Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. AMCs and hospitals included in study

Intervention AMCs	**Corresponding Hospitals**
Boston University	Boston Medical Center
Mount Sinai	Mount Sinai Hospital
	Mount Sinai Hospital of Queens
Northwestern University	Northwestern Memorial Hospital
	Children's Memorial Hospital
Rush University	John Stroger Hospital
	Provident Hospital
	Rush University Medical Center
	Rush Oak Park Hospital
Stanford University	Stanford Hospital and Clinics
	Lucile Packard Children's Hospital
University of California, Davis	UC Davis Medical Center
University of California, Los Angeles	Harbor UCLA Medical Center
	Resnick Neuropsychiatric Hospital
	Ronald Reagan UCLA Medical
	Santa Monica UCLA Medical Center and Orthopaedic Hosp.
	ValleyCare Olive View UCLA Medical Center
University of California, San Francisco	UCSF Medical Center
	UCSF Medical Center at Mount Zion
University of California, San Diego	UCSD Medical Center Hillcrest
	UCSD John and Sally Thornton Hospital
University of Illinois, Chicago	University of Illinois Medical Center at Chicago
University of Massachusetts	UMass Children's Medical Center
	UMass Memorial Medical Center Memorial Campus
	UMass Memorial Medical Center University Campus
	Wing Memorial Hospital Corporation
University of Pittsburgh	Children's Hospital of Pittsburgh of UPMC
	Magee-Women's Hospital of UPMC
	UPMC Bedford Memorial
	UPMC Braddock
	UPMC Horizon Greenville
	UPMC Horizon Shenango
	UPMC McKeesport
	UPMC Mercy
	UPMC Montefiore Hospital
	UPMC Northwest
	UPMC Passavant Cranberry
	UPMC Presbyterian
	UPMC Saint Margaret

Intervention AMCs	**Corresponding Hospitals**
	UPMC Shadyside
	Western Psychiatric Institute and Clinic
University of Rochester	University of Rochester Medical
University of Southern California	Good Samaritan Hospital
	Los Angeles County USC Healthcare Network
	USC Norris Cancer Hospital
	USC University Hospital
New York Medical College	Metropolitan Hospital Center
	Westchester County Healthcare
State University of New York, Downstate	Kings County Hospital Center
	SUNY Downstate Medical Center
Temple University	Jeanes Hospital
	Temple East
	Temple University Hospital
	Temple University Hospital, Episcopal Campus
Thomas Jefferson University	Thomas Jefferson University Hospital
Tufts University	Tufts Medical Center
	Tufts Medical Center and The Floating Hospital for Children
AMC with detailing policies excluded from sample due extremely small sample size	
Stony Brook University	Stony Brook University Medical Center
AMCs with detailing policies implemented before 2007 (not included in study)	
AMC	**Policy Date**
Loyola University	August 2005
New York University	October 1999
Cornell University	October 1999
Partners Healthcare (Harvard)	March 2005
Robert Wood Johnson	August 1998
University of California, Irvine	September 1994
University of Chicago	August 1992
University of Pennsylvania	January 2002
Yeshiva University	May 1993

eTable 2. Study drug classes and drugs

Bio-equivalent generic and brand name drugs are on the same line, if both were included in the study; if one is missing, it was not in the study as it was either not available or did not reach sufficient market share.

Generic Name	Brand Name	Month of initial generic availability (if occurred during study period)
Lipid-lowering agents (22 drugs total)		
Atorvastatin	Lipitor	November, 2011
Fenofibrate	Lofibra	
	Tricor	
Lovastatin	Mevacor	
Pravastatin Sodium	Pravachol	May, 2006
Simvastatin	Zocor	June, 2006
Cholestyramine		
Gemfibrozil		
	Advicor	
	Caduet	
	Crestor	
	Lescol	
	Lescol XL	
	Lovaza	
	Simcor	
	Vytorin	
	Zetia	
GERDs (15 drugs total)		
Famotidine	Pepcid	
Lansoprazole	Prevacid	
Lansoprazole, Extended Release	Prevacid 24 HR	November, 2009
Omeprazole	Prilosec	
Pantoprazole Sodium	Protonix	August, 2007
Nizatidine		
Ranitidine HCL		
Sucralfate		
	Naprapac	

Generic Name	Brand Name	Month of initial generic availability (if occurred during study period)
	Prevpac	
Antidiabetic (46 drugs total)		
Acarbose	Precose	
Chlorpropamide	Diabinese	
Glimepiride	Amaryl	
Glipizide	Glucotrol	
Glipizide/Metformin	Metaglip	
Glyburide	Diabeta	
Glyburide/Metformin	Glucovance	
Metformin	Glucophage	
Miglitol	Glyset	
Nateglinide	Starlix	September, 2009
Tolazamide		
Tolbutamide		
	Actos	
	Apidra	
	Avandamet	
	Avandaryl	
	Avandia	
	Byetta	
	Cycloset	
	Humalog	
	Humalog NPL	
	Humilin N	
	Humilin R	
	Janumet	
	Januvia	
	Lantus	
	Levemir	
	Novolin N	
	Novolin NPH	
	Novolin R	
	Novolog	

Generic Name	Brand Name	Month of initial generic availability (if occurred during study period)
	Ongylza	
	Prandimet	
	Prandin	
	Tradjenta	
	Victoza	
Antihypertensive (69 drugs total)		
Amlodipine	Norvasc	January, 2007
Amlodipine Besylate/Benazepril	Lotrel	May, 2007
Atenolol	Tenormin	
Benazepril	Lotensin	
Benazepril/Hydrochlorothiazide	Lotensin HCT	
Bisoprol/Hydrochlorothiazide	Ziac	
Carvedilol	Coreg	
Enalapril Maleate	Vasotec	
Enalapril Maleate/Hydrochlorothiazide	Vasotec HCT	
Fosinopril Sodium	Monopril	
Lisinopril	Zestril	
Lisinopril/Hydrochlorothiazide	Zestoretic	
Losartan	Cozaar	April, 2010
Losartan/Hydrochlorothiazide	Hyzaar	April, 2010
Metoprol/Hydrochlorothiazide	Dutoprol	
Metoprolol Tartrate	Lopressor	
Metoprolol, Extended Release	Toprol XL	August, 2009
Nebivolol	Bystolic	
Perindopril Erbumine	Aceon	November, 2009
Quinapril	Accupril	
Quinapril/Hydrochlorothiazide	Acurretic	
Ramipril	Altace	September, 2007
Trandolapril	Mavik	June, 2007
Doxazosin Mesylate		
Labetalol		
Methyldopa		
Methyldopa/Hydrochlorothiazide		
Nadolol		

Generic Name	Brand Name	Month of initial generic availability (if occurred during study period)
Penbutolol Sulfate		
Pindolol		
Prazosin		
Propranolol		
Sotalol		
Terazosin		
	Atacand	
	Atacand HCT	
	Avapro	
	Avalide	
	Diovan	
	Diovan HCT	
	Exforge	
	Exforge HCT	
	Micardis	
	Micardis HCT	
	Tekturna	
	Valturna	
Sleep Aid (17 drugs total)		
Estazolam	ProSom	
Flurazepam HCL	Dalmane	
Temazepam	Restoril	
Triazolam	Halcion	
Zaleplon	Sonata	June, 2008
Zolpidem	Ambien	April, 2007
Zolpidem, Extended Release	Ambien CR	October, 2010
Quazepam		
	Lunesta	
	Rozerem	
ADHD Drugs (16 drugs total)		
Amphetamine, Dextroamphetamine	Adderall	
Clonidine	Kapvay	
Dexmethylphenidate HCL	Focalin	

Generic Name	Brand Name	Month of initial generic availability (if occurred during study period)
Dextroamphetamine Sulfate	Procentra	
Guanfacine HCL	Intuniv	
Methylphenidate	Concerta	
	Methylin	
	Ritalin	
	Adderall XR	
	Strattera	
Antidepressives (55 drugs total)		
Amitriptyline	Elavil	
Amoxapine	Asendin	
Bupropion Hbr	Aplenzin	
Bupropion HCL	Wellbutrin	
Bupropion, Extended Release	Wellbutrin XL	January, 2007
Bupropion, Sustained release	Wellbutrin SR	
Clomipramine HCL	Anafranil	
Desipramine HCL	Norpramin	
Doxepin HCL	Sinequan	
Escitalopram	Lexapro	March, 2012
Fluoxetine	Prozac	
Fluoxetine Dr	Prozac Weekly	April, 2010
Imipramine HCL	Tofranil	
Maprotiline HCL	Ludiomil	
Mirtazapine	Remeron	
Nortriptyline HCL	Pamelor	
Paroxetine HCL	Paxil	
Paroxetine HCL, extended release	Paxil CR	July, 2007
Selegiline HCL	Emsam	
Sertraline HCL	Zoloft	July, 2007
Trazodone HCL	Desyrel	
Venlafaxine	Effexor	
Venlafaxine, Extended Release	Effexor XR	June, 2010
Nefazodone HCL		
Protriptyline HCL		

Generic Name	Brand Name	Month of initial generic availability (if occurred during study period)
Tranylcypromine Sulfate		
	Celexa	
	Cymbalta	
	Etrafon	
	Lexapro	
	Pristiq	
	Symbyax	
Antipsychotics (22 drugs total)		
Clozapine	Clozaril	
Diazepam	Diastat	
Haloperidol	Haldol	
Olanzapine	Zyprexa	November, 2011
Risperidone	Risperdal	December, 2008
Thiothixene	Navane	
Chlorpromazine		
Fluphenazine		
Loxapine Succinate		
Perphenazine		
Perphenazine/Amitriptyline		
Thioridazine		
Trifluoperazine		
	Abilify	
	Geodon	
	Seroquel	

Table Notes:

1. Bio-equivalent generic and brand name drugs are listed on the same row, when both were in the database. If a generic drug is listed with no corresponding brand name, then the branded version of the drug did not reach 0.5% market share during the study period. If a branded drug is listed with no corresponding generic name, then the generic version of the drug did not reach 0.5% market share during the study period (because the drug was protected by patent for all or nearly all of the study period).
2. A “branded” drug is not equivalent to a “detailed” drug. “Branded” means it was manufactured by a pharmaceutical company and given a brand name. Generic drugs are only known by their biological names, and do not carry brand names. In

the study, a “detailed” drug is one that was actively marketed to doctors during detailing visits in a given month. Branded drugs with bio-equivalent generic drugs are almost never detailed in the data. Branded drugs with no bioequivalent available in a given month are usually, but not always, detailed.

eTable 3. Results of regression estimating months to intervention differences between intervention and control groups

Months to intervention	Coefficient *	95% CI Lower Bound	95% CI Upper Bound	P-value**
t-12	-0.07	-1.17	1.03	0.90
t-11	-0.22	-1.53	1.08	0.74
t-10	0.06	-1.16	1.28	0.92
t-9	-0.46	-1.64	0.72	0.44
t-8	-1.08	-2.36	0.20	0.10
t-7	-0.46	-1.68	0.76	0.46
t-6	-0.27	-1.33	0.78	0.61
t-5	-0.99	-2.05	0.07	0.07
t-4	-0.81	-1.92	0.30	0.15
t-3	-1.05	-2.22	0.11	0.08
t-2	-0.58	-1.73	0.56	0.32
t-1***	.	.	.	.
t-0	-1.82	-3.01	-0.64	**0.003**
t+1	-1.62	-2.65	-0.59	**0.002**
t+2	-1.58	-2.62	-0.54	**0.003**
t+3	-1.53	-2.59	-0.47	**0.005**
t+4	-1.86	-2.88	-0.85	**<.001**
t+5	-1.26	-2.33	-0.19	**0.02**
t+6	-2.01	-3.04	-0.99	**<.001**
t+7	-1.85	-2.87	-0.83	**<.001**
t+8	-2.08	-3.10	-1.05	**<.001**
t+9	-1.84	-2.79	-0.89	**<.001**
t+10	-2.00	-2.97	-1.03	**<.001**
t+11	-1.77	-2.74	-0.80	**<.001**
t+12	-1.25	-2.35	-0.14	**0.03**

*Note: coefficient represents the estimated difference in percentage points of market share between intervention and control groups, compared to difference in month t-1

** $p<.05$ in bold

*** month to treatment = -1 was excluded from the regression, as it represents the comparison at which all other estimates are being made

eTable 4. Results of alternative regression models

(i) Regression models run separately by generalists and specialists

	Detailed drugs				Non-detailed drugs		
	Change in market share associated with policy (in percentage points)	**95% Confidence Interval**	**P-Value**		**Change in market share associated with policy (in percentage points)**	**95% Confidence Interval**	**P-Value**
Generalists, all drugs	-1.92	(2.74) - (1.19)	<.001		1.23	0.78 - 1.69	<.001
Specialists, all drugs	-1.46	(2.08) - (0.83)	<.001		0.67	0.30 - 1.04	<.001

(ii) Regression model using total monthly count of a physician-drug pair as dependent variable (not market share)

	Detailed drugs				Non-detailed drugs		
	Change in prescription count associated with policy	**95% Confidence Interval**	**P-Value**		**Change in prescription count associated with policy**	**95% Confidence Interval**	**P-Value**
All physicians, all drugs	-0.13	(0.18) - (0.09)	<.001		0.09	0.05 - 0.12	<.001

(iii) Regression model limiting intervention physicians to closest 5 matches

	Detailed drugs				Non-detailed drugs		
	Change in market share associated with policy (in percentage points)	**95% Confidence Interval**	**P-Value**		**Change in market share associated with policy (in percentage points)**	**95% Confidence Interval**	**P-Value**
All physicians, all drugs	-1.78	(2.33) –(1.22)	<.001		0.87	0.49-1.18	<.001

(iv) Regression model run as a fractional logit (i.e., log-odds), with market share as dependent variable

	Detailed drugs				Non-detailed drugs		
	Change in market share associated with policy*	**95% Confidence Interval**	**P-Value**		**Change in market share associated with policy***	**95% Confidence Interval**	**P-Value**
All physicians, all drugs	0.93	0.90-0.96	<.001		1.05	1.03-1.08	<.001

* Note: regression coefficients have been exponentiated so they represent odds ratios

(v) Regression models dropping one AMC or drug class

	Detailed drugs				Non-detailed drugs		
	Change in market share associated with policy (in percentage points)	**95% Confidence Interval**	**P-Value**		**Change in market share associated with policy (in percentage points)**	**95% Confidence Interval**	**P-Value**
Dropped AMC:							
Stanford	-1.67	(2.20) - (1.15)	<.001		0.86	0.54 - 1.18	<.001
Northwestern	-1.65	(2.15) - (1.14)	<.001		0.85	0.52 - 1.18	<.001
UC Davis	-1.67	(2.19) - (1.17)	<.001		0.82	0.51 - 1.13	<.001
UCLA	-1.50	(2.04) - (0.96)	<.001		0.69	0.32 - 1.06	<.001
UCSF	-1.69	(2.21) - (1.19)	<.001		0.87	0.56 - 1.18	<.001
Boston	-1.57	(2.10) - (1.04)	<.001		0.65	0.30 - 1.01	<.001
Illinois	-1.61	(2.13) - (1.09)	<.001		0.74	0.41 - 1.06	<.001
Mt Sinai	-1.63	(2.15) - (1.10)	<.001		0.90	0.57 - 1.22	<.001
Southern California	-1.65	(2.19) - (1.11)	<.001		0.81	0.46 - 1.15	<.001
Pittsburgh	-1.62	(2.18) - (1.06)	<.001		0.72	0.37 - 1.08	<.001
Rochester	-1.68	(2.21) - (1.16)	<.001		0.80	0.49 - 1.11	<.001
UCSD	-1.70	(2.23) - (1.17)	<.001		0.88	0.55 - 1.22	<.001
Massachusetts	-1.72	(2.27) - (1.17)	<.001		0.66	0.30 - 1.03	<.001
Rush	-1.71	(2.25) - (1.16)	<.001		0.89	0.55 - 1.23	<.001
Temple	-1.67	(2.20) - (1.16)	<.001		0.87	0.56 - 1.19	<.001
New York Medical	-1.65	(2.20) - (1.10)	<.001		0.86	0.54 - 1.18	<.001
SUNY Downstate	-1.69	(2.20) - (1.20)	<.001		0.79	0.47 - 1.12	<.001
Tufts	-1.70	(2.22) - (1.17)	<.001		0.86	0.53 - 1.20	<.001
Thomas Jefferson	-1.67	(2.19) - (1.18)	<.001		0.85	0.55 - 1.17	<.001

	Detailed drugs				Non-detailed drugs		
	Change in market share associated with policy (in percentage points)	**95% Confidence Interval**	**P-Value**		**Change in market share associated with policy (in percentage points)**	**95% Confidence Interval**	**P-Value**
Dropped drug class:							
Sleep	-1.59	(2.14) - (1.05)	<.001		0.79	0.46 - 1.12	<.001
GERDs	-1.41	(2.02) - (0.81)	<.001		0.61	0.31 - 0.90	<.001
ADHD Drugs	-1.64	(2.18) - (1.09)	<.001		0.85	0.54 - 1.16	<.001
Antidepressives	-1.57	(2.13) - (1.00)	<.001		0.72	0.35 - 1.09	<.001
Statins	-1.69	(2.29) - (1.09)	<.001		0.70	0.32 - 1.08	<.001
Antihypertensives	-1.75	(2.37) - (1.12)	<.001		0.88	0.50 - 1.27	<.001
Antipsychotics	-1.60	(2.13) - (1.07)	<.001		0.90	0.57 - 1.22	<.001
Antidiabetics	-1.80	(2.42) - (1.19)	<.001		0.97	0.56 - 1.39	<.001