Division of Medicaid
Office of the Governor
State of Mississippi
DUR Board Meeting

February 28, 2002

DIVISION OF MEDICAID
OFFICE OF THE GOVERNOR
DRUG UTILIZATION REVIEW BOARD
AGENDA
February 28, 2002

I.	Welcome	Rica Lewis-Payton
II.	DUR Board Responsibilities	Laura Neumann
III.	Review of DUR Board By-Laws	Laura Neumann
IV.	Review of Travel Voucher Procedures	Phyllis Williams
V.	Presentation of Top Medicaid Drugs	Laura Neumann
VI.	Review of Retrospective DUR Criteria ICER Risk Scores Patient Profile Intervention Letters Selection of Interventions	Steve Espy
VII.	Prescriber Profiling and HID's role	Steve Espy
VIII.	Selection of Chairman Selection of Vice-Chairman	Laura Neumann
IX.	Selection of Future Meeting Dates	Laura Neumann
X.	Closing	Laura Neumann

TABLE OF CONTENTS

DUR Board Overview and Responsibilities

Division of Medicaid
State of Mississippi
Drug Utilization Review Program

Drug Utilization Review (DUR) is a clinically based administrative process of utilization review and quality assessment. It includes predetermined criteria to describe appropriate medical care and standards to define allowable deviation from the criteria. The Omnibus Budget Reconciliation ACT of 1990 (OBRA '90) required each state to establish a Medicaid DUR program no later than January 1, 1993. DUR consists of a retrospective review system, educational interventions, and an on-line prospective review program. Prospective and retrospective drug utilization reviews are strategic tools used in the promotion of optimal pharmaceutical therapy. The methods used in each type of review differ, but there is a definite relationship between the two programs.

Retrospective DUR is focused on trends and patterns and provides valuable targeting for educational intervention. Through retrospective DUR, prescription claims are compared against criteria that have been developed by the DUR Board. This is a manual review of patient, pharmacy, and physician profiles to determine whether appropriate drug therapy is being prescribed and utilized. Retrospective DUR is a process of review, intervention, and evaluation.

Prospective DUR is an on-line program, which alerts pharmacists to potential drug therapy concerns. Alerts are given to pharmacists in the areas of early refill, therapeutic duplication, drug-drug interaction, high dose, and preferred drug products selection. The objective of the on-line prospective DUR is to assist pharmacists in screening drugs for potential drug therapy problems before the prescription is dispensed to the patient. DUR processing begins after the claim is certified as payable. Incoming drug claims are compared to the patient's pharmacy claims history file to detect potential therapeutic problems. DUR alert messages identifying the problem(s) are returned to the pharmacist for review/action.

Drug Utilization Review Board

TOPIC: Federal Requirements

According to Federal Regulations, CFR 456.700-456.725 the following are requirements of the DUR Program through the established DUR Board.

1. Review and make recommendations to Medicaid on pre-determined standards to be utilized through the DUR Programs to include modifications to current standards and the addition of new standards.

2. Evaluate the use of pre-determined standards, to include assessing the operational effect of pre-determined standards in use through retrospective and prospective DUR systems

3. Make recommendations to Medicaid concerning modifications or elimination of existing standards or the addition of new ones.

4. Identify and develop educational topics to provide guidance on common drug therapy concerns to improve prescribing and dispensing patterns.

5. Re-evaluate, and when necessary, make recommendations for modification of educational interventions and activities.

Drug Utilization Review Board

TOPIC: State Requirements

According to proposed House Bill 1200, current language reads:

1. Review and initiate retrospective drug use, review including ongoing periodic examination of claims data and other records in order to identify patterns of fraud, abuse, gross overuse, or inappropriate or medically unnecessary care among physicians, pharmacists and individuals receiving Medicaid benefits or associated with specific drugs or groups of drugs.
2. Review and initiate ongoing interventions for physicians and pharmacists targeted toward therapy problems or individuals identified in the course of retrospective drug use reviews.
3. On an ongoing basis, assess data on drug use against explicit predetermined standards using the compendia and literature set for the in the federal law and regulations.

Cost-Management Analysis Reports

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MISSISSIPPI MEDICAID

02/28/2002

Program Summary

6 Month Assessment

Period Covered:	12/2000 - 05/2001
Rx Claims Cost:	$210,400,347.45
Number Rx:	3,897,533
Total Recipients:	302,782
Avg. Recipients Per Month:	172,047
Avg Paid Per Member Over Period:	$694.89
Avg. Paid Per Member Per Month:	$203.82
Avg Paid Per Rx	$53.98

6 Month Assessment

Period Covered:	06/2001 - 11/2001
Rx Claims Cost:	$225,035,840.96
Number Rx:	3,995,892
Total Recipients:	309,192
Avg. Recipients Per Month:	174,719
Avg Paid Per Member Over Period:	$727.82
Avg. Paid Per Member Per Month:	$214.66
Avg Paid Per Rx	$56.32

12 Month Assessment

Period Covered:	12/2000 - 11/2001
Rx Claims Cost:	$435,436,188.41
Number Rx:	7,893,425
Total Recipients:	376,861
Avg. Recipients Per Month:	173,383
Avg Paid Per Member Over Period:	$1,155.43
Avg. Paid Per Member Per Month:	$209.28
Avg Paid Per Rx	$55.16

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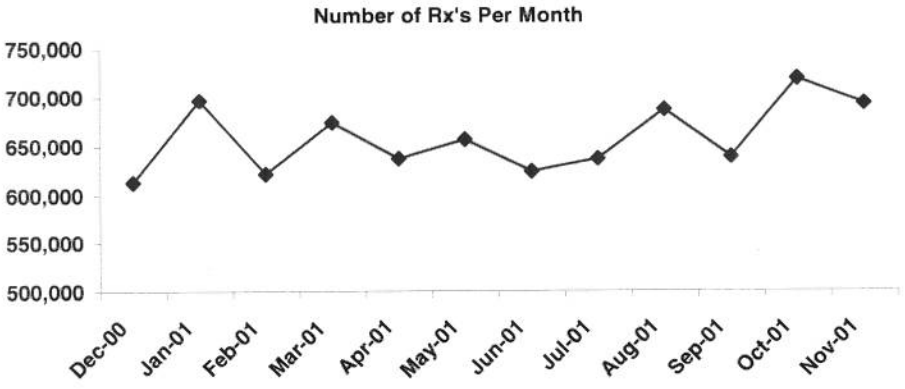
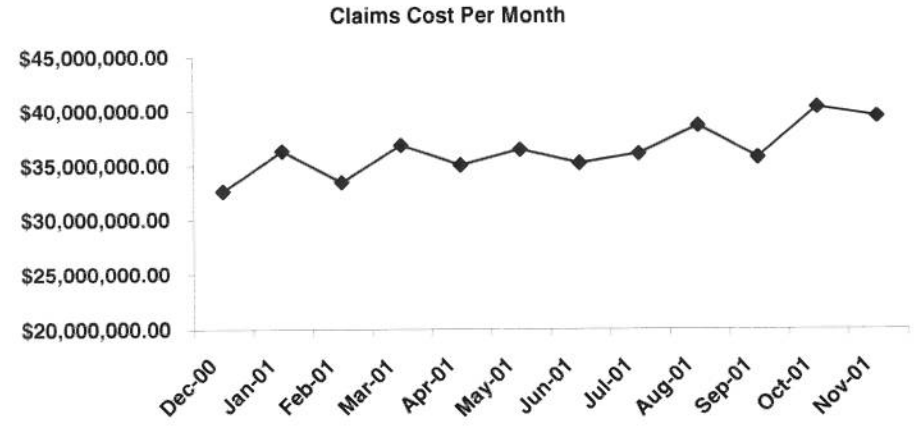
MISSISSIPPI MEDICAID
Cost Management Analysis

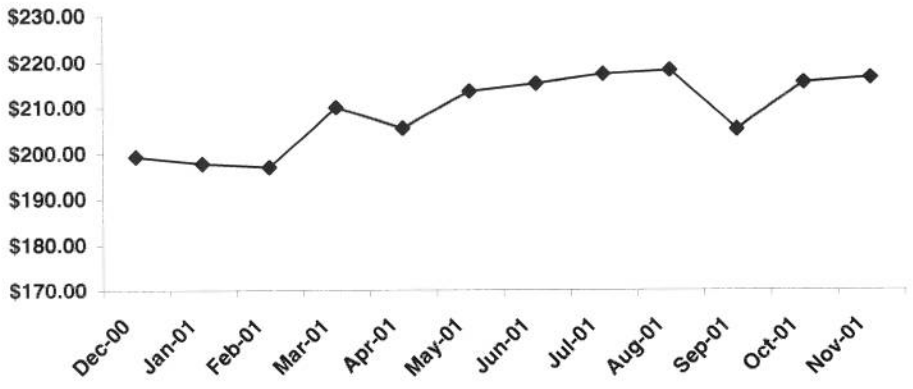
02/28/2002

Period Covered	Recipients	# Rx's	Rx Claims Cost	Cost per Member Per Month	Cost/Claim
Dec-00	163,576	613,116	$ 32,598,770.71	$199.29	$53.17
Jan-01	183,322	696,254	$ 36,246,428.39	$197.72	$52.06
Feb-01	169,690	621,335	$ 33,422,324.83	$196.96	$53.79
Mar-01	175,174	673,836	$ 36,785,431.45	$209.99	$54.59
Apr-01	170,139	636,760	$ 34,968,400.26	$205.53	$54.92
May-01	170,381	656,232	$ 36,378,991.81	$213.52	$55.44
Jun-01	163,312	623,783	$ 35,148,573.69	$215.22	$56.35
Jul-01	165,553	636,417	$ 35,980,574.11	$217.34	$56.54
Aug-01	176,753	686,418	$ 38,565,706.63	$218.19	$56.18
Sep-01	173,613	638,425	$ 35,634,067.93	$205.25	$55.82
Oct-01	186,961	718,086	$ 40,282,507.33	$215.46	$56.10
Nov-01	182,124	692,763	$ 39,424,411.27	$216.47	$56.91

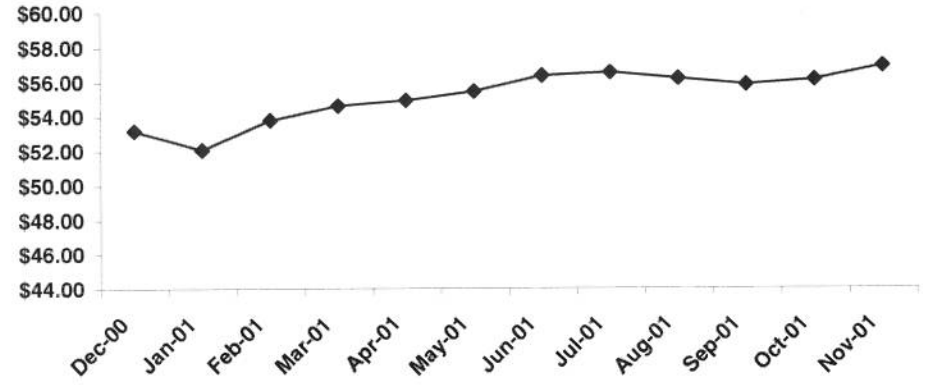




Cost Per Member Per Month



Avg Cost Per Rx Per Month

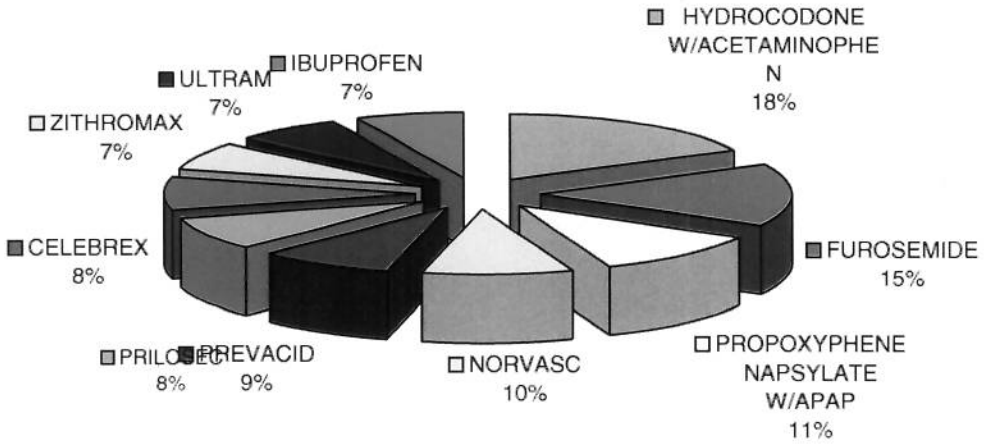


TOP 25 DRUGS BASED ON NUMBER OF CLAIMS FROM 06/01/2001 - 11/30/2001

Drug	AHFS Therapeutic Class	Rx	Paid	Paid/Rx	% Total Claims
HYDROCODONE W/ACETAMINO	OPIATE AGONISTS	95289	$ 1,189,925.55	$12.49	2.38%
FUROSEMIDE	DIURETICS	84255	$ 548,178.01	$6.51	2.11%
PROPOXYPHENE NAPSYLATE W	OPIATE AGONISTS	61016	$ 921,048.02	$15.10	1.53%
NORVASC	CARDIAC DRUGS	53817	$ 3,528,990.46	$65.57	1.35%
PREVACID	MISCELLANEOUS GI DRUGS	46865	$ 6,838,371.46	$145.92	1.17%
PRILOSEC	MISCELLANEOUS GI DRUGS	44951	$ 7,351,668.81	$163.55	1.12%
CELEBREX	NONSTEROIDAL ANTI-INFLAMMATORY	44850	$ 4,736,995.01	$105.62	1.12%
ZITHROMAX	MACROLIDES	38358	$ 1,520,666.68	$39.64	0.96%
ULTRAM	OPIATE AGONISTS	38085	$ 1,907,236.60	$50.08	0.95%
IBUPROFEN	NONSTEROIDAL ANTI-INFLAMMATORY	37781	$ 369,397.65	$9.78	0.95%
CLARITIN	ANTIHISTAMINE DRUGS	37029	$ 2,717,555.61	$73.39	0.93%
PREMARIN	ESTROGENS	36848	$ 1,274,975.61	$34.60	0.92%
LIPITOR	ANTILIPEMIC AGENTS	36408	$ 3,404,916.59	$93.52	0.91%
ACETAMINOPHEN W/CODEINE	OPIATE AGONISTS	34608	$ 363,616.09	$10.51	0.87%
CEPHALEXIN	CEPHALOSPORINS	34497	$ 470,149.87	$13.63	0.86%
ZYRTEC	ANTIHISTAMINE DRUGS	32614	$ 1,806,161.50	$55.38	0.82%
POTASSIUM CHLORIDE	REPLACEMENT PREPARATIONS	32371	$ 489,523.86	$15.12	0.81%
ZOLOFT	ANTIDEPRESSANTS	31128	$ 2,736,710.66	$87.92	0.78%
NEURONTIN	MISCELLANEOUS ANTICONVULSANTS	31044	$ 3,575,198.51	$115.17	0.78%
VIOXX	NONSTEROIDAL ANTI-INFLAMMATORY	30548	$ 2,916,867.92	$95.48	0.76%
RISPERDAL	ANTIPSYCHOTIC AGENTS	29645	$ 5,130,226.15	$173.06	0.74%
LANOXIN	CARDIAC DRUGS	28419	$ 294,350.49	$10.36	0.71%
HYDROCHLOROTHIAZIDE	DIURETICS	28377	$ 204,722.11	$7.21	0.71%
GLUCOPHAGE	MISCELLANEOUS ANTIDIABETIC AGENT	28051	$ 2,031,062.00	$72.41	0.70%
TRIAMTERENE W/HCTZ	DIURETICS	27469	$ 328,960.51	$11.98	0.69%
TOTAL TOP 25		1,024,323	$56,657,475.73	$55.31	25.63%

Total Rx Claims From 06/01/2001 - 11/30/2001	3,995,892

Top 10 Drugs
Based on Number of Claims

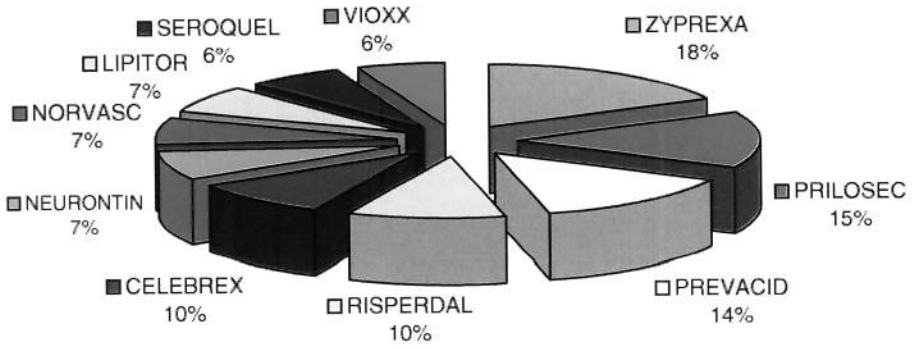


TOP 25 DRUGS BASED ON TOTAL CLAIMS COST FROM 06/01/2001 - 11/30/2001

Drug	AHFS Therapeutic Class	Rx	Paid	Paid/Rx	% Total Claims
ZYPREXA	ANTIPSYCHOTIC AGENTS	27448	$ 8,689,955.23	$316.60	0.69%
PRILOSEC	MISCELLANEOUS GI DRUGS	44951	$ 7,351,668.81	$163.55	1.12%
PREVACID	MISCELLANEOUS GI DRUGS	46865	$ 6,838,371.46	$145.92	1.17%
RISPERDAL	ANTIPSYCHOTIC AGENTS	29645	$ 5,130,226.15	$173.06	0.74%
CELEBREX	NONSTEROIDAL ANTI-INFLAMMATORY	44850	$ 4,736,995.01	$105.62	1.12%
NEURONTIN	MISCELLANEOUS ANTICONVULSANTS	31044	$ 3,575,198.51	$115.17	0.78%
NORVASC	CARDIAC DRUGS	53817	$ 3,528,990.46	$65.57	1.35%
LIPITOR	ANTILIPEMIC AGENTS	36408	$ 3,404,916.59	$93.52	0.91%
SEROQUEL	ANTIPSYCHOTIC AGENTS	16051	$ 3,056,479.35	$190.42	0.40%
VIOXX	NONSTEROIDAL ANTI-INFLAMMATORY	30548	$ 2,916,867.92	$95.48	0.76%
ZOLOFT	ANTIDEPRESSANTS	31128	$ 2,736,710.66	$87.92	0.78%
CLARITIN	ANTIHISTAMINE DRUGS	37029	$ 2,717,555.61	$73.39	0.93%
PLAVIX	UNCLASSIFIED THERAPEUTIC AGENTS	22605	$ 2,576,906.33	$114.00	0.57%
PAXIL	ANTIDEPRESSANTS	26236	$ 2,498,450.16	$95.23	0.66%
OXYCONTIN	OPIATE AGONISTS	9923	$ 2,372,921.77	$239.13	0.25%
ACTOS	MISCELLANEOUS ANTIDIABETIC AGENT	14644	$ 2,314,725.58	$158.07	0.37%
ZOCOR	ANTILIPEMIC AGENTS	16171	$ 2,265,656.52	$140.11	0.40%
NEXIUM	MISCELLANEOUS GI DRUGS	16633	$ 2,111,615.20	$126.95	0.42%
GLUCOPHAGE	MISCELLANEOUS ANTIDIABETIC AGENT	28051	$ 2,031,062.00	$72.41	0.70%
AVANDIA	MISCELLANEOUS ANTIDIABETIC AGENT	14967	$ 2,027,375.56	$135.46	0.37%
DEPAKOTE	MISCELLANEOUS ANTICONVULSANTS	19496	$ 2,000,648.27	$102.62	0.49%
ULTRAM	OPIATE AGONISTS	38085	$ 1,907,236.60	$50.08	0.95%
AUGMENTIN	PENICILLINS	25997	$ 1,903,801.70	$73.23	0.65%
ZYRTEC	ANTIHISTAMINE DRUGS	32614	$ 1,806,161.50	$55.38	0.82%
PROZAC	ANTIDEPRESSANTS	12402	$ 1,569,678.83	$126.57	0.31%
TOTAL TOP 25		707,608	$82,070,175.78	$115.98	17.71%

Total Rx Claims From 06/01/2001 - 11/30/2001	3,995,892

Top 10 Drugs
Based on Total Claims Cost



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Cost Management Analysis

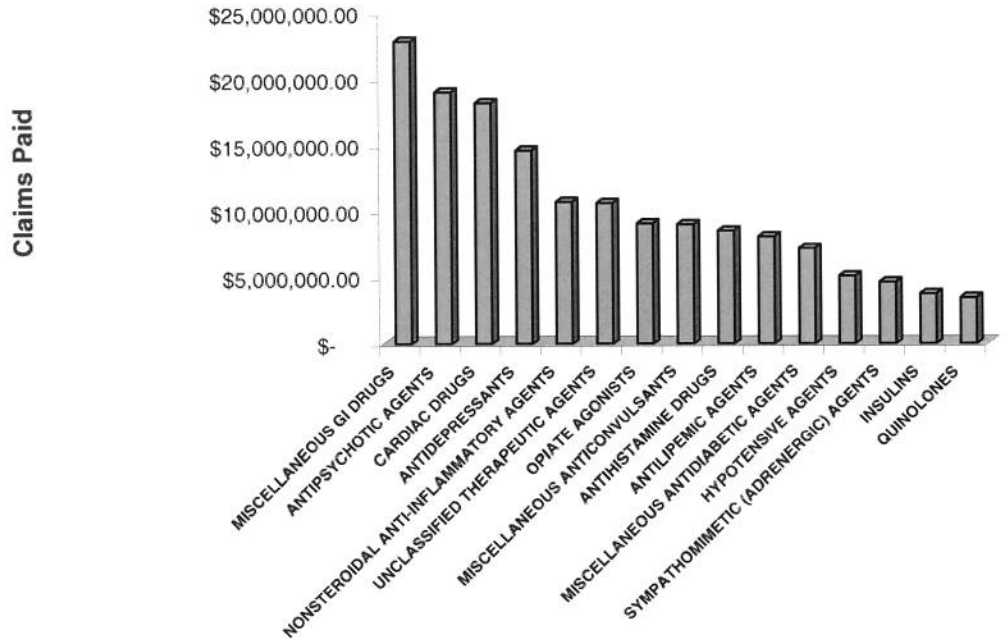
02/28/2002

TOP 15 THERAPEUTIC CLASSES BY TOTAL COST OF CLAIMS FROM 6/01/2001 - 11/30/2001

AHFS Therapeutic Class	Rx	Paid	Paid/Rx	% Total Claims
MISCELLANEOUS GI DRUGS	203382	$ 22,850,921.77	$112.35	5.09%
ANTIPSYCHOTIC AGENTS	104491	$ 19,009,328.80	$181.92	2.61%
CARDIAC DRUGS	395093	$ 18,199,182.56	$46.06	9.89%
ANTIDEPRESSANTS	210082	$ 14,591,890.88	$69.46	5.26%
NONSTEROIDAL ANTI-INFLAMMA	186388	$ 10,714,834.37	$57.49	4.66%
UNCLASSIFIED THERAPEUTIC A	93565	$ 10,617,534.81	$113.48	2.34%
OPIATE AGONISTS	283251	$ 9,048,024.05	$31.94	7.09%
MISCELLANEOUS ANTICONVULS	84876	$ 8,979,189.88	$105.79	2.12%
ANTIHISTAMINE DRUGS	215534	$ 8,507,103.95	$39.47	5.39%
ANTILIPEMIC AGENTS	79393	$ 8,035,756.23	$101.21	1.99%
MISCELLANEOUS ANTIDIABETIC	70312	$ 7,138,669.99	$101.53	1.76%
HYPOTENSIVE AGENTS	119099	$ 5,075,252.46	$42.61	2.98%
SYMPATHOMIMETIC (ADRENERG	81057	$ 4,610,856.62	$56.88	2.03%
INSULINS	52243	$ 3,725,971.93	$71.32	1.31%
QUINOLONES	46913	$ 3,418,150.48	$72.86	1.17%
TOTAL TOP 15	2,225,679	$154,522,668.78	$69.43	55.70%

Total Rx Claims From 06/01/2001 - 11/30/2001	3,995,892

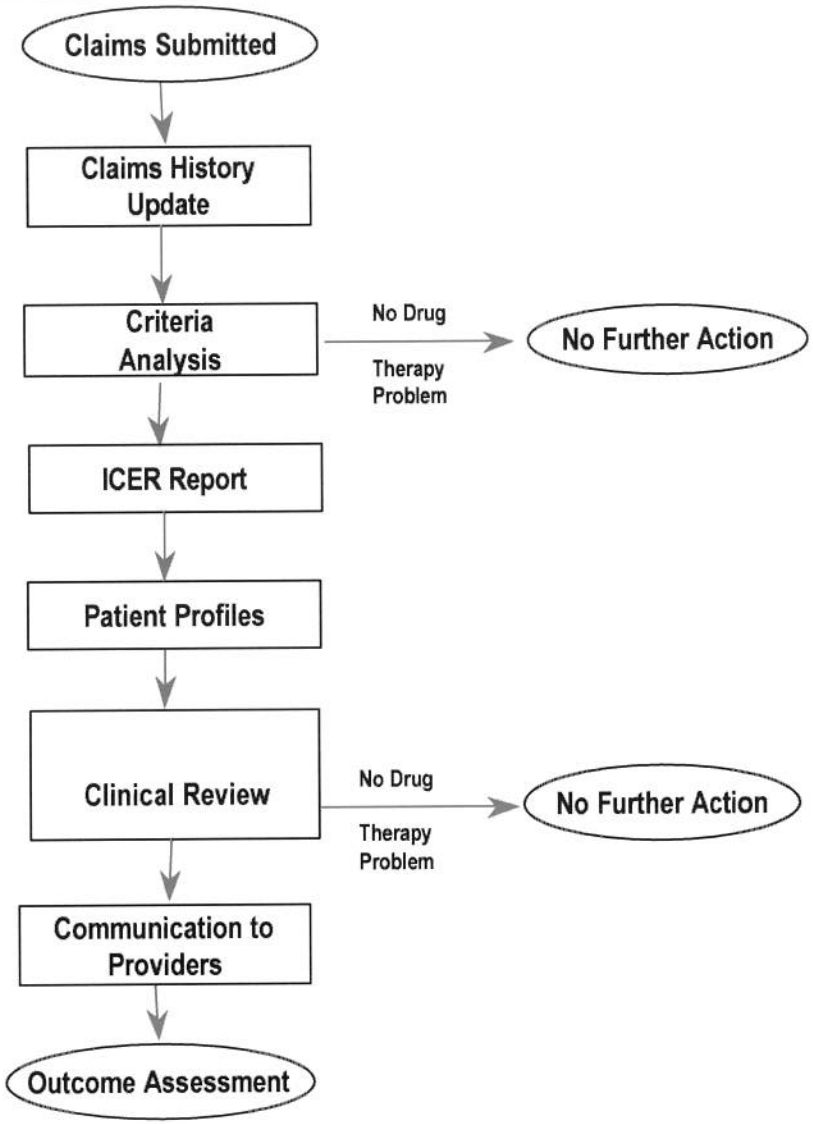
Top 15 Therapeutic Classes
Based on Total Cost of Claims



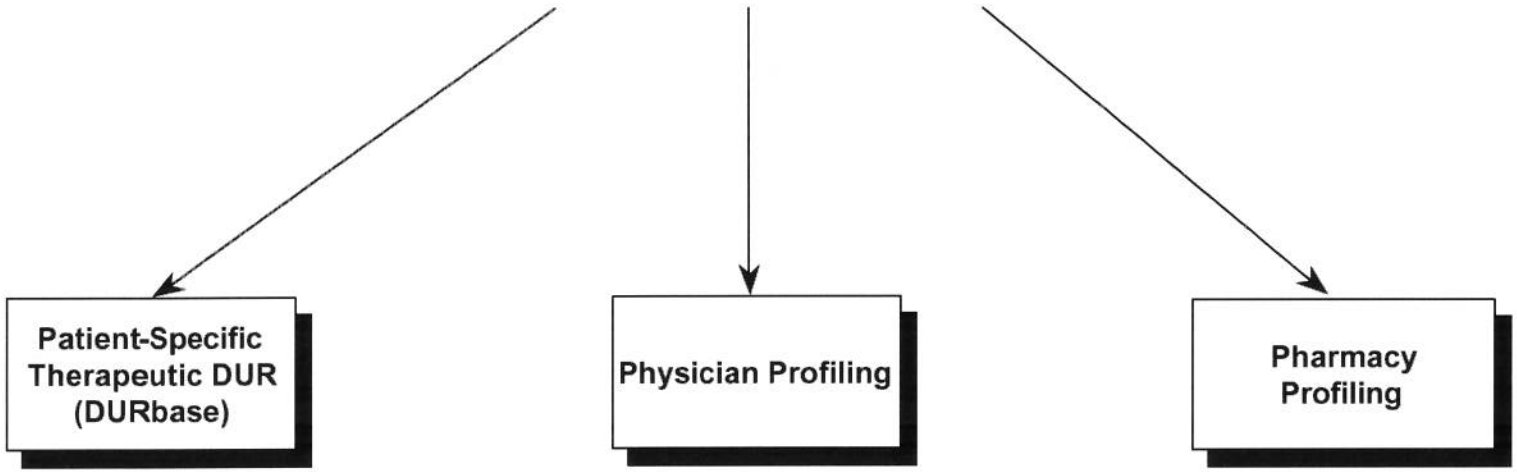
Retrospective DUR Overview

RetroDUR Overview

- Claims data submitted to HID on magnetic media by the client's fiscal agent
- Update drug histories.
- Apply full set of therapeutic DUR criteria to each record. Particular tests are used to reduce false positives.
- Initial Criteria Exception Report generated to aid in the selection of high risk profiles.
- Patient profiles are generated for the most clinically significant drug therapy conflicts.
- Clinical review by DUR Board to verify clinical significance.
- Intervention letters and profiles are sent to appropriate providers.
- Activity and impact reports are delivered monthly/quarterly.



Drug Utilization Review Services



- Monthly Data Analysis
- Generate/Review Exception Profiles on High Risk Recipients
- Send Letters/Profiles to Appropriate Providers

- Quarterly Data Analysis to Identify Substandard Prescribing Habits

- Quarterly Data Analysis to Identify Substandard Dispensing Patterns

Criteria

CRIT-ERIA NO.	UTIL A	UTILA DESCRIPTION	UTIL B	UTIL B DESCRIPTION	UTIL C	UTIL C DESCRIPTION	ONFLI CODE	CRITERIA DESCRIPTION
669	651	TIZANIDINE	656	ALPHA 2 ADRENERGIC AGONISTS	0		DD	Tizanidine is an alpha2-adrenergic agonist (like clonidine) and can produce hypotension. Caution is advised when tizanidine is to be used in patients receiving antihypertensive therapy and should not be used with other alpha2-adrenergic agonists.
668	651	TIZANIDINE	0		655	MUSCLE SPASM DIAGNOSES	TA	Patient has been receiving tizanidine (Zanaflex) for > 90 days. Limited data are available on the long-term use of tizanidine in patients other than those that have a diagnosis for multiple sclerosis, spinal cord injury or stroke. Consider evaluating for therapeutic efficacy and tolerance of adverse effects.
667	651	TIZANIDINE	654	CNS DEPRESSANTS	0		DD	The concurrent use of tizanidine and CNS depressant medications may result in additive sedation.
666	651	TIZANIDINE	653	PSYCHOSIS & HALLUCINATIONS	0		MC	Tizanidine should be used with caution in patients with psychosis. Tizanidine use has been associated with hallucinations and psychotic-like symptoms.
665	651	TIZANIDINE	652	ORAL CONTRACEPTIVES	0		DD	Tizanidine should be used with caution in patients receiving oral contaceptives due to the increased risk of tizanidine adverse effects resulting from the reduced clearance of tizanidine.
664	651	TIZANIDINE	0		0		TA	Tizanidine occassionally causes liver injury. Monitoring aminotransferase levels is recommended during the first 6 months of treatment (e.g. baseline 1, 3 and 6 months) and periodically thereafter, based on clinical status.
663	651	TIZANIDINE	270	HEPATIC IMPAIRMENT	0		MC	Tizanidine should be used with caution in patients with hepatic impairment due to the potential hepatoxicity of tizanidine.
662	651	TIZANIDINE	268	RENAL FAILURE	0		MC	Tizanidine should be used with caution in patients with renal insufficiency (creatinine clearance <25ml/min), as clearance is reduced > 50%. These patients may require reduced, individual doses during titration. If higher doses are required, increase individual doses rather than dosing frequency.
661	650	TIZANIDINE	0		0		ER	Tizanidine should be used with caution in the elderly. A cross study comparison showed a four-fold decrease in tizinadine clearance in elderly subjects.
660	649	TIZANIDINE	0		0		ER	Tizanidine may be over-utilized. The manufacturer's recommended maximum dose is 36 mg per day.
659	212	FLUVOXAMINE	3	WARFARIN	0		DD	Concurrent administration of fluvoxamine and warfarin may result in increased prothrombin time due to inhibition of warfarin metabolism. Prothrombin time ratio should be monitored closely with the addition or withdrawal of fluvoxamine and the warfarin dose adjusted accordingly.
658	212	FLUVOXAMINE	15	BETA BLOCKERS	0		DD	Concurrent administration of fluvoxamine and certain beta-blockers (propranolol or metoprolol) may result in elevated beta-blocker serum concentrations causing bradycardia and hypotension. Alternatively, atenolol, a beta-blocker that is not hepatically metabolized, may be considered.
657	212	FLUVOXAMINE	27	LITHIUM	0		DD	The combination of fluvoxamine and lithium should be used with caution due to the risk of enhanced serotonergic effects and possible seizures.
656	648	CITALOPRAM	270	HEPATIC IMPAIRMENT	0		MC	Citalopram should be used with caution in patients with reduced hepatic function. The manufacturer's recommended dose is 20 mg a day for patients with hepatic impairment. The maximum dose is not to exceed 40 mg per day.
655	647	CITALOPRAM	0		0		ER	Citalopram may be over-utilized. The manufacturer's recommended maximum dose is 60mg per day.
654	33	FLUOXETINE	270	HEPATIC IMPAIRMENT	0		MC	Fluoxetine should be used with caution in patients with hepatic insufficiency. A lower dose or less frequent dosing schedule is recommended.
653	646	FLUOXETINE	0		0		ER	Fluoxetine may be over-utilized. The manufacturer's recommended maximum dose is 80mg per day.
652	645	VENLAFAXINE	268	RENAL FAILURE	0		MC	Venlafaxine should be used with caution in patients with renal impairment. The total dose of venlafaxine (immediate release) should be reduced by 25% and venlafaxine XR (extended-release) 25-50% in patients with mild to moderate renal impairment (GFR between 10ml/min-70ml/min). For patients undergoing hemodialysis, the total daily dose should be decreased by 50%.
651	645	VENLAFAXINE	270	HEPATIC IMPAIRMENT	0		MC	Venlafaxine should be used with caution in patients with hepatic impairment. Venlafaxine clearance is decreased 30-35% in patients with hepatic impairment. The total daily dose should be reduced by 50% in patients with moderate hepatic impairment.

CRIT-ERIA NO.	UTIL A	UTILA DESCRIPTION	UTIL B	UTIL B DESCRIPTION	UTIL C	UTIL C DESCRIPTION	CONFLI CODE	CRITERIA DESCRIPTION
650	644	VENLAFAXINE-EXTENDED RELEASE	0		0		ER	Venlafaxine may be over-utilized. The manufacturer's recommended maximum dose, for extended-release venlafaxine, is 225mg per day.
649	643	VENLAFAXINE-REGULAR RELEASE	0		0		ER	Venlafaxine may be over-utilized. The manufacturer's recommended maximum dose of regular-release venlafaxine is 375mg per day.
648	642	SERTRALINE	270	HEPATIC IMPAIRMENT	0		MC	Sertraline may be overutilized. In patients with hepatic impairment or cirrhosis, a lower dose or a less frequent dosing interval should be used due to the extensive hepatic metabolism of sertraline.
647	641	SERTRALINE	0		0		ER	Sertraline may be over-utilized. The manufacturer's recommended maximum dose is 200mg per day.
646	211	PAROXETINE	268	RENAL FAILURE	0		MC	Paroxetine may be over-utilized. In patients with severe renal impairment, the manufacturer's recommended maximum dose for paroxetine regular-release is 40mg per day.
645	211	PAROXETINE	270	HEPATIC IMPAIRMENT	0		MC	Paroxetine may be over-utilized. In patients with hepatic impairment the manufacturer's recommended maximum daily dose for regular-release paroxetine is 40mg per day.
644	640	PAROXETINE	0		0		ER	Paroxetine may be over-utilized. The manufacturer's recommended dose for regular-release paroxetine is 60mg per day.
641	587	LONG HALF-LIFE BENZO ANXIOLYTICS	0		0		TA	All benzodiazepine anxiolytic agents, especially those with long half-lives, may result in accumulation causing prolonged sedation, increasing the risk of falls/fractures, and mortality. Anxiolytics with short to intermediate half-lives such as lorazepam and oxazepam are alternatives. Buspirone and SSRI's are excellant alternatives to benzodiazepines.
637	485	LOSARTAN	276	INDOMETHACIN	0		DD	The concurrent administratiuon of losartan and indomethacin may result in the decreased antihypertensive effect of losartan. Monitor hypertensive patients receiving both losartan and indomethacin for alternations in blood pressure.
635	56	SULFONYLUREAS	0		0		TD	Therapeutic duplication of sulfonylureas may be occurring.
634	631	AMLODIPINE	0		0		LR	Amlodipine may be under-utilized. Non-compliance may result in sub-therapeutic effects.
633	629	AIIRB'S	0		0		TD	Therapeutic duplication of angiotensin II receptor antagonists may be occurring.
632	628	TAMSULOSIN	0		0		LR	Tamsulosin may be under-utilized. Non-compliance may result in the decreased relief from symptoms of benign prostatic hyperplasia.
631	154	BETA BLOCKERS	0		0		TD	Therapeutic duplication of beta blockers may be occurring.
630	627	CITALOPRAM	0		0		ER	Citalopram may be over-utilized. The recommended daily dose for elderly patients is 20 mg. The maximum daily dose should not exceed 40 mg.
629	626	PAROXETINE	0		0		ER	Paroxetine may be over-utilized. The initial recommended daily dose in elderly patients is 10 mg, with the maximum daily dose not to exceed 40 mg.
628	625	FLUOXETINE	0		0		TA	In geriatric patients a lower initial dose or longer dosing interval is recommended because fluoxetine and its active metabolite have a long elimination half-life.
627	624	FELODIPINE	0		0		ER	Felodipine may be over-utilized. Patients over 65 years of age may develop elevated levels of felodipine, therefore the recommended starting dose is 2.5mg once a day with the maximum daily dose being 10 mg.
626	623	LOOP DIURETICS	0		0		TD	Therapeutic duplication of loop diuretics may be occurring.
625	10	METOCLOPRAMIDE	622	DEPRESSION - DRUGS & ICD9'S	0		TA	Metoclopramide may cause or exacerbate depression. Decreasing the dose to enable the resolution of depression, then increasing the dose gradually may eliminate depressive symptoms.
624	9	CYCLOSPORINE	621	HYPERTENSION -DRUGS & ICD9'S	0		DB	Cyclosporine may cause or exacerbate hypertension. Monitor patient closely for loss of hypertensive control.
623	620	AMLODIPINE	0		0		ER	Amlodipine may be over-utilized. The manufacturer's recommended maximum daily dose is 10 mg.
622	619	THIAZOLIDINEDIONES	0		0		TD	Therapeutic duplication of thiazolidinedione antidiabetic agents may be occurring.
621	618	PLATELET AGGREGATION INHIBITORS	0		0		TD	Therapeutic duplication of platelet aggregation inhibitor agents may be occurring.
620	617	SKELETAL MUSCLE RELAXANTS	0		0		TD	Therapeutic duplication of skeletal muscle relaxants may be occurring.
619	452	HMG-COA REDUCTASE INHIBITORS (ST	0		0		TD	Therapeutic duplication of HMG CoA reductase inhibitors may be occurring.
614	591	OXYCONTIN- ONLY	0		0		ER	This patient may be receiving excessive amounts of Oxycontin. According to manufacturer's information, Oxycontin should be dosed every 12 hours around- the-clock. It is recommended to increase the mg dose to control pain rather than increase the dose frequency. A combination of two different strengths may be required. Dispensing fewer tablets is not only cost effective for Arkansas Medicaid, but also a deterrent for theft and diversion.

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613	591	OXYCONTIN- ONLY	0		0		ER	Oxycontin has been targeted for theft and diversion. "Doctor shopping" to obtain additional prescriptions, emergency calls or visits near the end office hours, and repeated "loss" of prescrioptions are common drug seeking tactics.
612	591	OXYCONTIN- ONLY	0		0		ER	According to the manufacturer's information, Oxycontin should be dosed every 12 hours around-the-clock. It is recommended to increase the mg dose to control pain rather than increase the dose frequency. For patients with severe pain, a larger mg strength or a combination of two strengths is not only more cost effective for Arkansas Medicaid but is also a deterrent for theft and diversion when fewer tablets are dispensed.
609	610	SULFONAMIDES	3	WARFARIN	0		DD	Concomitant use of warfarin and a sulfonamide may result in an enhanced hypoprothrombinemic response to warfarin. The patient's INR values should be closely monitored upon addition and withdrawal of the sulfonamide and reassessed periodically during concurrent therapy. Adjustments to warfarin dose may be necessaty to maintain desired anticoagulation.
608	608	QUINOLONES	0		609	CF & ANTHRAX	TA	The safety and effectiveness of quinolones in pediatric patients and adolescents (less than 18 years of age) has not been established. Quinolones have been shown to cause cartilage damage in juvenile animals.
607	607	HORMONE REPLACEMENT THERAPY	0		0		LR	Hormone replacement therapy may be under-utilized resulting in sub-therapeutic effects.
606	606	MIGRAINE SPECIFIC MEDS	0		637	MIGRAINE PROPHYLACTIC THEI	ER	The overuse of migraine-specific medications (exceeding the recommended dosage and/or taking an agent more than 2 times a week) may result in drug-induced rebound headaches. Please consider the use of preventive medications such as divalproex, beta-blockers or SSRI's.
605	604	ANALGESIC MIGRAINE MEDS	411	MIGRAINE	605	ARTHRITIS	TA	The overuse of aspirin, NSAIDS or acetaminophen compounds (exceeding recommended dosage and/or taking an agent more than 2 to 3 times a week) for migraine relief may result in drug-induced rebound headaches. Analgesic rebound reduces the efficacy of other anti-migraine measures and may contribute to the chronic nature of the migraine.
604	602	FAMOTIDINE	0		0		TA	Famotidine should be used with caution in the elderly due to the risk of increased adverse effects resulting from possible age-related renal insufficiency. Lower doses of famotidine or less frequent dosing intervals may be required to compensate for the increased elimination half-life of famotidine.
603	602	FAMOTIDINE	603	RENAL INSUFFICIENCY	0		MC	Adverse CNS effects have been reported in patients with moderate to severe renal insufficiency receiving famotidine. Longer intervals between doses or lower doses may need to be used in patients with moderate (creatinine clearance <50mL/min) or severe (creatinine <10mL/min) renal insufficiency to compensate for the increased elimination half-life of famotidine.
602	601	PROTEASE INHIBITORS	385	DIABETES	0		MC	Protease Inhibitors may cause or exacerbate diabetes mellitus and hyperglycemia. Monitor patients closely for symptoms of diabetes (increased thrist, hunger, unexplained weight loss, increased urination, dry itchy skin).
601	601	PROTEASE INHIBITORS	600	HMG COA INHIBITORS	0		DD	Concurrent use of a protease inhibitor and lovastatin or simvastatin should be avoided due to the increased risk of skeletal muscle toxicity and potential decreased levels of the protease inhibitor resulting in possible virologic failure. Protease inhibitors cause inhibition of\CYP3A4 isoenzymes increasing statin levels and either statin may cause induction of P450 metabolism of protease inhibitors. Pravastatin is the\statin least susceptible to interaction with CYP isoenzyme metabolism. Low initial doses of pravastatin are recommended. Fluvastatin is also\an alternative but little interaction data is available.
600	598	CHOLINESTERASE INHIBITORS	599	GASTRIC DISORDERS & NSAIDS	0		MC	Reversible cholinesterace inhibitors are associated with significant adverse gastrointestinal effects due to increased cholinergic activity. Patients receiving rivastigmine (Exelon), tacrine (Cognex), galantamine (Reminyl) or donepezil (Aricept) should be monitored closely for symptoms of active or occult gastrointestinal bleeding, especially those at risk\for developing ulcers, e.g., those with a history of ulcer disease or those receiving concurrent non-steroidal anti-inflammatory drugs.
599	597	RIVASTIGMINE	0		0		TA	Patients on rivastigmine (Exelon) should always be started on 1.5 mg twice a day and titrated to their maintenance dose due to the drug's potential for significant adverse gastrointestinal effects. If treatment is interrupted for several days rivastigmine should be reinitiated at the lowest daily dose to prevent the possibility of severe vomiting.

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598	595	PRENATAL VITAMINS	0		0		LR	Prenatal vitamins may be under-utilized resulting in vitamin and/or mineral deficiencies before, during and/or while breast feeding.
597	525	CCB AMLODIPINE ONLY	526	ACE-INHIBITORS	523	LOTREL	CA	This combination of medications, an ACE inhibitor and a dihydropyridine calcium channel blocker, is available in a fixed-dosage combination (Lotrel) and may result in better blood pressure control by enhancing compliance.
594	591	OXYCONTIN- ONLY	0		106	NARCOTIC NEGATING CATEGOF	ER	Oxycontin may be over-utilized. In treating pain it is vital to assess the patient regularly and systematically to ensure maintenance of pain control and the relative occurrence of side effects.
593	589	AZATHIOPRINE	590	ALLOPURINOL	0		DD	Concomitant use of allopurinol and azathioprine results in a significant increase in azathioprine effect and possible azathioprine toxicity. The dose of azathioprine should be reduced if given with allopurinol.
592	588	LINEZOLID (ZYVOX)	0		0		TA	Linezolid may cause myelosuppression. It is recommended that complete blood counts be monitored weekly in patients who receive linezolid. Patients at greatest risk are those who receive linezolid for longer than two weeks, those with pre-existing myelosuppression, those receiving concomitant drugs that produce bone marrow suppression, or those with chronic infection who have received previous or concomitant antibiotic therapy.
591	576	TERTIARY AMINE TCA	0		0		TA	Tertiary amine tricyclic antidepressants should be used with caution in the elderly with depressive symptoms. These agents have significant anticholingeric side effects and are sedating increasing the risk of falls/fractures. Secondary amine tricyclic antidepressants, nortriptyline and despiramine, selective or non-selective serotonin reuptake inhibitor antidepressants are alternative agents with more favorable adverse effect profiles.
590	575	BARBITURATE SEDATIVE HYPNOTICS	0		0		TA	Barbiturate sedative/hypnotics are associated with rapid development of tolerance, psychological and physical dependence as well as withdrawal. The elderly may have increased sensitivity to barbiturates resulting in prolonged sedation, increasing the risk of falls/fractures. Sedative/hypnotics with short or intermediate half-lives, such as zaleplon, zolpidem, estazolam and temazepam are alternative agents with more favorable adverse effect profiles and are intended for short-term se.
588	574	LONG HALF-LIFE BENZO SEDATIVES	0		0		TA	Benzodiazepine sedative/hypnotics with long half-lives should be avoided in the elderly due to their increased sensitivity to these agents. \Chronic dosing of these agents can result in accumulation of the parent compound and the active metabolite causing prolonged sedation and increased risk of falls/fractures. Sedative/hypnotics with short or intermediate half-lives such as zolpidem, zaleplon or temazepam, are recommended alternatives and are intended for short-term use.
587	587	LONG HALF-LIFE BENZO ANXIOLYTICS	0		0		TA	Benzodiazepine anxiolytic agents with long half-lives should be avoided in the elderly due to their increased sensitivity to these agents. Chronic dosing of these agents may result in accumulation of the parent compound and the active metabolites causing prolonged sedation and increased risk of falls/fractures. Anxiolytics with short to intermediate half-lives such as oxazepam and lorazepam are recommended as alternatives.
586	586	ATYPICAL NEUROLEPTICS	0		0		TA	The use of clozapine, olanzapine, risperidone or quetiapine may increase the risk of developing type II diabetes mellitus or impaired glucose tolerance. Patients with a family history of diabetes or with pre-existing diabetes may need to have blood sugar monitored closely or changed to an alternativen medication.
585	570	DIPHENOXYLATE/ATROPINE	0		0		ER	Diphenoxylate/atropine may be overutilized. If clinical improvement of chronic diarrhea is not observed within 10 days of treatment with a maximum daily dose of diphenoxylate 20mg, symptoms are unlikely to respond to further doses. Consider loperamide which has superior clinical efficacy, duration of action and safety.
584	583	TRIAZOLAM	584	RIFAMPIN	0		DD	The concurrent use of triazolam and rifampin (a potent enzyme inducer) may result in the loss of efficacy of triazolam due to the increased metabolism of triazolam.
571	572	BUTALBITAL	0		0		ER	Mid-range analgesics containing butalbital may be over-utilized. Patients using this agent more than 3 times a week or exceeding the\recommended dosage may develop rebound headaches.

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570	533	PEPCID & AXID	0		534	H-2 BLOCKERS (NEGATING)	CA	Current literature suggests that generic H-2 antagonists are as effective as Axid for the treatment of PUD and GERD. If appropriate for this patient, modifying drug therapy from the brand name drug to an equivalent generic H-2 antagonist would result in cost savings of $25.00 to $70.00 per patient per month.
569	567	BUSPIRONE	0		0		HD	Buspirone may be overutilized. The maximum daily dosage should not exceed 60mg.
567	563	SEDATIVE/HYPNOTICS	560	DEPRESSION & ILLNESS	0		MC	Sedative/hypnotic drugs, should be administered with caution in patients exhibiting signs and symptoms of depression. Intentional overdose is more common in this group of patients, therefore prescribe the least amount of the drug that is feasible for the patient at one time.
566	562	SONATA AND AMBIEN	0		0		HD	Elderly and debilitated patients appear to be more sensitive to the effects of hynotics, therefore the recommended dose of Ambien (zolipdem) and Sonata (zaleplon) is 5 mg. Impaired motor and/or cognitive performance appears to be dose-related.
565	511	ZALEPLON (SONATA)	561	POTENT ENZYME INDUCERS	0		DD	The concomitant use of Sonata (zaleplon) and potent CYP3A4 enzyme\inducers (carbamazepine, phenytoin and phenobarbital) could lead to the ineffectiveness of Sonata (zaleplon) due to induced metabolism.
564	559	AMBIEN & SONATA	0		560	DEPRESSION & ILLNESS	ER	The failure of insomnia to remit after 7 to 10 days of treatment may indicate the need to evaluate for an unrecognized primary psychiatric or medical illness.
562	509	ZALEPLON (SONATA)	558	TRAZODONE - SEDATIVE USE	0		DD	Duplicate sedative/hypnotic therapy may be occurring with Sonata and trazodone (trazodone = or > 100mg hs).
561	554	ANTIPSYCHOTICS - ALL	0		0		TD	Therapeutic duplication of antipsychotic agents may be occurring.
560	551	THIORIDAZINE (MELLARIL)	375	CARDIAC ARRHYTHMIAS	0		MC	Thioridazine should be avoided in patients with congenital long QT syndrome, reduced levels of activity of P450 2D6 isozyme or a history of cardiac arrhythmias because of the increased risk of serious, potentially fatal, cardiac arrhythmias.
559	551	THIORIDAZINE (MELLARIL)	553	SELECTIVE SEROTONIN REUPTAKE INHIBITOR	0		DD	The concurrent use of thioridazine and certain Selective Serotonin Reuptake Inhibitors (fluoxetine, paroxetine and fluvoxamine) may result in elevated levels of thioridazine increasing the risk of serious, potentially fatal, cardiac arrhythmias.
558	551	THIORIDAZINE (MELLARIL)	552	BETA-BLOCKERS	0		DD	The concurrent use of thioridazine and certain beta blockers (propranolol and pindolol) may result in elevated levels of thioridazine increasing the risk of serious, potentially fatal, cardiac arrhythmias.
557	549	PROTON PUMP INHIBITORS	0		550	H-2 ANTAGONIST	CA	The efficacy of Proton Pump Inhibitors (PPIs) and H-2 antagonists in relieving symptoms of mild to moderate GERD and resolving PUD is essentially equal. If appropriate for this patient, your assistance in changing drug therapy to a less expensive H-2 antagonist would result in cost savings between $20.00 to $50.00 per patient per month. Certainly for patients with a higher severity level of GERD, PPIs would be indicated. Please consider the enclosed relative cost chart when prescribing.
556	525	CCB AMLODIPINE ONLY	526	ACE-INHIBITORS	523	LOTREL	CA	This combination of medications, an ACE inhibitor and a dihydropyridine calcium channel blocker, is available in a fixed-dosage combination and may result in better blood pressure control by enhancing compliance.
551	540	ATRIAL FIB DRUGS ONLY	541	ATRIAL FIB ICD-9	326	ANTICOAGULANTS	TA	Patients with atrial fibrillation may benefit from an anticoagulant added to their therapy to reduce the risk of stroke.
550	539	MEPROBAMATE	0		0		ER	Meprobamate is usually intended for short-term use because it is highly addictive and sedating.
549	538	NARCOTICS	319	HISTORY OF DRUG ABUSE	0		MC	Due to potential for abuse and dependence narcotics should be used with caution in patients with a history of drug abuse.
547	537	LIPID LOWERING AGENTS	0		0		LR	Lipid lowering agents may be underutilized resulting in subtherapeutic effects.
546	533	PEPCID & AXID	0		534	H-2 BLOCKERS (NEGATING)	CA	Current literature suggests that the generic H-2 antagonists, cimetidine and ranitidine, are as effective as Pepcid and Axid for the treatment of PUD and GERD. If appropriate for this patient, modifying drug therapy from the brand name drug to an equivalent generic H-2 antagonist would result in cost savings of $25.00 to $70.00 per patient per month.
545	244	DIGOXIN	532	ATRIAL FIB AGENTS & ICD-9	326	ANTICOAGULANTS	TA	Patient may have Congestive Heart Failure and Atrial Fibrillation and may benefit from an anticoagulant added to their therapy to decrease the risk of stroke.
544	543	BETA AGONIST	198	ASTHMA	531	LONG TERM ASTHMA CONTROL	TA	NIH Guidelines suggest for long term control of asthma, patients with mild persistent to severe persistent cases may benefit from the addition or increased strength of Inhaled Corticosteroids; and/or, the addition of a long-acting inhaled B2-agonist, Mast Cell Stabilizer, Leukotriene Modifier or alternatively (but not preferred) theophylline.

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543	530	CARDIO POST MI DRUGS	529	POST MYOCARDIAL INFARCTION	154	BETA BLOCKERS	TA	Post myocardial infarction patients may benefit from a beta blocker being \added to their therapy.
541	527	DIABETES	0		585	ACEI'S & AIIRB'S	TA	Diabetics (hypertensive and normotensive with microalbuminuria) may\benefit from the addition of an ACE inhibitor to their therapy to\reduce the rate of progression of renal disease.
540	524	TRAMADOL	0		106	NARCOTIC NEGATING CATEGOF	ER	Ultram (tramadol) may be overutilized. This medication has low abuse\potential and may reintroduce dependence in patients with a history\of opioid dependence.
539	516	COX-2 INHIBITORS	266	LOOP DIURETICS	0		DD	NSAIDS, including COX-2 inhibitors, may decrease the effects of loop diuretics.
538	516	COX-2 INHIBITORS	198	ASTHMA	0		MC	COX-2 inibitors may produce hypersensitivity reactions in patients with\aspirin-sensitive asthma, therefore they should be avoided or used with\caution.
537	516	COX-2 INHIBITORS	3	WARFARIN	0		DD	Concomitant use of COX-2 inhibitors and warfarin may result in increased\INR values and increased risk of bleeding.
536	510	CELECOXIB (CELEBREX)	521	FLUCONAZOLE	0		DD	Concomitant use of fluconazole and celecoxib (Celebrex) may result in\a two-fold increase in Celebrex plasma concentrations.
535	520	NSAIDS	0		0		TD	Duplicate NSAID therapy (including COX-2 inhibitors) may be occurring.
534	516	COX-2 INHIBITORS	519	ASPIRIN	0		DD	Concurrent use of COX-2 inhibitors and Aspirin may result in an increased risk\of gastrointestinal bleeding.
533	512	ROFECOXIB (VIOXX)	25	METHOTREXATE	0		DD	Vioxx(rofecoxib) may reduce renal elimination of methotrexate, resulting\in methotrexate toxicity.
532	512	ROFECOXIB (VIOXX)	52	RIFAMYCINS	0		DD	Rifampin may decrease plasma concentrations of Vioxx(rofecoxib) resulting\in decreased efficacy.
531	516	COX-2 INHIBITORS	27	LITHIUM	0		DD	COX-2 inhibitors may increase lithium plasma levels resulting in lithium\toxicity.
530	516	COX-2 INHIBITORS	94	ACEI	0		DD	COX-2 Inhibitors may reduce the antihypertensive effects of ACE inhibitors.
529	516	COX-2 INHIBITORS	270	HEPATIC IMPAIRMENT	0		MC	COX-2 inhibitors should be used with caution in patients with hepatic\impairment.
526	513	RABEPRAZOLE (ACIPHEX)	270	HEPATIC IMPAIRMENT	0		MC	Rabeprazole(Aciphex) should be used with caution in patients with hepatic\impairmant and cirrhosis.
525	513	RABEPRAZOLE (ACIPHEX)	244	DIGOXIN	0		DD	Rabeprazole(Aciphex) may increase digoxin Cmax 29%\resulting in toxicity.
524	513	RABEPRAZOLE (ACIPHEX)	518	KETOCONAZOLE	0		DD	Aciphex (rabeprazole) may decrease effects of ketoconazole resulting in\treatment failure.
521	511	ZALEPLON (SONATA)	270	HEPATIC IMPAIRMENT	0		MC	Sonata should be used with caution in patients with hepatic\impairment and cirrhosis.
520	310	HYPNOTICS	0		0		TD	Therapeutic duplication of sedative/hypnotics may be occurring.
519	509	ZALEPLON (SONATA)	52	RIFAMYCINS	0		DD	Rifamycins may inhibit the effects of zaleplon (Sonata).
518	509	ZALEPLON (SONATA)	65	CIMETIDINE	0		DD	Cimetidine may potentiate the effects of zaleplon (Sonata).
516	483	HYPNOTICS (474 HD) (516 DURATION)	0		0		ER	Zaleplon (Sonata) and zolpidem (Ambien) are not recommended for\duration of > 7 - 10 days.
515	145	CHLORAL HYDRATE	505	GASTROINTESTINAL DISORDERS WITH NO DF	0		MC	Chloral hydrate may cause GI irritation and worsen existing \gastrointestinal disorders.
514	154	BETA BLOCKERS	504	PULMONARY DISORDERS WITH NO DRUG MA	616	BETA-BLOCKERS	MC	Beta blockers may exacerbate pulmonary disorders by\promoting bronchospasms and blocking effects of bronchodilators.\Consider a cardio-selective beta blocker (metoprolol, atenolol,\acebutolol, bisoprolol or betaxolol) which has less of an effect\on bronchi as an alternative.
513	72	ANTIPSYCHOTIC AGENTS	503	PARKINSON'S DISEASE ONLY DX	0		MC	Antipsychotics may worsen extrapyramidal symptoms of Parkinson's disease.
512	125	ANTIPSYCHOTIC AGENTS	502	CONVULSIONS NO DRUG MARKERS	0		MC	Antipsychotic agents may cause or exacerbate convulsive disorders.
511	127	ANTIDEPRESSANT AGENTS	502	CONVULSIONS NO DRUG MARKERS	0		MC	Antidepressant agents may cause or exacerbate convulsive disorders.
510	463	AMANTADINE	502	CONVULSIONS NO DRUG MARKERS	0		MC	Amantadine may cause increased seizure activity in patients with a\history of seizure disorder.
508	497	PROTEASE INHIBITORS	501	TRIAZOLAM	0		DD	This protease inhibitor may increase the plasma concentration of triazolam\which may in crease the risk of over sedation.
507	476	ZAFIRLUKAST	3	WARFARIN	0		DD	Zafirlukast may inhibit the metabolism of warfarin,resulting in\increased prothrombin time.
506	290	RITONAVIR	2	QUINIDINE	0		DD	Ritonavir may increase the effects of quinidine which may increase the risk of\cardiac arrhythmias.
505	500	TICLOPIDINE	213	THEOPHYLLINES	0		DD	Ticlopidine may cause increased theophylline levels as it impairs theophylline\eliminatioin.
504	499	ANTIDEPRESSANT (TRICYCL + TRAZOD	498	SEDATIVES	0		DD	The concurrent use of an antidepressant and sedative may\result in additive sedation.
503	56	SULFONYLUREAS	434	APLASTIC ANEMIA	0		MC	Sulfonylureas may cause or worsen aplastic anemia.
502	244	DIGOXIN	268	RENAL FAILURE	0		MC	Dosage adjustment of digoxin may be required in patients with renal impairment.
501	317	ANTIARRHYTHMIC AGENTS	303	QUINOLONES (SPAR AND GREPAFLOXACIN)	0		DD	Sparfloxacin and grepafloxacin have been associated with QT\interval prolongation and are contraindicated for use in\patients receiving other QT interval prolonging medications.

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500	52	RIFAMYCINS	497	PROTEASE INHIBITORS	0		DD	Rifamycins increase the metabolism of protease inhibitors resulting in\ subtherapeutic levels. Protease inhibitors can cause an increase in \rifampin levels.
499	52	RIFAMYCINS	120	AZOLE ANTIFUNGAL AGENTS	0		DD	Rifamycins may increase the metabolism of the azole antifungals lowering their\plasma concentration and decreasing effectiveness.
498	496	LAMOTRIGINE	8	VALPROIC ACID	0		DD	Valproic acid may increase plasma levels of lamotrigine due to increased\ heptic clearance. This may lead to serious rash or disabling temor.
497	31	CARBAMAZEPINE	492	DANAZOL	0		DD	Carbamazepine levels may be increased significantly with concurrent danazol\therapy due to inhibition of carbamazepine metabolism.
496	496	LAMOTRIGINE	467	ANTICONVULSANTS	0		DD	Hepatic enzyme inducing anticonvulsants may decrease serum levels of lamotrigine\and decrease level of seizure control.
495	493	FELBAMATE	8	VALPROIC ACID	0		DD	Felbamate may increase serum concentrations of valproic\acid due to inhibition of valproic acid metabolism.
494	495	CIMETIDINE	56	SULFONYLUREAS	0		DD	Concurrent administration of cimetidine or ranitidine with sulfonylureas\may increase their hypoglycemic effect.
492	490	HYDROXYCHLOROQUIN / CHLOROQUIN	491	VISUAL DISTURBANCES	0		MC	Visual disturbances including disorders of accomodation\corneal deposits and retinopathy may occur as a result\of chloroquin or hydroxychloroquin therapy.
490	127	ANTIDEPRESSANT AGENTS	126	CONVULSIONS	387	MOOD DISORDERS/MOVMENT D	DC	Antidepressant agents may cause or exacerbate convulsive disorders.
489	65	CIMETIDINE	445	METFORMIN	0		DD	Cimetidine can significantly increase the plasma concentration\of metformin and increase risk of lactic acidosis. Metformin\dosage reduction may be needed.
488	56	SULFONYLUREAS	28	THIAZIDES	0		DD	Moderate to high doses of thiazide diuretics impair control of diabetes\by increasing blood sugar. An alternate agent may be more beneficial.
486	437	BRONCHODILATORS	375	CARDIAC ARRHYTHMIAS	0		DB	Beta adrenergic agents can cause or exacerbate cardiac\arrhythmias.
485	482	ANTIPARKINSONIA/ANTICHOLINERGIC /	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA	MC	Anticholinergic agents are contraindicated during pregnancy.
484	482	ANTIPARKINSONIA/ANTICHOLINERGIC /	353	MYASTHENIA GRAVIS	0		MC	Anticholinergics may exacerbate myasthemia gravis due \to the inhibition of acetylcholine.
483	482	ANTIPARKINSONIA/ANTICHOLINERGIC /	80	ANTIDEPRESSANT AGENTS	0		DD	The combination of tricyclic antidepressants and anticholinergic\agents may result in additive anticholinergic effects.
482	1	AMIODARONE	363	PULMONARY FIBROSIS	0		MC	Amiodarone may cause or exacerbate pulmonary fibrosis.
481	463	AMANTADINE	268	RENAL FAILURE	0		MC	The dose of amantidine may need to be reduced by 50%\in patients with renal impairment due to a decrease\in amantidine elimination.
480	388	HYDRALAZINE	355	SYSTEMIC LUPUS ERYTHEMATOSUS	0		MC	Hydralazine may cause or exacerbate systemic lupus erythematosus.
479	2	QUINIDINE	355	SYSTEMIC LUPUS ERYTHEMATOSUS	0		MC	Quinidine may cause systemic lupus erythematosus.
478	356	TOCAINIDE	363	PULMONARY FIBROSIS	0		MC	Tocainide may cause or exacerbate pulmonary fibrosis.
477	463	AMANTADINE	269	CONGESTIVE HEART FAILURE	0		MC	Amantadine may cause of exacerbate congestive heart failure due to\redistribution of fluid.
475	484	CONTROLLED SUBSTANCES	0		106	NARCOTIC NEGATING CATEGOR	LI	Patient has received several prescriptions for controlled substances\in recent months.
474	483	HYPNOTICS (474 HD) (516 DURATION)	0		0		HD	Zolpidem (Ambien) and zaleplon (Sonata) are not recommended to\be used at doses > 10 mg/day.
464	478	BUPROPION-ZYBAN ONLY	0		0		ER	Zyban is intended for short term use for smoking cessation.\Use beyond 2-3 months has not been shown to be more effective.
463	84	ANTIULCER AGENTS	0		0		TD	Therapeutic duplication of antiulcer agents may be occurring.
462	128	ANTIDEPRESSANT AGENTS	370	PROSTATIC HYPERTROPHY	0		MC	Tricyclic antidepressants can worsen urinary retention in\patients with prostatic hypertrophy.
461	324	BARBITURATES	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA	MC	Barbiturates should be avoided in pregnancy. The use of phenobarbital\has been associted with FHS (fetal hydantoin syndrome) including adverse\effects on neural development and decreased head circumference.
460	463	AMANTADINE	305	SEIZURE DISORDER (WITH DRUGS)	307	SECONDARY USE OF ANTI-CON	DB	Amantadine may cause increased seizure activity in patients with a\history of seizure disorder.
459	467	ANTICONVULSANTS	464	FELODIPINE	0		DD	Felodipine levels may be greatly decreased when carbamazepine,\phenobarbital or phenytoin are added to therapy, due to increased \hepatic metabolism. Alternate antihypertensive agents should be \considered.
458	324	BARBITURATES	421	DOXYCYCLINE	0		DD	Barbiturates increase the hepatic metabolism of doxycycline\and may therefore reduce its effectiveness.
457	324	BARBITURATES	336	COPD	0		MC	Barbiturates should be avoided in patients with COPD due to the risk of respiratory depression.
456	470	ACETAMINOPHEN	61	SALICYLATES	0		DD	Chronic use of both salicylates and acetaminophen can increase the risk of analgesic nephropathy and eventually lead to end stage renal disease.

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455	327	K SPARING DIURETICS	268	RENAL FAILURE	0		MC	Potassium sparing diuretics are contraindicated in patients with renal function impairment because they may lead to hyperkalemia.
454	466	ANTIPSYCHOTICS-ATYPICAL	0		0		TD	Therapeutic duplication of atypical antipsychotic agents may be occurring.
453	437	BRONCHODILATORS	455	NITRATES AND ANGINA	0		DB	Inhaled bronchodilators with beta-1 receptor activity or orally administered beta-2 agonists may have significant cardiac effect and worsen angina.
452	4	CARDIAC GLYCOSIDES	396	NAUSEA/VOMITING+ ANTIEMETIC DRUGS	397	VERTIGO/MENIER'S DX CANCER	MC	Nausea and vomiting may be a symptom of cardiac glycoside toxicity.
451	454	FIBRIC ACID DERIVATIVES	3	WARFARIN	0		DD	Fibric acid derivatives may increase the anticoagulant effects of warfarin.
450	445	METFORMIN	323	RENAL DISEASE AND LACTIC ACIDOSIS	0		MC	Patients with renal impairment or a past history of lactic acidosis may be at increased risk of developing lactic acidosis when receiving metformin therapy.
449	452	HMG-COA REDUCTASE INHIBITORS (ST	444	GEMFIBROZIL	0		DD	The combination of HMG-Co-A reductase inhibitors and gemfibrozil\can cause severe myopathy, rhabdomyolosis and sometimes renal failure.
448	433	METHYLDOPA	355	SYSTEMIC LUPUS ERYTHEMATOSUS	0		MC	Methyldopa may cause systemic lupus erythematosus.
447	452	HMG-COA REDUCTASE INHIBITORS (ST	9	CYCLOSPORINE	0		DD	The combination of HMG-Co-A reductase inhibitors and cyclosporine may result in severe myopathy, rhabdomyolisis and possible renal failure.
446	94	ACEI	381	HYPERKALEMIA	146	DIURETIC AGENTS	MC	ACE inhibitors may cause or exacerbate hyperkalemia.
445	441	SYMPATHOMIMETICS	271	HYPERTENSION	0		MC	Sympathomimetics may cause or exacerbate hypertension due to drug-induced cardiovascular effects.
444	443	GLIPIZIDE	9	CYCLOSPORINE	0		DD	Patients may require a 20 to 30% dosage reduction of cyclosporine when glipizide is initiated due to marked increase in cyclosporine levels.
443	445	METFORMIN	269	CONGESTIVE HEART FAILURE	0		MC	Congestive heart failure may cause tissue hypoxia and\increase the risk for lactic acidosis in patients treated with metformin.
442	446	TROGLITAZONE	269	CONGESTIVE HEART FAILURE	0		MC	Troglitazone may increase plasma volume and worsen congestive heart failure.
441	446	TROGLITAZONE	270	HEPATIC IMPAIRMENT	0		MC	Troglitazone should be used with extreme caution in patients with existing hepatic impairment.
440	447	ACARBOSE	453	HEPATIC CIRRHOSIS	0		MC	Acarbose may cause transaminase elevations in patients with hepatic cirrhosis.
439	424	SILDENAFIL	281	MACROLIDES	0		DD	Macrolides may potentiate the effects of sildenafil by inhibiting sildenafil metabolism.
438	442	LOOP DIURETICS	435	BLOOD DYSCRASIAS	0		MC	Blood dyscrasias may be caused by loop diuretics.
437	7	ISONIAZID	355	SYSTEMIC LUPUS ERYTHEMATOSUS	0		MC	Isoniazid may cause a lupus like syndrome or worsen existing SLE.
436	68	CARDIAC GLYCOSIDES	366	HYPERTROPHIC SUBAORTIC STENOSIS	0		MC	Cardiac glycosides may exacerbate hypertrophic subaortic stenosis due to increased obstruction of left ventriular outflow.
435	68	CARDIAC GLYCOSIDES	293	WOLFF PARKINSON WHITE SYNDROME	0		MC	Cardiac glycosides should be avoided in patients with WPW syndrome because they may enhance conduction via accessory pathways.
434	68	CARDIAC GLYCOSIDES	358	HYPOKALEMIA	393	POTASSIUM SALTS/ K+ SPARING	MC	Hypokalemia may predispose this patient to cardiac glycoside induced arrhythmias.
433	68	CARDIAC GLYCOSIDES	368	VENTRICULAR TACHYCARDIA	0		MC	Cardiac glycosides may exacerbate ventricular tachycardia.
432	304	BEPRIDIL	358	HYPOKALEMIA	0		MC	Bepridil should be avoided in patients with hypokalemia. Hypokalemia may alter the electrophysiologic effects of\bepridil and increase risk of arrhythmia.
431	417	NICOTINE	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA	MC	Nicotine replacement therapy is not recommended during pregnancy as it has been associated with fetal harm. Nicotine is FDA pregnancy category X.
430	401	TETRACYCLINES	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA	MC	Tetracyclines should be avoided during pregnancy as it causes yellow brown discoloration of the primary teeth of the fetus when given after the first trimester.
429	334	GUAN. AGENTS (GUANETHIDINE AND G	269	CONGESTIVE HEART FAILURE	0		MC	Guanethidine and guanadrel may exacerbate congestive heart failure.
428	111	TRICYCLIC ANTIDEPRESSANT AGENTS	303	QUINOLONES (SPAR AND GREPAFLOXACIN)	0		DD	Sparfloxacin and grepafloxacin have been associated with QT interval prolongation. They should be avoided in patients receiving other QT interval prolonging drugs such as tricyclic antidepressants.
427	301	ZILEUTON	3	WARFARIN	0		DD	Concurrent use of zileuton and warfarin may cause clinically significant increases in PT (INR).
426	56	SULFONYLUREAS	270	HEPATIC IMPAIRMENT	0		MC	Metabolism of sulfonylureas may be decreased by hepatic impairment increasing the risk for serious hypoglycemia.
425	292	TRAMADOL	305	SEIZURE DISORDER (WITH DRUGS)	307	SECONDARY USE OF ANTI-CON	MC	Tramadol has been known to cause seizures and should be avoided in patients with a history of seizure disorder.
424	422	SULFONYLUREAS	268	RENAL FAILURE	0		MC	Renal impairment will increase the elimination half life of this sulfonyurea, increasing the risk for hypoglycemia.
423	326	ANTICOAGULANTS	421	DOXYCYCLINE	0		DD	Doxycycline therapy may increase PT (INR) in patients receiving oral anticoagulants.
422	409	ESTROGENS	436	HEPATIC IMPAIRMENT,CHOLELITHIASIS	0		MC	Estrogen metabolism may be impaired by hepatic dysfunction. Estrogen may also worsen hepatic or cholestatic disease.

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421	419	QUINOLONES	300	IRON SALTS	0		DD	Iron supplements interfere with the absorption of this quinolone by decreasing bioavailability. To avoid this interaction the quinolone must be dosed 2-4 hours before or 6-8 hours after iron supplements.
420	356	TOCAINIDE	200	THROMBOCYTOPENIA	0		MC	Tocainide may cause or worsen thrombocytopenia.
419	406	PIMOZIDE	375	CARDIAC ARRHYTHMIAS	0		MC	Pimozide may cause or worsen cardiac arrhythmias.
417	154	BETA BLOCKERS	449	PERIPHERAL VASCULAR DISEASE	0		MC	Beta blockers may exacerbate peripheral vascular disease by reducing peripheral circulation.
416	154	BETA BLOCKERS	451	PULMONARY DISORDER	557	CARDIO SELECTIVE BETA BLOC	DB	Beta blockers may exacerbate pulmonary disorders by promoting bronchospasms and blocking effects of bronchodilators. Consider a cardio-selective beta blocker (metoprolol, atenolol, acebutolol, bisoprolol or betaxolol) which has less of an effect on bronchi as an alternative.
415	304	BEPRIDIL	450	VENTRICULAR ARRHYTHMIAS	0		MC	Bepridil may exacerbate ventricular arrhythmias.
414	94	ACEI	448	RENAL ARTERY STENOSIS	0		MC	ACE inhibitors may induce renal failure in patients with renal artery stenosis.
413	438	CALCIUM CHANNEL BLOCKERS	268	RENAL FAILURE	0		MC	A dosage adjustment of the calcium channel blocking agent (verapamil or diltiazem only) may be required in patients with renal impairment.
412	429	CALCIUM CHANNEL BLOCKING AGENTS	270	HEPATIC IMPAIRMENT	0		MC	A dosage adjustment of calcium channel blocking agents may be required in patients with hepatic impairment.
411	429	CALCIUM CHANNEL BLOCKING AGENTS	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA(	MC	Calcium Channel blockers should be used with caution in pregnancy.
410	420	METHYLDOPA	270	HEPATIC IMPAIRMENT	0		MC	Methyldopa should be avoided in patients with acute hepatic disease. Lower doses my be required in those with hepatic impairment due to reduced drug elimination.
409	407	PEMOLINE	270	HEPATIC IMPAIRMENT	0		MC	Pemoline therapy should be avoided in patients with hepatic impairment as it has been associated with acute hepatic failure.
408	34	VERAPAMIL	430	BRADYCARDIA	0		MC	Verapamil may cause or exacerbate bradycardia.
407	409	ESTROGENS	414	ENDOMETRIAL CARCINOMA	0		MC	Estrogens alone or in combination products should not be used in patients with a history of endometrial carcinoma.
406	330	DILTIAZEM	430	BRADYCARDIA	0		MC	Diltiazem may cause or exacerbate bradycardia.
405	154	BETA BLOCKERS	377	2ND AND 3RD DEGREE HEART BLOCK	0		MC	Beta blocking agents are contraindicated in patients with 2nd or 3rd degree AV block.
404	431	BETA BLOCKERS	268	RENAL FAILURE	0		MC	This beta-blocking agent may require dosage adjustment in patients with renal impairment.
403	440	BETA BLOCKERS	270	HEPATIC IMPAIRMENT	0		MC	A dosage adjustment of beta blocking agents may be required in patients with liver impairment.
402	432	BIRTH CONTROL PILLS	413	LIVER ADENOMA	0		MC	The use of oral contraceptives has been associated with liver adenomas.
401	439	BETA BLOCKERS	124	PREGNANCY	298	BIRTH/TERMINATION OF PREGN	MC	Certain beta blocking agents should be used with caution during pregnancy.
400	438	CALCIUM CHANNEL BLOCKERS	352	CONGESTIVE HEART FAILURE	0		MC	Calcium channel blocking agents may cause or exacerbate congestive heart failure especially in patients receiving beta-blockers.
399	423	PROGESTERONES	411	MIGRAINE	0		MC	Oral contraceptives or other progesterone products may cause or worsen migraine headaches.
398	388	HYDRALAZINE	153	ANGINA	0		MC	Hydralazine can aggrevate angina, possibly due to reflex tachycardia.
397	418	QUINOLONES	268	RENAL FAILURE	0		MC	This quinolone is primarily renally excreated and may require dosage adjustment in patients with renal impairment.
396	56	SULFONYLUREAS	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA(	MC	Sulfonylureas are not recommended for use during pregnancy due to possible teratogenic effects. Insulin is the preferred method of blood glucose control during pregnancy.
395	410	ESTROGENS /PROGESTERONE	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA(	MC	Estrogens and progestins should be avoided during pregnancy due to their possible teratogenic effects.
394	405	MINOXIDIL	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA(	MC	Minoxidil should be avoided in pregnancy due to possible teratogenic effects. Minoxidil is rated as FDA pregnancy category C.
393	306	QUINOLONES (ALL)	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA(	MC	Quinolones are not recommended in pregnancy. Quinolones are FDA pregnancy category C.
392	56	SULFONYLUREAS	337	PORPHYRIA	0		MC	Sulfonylureas may cause or woren porphyria.
391	409	ESTROGENS	337	PORPHYRIA	0		MC	The use of estrogens may precipitate or worsen porphyria.
390	405	MINOXIDIL	269	CONGESTIVE HEART FAILURE	0		MC	Minoxidil therapy may exacerbate congestive heart failure due to fluid retention.
389	416	SULFONYLUREAS	404	ALCOHOL DEPENDENCE	0		MC	Certain sulfonylureas may cause a disulfiram reaction when combined with alcohol. They should be used with caution in patients with a history of alcohol dependence.
388	405	MINOXIDIL	153	ANGINA	154	BETA BLOCKERS	MC	Minoxidil can cause or worsen angina, especially in patients not receiving beta-blocker therapy. This effect may be due to increased oxygen demand associated with increased heart rate and cardiac output caused by minoxidil.
387	415	CHLORPROPAMIDE	408	HYPONATREMIA	0		MC	Chlorpropamide therapy may cause hyponatremia. This effect is usually reversed upon discontinuation of the drug.

CRIT-ERIA NO.	UTIL A	UTILA DESCRIPTION	UTIL B	UTIL B DESCRIPTION	UTIL C	UTIL C DESCRIPTION	ONFLI CODE	CRITERIA DESCRIPTION
386	405	MINOXIDIL	268	RENAL FAILURE	0		MC	The dose of minoxidil may need to be adjusted in patients with renal impairment due to reduced drug elimination.
385	217	ANTIHISTAMINES	270	HEPATIC IMPAIRMENT	0		MC	Terfenadine and astemizole should be used with caution in patients with existing hepatic function impairment as this condition may result in increased plasma levels. Increased plasma levels of either drug may lead to cardiac arrythmias.
384	403	SALICYLATES/INDOMETHACIN	402	TINNITUS	0		MC	Chronic use of high dose salicylates or indomethacin may cause tinnitus.
383	266	LOOP DIURETICS	412	HEARING LOSS DUE OTOTOXICITY	0		MC	Ototoxicity can be associated with high doses of loop diuretics. Renally impaired patients are at greatest risk and should be monitored for hearing loss.
382	266	LOOP DIURETICS	270	HEPATIC IMPAIRMENT	0		MC	Loop diuretics should be used with caution in patients with hepatic impairment as they may precipitate hepatic coma due to alterations in eletrolyte balance.
381	266	LOOP DIURETICS	408	HYPONATREMIA	0		MC	Use of loop diuretics can cause hyponatremia. This usually occurs several months after the start of therapy.
380	28	THIAZIDES	408	HYPONATREMIA	0		MC	Use of thiazide diuretics can cause or exacerbate hyponatremia. The onset can be sudden and life threatening in certain conditions.
379	382	ANTIARRHYTHMICS	270	HEPATIC IMPAIRMENT	0		MC	This antiarrythmic medication is metabolized by the liver\and may require dose reduction in hepatically impaired patients.
378	395	ENCAINIDE /FLECAINIDE	399	BLURRED VISION/ACCOMODATION DISORDEF	0		MC	Visual disturbances may be caused or worsened by flecainide or encainide therapy. The effect is usually dose related and may require dosage adjustment.
377	382	ANTIARRHYTHMICS	268	RENAL FAILURE	0		MC	Due to renal impairment there may be reduced clearance of this antiarrhythmic agent in this patient. Dosage adjustment may be needed.
376	1	AMIODARONE	270	HEPATIC IMPAIRMENT	0		MC	Lower doses of amiodarone may be required in patients with hepatic impairment due to reduced metabolism of the drug.
375	66	PROCAINAMIDE	270	HEPATIC IMPAIRMENT	0		MC	Procainamide should be used with caution in patients with hepatic impairment. Procainamide accumulation may occur leading to symptoms of overdose such as ventricular tachycardia.
374	428	SULFONYLUREAS- MODERATE DOSE	0		0		LR	Sulfonylureas may be underutilized.
373	426	SULFONYLUREAS-LOW DOSE	0		0		LR	Low dose sulfonylureas may be underutilized.
372	424	SILDENAFIL	425	NITRATES	0		DD	The hypotensive effects of nitrates are potentiated by sildenafil. The resulting severe hypotension may cause dizziness, syncope or serious cardiac events.
369	394	LOOP DIURETICS-LOW DOSE	0		0		LR	Loop diuretics may be underutilized.
368	68	CARDIAC GLYCOSIDES	367	HEART BLOCK: 1ST OR 2ND DEGREE	0		MC	Cardiac glycosides may cause progression to complete heart block in patients with first or second degree heart block.
367	357	PROPAFENONE	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	Propafenone is not recommended for use in pregnancy.
366	331	MEXILETINE	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	Mexitilene is not recommended for use during pregnancy. (FDA pregnancy category C).
365	356	TOCAINIDE	270	HEPATIC IMPAIRMENT	0		MC	In patients with hepatic impairment lower or less frequent doses may be required due to decreased biotransformation of tocainide.
364	2	QUINIDINE	268	RENAL FAILURE	0		MC	Due to renal impairment there could be quinidine accumulation in this patient. Dosage adjustment may be needed.
363	2	QUINIDINE	270	HEPATIC IMPAIRMENT	0		MC	Due to hepatic impairment, quinidine accumulation may occur in this patient. Dosage adjustment may be needed.
362	78	DISOPYRAMIDE	270	HEPATIC IMPAIRMENT	0		MC	Since disopyramide is metabolized by the liver, dosage adjustment may be needed in patients with hepatic insufficiency.
361	120	AZOLE ANTIFUNGAL AGENTS	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	Azole antifungals should be used with caution in pregnancy.
360	1	AMIODARONE	361	OPTIC NEUROPATHY OR NEURITIS	0		MC	Amiodarone should be used with caution in this patient as optic neuritis or neuropathy may be caused by amiodarone.
359	392	ISOTRETINON	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	Isotretinoin is contraindicated in pregnancy as it has caused major human fetal abnormalities. Isotretinoin is rated FDA pregnancy category X.
358	382	ANTIARRHYTHMICS	358	HYPOKALEMIA	393	POTASSIUM SALTS/ K+ SPARING	MC	Hypokalemia can alter the effects of type I antiarrhtymic agents.
357	382	ANTIARRHYTHMICS	381	HYPERKALEMIA	146	DIURETIC AGENTS	MC	Hyperkalemia can alter the effects of class I antiarrhythmic agents.
356	266	LOOP DIURETICS	358	HYPOKALEMIA	393	POTASSIUM SALTS/ K+ SPARING	MC	Loop diuretics can worsen hypokalemia.
355	28	THIAZIDES	358	HYPOKALEMIA	393	POTASSIUM SALTS/ K+ SPARING	MC	Thiazide diuretics may worsen hypokalemia.
354	28	THIAZIDES	270	HEPATIC IMPAIRMENT	358	HYPOKALEMIA	MC	Thiazide diuretics should be used with caution in patients with hepatic impairment as they may precipitate hepatic coma due to electrolyte imbalance.
352	1	AMIODARONE	144	HYPERTHYROIDISM	0		MC	The use of amiodarone can alter thyroid function tests or cause functional hyperthyroidism.
351	383	ANTIHYPERTENSIVE AGENTS	384	DEPRESSION	0		MC	This antihypertensive agent may exacerbate depression.

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350	101	LOOP DIURETICS-MOD TO HIGH DOSE	244	DIGOXIN	393	POTASSIUM SALTS/ K+ SPARING	DD	Loop diuretics may cause hypokalemia which may increase the risk of digoxin toxicity.
349	14	PROPAFENONE	386	ASTHMA DX PLUS DRUG MARKERS	0		DC	Due to propafenone's beta blocking properties, it may promote bronchospasm and therefore, should be used with caution in patients with asthma or bronchospastic disease.
348	2	QUINIDINE	377	2ND AND 3RD DEGREE HEART BLOCK	0		MC	Quinidine should be used with caution in patients with second degree heart block as it may cause complete heart block.
347	1	AMIODARONE	362	HYPOTHYROIDISM	0		MC	Amiodarone can alter thyroid function tests and has been associated with hypothyroidism. Careful dose titration may be needed in patients with existing hypothyroidism.
346	276	INDOMETHACIN	339	AGRANULOCYTOSIS	0		MC	Indomethacin may cause or worsen agranulocytosis.
345	380	SPIRONOLACTONE	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	The use of spironolactone is not recommended during pregnancy. Spironolactone is FDA pregnancy category D.
344	26	THIAZIDES	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	Thiazide diuretics should be used with caution during pregnancy.
343	266	LOOP DIURETICS	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	Loop diuretics should be used with caution in pregnancy.
341	327	K SPARING DIURETICS	270	HEPATIC IMPAIRMENT	0		MC	Potassium sparing diuretics should be used with caution in patients with hepatic impairment due to their increased sensitivity to electrolyte changes.
340	312	QUINOLONES	67	THEOPHYLLINES	0		DD	The combination of quinolones and theophylline may result in increased theophylline effects.
339	314	BUPROPION	49	MAO INHIBITORS	0		DD	The concurrent use of MAO-Inhibitors and Bupropion may result in acute bupropion toxicity.
338	310	HYPNOTICS	270	HEPATIC IMPAIRMENT	0		DC	Hypnotics should be used with caution in patients with hepatic impairment.
337	313	QUINOLONES	88	DIDANOSINE	0		DD	Quinolones and Didanosine may interact, which may cause decreased pharmacologic effects of Quinolones.
336	309	DELAVIRDINE	52	RIFAMYCINS	0		DD	The combination of delavirdine and rifamycins may result in decreased blood level of delavirdine.
335	8	VALPROIC ACID	270	HEPATIC IMPAIRMENT	0		DC	Valproic acid should be used with caution in patients with hepatic impairment. Particular caution should be used for children under 2.
334	2	QUINIDINE	364	THROMBOCYTOPENIA	0		MC	Quinidine is contraindicated in patients with a history of thrombocytopenia.
333	128	ANTIDEPRESSANT AGENTS	270	HEPATIC IMPAIRMENT	0		MC	Tricyclic antidepresants are metabolized extensively by the liver. Dosage in patients with hepatic dysfunction may need to be decreased to prevent accumulation.
332	331	MEXILETINE	364	THROMBOCYTOPENIA	0		MC	Mexiletine may cause or worsen the patient's thrombocytopenia.
331	111	TRICYCLIC ANTIDEPRESSANT AGENTS	375	CARDIAC ARRHYTHMIAS	0		DC	Tricyclic antidepressants may exacerbate cardiac arrhythmias.
330	306	QUINOLONES (ALL)	305	SEIZURE DISORDER (WITH DRUGS)	307	SECONDARY USE OF ANTI-CONV	DC	Quinolones may cause CNS stimulation and worsen seizure disorder.
329	36	BARBITURATES	337	PORPHYRIA	0		MC	Barbiturates may exacerbate porphyria.
328	74	ANTIPSYCHOTIC AGENTS	370	PROSTATIC HYPERTROPHY	0		MC	The anticholinergic effects of antipsychotic medications may exacerbate symptoms of prostatic hypertrophy.
327	72	ANTIPSYCHOTIC AGENTS	316	PARKINSON'S DISEASE	0		DC	Antipsychotics may worsen extrapyramidal symptoms of Parkinson's disease.
326	284	PHENOTHIAZINES	339	AGRANULOCYTOSIS	0		MC	Phenothiazines may cause or worsen agranulocytosis.
325	371	ANTICONVULSANTS	372	RICKET'S AND OSTEOMALACIA	378	ERGOCALCIFEROL	MC	Anticonvulsants may cause or exacerbate rickets or osteomalacia due to decrease d serum concntrations of ergocalciferol, cholecalciferol and calcium.
323	160	ANTIPSYCHOTIC AGENTS	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	DC	Antipsychotic agents should be avoided during pregnancy because of the risk of adverse fetal effects.
322	356	TOCAINIDE	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	Tocainide may be maternotoxic and should be avoided in pregnancy.
321	1	AMIODARONE	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	DC	Amiodarone is not recommended for use in pregnancy due to possible adverse effects on fetal heart rate and thyroid status. Amiodarone is pregnancy category D.
320	210	ANTIARRHYTHMIC AGENTS	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	MC	Class I antiarrhythmic (procainamide, quinidine and disopyramide) are not recommended for use during pregnancy due to possible fetal abnormalities or premature initiations of uterine contractions.
318	321	MEPROBAMATE	270	HEPATIC IMPAIRMENT	0		MC	Meprobamate should be used with caution in patients with hepatic impairment. Decreased metabolism may lead to drug accumulation in the body.
317	276	INDOMETHACIN	316	PARKINSON'S DISEASE	0		DC	Indomethacin may aggravate psychiatric disturbances such as parkinsonism.
315	338	THIOXANTHENES	339	AGRANULOCYTOSIS	0		MC	Thiothixene should be avoided in patients with agranulocytosis.
314	210	ANTIARRHYTHMIC AGENTS	353	MYASTHENIA GRAVIS	0		MC	Class I antiarrhythmic drugs (quinidine, disopyramide, and procainamide) may cause muscle weakness and therefore exacerbate myasthenia gravis.
313	66	PROCAINAMIDE	355	SYSTEMIC LUPUS ERYTHEMATOSUS	0		MC	Procainamide may precipitate active SLE in patients with a history of Lupus.
312	162	BENZODIAZEPINES	319	HISTORY OF DRUG ABUSE	0		MC	Due to their potential for abuse and dependence, benzodiazepines should be used with caution in patients with a history of drug abuse.
311	145	CHLORAL HYDRATE	335	GASTROINTESTINAL DISORDERS	0		DC	Chloral hydrate may cause GI irritation and worsen existing gastrointestinal disorders.

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310	162	BENZODIAZEPINES	336	COPD	0		MC	Benzodiazepines may increase the risk of pulmonary failure and should\therefore be used with caution in patients with COPD.
309	162	BENZODIAZEPINES	295	GLAUCOMA	0		MC	Due to their anticholinergic effects, benzodiazepinesshould be used with caution in patients with narrow angle glaucoma.
308	321	MEPROBAMATE	337	PORPHYRIA	0		MC	Meprobamate should be avoided in patients with porphyria.
307	27	LITHIUM	268	RENAL FAILURE	0		MC	Lithium should be used with caution when used in patients with renal insufficiency.
306	27	LITHIUM	274	SEIZURE DISORDERS	0		MC	Lithium should be used with caution in patients with seizure disorders.
305	354	CARISOPRODOL	0		0		ER	Carisoprodol is usually intended for short term use. Carisoprodol is metabolized by the liver to meprobamate and patients may be at risk for developing dependence.
304	340	BETA-AGONISTS (INHALED)	0		0		ER	The overuse of beta agonists may signal worsening asthma.
303	343	NICOTINE POLACRILEX	0		0		ER	The use of nicotine polacrilex for more than 6 months indicates that this medication is being used as a substitute source of nicotine to maintain addiction. Gradual withdrawal may be indicated.
302	349	BUTORPHANOL	0		0		ER	Butorphanol may be overutilized.
301	321	MEPROBAMATE	320	ATAXIA	0		MC	Meprobamate should be used with caution in patients with ataxia.
298	94	ACEI	327	K SPARING DIURETICS	146	DIURETIC AGENTS	DD	The combination of Ace inhibitors and Potassium Sparing Diuretics may lead to hyperkalemia.
295	205	ANTIDEPRESSANTS	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA(	DC	Antidepressants should be used with caution in pregnancy.
289	303	QUINOLONES (SPAR AND GREPAFLOXA	317	ANTIARRHYTHMIC AGENTS	0		DD	The combination of the quinolone sparfloxacin with anti-arrhythmic agents may increase the risk of life-threatening cardiac arrhythmias.
288	318	TACRINE	316	PARKINSON'S DISEASE	0		DC	When Tacrine is given to a patient with Parkinson's, it may worsen the disease.
287	310	HYPNOTICS	320	ATAXIA	0		DC	Hypnotics should be used with caution in patients with ataxia.
286	321	MEPROBAMATE	319	HISTORY OF DRUG ABUSE	0		MC	Meprobamate should be used with caution in patients with a history of drug abuse.
285	255	CLOZAPINE	311	SSRI	0		DD	The combination of clozapine and certain SSRI's (fluvoxamine, fluoxetine and sertraline) may result in elevated clozapine levels.
284	302	DEXTROMETHORPHAN	49	MAO INHIBITORS	0		DD	The concurrent use of MAO inhibitors and dextromethorphan must be avoided.
283	304	BEPRIDIL	303	QUINOLONES (SPAR AND GREPAFLOXACIN)	0		DD	The combination of bepridil with sparfloxacin may result in life-threatening cardiac arrhythmias.
281	34	VERAPAMIL	27	LITHIUM	0		DD	The combination of lithium and verapamil may cause increased neurotoxicity.
280	325	BENZODIAZEPINES	270	HEPATIC IMPAIRMENT	0		MC	Benzodiazepines should be used with caution in patients with hepatic impairment.
279	324	BARBITURATES	320	ATAXIA	0		MC	Barbiturates may cause or worsen ataxia.
278	324	BARBITURATES	319	HISTORY OF DRUG ABUSE	0		DC	Barbiturates should be used with caution in patients with a history of drug abuse.
277	324	BARBITURATES	270	HEPATIC IMPAIRMENT	0		MC	Barbiturates should be used with caution in patients with hepatic impairment.
276	310	HYPNOTICS	319	HISTORY OF DRUG ABUSE	0		DC	Hypnotics should be used with caution in patients with a history of drug abuse.
274	32	HALOPERIDOL	334	GUAN. AGENTS (GUANETHIDINE AND GUANAD	0		DD	Haloperidol may inhibit the effects of guanethidine or guanadrel.
273	333	CARDIAC GLYCOSIDES	0		0		ER	Patient may be overutilizing cardiac glycosides which may lead to cardiac glycoside toxicity.
272	120	AZOLE ANTIFUNGAL AGENTS	9	CYCLOSPORINE	0		DD	The combination of Azole Antifungal agents and cyclosporine may cause increased levels of cyclosporine and may result in cyclosporine toxicity.
271	120	AZOLE ANTIFUNGAL AGENTS	326	ANTICOAGULANTS	0		DD	The combination of Azole Antifungal agents and Anticoagulants may cause increased pharmacologic effects of Anticoagulants.
270	14	PROPAFENONE	244	DIGOXIN	0		DD	The combination of Propafenone and Digoxin may cause increased levels of Digoxin, which may lead to Digoxin toxicity.
269	329	TRIMETHOPRIM	66	PROCAINAMIDE	0		DD	Trimethoprim may potentiate the effects of Procainamide.
268	34	VERAPAMIL	67	THEOPHYLLINES	0		DD	The concurrent use of Verapamil and Theophylline may cause increased Theophylline effects and may lead to Theophylline toxicity.
267	331	MEXILETINE	67	THEOPHYLLINES	0		DD	Concurrent use of Mexiletine and Theophylline may cause increased levels of Theophylline which may lead to Theophylline toxicity.
266	330	DILTIAZEM	31	CARBAMAZEPINE	0		DD	The concurrent use of Diltiazem and Carbamazepine may result in increased levels of Carbamazepine which may lead to Carbamazepine toxicity.
265	330	DILTIAZEM	67	THEOPHYLLINES	0		DD	The concurrent use of Diltiazem and Theophyllines may cause increased Theophylline effects and may lead to Theophylline toxicity.
264	332	PROPRANOLOL	67	THEOPHYLLINES	0		DD	Propranolol and Theophylline may counter the effects of each other.
263	1	AMIODARONE	66	PROCAINAMIDE	0		DD	Amiodarone may potentiate the effects of Procainamide.
262	14	PROPAFENONE	326	ANTICOAGULANTS	0		DD	Propafenone may potentiate the effects of Anticoagulants.
261	94	ACEI	27	LITHIUM	322	CHF/RENAL DISEASE	DD	The combination of Ace Inhibitors and Lithium may result in neurotoxicity.

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260	306	QUINOLONES (ALL)	328	SUCRALFATE	0		DD	The combination of Quinolones and Sucralfate may result in decreased pharmacologic effects of Quinolones.
259	301	ZILEUTON	213	THEOPHYLLINES	0		DD	The combination of zileuton and theophylline (or derivatives) may result in increased theophylline effects.
258	301	ZILEUTON	43	ANTICOAGULANT AGENTS	0		DD	The combination of zileuton and anticoagulants increases the effects of the anticoagulants.
256	85	AZOLE ANTIFUNGALS	88	DIDANOSINE	0		DD	The concurrent use of Antifungal Agents and Didanosine may result in decreased pharmacologic effects of Antifungal Agents.
255	282	TETRACYCLINES	300	IRON SALTS	0		DD	The combination of a tetracycline and iron salts may result in decreased pharmacologic effect of the tetracycline.
254	2	QUINIDINE	244	DIGOXIN	0		DD	The combination of quinidine and digoxin may cause digoxin toxicity.
252	49	MAO INHIBITORS	56	SULFONYLUREAS	0		DD	The combination of MAO inhibitors and sulfonylureas may cause an increase in sulfonylureas effects.
251	296	TACRINE	67	THEOPHYLLINES	0		DD	The combination of Tacrine and Theophyllines may result in Theophylline toxicity.
250	1	AMIODARONE	297	HYDANTOINS	0		DD	The combination of Amiodarone and Hydantoins may cause increased levels of Hydantoins, and decreased effects of Amiodarone.
249	65	CIMETIDINE	296	TACRINE	0		DD	The combination of Tacrine and Cimetidine may cause increased pharmacologic effects of Tacrine.
248	32	HALOPERIDOL	27	LITHIUM	0		DD	The combination of Haloperidol and Lithium may result in neurotoxicity.
247	296	TACRINE	77	ANTICHOLINERGIC AGENTS	0		DD	The combination of Tacrine and Anticholinergics may cause a decrease in Anticholinergic effects.
246	82	CYCLIC ANTIDEPRESSANT AGENTS	295	GLAUCOMA	0		DC	Antidepressants may exacerbate narrow angle glaucoma.
245	82	CYCLIC ANTIDEPRESSANT AGENTS	293	WOLFF PARKINSON WHITE SYNDROME	0		DC	Antidepressants may exacerbate Wolff-Parkinson-White Syndrome.
244	82	CYCLIC ANTIDEPRESSANT AGENTS	294	PARALYTIC ILEUS	0		DC	Tricyclics may cause or exacerbate Paralytic Ileus.
240	220	NEFAZODONE	221	BENZODIAZEPINES (ALPRAZ.,TRIAZ.)	0		DD	The combination of Nefazodone and Alprazolam or Triazolam may result in Alprazolam and Triazolam toxicity.
239	101	LOOP DIURETICS-MOD TO HIGH DOSE	27	LITHIUM	0		DD	Initiation or discontinuation of loop diuretics may require an adjustment in dosage of lithium.
238	284	PHENOTHIAZINES	27	LITHIUM	0		DD	The combination of Phenothiazines and Lithium may lead to Neurotoxicity.
236	288	INDINAVIR	217	ANTIHISTAMINES	0		DD	The combination of Indinavir and Non-Sedating Antihistamines may result in serious cardiotoxicity.
235	52	RIFAMYCINS	283	ORAL CONTRACEPTIVES	0		DD	The concurrent use of Rifampin and Oral Contraceptives may cause decreased Oral Contraceptive effects.
234	41	BARBITURATES	283	ORAL CONTRACEPTIVES	0		DD	The concurrent use of Barbiturates and Oral Contraceptives may cause decreased effects oral contraceptive effects.
233	48	MAO INHIBITORS	264	INSULIN	0		DD	The combination of MAO Inhibitors and Insulin may cause increased pharmacologic effect of Insulin.
232	292	TRAMADOL	206	MAO INHIBITORS	0		DD	Concurrent administration of Tramadol and MAO Inhibitors may result in increased risk of seizures.
231	291	ANTIFUNGAL AGENTS	289	TRIAZOLAM	0		DD	The concurrent use of Antifungal Agents and Triazolam may cause increased Triazolam effects.
230	32	HALOPERIDOL	41	BARBITURATES	0		DD	The concurrent use of the haloperidol and barbiturates may result in deceased haloperidol effect and additive sedation.
229	290	RITONAVIR	2	QUINIDINE	0		DD	The concurrent use of Ritonavir and Quinidine may cause increased levels of Quinidine. Which may result in Quinidine toxicity.
228	290	RITONAVIR	223	MEPERIDINE	0		DD	The combination of Ritonavir and Meperidine may cause serious cardiotoxicity.
227	290	RITONAVIR	277	CISAPRIDE	0		DD	The combination of Ritonavir and Cisapride may cause cardiotoxicity.
226	290	RITONAVIR	217	ANTIHISTAMINES	0		DD	The combination of ritonavir and non-sedating antihistamines may result in serious cardiotoxicity.
225	288	INDINAVIR	52	RIFAMYCINS	0		DD	Indinavir and rifampin may interact, which may cause increased rifampin levels, and decreased indinavir effects.
224	288	INDINAVIR	289	TRIAZOLAM	0		DD	The combination of indinavir and triazolam may cause increased levels of triazolam and result in triazolam toxicity.
223	288	INDINAVIR	277	CISAPRIDE	0		DD	The combination of indinavir and cisapride may result in serious cardiotoxicity.
222	281	MACROLIDES	31	CARBAMAZEPINE	0		DD	The combination of Macrolides and Carbamazepine may result in carbamazepine toxicity.

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220	49	MAO INHIBITORS	20	AMPHETAMINES	0		DD	Concurrent administration of MAO Inhibitors and Amphetamines may precipitate hypertensive crises.
219	14	PROPAFENONE	15	BETA BLOCKERS	0		DD	The concurrant use of Propafenone and Beta Blockers may result in increased pharmacologic effects of beta blockers.
218	281	MACROLIDES	67	THEOPHYLLINES	0		DD	Macrolide antibiotics such as Biaxin & erythromycin may cause increased Theophylline levels and toxicity.
216	204	SEROTONIN REUPTAKE INHIBITORS	31	CARBAMAZEPINE	569	SELECTIVE SEROTONIN RI'S	DD	The combination of certain SSRI's and Carbamazepine may cause an increase in carbamazepine effects. Paroxetine, Citalopram and Sertraline do not exhibit this interaction with Carbamazepine.
215	281	MACROLIDES	45	ANTICOAGULANT AGENTS	0		DD	Concurrent use of Erythromycin and Anticoagulants may result in increased anticoagulant effect.
214	285	MACROLIDES	9	CYCLOSPORINE	0		DD	The combination of macrolide antibiotics and cyclosporine may result in cyclosporine toxicity.
213	65	CIMETIDINE	2	QUINIDINE	0		DD	The combination of cimetidine and quinidine may cause quinidine toxicity.
211	28	THIAZIDES	244	DIGOXIN	287	POTASSIUM SALTS/POTASSIUM	DD	Thiazide Diuretics may cause hypokalemia which may result in Digoxin toxicity.
210	86	MACROLIDES	277	CISAPRIDE	0		DD	The concurrent use of Macrolides and Cisapride may result in serious cardiac problems.
209	65	CIMETIDINE	31	CARBAMAZEPINE	0		DD	The combination of Cimetidine and Carbamazepine may result in Carbamazepine toxicity.
208	34	VERAPAMIL	31	CARBAMAZEPINE	0		DD	Concurrent use of verapamil and carbamazepine may result in carbamazepine toxicity.
207	6	DISULFIRAM	45	ANTICOAGULANT AGENTS	0		DD	Disulfiram may potentiate the effects of anticoagulant agents.
206	52	RIFAMYCINS	45	ANTICOAGULANT AGENTS	0		DD	Rifampin may inhibit the effects of Anticoagulant agents.
205	34	VERAPAMIL	2	QUINIDINE	0		DD	The concurrent use of verapamil and quinidine may cause increased levels of Quinidine which may result in Quinidine toxicity, including cardiotoxicity.
203	220	NEFAZODONE	277	CISAPRIDE	0		DD	Nefazodone may raise concentrations of cisapride, thereby causing cardiac arrhythmias.
202	212	FLUVOXAMINE	277	CISAPRIDE	0		DD	Fluvoxamine may raise concentrations of cisapride, thereby causing cardiac arrhythmias.
201	120	AZOLE ANTIFUNGAL AGENTS	277	CISAPRIDE	0		DD	Azole Antifungal agents may increase cisapride plasma concentrations, and this may lead to cardiac toxicity.
200	275	KETOROLAC	0		0		ER	Ketorolac is not recommended for longer than five days of therapy.
199	21	NSAIDS	273	PREGNANCY	360	NORMAL DELIVERY/MISCARRIA(	PG	NSAIDs should be avoided, especially during the 3rd trimester of pregnancy, to prevent adverse fetal cardiovascular effects and prolonged labor.
197	21	NSAIDS	270	HEPATIC IMPAIRMENT	0		MC	NSAIDS should be used with caution in patients with pre-existing hepatic disorders.
196	21	NSAIDS	198	ASTHMA	0		MC	NSAIDs may cause or exacerbate asthma.
195	64	ASPIRIN	267	PEPTIC ULCER DISEASE	0		MC	Aspirin should be used with caution in patients with peptic ulcer disease.
194	21	NSAIDS	269	CONGESTIVE HEART FAILURE	0		MC	NSAIDS should be used with caution in patients with congestive heart failure.
193	64	ASPIRIN	272	BLEEDING DISORDERS	0		MC	Aspirin should be avoided in patients with bleeding disorders.
192	21	NSAIDS	272	BLEEDING DISORDERS	0		MC	NSAIDS should be used with caution in patients with bleeding disorders.
191	21	NSAIDS	271	HYPERTENSION	0		MC	NSAIDS should be used with caution in patients with hypertension.
190	64	ASPIRIN	43	ANTICOAGULANT AGENTS	0		DD	Aspirin may potentiate the effects of warfarin.
189	21	NSAIDS	267	PEPTIC ULCER DISEASE	37	CORTICOSTEROIDS	MC	NSAIDs may cause or exacerbate upper GI disease.
188	21	NSAIDS	268	RENAL FAILURE	487	RENAL UNDERPERFUSSION, CC	MC	NSAIDS may cause or worsen renal dysfunction. Patients with co-existing conditions causing compromised renal perfusion are at greatest risk.
187	21	NSAIDS	266	LOOP DIURETICS	0		DD	NSAIDS may decrease the effects of loop diuretics.
186	21	NSAIDS	154	BETA BLOCKERS	0		DD	NSAIDS may reduce the antihypertensive effects of beta blockers.
185	21	NSAIDS	27	LITHIUM	0		DD	NSAIDs may potentiate the effects of lithium.
183	21	NSAIDS	94	ACEI	0		DD	NSAIDS may reduce the antihypertensive effects of ACE Inhibitors.
182	21	NSAIDS	25	METHOTREXATE	0		DD	NSAIDS may reduce renal elimination of methotrexate, resulting in an increased risk of methotrexate toxicity.
181	61	SALICYLATES	264	INSULIN	0		DD	Salicylates may enhance the hypoglycemic effect of insulin.
180	61	SALICYLATES	265	URICOSURIC AGENTS	0		DD	Salicylates may inhibit the uricosuric effects of probenecid and sulfinpyrazone.
179	1	AMIODARONE	2	QUINIDINE	0		DD	Amiodarone may potentiate the effects of quinidine.
178	61	SALICYLATES	0		0		TD	Therapeutic duplication of salicylate agents may be occurring.
177	61	SALICYLATES	8	VALPROIC ACID	0		DD	Salicylates may increase serum concentrations of valproic acid, resulting in valproic acid toxicity.
176	37	CORTICOSTEROIDS	61	SALICYLATES	0		DD	Corticosteroids may enhance the elimination of salicylates, resulting in subtherapeutic concentrations of salicylates.
175	61	SALICYLATES	56	SULFONYLUREAS	0		DD	Salicylates may enhance the hypoglycemic response to sulfonylureas.

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174	61	SALICYLATES	262	ACETAZOLAMIDE	0		DD	Salicylates may increase the plasma concentration of acetazolamide leading to CNS toxicity.
173	162	BENZODIAZEPINES	252	NON-BENZO SEDATIVES	0		DD	The use of a benzodiazepine with a sedative/hypnotic agent may result in excessive sedation.
171	82	CYCLIC ANTIDEPRESSANT AGENTS	259	ATRIOVENTRICULAR BLOCK	0		MC	Tricyclic and tetracyclic antidepressant agents should be used with caution in patients with cardiac conduction disorders.
170	82	CYCLIC ANTIDEPRESSANT AGENTS	258	BUNDLE BRANCH BLOCK	0		MC	Tricyclic and tetracyclic antidepressant agents should be used with caution in patients with cardiac conduction disorders.
169	256	BENZODIAZEPINES	255	CLOZAPINE	0		DD	The combination of clozapine and selected benzodiazepines may lead to respiratory depression or hypotension.
168	65	CIMETIDINE	254	BENZODIAZEPINES	0		DD	The combination of cimetidine and benzodiazepines may lead to increased benzodiazepine effects and/or toxicity.
167	109	BENZO ANXIOLYTIC AGENTS	0		0		TD	Therapeutic Duplication of anxiolytic agents may be occurring.
166	251	BENZO SEDATIVES	0		0		TD	Therapeutic duplication of benzodiazepine sedative/hypnotic agents may be occurring.
165	251	BENZO SEDATIVES	0		0		ER	Sedative agents are usually intended for short term use.
158	244	DIGOXIN	245	DIURETICS	585	ACEI'S & AIIRB'S	DC	Patient may have Congestive Heart Failure and may need to have an ACE Inhibitor added to their therapy.
157	206	MAO INHIBITORS	227	LEVODOPA	0		DD	The combination of MAO Inhibitors with levodopa may cause a hypertensive crisis.
155	206	MAO INHIBITORS	225	ANTIHYPERTENSIVES	0		DD	The combination of MAO Inhibitor and Guanethidine or reserpine may cause hypertension.
154	206	MAO INHIBITORS	224	SYMPATHOMIMETICS	0		DD	The combination of MAO Inhibitors and sympathomimetic agents may cause hypertensive crisis.
153	206	MAO INHIBITORS	223	MEPERIDINE	0		DD	The combination of MAO Inhibitors and Meperidine may produce a serotonin syndrome, which may include hyperthermia, tremor, myoclonus and irritability.
152	83	MAO-INHIBITORS W SELEGILINE	222	VENLAFAXINE	0		DD	The combination of MAO Inhibitors and Venlafaxine may produce a serotonin syndrome, which may include hyperthermia, tremor, myoclonus and irritability.
150	83	MAO-INHIBITORS W SELEGILINE	220	NEFAZODONE	0		DD	The combination of MAO Inhibitors and Nefazodone may produce a serotonin syndrome, which may include hyperthermia, tremor, myoclonus and irritability.
149	220	NEFAZODONE	217	ANTIHISTAMINES	0		DD	Nefazodone may raise concentrations of terfenadine or astemizole, thereby causing cardiac arrhythmias.
148	218	TRAZODONE	219	SEDATIVE AGENTS	0		DD	The combination of trazodone and sedative agents may cause additive sedative effects.
147	216	BUPROPION	227	LEVODOPA	0		DD	The combination of Bupropion and levodopa may cause excessive dopamine stimulation thereby resulting in psychotic symptoms.
145	212	FLUVOXAMINE	215	BENZODIAZEPINES	0		DD	Fluvoxamine may potentiate the effects of alprazolam, diazepam or triazolam.
144	212	FLUVOXAMINE	217	ANTIHISTAMINES	0		DD	Fluvoxamine may raise concentrations of terfenadine or astemizole, there by causing cardiac arrhythmias.
143	212	FLUVOXAMINE	213	THEOPHYLLINES	0		DD	Fluvoxamine may potentiate the effects of theophylline.
142	65	CIMETIDINE	211	PAROXETINE	0		DD	Cimetidine may potentiate the effects of paroxetine.
138	65	CIMETIDINE	82	CYCLIC ANTIDEPRESSANT AGENTS	0		DD	Cimetidine may potentiate the effects of tricyclic antidepressants
137	207	AMOXAPINE	208	LEVODOPA AND DOPAMINE AGONIST	0		DD	The combination of amoxapine and dopamine agonist or levodopa may exacerbate tardive dyskinesia.
136	204	SEROTONIN REUPTAKE INHIBITORS	0		0		TD	Duplicate therapy with serotonin reuptake inhibitors may be occurring.
135	82	CYCLIC ANTIDEPRESSANT AGENTS	0		0		TD	Duplicate cyclic antidepressant therapy may be occurring.
134	206	MAO INHIBITORS	0		0		TD	Duplicate cyclic antidepressant therapy may be occurring.
132	204	SEROTONIN REUPTAKE INHIBITORS	82	CYCLIC ANTIDEPRESSANT AGENTS	0		DD	Serotonin reuptake inhibitors may potentiate the effects of tricyclic or tetracyclic antidepressant agents.
127	163	ANTIPSYCHOTIC AGENTS-TRADITIONAL	0		0		TD	Therapeutic duplication of antipsychotic agents may be occurring.
125	161	SEDATIVE AGENTS	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	PG	Sedative agents should be avoided during pregnancy because of the risk of adverse fetal effects.
124	94	ACEI	124	PREGNANCY	360	NORMAL DELIVERY/MISCARRIAG	PG	ACE inhibitors should be avoided during pregnancy because of the risk of adverse fetal effects.
121	94	ACEI	158	COUGH	0		DC	ACE inhibitors may cause persistent coughing.
120	157	DIURETIC AGENTS	155	IMPOTENCE	0		DC	Certain diuretic agents may cause or exacerbate impotence.
119	156	ANTIHYPERTENSIVE AGENTS	155	IMPOTENCE	0		DC	Certain antihypertensive agents may cause or exacerbate impotence.
118	154	BETA BLOCKERS	155	IMPOTENCE	0		DC	Nonselective beta blockers may cause or exacerbate impotence.
116	151	ANTIPARKINSONIAN AGENTS	142	ANXIETY	0		DC	Certain anti-Parkinsonism agents may cause or exacerbate anxiety.
115	150	BRONCHODILATORS	142	ANXIETY	0		DC	Bronchodilators may cause or exacerbate anxiety.
113	146	DIURETIC AGENTS	147	HYPERURICEMIA	269	CONGESTIVE HEART FAILURE	DC	Diuretic agents may cause or exacerbate hyperuricemia.

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111	143	STIMULANTS	144	HYPERTHYROIDISM	0		DB	Stimulants are contraindicated for patients with hyperthyroidism.
108	68	CARDIAC GLYCOSIDES	138	NAUSEA AND VOMITING	0		DC	Nausea and vomiting may occur when serum levels of cardiac glycosides are toxic.
107	2	QUINIDINE	135	DIARRHEA	0		DC	Quinidine may cause diarrhea.
106	136	RESERPINE	137	ULCERATIVE COLITIS	0		DC	Reserpine may exacerbate ulcerative colitis.
105	18	GUANETHIDINE	135	DIARRHEA	0		DC	Guanethedine may cause diarrhea.
103	131	STIMULANTS	132	HYPERTENSION	0		DC	Stimulants may cause or exacerbate hypertension.
99	125	ANTIPSYCHOTIC AGENTS	126	CONVULSIONS	0		DB	Antipsychotic agents may cause or exacerbate convulsive disorders.
97	94	ACEI	121	NSAID'S	456	NEPHROTIC SYNDROME	DD	The combination of ACEI and NSAIDs may produce decreased renal function due to diminished GFR. Patients at greatest risk are the elderly and those with CHF, liver cirrhosis or systemic lupus erythematosis.
95	117	ACE INHIBITORS/K+SPARING DIURETIC	118	POTASSIUM SUPPLEMENTS	119	POTASSIUM WASTING DIURETIC	DD	The combination of potassium sparing diuretics or ACE inhibitors together with potassium supplements may produce hyperkalemia.
94	115	ANTIPSYCHOTIC AGENTS	116	ANTIHYPERTENSIVE AGENTS	0		DD	The combination of antipsychotic agents and antihypertensive agents may produce additive sedation.
93	114	ANTIPSYCHOTIC AGENTS	18	GUANETHIDINE	0		DD	Antipsychotic agents may inhibit the effects of guanethidine.
92	113	BARBITURATES	15	BETA BLOCKERS	0		DD	Barbiturates may inhibit the effects of beta blockers.
91	111	TRICYCLIC ANTIDEPRESSANT AGENTS	112	ANTIHYPERTENSIVE AGENTS	0		DD	Tricyclic antidepressant agents may inhibit the effects of guanethidine, guanadrel, or clonidine.
89	5	PHENYTOIN	2	QUINIDINE	0		DD	Phenytoin may inhibit the effects of quinidine.
88	109	BENZO ANXIOLYTIC AGENTS	0		0		ER	Anxiolytic agents may be overutilized.
87	108	SEDATIVE AGENTS	0		0		ER	Sedative agents are usually intended for short term use.
86	107	STIMULANTS	0		0		ER	Stimulants may be overutilized.
85	105	NARCOTIC AGENTS	0		106	NARCOTIC NEGATING CATEGOF	ER	Narcotic agents may be overutilized.
84	104	ANTI-ULCER AGENTS	0		199	ANTI-ULCER NEGATING	ER	Acute doses of antiulcer agents are generally indicated for short term use.
83	103	PHENYTOIN	0		0		LR	Phenytoin may be underutilized.
82	102	POTASSIUM SPARING DIURETICS	0		0		LR	Potassium-sparing diuretics may be underutilized.
81	101	LOOP DIURETICS-MOD TO HIGH DOSE	0		0		LR	Loop diuretics may be underutilized.
80	100	THIAZIDES	0		0		LR	Thiazides may be underutilized.
79	99	BETA-BLOCKERS	0		0		LR	Beta blockers may be underutilized.
77	97	SULFONYLUREAS	0		0		LR	Sulfonylureas may be underutilized.
75	95	CALCIUM CHANNEL BLOCKERS	0		0		TD	Duplicate calcium channel blocker therapy may be occurring.
74	94	ACEI	0		0		TD	Duplicate ACE Inhibitor therapy may be occurring .
73	93	ANTI-ULCER AGENTS	0		0		TD	Therapeutic duplication of antiulcer agents may be occurring.
72	91	MEPERIDINE	92	SELEGILINE	0		DD	Meperidine may potentiate the effects of selegiline.
71	62	PROBENICID	90	SEDATIVE AGENTS	0		DD	Probenecid may potentiate the effects of sedative agents.
70	88	DIDANOSINE	89	DAPSONE	0		DD	Didanosine may inhibit the effects of dapsone.
68	84	ANTIULCER AGENTS	85	AZOLE ANTIFUNGALS	0		DD	Concomitant use of antiulcer medications and azole antifungal may result in antifungal therapy failure. Increased gastric pH induced by antiulcer medications decreases azole antifungal absorption.
67	81	SEROTONIN REUPTAKE INHIBITORS	83	MAO-INHIBITORS W SELEGILINE	0		DD	The combination of serotonin reuptake inhibitors and MAO inhibitors may produce a serotonin syndrome, which may include hyperthermia, tremor, myoclonus and irritability.
64	78	DISOPYRAMIDE	79	ANTICHOLINERGIC AGENTS	0		DD	The combination of disopyramide and anticholinergic agents may produce additive anticholinergic effects.
63	76	ANTIPSYCHOTIC AGENTS	77	ANTICHOLINERGIC AGENTS	0		DD	The combination of antipsychotic agents and anticholinergic agents may produce additive anticholinergic effects.
62	74	ANTIPSYCHOTIC AGENTS	75	NARCOTIC AGENTS	0		DD	The combination of antipsychotic agents and narcotics may produce additive sedation.
61	72	ANTIPSYCHOTIC AGENTS	73	LEVODOPA	0		DD	Antipsychotic agents may inhibit the effects of levodopa.
60	70	ANOREXIANTS	71	ANTIPSYCHOTIC AGENTS	0		DD	Anorexiants may inhibit the effects of antipsychotic agents and antipsychotic agents may inhibit the effects of anorexiants.
59	69	BILE ACID SEQUESTRANTS	68	CARDIAC GLYCOSIDES	0		DD	Bile acid sequestrants may inhibit the effects of cardiac glycosides.
57	34	VERAPAMIL	68	CARDIAC GLYCOSIDES	0		DD	Verapamil may potentiate the effects of cardiac glycosides.
56	55	THYROID HORMONES	68	CARDIAC GLYCOSIDES	0		DD	Thyroid hormones may inhibit the effects of cardiac glycosides.
55	2	QUINIDINE	68	CARDIAC GLYCOSIDES	0		DD	Quinidine may potentiate the effects of cardiac glycosides.
54	52	RIFAMYCINS	2	QUINIDINE	0		DD	Rifampin may inhibit the effects of quinidine.
53	52	RIFAMYCINS	67	THEOPHYLLINES	0		DD	Rifampin may inhibit the effects of theophylline, aminophylline, or oxtriphylline.

CRIT-ERIA NO.	UTIL A	UTILA DESCRIPTION	UTIL B	UTIL B DESCRIPTION	UTIL C	UTIL C DESCRIPTION	ONFLI CODE	CRITERIA DESCRIPTION
52	65	CIMETIDINE	67	THEOPHYLLINES	0		DD	Cimetidine may potentiate the effects of theophylline, aminophylline or oxtriphylline.
51	65	CIMETIDINE	66	PROCAINAMIDE	0		DD	Cimetidine may potentiate the effects of procainamide.
50	65	CIMETIDINE	5	PHENYTOIN	0		DD	Cimetidine may potentiate the effects of phenytoin.
49	65	CIMETIDINE	3	WARFARIN	0		DD	Cimetidine may potentiate the effects of warfarin.
46	61	SALICYLATES	63	METHOTREXATE	0		DD	Salicylates may increase methotrexate serum concentrations and enhance methotrexate toxicity.
43	59	SULFONAMIDES	60	SULFONYLUREAS	0		DD	Sulfonamides may potentiate the effects of sulfonylureas.
41	55	THYROID HORMONES	56	SULFONYLUREAS	0		DD	Thyroid hormones may inhibit the effects of sulfonylureas.
40	54	DICUMAROL	50	SULFONYLUREAS	0		DD	Dicumarol may potentiate the effects of certain selected sulfonylureas.
39	52	RIFAMYCINS	53	SULFONYLUREAS	0		DD	Rifampin may inhibit the effects of sulfonylureas.
38	51	CHLORAMPHENICOL	50	SULFONYLUREAS	0		DD	Chloramphenicol may potentiate the effects of sulfonylureas.
36	47	CYCLIC ANTIDEPRESSANT AGENTS	83	MAO-INHIBITORS W SELEGILINE	0		DD	The combination of tricyclic or tetracyclic antidepressant agents and MAO inhibitors may produce additive toxic effects.
35	564	METFORMIN	565	GLYBURIDE	566	GLUCOVANCE	CA	This combination of medications, metformin and glyburide, is available in a fixed dosage combination and may result in better glycemic control.
34	2	QUINIDINE	45	ANTICOAGULANT AGENTS	0		DD	Quinidine may potentiate the effects of anticoagulant agents.
33	44	ETHCHLORVYNOL	43	ANTICOAGULANT AGENTS	0		DD	Ethchlorvynol may inhibit the effects of anticoagulant agents.
32	42	BARBITURATES	43	ANTICOAGULANT AGENTS	0		DD	Amobarbital, phenobarbital, or secobarbital may inhibit the effects of warfarin and dicumarol.
31	41	BARBITURATES	40	PRIMIDONE	0		DD	The combination of primidone and barbiturates may produce additive sedative effects.
30	8	VALPROIC ACID	38	BARBITURATES	0		DD	Valproic acid may potentiate the effects of phenobarbital and primidone.
29	38	BARBITURATES	39	GRISEOFULVIN	0		DD	Barbiturates may inhibit the effects of griseofulvin.
28	36	BARBITURATES	37	CORTICOSTEROIDS	0		DD	Barbiturates may inhibit the effects of corticosteroids.
27	35	BARBITURATES	2	QUINIDINE	0		DD	Barbiturates may inhibit the effects of quinidine.
26	34	VERAPAMIL	31	CARBAMAZEPINE	0		DD	Verapamil may potentiate the effects of carbamazepine.
24	31	CARBAMAZEPINE	32	HALOPERIDOL	0		DD	Carbamazepine may inhibit the effects of haloperidol.
23	27	LITHIUM	31	CARBAMAZEPINE	0		DD	The combination of lithium and carbamazepine may produce neurotoxicity.
21	29	THEOPHYLLINES	27	LITHIUM	0		DD	Theophyllines may enhance renal lithium clearance.
20	28	THIAZIDES	27	LITHIUM	0		DD	Thiazide Diuretics may cause increased levels of Lithium, which may\result in Lithium toxicity.
17	22	NSAID'S	23	TRIAMTERENE	0		DD	The combination of indomethacin, ibuprofen, or diclofenac with triamterene may cause acute renal failure.
16	21	NSAIDS	3	WARFARIN	0		DD	NSAIDs may potentiate the effects of warfarin.
15	20	AMPHETAMINES	18	GUANETHIDINE	0		DD	Amphetamines may inhibit the effects of guanethidine.
14	18	GUANETHIDINE	19	SYMPATHOMIMETIC AGENTS	0		DD	Guanethidine may potentiate the effects of sympathomimetic agents.
13	16	NON-CARDIOSELECTIVE BETA BLOCKE	17	SYMPATHOMIMETIC AGENTS	0		DD	Non-cardioselective beta blockers may potentiate the effects of sympathomimetic agents, thereby causing hypertension and bradycardia.
11	12	CLONIDINE	154	BETA BLOCKERS	0		DD	The combination of clonidine and certain beta blockers has been reported to cause a hypertensive crisis when one drug is withdrawn.
10	11	CALCIUM CHANNEL BLOCKERS	9	CYCLOSPORINE	0		DD	Calcium channel blockers may potentiate the effects of cyclosporine.
9	10	METOCLOPRAMIDE	9	CYCLOSPORINE	0		DD	Metoclopramide may potentiate the effects of cyclosporine.
8	5	PHENYTOIN	9	CYCLOSPORINE	0		DD	Phenytoin may inhibit the effects of cyclosporine.
7	8	VALPROIC ACID	5	PHENYTOIN	0		DD	Valproic acid may potentiate the effects of phenytoin.
6	7	ISONIAZID	5	PHENYTOIN	0		DD	Isoniazid may potentiate the effects of phenytoin.
5	6	DISULFIRAM	5	PHENYTOIN	0		DD	Disulfiram may potentiate the effects of phenytoin.
3	1	AMIODARONE	4	CARDIAC GLYCOSIDES	0		DD	Amiodarone may potentiate the effects of digoxin.
2	1	AMIODARONE	3	WARFARIN	0		DD	Amiodarone may potentiate the effects of warfarin.

Initial Criteria Exception Report (ICER)

In Part

01/28/2002
(PA) COST APPROPRIATENESS

Criteria	Utilization Category Descriptions Util. A	Util. B	Criteria Exception Risk Counts Low	Medium	High	Total
(125) DISEASE STATE MANAGEMENT						
516	PEPCID & AXID		1,085	50	19	1,154
570	PEPCID & AXID		1,085	50	19	1,154
		Problem Code Total :				2,308
(128) COST CONTROL						
15	METFORMIN	GLYBURIDE	587	28	4	619
564	CCB AMLODIPINE ONLY	ACE-INHIBITORS	154	6	1	161
567	PROTON PUMP INHIBITORS		14,837	1,189	442	16,468
597	CCB AMLODIPINE ONLY	ACE-INHIBITORS	154	6	1	161
		Problem Code Total :				17,409
(DR) DRUG-DRUG MARKER AND/OR DIAGNOSIS						
Criteria	Utilization Category Descriptions Util. A	Util. B	Criteria Exception Risk Counts Low	Medium	High	Total
(007) BETA BLOCKER INTERACTION						
416	BETA BLOCKERS	PULMONARY DISORDER	101	17	6	124
		Problem Code Total :				124
(008) HYPERTENSION						
621	CYCLOSPORINE	HYPERTENSION -DRUGS &	59	5	5	69
		Problem Code Total :				69
(025) ARRHYTHMIAS						
486	BRONCHODILATORS	CARDIAC ARRHYTHMIAS	9	0	0	9
		Problem Code Total :				9
(052) CONVULSIONS						
89	ANTIPSYCHOTIC AGENTS	CONVULSIONS	81	4	1	86
560	AMANTADINE	SEIZURE DISORDER (WITH	19	0	0	19
		Problem Code Total :				105
(053) HYPERTHYROIDISM						
111	STIMULANTS	HYPERTHYROIDISM	0	0	0	0
		Problem Code Total :				0

(09[illegible]) [illegible]OSIDE INTERACTION

273	CARDIAC GLYCOSIDES	[illegible]	1	0	7
		Problem Code Total :			7

(0[illegible]) OVERUTIL. OF ANTIULCER AGENTS

84	ANTI-ULCER AGENTS	400	56	[illegible]7	483
		Problem Code Total :			483

(042) OVERUTIL. OF NARCOTIC AGENTS

85	NARCOTIC AGENTS	1,260	457	462	2,179
594	OXYCONTIN- ONLY	[illegible]	0	0	3
612	OXYCONTIN- ONLY	[illegible]	0	0	3
613	OXYCONTIN- ONLY	3	0	0	3
614	OXYCONTIN- ONLY	[illegible]	0	0	0
		Problem Code Total :			2,188

(043) OVERUTILIZATION OF STIMULANTS

86	STIMULANTS	83	11	10	104
		Problem Code Total :			104

(044) OVERUTIL. OF SEDATIVE AGENTS

87	SEDATIVE AGENTS	[illegible]	39	21	158
165	BENZO SEDATIVES	260	260	89	609
516	HYPNOTICS (474 HD) (516 D	701	368	256	1,325
563	AMBIEN & SONATA	2,0[illegible]0	177	167	2,434
		Problem Code Total :			4,526

(045) OVERUTIL. OF ANXIOLYTIC AGENTS

88	BENZO ANXIOLYTIC AGENTS	213	93	105	411
		Problem Code Total :			411

(082) INAPPROPRIATE THERAPY FOR ELDERLY

622	FELODIPINE	[illegible]	5	1	15
661	TIZANIDINE	[illegible]	0	0	0
		Problem Code Total :			15

(091) OVERUTILIZATION

[illegible]	KETOROLAC	[illegible]	0	0	0
[illegible]	BUTORPHANOL	[illegible]	2	[illegible]	5
303	NICOTINE POLACRILEX	1	0	0	1
304	BETA-AGONISTS (INHALED)	1,[illegible]	265	[illegible]	2,0[illegible]5
305	CARISOPRODOL	[illegible]	218	[illegible]	890
403	BUPROPION-ZYBAN ONLY	[illegible]	2	0	9

			Problem Code Total :			146
(135) DISEASE STATE MANAGEMENT						
541	DIABETES		8,266	415	140	8,821
543	CARDIO POST MI DRUGS	POST MYOCARDIAL INFARC	65	11	3	79
544	BETA AGONIST	ASTHMA	171	23	14	210
545	DIGOXIN	ATRIAL FIB AGENTS & IC	938	43	8	989
551	ATRIAL FIB DRUGS ONLY	ATRIAL FIB ICD-9	51	0	3	54
			Problem Code Total :			10,153
(138) ADVERSE ANTIPSYCHOTIC EFFECT						
586	ATYPICAL NEUROLEPTICS		8,291	488	197	8,976
			Problem Code Total :			8,976
(145) MYELOSUPPRESSION						
597	LINEZOLID (ZYVOX)		4	0	2	6
			Problem Code Total :			6
(141) INAPPROPRIATE MIGRAINE THERAPY						
605	ANALGESIC MIGRAINE MEDS	MIGRAINE	23	4	9	36
			Problem Code Total :			36
(143) FLUOROQUINOLONE TOXICITY						
608	QUINOLONES		120	44	16	180
			Problem Code Total :			180
(149) DEPRESSION						
635	METOCLOPRAMIDE	DEPRESSION - DRUGS & I	111	26	12	149
			Problem Code Total :			149
(159) TIZANIDINE TOXICITY						
661	TIZANIDINE		879	116	161	1,156
			Problem Code Total :			1,156
(150) THERAPEUTIC DUPLICATION						
Criteria	Utilization Category Descriptions Util. A	Util. B	Criteria Exception Risk Counts Low	Medium	High	Total
(114) DUPLICATE ANTIULCER THERAPY						
	ANTI-ULCER AGENTS		41	4	1	19

Criteria	Util. A	Util. B	Low	Medium	High	Total
[illegible]	THIORIDAZINE (MELLARIL)	CARDIAC ARRHYTHMIAS	3	0	0	3
		Problem Code Total :				3

(1[illegible]) INCREASED CHOLINERGIC EFFECTS

Criteria	Util. A	Util. B	Low	Medium	High	Total
[illegible]0	CHOLINESTERASE INHIBITORS	GASTRIC DISORDERS & NS	707	19	3	729
		Problem Code Total :				729

(11[illegible]) RENAL INSUFFICIENCY

Criteria	Util. A	Util. B	Low	Medium	High	Total
[illegible]03	FAMOTIDINE	RENAL INSUFFICIENCY	26	3	0	29
		Problem Code Total :				29

(1[illegible]0) ADVERSE TIZANIDINE EFFECTS

Criteria	Util. A	Util. B	Low	Medium	High	Total
[illegible]	TIZANIDINE	PSYCHOSIS & HALLUCINAT	2	1	0	3
		Problem Code Total :				3

[illegible] DRUG PREGNANCY ALERT

Criteria	Utilization Category Descriptions Util. A	Util. B	Criteria Exception Risk Counts Low	Medium	High	Total
(0[illegible]) ADVERSE FETAL EFFECTS						
1[illegible]4	ACEI	PREGNANCY	31	3	3	37
1[illegible]5	SEDATIVE AGENTS	PREGNANCY	28	3	11	42
1[illegible]6	NSAIDS	PREGNANCY	16	3	2	21
		Problem Code Total :				100

[illegible] THERAPEUTIC APPROPRIATENESS

Criteria	Utilization Category Descriptions Util. A	Util. B	Criteria Exception Risk Counts Low	Medium	High	Total
(082) INAPPROPRIATE THERAPY FOR ELDERLY						
587	LONG HALF-LIFE BENZO ANXI		240	100	64	404
588	LONG HALF-LIFE BENZO SEDA		1	2	0	3
590	BARBITURATE SEDATIVE HYPN		26	8	0	34
591	TERTIARY AMINE TCA		1,245	602	207	2,054
599	RIVASTIGMINE		941	18	0	959
604	FAMOTIDINE		695	277	27	999
[illegible]28	FLUOXETINE		24	10	3	37
[illegible]41	LONG HALF-LIFE BENZO ANXI		240	100	64	404
		Problem Code Total :				4,894
(0[illegible]) OVERUTILIZATION						
[illegible]	TIZANIDINE		[illegible]	20	[illegible]4	[illegible]

Risk Scores

Risk Scores

Multivariate algorithm logic is used so that patients with the greatest risk will be given a computed priority. Individual patient ***risk factors*** are assigned to criteria. These risk factors are applied in combination with the drug therapy factors to define specific relative outcomes and to rank potential cases in terms of clinical significance for enhanced and focused reviews. Assignable risk factors include:

1. **Age Range/Age Flag:** Documents the age of the patient being reviewed. Risk points can be added for up to ten age ranges

2. **Gender/Gender Qualifier:** The gender of the patient being reviewed allows risk points to be added if a drug therapy problem effects one gender more severely or only applies to one gender (e.g. pregnancy or prostatitis).

3. **Multiple Providers:** The number of different providers, both physicians and pharmacies, which the patient has seen in a specified time period. Risk points can be added when multiple prescribers and/or pharmacies are involved. For each prescriber seen over two, fifteen points are added, and for each pharmacy over two, thirty points are added. Consequently, patients who see multiple physicians and use many pharmacies tend to have high risk scores.

4. **Concomitant Therapy or Diagnosis:** Identifies the number and type of treated diseases or conditions for the patient being analyzed. For example, risk points are added if the patient is taking another drug or has an additional diagnosis that contributes to a drug therapy problem (e.g. NSAID-Peptic Ulcer Disease along with Prednisone).

5. **Negating Therapy or Diagnosis.** Identifies diseases or treatments that lessen the likelihood that a true drug therapy problem exists. For instance, the system allows the user to construct the criteria to subtract risk points when a patient is taking both an ACE Inhibitor and Potassium supplements in the presence of a potassium wasting diuretic.

6. **Multiple diseases >2**

7. **Multiple contraindications >3**

8. **Multiple adverse reactions per drug >10**

We have identified some apparent problems that after examination are not really problems (false positives), and can be avoided by computing a single score summary of a patient's risk. Our RDUR criteria are capable of using drug markers and/or diagnosis codes to identify recipients with potential drug therapy problems. We also use diagnosis codes to negate problems where appropriate. For example, if a recipient was receiving high doses of narcotics over a period of time, the system would identify a problem of over utilization of narcotics. However, if the recipient has a diagnosis of cancer or sickle cell anemia in his or her history, the recipient would not be identified for clinical review.

Conversely, the system uses diagnoses codes to better predict the severity of risk of a drug therapy problem. For example, if a recipient has a history of peptic ulcer disease

and receives chronic non-steroidal anti-inflammatory therapy, the recipient would be identified for clinical review. If the recipient also has a history of a bleeding disorder, then the recipient would be categorized as being at high risk for the drug therapy problem. This function provides enhanced system identification of recipients who would greatly benefit from intervention.

Not all patients have the same risk for developing drug therapy problems and not all drug therapy problems are of the same severity. Therefore, Health Information Designs, Inc. has designed a proprietary system to account for differences in patients and differences in severity of drug therapy problems.

Risk points are assigned for factors that may increase or decrease an individual patient's risk of developing a drug therapy problem. Risk points are also assigned for the severity of the drug therapy problem. Therefore, for each of our over 700 criteria, a risk score is calculated for each recipient with drug claims.

The risk score is a relative score that is printed on the Initial Criteria Exception Reports (ICER's) designed to assist pharmacists reviewing profiles in clinical assessment of the importance of the drug therapy problems for each patient.

Criteria are assigned a base risk score based upon documented literature supporting a low, moderate, or high severity. Then individual patient risk factors are added for each of the following risks to generate a risk score for each criterion. Then each criterion that the patient hits upon is added for a total risk score for that patient.

Base Risk Score per criteria	= 1 to 40
Individual Patient Risk Factors	
✓ Age Range/ Age	= 0 to 40
✓ Gender	= + or - 15
✓ Multiple Prescribers over two	= +15 each
✓ Multiple Pharmacies over two	= +30 each
✓ Concomitant Therapy or Diagnosis	= + 0 to 40
✓ Negating Therapy or Diagnosis	= -15 to -999
✓ Multiple diseases over two	= +10 each
✓ Multiple contraindications per drug over 3	= +5 each
✓ Multiple adverse reactions per drug over 10	= +2 each

This score is a relative risk. For example, if the patient sees 75 prescribers and 10 pharmacies in one month, and has two diseases that apply to the criteria, their risk score may be 1461. In contrast, a patient who sees one prescriber and one pharmacy and has one disease that applies to the criteria may have only a risk score of 10.

Therapeutic Criteria

The therapeutic criteria are the set of data that comprise the set of rules by which the pharmaceutical claims data in the database are measured. There are about 700 TCEs. For nomenclature purposes, the TCEs are divided into conflict codes including:

CONFLICT CODES with ASSOCIATED PROBLEM CATEGORIES

CONFLICT CODES	DESCRIPTION	DISTRIBUTION OF CASES BY PROBLEM TYPE
DB	DRUG-DRUG MARKER AND /OR DIAGNOSIS	DR-DZ
DC	INFERRED DRUG DISEASE PRECAUTION	DR-DZ
DD	DRUG-DRUG INTERACTION	DRUG-DRUG
ER	OVERUSE PRECAUTION	OVERUTILIZATION
HD	HIGH DOSE ALERT	OVERUTILIZATION
LR	UNDERUSE PRECAUTION	UNDERUTILIZATION
MC	DRUG (ACTUAL) DISEASE PRECAUTION	DR-DZ
PG	DRUG PREGNANCY ALERT	DR-DZ
TD	THERAPEUTIC DUPLICATION	DRUG-DRUG
TA	THERAPEUTIC APPROPRIATENESS	CLINICAL APPROP.
GA	APPROPRIATE USE OF GENERICS	CLINICAL APPROP.
CA	COST APPROPRIATENESS	CLINICAL APPROP.
LI	LOCK-IN – NARCOTICS	OVERUTILIZATION

Patient Profile

t ID: 1279386001 DOB: 07/11/1944 Age: 56 Gender: M County: 19

# of Pharmacies since 06/22/00 = 1
# of Prescribers since 06/22/00 = 5

THERAPEUTIC CRITERIA EXCEPTION

1) The combination of ACEI and NSAIDs may produce decreased renal function due to diminished GFR. Patients at greatest risk are the elderly and those with CHF, liver cirrhosis or systemic lupus erythematosis.

REVIEW Criteria: 00097 Trigger DOS: 10/03/2000 Assoc. DOS: 10/03/2000
___ CODE Risk Score: 90 MODERATE SEVERITY
___ Letter Type: 100P
References: Br J Clin Pharma 1993, Apr 35(4):343-348.
Drug Interaction Facts, 1999

2) Duplicate NSAID therapy (including COX-2 inhibitors) may be occurring.
REVIEW Criteria: 00535 Trigger DOS: 10/03/2000 Assoc. DOS: 08/01/2000
___ CODE Risk Score: 46 MODERATE SEVERITY
___ Letter Type: 400
References: AHFS Drug Information, 1999 Edition
Facts and Comparisons, 2000 updates.
MICROMEDEX Health Series, Drugdex Drug Evaluations, Vol 103, 2000.

TOTAL RISK: 136

* = Most recent occurrence of drugs identified in potential therapy problem.
- = Occurrences of drugs identified in the same therapeutic class as those involved in the potential therapy problem.

___ Refer to abuse unit.

Drug History

Date of Service	Rx Number	NDC		Drug Description	Strength	Qty	Days	Pharmacy Number	Prescriber Number	LTC Ind
10/03/2000	0520338	00456261590		TIAZAC	300MG	30	30	100050407	106582001	0
10/03/2000	0520337	38245015010	*	NAPROXEN	500MG	60	30	100050407	106582001	0
10/03/2000	0520336	00047008420		GEMFIBROZIL	600MG	30	30	100050407	106582001	0
10/03/2000	0520335	00087060942	*	MONOPRIL	20MG	30	30	100050407	106582001	0
10/03/2000	0159601	00406035705		HYDROCODONE W/ACETAMINOPH	5-500MG	30	5	100050407	106582001	0
09/06/2000	0512827	00047008420		GEMFIBROZIL	600MG	31	31	100050407	NPARMSTRO	0
08/09/2000	0516943	00045152550		LEVAQUIN	500MG	10	10	100050407	NPARMSTRO	0
08/03/2000	0008006	00182917501		OXYCODONE W/ACETAMINOPHEN	5-500MG	20	5	100050407	NPARMSTRO	0
08/01/2000	0516438	00026851351		CIPRO	500MG	20	10	100050407	NPARMSTRO	0
08/01/2000	0512827	00047008420		GEMFIBROZIL	600MG	31	31	100050407	NPARMSTRO	0
08/01/2000	0516440	00087060942	-	MONOPRIL	20MG	30	30	100050407	106576001	0
08/01/2000	0516439	00456261490		TIAZAC	240MG	30	30	100050407	106576001	0
08/01/2000	0158588	00044072302	*	VICOPROFEN	200-7.5MG	24	6	100050407	106576001	0
07/27/2000	0007993	00182917501		OXYCODONE W/ACETAMINOPHEN	5-500MG	20	5	100050407	NPROBERTS	0
07/01/2000	0512827	00047008420		GEMFIBROZIL	600MG	31	31	100050407	NPWILSON	0
07/01/2000	0507232	00182044810		ASPIRIN	325MG	30	30	100050407	106576001	0
07/01/2000	0504917	00456261490		TIAZAC	240MG	30	30	100050407	106576001	0
07/01/2000	0504916	00087060942	-	MONOPRIL	20MG	30	30	100050407	106576001	0
07/01/2000	0502626	38245015010	-	NAPROXEN	500MG	60	30	100050407	106576001	0
01/2000	0512827	00047008420		GEMFIBROZIL	600MG	31	31	100050407	NPHILL	0
01/2000	0507232	00182044810		ASPIRIN	325MG	30	30	100050407	106576001	0
06/01/2000	0504917	00456261490		TIAZAC	240MG	30	30	100050407	106576001	0
/01/2000	0504916	00087060942	-	MONOPRIL	20MG	30	30	100050407	106576001	0
06/01/2000	0502626	38245015010	-	NAPROXEN	500MG	60	30	100050407	106576001	0
05/01/2000	0502625	00047008420		GEMFIBROZIL	600MG	31	31	100050407	NP	0
05/01/2000	0504917	00456261490		TIAZAC	240MG	30	30	100050407	106576001	0
05/01/2000	0156472	00044072302	-	VICOPROFEN	200-7.5MG	24	6	100050407	106576001	0

DRUG UTILIZATION REVIEW PROGRAM
Patient Dx/Rx History Profile

t ID: 1279386001 DOB: 07/11/1944 Age: 56 Gender: M County: 19

Drug History

Date of Service	Rx Number	NDC	Drug Description	Strength	Qty	Days	Pharmacy Number	Prescriber Number	LTC Ind
05/01/2000	0504916	00087060942	- MONOPRIL	20MG	30	30	100050407	106576001	0
04/03/2000	0502625	00047008420	GEMFIBROZIL	600MG	31	31	100050407	NP	0
04/03/2000	0504917	00456261490	TIAZAC	240MG	30	30	100050407	106576001	0
04/03/2000	0504916	00087060942	- MONOPRIL	20MG	30	30	100050407	106576001	0
04/03/2000	0156472	00044072302	- VICOPROFEN	200-7.5MG	24	6	100050407	106576001	0
03/02/2000	0504917	00456261490	TIAZAC	240MG	30	30	100050407	106576001	0
03/02/2000	0504916	00087060942	- MONOPRIL	20MG	30	30	100050407	106576001	0
03/02/2000	0156472	00044072302	- VICOPROFEN	200-7.5MG	24	6	100050407	106576001	0
02/01/2000	0502625	00047008420	GEMFIBROZIL	600MG	31	31	100050407	NP	0
02/01/2000	0504918	00069306030	ZITHROMAX	250MG	6	5	100050407	106576001	0
02/01/2000	0504917	00456261490	TIAZAC	240MG	30	30	100050407	106576001	0
02/01/2000	0504916	00087060942	- MONOPRIL	20MG	30	30	100050407	106576001	0
01/03/2000	0502625	00047008420	GEMFIBROZIL	600MG	31	31	100050407	NP	0
01/03/2000	0502626	38245015010	- NAPROXEN	500MG	60	30	100050407	106576001	0
01/03/2000	0491699	00456261490	TIAZAC	240MG	30	30	100050407	106576001	0
01/03/2000	0491698	00087060942	- MONOPRIL	20MG	30	30	100050407	106576001	0
01/03/2000	0478691	00071057013	NITROSTAT	0.4MG	25	25	100050407	106576001	0
12/01/1999	0491700	00047008420	GEMFIBROZIL	600MG	31	31	100050407	NP	0
12/01/1999	0500411	38245015010	- NAPROXEN	500MG	60	30	100050407	106576001	0
12/01/1999	0491699	00456261490	TIAZAC	240MG	30	30	100050407	106576001	0
12/01/1999	0491698	00087060942	- MONOPRIL	20MG	30	30	100050407	106576001	0
)1/1999	0491700	00047008420	GEMFIBROZIL	600MG	31	31	100050407	NP	0
11/01/1999	0498243	00172298548	DOXYCYCLINE HYCLATE	100MG	10	5	100050407	106576001	0
'01/1999	0491699	00456261490	TIAZAC	240MG	30	30	100050407	106576001	0
/01/1999	0491698	00087060942	- MONOPRIL	20MG	30	30	100050407	106576001	0
11/01/1999	0488630	38245015010	- NAPROXEN	500MG	60	30	100050407	106576001	0
11/01/1999	0152388	00044072302	- VICOPROFEN	200-7.5MG	24	6	100050407	106576001	0

Diagnosis History

Current Date of Service	Diagnosis	ICD9 Code Description	First Date of Service	Number of Occurences	Physician Number
09/30/2000	A6000		04/30/1999	34	117581749
09/25/2000	36232	ARTERIAL BRANCH OCCLUS	09/13/1999	2	106538002
08/09/2000	6084	MALE GEN INFLAM DIS NEC	08/01/2000	4	122569749
08/04/2000	185	MALIGN NEOPL PROSTATE	01/14/1999	5	106521002
07/27/2000	6039	HYDROCELE NOS	03/30/2000	6	129186105
04/06/2000	7245	BACKACHE NOS	04/06/2000	1	139073749
03/01/2000	41400	COR ATHRSCL-UNS VESSEL	08/12/1999	11	132853749
02/19/2000	78650	CHEST PAIN NOS	02/18/2000	3	128286002
02/19/2000	49121	OBST CH BRONCHIT/AC EXAC	02/18/2000	3	134056002
02/18/2000	7865	CHEST PAIN	02/18/2000	1	115191715
01/06/2000	V1046	HX-PROSTATIC MALIGNANCY	01/06/2000	1	128286002
12/01/1999	72982	CRAMP IN LIMB	12/01/1999	1	129672709
/01/1999	514	PULM CONGEST/HYPOSTASIS	11/01/1999	1	106576001

Prescriber History (3 months)

:escriber Number	Prescriber Name	Address	City	State
106576001				
106582001				
NPARMSTRC				

Physician Intervention Letters

Health Information Designs, Inc.

Using Medication Information Cost-Effectively

PO Box 320506
Flowood, MS 39232
(800) 355-0486 Fax (601) 939-7857

LETTER TYPE 100P
DRUG-DRUG INTERACTION
PHYSICIAN LETTER

[TODAY]

[adrs1]
[adrs2]
[adrs3]
[adrs4]

DEAR [tadrs1]:

Health Information Designs, Inc. (HID) is the pharmacy benefits management/drug utilization review organization contracted with the Mississippi Division of Medicaid (DOM) to provide administrative support and review pharmacy services provided to Medicaid beneficiaries. Under this contract, we seek to assure that Medicaid beneficiaries receive appropriate and cost effective drug therapy.

In compliance with the OBRA '90 federal legislation, state Medicaid agencies are mandated to institute Retrospective Drug Utilization Review Programs (RDUR). This RDUR program is informational in nature and allows you to incorporate the information provided into your continuing assessment of the patient's drug therapy requirements.

During a recent review of the enclosed drug history profile, *it was noted that your patient,* **[t1d0-recip-fst-nm] [t1d0-recip-lst-nm],** *is receiving* **[drug_a_name] and [drug_b_name].** [alert_msg] In presenting this information to you, we recognize that the management of each patient's drug therapy depends upon an assessment of the patient's entire clinical situation about which we are not fully aware.

The success of the DUR program is enhanced by the two way exchange of information. Therefore, at your convenience, we would appreciate learning of your assessment of this information and of any action taken in response to this notice. Although your participation in this program is voluntary, we find your feedback helpful in adjusting our program to address clinically important problems. Please complete the response form on the reverse side of this letter and return it in the enclosed envelope or fax it to the number below.

At the bottom of this letter are the specific prescriptions attributed to you by the dispensing pharmacy. In addition, if multiple prescribers are involved in the therapy mentioned above, each will receive this information. Thank you for your professional consideration.

RX #(s): [rx_no_a]

Sincerely,

W. Murray Yarbrough M.D.

W. Murray Yarbrough, M.D.
Medical Director

Case#: [case_no]
Enclosures

Health Information Designs, Inc.

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PO Box 320506
Flowood, MS 39232
(800) 355-0486 Fax (601) 939-7857

LETTER TYPE 300P
CHRONIC USE LETTER
PHYSICIAN LETTER

[TODAY]

This is an informational & educational letter sent to you by HID.

[adrs1]
[adrs2]
[adrs3]
[adrs4]

DEAR [tadrs1]:

Health Information Designs, Inc. (HID) is the pharmacy benefits management/drug utilization review organization contracted with the Mississippi Division of Medicaid (DOM) to provide administrative support and review pharmacy services provided to Medicaid beneficiaries. Under this contract, we seek to assure that Medicaid beneficiaries receive appropriate and cost effective drug therapy.

In compliance with the OBRA '90 federal legislation, state Medicaid agencies are mandated to institute Retrospective Drug Utilization Review Programs (RDUR). This RDUR program is informational in nature and allows you to incorporate the information provided into your continuing assessment of the patient's drug therapy requirements.

During a recent review of the enclosed drug history profile, *it was noted that your patient,* **[t1d0-recip-fst-nm] [t1d0-recip-lst-nm]**, *has been receiving* **[drug_a_name]** *chronically without a specific diagnosis or procedure in our records to suggest or support this use.* [alert_msg] We routinely notify practitioners of such continued use by the patient to ensure that this regimen is still desired. The enclosed historical profile is provided for your evaluation and consideration. In presenting this information to you, we recognize that the management of each patient's drug therapy depends upon an assessment of the patient's entire clinical situation about which we are not fully aware.

The success of the DUR program is enhanced by the two-way exchange of information. Therefore, at your convenience, we would appreciate learning of your assessment of this information and of any action taken in response to this notice. Although your participation in this program is voluntary, we find your feedback helpful in adjusting our program to address clinically important problems. Please complete the response form on the reverse side of this letter and return it in the enclosed envelope or fax it to the number below.

At the bottom of this letter are the specific prescriptions attributed to you by the dispensing pharmacy. In addition, if multiple physicians are involved, each will receive this information. Thank you for your professional consideration.

RX #(s): [rx_no_a]

Sincerely,

W. Murray Yarbrough M.D.

W. Murray Yarbrough, M.D.
Medical Director

Case#: [case_no]
Enclosures

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(800) 355-0486 Fax (601) 939-7857

LETTER TYPE 302
MULTIPLE PRESCRIBERS
PHYSICIAN LETTER

[TODAY]

[adrs1]
[adrs2]
[adrs3]
[adrs4]

DEAR [tadrs1]:

Health Information Designs, Inc. (HID) is the pharmacy benefits management/drug utilization review organization contracted with the Mississippi Division of Medicaid (DOM) to provide administrative support and review pharmacy services provided to Medicaid beneficiaries. Under this contract, we seek to assure that Medicaid beneficiaries receive appropriate and cost effective drug therapy.

In compliance with the OBRA '90 federal legislation, state Medicaid agencies are mandated to institute Retrospective Drug Utilization Review Programs (RDUR). This RDUR program is informational in nature and allows you to incorporate the information provided into your continuing assessment of the patient's drug therapy requirements.

During a recent review of the enclosed drug history profile, *it was noted that your patient,* **[t1d0-recip-fst-nm] [t1d0-recip-lst-nm]**, *has received and is apparently taking similar and/or potentially conflicting drugs prescribed by multiple physicians* (**[drug_a_name]**). Therefore, [alert_msg] Since one physician may be unaware of the treatment given by another and the concurrent use of these drugs can alter the patient's response to the planned therapy, we are providing the enclosed historical profile for your evaluation and action, if appropriate. In presenting this information to you, we recognize that management of each patient's drug therapy depends upon an assessment of the patient's entire clinical situation about which we are not fully aware.

The success of the DUR program is enhanced by the two way exchange of information. Therefore, at your convenience, we would appreciate learning of your assessment of this information and of any action taken in response to this notice. Although your participation in this program is voluntary, we find your feedback helpful in adjusting our program to address clinically important problems. Please complete the response form on the reverse side of this letter and return it in the enclosed envelope or fax it to the number below.

At the bottom of this letter are the specific prescriptions attributed to you by the dispensing pharmacy. In addition, if multiple physicians are involved, each will receive this information. Thank you for your professional consideration.

RX #(s): [rx_no_a]

Sincerely,

W. Murray Yarbrough M.D.

W. Murray Yarbrough, M.D.
Medical Director

Case#: [case_no]
Enclosures

Health Information Designs, Inc.

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PO Box 320506
Flowood, MS 39232
(800) 355-0486 Fax (601) 939-7857

LETTER TYPE 500
THERAPEUTIC APPROPRIATENESS
PHYSICIAN LETTER

[TODAY]

[adrs1]
[adrs2]
[adrs3]
[adrs4]

DEAR [tadrs1]:

Health Information Designs, Inc. (HID) is the pharmacy benefits management/drug utilization review organization contracted with the Mississippi Division of Medicaid (DOM) to provide administrative support and review pharmacy services provided to Medicaid beneficiaries. Under this contract, we seek to assure that Medicaid beneficiaries receive appropriate and cost effective drug therapy.

In compliance with the OBRA '90 federal legislation, state Medicaid agencies are mandated to institute Retrospective Drug Utilization Review Programs (RDUR). This RDUR program is informational in nature and allows you to incorporate the information provided into your continuing assessment of the patient's drug therapy requirements.

During a recent review of the enclosed drug history profile, it was noted that your patient, **[t1d0-recip-fst-nm] [t1d0-recip-lst-nm]**, *is receiving* **[drug_a_name].** *[alert_msg]* In presenting this information to you, we recognize that the management of each patient's drug therapy depends upon an assessment of the patient's entire clinical situation about which we are not fully aware.

The success of the DUR program is enhanced by effective two-way exchange of information. Therefore, at your convenience, we would appreciate learning of your assessment of this information and of any action taken in response to this notice. Although your participation in this program is voluntary, we find your feedback helpful in adjusting our program to address clinically important problems. Please use the enclosed response to note your comments and return it in the enclosed envelope or fax it to the number below.

At the bottom of this letter are the specific prescriptions attributed to you by the dispensing pharmacy. In addition, if multiple prescribers are involved in the therapy identified above, each will receive this information. Thank you for your professional consideration.

RX #(s): [rx_no_a]

Sincerely,

W. Murray Yarbrough M.D.

W. Murray Yarbrough, M.D.
Medical Director

Case#: [case_no]
Enclosures

Health Information Designs, Inc.

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PRESCRIBER RESPONSE

All information used to generate the enclosed letter, including Prescriber identification, was obtained from Pharmacy Claims Data. If there appears to be an error in the information provided, please note the discrepancy. Thank you for your cooperation.

1. This patient **is** under my care:

_____ I have reviewed the information and will continue without change.
_____ however, I did not prescribe the following medication(s)_____.
_____ and has an appointment to discuss drug therapy.
_____ however, has not seen me recently.
_____ however, I was not aware of other prescribers.
_____ I have reviewed the information and modified drug therapy.
_____ I have not modified drug therapy because benefits outweigh the risks.
_____ I have tried to modify therapy, however the patient refuses to change.
_____ I have tried to modify therapy, however symptoms reoccurred.

2. This patient **is not** under my care:

_____ however, I did prescribe medication while covering for other MD or in the ER.
_____ but has previously been a patient of mine.
_____ because the patient recently expired.
_____ and has never been under my care.

3. I have reviewed the enclosed information and found it:
_____ very useful_____ useful_____ neutral_____ somewhat useful_____ not useful.

4. Please check here if you wish to receive reference information on the identified problem___. (Please provide a fax number if available_____-_____-_____.)

Comments: _____
_____
_____
_____

[adrs1] Case# [case_no]
Letter Type [letter_type]
[alert_msg]
[criteria]

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Flowood, MS 39232
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Prescriber Profiling

Health Information Designs, Inc.

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Physician Profiling Example

Dr. XXXXXXXXX
Address
Address
City, State, Zip

Date: 01/10/2001

The enclosed materials include two groups (EDUCATIONAL PIECE OR NOT; and, PHONE CALL OR VISIT OR NOT).

Dear Dr. XXXXXXXXX,

Health Information Designs, Inc has been contracted by the Division of Medicaid to administer the retrospective drug utilization program. This program compares the prescribing habits of physicians to those of their peers. Our profiling focus will be on giving physicians, such as yourself, your individual prescribing information compared to your peers.

Our goal is to provide insights to help you provide high quality care to our Medicaid beneficiaries while effectively considering costs. Therefore, the information is provided to assist you in prescribing decisions concerning the selected therapeutic class or classes.

Performance review measures of cost, use and quality are used to ensure clinically appropriate, high quality prescribing that is cost effective. **Comparisons are made among physicians in the same specialty.** Measures are also risk-adjusted by a population-based case-mix system (for physicians who see patients with complex problems).

In reviewing your drug utilization data, we have identified that you appear to be prescribing **[selected classes of or UTIL_A*]** medications in a manner that varies from that of your peers. Please take time to review this information. Upon completing your review, please fill out the Physician's Questionnaire included in your packet and return it in the envelope provided.

Sincerely,

W. Murray Yarbrough M.D.

Murray Yarbrough, M.D.
Medical Director

**Examples: Third-generation Antibiotic; Narcotic; Benzodiazepines; albuterol; etc.*

Health Information Designs, Inc.
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Flowood, MS 39232
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Health Information Designs, Inc.

Using Medication Information Cost-Effectively

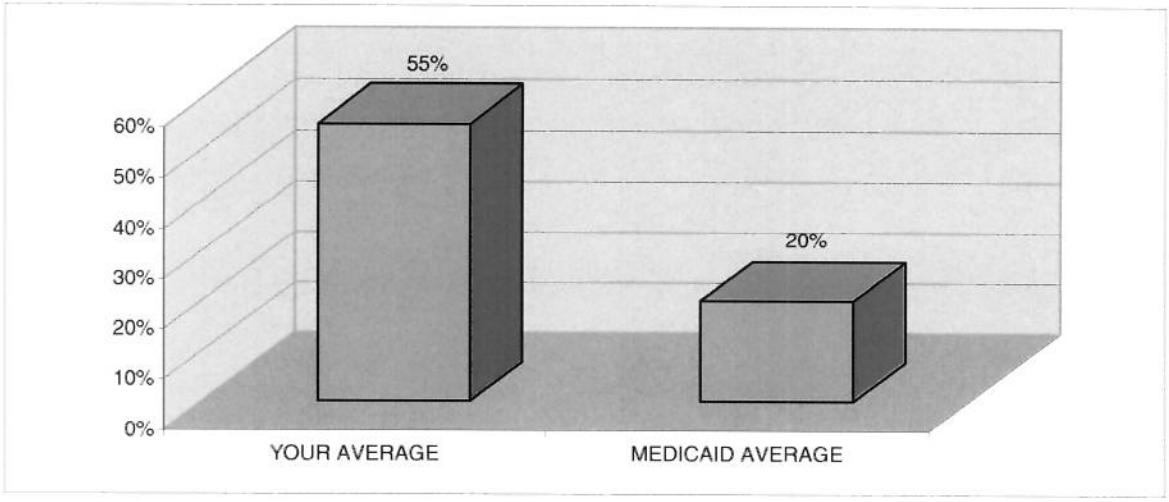
Mississippi Medicaid Drug Utilization Review Program
Report Card:

Prescribing Period: 07/01/1999 – 06/30/2000

You are one of 125 providers chosen for this program due to your volume of drug prescribing. For your information, total dollars paid for narcotics in 2000 for Medicaid patients prescribed by the Medicaid provider number, ########, was $$$$$$$$

Of all drugs prescribed by you during the study period, **NARCOTICS** were prescribed at a rate of (xx%). The Medicaid average standard is <= xx%.

Performance Review: Narcotics Therapeutic Class For Medicaid Provider #



DESCRIPTION OF PATIENT POPULATION
FOR MEDICAID ID # XXXXXXXX

Entire Practice Utilization	Narcotic Only Utilization
Total Drug Cost (Your Entire Practice):	Total Drug Cost (Narcotics only):
Total Patients (Your Entire Practice):	Total Patients (Narcotics only):
Total Rxs (Your Entire Practice):	Total Rxs (Narcotics):

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PRESCRIPTION EDUCATION DRUG UPDATE PROGRAM
PHYSICIAN RESPONSE FORM

Name: _____ Office Address:_____
_____

1) Please rate the Pharmacist's communication with you regarding the selected prescription drug topics. The educator was (circle one):

A) Highly effective B) Effective C) Not Effective

2) Do you fill that the session was worthwhile (circle one)?

A) Worthwhile B) Somewhat C) Not Worthwhile

3) Please describe any suggestion that will help us improve these sessions.
_____
_____

4) Did you feel that the level of detail in the educational material was ....

A) Appropriate B) Not Detailed Enough C) Too Detailed

5) If additional educational materials were developed, would you be interested in receiving them?

A) Yes B) No

6) Please provide specific comments about the educational material. Your suggestions will help us make the materials more useful for practicing clinicians.
_____
_____
_____

7) Are these specific prescribing issues that you would like to see addressed in similar education materials?
_____
_____

Thank you for participating in the Prescription Drug Education Update Program.

PRESCRIBER ID:

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Flowood, MS 39232
(800) 355-0486 Fax (601) 939-7857