona Rehabilitation Centre Kingston

National Chest Hospital Kingston

Victoria Jubilee Hospital Kingston

(b) Type 'A' Hospitals

Cornwall Regional Hospital Montego Bay

Kingston Public Hospital Kingston

(c) Type B1 Hospitals

Mandeville Public Gen. Hospital Mandeville

Spanish Town Hospital Spanish Town

St. Ann's Bay Hospital St. Ann's Bay

(d) Type 'B2 Hospitals

Savanna-la-mar Hospital Savanna-la-mar

(e) Type 'C' Hospitals

Annotto Bay Hospital Annotto Bay

Black River Hospital Black River

Falmouth Hospital Falmouth

Lionel Town Hospital	Lionel Town
Linstead Hospital	Linstead
May Pen Hospital	May Pen
Noel Holmes Hospital	Lucea
Percy Junor Hospital	Spaldings
Port Antonio Hospital	Port Antonio
Port Maria Hospital	Port Maria
Princess Margaret Hospital	Morant Bay

General medicine    dermatology  
Psychiatry  
Paediatric medicine  
General surgery    ear, nose and throat  
Paediatric surgery ophthalmology  
   urology  
   orthopaedics

Anaesthesiology

Pathology and laboratory

Radiology

- (d)            Type B2 hospitals being general hospitals providing specialist referral services in most but not necessarily all of the following:

24 hour Casualty/Emergency service

Obstetrics and gynaecology

General medicine

Paediatric medicine

General surgery

Paediatric surgery

Anaesthesiology

Laboratory

Radiology

- (e)            Type C hospitals being parish hospitals offering general care services in the following:

Maternity

General medicine

Child health

General surgery

HOSPITALS BY REGION - JAMAICA 1993

SOUTH EAST

University Hospital of the West Indies	
Kingston Public Hospital	
Victoria Jubilee Hospital	
Bustamante Hospital for Children (BCH)	Kingston & St. Andrew
Mona Rehab.	
Hope Institute	
National Chest	
Bellevue Hospital	
Spanish Town	St. Catherine
Linstead	
Princess Margaret	St. Thomas

SOUTHERN

May Pen	Clarendon
Lionel Town	Clarendon
Spauldings (Percy Junior)	
Mandeville	Manchester
Black River	St. Elizabeth

WESTERN

Sav-la-mar	Westmoreland
Lucea (Noel Holmes)	Hanover
Cornwall Regional	St. James
Falmouth	Trelawny

NORTH EAST

St. Ann's Bay Hospital	St. Ann
Port Maria Hospital	St. Mary
Annotto Bay Hospital	St. Mary
Port Antonio Hospital	Portland

# **APPENDIX**

## **B**

### **PRESCRIBING ANALYSIS DATA COLLECTION FORM**

PRESCRIBING ANALYSIS FORM

PRESCRIBED										DISPENSED		ADMINISTERED			
Pt. ID	Ward	Sex	Date of Birth	Diagnosis & Code	Medications name & strength & directions for use	Dosage form	Quantity	B/G	Prescriber		Gen / Manufact name. strength	Quantity	Dosing interval	Date started	Date ended
									Name/ID NO	TYPE					

58  
JHE

# **APPENDIX**

## **C**

### **PRESCRIBER INTERVIEW QUESTIONNAIRE**



IV FLUIDS THERAPY

6. What types of patients do you most often see in your practice?  
Rank in order of most frequently seen.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

7. a) How often do you see patients who require IV fluids?

- ( ) frequently (>30 cases per week )
- ( ) less frequently ( 15-30 cases per week )
- ( ) infrequently ( <5 cases per week )
- ( ) very rare (< 5 cases per week)

b) What is/are the usual diagnosis (es)? \_\_\_\_\_

- ( ) Diabetes ketoacidosis
- ( ) sepsis
- ( ) dehydration
- ( ) during labour
- ( ) gastroenteritis
- ( ) other (specify) : \_\_\_\_\_

8. a) What type of fluid do you prescribe? (rank according to frequency of use/order).

- ( ) NS (for irrigation)
- ( ) D5W
- ( ) D5W/NS
- ( ) Hartmann's
- ( ) Other, Specify

b) Indicate below the five most common cases for which you prescribe IV fluids and the quantity prescribed (volume per patient/day)?

COMMON CASES	VOLUME (Per Patient/Day)
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

9. What criteria do you use in determining the fluid type ordered?

- ( ) Patients condition/illness
- ( ) Availability of fluid
- ( ) Other \_\_\_\_\_

10. To what extent are these orders filled\supplied when written?

- ( ) 81 - 100% of time
- ( ) 61 - 80%
- ( ) 41 - 60%
- ( ) 21 - 40%
- ( ) < 20%

11. When orders cannot be filled, what are the alternative actions? (rank in order of action taken)

- a. Pharmacist recommends an alternative fluid.
- b. The order remains unfilled without Doctor consultation.
- c. Pharmacy indicates it is an out of stock item and substitution is made.
- d. The item is sourced from another hospital, ward or emergency source.

12. What is/are the explanation(s) given for non-filled orders?

- ( ) Item unavailable from Health Corporation (o/s)
- ( ) Low stock - Minimum quantities sent/ emergency
- ( ) Not on formulary (sometimes as gift/ special request)
- ( ) Other (Specify) \_\_\_\_\_
- ( ) Pharmacy is monitoring fluid distribution

ANTIBIOTIC/ANTI-INFECTIVE DRUG USE

13. On average, how many patients do you see weekly who require antibiotics?

- |                                     |                                  |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/> > 50 cases | <input type="checkbox"/> 41 - 50 |
| <input type="checkbox"/> 31 - 40    | <input type="checkbox"/> 21 - 30 |
| <input type="checkbox"/> 11 - 20    | <input type="checkbox"/> 0 - 10  |

14. What are the common indications?

- common cold/flu
- Septicemia
- STD's
- Respiratory infections
- UTI's
- Prophylaxis
- Other (Specify): \_\_\_\_\_

15. What criteria do you use for selection of drug?

- Clinical Presentation
- C & S/Lab Results
- Both Hx & Lab
- Provisional Dx/suspicion
- Type of lesion

16. (a) What type of antibiotic coverage is typically implemented for the indications (one drug or multiple drugs)?

- Single Drug Tx
- Multiple Drug Tx

(b) Name specific drug(s) and regimen used for the stated conditions.

- Common cold/flu \_\_\_\_\_
- Sepsis \_\_\_\_\_
- STD's \_\_\_\_\_
- URI \_\_\_\_\_
- UTI \_\_\_\_\_
- Other (Specify) \_\_\_\_\_

17. What percentage of antibiotic orders are filled as written?

- 81 - 100% of time
- 61 - 89%
- 41 - 60%
- 21 - 40%
- < 20%

18. Which of the following class/classes of drugs is/are most frequently out of stock?

- Cephalosporin [1st] [2nd] [3rd]
- Penicillin [ES] [BS] [PR] [Natural]
- Quinolones
- Other Specify \_\_\_\_\_

19 a. Are patients sometimes asked to purchase drugs?

- Yes  No

b. If yes, what percentage of the time? \_\_\_\_\_

c. If yes, what situation warrants outside purchase?

- condition requires alternative drug
- alternative drug will provide faster relief or cure
- other (specify): \_\_\_\_\_

20. What monitoring techniques do you implement in these patients?

- Repeat Lab within a week
- Follow-up visit
- Other Specify \_\_\_\_\_

21. Are the therapeutic endpoints usually achieved?

yes  no  don't know

If no, what alternative actions/measures might have assisted in the achievement of these endpoints?

- improved patient compliance
- availability of tests
- patient's ignorance of seriousness of condition
- cost of drug (when patient has to buy drug)
- unavailability of drug from pharmacy
- non-administration of drug

ANTIHYPERTENSIVE DRUG USE

22 How many hypertensive patients do you see weekly?

- |     |         |     |         |
|-----|---------|-----|---------|
| ( ) | 31 - 40 | ( ) | 21 - 30 |
| ( ) | 11 - 20 | ( ) | < 10    |

23. For those with essential HTN describe the first line therapy(ies) used (include regimen)

DRUG

REGIMEN

- ( ) Thiazides
- ( ) Brinerdin
- ( ) Methyldopa
- ( ) Hydralazine
- ( ) Other (Specify) \_\_\_\_\_

24. What criteria do you use for selection of drug therapy?

- ( ) Patient's condition
- ( ) Availability of drug
- ( ) Economic ability of patient
- ( ) Other ( ) Specify

25. To what extent are these orders filled when written?

- ( ) 81 - 100% of time
- ( ) 61 - 89%
- ( ) 41 - 60%
- ( ) 21 - 40%
- ( ) < 20%

26. When an order cannot be filled, what are the alternative actions? (rank in order of action taken).

- a. Pharmacist recommends an alternative drug
- b. The order remains unfilled without doctor consultation
- c. Pharmacy indicates it is an out of stock item and patients is left without medication
- d. The item is sourced from another hospital or emergency source

27. What is/are the explanations given for non-filled orders?

- ( ) Item is unavailable from Health corporation
- ( ) Stock quantities are low so minimum quantities sent
- ( ) Item is not on formulary (gift or special request)
- ( ) Other (Specify) \_\_\_\_\_

28. Which drugs/classes of drugs are frequently out of stock?

Diuretic

ACEI

Ca-Blockers

Vasodilator

Other

Specify \_\_\_\_\_

29. What percentage of your orders are written as generic or indicate "generic dispensing permitted."

( ) 75 - 100%

( ) 50 - 75%

( ) 25 - 50%

( ) < - 25%

30. How do you monitor your patients?

( ) return clinic visits

( ) clinical improvement seen (for inpatients)

( ) other Specify \_\_\_\_\_

31. Do you ever write for drugs not included on the VEN list?

( ) Yes

( ) No

32. When this is done, what is usually the reason for it?

( ) need for additional therapy/condition requires other drug

( ) alternative drug works better

( ) other Specify \_\_\_\_\_

HYPOGLYCEMIC DRUG USE

33. How many diabetes patients do you see weekly?  
    ( ) 20 - 30  
    ( ) 10 - 20  
    ( ) < 10

34. Which type of patients are frequently seen?  
    ( ) Type I                      ( ) Type II (Adult Onset)

35. For type I patients, what types of insulin and regimen are frequently employed?

<u>Types of Insulin</u>	<u>Regimen</u>
Novolin L	
R	
Humulin L	
R	

36. For type II patients, state frequently prescribed drugs and their regimens.

<u>DRUG</u>	<u>REGIMEN</u>
Chlorpropamide	
Glibenclamide	
Metformin	

37. Do you always prescribe drugs on the VEN list?  
    ( ) yes                      ( ) no

If no, what situation warrants prescribing outside of the VEN list?

- ( ) condition requires alternative drug  
( ) alternative drug will provide faster relief  
( ) other                      specify \_\_\_\_\_

38. What percentage of your prescriptions are written generically?  
    ( ) 76 - 100%  
    ( ) 51 - 75%  
    ( ) 21 - 50%  
    ( ) < 20

GENERAL QUESTIONS

39. (a) Are you satisfied with the services provided by the pharmacy/pharmacists in your hospital?  
( ) yes ( ) no
- (b) If no, what areas would you say need improvement at this time?
40. How are you usually informed of drugs available or in stock at a given period of time?  
( ) by calling in to the pharmacy  
( ) by means of a pharmacy newsletter or circular  
( ) information is provided at the P & T committee meetings  
( ) other specify \_\_\_\_\_
41. a. Is there a committee which sets policies to monitor the use of scarce or expensive pharmaceuticals?  
( ) Yes ( ) No
- b. If yes, how does it work?
42. Other than services directly related to distribution of drugs, what other services do you believe pharmacists could offer to improve the quality of care to your patients?

\_\_\_\_\_

Name of Researcher \_\_\_\_\_

Date \_\_\_\_\_

# **APPENDIX**

## **D**

### **PATIENT PROFILE**

CURR PERIOD 60 DAYS

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ALERT SUMMARY INFORMATION

PATIENT CHARACTERISTICS

PATIENT NUMBER 2  
PATIENT ID 15915  
AGE 992  
SEX F  
STATUS Unknown

OR CASE NUMBER(S): ( )

ICD-9 VALUE 188888888

FINANCIAL CHARACTERISTICS

SERVICES CURR PERIOD  
PRESCRIPTIONS \$ 0.00  
IN-PT HOSP \$ 0.00  
OUT-PT HOSP \$ 0.00  
OTHER \$ 0.00

MORBIDITIES

CONDITIONS/ICD-9-CM MOST RECENT FIRST # OF OCCURRENCE

DRUG/SERVICE

CURR PERIOD  
PHARMACY 1  
PRESCRIPTIONS 7  
PHARM. ENTITIES 7  
TREATING PROVIDERS 0  
PRESCRIBERS 1  
PATIENT HOSP SERVICES 0  
PATIENT HOSP SERVICES 0

CONFLICT SUMMARY

# DRUG-DISEASE CONFLICTS 3  
# DRUG-INTERACTION PROBLEMS 0  
# UTILIZATION PROBLEMS 0  
# DURATION PROBLEMS 0  
# DUPLICATION PROBLEMS 0

POTENTIAL THERAPEUTIC PROBLEM(S)

HYDRALAZINE 25MG TABLET SHOULD BE USED WITH CAUTION IN PATIENTS WITH ANGINA PECTORIS.--REF# 0062 0087 [ AOP ] \*  
PROPRANOLOL 40MG TABLET MAY AFFECT GLUCOSE INTOLER/HYPERGLYCEMIA.--REF# 0043 0044 [ Unknown ] \*  
PROPRANOLOL 40MG TABLET SHOULD BE USED WITH CAUTION IN PATIENTS WITH CONGESTIVE HRT FAILURE.--REF# 0043 0044 [ Unknown ] \*

( Adverse Outcome Probability ): Suggests this patient's increased risk for a potential pharmaceutical related hospitalization in relation to his/her existing disease-based risk (e.g. 2.5 -> 5.0 disease based risk for hospitalization (2.5) increases to 5.0 in the presence of the drug therapy pattern noted )

REFERENCE:  
1: JNT NATL COMMIT, 5TH RPRT ON DETECT, EVAL & TRTMENT HIGH BLD PRESS, ARCH INTERN MED 1993;153:154-83  
2: NADELHANN J: CLIN USE OF B-BLCKADE IN SYST HYPERTENSION, DRUGS 1990;39(6):862-76  
3: AMA: ANTIHYPERTENSIVE DRUGS, DRUG EVAL ANNUAL 1994;1/CV-4: (P17-27) DR BENNETT, RD  
4: ASHP: CARDIAC DRUGS, AHP'S DRUG INFO 1995;SEC 24:04. GK MCEVOY, ED

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# **APPENDIX**

## **E**

### **MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS**

MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME	
AL	AMOXICILLIN		W1A	W1AUX	266	6.52	PENICILLINS
AL	MEPERIDINE		H3A	H3AAX	182	4.46	ANALGESICS, NARCOTICS
AL	METHYLDOPA		A4B	A4BNX	162	3.97	HYPOTENSIVES, SYMPATHOLYTIC
AL	CHLORPROMAZINE		H2G	H2GAX	134	3.28	ANTI-PSYCHOTICS, PHENOTHIAZINES
AL	FUROSEMIDE		R1F	R1FPX	128	3.14	THIAZIDE DIURETICS
AL	CHLORAMPENICOL ORAL CAP		W1E	W1EAX	126	3.09	CHLORAMPHENICOL & DERIVATIVES
AL	IBUPROFEN		S2B	S2BDX	115	2.82	NSAIDS
AL	HYDRALAZINE		A4A	A4AAX	112	2.75	HYPOTENSIVES, VASODILATORS
AL	TRIHXYLPHENIDYL		H6B	H6BAX	111	2.72	ANTIPARKINSONISM DRUGS, OTHER
AL	GENTAMICIN SULFATE		W1F	W1FFX	97	2.38	AMINOGLYCOSIDES
AL	INSULIN (REG)		C4G	C4GAX	96	2.35	INSULINS
AL	FLUPHENAZINE		H2G	H2GDX	95	2.33	ANTI-PSYCHOTICS, PHENOTHIAZINES
AL	MEFENAMIC ACID		H3C	H3CCX	85	2.08	ANALGESICS, NON-NARCOTICS
AL	METRONIDAZOLE		W4E	W4EAX	81	1.99	TRICHOMONACIDES
AL	CO-TRIMOXAZOLE ORAL SUSP		W8J	W8JCX	76	1.86	ANTIBACTERIAL AGENTS, MISC
AL	DEXTROSE 5%-WATER		C5J	C5JAX	72	1.76	IV SOLUTIONS
AL	ACETAMINOPHEN		H3E	H3EGX	69	1.69	ANALGESIC/ANTIPYRETICS, NON-SALICYL
AL	DIGOXIN		A1A	A1ADX	66	1.62	DIGITALIS GLYCOSIDES
AL	FE PYROPHOS/VIT B COMP/FA		C3B	C3BAX	66	1.62	IRON REPLACEMENT
AL	MAGNESIUM TRISILICATE ORAL SUSP		D4B	D4BFX	62	1.52	ANTACIDS
AL	DIAZEPAM		H2F	H2FAX	56	1.37	ANTI-AXIETY AGENTS
AL	FOLIC ACID		C6M	C6MXX	50	1.23	FOLIC ACID PREPARATIONS
AL	CLOXACILLIN		W1A	W1ALX	49	1.20	PENICILLINS
AL	DIPHENHYDRAMINE		Z2A	Z2AAX	49	1.20	ANTIHISTAMINES
AL	POTASSIUM CHLOR ORAL TAB FOR SOLN		C1D	C1DAA	46	1.13	POTASSIUM REPLACEMENT
AL	AMPICILLIN		W1A	W1AMX	45	1.10	PENICILLINS
AL	PHENOBARBITAL		H2D	H2DBX	42	1.03	BARBITURATES
AL	CHLORPROPAMIDE		C4K	C4KXX	39	.96	ORAL HYPOGLYCEMICS, SULFONYLUREAS
AL	CLINDAMYCIN HYDROCHLORIDE		W1K	W1KBX	39	.96	LINCOSAMIDES
AL	ATROP/SCOPOLAMINE/HYOSCY/PB		J2A	J2ABX	37	.91	BELLADONNA ALKALOIDS
AL	INSULIN ZINC		C4G	C4GDX	37	.91	INSULINS
AL	SPIRONOLACTONE		P5T	P5TAX	36	.88	ALDOSTERONE ANTAGONISTS
AL	SODIUM CHLORIDE 0.9%		C1B	C1BFX	35	.86	SODIUM REPLACEMENT
AL	D5NS/POTASSIUM CHLORIDE		C5K	C5KFX	34	.83	IV SOLUTIONS
AL	MULTIVITAMINS		C6Z	C6ZXX	32	.78	MULTIVITAMIN PREPARATIONS
AL	OXYTOCIN		G3A	G3ACX	32	.78	OXYTOCICS
AL	PHENYTOIN		H4B	H4BAX	32	.78	ANTICONVULSANTS
AL	AMOXICILLIN/CLAVULANATE CHEW TAB		W1R	W1RAX	30	.74	BETA-LACTAMASE INHIBITORS
AL	ERGONOVINE MALEATE		G3A	G3AAX	30	.74	OXYTOCICS
AL	HEP NA (PORCINE)/NA CHLOR 0.9%		M9K	M9KAX	29	.71	HEPARIN PREPARATIONS
AL	ALBUTEROL		J5D	J5DCX	28	.69	BETA-ADRENERGIC AGENTS, AROMATIC
AL	HYDROCHLOROTHIAZIDE		R1F	R1FBX	28	.69	THIAZIDE DIURETICS
AL	UNKNOWN		C5M	C5MXX	28	.69	IV SOLUTIONS
AL	UNKNOWN		MET	METAX	26	.64	
AL	RANITIDINE		Z2D	Z2DBX	25	.61	HISTAMINE H2 INHIBITORS
AL	UNKNOWN		H3G	H3GHX	25	.61	ANALGESICS, MISC
AL	TETRACYCLINE		W1C	W1CAX	24	.59	TETRACYCLINES
AL	RINGERS SOLUTION, LACTATED		C0C	C0CMX	23	.56	DRUGS USED TO TREAT ACIDOSIS
AL	BISACODYL		D6S	D6SDX	22	.54	LAXATIVES & CATHARTICS
AL	HALOPERIDOL		H2L	H2LHX	22	.54	ANTI-PSYCHOTICS, NON-PHENOTHIAZINES
AL	UNKNOWN		H3E	H3EZX	21	.51	ANALGESIC/ANTIPYRETICS, NON-SALICYL
AL	DICLOFENAC		S2B	S2BQX	20	.49	NSAIDS

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
AL	ERYTHROMYCIN BASE	W1D	W1DAB	19	.47	MACROLIDES
AL	AMINOPHYLLINE	A1B	A1BCX	18	.44	XANTHINES
AL	DIMENHYDRINATE	Z2A	Z2ACX	17	.42	ANTIHISTAMINES
AL	THIOPENTAL SODIUM	H2C	H2CAX	17	.42	GENERAL ANESTHETICS, INJECTABLE
AL	CARBAMAZEPINE	H4B	H4BVX	16	.39	ANTICONVULSANTS
AL	CHLORPHENIRAMINE MALEATE	Z2A	Z2APX	16	.39	ANTIHISTAMINES
AL	HC/RESOR/BISMUTH SUBGAL/ZNOX	P5A	P5ABX	16	.39	GLUCOCORTICOIDS, SYSTEMIC
AL	CEFTRIAXONE SODIUM	W1B	W1BTX	15	.37	CEPHALOSPORINS
AL	PEN G POT/DEXTROSE-WATER	W1A	W1AAX	15	.37	PENICILLINS
AL	LOPERAMIDE	D6D	D6DBX	14	.34	ANTIDIARRHEALS
AL	THIORIDAZINE	H2G	H2GHX	14	.34	ANTI-PSYCHOTICS, PHENOTHIAZINES
AL	UNKNOWN	W1A	W1AEX	14	.34	PENICILLINS
AL	ERGOTAMINE	A7A	A7APX	13	.32	VASOCONTRICTORS, ARTERIOLAR
AL	NIFEDIPINE	A9A	A9ABX	13	.32	CALCIUM CHANNEL BLOCKERS
AL	POTASSIUM	C1D	C1DAX	13	.32	POTASSIUM REPLACEMENT
AL	ASPIRIN	H3D	H3DEX	12	.29	ANALGESICS, SALICYLATES
AL	MAG SULF/VIT C/VITAMIN E/ZINC	C1H	C1HAX	12	.29	MAGNESIUM REPLACEMENT
AL	PANCURONIUM BROMIDE	S7A	S7APX	12	.29	NEUROMUSCULAR BLOCKING AGENTS
AL	POTASSIUM CHLORIDE ORAL LIQ	C1D	C1DAL	12	.29	POTASSIUM REPLACEMENT
AL	PREDNISONE	P5A	P5ARX	12	.29	GLUCOCORTICOIDS, SYSTEMIC
AL	PROCAINAMIDE	A2A	A2ABX	12	.29	ANTIARRHYTHMICS
AL	PROPRANOLOL	J7C	J7CAX	12	.29	BETA-ADRENERGIC BLOCKING AGENTS
AL	QUINAPRIL	A4D	A4DGX	12	.29	HYPOTENSIVES, ANGIOTENSIN BLCKER
AL	AMITRIPTYLINE	H2J	H2JBX	11	.27	ANTIDEPRESSANTS
AL	MISOPROSTOL	D4E	D4EBX	11	.27	ANTI-ULCER PREPARATIONS
AL	NEOSTIGMINE BROMIDE ORAL TAB	J1B	J1BBX	11	.27	CHOLINESTERASE INHIBITORS
AL	ASCORBATE CALCIUM	C6C	C6CCX	10	.25	VITAMIN PREPARATIONS
AL	CIMETIDINE	Z2D	Z2DAX	10	.25	HISTAMINE H2 INHIBITORS
AL	MEBENDAZOLE	W4L	W4LLX	10	.25	ANTHELMINTICS
AL	RESERPINE	A4B	A4BBX	10	.25	HYPOTENSIVES, SYMPATHOLYTIC
AL	CEPHALEXIN	W1B	W1BDX	9	.22	CEPHALOSPORINS
AL	CHLORHEX GL/GLYCERIN/HE-CELL	W8G	W8GEX	9	.22	ANTISEPTICS, GENERAL
AL	CLOTIRMAZOLE	W3B	W3BUX	9	.22	ANTIFUNGAL AGENTS
AL	PENTOXIFYLLINE	M9S	M9SAX	9	.22	HEMORRHOLOGIC AGENTS
AL	TRIFLUOPERAZINE	H2G	H2GGX	9	.22	ANTI-PSYCHOTICS, PHENOTHIAZINES
AL	UNKNOWN	SUX	SUX ..	9	.22	
AL	UNKNOWN	W1A	W1ACX	9	.22	PENICILLINS
AL	WARFARIN	M9L	M9LCX	9	.22	ORAL ANTICOAGULANTS, COUMADIN TYPE
AL	BENZTROPINE	H6B	H6BJX	8	.20	ANTIPARKINSONISM DRUGS, OTHER
AL	ELECTROLYTE-148 SOLN	C1Z	C1ZOX	8	.20	ELECTROLYTE REPLACEMENT
AL	NYSTATIN	W3A	W3ADX	8	.20	ANTIFUNGAL ANTIBIOTICS
AL	POTASSIUM CAP/TAB	C1D	C1DAC	8	.20	POTASSIUM REPLACEMENT
AL	UNKNOWN	A7B	A7BBS	8	.20	VASODILATORS, CORONARY
AL	ISOSORBIDE	A7B	A7BFX	7	.17	VASODILATORS, CORONARY
AL	METOCLOPRAMIDE	J9A	J9AAX	7	.17	INTESTINAL MOTILITY AGENTS
AL	TETANUS TOXOID, FLUID	W7N	W7NFX	7	.17	VACCINES
AL	UNKNOWN	C3G	C3GDY	7	.17	
AL	CEFAMANDOLE NAFATE	W1B	W1BJX	6	.15	CEPHALOSPORINS
AL	DEXAMETHASONE	P5B	P5BCX	6	.15	GLUCOCORTICOIDS, SYSTEMIC
AL	DIPHENOXYLATE	D6D	D6DAX	6	.15	ANTIDIARRHEALS
AL	LORAZEPAM	H2F	H2FMX	6	.15	ANTI-AXIETY AGENTS
AL	MAGNESIUM CARBONATE	D4B	D4BDX	6	.15	ANTACIDS
AL	MORPHINE SULFATE	H3A	H3ADY	6	.15	ANALGESICS, NARCOTICS
AL	ALBUTEROL INHAL AEROSOL	J5D	J5DCH	5	.12	BETA-ADRENERGIC AGENTS, AROMATIC

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
AL	ALUMINUM HYDROXIDE	D4B	D4BHX	5	.12	ANTACIDS
AL	CAPTOPRIL	A4D	A4DAX	5	.12	HYPOTENSIVES, ANGIOTENSIN BLCKER
AL	DOXYC HYCL/ASTRG/SKIN CLN/EMOL	W1C	W1CGX	5	.12	TETRACYCLINES
AL	METOLAZONE	R1F	R1FSX	5	.12	THIAZIDE DIURETICS
AL	NA BIPHOS/AMMON PHOS/NA PYROPH	C1B	C1BAX	5	.12	SODIUM REPLACEMENT
AL	NORFLOXACIN	W1Q	W1QFX	5	.12	QUINOLONES
AL	PHYTONADIONE	C6K	C6KFX	5	.12	VITAMIN K PREPARATIONS
AL	PREDNISOLONE	P5A	P5AHX	5	.12	GLUCOCORTICIODS, SYSTEMIC
AL	SILVER SULFADIAZINE	W8A	W8AFX	5	.12	HEAVY METAL ANTISEPTICS
AL	SOD BICARB/CAL/POTASS/NA CHLOR	C0C	C0CAX	5	.12	DRUGS USED TO TREAT ACIDOSIS
AL	SUCCINYLCHOLINE CHLORIDE	H6H	H6HXX	5	.12	SKELETAL MUSCLE RELAXANTS
AL	VITAMIN K	C6K	C6KYX	5	.12	VITAMIN K PREPARATIONS
AL	ATENOLOL	J7C	J7CFX	4	.10	BETA-ADRENERGIC BLOCKING AGENTS
AL	CEFUROXIME	W1B	W1BFX	4	.10	CEPHALOSPORINS
AL	DIPYRIDAMOL ORAL TAB	A7B	A7BJX	4	.10	VASODILATORS, CORONARY
AL	ERGOLOID MESYLATES	A7C	A7CFX	4	.10	VASODILATORS, PERIPHERAL
AL	GLYBURIDE	C4K	C4KEX	4	.10	ORAL HYPOGLYCEMICS, SULFONYLUREAS
AL	INFANT FORMULA,SOY W-IRON	C5C	C5CBX	4	.10	INFANT FORMULAS
AL	KETAMINE HYDROCHLORIDE	H2C	H2CKX	4	.10	GENERAL ANESTHETICS, INJECTABLE
AL	LITHIUM CARBONATE	H2M	H2MAA	4	.10	ANTI-MANIA DRUGS
AL	MUPIROCIIN	W1L	W1LGX	4	.10	TOPICAL ANTIBIOTICS
AL	PENICILLIN G POTASSIUM ORAL SUSP	W1A	W1ABX	4	.10	PENICILLINS
AL	RINGERS SOLUTION	C1Z	C1ZAX	4	.10	ELECTROLYTE REPLACEMENT
AL	TUBOCURARINE CHLORIDE	S7A	S7AAX	4	.10	NEUROMUSCULAR BLOCKING AGENTS
AL	AMOBARBITAL	H2D	H2DCX	3	.07	BARBITURATES
AL	BECLOMETHASONE DIPROPIONATE	P5B	P5BFX	3	.07	GLUCOCORTICIODS, SYSTEMIC
AL	BENZYL BENZOAT/BALS/BISM/ZNOX	W4M	W4MBX	3	.07	TOPICAL ANTIPARASITICS
AL	BETAMETHASONE	P5B	P5BBX	3	.07	GLUCOCORTICIODS, SYSTEMIC
AL	DEXTROSE 5%-0.125% SALINE	C5K	C5KXX	3	.07	IV SOLUTIONS
AL	DIETHYLSTILBESTROL	G1A	G1AFX	3	.07	ESTROGENIC AGENTS
AL	INDOMETHACIN	S2B	S2BAX	3	.07	NSAIDS
AL	KAOLIN	D5P	D5PAX	3	.07	INTES *INAL ADSORBENTS & PROTECTIVES
AL	MANNITOL	R1B	R1BAX	3	.07	OSMOTIC DIURETICS
AL	METFORMIN	C4L	C4LBX	3	.07	ORAL HYPOGLYCEMICS/NONSULFONYLUREAS
AL	MULTIVITS,STRESS FORMULA	C6Z	C6ZFX	3	.07	MULTIVITAMIN PREPARATIONS
AL	PROMETHAZINE	H2G	H2GJX	3	.07	ANTI-PSYCHOTICS, PHENOTHIAZINES
AL	TETANUS TOXOID,ADSORBED-ADULT	W7N	W7NXX	3	.07	VACCINES
AL	TIMOLOL	J7C	J7CGX	3	.07	BETA-ADRENERGIC BLOCKING AGENTS
AL	UNKNOWN	FED	FEDEX	3	.07	
AL	ATRACURIUM BESYLATE	S7A	S7ATX	2	.05	NEUROMUSCULAR BLOCKING AGENTS
AL	CALAMINE	L3A	L3ACX	2	.05	PROTECTIVS
AL	CEFOTAXIME SODIUM	W1B	W1BLX	2	.05	CEPHALOSPORINS
AL	CODEINE	H3A	H3AHX	2	.05	ANALGESICS, NARCOTICS
AL	DEXTROSE 50%-WATER	C5J	C5JGX	2	.05	IV SOLUTIONS
AL	ESTROGEN CONJ	G1A	G1ACX	2	.05	ESTROGENIC AGENTS
AL	FENTANYL CITRATE	H3A	H3ATX	2	.05	ANALGESICS, NARCOTICS
AL	IMIPRAMINE	H2J	H2JAX	2	.05	ANTIDEPRESSANTS
AL	LEVAMISOLE HYDROCHLORIDE	Z2G	Z2GCX	2	.05	IMMUNOMODULATORS
AL	MULTIVITAMINE W-IRON	C6Z	C6ZLX	2	.05	MULTIVITAMIN PREPARATIONS
AL	NEOMYCIN	W1F	W1FEX	2	.05	AMINOGLYCOSIDES
AL	NITROGLYCERIN CAPS	A7B	A7BBC	2	.05	VASODILATORS, CORONARY
AL	PERGOLIDE	P1F	P1FCX	2	.05	PITUITARY SUPPRESSIVE AGENTS
AL	PHYSOSTIGMINE	J1B	J1BAX	2	.05	CHOLINESTERASE INHIBITORS
AL	UNKNOWN	BRI	BRINX	2	.05	

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
AL	VITAMIN B COMPLEX	C6B	C6BBX	2	.05	VITAMIN PREPARATIONS
AL	ACETAZOLAMIDE	R1E	R1EAX	1	.02	CARBONIC ANHYDRASE INHIBITORS
AL	AMIKACIN SULFATE	W1F	W1FHX	1	.02	AMINOGLYCOSIDES
AL	CEFACLOR	W1B	W1BKX	1	.02	CEPHALOSPORINS
AL	CEFAZOLIN SODIUM	W1B	W1BFX	1	.02	CEPHALOSPORINS
AL	CEFTAZIDIME	W1B	W1BUX	1	.02	CEPHALOSPORINS
AL	CLEMASTINE	Z2P	Z2BGX	1	.02	ANTIHISTAMINES
AL	CROTAMITON	W4M	W4MCX	1	.02	TOPICAL ANTIPARASITICS
AL	D-METHORPHAN HB/PPA/BR-pHENIR	H6C	H6CAX	1	.02	ANTIPARKINSONISM DRUGS, ANTICHOLIN
AL	DICUMAROL	M9L	M9LAX	1	.02	ORAL ANTICOAGULANTS, COUMADIN TYPE
AL	DOXYLAMINE SUCCINATE	Z2A	Z2ADX	1	.02	ANTIHISTAMINES
AL	ELECTROLYTE SOLUTION, ORAL	C1Z	C1ZCX	1	.02	ELECTROLYTE REPLACEMENT
AL	FAMOTIDINE	Z2D	Z2DCX	1	.02	HISTAMINE H2 INHIBITORS
AL	GLYCERIN	D6S	D6SGX	1	.02	LAXATIVES & CATHARTICS
AL	H2O/NA PY-PHOS/ALC/GLYCER/SLS	C0B	C0BAX	1	.02	WATER
AL	KARAYA GUM	X3A	X3AKX	1	.02	OSTOMY SUPPLIES
AL	KETOPROFEN	S2B	S2BZX	1	.02	NSAIDS
AL	LACTULOSE	D9A	D9AAX	1	.02	AMMONIA INHIBITORS
AL	LISINAPRIL	A4D	A4DCX	1	.02	HYPOTENSIVES, ANGIOTENSIN BLCKER
AL	MEDROXYPROGESTERONE ACET	G2A	G2ADX	1	.02	PROGESTATIONAL AGENTS
AL	MICONAZOLE	W3B	W3BWX	1	.02	ANTIFUNGAL AGENTS
AL	MIDAZOLAM HYDROCHLORIDE	H2F	H2FUX	1	.02	ANTI-AXIETY AGENTS
AL	MULTIVITAMINS W-MINERALS	C6Z	C6ZMX	1	.02	MULTIVITAMIN PREPARATIONS
AL	NALIDIXIC ACID	W1Q	W1QAX	1	.02	QUINOLONES
AL	NITROGLYCERIN PATCH/TRANSDERMAL	A7B	A7BBP	1	.02	VASODILATORS, CORONARY
AL	NORFLOXACIN	W2G	W2GYX	1	.02	ANTIBACTERIAL CHEMOTHER. MISC
AL	PARAFFIN	U6E	U6EJX	1	.02	OINTMENT/CREAM BASE
AL	PENICILLIN VK	W1A	W1AGX	1	.02	PENICILLINS
AL	PILOCARPINE HCL	J1A	J1AEX	1	.02	PARASYMPATHETIC AGENTS
AL	PIPERACILLIN SODIUM	W1A	W1AIX	1	.02	PENICILLINS
AL	PROBENECID	R1R	R1RAX	1	.02	URICOSURIC AGENTS
AL	PROPOXYPHENE NAPSYLATE	H3C	H3CAN	1	.02	ANALGESICS, NON-NARCOTICS
AL	SILVER NITRATE	W8A	W8ALX	1	.02	HEAVY METAL ANTISEPTICS
AL	SOD LACTATE/H2O/LA/CETYL ALC	C0C	C0CPX	1	.02	DRUGS USED TO TREAT ACIDOSIS
AL	STREPTOMYCIN SULFATE	W1F	W1FAX	1	.02	AMINOGLYCOSIDES
AL	TERBINAFINE HCL	W3C	W3CNX	1	.02	ANTIFUNGAL AGENTS
AL	TOBRAMYCIN SULFATE	W1F	W1FGX	1	.02	AMINOGLYCOSIDES
AL	UNKNOWN	A4A	A4AZX	1	.02	HYPOTENSIVES, VASODILATORS
AL	UNKNOWN	A7A	A7ARX	1	.02	VASOCONTRACTORS, ARTERIOLAR
AL	UNKNOWN	C0B	C0BEX	1	.02	WATER
AL	UNKNOWN	MET	METFX	1	.02	
AL	UNKNOWN	ORF	ORFOX	1	.02	
AL	UNKNOWN	R1K	R1KZX	1	.02	DIURETICS, MISC
AL	UNKNOWN	S0S	S0SSX	1	.02	

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
NE	AMOXICILLIN	W1A	W1AUX	52	11.02	PENICILLINS
NE	GENTAMICIN SULFATE	W1F	W1FFX	21	4.45	AMINOGLYCOSIDES
NE	MEPERIDINE	H3A	H3AAX	20	4.24	ANALGESICS, NARCOTICS
NE	HYDRALAZINE	A4A	A4AAX	17	3.60	HYPOTENSIVES, VASODILATORS
NE	DEXTROSE 5%-WATER	C5J	C5JAX	16	3.39	IV SOLUTIONS
NE	METHYLDOPA	A4B	A4BNX	16	3.39	HYPOTENSIVES, SYMPATHOLYTIC
NE	ACETAMINOPHEN	H3E	H3EGX	15	3.18	ANALGESIC/ANTIPYRETICS, NON-SALICYL
NE	AMPICILLIN	W1A	W1AMX	15	3.18	PENICILLINS
NE	FUROSEMIDE	R1F	R1FPX	14	2.97	THIAZIDE DIURETICS
NE	METRONIDAZOLE	W4E	W4EAX	14	2.97	TRICHOMONACIDES
NE	MEFENAMIC ACID	H3C	H3CCX	13	2.75	ANALGESICS, NON-NARCOTICS
NE	CHLORAMPENICOL ORAL CAP	W1E	W1EAX	11	2.33	CHLORAMPHENICOL & DERIVATIVES
NE	MAGNESIUM TRISILICATE ORAL SUSP	D4B	D4BFX	11	2.33	ANTACIDS
NE	D5NS/POTASSIUM CHLORIDE	C5K	C5KFX	9	1.91	IV SOLUTIONS
NE	INSULIN (REG)	C4G	C4GAX	9	1.91	INSULINS
NE	RINGERS SOLUTION,LACTATED	C0C	C0CMX	9	1.91	DRUGS USED TO TREAT ACIDOSIS
NE	CO-TRIMOXAZOLE ORAL SUSP	W8J	W8JCX	8	1.69	ANTIBACTERIAL AGENTS, MISC
NE	DIAZEPAM	H2F	H2FNX	8	1.69	ANTI-AXIETY AGENTS
NE	IBUPROFEN	S2B	S2BDX	8	1.69	NSAIDS
NE	TRIHXYLPHENIDYL	H6B	H6BAX	8	1.69	ANTIPARKINSONISM DRUGS, OTHER
NE	FE PYROPHOS/VIT B COMP/FA	C3B	C3BAX	7	1.48	IRON REPLACEMENT
NE	INSULIN ZINC	C4G	C4GDX	7	1.48	INSULINS
NE	ASPIRIN	H3D	H3DBX	6	1.27	ANALGESICS, SALICYLATES
NE	CHLORPROMAZINE	H2G	H2GAX	6	1.27	ANTI-PSYCHOTICS, PHENOTHIAZINES
NE	DIMENHYDRINATE	Z2A	Z2ACX	6	1.27	ANTIHISTAMINES
NE	FOLIC ACID	C6M	C6MMX	6	1.27	FOLIC ACID PREPARATIONS
NE	MULTIVITAMINS	C6Z	C6ZYX	6	1.27	MULTIVITAMIN PREPARATIONS
NE	OKYTOCIN	G3A	G3ACX	6	1.27	OXYTOCICS
NE	ALBUTEROL	J5D	J5DCX	5	1.06	BETA-ADRENERGIC AGENTS, AROMATIC
NE	ASCORBATE CALCIUM	C6C	C6CCX	5	1.06	VITAMIN PREPARATIONS
NE	ATROP/SCOPOLAMINE/HYOSCY/PB	J2A	J2ABX	5	1.06	BELLADONNA ALKALOIDS
NE	POTASSIUM	C1D	C1DAX	5	1.06	POTASSIUM REPLACEMENT
NE	HYDROCHLOROTHIAZIDE	R1F	R1FBX	4	.85	THIAZIDE DIURETICS
NE	INFANT FORMULA, SOY W-IRON	C5C	C5CBX	4	.85	INFANT FORMULAS
NE	POTASSIUM CHLOR TAB FOR SOLN	C1D	C1DAA	4	.85	POTASSIUM REPLACEMENT
NE	SODIUM CHLORIDE 0.9%	C1B	C1BFX	4	.85	SODIUM REPLACEMENT
NE	TETRACYCLINE	W1C	W1CAX	4	.85	TETRACYCLINES
NE	AMITRIPTYLINE	H2J	H2JBX	3	.64	ANTIDEPRESSANTS
NE	BISACODYL	D6S	D6SDX	3	.64	LAXATIVES & CATHARTICS
NE	DIGOXIN	A1A	A1ADX	3	.64	DIGITALIS GLYCOSIDED
NE	DIPHENHYDRAMINE	Z2A	Z2AAX	3	.64	ANTIHISTAMINES
NE	ERGOLOID MESYLATES	A7C	A7CFX	3	.64	VASODILATORS, PERIPHERAL
NE	HC/RESOR/BISMUTH SUBGAL/ZNOX	P5A	P5ABX	3	.64	GLUCOCORTICOIDS, SYSTEMIC
NE	LORAZEPAM	H2F	H2FNX	3	.64	ANTI-AXIETY AGENTS
NE	METOCLOPROPAMIDE	J9A	J9AAX	3	.64	INTESTINAL MOTILITY AGENTS
NE	PHENOBARBITAL	H2D	H2DBX	3	.64	BARBITURATES
NE	UNKNOWN	W1A	W1AEX	3	.64	PENICILLINS
NE	VITAMIN K	C6K	C6KYX	3	.64	VITAMIN K PREPARATIONS
NE	ALBUTEROL INHAL AEROSOL	J5D	J5DCH	2	.42	BETA-ADRENERGIC AGENTS, AROMATIC
NE	AMINOPHYLLINE	A1B	A1BCX	2	.42	XANTHINES
NE	AMOBARBITAL	H2D	H2DCX	2	.42	BARBITURATES
NE	CAPTOPRIL	A4D	A4DAX	2	.42	HYPOTENSIVES, ANGIOTENSIN BLCKER
NE	CLOTRIMAZOLE	W3B	W3BUX	2	.42	ANTIFUNGAL AGENTS
NE	DEXAMETHASONE	P5B	P5BCX	2	.42	GLUCOCORTICOIDS, SYSTEMIC

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
NE	DICLOFENAC	S2B	S2BQX	2	.42	NSAIDS
NE	ERGOTAMINE	A7A	A7APX	2	.42	VASOCONTRACTORS, ARTERIOLAR
NE	PHENYTOIN	H4B	H4BAX	2	.42	ANTICONVULSANTS
NE	PREDNISONE	P5A	P5ARX	2	.42	GLUCOCORTICOIDS, SYSTEMIC
NE	RESERPINE	A4B	A4BBX	2	.42	HYPOTENSIVES, SYMPATHOLYTIC
NE	UNKNOWN	C5M	C5MXX	2	.42	IV SOLUTIONS
NE	UNKNOWN	H3E	H3EZX	2	.42	ANALGESIC/ANTIPIRETTICS, NON-SALICYL
NE	AMOXICILIN/CLAVULANATE CHEW TAB	W1R	W1RAX	1	.21	BETA-LACTAMASE INHIBITORS
NE	CEFOTAXIME SODIUM	W1B	W1BLX	1	.21	CEPHALOSPORINS
NE	CEFTRIAZONE SODIUM	W1B	W1BTX	1	.21	CEPHALOSPORINS
NE	CHLORHEX GL/GLYCERIN/HE-CELL	W8G	W8GEX	1	.21	ANTISEPTICS, GENERAL
NE	CIMETIDINE	Z2D	Z2DAX	1	.21	HISTAMINE H2 INHIBITORS
NE	CROTAMITON	W4M	W4MCX	1	.21	TOPICAL ANTIPARASITICS
NE	DOXYC HYCL/ASTRG/SKIN CLN/EMOL	W1C	W1CGX	1	.21	TETRACYCLINES
NE	ERYTHROMYCIN BASE	W1D	W1DAB	1	.21	MACROLIDES
NE	GLYCERIN	D6S	D6SGX	1	.21	LAXATIVES & CATHARTICS
NE	HALOPERIDOL	H2L	H2LHX	1	.21	ANTI-PSYCHOTICS, NON-PHENOTHIAZINES
NE	ISOSORBIDE	A7B	A7BFX	1	.21	VASODILATORS, CORONARY
NE	LOPERAMIDE	D6D	D6DBX	1	.21	ANTIDIARRHEALS
NE	MEBENDAZOLE	W4L	W4LLX	1	.21	ANTHELMINTICS
NE	MEDROXYPROGESTERONE ACET	G2A	G2ADX	1	.21	PROGESTATIONAL AGENTS
NE	MULTIVITAMINS W-IRON	C6Z	C6ZLX	1	.21	MULTIVITAMIN PREPARATIONS
NE	MUPIROCIN	W1L	W1LGX	1	.21	TOPICAL ANTIBIOTICS
NE	NA BIPHOS/AMMON PHOS/NA PYROPH	C1B	C1BAX	1	.21	SODIUM REPLACEMENT
NE	PROMETHAZINE	H2G	H2GJX	1	.21	ANTI-PSYCHOTICS, PHENOTHIAZINES
NE	RANITIDINE	Z2D	Z2DBX	1	.21	HISTAMINE H2 INHIBITORS
NE	RINGERS SOLUTION	C1Z	C1ZAX	1	.21	ELECTROLYTE REPLACEMENT
NE	SILVER SULFADIAZINE	W8A	W8APX	1	.21	HEAVY METAL ANTISEPTICS
NE	STREPTOMYCIN SULFATE	W1F	W1FAX	1	.21	AMINOGLYCOSIDES
NE	TETANUS TOXOID, FLUID	W7N	W7NFX	1	.21	VACCINES
NE	THIOPENTAL SODIUM	H2C	H2CAX	1	.21	GENERAL ANESTHETICS, INJECTABLE
NE	TRIFLUOPERAZINE	H2G	H2GGX	1	.21	ANTI-PSYCHOTICS, PHENOTHIAZINES
NE	UNKNOWN	W1A	W1ACX	1	.21	PENICILLINS
NE	WARFARIN	M9L	M9LCX	1	.21	ORAL ANTICOAGULANTS, COUMADIN TYPE

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
S	AMOXICILLIN	W1A	W1AUX	98	5.44	PENICILLINS
S	MEPERIDINE	H3A	H3AAX	93	5.16	ANALGESICS, NARCOTICS
S	CHLORAMPHENICOL ORAL CAP	W1E	W1EAX	88	4.89	CHLORAMPHENICOL & DERIVATIVES
S	METHYLDOPA	A4B	A4BNX	87	4.83	HYPOTENSIVES, SYMPATHOLYTIC
S	FUROSEMIDE	R1F	R1FPX	76	4.22	THIAZIDE DIURETICS
S	HYDRALAZINE	A4A	A4AAX	71	3.94	HYPOTENSIVES, VASODILATORS
S	INSULIN (REG)	C4G	C4GAX	62	3.44	INSULINS
S	IBUPROFEN	S2B	S2BDX	53	2.94	NSAIDS
S	DEXTROSE 5%-WATER	C5J	C5JAX	49	2.72	IV SOLUTIONS
S	DIGOXIN	A1A	A1ADX	48	2.67	DIGITALIS GLYCOSIDED
S	MEFENAMIC ACID	H3C	H3CCX	43	2.39	ANALGESICS, NON-NARCOTICS
S	CO-TRIMOXAZOLE ORAL SUSP	W8J	W8JCX	39	2.17	ANTIBACTERIAL AGENTS, MISC
S	FOLIC ACID	C6M	C6MMX	38	2.11	FOLIC ACID PREPARATIONS
S	ACETAMINOPHEN	H3E	H3EGX	35	1.94	ANALGESIC/ANTIPYRETICS, NON-SALICYL
S	FE PYROPHOS/VIT B COMP/FA	C3B	C3BAX	35	1.94	IRON REPLACEMENT
S	SPIRONOLACTONE	P5T	P5TAX	32	1.78	ALDOSTERONE ANTAGONISTS
S	ATROP/SCOPOLAMINE/HYOSCY/PB	J2A	J2ABX	29	1.61	BELLADONNA ALKALOIDS
S	CLINDAMYCIN HYDROCHLORIDE	W1K	W1KBX	29	1.61	LINCOSAMIDES
S	POTASSIUM CHLOR ORAL TAB FOR SOLN	C1DAA		29	1.61	POTASSIUM REPLACEMENT
S	SODIUM CHLORIDE 0.9%	C1B	C1BFX	28	1.55	SODIUM REPLACEMENT
S	AMOXICILLIN/CLAVULANATE CHEW TAB	W1R	W1RAX	27	1.50	BETA-LACTAMASE INHIBITORS
S	CHLORPROPAMAZINE	H2G	H2GAX	26	1.44	ANTI-PSYCHOTICS, PHENOTHIAZINES
S	CLOXACILLIN	W1A	W1ALX	25	1.39	PENICILLINS
S	UNKNOWN	C5M	C5MXX	23	1.28	IV SOLUTIONS
S	CHLORPROPAMIDE	C4K	C4KCX	22	1.22	ORAL HYPOGLYCEMICS, SULFONYLUREAS
S	D5NS/POTASSIUM CHLORIDE	C5K	C5KFX	22	1.22	IV SOLUTIONS
S	MULTIVITAMINS	C6Z	C6ZYX	21	1.17	MULTIVITAMIN PREPARATIONS
S	HYDROCHLOROTHIAZIDE	R1F	R1FBX	20	1.11	THIAZIDE DIURETICS
S	AMPICILLIN	W1A	W1AMX	19	1.05	PENICILLINS
S	DIPHENHYDRAMINE	Z2A	Z2AAX	19	1.05	ANTIHISTAMINES
S	GENTAMICIN SULFATE	W1F	W1FFX	18	1.00	AMINOGLYCOSIDES
S	PHENOBARBITAL	H2D	H2DBX	18	1.00	BARBITURATES
S	PHENYTOIN	H4B	H4BAX	17	.94	ANTICONVULSANTS
S	UNKNOWN	H3E	H3EZX	17	.94	ANALGESIC/ANTIPYRETICS, NON-SALICYL
S	BISACODYL	D6S	D6SDX	16	.89	LAXATIVES & CATHARTICS
S	DIAZEPAM	H2F	H2FAX	15	.83	ANTI-ANXIETY AGENTS
S	MAGNESIUM TRISILICATE ORAL SUSP	D4B	D4BFX	15	.83	ANTACIDS
S	METRONIDAZOLE	W4E	W4EAX	15	.83	TRICHOMONACIDES
S	RINGERS SOLUTION, LACTATED	C0C	C0CMX	13	.72	DRUGS USED TO TREAT ACIDOSIS
S	CHLORPHENIRAMINE MALEATE	Z2A	Z2APX	12	.67	ANTIHISTAMINES
S	ERYTHROMYCIN BASE	W1D	W1DAB	12	.67	MACROLIDES
S	PEN G POT/DEXTROSE-WATER	W1A	W1AAX	12	.67	PENICILLINS
S	POTASSIUM CHLORIDE ORAL LIQ	C1D	C1DAL	12	.67	POTASSIUM REPLACEMENT
S	ERGOTAMINE	A7A	A7APX	11	.61	VASOCONTRACTORS, ARTERIOLAR
S	INSULIN ZINC	C4G	C4GDX	10	.56	INSULINS
S	TRIHXYLPHENIDYL	H6B	H6BAX	10	.56	ANTIPARKINSONISM DRUGS, OTHER
S	DICLOFENAC	S2B	S2BQX	9	.50	NSAIDS
S	RANITIDINE	Z2D	Z2DBX	9	.50	HISTAMINE H2 INHIBITORS
S	ALBUTEROL	J5D	J5DCX	8	.44	BETA-ADRENERGIC AGENTS, AROMATIC
S	ELECTROLYTE-148 SOLN	C1Z	C1ZOX	8	.44	ELECTROLYTE REPLACEMENT
S	OXYTOCIN	G3A	G3ACX	8	.44	OXYTOCICS
S	PENTOXIFYLLINE	M9S	M9SAX	8	.44	HEMORRHEOLOGIC AGENTS
S	FLUPHENAZINE	H2G	H2GDX	7	.39	ANTI-PSYCHOTICS, PHENOTHIAZINES
S	POTASSIUM	C1D	C1DAX	7	.39	POTASSIUM REPLACEMENT

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
S	THIORIDAZINE	H2G	H2GHX	7	.39	ANTI-PSYCHOTICS, PHENOTHIAZINES
S	UNKNOWN	C3G	C3GDX	7	.39	
S	MAG SULF/VIT C/VITAMIN E/ZINC	C1H	C1HAX	6	.33	MAGNESIUM REPLACEMENT
S	NYSTATIN	W3A	W3ADX	6	.33	ANTIFUNGAL ANTIBIOTICS
S	UNKNOWN	MET	METAX	6	.33	
S	CIMETIDINE	Z2D	Z2DAX	5	.28	HISTAMINE H2 INHIBITORS
S	CLOTTRIMAZOLE	W3B	W3BUX	5	.28	ANTIFUNGAL AGENTS
S	HEP NA(PORCINE)/NA CHLOR 0.9%	M9K	M9KAX	5	.28	HEPARIN PREPARATIONS
S	MAGNESIUM CARBONATE	D4B	D4BDX	5	.28	ANTACIDS
S	NORFLOXACIN	W1Q	W1QFX	5	.28	QUINOLONES
S	PANCURONIUM BROMIDE	S7A	S7APX	5	.28	NEUROMUSCULAR BLOCKING AGENTS
S	QUINAPRIL	A4D	A4DGX	5	.28	HYPOTENSIVES, ANGIOTENSIN BLCKER
S	WARFARIN	M9L	M9LCX	5	.28	ORAL ANTICOAGULANTS, COUMADIN TYPE
S	CARBAMAZEPINE	H4B	H4BVX	4	.22	ANTICONVULSANTS
S	DIMENHYDRINATE	Z2A	Z2ACX	4	.22	ANTIEMETICS
S	HALOPERIDOL	H2L	H2LHX	4	.22	ANTI-PSYCHOTICS, NON-PHENOTHIAZINES
S	MISOPROSTOL	D4E	D4EBX	4	.22	ANTI-ULCER PREPARATIONS
S	NA BIPHOS/AMMON PHOS/NA PYROPH	C1B	C1BAX	4	.22	SODIUM REPLACEMENT
S	NIFEDIPINE	A9A	A9ABX	4	.22	CALCIUM CHANNEL BLOCKERS
S	PENICILLIN G POTASSIUM ORAL SUSP	W1A	W1ABX	4	.22	PENICILLINS
S	POTASSIUM CAP/TAB	C1D	C1DAC	4	.22	POTASSIUM REPLACEMENT
S	PROPRANOLOL	J7C	J7CAX	4	.22	BETA-ADRENERGIC BLOCKING AGENTS
S	SILVER SULFADIAZINE	W8A	W8APX	4	.22	HEAVY METAL ANTISEPTICS
S	SUCCINYLCHOLINE CHLORIDE	H6H	H6HXX	4	.22	SKELETAL MUSCLE RELAXANTS
S	UNKNOWN	W1A	W1ACX	4	.22	PENICILLINS
S	UNKNOWN	W1A	W1AEX	4	.22	PENICILLINS
S	BECLOMETHASONE DIPROPIONATE	P5B	P5BFX	3	.17	GLUCOCORTICOIDS, SYSTEMIC
S	BENZYL BENZOAT/BALS/BISM/ZNOX	W4M	W4MBX	3	.17	TOPICAL ANTIPARASITICS
S	DEXTROSE 5%-0.125% SALINE	C5K	C5KXX	3	.17	IV SOLUTIONS
S	DIETHYLSTILBESTROL	G1A	G1AFX	3	.17	ESTROGENIC AGENTS
S	DIPHENOXYLATE	D6D	D6DAX	3	.17	ANTIDIARRHEALS
S	ERGONOVINE MALEATE	G3A	G3AAX	3	.17	OKYTOCICS
S	HC/RESOR/BISMUTH SUBGAL/ZNOX	P5A	P5ABX	3	.17	GLUCOCORTICOIDS, SYSTEMIC
S	LOPERAMIDE	D6D	D6DBX	3	.17	ANTIDIARRHEALS
S	MANNITOL	R1B	R1BAX	3	.17	OSMOTIC DIURETICS
S	MUPIROCI	W1L	W1LGX	3	.17	TOPICAL ANTIBIOTICS
S	NEOSTIGMINE BROMIDE ORAL TAB	J1B	J1BBX	3	.17	CHOLINESTERASE INHIBITORS
S	RINGERS SOLUTION	C1Z	C1ZAX	3	.17	ELECTROLYTE REPLACEMENT
S	TETANUS TOXOID, FLUID	W7N	W7NFX	3	.17	VACCINES
S	TIMOLOL	J7C	J7CGX	3	.17	BETA-ADRENERGIC BLOCKING AGENTS
S	UNKNOWN	FED	FEDEX	3	.17	
S	AMINOPHYLLINE	A1B	A1BCX	2	.11	XANTHINES
S	ASPIRIN	H3D	H3DBX	2	.11	ANALGESICS, SALICYLATES
S	CALAMINE	L3A	L3ACX	2	.11	PROTECTIVS
S	DEXTROSE 50%-WATER	C5J	C5JGX	2	.11	IV SOLUTIONS
S	INDOMETHACIN	S2B	S2BAX	2	.11	NSAIDS
S	ISOSORBIDE	A7B	A7BFX	2	.11	VASODILATORS, CORONARY
S	LEVAMISOLE HYDROCHLORIDE	Z2G	Z2GCX	2	.11	IMMUNOMODULATORS
S	VITAMIN K	C6K	C6KXX	2	.11	VITAMIN K PREPARATIONS
S	ACETAZOLAMIDE	R1E	R1EAX	1	.06	CARBONIC ANHYDRASE INHIBITORS
S	ALBUTEROL INHAL AEROSOL	J5D	J5DCH	1	.06	BETA-ADRENERGIC AGENTS, AROMATIC
S	ASCORBATE CALCIUM	C6C	C6CCX	1	.06	VITAMIN PREPARATIONS
S	CEFAFLOR	W1B	W1BKX	1	.06	CEPHALOSPORINS
S	CEFAZOLIN SODIUM	W1B	W1BFX	1	.06	CEPHALOSPORINS

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REGION		MOST FREQUENTLY PRESCRIBED			PRODUCTS BY REGION	
REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.		PXC NAME
S	CEFUROXIME	W1B	W1BPX	1	. 06	CEPHALOSPORINS
S	CEPHALEXIN	W1B	W1BDX	1	. 06	CEPHALOSPORINS
S	CHLORHEX GL/GLYCERIN/HE-CELL	W8G	W8GEX	1	. 06	ANTISEPTICS, GENERAL
S	DEXAMETHASONE	P5B	P5BCX	1	. 06	GLUCOCORTICOIDS, SYSTEMIC
S	DOXYLAMINE SUCCINATE	Z2A	Z2ADX	1	. 06	ANTIHIISTAMINES
S	ELECTROLYTE SOLUTION, ORAL	C1Z	C1ZCX	1	. 06	ELECTROLYTE REPLACEMENT
S	ERGOLOID MESYLATES	A7C	A7CFX	1	. 06	VASODILATORS, PERIPHERAL
S	H2O/NA PY-PHOS/ALC/GLYCER/SLS	COB	COBAX	1	. 06	WATER
S	KARAYA GUM	X3A	X3AKX	1	. 06	OSTOMY SUPPLIES
S	MEBENDAZOLE	W4L	W4LLX	1	. 06	ANTHELMINTICS
S	METFORMIN	C4L	C4LBX	1	. 06	ORAL HYPOGLYCEMICS/NONSULFONYLUREAS
S	NITROGLYCERIN CAPS	A7B	A7B3C	1	. 06	VASODILATORS, CORONARY
S	NORFLOXACIN	W2G	W2GYX	1	. 06	ANTIBACTERIAL CHEMOTHER. MISC
S	PILOCARPINE HCL	J1A	J1AEX	1	. 06	PARASYMPATHETIC AGENTS
S	PREDNISOLONE	P5A	P5AHX	1	. 06	GLUCOCORTICOIDS, SYSTEMIC
S	PREDNISONF	P5A	P5ARX	1	. 06	GLUCOCORTICOIDS, SYSTEMIC
S	RANITIDINE	Z2D	Z2DBX	1	. 48	HISTAMINE H2 INHIBITORS
S	RESERPINE	A4B	A4BBX	1	. 06	HYPOTENSIVES, SYMPATHOLYTIC
S	SOD BICARB/CAL/POTASS/NA CHLOR	C0C	C0CAX	1	. 06	DRUGS USED TO TREAT ACIDOSIS
S	SOD LACTATE/H2O/LA/CETYL ALC	C0C	C0CPX	1	. 06	DRUGS USED TO TREAT ACIDOSIS
S	UNKNOWN	A4A	A4AZX	1	. 06	HYPOTENSIVES, VASODILATORS
S	UNKNOWN	A7A	A7ARX	1	. 06	VASOCONTRACTORS, ARTERIOLAR
S	UNKNOWN	A7B	A7BBS	1	. 06	VASODILATORS, CORONARY
S	UNKNOWN	COB	COBEX	1	. 06	WATER
S	UNKNOWN	ORF	ORFOX	1	. 06	WATER

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
SE	AMOXICILLIN	W1A	W1AUX	111	6.94	PENICILLINS
SE	CHLORPROMAZINE	H2G	H2GAX	102	6.38	ANTI-PSYCHOTICS, PHENOTHIAZINES
SE	TRIHXYLPHENIDYL	H6B	H6BAX	91	5.69	ANTIPARKINSONISM DRUGS, OTHER
SE	FLUPHENAZINE	H2G	H2GDX	88	5.50	ANTI-PSYCHOTICS, PHENOTHIAZINES
SE	MEPERIDINE	H3A	H3AAX	60	3.75	ANALGESICS, NARCOTICS
SE	GENTAMICIN SULFATE	W1F	W1FFX	50	3.13	AMINOGLYCOSIDES
SE	METRONIDAZOLE	W4E	W4EAX	50	3.13	TRICHOMONACIDES
SE	IBUPROFEN	S2B	S2BDX	48	3.00	NSAIDS
SE	METHYLDOPA	A4B	A4BNX	48	3.00	HYPOTENSIVES, SYMPATHOLYTIC
SE	MAGNESIUM TRISILICATE ORAL SUSP	D4B	D4BFX	32	2.00	ANTACIDS
SE	DIAZEPAM	H2F	H2FAX	30	1.88	ANTI-ANXIETY AGENTS
SE	FUROSEMIDE	R1F	R1FFX	29	1.81	THIAZIDE DIURETICS
SE	MEFENAMIC ACID	H3C	H3CCX	26	1.63	ANALGESICS, NON-NARCOTICS
SE	ERGONOVINE MALEATE	G3A	G3AAX	25	1.56	OXYTOCICS
SE	INSULIN (REG)	C4G	C4GAX	25	1.56	INSULINS
SE	UNKNOWN	H3G	H3GHX	25	1.56	ANALGESICS, MISC
SE	CLOXACILLIN	W1A	W1ALX	23	1.44	PENICILLINS
SE	CO-TRIMOXAZOLE ORAL SUSP	W8J	W8JCX	23	1.44	ANTIBACTERIAL AGENTS, MISC
SE	FE PYROPHOS/VIT B COMP/FA	C3B	C3BAX	23	1.44	IRON REPLACEMENT
SE	CHLORAMPENICOL ORAL CAP	W1E	W1EAX	22	1.38	CHLORAMPHENICOL & DERIVATIVES
SE	HYDRALAZINE	A4A	A4AAX	22	1.38	HYPOTENSIVES, VASODILATORS
SE	HEP NA(PORCINE)/NA CHLOR 0.9%	M9K	M9KAX	20	1.25	HEPARIN PREPARATIONS
SE	PHENOBARBITAL	H2D	H2DBX	20	1.25	BARBITURATES
SE	UNKNOWN	MET	METAX	20	1.25	
SE	DIPHENHYDRAMINE	Z2A	Z2AAX	19	1.19	ANTIHISTAMINES
SE	HALOPERIDOL	H2L	H2LHX	17	1.06	ANTI-PSYCHOTICS, NON-PHENOTHIAZINES
SE	INSULIN ZINC	C4G	C4GDX	17	1.06	INSULINS
SE	OXYTOCIN	G3A	G3ACX	16	1.00	OXYTOCICS
SE	CEFTRIAKONE SODIUM	W1B	W1BTX	14	.89	CEPHALOSPORINS
SE	CHLORPROPAMIDE	C4K	C4KCX	14	.88	ORAL HYPOGLYCEMICS, SULFONYLUREAS
SE	RANITIDINE	Z2D	Z2DBX	14	.88	HISTAMINE H2 INHIBITORS
SE	PHENYTOIN	H4B	H4BAX	13	.81	ANTICONVULSANTS
SE	TETRACYCLINE	W1C	W1CAX	13	.81	TETRACYCLINES
SE	CARBAMAZEPINE	H4B	H4BVX	12	.75	ANTICONVULSANTS
SE	PROCAINAMIDE	A2A	A2ABX	12	.75	ANTIARRHYTHMICS
SE	AMINOPHYLLINE	A1B	A1BCX	11	.69	XANTHINES
SE	ACETAMINOPHEN	H3E	H3EGX	10	.63	ANALGESIC/ANTIPYRETICS, NON-SALICYL
SE	CLINDAMYCIN HYDROCHLORIDE	W1K	W1KBX	10	.63	LINCOSAMIDES
SE	DIGOXIN	A1A	A1ADX	10	.63	DIGITALIS GLYCOSIDED
SE	LOPERAMIDE	D6D	D6DBX	10	.63	ANTIDIARRHEALS
SE	DICLOFENAC	S2B	S2BQX	9	.56	NSAIDS
SE	HC/RESOR/BISMUTH SUBGAL/ZNOX	P5A	P5ABX	9	.56	GLUCOCORTICOIDS, SYSTEMIC
SE	PREDNISONE	P5A	P5ARX	9	.56	GLUCOCORTICOIDS, SYSTEMIC
SE	THIOPENTAL SODIUM	H2C	H2CAX	9	.56	GENERAL ANESTHETICS, INJECTABLE
SE	UNKNOWN	SUX	SUXAX	9	.56	
SE	ALBUTEROL	J5D	J5DCX	8	.50	BETA-ADRENERGIC AGENTS, AROMATIC
SE	AMITRIPTYLINE	H2J	H2JBX	8	.50	ANTIDEPRESSANTS
SE	BENZTROPINE	H6B	H6BJX	8	.50	ANTIPARKINSONISM DRUGS, OTHER
SE	NEOSTIGMINE BROMIDE ORAL TAB	J1B	J1BBX	8	.50	CHOLINESTERASE INHIBITORS
SE	NIFEDIPINE	A9A	A9ABX	8	.50	CALCIUM CHANNEL BLOCKERS
SE	POTASSIUM CHLOR ORAL TAB FOR SOLN	C1D	C1DAA	8	.50	POTASSIUM REPLACEMENT
SE	PROPRANOLOL	J7C	J7CAX	8	.50	BETA-ADRENERGIC BLOCKING AGENTS
SE	TRIFLUOPERAZINE	H2G	H2GGX	8	.50	ANTI-PSYCHOTICS, PHENOTHIAZINES
SE	CHLORHEX GL/GLYCERIN/HE-CELL	W8G	W8GEX	7	.44	ANTISEPTICS, GENERAL

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
SE	DEXTROSE 5%-WATER	C5J	C5JAX	7	.44	IV SOLUTIONS
SE	MISOPROSTOL	D4E	D4EBX	7	.44	ANTI-ULCER PREPARATIONS
SE	PANCURONIUM BROMIDE	S7A	S7APX	7	.44	NEURG MUSCULAR BLOCKING AGENTS
SE	QUINAPRIL	A4D	A4DGX	7	.44	HYPOTENSIVES, ANGIOTENSIN BLCKER
SE	UNKNOWN	A7B	A7BBS	7	.44	VASODILATORS, CORONARY
SE	UNKNOWN	W1A	W1AEX	7	.44	PENICILLINS
SE	AMPICILLIN	W1A	W1AMX	6	.38	PENICILLINS
SE	CEFAMANDOLE NAFATE	W1B	W1BJX	6	.38	CEPHALOSPORINS
SE	MAG SULF/VIT C/VITAMIN E/ZINC	C1H	C1HAX	6	.38	MAGNESIUM REPLACEMENT
SE	MORPHINE SULFATE	H3A	H3ADX	6	.38	ANALGESICS, NARCOTICS
SE	RESERPINE	A4B	A4BBX	6	.38	HYPOTENSIVES, SYMPATHOLYTIC
SE	FOLIC ACID	C6M	C6MMX	5	.31	FOLIC ACID PREPARATIONS
SE	METOLAZONE	R1F	R1FSX	5	.31	THIAZIDE DIURETICS
SE	MULTIVITAMINS	C6Z	C6ZYX	5	.31	MULTIVITAMIN PREPARATIONS
SE	PHYTONADIONE	C6K	C6KKX	5	.31	VITAMIN K PREPARATIONS
SE	ASCORBATE CALCIUM	C6C	C6CCX	4	.25	VITAMIN PREPARATIONS
SE	ATENOLOL	J7C	J7CFX	4	.25	BETA-ADRENERGIC BLOCKING AGENTS
SE	CHLORPHENIRAMINE MALEATE	Z2A	Z2APX	4	.25	ANTIHISTAMINES
SE	DIMENHYDRINATE	Z2A	Z2ACX	4	.25	ANTIHISTAMINES
SE	DIPYRIDAMOL ORAL TAB	A7B	A7BJX	4	.25	VASODILATORS, CORONARY
SE	DOXYC HYCL/ASTRG/SKIN CLN/EMOL	W1C	W1CGX	4	.25	TETRACYCLINES
SE	ERYTHROMYCIN BASE	W1D	W1DAB	4	.25	MACROLIDES
SE	KETAMINE HYDROCHLORIDE	H2C	H2CKX	4	.25	GENERAL ANESTHETICS, INJECTABLE
SE	LITHIUM CARBONATE	H2M	H2MAA	4	.25	ANTI-MANIA DRUGS
SE	MEBENDAZOLE	W4L	W4LLX	4	.25	ANTHELMINTICS
SE	POTASSIUM CAP/TAB	C1D	C1DAC	4	.25	POTASSIUM REPLACEMENT
SE	SOD BICARB/CAL/POTASS/NA CHLOR	C0C	C0CAC	4	.25	DRUGS USED TO TREAT ACIDOSIS
SE	SPIRONOLACTONE	P5T	P5TAX	4	.25	ALDOSTERONE ANTAGONISTS
SE	THIORIDAZINE	H2G	H2GHX	4	.25	ANTI-PSYCHOTICS, PHENOTHIAZINES
SE	TUBOCURARINE CHLORIDE	S7A	S7AAX	4	.25	NEUROMUSCULAR BLOCKING AGENTS
SE	ALUMINUM HYDROXIDE	D4B	D4BHX	3	.19	ANTACIDS
SE	ASPIRIN	H3D	H3DBX	3	.19	ANALCESICS, SALICYLATES
SE	BISACODYL	D6S	D6SDX	3	.19	LAXATIVES & CATHARTICS
SE	CEFUROXIME	W1B	W1BPX	3	.19	CEPHALOSPORINS
SE	D5NS/POTASSIUM CHLORIDE	C5K	C5KFX	3	.19	IV SOLUTIONS
SE	DEXAMETHASONE	P5B	P5BCX	3	.19	GLUCOCORTICOIDS, SYSTEMIC
SE	DIPHENOXYLATE	D6D	D6DAX	3	.19	ANTIDIARRHEALS
SE	HYDROCHLOROTHIAZIDE	R1F	R1FBX	3	.19	THIAZIDE DIURETICS
SE	ISOSORBIDE	A7B	A7BFX	3	.19	VASODILATORS, CORONARY
SE	MULTIVITS,STRESS FORMULA	C6Z	C6ZFX	3	.19	MULTIVITAMIN PREPARATIONS
SE	SODIUM CHLORIDE 0.9%	C1B	C1BFX	3	.19	SODIUM REPLACEMENT
SE	TETANUS TOXOID, ADSORBED-ADULT	W7N	W7NXX	3	.19	VACCINES
SE	TETANUS TOXOID, FLUID	W7N	W7NFX	3	.19	VACCINES
SE	UNKNOWN	C5M	C5MXX	3	.19	IV SOLUTIONS
SE	ALBUTEROL INHAL AEROSOL	J5D	J5DCH	2	.13	BETA-ADRENERGIC AGENTS, AROMATIC
SE	AMOXICILLIN/CLAVULANATE CHEW TAB	W1R	W1RAX	2	.13	BETA-LACTAMASE INHIBITORS
SE	ATRACURIUM BESYLATE	S7A	S7ATX	2	.13	NEUROMUSCULAR BLOCKING AGENTS
SE	CEPHALEXIN	W1B	W1BDX	2	.13	CEPHALOSPORINS
SE	CLOTRIMAZOLE	W3B	W3BUX	2	.13	ANTIFUNGAL A GENTS
SE	FENTANYL CITRATE	H3A	H3ATX	2	.13	ANALGESICS, NARCOTICS
SE	IMIPRAMINE	H2J	H2JAX	2	.13	ANTIDEPRESSANTS
SE	KAOLIN	D5P	D5PAX	2	.13	INTES TINAL ADSORBENTS & PROTECTIVES
SE	METOCLOPRAMIDE	J9A	J9AAX	2	.13	INTES TINAL MOTILITY AGENTS
SE	NEOMYCIN	W1F	W1FEX	2	.13	AMINOGLYCOSIDES

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
SE	NYSTATIN	W3A	W3ADX	2	.13	ANTIFUNGAL ANTIBIOTICS
SE	PHYSOSTIGMINE	J1B	J1BAX	2	.13	CHOLINESTERASE INHIBITORS
SE	PROMETHAZINE	H2G	H2GJX	2	.13	ANTI-PSYCHOTICS, PHENOTHIAZINES
SE	UNKNOWN	BRI	BRINX	2	.13	
SE	VITAMIN B COMPLEX	C6B	C6BBX	2	.13	VITAMIN PREPARATIONS
SE	WARFARIN	M9L	M9LCX	2	.13	ORAL ANTICOAGULANTS, COUMADIN TYPE
SE	AMIKACIN SULFATE	W1F	W1FHX	1	.06	AMINOGLYCOSIDES
SE	AMOBARBITAL	H2D	H2DCX	1	.06	BARBITURATES
SE	ATROP/SCOPOLAMINE/HYOSCY/PB	J2A	J2ABX	1	.06	BELLADONNA ALKALOIDS
SE	BETAMETHASONE	P5B	P5BBX	1	.06	GLUCOCORTICOID, SYSTEMIC
SE	CAPTOPRIL	A4D	A4DAX	1	.06	HYPOTENSIVES, ANGIOTENSIN BLCKER
SE	CEFOTAXIME SODIUM	W1B	W1BLX	1	.06	CEPHALOSPORINS
SE	CIMETIDINE	Z2D	Z2DAX	1	.06	HISTAMINE H2 INHIBITORS
SE	CODEINE	H3A	H3AHX	1	.06	ANALGESICS, NARCOTICS
SE	D-METHORPHAN HB/PPA/BR-PHENIR	H6C	H6CAX	1	.06	ANTIPARKINSONISM DRUGS, ANTICHOLIN
SE	DICUMAROL	M9L	M9LAX	1	.06	ORAL ANTICOAGULANTS, COUMADIN TYPE
SE	FAMOTIDINE	Z2D	Z2DCX	1	.06	HISTAMINE H2 INHIBITORS
SE	GLYBURIDE	C4K	C4KEX	1	.06	ORAL HYPOGLYCEMICS, SULFONYLUREAS
SE	INDOMETHACIN	S2B	S2BAX	1	.06	NSAIDS
SE	LACTULOSE	D9A	D9AAX	1	.06	AMMONIA INHIBITORS
SE	LISINOPRIL	A4D	A4DCX	1	.06	HYPOTENSIVES, ANGIOTENSIN BLCKER
SE	LORAZEPAM	H2F	H2FMX	1	.06	ANTI-AXIETY AGENTS
SE	MAGNESIUM CARBONATE	D4B	D4BDX	1	.06	ANTACIDS
SE	MIDAZOLAM HYDROCHLORIDE	H2F	H2FUX	1	.06	ANTI-AXIETY AGENTS
SE	*MULTIVITAMINS W-IRON	C6Z	C6ZLX	1	.06	MULTIVITAMIN PREPARATIONS
SE	MULTIVITAMINS W-MINERALS	C6Z	C6ZMX	1	.06	MULTIVITAMIN PREPARATIONS
SE	NALIDIXIC ACID	W1Q	W1QAX	1	.06	QUINOLONES
SE	PARAFFIN	U6E	U6EJX	1	.06	OINTMENT/CREAM BASE
SE	PENICILLIN VK	W1A	W1AGX	1	.06	PENICILLINS
SE	PENTOXIFYLLINE	M9S	M9SAX	1	.06	HEMORRHEOLOGIC AGENTS
SE	PIPERACILLIN SODIUM	W1A	W1AIX	1	.06	PENICILLINS
SE	PROBENECID	R1R	R1RAX	1	.06	URICOSURIC AGENTS
SE	RINGERS SOLUTION,LACTATED	COC	COCMX	1	.06	DRUGS USED TO TREAT ACIDOSIS
SE	SILVER NITRATE	W8A	W8ALX	1	.06	HEAVY METAL ANTISEPTICS
SE	SUCCINYLCHOLINE CHLORIDE	H6H	H6HXX	1	.06	SKELETAL MUSCLE RELAXANTS
SE	TERBINAFINE HCL	W3C	W3CNX	1	.06	ANTI-FUNGAL AGENTS
SE	TOBRAMYCIN SULFATE	W1F	W1FGX	1	.06	AMINOGLYCOSIDES
SE	UNKNOWN	MET	METFX	1	.06	
SE	UNKNOWN	SOS	SOSSX	1	.06	

MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
W	METHYLDOPA	A4B	A4BNX	11	5.31	HYPOTENSIVES, SYMPATHOLYTIC
W	ACETAMINOPHEN	H3E	H3EGX	9	4.35	ANALGESIC/ANTIPYRETICS, NON-SALICYL
W	FUROSEMIDE	R1F	R1FPX	9	4.35	THIAZIDE DIURETICS
W	MEPERIDINE	H3A	H3AAX	9	4.35	ANALGESICS, NARCOTICS
W	DIPHENHYDRAMINE	Z2A	Z2AAX	8	3.86	ANTIHISTAMINES
W	GENTAMICIN SULFATE	W1F	W1FFX	8	3.86	AMINOGLYCOSIDES
W	ALBUTEROL	J5D	J5DCX	7	3.38	BETA-ADRENERGIC AGENTS, AROMATIC
W	CEPHALEXIN	W1B	W1BDX	6	2.90	CEPHALOSPORINS
W	CO-TRIMOXAZOLE ORAL SUSP	W8J	W8JCX	6	2.90	ANTIBACTERIAL AGENTS, MISC
W	IBUPROFEN	S2B	S2BDX	6	2.90	NSAIDS
W	AMOXICILLIN	W1A	W1AUX	5	2.42	PENICILLINS
W	AMPICILLIN	W1A	W1AMX	5	2.42	PENICILLINS
W	CHLORAMPHENICOL ORAL CAP	W1E	W1EAX	5	2.42	CHLORAMPHENICOL & DERIVATIVES
W	DIGOXIN	A1A	A1ADX	5	2.42	DIGITALIS GLYCOSIDES
W	POTASSIUM CHLOR ORAL TAB FOR SOLN	C1D	C1DAA	5	2.42	POTASSIUM REPLACEMENT
W	MAGNESIUM TRISILICATE ORAL SUSP	D4B	D4BFX	4	1.93	ANTACIDS
W	MEBENDAZOLE	W4L	W4LLX	4	1.93	ANTHELMINTICS
W	PREDNISOLONE	P5A	P5AHX	4	1.93	GLUCOCORTICOIDS, SYSTEMIC
W	UNKNOWN	W1A	W1ACX	4	1.93	PENICILLINS
W	AMINOPHYLLINE	A1B	A1BCX	3	1.45	XANTHINES
W	CHLORPROPAMIDE	C4K	C4KCX	3	1.45	ORAL HYPOGLYCEMICS, SULFONYLUREAS
W	CIMETIDINE	Z2D	Z2DAX	3	1.45	HISTAMINE H2 INHIBITORS
W	DIAZEPAM	H2F	H2FNX	3	1.45	ANTI-AXIETY AGENTS
W	DIMENHYDRINATE	Z2A	Z2ACX	3	1.45	ANTIHISTAMINES
W	GLYBURIDE	C4K	C4KEX	3	1.45	ORAL HYPOGLYCEMICS, SULFONYLUREAS
W	INSULIN ZINC	C4G	C4GDX	3	1.45	INSULINS
W	MEFENAMIC ACID	H3C	H3CCX	3	1.45	ANALGESICS, NON-NARCOTICS
W	PEN G POT/DEXTROSE-WATER	W1A	W1AAX	3	1.45	PENICILLINS
W	THIORIDAZINE	H2G	H2GHX	3	1.45	ANTI-PSYCHOTICS, PHENOTHIAZINES
W	ALUMINUM HYDROXIDE	D4B	D4BHX	2	.97	ANTACIDS
W	ATROP/SCOPOLAMINE/HYOSCY/PB	J2A	J2ABX	2	.97	BELLADONNA ALKALOIDS
W	BETAMETHASONE	P5B	P5BBX	2	.97	GLUCOCORTICOIDS, SYSTEMIC
W	CAPTOPRIL	A4D	A4DAX	2	.97	HYPOTENSIVES, ANGIOTENSIN BLCKER
W	ERGONOVINE MALEATE	G3A	G3AAX	2	.97	OXYTOCICS
W	ERYTHROMYCIN BASE	W1D	W1DAB	2	.97	MACROLIDES
W	ESTROGEN CONJ	G1A	G1ACX	2	.97	ESTROGENIC AGENTS
W	HEP NA(PORCINE)/NA CHLOR 0.9%	M9K	M9KAX	2	.97	HEPARIN PREPARATIONS
W	HYDRALAZINE	A4A	A4AAX	2	.97	HYPOTENSIVES, VASODILATORS
W	LORAZEPAM	H2F	H2FMX	2	.97	ANTI-AXIETY AGENTS
W	METFORMIN	C4L	C4LAX	2	.97	ORAL HYPOGLYCEMICS/NONSULFONYLUREAS
W	METOCLOPRAMIDE	J9A	J9AAX	2	.97	INTESTINAL MOTILITY AGENTS
W	METRONIDAZOLE	W4E	W4EAX	2	.97	TRICHOMONACIDES
W	OXYTOCIN	G3A	G3ACX	2	.97	OXYTOCICS
W	PERGOLIDE	P1F	P1FCX	2	.97	PITUITARY SUPPRESSIVE AGENTS
W	TRIHXYLPHENIDYL	H6B	H6BAX	2	.97	ANTIPARKINSONISM DRUGS, OTHER
W	UNKNOWN	H3E	H3EZX	2	.97	ANALGESIC/ANTIPYRETICS, NON-SALICYL
W	ASPIRIN	H3D	H3DBX	1	.48	ANALGESICS, SALICYLATES
W	CEFTAZIDIME	W1B	W1BUX	1	.48	CEPHALOSPORINS
W	CLEMASTINE	Z2B	Z2BGX	1	.48	ANTIHISTAMINES
W	CLOXACILLIN	W1A	W1ALX	1	.48	PENICILLINS
W	CODEINE	H3A	H3AHX	1	.48	ANALGESICS, NARCOTICS
W	FE PYROPHOS/VIT B COMP/FA	C3B	C3BAX	1	.48	IRON REPLACEMENT
W	FOLIC ACID	C6M	C6MMX	1	.48	FOLIC ACID PREPARATIONS
W	HC/RESOR/BISMUTH SUBGAL/ZNOX	P5A	P5ABX	1	.48	GLUCOCORTICOIDS, SYSTEMIC

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MOST FREQUENTLY PRESCRIBED DRUG PRODUCTS BY REGION

REGION	RXC NAME	PXC CODE	RXC CODE	RX NO.	%	PXC NAME
W	HYDROCHLOROTHIAZIDE	R1F	R1FBX	1	.48	THIAZIDE DIURETICS
W	ISOSORBIDE	A7B	A7BFX	1	.48	VASODILATORS, CORONARY
W	KAOLIN	D5P	D5PAK	1	.48	INTESTINAL ADSORBENTS & PROTECTIVES
W	KETOPROFEN	S2B	S2BZX	1	.48	NSAIDS
W	MICONAZOLE	W3B	W3BWX	1	.48	ANTIFUNGAL AGENTS
W	NIFEDIPINE	A9A	A9ABX	1	.48	CALCIUM CHANNEL BLOCKERS
W	NITROGLYCERIN CAPS	A7B	A7BBC	1	.48	VASODILATORS, CORONARY
W	NITROGLYCERIN PATCH/TRANSDERMAL	A7B	A7BBP	1	.48	VASODILATORS, CORONARY
W	PHENOBARBITAL	H2D	H2DBX	1	.48	BARBITURATES
W	POTASSIUM	C1D	C1DAX	1	.48	POTASSIUM REPLACEMENT
W	PROPOXYPHENE NAPSYLATE	H3C	H3CAN	1	.48	ANALGESICS, NON-NARCOTICS
W	RESERPINE	A4B	A4BBX	1	.48	HYPOTENSIVES, SYMPATHOLYTIC
W	UNKNOWN	R1K	R1KZX	1	.48	DIURETICS, MISC
W	WARFARIN	M9L	M9LCX	1	.48	ORAL ANTICOAGULANTS, COUMADIN TYPE

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