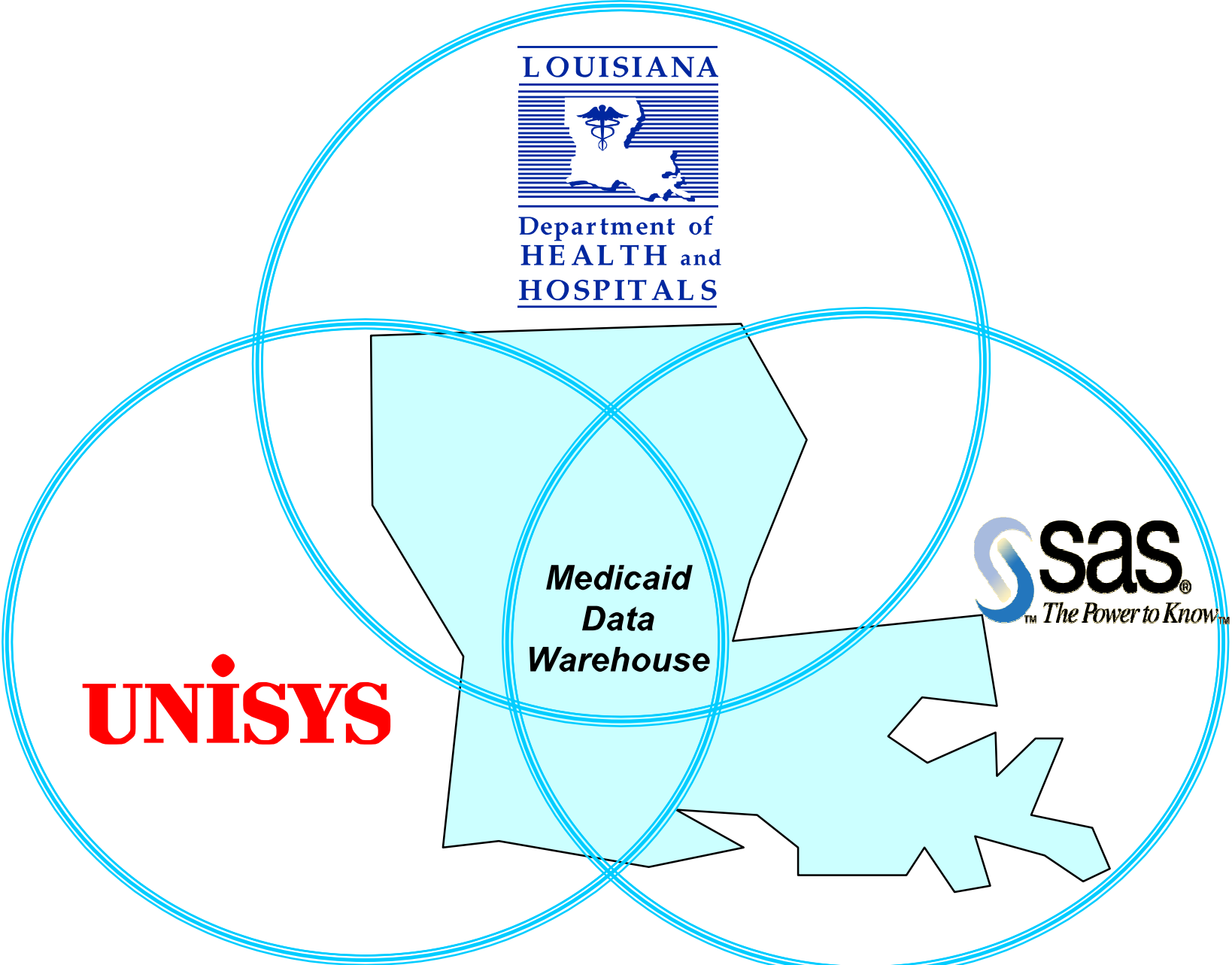


LOUISIANA



Department of
HEALTH and
HOSPITALS



*Medicaid
Data
Warehouse*

UNISYS

sas[®]
™ *The Power to Know*™

Agenda

Contract Overview

Business Problem

Business Solution

Technology

DDI Costs

Benefits and ROI

Future

Contract Overview

LOUISIANA MEDICAID

- **Federally-sponsored health care program for the State's poor & needy residents**
- **Administered by Louisiana Department of Health & Hospitals**
- **Supported on a fiscal intermediary contract by Unisys Corp.**
- **Annual expenditures of approximately \$3 billion US (ranks with Education as State's largest fiscal budgetary expense)**
- **Provides medical services to 1 million recipients per year**
- **Utilizes 27,000 medical services providers**
- **Processes between 42 and 60 million service claims per year.**

Business Problem

- **Increased administrative need for information on an immediate basis (Governor's office, State Legislature, Federal Gov't)**
- **Legacy-based mainframe systems had ineffective, inefficient (but very expensive) data storage capabilities**
- **Federal financial reporting system (MARS) was 20+ years old, written in COBOL, and needed an overhaul**
- **DHH administrators wanted direct access to program data to meet their ad-hoc information needs**
- **Previous attempt at a mainframe-based EIS/DSS system was time-consuming, costly, and unsuccessful.**

Business Solution

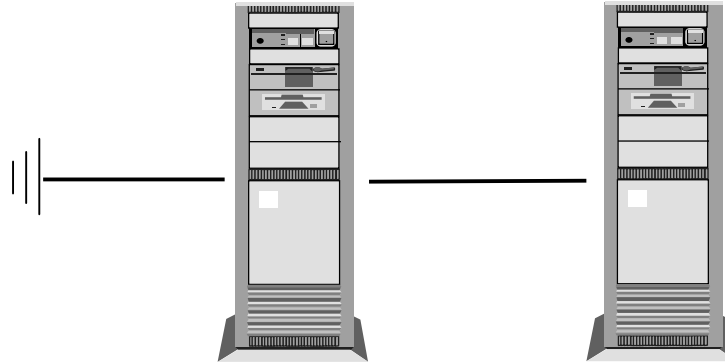
- **Utilization of client-server hardware platform (Unisys ES 2000)**
- **Utilization of an RDBMS (Microsoft's SQL Server 2000)**
- **Design, development, & implementation of a modern data warehouse called the Louisiana Medicaid Data Warehouse (MDW)**
- **Implementation of ETL (extract, transform, load) software from SAS to facilitate the data migration from legacy platforms**
- **Utilization of SAS thick-client, and server software to facilitate report development and ad-hoc queries (15 users)**
- **Deployment of a dedicated team of users, analysts, programmers, and engineers to respond to the State's information needs and to renovate the federal MARS reporting system.**

Technology



Workstation

- Windows 2000 Pro or Win NT
- Base SAS
- STATS
- Graph
- Access for PC File Formats
- Connect



SAS Server

- Windows 2000 Adv Server
- Base SAS
- STATS
- Graph
- Access for OLE DB
- Connect
- Warehouse Administrator

MDW Server

- Windows 2000 Adv Server
- SQL Server 2000 Enterprise Ed.

DDI Costs

- **Total cost of Design, Development, & Implementation: \$450,000 US**
 - **Utilized existing staff** (no additional personnel costs)
 - **Utilized existing WAN** (no additional networking costs)
 - **Hardware costs: \$200,000 US**
(Unisys ES 2000 4-way servers, RAID storage, User workstations)
 - **Software costs: \$200,000 US**
(SAS Server & Workstation software*,
MS Windows 2000 Advanced Server,
MS SQL Server 2000 Enterprise Ed.)
 - **Training costs: \$ 50,000 US**

* SAS Software: Base, STATS, Graph, Access for OLE DB, Access for PC File Formats, Connect, Warehouse Admin. (4-way server license and 15 workstation licenses)

Benefits and ROI

- **Improved information response capabilities**
 - **Mainframe average: 2 weeks**
 - **MDW average: 2 days (4 hours for urgent request)**
- **Immediate access to extensive program information**
 - **5 years of claims data (approx. 250 million rows)**
 - **5 years of eligibility data (approx. 20 million rows)**
- **Improved reporting accuracy**
 - **Fewer coding errors with SAS and SQL**
 - **Integration of QC measures to ensure report validity**
- **Dramatic reduction in report production usage expense**
 - **Annual mainframe expense: \$350,000 to \$600,000 US**
 - **Annual MDW expense: \$0 US**

The Future

- **Implementation of SAS OLAP and Data Mining tools (with Enterprise Guide and Enterprise Miner software)**
- **Expansion of platform to store 8 to 10 years of claims history**
- **Research platform for clinical-based analyses that will help improve the program (quality and availability of services) and help reduce costs**
 - **Medicaid expenditures distribution (recipients) - Chart 1**
 - **Medicaid expenditures distribution (disease state) - Chart 2**
- **Expansion of platform to enhance fraud & abuse detection**
 - **Peer-based physician prescribing profiles - Chart 3**

Chart 1 - Medicaid Expenditures Distribution (Recipients)

Medicaid Expenditures*

A Small Percentage of Recipients Account for Most Spending

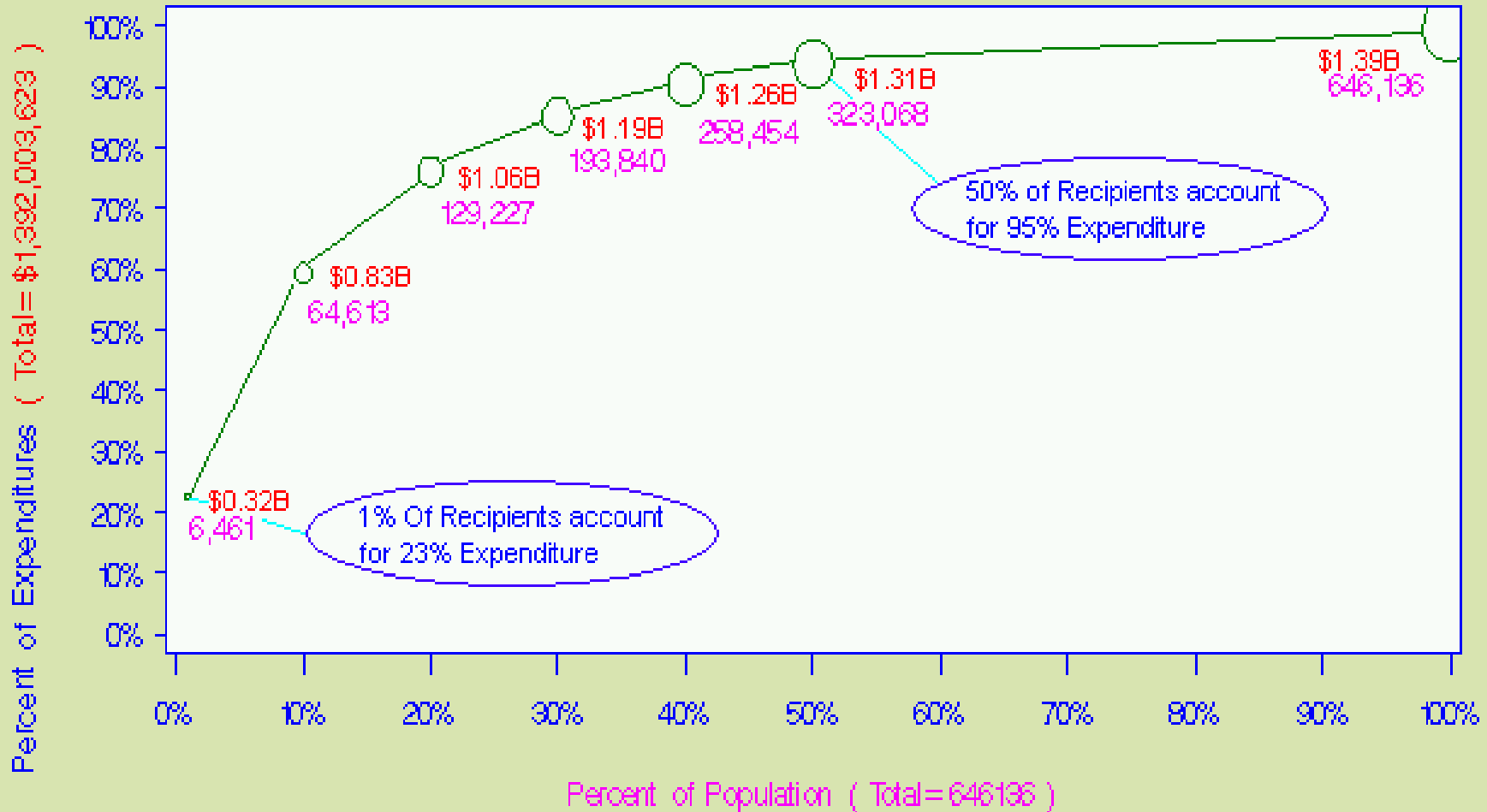


Chart 2- Medicaid Expenditures Distribution (Disease State)

Distribution of Medicaid Reimbursement

Total Charges = \$745,724,376**

Excludes MNP, LTC and Waiver Recipients

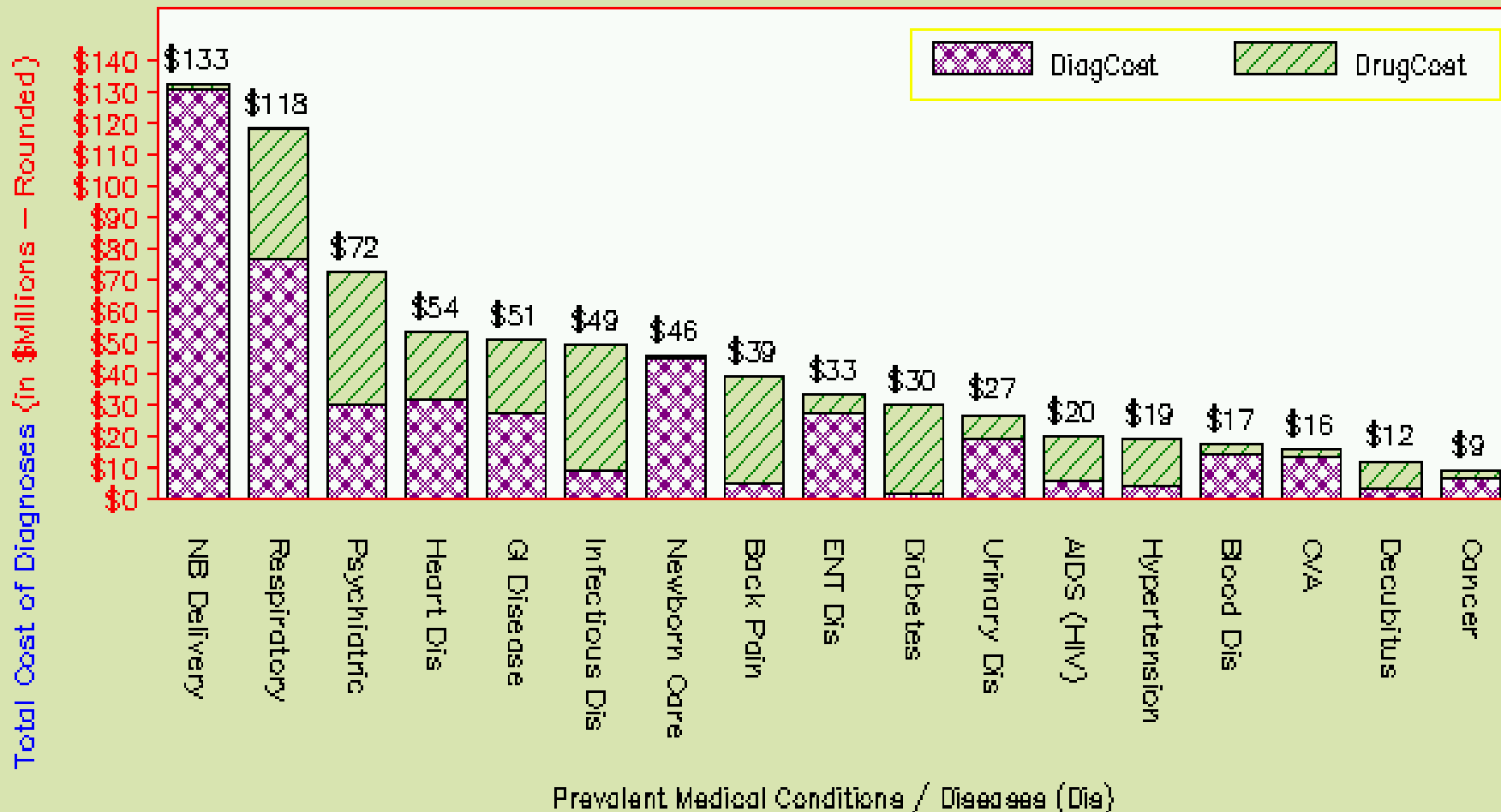


Chart 3 - Peer-based Physician Prescriber Profile

Practitioner: **DOE, JOHN MD**
 Number of Prescribers in Peer Group: **652**
 NOTE: Peer Group includes all prescribers with:
 Focus Period: **Jul-2001** through **Dec-2001**

Specialty = **41 - Internal Medicine**

A. Recipient Demographics		
	Practitioner	Peer Group Average
Gender Distribution		
(a) Percent of Adult Males	23.3%	19.6%
(b) Percent of Adult Females	69.8%	59.0%
(c) Children (18 and under)	6.9%	21.4%
Average Age		
(d) Average Age of Adult Male	48.4	52.2
(e) Average Age of Adult Female	47.1	53.4
(f) Average Age of Child	11.8	8.6

B. Prescriber Practice Demographics					
	Practitioner		Peer Group Average		
	Age Distribution	Count	% of Total	Count	% of Total
(a)	< 1 year	1	0.1%	1	2.9%
(b)	1 - 5 years	15	1.1%	3	8.6%
(c)	6 - 14 years	43	3.1%	3	8.6%
(d)	15 - 18 years	38	2.7%	2	5.7%
(e)	19 - 44 years	592	42.1%	9	25.7%
(f)	45 - 64 years	563	40.0%	9	25.7%
(g)	65 years and above	154	11.0%	8	22.9%

C. Prescriber Totals			
	Practitioner	Peer Group Average	Rank in Peer Group
(a) Number of Recipients	1,406	35	2
(b) Number of Prescriptions	24,313	332	1
(c) Total Rx Cost	\$ 1,317,487.09	\$ 17,806.89	1

D. Practice Ratios*			
	Practitioner	Peer Group Average	Rank in Peer Group
(a) Prescriptions / Recipient	17.3	9.6	29
(b) Rx Cost / Prescription	\$ 54.19	\$ 53.66	198
(c) Rx Cost / Recipient	\$ 937.05	\$ 512.79	46

E. Therapeutic Drug Classes Ranked by Rx Volume (Top 10) *		
	Practitioner	Peer Group Average
Rank	Therapeutic Class	% of Total Rx Written
1	ANALGESICS,NARCOTICS	10.0%
2	SKELETAL MUSCLE RELAXANTS	6.9%
3	NSAIDS,CYCLOOXYGENASE INHIBITOR-TYPE	4.3%
4	ANTI-ANXIETY DRUGS	4.1%
5	BETA-ADRENERGIC AGENTS	3.5%
6	GASTRIC ACID SECRETION REDUCERS	3.5%
7	CALCIUM CHANNEL BLOCKING AGENTS	2.5%
8	HYPOTENSIVES, ACE BLOCKING TYPE	2.2%
9	ANTIHISTAMINES (CONTINUED1)	2.2%
10	SEROTONIN SPECIFIC REUPTAKE INHIBITOR (S	2.1%
Total of the Top 10 Listed Above:		41.4%
Total Number of Rx for Top 10 Listed Above:		10,068

F. Therapeutic Drug Classes Ranked by Cost (Top 10)		
	Practitioner	Peer Group Average
Rank	Therapeutic Class	% of Total Cost
1	ANALGESICS,NARCOTICS	7.3%
2	GASTRIC ACID SECRETION REDUCERS	6.4%
3	NSAIDS,CYCLOOXYGENASE INHIBITOR-TYPE	5.1%
4	SKELETAL MUSCLE RELAXANTS	4.7%
5	SEROTONIN SPECIFIC REUPTAKE INHIBITOR (S	3.3%
6	LIPOTROPICS	3.1%
7	BETA-ADRENERGIC AGENTS	3.1%
8	HEPATITIS C TREATMENT AGENTS	2.7%
9	CALCIUM CHANNEL BLOCKING AGENTS	2.5%
10	ANTIHISTAMINES (CONTINUED1)	2.4%
Total of the Top 10 Listed Above:		40.5%
Total Payments for the Top 10 Listed Above:		\$ 533,926.45