SFY21 MONTHLY BUDGET REPORT
NEVADA STATE BOARD OF PHARMACY
CURRENT MONTH: JULY

REVENUES	APPROVED BUDGET	BUDGET AMENDMENTS	REVISED BUDGET	CURRENT MONTH REVENUE/EXPENSE	PRIOR MONTH(s) REVENUE/EXPENSE	PROJECTIONS THROUGH 6/30/2020	TOTAL REVENUE/EXPENSE SFY21	DIFFERENCE
Beginning Balance	$ 2,133,664		$ 2,133,664	$ 2,234,060	$ -	$ -	$ 2,234,060	$ 100,396
Renewal Fees	$ 4,576,940		$ 4,576,940	$ 3,690	$ -	$ 4,573,250	$ 4,576,940	$ -
Registration Fees	$ 673,700		$ 673,700	$ 55,062	$ -	$ 618,638	$ 673,700	$ -
Misc. Revenue	$ 155,000	$ (154,000)	$ 1,000	$ 102	$ -	$ 898	$ 1,000	$ -
Recovered Costs	$ -	$ 28,000	$ 28,000	$ -	$ -	$ 28,000	$ 28,000	$ -
CC Processing Fees	$ -	$ 97,000	$ 97,000	$ 1,307	$ -	$ 95,694	$ 97,000	$ -
Paper Use Fee	$ -	$ 10,500	$ 10,500	$ 40	$ -	$ 10,460	$ 10,500	$ -
Change MGR RPh	$ -	$ 11,500	$ 11,500	$ 200	$ -	$ 11,300	$ 11,500	$ -
Inspections	$ -	$ 7,000	$ 7,000	$ 75	$ -	$ 6,925	$ 7,000	$ -
Interest Income	$ 30,500		$ 30,500	$ 56	$ -	$ 30,444	$ 30,500	$ -
Late Fees	$ 25,000		$ 25,000	$ 1,605	$ -	$ 23,395	$ 25,000	$ -
Total Revenues	**$ 7,594,804**	**$ -**	**$ 7,594,804**	**$ 2,296,196**	**$ -**	**$ 5,399,004**	**$ 7,695,200**	**$ 100,396**

EXPENSES								
Payroll	$ 2,897,623		$ 2,897,623	$ 230,241	$ -	$ 2,667,382	$ 2,897,623	$ -
Operating	$ 909,437		$ 909,437	$ 45,637	$ -	$ 863,800	$ 909,437	$ -
Equipment	$ 30,000		$ 30,000	$ -	$ -	$ 30,000	$ 30,000	$ -
In-State Travel	$ 110,000		$ 110,000	$ 410	$ -	$ 109,590	$ 110,000	$ -
Out-of-State Travel	$ 65,000		$ 65,000	$ -	$ -	$ 65,000	$ 65,000	$ -
DAG Cost	$ 12,000		$ 12,000	$ -	$ -	$ 12,000	$ 12,000	$ -
Aid for Education	$ 2,000		$ 2,000	$ -	$ -	$ 2,000	$ 2,000	$ -
Reserve	$ 3,568,744		$ 3,568,744	$ -	$ -	$ 3,568,744	$ 3,568,744	$ -
Total Expenses	**$ 7,594,804**	**$ -**	**$ 7,594,804**	**$ 276,289**	**$ -**	**$ 7,318,515**	**$ 7,594,804**	**$ -**
Balance	$ -	$ -	$ -		$ -			

REQUEST TO REDUCE CONTROLLED SUBSTANCE LICENSE FEES FOR RESIDENTS AND FELLOWS

- Residents and Fellows are physicians in training
  - They carry limited/restricted medical licenses for the duration of the training with UNLV SOM
- NVBME Licensing
  - Full licensing = $1200
  - Resident/Fellow licensing = $415 initial; $40 annually
- NVBOM Licensing
  - Full licensing = $450 annually
  - Resident/Fellow licensing = $200 annually
- DEA Licensing
  - Practitioner licensing = $731 every 3 years
  - Resident/Fellow licensing = $0 (free)
- NVBOP Licensing
  - Practitioner licensing = $200 renews on even years
  - No reduced rate for Residents/Fellows
  - **Request to keep rate at $80 per trainee**

UNLV | SCHOOL OF MEDICINE

GRADUATE MEDICAL EDUCATION

UNLV SCHOOL OF MEDICINE

Presenters:

Megan Cortney, MSM, Institutional Graduate Medical Education Coordinator
Priscilla Manrique, MBA, Graduate Medical Education Director

UNLV | SCHOOL OF MEDICINE
GRADUATE MEDICAL EDUCATION

SUPPLEMENTAL PACKET:

Additional Information submitted by Tracy L. Singh, Esq., counsel of record for

John Phoenix, Applicant

(In addition to pages 1191-1196 for Agenda Item #15)

September 2, 2020

15

Nevada State Board of NURSING
Primary Source License Verification

ViewReportHeaderTitle

Primary Source Board of Nursing Report Summary for

JOHN ROBERT PHOENIX

Thursday, August 20 2020 09:50:50 AM

The legend below provides details related to the statuses for advanced practice registered nurses (APRNs) only

Active– *ascribed to APRNs who meet the requirements for licensure, but do not meet the requirements, or have not applied for, prescribing privileges.*

Active Prescribing– *ascribed to all APRNs who have been granted authority to prescribe all legend drugs and may include Schedule CIII-V*

Active Prescribing – CII – *ascribed to all APRNs who have been granted authority to prescribe within the Schedule CII-V category, and is not required to obtain a protocol with a collaborative physician.*

Active Prescribing-CII-COLL – *ascribed to all APRNs who have been granted authority to prescribe within the Schedule CII-V category, and have provided a copy of his/her current protocol with a collaborative physician.*

Active Prescribing -D– *ascribed to all APRNs who have been granted authority to prescribe and dispense all legend drugs and may include Schedule CIII-V*

Active Prescribing – CII – D *ascribed to all APRNs who have been granted authority to prescribe and dispense within the Schedule CII-V category, and is not required to obtain a protocol with a collaborative physician.*

Active Prescribing-CII-COLL –D *ascribed to all APRNs who have been granted authority to prescribe and dispense within the Schedule CII-V category, and have provided a copy of his/her current protocol with a collaborative physician.*

APRNs must also apply with the Nevada State Board of Pharmacy and/or DEA before they can prescribe in Nevada.

If an APRN wishes to remove the protocol requirement they must submit a letter on letterhead from their employer to the Nevada State Board of Nursing verifying that they have worked a minimum of 2 years or 2,000 hours as an APRN.

Details related to License / Certificate Status can be found at the bottom of this page.

Name on License	License / Certificate Type	License / Certificate Number	License Status	Original Issue Date	Current Expiration Date	Discipline
PHOENIX, JOHN ROBERT	RN	T-786094A	Expired	03/04/1994	07/04/1994	NO

Primary Source Board of Nursing Messages & Notifications

- This temporary license is issued until the applicant meets all of the licensure requirements for a permanent license. A temporary license may not be extended or renewed.

Name on License	License / Certificate Type	License / Certificate Number	License Status	Original Issue Date	Current Expiration Date	Discipline
PHOENIX, JOHN ROBERT	RN	RN25160	Active	03/23/1994	07/07/2022	NO

Name on License	License / Certificate Type	License / Certificate Number	License Status	Original Issue Date	Current Expiration Date	Discipline
PHOENIX, JOHN ROBERT	APRN-CNP	TAPN700742	Expired	01/24/2012	07/07/2012	NO

Primary Source Board of Nursing Messages & Notifications

- This temporary license is issued until the applicant meets all of the licensure requirements for a permanent license. A temporary license may not be extended or renewed.

Advanced Practice license/recognition information

- Population Focus / Specialty:
  - Focus/Specialty: Family Across the Lifespan
  - Expiration Date: 07/07/2012
  - Original Issuance Date: 01/24/2012
  - Current Issue Date: 01/24/2012
  - Has discipline: NO
  - Certification expiration date: 11/30/2021

Name on License	License / Certificate Type	License / Certificate Number	License Status	Original Issue Date	Current Expiration Date	Discipline
PHOENIX, JOHN ROBERT	APRN-CNP	APRN001359	Active - Prescribing - CII - D	01/30/2012	07/07/2022	NO

Advanced Practice license/recognition information

- Population Focus / Specialty:
  - Focus/Specialty: Family Across the Lifespan
  - Expiration Date: 07/07/2022
  - Original Issuance Date: 01/30/2012
  - Current Issue Date: 08/19/2020
  - Has discipline: NO
  - Certification expiration date: 11/30/2021

License type information

- **RN:** Registered Nurse
- **PN:** Practical Nurse (aka Licensed Practical Nurse (LPN), Vocational Nurse (VN), Licensed Vocational Nurse (LVN))
- **CNP:** Certified Nurse Practitioner
- **CNS:** Clinical Nurse Specialist
- **CNM:** Certified Nurse Midwife
- **CRNA:** Certified Registered Nurse Anesthetist

Font Size

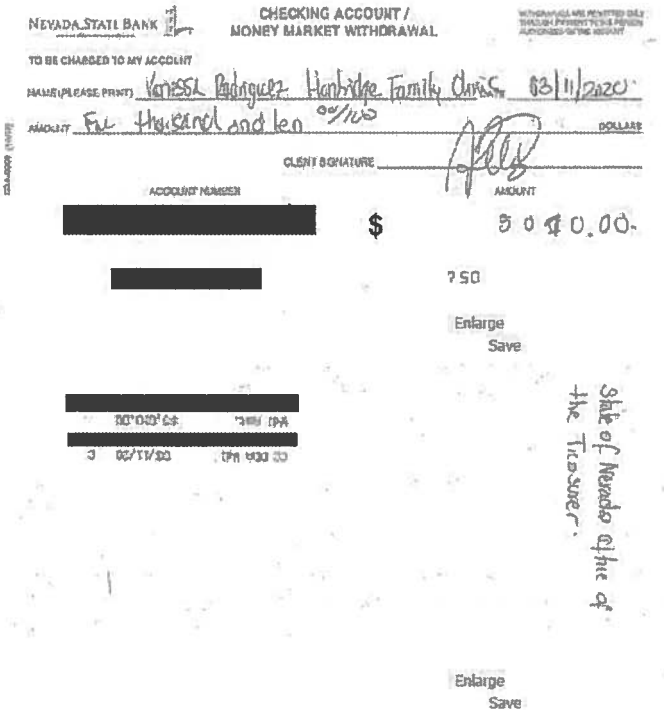
Close Window Print Screen

View Transaction Printable View

Transaction Information

Account	Business Growth Checking - xxxxx4871
Description	TELLER CASHED CHECK
Amount	$-5,010.00
Status	Cleared
Transaction	Check
Date Cleared	March 11, 2020
Date Initiated	March 11, 2020

Note: Check and Deposit images older than 180 days are not available online, but can be obtained by ordering copies by visiting the Services tab. In order to maintain service, there is scheduled maintenance every Saturday at 11:00 PM and on the last day of each month at 7:00 PM. During this time, which typically lasts about six hours, your images may not be available. We apologize for any inconvenience this may cause.


NEVADA STATE BANK

CHECKING ACCOUNT / MONEY MARKET WITHDRAWAL

TO BE CHARGED TO MY ACCOUNT

NAME (PLEASE PRINT) Vanessa Rodriguez Hardridge Family Trust DATE 03/11/2020

AMOUNT Five thousand and ten 00/100 DOLLARS

CLIENT SIGNATURE

ACCOUNT NUMBER [redacted] AMOUNT $ 5010.00

[redacted] 750

Enlarge Save

State of Nevada office of the Treasurer.

Enlarge Save

CURRICULUM VITAE

JOHN R. PHOENIX, MSN, APN-C.

Education:

2011	California State University, Domiguez Hills Carson, CA Master of Science-Nursing, Family Nurse Practitioner role option
2002	LaSalle University, Mandeville, LA Bachelor of Arts Degree
1992	Valencia Community College, Orlando, Florida Associate Arts Degree
1990	Valencia Community College, Orlando, Florida Associate Science Degree Nursing

Professional Experience:

4/18-present	Gay and Lesbian Center of Southern Nevada Laboratory Director for CLIA waived HIV testing program 401 S Maryland Parkway Las Vegas, NV 89101
12/17-present	Superior Emergency Physicians Nurse Practitioner, Emergency Deparment 1409 E Lake Mead Blvd North Las Vegas, NV 89032
10/14-2018	Correct Care Solutions Nurse Practitioner, corrections 1283 Murfreesboro Rd, Suite 500, Nashville TN 37217
08/13-present	Huntridge Family Clinic Nurse Practitioner, Family Practice, Owner Medical Director, Laboratory Director 1830 E Sahara Ave Suite 201 Las Vegas, NV 89104
2012-2016	Freemont Emergency Services Nurse Practitioner, Emergency Department 8670 Cheyenne Ave Suite 120 Las Vegas, NV 89129
2012-2014	eStudy Site Sub Investigator 3196 S Maryland Parkway Suite 207 Las Vegas, NV 89109

2012-2012	Nevada Neuroscience Insitute at Sunrise Hospital and Medical Ceter Nurse Practitioner, Stroke and Neurology Program 3131 La Canada Suite 101 Las Vegas, NV 89169
2012-2012	Westways Staffing Services Registered Nurse-Emergency Department/Urgent Care Centers, staff relief 500 City Parkway Orange, CA 92868

Professional experience (cont)

2011-2012	All About Staffing Registered Nurse-Emergency Department, Travel assignment 1000 Sawgrass Corporate Parkway Sunrise, FL
2011-2012	Meditech Health Services Inc Registered Nurse-Emergency Department/Urgent Care Centers, staff relief 4562 Westinghouse St Ventura, CA
2008-2011	Valley Presbyterian Hospital ED Charge Nurse, Stroke program Coordinator 15107 Vanowen St Van Nuys, CA 91364 General emergency department, annual census 50, 000
2008-2009	UCLA Geffen School of Medicine Clinical Nurse II, Clinical Research Nurse, FAST-MAG Clinical Trial 924 Westwood Blvd Suite 540 Mailcode 698346 Los Angeles, CA
2008-2008	Los Robles Hospital and Medical Center Research Coordinator-Oncology, Business Development Stroke Program Manager 215 West Janss Road Thousand Oaks, CA
2005-2008	Sunrise Hospital Medical Center Nevada Neuroscience Institute Manager stroke and research programs Research Coordinator 3186 S Maryland Parkway Las Vegas, NV 3131 La Canada Suite 101 Las Vegas, NV

2005-2005 ADP Total Source/Genezen Healthcare
Territory Clinical Manager
10200 Sunset Dr
Miami, FL

2003-2005 Staff Nurse
University Medical Center
Las Vegas, Nevada

Professional experience (cont)

2002-2003 Nevada Neurological Consultants, Ltd
Manager Clinical Research Dept /Research Coordinator
880 Seven Hills Blvd, Suite 220
Henderson, NV 89052

2000-2002 John R Bishop, Inc
Owner, Clinical Research Consultant, Research Coordinator
2420 Sherman Place
Las Vegas, NV 89102

1998-2000 Director
ICSL – Clinical Studies
2931 North Tenaya Way, Suite 102
Las Vegas, Nevada 89128

1996-1998 Clinical Operations Training and Education Specialist
Health Management Consultants
Mederi Home Health, Florida

1995-1996 Shift Manager, Emergency Room
Orlando Regional Healthcare Systems
Sandlake Div , Orlando, Florida

1994-1995 Staff Nurse
University Medical Center
Las Vegas, Nevada

1993-1998 Adjunct Faculty
Valencia Community College
Orlando, Florida

1987-1994 Administrative Supervisor
Lucerne Medical Center
Orlando, Florida

Professional Memberships/Organizaations:

Current American Academy of Nurse Practitioners
Current Nevada Advance Practice Nurses Association
Current American Nurses Association

Licenses/Certifications:

Current Advanced Practice Nurse-Nevada
Current Registered Nurse- California, Nevada
Current American Heart Association – Pediatric Advanced Life Support Provider
Current American Heart Association - Advanced Cardiac Life Support Provider
Current American Heart Association-Basic Life Support Provider
Current HIV primary care certified provider

Faculty Appointments:

2017-present South University
Savanah, GA
Clinical Preceptor

2018—present University of Nevada Reno
Reno, NV
Community Faculty Member

Hospital Affiliations:

2013-present North Vista Hospital
1409 E Lake Mead
North Las Vegas, NV 89030

2012-2016 Sunrise Hospital and Medical Center
3186 S Maryland Parkway
Las Vegas, NV 89109

2012-2016 Mountain View Hospital
3100 N Tenaya Way
Las Vegas, NV 89128

2012-2016 Southern Hills Hospital
9300 Sunset Road
Las Vegas, NV 89148

September 25, 2019

Paul Luke
Via Merano Street
Henderson, NV 89052

Nevada State Board of Pharmacy
985 Damonte Ranch Pkwy, Ste. 206
Reno, NV 89521

Dear Board of Pharmacy,

The reason behind writing this letter is to express my sincere apologies for my actions that happened in the pharmacy at St. Rose Dominican Hospital St. Martin campus. My behavior was not appropriate and did not reflect the respect that was expected in my field of work. There is, however, no excuse for such kind of bad behavior.

I realized that I was so wrong and that stealing is a serious crime. I admit that I was wrong and accept that I'm guilty. I also accept full responsibility and promise that I will never do this again. I feel very ashamed and remorseful for my actions. I can't make any kind of excuse for what I did. I am very sorry for what I transpired. I meant no disrespect to the Nevada State Board of Pharmacy.

Obviously, I can understand it maybe very difficult for the Nevada State Board of Pharmacy to accept my apology because what I did was out of bounds. I crossed my limits, but I hope that this letter might give me an opportunity to prove my behavior and to help me make things better.

Sincerely,

Paul Luke, Pharm.D, MBA
e@gmail.com
702.

Exhibit 1

U. S. Department of Justice - Drug Enforcement Administration

SURRENDER FOR CAUSE OF DEA CERTIFICATE OF REGISTRATION

DEA USE ONLY
File No.

In view of my alleged failure to comply with the Federal requirements pertaining to controlled substances or list 1 chemicals, and as an indication of my good faith in desiring to remedy any incorrect or unlawful practices on my part, I hereby surrender for cause my Drug Enforcement Administration (DEA) Certificate of Registration.

I understand that submission of this document to DEA, including any employee of DEA, shall result in the immediate termination of my registration.

I understand that I am not entitled to a refund of any payments made by me in connection with my registration.

I understand that, beginning on the date that I sign below, I am not authorized to order, manufacture, distribute, possess, dispense, administer, prescribe, or engage in any other activities with controlled substances or list I chemicals.

With the understanding that I am not required to surrender my DEA Certificate of Registration, I freely and under no duress, implied or expressed, execute this document and choose to take the action described herein.

NAME OF REGISTRANT *(Print)*	ADDRESS OF REGISTRANT
Victoria Wall	2013 Grouse St. Las Vegas, NV 89134
DEA REGISTRATION NO. BW 8998025	

SIGNATURE OF REGISTRANT OR AUTHORIZED INDIVIDUAL	DATE
W Victoria Wall	6/14/2020

WITNESSES TO REGISTRANT'S SIGNATURE

NAME AND DATE	TITLE
Beverly A. Fox 6/14/2020	—
NAME AND DATE	TITLE
6/14/2020	—

PRIVACY ACT

AUTHORITY: Section 301 of the Controlled Substances Act of 1970 (21 U.S.C 821).
PURPOSE: Permit surrender for cause of DEA Certificate of Registration.
ROUTINE USES: The Controlled Substances Act Registration Records produce special reports as required for statistical analytical purposes. Disclosures of information from this system are made to the following categories of users for the purposes stated:
A. Other Federal law enforcement and regulatory agencies for law enforcement and regulatory purposes.
B. State and local law enforcement and regulatory agencies for law enforcement and regulatory purposes.
C. Persons registered under the Controlled Substances Act (21 U.S.C. 822 and 957) for the purpose of verifying the registration of customers and practitioners.
EFFECT: Submission of this information is voluntary. There is no effect on the individual if not provided.

Exhibit A

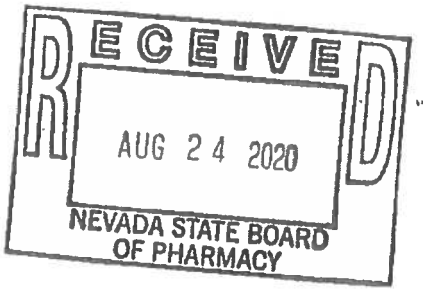
NOTICE OF RELINQUISHMENT OF LICENSE

To: The Nevada State Board of Pharmacy

985 Damonte Ranch Parkway, Suite 206

Reno, Nevada 89521

Attn: Bendt Kandt, General Counsel



From:

Victoria Wall

Grouse St.

Las Vegas, NV 89134

Re: Certificate of Registration No. CS15026 issued by the Nevada Board of Pharmacy.

Greetings:

Due to a technical violation Doctor Wall no longer qualifies to hold a controlled substance registration issued by the Nevada Board of Pharmacy (Certificate of Registration No. CS15026). Without admitting any intentional wrongdoing and without prejudice to reapply to the Board in the future, subject to strict compliance, Doctor Wall herewith voluntarily relinquishes her license to issue controlled substances, specifically Certificate of Registration Number CS15026. This voluntary tender is to be effective immediately.

Very truly,

Baron Harmon

Exhibit B

10:46

search.dca.ca.gov

CA.GOV dca SEARCH

MEDICAL BOARD OF CALIFORNIA

LICENSING DETAILS FOR: A 88040

NAME: WALL, VICKI K

LICENSE TYPE: PHYSICIAN AND SURGEON A

PRIMARY STATUS: DELINQUENT - LICENSE RENEWAL FEE HAS NOT BEEN PAID. NO PRACTICE IS PERMITTED.

SCHOOL NAME: UNIVERSITY OF NEVADA SCHOOL OF MEDICINE

GRADUATION YEAR: 2000

ADDRESS OF RECORD

6401 CENTENNIAL CENTER BLVD
LAS VEGAS NV 89149-4532
CLARK COUNTY

MAP

ISSUANCE DATE

JULY 1, 2004

EXPIRATION DATE

JULY 31, 2018

CURRENT DATE / TIME

Exhibit C

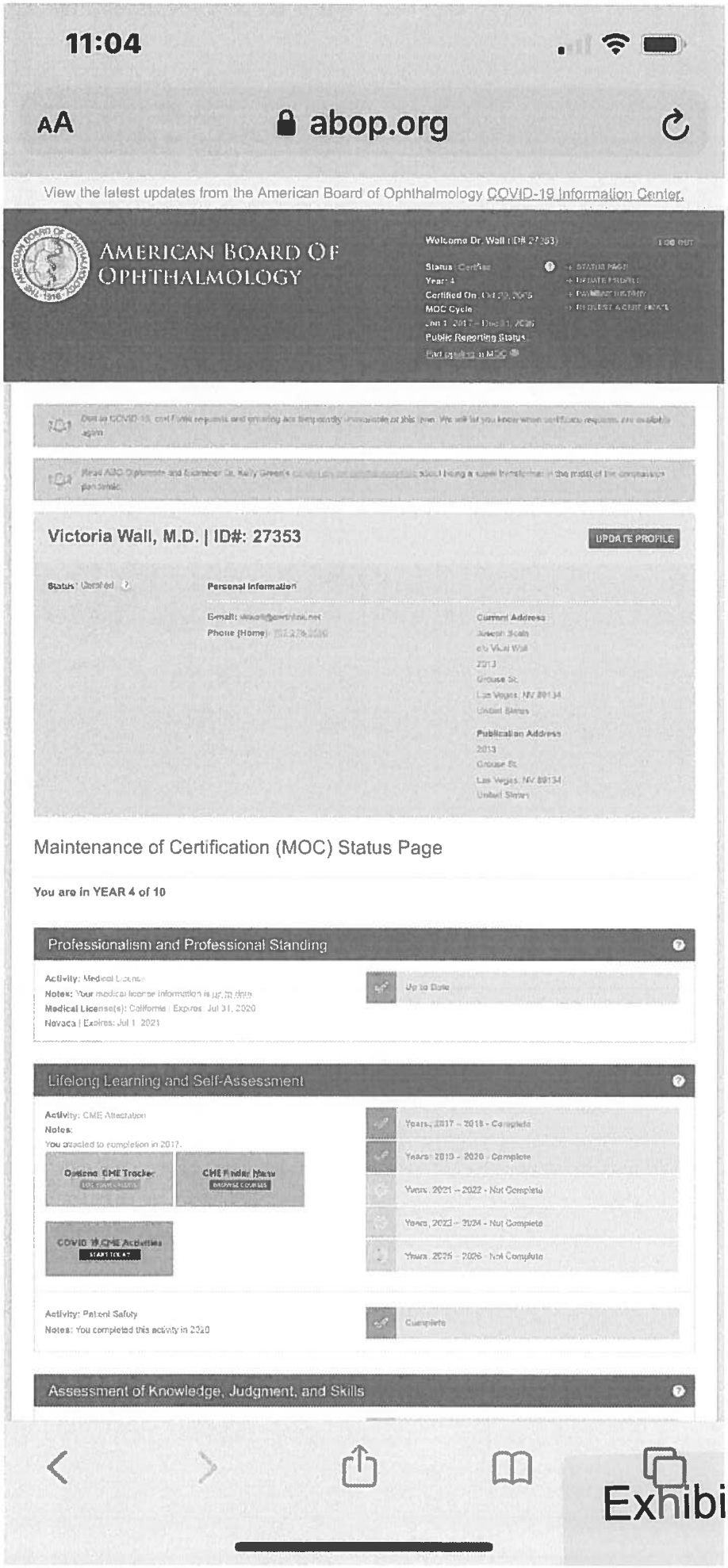

11:04
AA
abop.org
View the latest updates from the American Board of Ophthalmology COVID-19 Information Center.
AMERICAN BOARD OF OPHTHALMOLOGY
Welcome Dr. Wall (ID# 27353)
Victoria Wall, M.D. | ID#: 27353
UPDATE PROFILE
Personal Information
Maintenance of Certification (MOC) Status Page
You are in YEAR 4 of 10
Professionalism and Professional Standing
Lifelong Learning and Self-Assessment
Assessment of Knowledge, Judgment, and Skills

Exhibit D

From: Vicki Wall
Sent: Tuesday, September 01, 2020 12:46 AM
To: Baron Harmon <bharmon@fdbalaw.com>
Subject: Letter to the Board of Pharmacy 8/31/20

Dear Madame and Sirs of the Board of Pharmacy, General Counsel Brett Kandt:

It is with a heavy heart and deep regret that this situation has arisen. In 2008, the year in question, I was a 34 year old surgeon who left for work at 5 am, finished up around 6:30 at night, and was on call 24/7. I was stressed to death, worried about my biological clock ticking, and didn't even have time to get to the dentist or take care of myself. Since the age of 5 I wanted to be a physician. I was raised by a single mother who was a registered nurse at Sunrise Hospital here in Las Vegas. The two of us worked my entire childhood and adolescence toward that goal. I studied excessively, she worked three jobs. I went through undergrad at UCSD in three years, to save money on the fourth year, because I had a long financial haul ahead of me. I chose to go to the University of Nevada School of Medicine. I received substantial scholarships and as an "in stater" my tuition was $10,000 instead of $40,000 a year in a private medical school. After my four years of residency I entered the workforce with $65,000 in loans.

When I stopped working for the ophthalmology practice in 2008 to pursue becoming a mother, I had every intent to return to practicing medicine. But after I finally gave birth to my daughter in 2010 I made several financial sacrifices and dedicated myself to her. The internal struggle and stress is significant for female physicians (or, for any female employed outside the home with a toddler): career vs the happiness of my family and newborn daughter. To save money only, I downgraded my medical license in Nevada to inactive and continued my medical license in California because they didn't offer an inactive status in California. For 10 years, from 2008-2018 I paid thousands of dollars each year, without earning medical fees to maintain my Nevada license, California license, DEA registration, controlled substance license, board of pharmacy license, and my board certification for ophthalmology. My new nuclear family helped me defray my expenses to maintain licensure.

I maintained my licensure for my own autonomy. Yes, I'm proud that I came from a humble background and worked very hard to achieve my dreams. Yes, I wanted to maintain my licensure in case my marriage ended in a divorce like 50% of marriages or I am left a widow (my husband has cancer). I maintained my continuing medical education. I continued to participate in the ophthalmology community and attend annual meetings.

I have every intent to do things by the book. I never charged a fee to a patient past 2008. I helped only my family. I never abused the power of the prescription pad. I regret the one fateful mistake I made that wound me up here. I stopped paying for my medical license in California in 2018. I really didn't realize that by neglecting to pay that fee, to try to save a couple thousand dollars, that all of my professional licenses would be adversely impacted.

I am deeply sad that I feel impotent now and cut off from my first love, medicine. It's ironic that on 8/31 tonight, my mother's birthday, I receive notice form my lawyer that the Board of Pharmacy has a insurmountable fine headed my way of $16,000. I have to tell my registered nurse mom that worked so hard all of those years that I really have to let all of my licensure go because I can't afford it.

I want to continue my licensure for my autonomy and the ease of returning back to work. It still is my intent to reactivate my inactive Nevada license, and go back to work. I only wish I had continued paying California for my license, for I wouldn't be before you right now. I am left with no real plan on how to pay the Board and return to work. In view of the above, the difficult economy and my otherwise clean record, I ask for mitigation. I can afford to pay $2,000 from my credit card.

Exhibit E

Respectfully,

Victoria Wall, M.D.

BARON DAVID HARMON
FAVIL DAVID BERNS & ASSOCIATES
30 E. NORTH AVE.
NORTHLAKE, IL 60164
(708)562-1076 x 621

Timesheet for Brett Kandt, General Counsel–

NEVADA STATE BOARD OF PHARMACY V. VICTORIA K. WALL, MD - Case No. 20-067-S

DATE	TIME
6/5/2020	2.00

Staff meeting to review unlawful practice for Registration No. CS15026; draft and serve CEASE and DESIST pursuant to NRS 639.2895.

6/23/2020	3.75

Staff meeting to review file and evaluate possible charges in Case No. 20-067-S; review investigation report and draft Notice of Intended Action and Accusation in Case No. 19-072-CS-S; confer with client.

6/25/2020	1.25

Review and revise final version of Notice of Intended Action and Accusation in Case No. 19-072-CS-S together with Statement to Respondent and Notice of Hearing for filing and service.

7/13/2020	1.75

Review Wall Answer and Notice of Defense in Case No. 19-072-CS-S; prepare for hearing.

7/28/2020	5.25

Research and draft Motion to Deem Allegations Admitted in Case No. 19-072-CS-S.

8/20/2020	0.50

Confer with opposing counsel; finalize and file Motion to Deem Allegations Admitted in Case No. 19-072-CS-S.

8/21/2020	1.25

Confer with opposing counsel; draft proposed stipulation in Case No. 19-072-CS-S.

8/24/2020	2.25

Review Motion for Continuance and in Case No. 19-072-CS-S and draft and file opposition thereto; confer with opposing counsel.

TOTAL 15.75 hours x $72.95/hour = $1,313.10

Exhibit F

INVESTIGATION HOURS

CASE NUMBER 20-067 Dr. Victoria Wall STAFF NAME McClish

DATE	STAFF	ACTIVITY	HOURS
6/4		-initial review, emails, PMP pull, phone w/ Dr. Wall + RMC	1.25
6/10		run reports - Alley letter, rec. Rxs - visit CHS	5.25
6/23		email w/ lawyer, email w/ RMC	.75
6/30		-answer / print + read	1.25
7/13		-response - print + deliver	.5
8/5		Rol - copy-scan, read, deliver	5 hr
		$649.77	
		46.4123, 14 hrs	
		HRLY WAGE	TOTAL TIME
		TOTAL BILL	$649.77

Staff Signature [signature] Date 8/25/20

LEWIS BRISBOIS BISGAARD & SMITH LLP
JILL M. CHASE
Nevada Bar No. 5250
6385 S. Rainbow Boulevard, Suite 600
Las Vegas, Nevada 89118
Telephone: 702.893.3383
Facsimile: 702.893.3789
Email: Jill.Chase@lewisbrisbois.com
Attorney for Abdel M. Khalek, M.D.

BEFORE THE NEVADA STATE BOARD OF PHARMACY

NEVADA STATE BOARD OF PHARMACY, Petitioner, vs. ABDEL M. KHALEK, M.D., Certificate of Registration No. CS19745 and PD00722 Respondent.	CASE NO. 19-090-CS-S ANSWER AND NOTICE OF DEFENSE

ABDEL M. KHALEK, M.D., ("Dr. Khalek"), by and through his counsel, JILL M. CHASE, ESQ. of the law firm of LEWIS BRISBOIS BISGAARD & SMITH, LLP hereby submits his Answer and Notice of Defense.

JURISDICTION

1. Answering Paragraph 1, Respondent objects to this paragraph as it calls for a legal conclusion; notwithstanding, Respondent admits that he held a Board-issued controlled substance registration, Certificate of Registration No. CS19745 and PD00722.

FACTUAL ALLEGATIONS

2. Answering Paragraph 2, Respondent admits that Vinay Kumar Bararia, M.D. was not registered with the Board at the time of the alleged events herein.

3. Answering Paragraph 3, Respondent is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph III and therefore denies these allegations.

4. Answering Paragraph 4, Respondent is without sufficient knowledge,

information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 4 and therefore denies these allegations. .

5. Answering Paragraph 5, Respondent admits he was employed at Trimcare from October 2018 to April 2019.

6. Answering Paragraph 6, Respondent is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 6 and therefore denies these allegations.

7. Answering Paragraph 7, Respondent is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 7 and therefore denies these allegations.

8. Answering Paragraph 8, Respondent denies that he was the medical director of Ageless Aesthetics from October 2018 to April 2019.

9. Answering Paragraph 9, Respondent is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 9 and therefore denies these allegations.

10. Answering Paragraph 10, Respondent denies these allegations as to this Respondent, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the remaining allegations contained in Paragraph 10 and therefore denies these allegations.

11. Answering Paragraph 11, Respondent denies these allegations.

12. Answering Paragraph 12, Respondent is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 12 and therefore denies these allegations.

13. Answering Paragraph 13, this allegation is not directed to this Respondent is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 13 and therefore denies these allegations.

14. Answering Paragraph 14, Respondent denies these allegations as to this

Respondent, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the remaining allegations contained in Paragraph 14 and therefore denies these allegations.

15. Answering Paragraph 15, Respondent denies these allegations as to this Respondent, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the remaining allegations contained in Paragraph 15 and therefore denies these allegations.

16. Answering Paragraph 16, Respondent is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 16 and therefore denies these allegations.

17. Answering Paragraph 17, Respondent is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 17 and therefore denies these allegations

APPLICABLE LAW

18. Answering Paragraph 18, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

19. Answering Paragraph 19, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

20. Answering Paragraph 20, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

21. Answering Paragraph 21, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

22. Answering Paragraph 22, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

23. Answering Paragraph 23, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

24. Answering Paragraph 24, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

25. Answering Paragraph 25, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

26. Answering Paragraph 26, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

27. Answering Paragraph 27, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

28. Answering Paragraph 28, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

29. Answering Paragraph 29, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

30. Answering Paragraph 30, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

31. Answering Paragraph 31, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

32. Answering Paragraph 32, Respondent objects to this paragraph as it calls for a legal conclusion, for which no response is required.

FIRST CAUSE OF ACTION

Unprofessional Conduct-Party to a Fraudulent/Deceitful Practice/Transaction

33. Answering Paragraph 33, Respondent denies that he permitted Bararia to perform any unlawful acts alleged in Paragraph 33, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 33 as to the remaining Respondents and therefore denies these allegations.

SECOND CAUSE OF ACTION

Unprofessional Conduct-Incompetent, Unskillful or Negligent Performance of Duties

34. Answering Paragraph 34, Respondent denies that he permitted Bararia to perform any unlawful acts alleged in Paragraph 34, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations

contained in Paragraph 34 as to the remaining Respondents and therefore denies these allegations.

THIRD CAUSE OF ACTION

Unprofessional Conduct-Aiding and Abetting Unlicensed Practice

35. Answering Paragraph 35, Respondent denies that he permitted Bararia to perform any unlawful acts alleged in Paragraph 35, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 35 as to the remaining Respondents and therefore denies these allegations.

FOURTH CAUSE OF ACTION

Unprofessional Conduct-Prescribing/Dispensing Without Bona Fide Therapeutic Relationship

36. Answering Paragraph 36, Respondent denies that he performed any unlawful acts alleged in Paragraph 36, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 36 as to the remaining Respondents and therefore denies these allegations.

FIFTH CAUSE OF ACTION

Violations of Federal Controlled Substances Act

37. Answering Paragraph 37, Respondent denies that he permitted Bararia to perform any unlawful acts alleged in Paragraph 37, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 37 as to the remaining Respondents and therefore denies these allegations.

///

///

///

///

///

SIXTH CAUSE OF ACTION

Violations of State Law for Unlicensed Practice

38. Answering Paragraph 38, Respondent denies that he permitted Bararia to perform any unlawful acts alleged in Paragraph 38, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 38 as to the remaining Respondents and therefore denies these allegations.

SEVENTH CAUSE OF ACTION

Failure to Maintain Security of Controlled Substances or Dangerous Drugs

39. Answering Paragraph 39, Respondent denies that he permitted Bararia and/or other unlicensed employees of Trimcare and/or Ageless Aesthetics to perform any unlawful acts alleged in Paragraph 39, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 39 as to the remaining Respondents and therefore denies these allegations.

EIGHTH CAUSE OF ACTION

Failure to Maintain Records for Controlled Substances Dispensed

40. Answering Paragraph 40, Respondent denies that he performed or committed any of the unlawful acts alleged in Paragraph 40, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 40 as to the remaining Respondents and therefore denies these allegations.

NINTH CAUSE OF ACTION

Failure to Verify Dispensed Medications for Accuracy

41. Answering Paragraph 41, Respondent denies that he performed any unlawful acts alleged in Paragraph 41, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 41 as to the remaining Respondents and therefore denies these allegations.

///

TENTH CAUSE OF ACTION

Failure to Inventory Controlled Substances Every Two Years

42. Answering Paragraph 42, Respondent denies that he performed any unlawful acts alleged in Paragraph 42, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 42 as to the remaining Respondents and therefore denies these allegations.

ELEVENTH CAUSE OF ACTION

Failure to Properly Segregate/Dispose Adulterated/Expired Drugs

43. Answering Paragraph 43, Respondent denies that he performed or committed any of the unlawful acts alleged in Paragraph 43, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 43 as to the remaining Respondents and therefore denies these allegations.

TWELFTH CAUSE OF ACTION

Failure to Properly Label Pre-Filled Syringes Against

44. Answering Paragraph 44, Respondent states that this allegation seeks information about other Respondents for which he is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 44 as to the remaining Respondents and therefore denies these allegations.

THIRTEENTH CAUSE OF ACTION

Commission of Acts that Render Registration Inconsistent with the Public Interest

45. Answering Paragraph 45, Respondent denies this paragraph as to himself, but is without sufficient knowledge, information upon which to base a belief as to the truth or falsity of the allegations contained in Paragraph 45 as to the remaining Respondents and therefore denies these allegations.

///

///

AFFIRMATIVE DEFENSES

FIRST AFFIRMATIVE DEFENSE

The Board's Complaint fails to state a claim on which relief may be granted.

SECOND AFFIRMATIVE DEFENSE

The Board's Complaint, and each cause of action therein, is barred by the doctrine of laches, estoppel, and the doctrine of unclean hands.

THIRD AFFIRMATIVE DEFENSE

Respondent denies each and every allegation of the Board's Complaint not specifically admitted or otherwise pled to herein.

WHEREFORE, Respondent prays for judgment as follows:

1. That all charges against him be dismissed;

2. For such other and further relief as may be deemed just and proper in these premises.

DATED: August 28, 2020

Respectfully submitted,

Jill M. Chase
LEWIS BRISBOIS BISGAARD & SMITH LLP

/s/ Jill M. Chase
By: _____
Attorneys for Abdel Khalek, M.D.

BEFORE THE NEVADA STATE BOARD OF PHARMACY

NEVADA STATE BOARD OF PHARMACY, Case Nos. 18-096-RPH-A-S
Petitioner, 18-096-RPH-B-S
18-096-PH-S

v.

GLORY K. REMLEY, R.PH.
Certificate of Registration No. 10562

JESSICA L. HUEY, R.PH.
Certificate of Registration No. 18577, and

WALMART PHARMACY #10-3728
Certificate of Registration No. PH02226

Respondents

_____/

HAL TAYLOR, ESQ.
223 Marsh Avenue
RENO, NV 89509
TEL (775) 828-2223, FAX (775) 328-1113

RESPONDENT WALMART'S ANSWER

AND NOTICE OF DEFENSE

Respondent Walmart Pharmacy #10-3728 ("Respondent Walmart"), in answer to the Notice of Intended Action and Accusation ("Accusation") in the above matter, admits, denies and alleges as follows:

Jurisdiction

I.

Admitted.

Factual Allegations

II.

Admitted

III.

Admitted that A.L. was prescribed Tramadol 50 mg. with instructions to take one tablet every six hours as needed. The prescription allowed for a quantity of 12 tablets for a three-day supply and "0(Zero)" refills. ("Prescription") Admitted that the Prescription was dated August 3, 2018. Respondent Walmart has no direct knowledge of A.L.'s medical examination that let to the Prescription being written.

IV.

Admitted that on August 9, 2018, A.L. tendered the Prescription to Walmart, and that pharmaceutical technician John Castro ("Castro") performed the initial data entry into Walmart's pharmaceutical computer system. Admitted that the computer system designated the Prescription as Prescription No. 4466273.

V.

Admitted that during the data entry, Castro mistakenly entered the days' supply of "3" into the computer system's refill field rather than the "0" refills written in the Prescription.

VI.

Admitted that Respondent Remley is on record as the verifying pharmacist for the four-point entry check for this Prescription, and that she failed to detect the refill error when she verified the data entry as accurate.

VII.

Admitted that Respondent Huey performed the Visual Verification on the medication. Per the applicable Walmart Standards of Practice, the pharmacist performing the Visual Verification has no responsibility for confirming that the refill information has been properly transferred from the subject prescription to the computer. Respondent Walmart denies that Respondent Huey violated any statute or regulation by not identifying any refill error for this Prescription.

VIII.

Admitted that the initial fill of the Prescription was dispensed to A.L. on August 9,

HAL TAYLOR, ESQ.
223 Marsh Avenue
RENO, NV 89509
TEL. (775) 828-2223, FAX (775) 329-1113

2018.

IX.

Admitted that Walmart's records reflect that the Prescription was subsequently refilled and dispensed on August 16, 2018, and again on August 26, 2018.

X.

Respondent Walmart has no personal knowledge of the allegation in this paragraph.

FIRST CAUSE OF ACTION

(Respondent Remley)

This Cause of Action does not require a response by Respondent Walmart.

SECOND CAUSE OF ACTION

Unprofessional Conduct, Failure to Verify Dispensed Medication

(Respondent Huey)

This Cause of Action does not require a response by Respondent Walmart..

THIRD CAUSE OF ACTION

(Respondent Walmart Pharmacy #10-3728)

Respondent Walmart admits that it owned and operated the pharmacy in which the refill error alleged in the Accusation occurred, and that if this matter were to go to hearing, that sufficient evidence exists in this case to support findings by the Board that Respondent Walmart is responsible for the violations alleged in this Cause of Action pursuant to NRS 639.230(5), NAC 639.702 and NAC 639.945(2).

WHEREFORE, Respondent Walmart #10-3728 prays that if the Nevada State Board of Pharmacy finds that Respondent Walmart #10-3728 has violated the cited statutes and/or regulations, that the Board impose the least severe discipline allowed , taking into consideration the good-faith efforts of Respondent Walmart #10-3728 to .

//

//

//

HAL TAYLOR, ESQ.
223 Marsh Avenue
RENO, NV 89509
TEL. (775) 828-2222, FAX (775) 329-1113

prevent errors in filling prescriptions such as occurred in this case.

Dated: July 29, 2020.

Walmart #10-3728

Shelley Tustison

By: Shelley Tustison, Director
U. S. Health and Wellness
Practice Compliance

By signature below, the undersigned affirms that the preceding document does not contain the social security number of any person.

Date: July 29, 2020.

HAL TAYLOR, ESQ.
223 Marsh Ave.
Reno, Nevada 89509
(775) 825-2223
Email: haltaylorlawyer@gbis.com

Hal Taylor, Esq.

HAL TAYLOR, ESQ.
223 Marsh Avenue
RENO, NV 89509
TEL. (775) 825-2223, FAX (775) 329-1113

CERTIFICATE OF SERVICE

On this date, the undersigned, an employee of Hal Taylor, Esq., delivered by email a copy of the attached Answer and Notice of Defense upon the following:

Brett Kandt
General Counsel
Nevada Board of Pharmacy
bkandt@pharamcy.nv.gov

Date: July 29, 2020.

Hal Taylor

HAL TAYLOR, ESQ.
223 Ninth Avenue
RENO, NV 89509
TEL. (775)825-2223, FAX (775) 329-1113

Owens & Minor™

Nevada State Board of Pharmacy
985 Damonte Ranch Pkwy, Ste 206
Reno, NV 89521

August 18, 2020

Re: Board Hearing Appearance September 3, 2020
Medical Action Industries, Inc.
Owens & Minor Distribution, Inc.

Dear Mark Sedar,

Sarah Golas, Manager Licensing, has permission to appear before the board on behalf of Medical Action Industries, Inc. and Owens & Minor Distribution, Inc. Both entities are 100% owned by the same parent entity, Owens & Minor, Inc. and Sarah manages the licensing process for each one. If you have any questions, please do not hesitate to contact me.

Sincerely,

Nicholas J. Pace
Executive Vice President, General Counsel
& Corporate Secretary
Owens & Minor, Inc.
Nicholas.Pace@owens-minor.com

CC: Sarah Golas, Manager Licensing

This document constitutes a list of disciplinary actions taken against Owens & Minor, Inc. and its affiliated companies (collectively, "Owens & Minor"). The applicant provides this document in response to application questions involving disciplinary actions related to the applicant's owners, officers, etc.

Discipline Responses

Company General Comments: *Owens & Minor, a Fortune 500 company, has been in the same business since 1882. We operate over 40 distribution centers throughout the country and ship into all states. All of our distribution centers are fully licensed in their respective resident and adjacent states and several hold multiple licenses to ship nationwide. We take legal compliance seriously and employ a number of individuals whose sole focus is to ensure that we follow all applicable state and federal laws and regulations. Changes to laws and requirements are subjects of ongoing vigilance. While we regret that we have been the subject of any discipline, we believe that these instances should be considered in the context of our size and overall operations in a field of enterprise highly regulated by a multiplicity of agencies. This is a comprehensive list of discipline that Owens & Minor Distribution, Inc. has received.*

- This is an explanation of a Notice of Fine issued by the Louisiana State Board of Wholesale Drug Distributors against Owens & Minor's Wholesale Distribution Center in St. Rose, Louisiana facility. The citation was issued on April 11, 2002, but related to an inspection conducted on February 1, 2002. The citation referenced violations of regulations on customer license records. All issues had already been rectified to the Department's satisfaction prior to a hearing held on April 9, 2002, and the fine of $5,000 has been fully paid.

- This is an explanation of a citation issued by the California Board of Pharmacy against Owens & Minor's Wholesale Distribution Centers in Livermore and Lathrop, California. The citation was issued in May 2006. The citation referenced violations of regulations regarding timely notification of the Board when a facility's Designated Representative changes. All have been rectified to the Department's satisfaction, and the fine of $500 for both facilities has been fully paid.

- This is an explanation of a report of alleged violations issued by the Florida Department of Health against Owens & Minor's Wholesale Distribution Center in Orlando, Florida. The report was issued in February 2007 and referenced alleged violations of regulations regarding licensing and drug pedigrees. All matters raised in the report were resolved to the Department's satisfaction, the fine in the amount of $285,000 has been fully paid, and the matter is closed.

- This is an explanation of a Settlement Agreement and Disciplinary Order entered into between Owens & Minor Distribution, Inc. and the Missouri Board of Pharmacy. The Settlement, executed in May 2008 references violations of regulations regarding temperature controls and monitoring at its Kansas City, Missouri distribution center. The Company remains fully licensed but was placed on probation for a period of 3 years. There was no fine imposed.

- This is an explanation of a Stipulation Order with the Colorado State Board of Pharmacy concerning Owens & Minor's Wholesale Distribution Center in Denver Colorado. The effective date was November 2, 2009. The Order references a violation of regulations regarding the inadvertent purchase and receipt of prescription drugs on March 5, 2009 from one vendor (Hospira) from a location not licensed by the Board to ship Rx products into Colorado. All issues have been rectified to the Board's satisfaction, and the fine of $5,750 has been fully paid.

- This is an explanation of a Settlement Agreement entered into between Owens & Minor Distribution, Inc. and the Florida Department of Health. The Settlement, executed in July 2010, references violations of miscellaneous recordkeeping, personnel and license verification regulations in Owens & Minor's Wholesale Distribution Centers in Gainesville and Jacksonville, Florida. The Company and those facilities remained fully licensed but were under probation for a period of 2 years. The fine of $12,500 has been fully paid and the probation period passed without incident in 2012.

- On March 15, 2011, Owens and Minor entered into a Consent Agreement with the Louisiana Board of Wholesale Drug Distributors ("Louisiana Board") to resolve a finding in an inspection report dated December 8, 2010 that Owens & Minor received a product from supplier not licensed to sell or ship drugs into Louisiana. The agreed upon fine of $3,500 has been paid and this matter is now resolved to the satisfaction of the Louisiana Board.

- On July 27, 2011 Owens and Minor entered into a Stipulation and Consent Order with the Vermont Board of Pharmacy with regard to the application for a Third Party Logistics license by its facility in Redlands, California - Owens & Minor Healthcare Logistics. The basis of the order was discipline incurred by the company in other states. There was no specific non-compliance with Vermont law, or any other state regulation by any Owens & Minor facility. No fine was imposed. The license was issued subject to compliance with the laws of Vermont and reporting of future disciplinary actions.

- Owens & Minor Distribution, Inc. entered into a Stipulation Order with the Colorado State Board of Pharmacy concerning Owens & Minor's Wholesale Distribution Center in Denver, Colorado. The effective date was August 1, 2012. The Order referenced violations of regulations regarding timely notification of the Board when a facility's Designated Representative changes, and imposed the minimum fine. Colorado law

requires that each licensed facility must provide the board with the name of a Designated Representative knowledgeable in regulatory requirements. Those named must meet certain criteria for experience and pass a background check. Changes must be submitted within fourteen calendar days. However due to an oversight, notice that the Designated Representative had been laid off was not sent for ninety-five calendar days. This oversight was pointed out during a routine inspection in February 2012 and corrected the same day. The Stipulation requires that any future changes be made within prescribed time limits, that Owens & Minor promptly pay all fines and charges, and that it comply with all other applicable laws and regulations. All have been rectified to the Board's satisfaction, the fine of $1,100 has been fully paid and there have been no subsequent incidents of non-compliance.

- In February 2013 The Hawaii Department of Commerce and Consumer Affairs presented Owens & Minor with a Settlement Agreement assessing a fine of $500.00 for having been disciplined in another jurisdiction. No deficiencies were noted in the operations or compliance activities of any specific Owens & Minor distribution center. This was strictly an administrative matter, a fine for being fined essentially. Owens & Minor signed the Settlement Agreement, paid the fine, and the matter is now satisfactorily closed. This action affected no specific Owens & Minor facility.

- In August of 2012 Owens & Minor took over management of a hospital customer's internal warehouse and medical-surgical product distribution activities to the hospital's facilities and clinics in and around Burlingame, Ca. The facility was not licensed by the California Board of Pharmacy at the time management responsibilities changed. Accordingly, Owens & Minor submitted an application for licensure, and during the pre-licensing inspection, the Board representative took note of the presence of prescription drugs and devices that had been received and stored in the warehouse prior to the hospital's decision to outsource this activity to Owens & Minor. No other deficiencies or issues were identified, and the Board issued Owens & Minor a Wholesale Distributor's license shortly thereafter. In March of 2013, the Board issued Owens & Minor a citation for operating an unlicensed facility, assessing a fine of $2,500, but imposing no other sanctions. All issues have been rectified to the Board's satisfaction, the fine has been fully paid, and the matter is now closed. This action involved only the Owens & Minor distribution in Burlingame CA, and no others.

- This is notice of an action by Kentucky Board of Pharmacy. In December 2014, Owens & Minor entered into an Agreed Order with the Board of Pharmacy concerning Owens & Minor's tardy formal notice to the Board of its closing of a wholesale distribution center in Louisville, KY in 2013. The Board assessed a fine of $500.00. Owens & Minor signed the Order, paid the fine and the matter is now satisfactorily closed.

- In April 2015, Owens & Minor entered into a Stipulation and Consent Order with the Vermont Board of Pharmacy in connection with an application submitted by our distribution center in Flower Mound, Texas to ship products into Vermont. Owens & Minor failed to disclose any of the discipline that occurred prior to July of 2010 and also failed to disclose Vermont's discipline and the resulting conditions. This was strictly an administrative error and the Board assessed a fine of $1,000. In addition to the fine, Owens & Minor agrees to notify the Board within ten business days of any discipline imposed upon it in any jurisdiction, any charges of unprofessional conduct in any other jurisdiction, and any charges that it violated any probations or conditions it is currently required to follow.

- In January 2016, Owens & Minor Distribution, Inc. entered into a Stipulation and Consent Order with the Alabama State Board of Pharmacy for the most recent discipline received in Vermont for their Flower Mound, TX facility. This was strictly an administrative matter, a fine for being fined essentially. Owens & Minor signed the Settlement Agreement, paid the fine of $10,000, and the matter is now satisfactorily closed.

- On April 28, 2016, the Hawaii Board of Pharmacy approved the Final Consent Order and Settlement Agreement for PHA 2015-92-L in the matter of Owens & Minor Distribution, Inc. ("Owens & Minor") and the Hawaii Department of Commerce and Consumer Affairs (DCCA), which provided for a fine of $5,000.00. Hawaii Revised Statutes (HRS) § 436B-19(13) permits the Hawaii DCCA to impose discipline on a licensee for disciplinary action taken by another state. No deficiencies were noted in the operations or compliance activities of any specific Owens & Minor distribution center. This was strictly an administrative matter, a fine for being fined essentially. Owens & Minor signed the Settlement Agreement, paid the fine, and the matter is now satisfactorily closed.

- On May 25, 2016, the Wisconsin Pharmacy Examining Board issued a Final Decision & Order regarding Owens & Minor Distribution, Inc. and discipline received by Owens & Minor in the state of Vermont. No deficiencies were noted in the operations or compliance activities of any specific Owens & Minor distribution center. This was strictly an administrative matter, a fine for being fined in another jurisdiction essentially. Owens & Minor signed a Stipulation, paid a $1,120.00 fine, and the matter is now satisfactorily closed.

- On January 3, 2017, Owens & Minor Distribution, Inc. entered into a Stipulation and Final Agency Order with the Colorado State Board of Pharmacy for discipline received for its Denver, CO facility. The discipline regarded the tardy formal notification to the Board of a change in Designated Representative. The Board assessed a fine of $1,150.00. Owens & Minor signed the Order, paid the fine and the matter is now satisfactorily closed.

- In June, 2017, the Hawaii Department of Commerce and Consumer Affairs presented Owens & Minor with a Settlement Agreement assessing a fine of $250.00 for discipline received from the Colorado State Board of Pharmacy for its Denver, CO facility due to a tardy notification of a change in Designated Representative. This was strictly an administrative fine for being disciplined in another jurisdiction. Owens & Minor signed the Settlement Agreement, paid the fine, and the matter is now satisfactorily closed. It should also be noted that the Honolulu facility closed on December 31, 2016.

- On April 26, 2018, Owens & Minor Distribution, Inc. entered into a Settlement Agreement with the State of Florida Department of Business & Professional Regulation regarding the tardy formal notification to the Board of a change in Designated Representative and the imposition of discipline by another state, also regarding a tardy notification of change in Designated Representative. The Department assessed a fine of $2,250.00 and determined that the agreement will not be deemed to constitute discipline within the meaning of Florida pharmacy laws. Owens & Minor signed the Order, paid the fine and the matter is now closed.

- On November 28, 2018, Owens & Minor Distribution, Inc. entered into a Stipulation and Final Agency Order with the Colorado State Board of Pharmacy regarding the tardy formal notification to the Board of a change in Designated Representative as well as failure to review its policy and procedure manual. The Department assessed a fine of $6,900.00, and the matter is now closed.

- On February 25, 2019, Owens & Minor received a citation issued by the California Board of Pharmacy against Owens & Minor's Louisville facility. The citation referenced violations of regulations regarding timely notification of the Board when a facility's Designated Representative changes. No fine has been assessed with the citation and no proof of abatement has been ordered. The matter is now closed.

- On March 19, 2019, the Florida Department of Business & Professional Regulations presented Owens & Minor with a Settlement Agreement assessing a fine of $3,000.00 for discipline received from the Colorado State Board of Pharmacy for its Denver, CO facility due to a tardy notification of a change in Designated Representative. This was strictly an administrative fine for being disciplined in another jurisdiction. Owens & Minor signed the Settlement Agreement, paid the fine, and the matter is now satisfactorily closed.

- On April 19, 2019, the Colorado Department of Regulatory Agencies, Division of Professions and Occupations presented Owens & Minor with a Letter of Admonishment recognizing that Owens & Minor failed to timely submit an application and fee for a change of Designated Representative for the Chicago, IL facility. This was strictly an open public record and reportable action and no such fine was given. Owens & Minor did not initiate formal disciplinary hearings to adjudicate the conduct and has accepted the letter for public record. This matter is closed.

- On December 11, 2019, the Colorado Department of Regulatory Agencies, Division of Professions and Occupations presented Owens & Minor with a Stipulation and Final Agency Order regarding the tardy formal notification to the Board of a change of Designated Representative. The Department assessed a fine of $5,000.00. Owens & Minor signed the Stipulation agreement, paid the fine, and the matter is now satisfactorily closed.

X _____ Date 12-18-2019

Nicholas J. Pace
EVP, General Counsel & Corporate Secretary

PHYSICIAN DISPENSING IN WORKERS' COMPENSATION

Dongchun Wang

WC-12-24

July 2012

WORKERS COMPENSATION RESEARCH INSTITUTE
CAMBRIDGE, MASSACHUSETTS

ISBN 978-1-61471-961-8 (online)

ACKNOWLEDGEMENTS

This report benefited from the contributions of numerous colleagues, both within and outside WCRI. I am grateful to the two technical reviewers, Dr. Peter Barth, University of Connecticut, and Dr. Jeff Harris, J. Harris Associates, Inc., whose comments and suggestions not only helped to improve the quality of the final report, but also provided valuable input and guidance for future studies. Comments from a number of other reviewers also helped to improve the clarity of the report. In light of this, I would like to give my thanks to Dr. William Gaines, Dr. Margaret Atwell, Kimberly Schlosser, Artemis Emslie, and Cynthia Page.

Kevin Tribout and Adam Fowler from PMSI, Kimberly Schlosser and Angela Jenkins from Progressive Medical, Inc., and Stephanie Deeley of WCRI contributed tremendously to the update of state policies and recent legislative and regulatory activities regarding fee schedules for workers' compensation pharmaceuticals and related areas. I am grateful for the generous help they provided. Also critical to the study was the capable assistance from my colleagues at WCRI, Eric Harrison, Syd Allan, Juxiang Liu, and Te-Chun Liu—their contributions were indispensable in the pharmacy database construction, quality assurance, and programming support. Much appreciation goes to Dr. Philip Borba and his staff, who contributed to the development of the Detailed Benchmark/Evaluation Database, which made this study possible. Special thanks to Dr. Richard Victor, executive director of the Institute, for his invaluable input and guidance throughout the study process.

I wish to thank Sarah Solorzano and Linda Carrubba for their superior administrative assistance that helped to improve the readability and accuracy of the report, and Sarah Solorzano, who managed the review and publication process.

Of course, any errors or omissions that remain in the report are the responsibility of the author.

Dongchun Wang
Cambridge, Massachusetts
July 2012

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

This study reports on the rapid growth of physician-dispensed pharmaceuticals for injured workers under state workers' compensation. The study finds that physician-dispensed drugs became increasingly common in most states that permit physician dispensing. At the same time, the prices paid for physician-dispensed drugs were often substantially higher than if the same drugs were dispensed by a retail pharmacy. Moreover, the prices paid to dispensing physicians rose rapidly for medications that were commonly dispensed by physicians, while the prices paid to pharmacies for the same drugs changed little or fell.

The study also shows examples of physicians writing prescriptions for and dispensing certain drugs (e.g., omeprazole [Prilosec®] and ranitidine HCL [Zantac®]) that are available without a prescription in a drug or grocery store at a much lower price. Finally, the study examines the results of the California fee schedule reforms, providing evidence of the impact on prices paid, patient access to physician-dispensed prescriptions, and physician prescribing and dispensing patterns for certain drugs.

The study compares 23 states,[1] including Arkansas, Connecticut, Florida, Illinois, Indiana, Iowa, Louisiana, Maryland, Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Virginia, and Wisconsin. Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician-dispensed drugs. The data include post-reform results for Arizona[2] and California[3] and pre-reform baselines for Georgia, South Carolina, and Tennessee. Also included are three states where physician dispensing is prohibited in general (Massachusetts, New York, and Texas).

SUMMARY OF MAJOR FINDINGS

- Physician dispensing was common in workers' compensation, as seen in 2010/2011 claims.[4] In Florida, Illinois, pre-reform Georgia, Maryland, and Connecticut, as well as post-reform Arizona and California, physicians dispensed 28–53 percent of all prescriptions, representing 28–63 percent of total spending on pharmaceuticals in workers' compensation claims (Table A). Note that in post-reform Arizona and California, the cost share of physician dispensing was not greater than the frequency, partly because of the price reduction for physician-dispensed drugs due to the fee schedule reforms.

[1] The states included represent a range of different policies toward physician dispensing and are of average or larger-than-average size, representing more than two-thirds of the workers' compensation benefits in the United States.

[2] The data for Arizona include the early results of the fee schedule reforms, which are not specifically discussed in the report.

[3] California post-reform results are discussed in the Executive Summary and in Chapter 6.

[4] The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011. Similar notation is used for other years.

Table A Prevalence and Costs of Physician Dispensing, 2010/2011

State	Percentage of All Rx That Were Dispensed by Physicians	Percentage of Rx Payments That Were Paid for Physician-Dispensed Rx
Illinois	43%	63%
Florida	45%	62%
California[a]	53%	52%
Georgia[a]	36%	48%
Maryland	35%	47%
Connecticut	28%	37%
Arizona[a]	32%	28%
Pennsylvania	20%	27%
South Carolina[a]	18%	26%
Tennessee[a]	20%	25%
Michigan	24%	22%
Louisiana	7%	19%
North Carolina	14%	18%
Indiana	22%	17%
Wisconsin	11%	15%
Iowa	15%	12%
Virginia	10%	12%
New Jersey	18%	12%
Minnesota	4%	3%
Arkansas	4%	3%

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011. Three states (Massachusetts, New York, and Texas) where physician dispensing is not allowed in general are not included.

[a] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician dispensing (see Appendix A for more detail). The data included are post-reform for Arizona and California, and pre-reform for Georgia, South Carolina, and Tennessee. Lessons learned from California's post-reform experience are discussed in Chapter 6.

Key: Rx: prescriptions.

- Over the three years covered by the study, from 2007/2008 to 2010/2011, the frequency and cost of physician dispensing grew rapidly in a number of states (Table B).
  - Illinois saw the fastest growth in physician dispensing. Physicians' share of all prescriptions increased from 26 to 43 percent, and the dollar share increased even more, from 22 to 63 percent of all prescription payments.
  - Connecticut: Physician dispensing also grew rapidly, from 18 to 28 percent of all prescriptions and from 16 to 37 percent of all prescription payments.
  - Florida: Physician dispensing continued to grow in Florida—the physicians' share of all prescriptions dispensed increased from 35 to 45 percent. Their share of all prescription payments rose from 43 to 62 percent.
  - South Carolina: Physician dispensing increased in South Carolina from 12 to 18 percent of all prescriptions, and from 10 to 26 percent of total spending on prescriptions. South Carolina

adopted regulations, effective December 2011, which aimed at limiting the price differential between what physicians and pharmacies were paid for the same drug.

- Georgia: Physicians' share of prescriptions dispensed in Georgia increased from 30 to 36 percent and the dollar share increased from 32 to 48 percent over the three years. Georgia adopted fee schedule reforms, effective April 2011, aimed at reducing the costs of physician dispensing.
- In four states (Pennsylvania, Tennessee, Maryland, and Wisconsin), the costs of physician dispensing also grew rapidly, although the frequency of physician dispensing grew moderately over the same period. This occurred because of large increases in the prices of physician-dispensed drugs, while the prices paid to pharmacies for the same medications changed little or fell. Physicians' share of prescription payments increased from 15 to 27 percent in Pennsylvania, 14 to 25 percent in Tennessee, 36 to 47 percent in Maryland, and from 5 to 15 percent in Wisconsin (Table B). Tennessee adopted regulations, effective August 2012, which aimed at limiting the price differential between what physicians and pharmacies were paid for the same drug.

Table B Growth of Physician Dispensing, 2007/2008–2010/2011

State	Percentage of All Rx That Were Dispensed by Physicians		Percentage Point Change	Percentage of Rx Payments That Were Paid for Physician-Dispensed Rx		Percentage Point Change
	2007/2008	2010/2011		2007/2008	2010/2011	
Illinois	26%	43%	17	22%	63%	41
Connecticut	18%	28%	10	16%	37%	21
Florida	35%	45%	10	43%	62%	19
South Carolina[a]	12%	18%	6	10%	26%	16
Georgia[a]	30%	36%	6	32%	48%	16
Pennsylvania	17%	20%	3	15%	27%	12
Tennessee[a]	15%	20%	5	14%	25%	11
Maryland	33%	35%	2	36%	47%	11
Wisconsin	8%	11%	3	5%	15%	10
North Carolina	12%	14%	2	10%	18%	8
Indiana	17%	22%	5	9%	17%	8
Virginia	7%	10%	3	5%	12%	7
Michigan	23%	24%	1	15%	22%	7
Arizona[a]	27%	32%	5	23%	28%	5
Louisiana	11%	7%	-4	17%	19%	2
New Jersey	11%	18%	7	10%	12%	2
Iowa	16%	15%	-1	11%	12%	1
Minnesota	3%	4%	1	2%	3%	1
Arkansas	2%	4%	2	2%	3%	1
California[a]	56%	53%	-3	55%	52%	-3

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011; similar notation is used for other years. Three states (Massachusetts, New York, and Texas) where physician dispensing is not allowed in general are not included.

[a] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician dispensing (see Appendix A for more detail). The data included are partially post-reform for Arizona, post-reform for California, and pre-reform for Georgia, South Carolina, and Tennessee. Lessons learned from California's post-reform experience are discussed in Chapter 6.

Key: Rx: prescriptions.

- For most drugs that were commonly dispensed by physicians, the prices per pill paid for an individual drug when dispensed by physicians were often 60–300 percent higher than the prices paid for the same drug when dispensed at a retail pharmacy. This large premium paid to physicians was observed in 2010/2011 claims in most states where physician dispensing was common.
- We found large increases in the prices per pill paid to physicians for a number of drugs commonly dispensed by physicians over the period from 2007/2008 to 2010/2011. In contrast, the prices paid to pharmacies for the same drugs remained stable or decreased over the same period (see Table C for hydrocodone-acetaminophen [Vicodin®] as an example).[5]
    - Illinois saw very rapid growth in prices paid to physicians for several common drugs, including hydrocodone-acetaminophen (Vicodin®, 66 percent), meloxicam (Mobic®, 39 percent), and tramadol HCL (Ultram®, 24 percent). In contrast, the prices of these drugs dispensed at pharmacies stayed the same or dropped over the same period of time (a 2 percent decrease for hydrocodone-acetaminophen [Vicodin®] and tramadol HCL [Ultram®] and a 24 percent decrease for meloxicam [Mobic®]).
    - In Connecticut, the average price per pill paid for physician-dispensed hydrocodone-acetaminophen (Vicodin®) increased 54 percent over the three-year period, while the prices paid to pharmacies for the same drug decreased by 10 percent over three years.[6]
    - In Florida, prices paid to physicians for hydrocodone-acetaminophen (Vicodin®) did not change over the three years, while prices paid to pharmacies for the same drug decreased by 12 percent. We saw increases in the prices paid to physicians for several other drugs commonly dispensed by Florida physicians, but the growth appeared to have slowed over the study period.
    - In South Carolina, the prices paid for physician-dispensed hydrocodone-acetaminophen (Vicodin®) increased 50 percent between 2007/2008 and 2010/2011, while the prices paid to pharmacies for the same drug decreased by 11 percent over three years. Prices paid to physicians for meloxicam (Mobic®) also increased in South Carolina by 37 percent, while the prices of the same drug when dispensed at pharmacies dropped 23 percent.[7]
    - In Georgia, the prices paid for physician-dispensed hydrocodone-acetaminophen (Vicodin®) increased slightly, by 6 percent, while the prices paid to pharmacies for the same drug dropped 8 percent.[8] For a number of common drugs dispensed by physicians in the state, it appears that the prices paid to both pharmacies and physicians fell over the three years. However, the prices paid for physician-dispensed prescriptions were still higher than the prices paid to pharmacies for the same drug.

[5] When discussing a specific drug, we use the drug name that reflects the active ingredients of the drug and include a brand name in parentheses that has the same active ingredients. For example, hydrocodone-acetaminophen has two active ingredients—hydrocodone and acetaminophen. Vicodin® and Norco® are two brand names for hydrocodone-acetaminophen. Throughout the report, we refer to this drug as *hydrocodone-acetaminophen (Vicodin®)* for brevity; similar notation is used for other drugs.

[6] Prices paid to physicians in Connecticut for several other drugs also had a double-digit increase over the same period, including propoxyphene-N w/APAP (Darvocet-N®).

[7] Prices paid to physicians in South Carolina for several other drugs also had a double-digit increase over the same period, including naproxen (Aleve®).

[8] Considerable increases in prices paid to physicians were also seen for gabapentin (Neurontin®) and tramadol-acetaminophen (Ultracet®).

- In Pennsylvania, Tennessee, Maryland, and Wisconsin, where physicians' share of drug spending grew rapidly, prices paid for physician-dispensed prescriptions also increased for several drugs commonly dispensed by physicians, while prices paid to pharmacies changed little or fell. For example, the average price per pill paid to physicians for hydrocodone-acetaminophen (Vicodin®) increased 78 percent in Maryland, 48 percent in Wisconsin, 23 percent in Pennsylvania, and 6 percent in Tennessee, while the prices paid to pharmacies for the same drug fell by 2 to 11 percent in the four states.

Table C Trends in Prices per Pill Paid for Physician- and Pharmacy-Dispensed Prescriptions for Selected States[a]: Hydrocodone-Acetaminophen (Vicodin®), 2007/2008–2010/2011

	2007/2008	2008/2009	2009/2010	2010/2011	Percentage Change from 2007/2008 to 2010/2011
Illinois					
Physician-dispensed Rx	$0.87	$1.13	$1.35	$1.44	66%
Pharmacy-dispensed Rx	$0.54	$0.55	$0.53	$0.53	-2%
Connecticut					
Physician-dispensed Rx	$0.93	$1.53	$1.47	$1.43	54%
Pharmacy-dispensed Rx	$0.41	$0.41	$0.36	$0.37	-10%
Florida					
Physician-dispensed Rx	$1.08	$1.11	$1.15	$1.08	0%
Pharmacy-dispensed Rx	$0.49	$0.49	$0.43	$0.43	-12%
South Carolina[b]					
Physician-dispensed Rx	$0.80	$1.11	$1.09	$1.20	50%
Pharmacy-dispensed Rx	$0.46	$0.46	$0.43	$0.41	-11%
Georgia[b]					
Physician-dispensed Rx	$0.96	$0.97	$1.11	$1.02	6%
Pharmacy-dispensed Rx	$0.51	$0.51	$0.49	$0.47	-8%
Pennsylvania					
Physician-dispensed Rx	$0.92	$0.78	$1.09	$1.13	23%
Pharmacy-dispensed Rx	$0.39	$0.37	$0.34	$0.35	-10%
Tennessee[b]					
Physician-dispensed Rx	$1.05	$1.01	$1.06	$1.11	6%
Pharmacy-dispensed Rx	$0.53	$0.53	$0.52	$0.52	-2%
Maryland					
Physician-dispensed Rx	$0.83	$1.03	$1.54	$1.48	78%
Pharmacy-dispensed Rx	$0.39	$0.37	$0.38	$0.36	-8%
Wisconsin					
Physician-dispensed Rx	$0.77	$0.86	$0.97	$1.14	48%
Pharmacy-dispensed Rx	$0.46	$0.46	$0.42	$0.41	-11%

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions filled through March 31, 2011; similar notation is used for other years.

[a] Included are the states where physicians' share of drug spending grew rapidly or very rapidly (see Table B).

[b] The data included are pre-reform for Georgia, South Carolina, and Tennessee, where the recent reforms were aimed at reducing the prices paid for physician-dispensed prescriptions.

Key: Rx: prescriptions.

- Some physician-dispensers wrote prescriptions for certain drugs that were available at pharmacies over the counter (without a prescription). When they did so, they were paid 5–15 times higher prices compared with what was charged by a national chain of pharmacies for the over-the-counter drug.[9]
  - Both omeprazole (Prilosec®) and ranitidine HCL (Zantac®) were rarely prescribed by doctors in most study states. However, 8–11 percent of injured workers in Florida, Georgia, Illinois, and Maryland received at least one prescription for omeprazole (Prilosec®) or ranitidine HCL (Zantac®).[10] Almost all were dispensed at physician offices.
  - The price at Walgreens for Prilosec OTC® is about 64 cents per pill.[11] However, when physicians dispensed the drug, the average price per pill paid to physicians ranged from 5 to 8 dollars in most states where physician dispensing was common.
  - The price at Walgreens for ranitidine HCL (Zantac®) is 33–42 cents per pill, depending on strength and quantity.[12] When physicians dispensed the drug, the average price paid per pill was 4 to 7 dollars in the four states mentioned above.

LESSONS LEARNED FROM CALIFORNIA

In March 2007, California changed its fee schedule that governs reimbursement of physicians for the prescriptions they dispense. It required that the relevant fee schedule rate for physician-dispensed drugs be based on the original manufacturer National Drug Code (NDC) for the drug—the same rule that applies to pharmacies. Since then, a number of states adopted a similar policy to control prices for physician-dispensed prescriptions, including Arizona (effective October 2009), Georgia (April 2011), South Carolina (December 2011), and Tennessee (August 2012).[13]

For these states and the states where issues regarding physician dispensing have been actively debated (e.g., Florida for physician dispensing of drugs other than Schedule II and III narcotics, Hawaii, and Maryland), several lessons learned from the California experience may be valuable.

- First, supporters of physician dispensing have been concerned that physicians will stop dispensing after a large reduction in price. If physicians stop dispensing, they expressed concern that patient compliance would suffer and poorer patient outcomes would be the result. The California post-reform experience shows that many physicians continued to dispense prescriptions, even when the prices paid were lower.
  - In 2010/2011 claims (three years after the reform), about half of all prescriptions in California were physician dispensed. Instead of dispensing more expensive repackaged drugs, many

[9] Retail prices are available for over-the-counter drugs at www.walgreens.com.

[10] Both drugs are indicated for acid reflux and may be used to protect against gastric irritation or erosion from taking non-steroidal anti-inflammatory drugs (NSAIDs).

[11] Prilosec OTC® acid reducer is the same as prescription Prilosec® 20 mg. The price for a 42-count box of Prilosec OTC® is $26.99. Prices were retrieved on May 29, 2012, from www.walgreens.com.

[12] The unit price per pill for a 30-pill bottle of Zantac® is 33 cents and for a 24-pill box of Zantac® 150 mg is about 42 cents. Prices were retrieved on May 29, 2012, from www.walgreens.com.

[13] The fee schedule change in Tennessee was delayed from June 2012 to August 2012. The delay only affects the effective dates, not the substance of the fee schedule change.

physicians dispensed non-repackaged drugs and were paid the same prices as were paid to pharmacies for the same drug.[14]

  - Fifty-five percent of prescriptions were dispensed by physicians in the first quarter of 2007, immediately before the 2007 change. That dropped to 44 percent in the same quarter of 2008 after the fee schedule change.[15] At the same time, the percentage of all physician-dispensed prescriptions that were repackaged drugs decreased from 43 to 11 percent.

- The second concern expressed by supporters of physician dispensing is that costs could rise if physician dispensing were eliminated or reduced. They argue that physicians almost always dispense less expensive generic versions of drugs, while pharmacies dispense both brand names and generics.
  - We found that for the medications commonly dispensed by physicians, generics were almost always dispensed by both physicians and pharmacies. Moreover, when generic drugs were dispensed, physician-dispensers were paid much higher prices per pill than pharmacies for the same prescription.
- The 2007 change in California seems to have changed prescribing practices for certain drugs.
  - We saw a considerable drop in the number of prescriptions for carisoprodol (Soma®) after the large price reduction for the drug, a medication that was not frequently prescribed in most states where physician dispensing was uncommon.
  - We also found that California physicians substituted omeprazole (Prilosec®) for ranitidine HCL (Zantac®). Both drugs are indicated for acid reflux and may be prescribed by some physicians for ulcer disease related to the side effect of taking nonsteroidal anti-inflammatory agents (NSAIDs). Omeprazole (Prilosec®) was more expensive than ranitidine HCL (Zantac®), but the price premium for ranitidine HCL was higher than that for omeprazole prior to the 2007 fee schedule reforms in California.[16] Both are available without a prescription at most pharmacies.

DATA, APPROACH, AND CAVEATS

The data used for this study include approximately 758,000 claims with more than seven days of lost time that received at least one prescription paid under workers' compensation—nearly 5.7 million prescriptions. The claims are from 23 states, including Arkansas, Arizona, California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Wisconsin. These states represent over two-thirds of the workers' compensation benefits paid in the United States. The data represent 21–47 percent of all cases, depending on the state, for the 23 states included in this study.

[14] While it may seem unusual for physicians to dispense non-repackaged drugs, it is possible in that if a physician is affiliated with a provider network or multispecialty clinic that owns an onsite pharmacy, the physician may send the injured worker to the pharmacy to fill the prescriptions written. We see some evidence suggesting the existence of this relationship, which may explain why some physicians continued to write prescriptions to the patient and dispense them at the onsite pharmacy.

[15] The results reported for California were based on a separate analysis that tracked changes in physicians' share of prescriptions on a quarterly basis. Unlike the analysis based on an average 12 months of experience, this type of analysis focuses on the prescriptions filled by calendar quarter and, therefore, better tracks changes in fee schedule reforms. See Chapter 6 for a more detailed description.

[16] According to two physicians who reviewed a draft of the report, there is medical evidence that omeprazole (Prilosec®) is somewhat more effective than ranitidine HCL (Zantac®) in treating ulcer disease from taking NSAIDs. This might help explain the change in prescribing patterns for the two drugs before and after the fee schedule reforms.

By prescription, we mean either a new prescription or a refill of an existing prescription. We excluded prescription medications dispensed at a hospital. We also excluded prescription medications that were administered rather than dispensed (e.g., injections received at a physician's office).

The analyses of trends in this report were based on claims with an average of 12 months' experience. The reader should be aware that these are snapshots for prescribing and dispensing patterns during the first year of injury, on average. Prescribing patterns may be different for subsequent years or longer maturities. In addition, we focused on claims where the worker had at least seven days of lost time from work and at least one prescription paid by a workers' compensation payor.

Compared with data on other medical services, the data provided to WCRI on workers' compensation prescriptions were less complete for some data sources. We excluded those data sources where our tests suggested that the data provided were not complete and were likely to bias the study results. The data are not necessarily representative of the population of cases in some states. The data cover the voluntary market, the self-insured market, and state funds where they exist, but do not cover the small residual market in states with distinct residual markets. For two states, we are also missing data from some large regional insurers.[17]

[17] We do not provide more detailed information regarding the states and data sources due to a confidentiality concern.

1

INTRODUCTION

Some physicians write prescriptions and dispense them directly to patients at their offices. When physicians dispense, they are often paid more than pharmacies for the same prescription. In several states, physician dispensing has been a significant driver of prescription costs. Among the study states where physician dispensing is permitted, a number of states have recently adopted reforms aimed at reducing the prices paid for physician-dispensed drugs by limiting the prices to what is paid to pharmacies for the same drug (or a small premium above), including California (March 2007), Arizona (October 2009), Georgia (April 2011), South Carolina (December 2011), and Tennessee (August 2012). In other states, legislative or regulatory reforms have been debated (for example, in Florida,[1] Hawaii, Michigan, and Maryland).

This study reports on the very rapid growth in physician-dispensed pharmaceuticals for injured workers under state workers' compensation. The study finds that physicians significantly expanded the share of all prescriptions that they dispensed, and the price premium that they received above what was paid to pharmacies has increased—significantly, in a number of states. The study also draws some useful lessons from California's post-reform experience, providing some evidence that helps address certain concerns about policies seeking to control the prices paid for physician-dispensed drugs.

BACKGROUND

The recent policy debate has focused on the prices paid for prescriptions dispensed by physicians. Recent reforms have not sought to limit the ability of physicians to dispense drugs directly to their patients. One important exception is found in Florida. Legislation passed in 2011, aimed at so-called *pill mills*, prohibited physicians from dispensing Schedule II and III narcotics.

Physician dispensing is one example of a larger set of issues that are often referred to as *physician self-referral*.[2] The federal law governing most physician self-referral is known as the *Stark Law*, which was initially passed in the U.S. Congress in 1989, and subsequently amended in 1993 and 2007, to ban physician self-referrals of Medicare and

[1] In Florida, legislation passed in 2011, aimed at eliminating so-called *pill mills*, prohibited physicians from dispensing Schedule II and III narcotics. Physician dispensing (of non-narcotic drugs) was also debated during the legislative session in the past two years.

[2] Numerous studies have provided evidence of overutilization of medical services as a result of physician self-referral in response to financial incentives, including physician ownership interests in laboratories (U.S. Department of Health and Human Services, Office of the Inspector General, 1989), MRI facilities (Aronovitz, 1994; Hillman et al., 1990, 1992, and 1995; Gazelle et al., 2007; and Baker, 2010), ambulatory surgical centers and specialty hospitals (Mitchell, 2005; U.S. General Accounting Office, 2003; Yee, 2012), and physician ownership in physical therapy and rehabilitation services (Mitchell and Scott, 1992; Mitchell and Sass, 1995). However, only a few studies have documented over-prescribing and associated economic costs that stem from higher-priced physician dispensing, including the California studies of physician dispensing in workers' compensation (Wynn, 2005; Neuhauser et al., 2006) and several others outside workers' compensation that have drawn lessons from international studies (Iizuka, 2007; Currie et al., 2010; Chen et al., 2011).

Medicaid patients for *designated health services* (DHS) to facilities in which the physicians or members of the physician's group have a financial interest.[3] There are exceptions to the Stark Law known as the *bona fide employee* and *in-office ancillary services* exceptions. The bona fide employee exception allows physician self-referrals to an employee of an affiliated vertically integrated firm. The in-office ancillary services exception allows physicians to perform certain in-office services, including dispensing prescription drugs.[4]

Physician dispensing is not new. What is new is the increased frequency with which physicians have dispensed prescription medications, especially since the relatively recent emergence of repackaged drugs, which makes physician dispensing of prescription drugs easier and more profitable.[5] What is also more recent is the growing price differential between what physicians and pharmacies are paid for the same drug.

Advocates for physician dispensing note certain advantages. First, for some injured workers, it may mean greater compliance with the medication therapy the doctor prescribes, because when the injured worker is given a prescription to be filled at a pharmacy, there is a possibility that this worker will not actually fill the prescription. Second, it saves the patient time—especially for patients who live in remote areas that are long distances from the nearest pharmacy. Finally, it maximizes the benefit of prompt treatment, since some medications (e.g., antibiotics in some cases) should be taken as soon as possible.

Opponents of physician dispensing express several concerns. First, they argue that the price differential charged for physician-dispensed drugs is often excessive. Second, they contend that patient compliance is less of an issue in workers' compensation than for non-occupational medical care—since the majority of workers' compensation prescriptions are for pain medications, rather than for maintenance drugs (e.g., hypertension or cholesterol medications) where compliance is a concern. Third, they argue that pharmacies or pharmacy benefit managers are better positioned than physician-dispensers to identify drug safety issues, such as drug interactions, narcotics abuse or diversion, or duplicate therapies.

The public policy questions that are commonly debated are

- Should physician dispensing be permitted or prohibited?
- If permitted, should physicians be paid a premium price above what pharmacies are paid? If so, how large should the premium be?

In the United States, five states have prohibited physicians from dispensing prescription drugs in general, by law. Three of them are included in this study (Massachusetts, New York, and Texas). The only other states that prohibit physician dispensing are Montana and Utah. In other states, issues related to physician dispensing are more or less addressed through state workers' compensation policies on pharmacy fee schedules, which set maximum reimbursement rates for pharmaceuticals dispensed at pharmacies and physician offices.

[3] The Stark Law was named after Congressman Fortney Pete Stark. Stark I, a provision in the Omnibus Budget Reconciliation Act of 1989 (OBRA 1989), which was effective January 1, 1992, banned self-referral arrangements for clinical laboratory services under the Medicare program. The OBRA of 1993, known as Stark II, extended the ban to an additional list of designated health services beginning in 1995, which also included significant modification to the in-office ancillary services exceptions. The ban also extended to services and supplies provided to Medicaid beneficiaries. The Development of Phases I and II of the Stark regulations began in 1998. Stark II Phase III was published on September 5, 2007. It is widely believed that the Stark Law has restricted physician self-referral practices, but the extent of the restrictive effects is not well known (Manchikanti and McMahon, 2007).

[4] Drawing lessons from other countries on the same issue, Chen and his colleagues provided evidence that suggests physicians may exploit the in-office ancillary exception to continue dispensing prescriptions at a higher price or exploit the bona fide employee exception to hire on-site pharmacists or acquire pharmacies (Chen et al., 2011).

[5] Repackagers purchase the drugs in bulk and package them in smaller, convenient quantities (e.g., 30, 60, 90, etc.). In the process of repackaging, the companies are allowed to assign a new National Drug Code and assign a new, often much higher average wholesale price for the repackaged drugs. In our data, we see individual physicians and multispecialty clinics who dispense repackaged drugs, but little evidence that pharmacies dispense repackaged drugs.

Appendix A provides a summary of state policies on pharmacy fee schedules and physician dispensing as of June 2012, highlighting major changes in fee schedules that have been made since 2007.

ORGANIZATION OF THIS REPORT

This report provides five additional chapters. Chapter 2 summarizes the data and approach used for this study. Chapter 3 describes the prevalence and growth of physician dispensing in 23 larger states. In Chapter 4, we present price comparisons between physician- and pharmacy-dispensed prescriptions for the same drugs and examine the growth in prices paid. In Chapter 5, we offer some evidence that certain drugs, that may otherwise not be prescribed if the prescription is filled at a pharmacy, are only prescribed when physicians dispense. Chapter 6 examines lessons learned from the California post-reform experience. We describe how the reform that equalized prices paid regardless of dispensing point affected patient access to physician-dispensed drugs and how prescribing practices may have changed. These lessons may be useful for policymakers in other states as they consider whether reforms like those in California would reduce the costs associated with physician dispensing.

Appendix A summarizes state policies on fee schedules for workers' compensation pharmaceuticals, covering pharmacy fee schedules and policies on physician dispensing. It also highlights major changes in the states studied that had or will have a significant impact on pharmacy costs. Appendix B describes a test of how sensitive the results of the price comparison were to the differences in the quantity per prescription and the strength for physician- and pharmacy-dispensed drugs. For readers who are less familiar with some terminologies used in the report, we provide a glossary.

2

DATA AND METHODS

This chapter describes the data and methods we used for this study. A summary of state policies and major changes in the study states can be found in Appendix A. Appendix B describes a test of how sensitive the results of the price comparison were to the differences in the quantity per prescription and the strength for physician- and pharmacy-dispensed drugs. For the reader who is interested in more detailed information about the WCRI prescription benchmark metrics and a discussion of related data and methodological issues, see Wang and Liu (2011a and 2011b).

DATA AND REPRESENTATIVENESS

This study includes approximately 758,000 claims with more than seven days of lost time that received at least one prescription paid under workers' compensation,[1] and nearly 5.7 million prescriptions associated with those claims. The claims are from 23 states,[2] covering work-related injuries arising from October 1, 2006, to September 30, 2010, with prescriptions filled through March 31, 2011. The pharmacy data were extracted from the WCRI Detailed Benchmark/Evaluation (DBE) database, in which we have detailed prescription transaction data that were collected from the medical bill review and payment systems of payors and their pharmacy benefit managers. Table 2.1 provides the number of prescriptions and claims by state that were included in this study. It also shows that the study is based on 21 to 47 percent of claims (with more than seven days of lost time) in each state.

The unit of analysis for this study is the state. Claims are valued with an average 12 months' experience. For example, the 2010/2011 claims refer to those that had work-related injuries occurring from October 1, 2009, to September 30, 2010, with prescriptions filled and paid for by a workers' compensation payor through March 31, 2011. Similar notation is used for other years.

[1] We chose to use claims with more than seven days of lost time for the analysis for several reasons. First, although the costs and utilization of prescription drugs observed in these cases were higher than those for all claims, the cases with more than seven days of lost time provided a relatively more homogeneous and comparable base, in terms of disability for work-related injuries, for the purpose of interstate comparisons. Second, since we are interested in measuring, among other things, prescribing and dispensing patterns, our unit of observation is often "per claim." If we included all of the claims with less than seven days of lost time, the number of claims would increase, on average, fourfold, with only a small increase in the number of prescriptions. This would likely reduce variations in the per claim measures across states and, therefore, mask important interstate differences in prescribing and dispensing patterns. Third, these claims represent the overwhelming majority of the prescriptions and medical services delivered and associated costs, which is an area of greater policy implications. It is possible that selecting claims with more than seven days of lost time may filter in a subset of claims that may be more serious for some states and less serious for others. If that occurred, the results of interstate comparison may be biased. However, we did not see clear evidence suggesting that this is likely to be the case.

[2] The 23 states are Arkansas, Arizona, California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Wisconsin. These states represent over two-thirds of the workers' compensation benefits paid in the United States.

Table 2.1 Actual Number of Claims and Prescriptions Included in the Analysis

State	Number of Claims Included	Number of Rx Included	Number of Claims Included as a Percentage of All Claims in the Population
Arizona[a]	11,539	68,545	22%
Arkansas	6,579	44,250	35%
California[a]	134,578	1,508,155	31%
Connecticut	19,516	99,255	43%
Florida	52,442	433,946	27%
Georgia[a]	20,196	210,634	29%
Illinois	45,033	254,874	30%
Indiana	16,343	93,550	33%
Iowa	8,202	42,134	21%
Louisiana	11,518	150,554	32%
Maryland	22,869	157,460	29%
Massachusetts[b]	29,743	109,053	44%
Michigan	27,585	149,573	38%
Minnesota	19,359	87,192	31%
New Jersey	42,709	147,040	46%
New York[b]	56,356	318,198	34%
North Carolina	20,713	174,511	29%
Pennsylvania	57,625	370,202	35%
South Carolina[a]	11,460	108,483	46%
Tennessee[a]	20,355	181,740	31%
Texas[b]	88,644	803,415	47%
Virginia	15,913	101,358	35%
Wisconsin	18,847	73,032	24%

Notes: The claims included are those that had more than seven days of lost time and complete medical details for injuries occurring from October 1, 2006, to September 30, 2010. The prescription transaction data are for those prescriptions filled through March 31, 2011, and paid under workers' compensation that are associated with the claims included.

[a] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician dispensing (see Appendix A for more detail). The data included are partially post-reform for Arizona, post-reform for California, and pre-reform for Georgia, South Carolina, and Tennessee.

[b] In Massachusetts, New York, and Texas, physician dispensing is not allowed in general (see Appendix A for more detail).

Key: Rx: prescriptions.

Unlike in other WCRI benchmark reports, the data included in this study may not necessarily be representative of the total population of claims in some states for several reasons. First, the data cover the voluntary market, self-insured market, and state funds where they exist, but do not cover the residual market in the states with a distinct residual market. Fortunately, these residual markets were small in the study states over the period we analyzed. Second, we were missing data from some large regional insurers for two states, which may affect the representativeness of the data for the states. Third, compared with data on other medical services, the data provided

to WCRI on workers' compensation prescriptions were less complete for some data sources. We excluded those data sources where our tests suggested that the data provided were not complete and were likely to bias the study results.[3]

IDENTIFYING PRESCRIPTION DRUGS AND DISPENSING POINTS

By prescription, we mean either a new prescription or a refill of an existing prescription. We excluded prescription medications that were billed by a hospital or administered in a physician's offices (e.g., injections received at a physician's office).[4] We also excluded nonprescription medicines and certain medical supplies or equipment that are billed under a National Drug Code (NDC).[5]

The data come from various bill review and payment systems of payors and their pharmacy benefit managers. The data for each prescription typically contain the amounts charged and paid, the number of pills (for orally-administered drugs in pill form),[6] the date of service, and a code that identifies the transaction as a prescription. This code could be an NDC, a Current Procedural Terminology (CPT) code, a Healthcare Common Procedure Coding System (HCPCS) code, or a code for prescription medications specific to a data source.

The NDCs were linked to the Medi-Span® data that identify the type of medication (e.g., therapeutic class, narcotics, and federal-level narcotic schedules), its strength, and the manufacturer or repackaging firm for the medication.[7] For the pharmacy-dispensed prescriptions, the NDC data were complete. For the prescriptions dispensed in physicians' offices, however, the NDC data were less complete for several data sources in the earlier years of the study period.[8] For any prescription that was missing an NDC, we were unable to determine the name of the medication and its strength. We included these prescriptions in benchmarks that characterize overall costs and utilization, but did not include them in the benchmark metrics that are based on NDC data. To maximize the representativeness, we included a data source for the NDC-based metrics if the prescriptions with NDCs in the data source were representative of all prescriptions from that data source. As a result, a smaller number of data sources were included for these NDC-based metrics, compared with those included for the broader prescription benchmarks.

The quality of data tended to vary from one year to another due to the improvement of the pharmacy data over time. For the trend analysis, we excluded additional data sources where the data quality was not consistent across years. This affected a limited number of metrics.

As mentioned at the beginning of this section, this study focuses on prescriptions that were dispensed either at

[3] This may affect the representativeness of the data if the claims from those excluded data sources were different in some way or had different experiences.

[4] Injectable medications are typically coded using the J codes in the Healthcare Common Procedures Coding System (a.k.a., HCPCS J-codes).

[5] One challenge was to distinguish prescription drugs in the data from prescriptions that were written for nonprescription medicines, or certain medical supplies or equipment. The NDC structure assigns codes to prescriptions, some nonprescription medicines, and some medical supplies or equipment. We excluded from the pharmacy data those nonprescription medicines and medical supplies and equipment by screening for particular NDCs.

[6] Over 90 percent of the prescription medications included in this study are in oral dosage form. The non-oral medications may be in the form of a pad, patch, cream, or lotion.

[7] Medi-Span® is a publisher which offers a series of comprehensive drug databases, tools, and applications utilized by health care professionals. Medi-Span® is part of Wolters Kluwer Health, Inc. We used Medi-Span's *Master Drug Data Base (MDDB®) v2.5* to get detailed information on individual drugs for constructing our pharmacy database (see Medi-Span®, 2005).

[8] In the 2010/2011 data, NDCs were present in over 97 percent of pharmacy-dispensed prescriptions and 89–98 percent of physician-dispensed prescriptions. NDCs among physician-dispensed prescriptions were less complete for a small number of data sources in some states in the 2007/2008 data—68–96 percent of the physician-dispensed prescriptions had NDCs in that year.

pharmacies or at the office of the prescribing physician. When physicians dispense medications, they typically dispense repackaged drugs for various reasons (e.g., patient convenience and higher price paid).[9]

In order to divide prescriptions into two groups, physician- and pharmacy-dispensed prescriptions, we used two variables in the data—the provider group, a field that indicates whether the prescription was billed by a physician or non-physician, and the Medi-Span® indicator, which identifies repackaged drugs by the NDCs assigned for repackaged drugs during the Food and Drug Administration (FDA) drug approval process. Since we excluded prescriptions billed by hospitals, we classified a prescription as a physician-dispensed prescription if the prescription was billed by a physician or if the Medi-Span® indicator labeled the prescription as one for a repackaged drug (even when the provider group was a non-physician). Note that we included mail-order prescriptions in the definition of pharmacy-dispensed prescriptions.

KEY BENCHMARK METRICS DISCUSSED IN THIS REPORT

In comparing the prices paid for physician- and pharmacy-dispensed prescriptions, we relied on the average price per pill paid for a specific drug. We also focused on comparing the prices for generic drugs that were most commonly dispensed by physicians. This is appropriate because, for the medications commonly dispensed by physicians, generics were almost always dispensed by both physicians and pharmacies.[10]

The price per pill paid for a generic drug has an obvious advantage over the price per prescription because it takes into account the difference in the number of pills per prescription and the difference in price between brand names and generics. However, the same measure may still reflect price differentials in the strength and per-packet quantity to the extent that a large difference exists between physician- and pharmacy-dispensed prescriptions. For example, the price per pill for a 30-pill bottle of ibuprofen (Motrin®) is somewhat higher than the price per pill for a 90-pill bottle of the same drug. A drug product with a stronger strength would also cost more than the same drug with a lower strength. We checked the number of pills per prescription and selectively reviewed more detailed data on a drug product and its strength when making a price comparison. We also tested how sensitive the results of the price comparison were to these potential confounding factors. In these analyses, we saw little evidence that this should be a serious concern, especially given the size of the differences in the prices we are reporting.[11]

Other key benchmark metrics we used for this study include the percentage of all prescriptions and prescription payments that were for physician-dispensed prescriptions, as well as the percentage of claims with prescriptions that had a specific drug commonly dispensed by physicians. We also report the percentage of all prescriptions that were for repackaged drugs in the analysis of California's pre- and post-reform experience.

Since the completeness of NDCs in the prescription transaction data has improved considerably over the study period for some data sources, especially among prescriptions that were dispensed by a physician, one potential concern is that the improvement may overstate the growth of physician dispensing (and repackaging) and it may also

[9] Conceivably, physicians who are affiliated with physician groups and multispecialty clinics can also dispense the same, but non-repackaged, drugs, since these practice groups and clinics may own an onsite pharmacy through vertical integration between a physician practice and a pharmacy. We observed some of this in our data. Conceptually, we define physician-dispensed prescriptions as those that are dispensed and billed for by the physician (i.e., independent practitioners and physicians practicing in physician groups, occupational rehabilitation centers, and multispecialty clinics). With this definition, prescriptions dispensed at an onsite pharmacy affiliated with a physician group or multispecialty clinic under the same financial entity are considered physician-dispensed prescriptions, which is appropriate for this study.

[10] Our data show that physicians rarely dispensed other drugs that are only available as brand names. Those single-source brand name drugs are mostly dispensed at pharmacies.

[11] See Appendix B for a description of the sensitivity analysis, in which we provided the results of the price comparison for 5 mg hydrocodone-acetaminophen (Vicodin®) at 30 or 60 pills per prescription. These combinations were most commonly seen among physician- and pharmacy-dispensed prescriptions for the drug.

compromise the price comparison for individual drugs for physician- and pharmacy-dispensed prescriptions. Based on how we constructed the benchmark measures, we believe that this should not be a serious concern for the following reasons. First, we identified physician-dispensed prescriptions using two variables as described above—the provider group established in the DBE database and the Medi-Span® indicator for repackaged drugs. The provider group identified a vast majority of the prescriptions that were dispensed by a physician.[12] For prescriptions that were not associated with the physician as a provider group, over 92 percent of them had NDCs in our data across the years. Because the NDCs were complete among those prescriptions, the Medi-Span® indicator for repackaged drugs adequately reclassified prescriptions that were dispensed by a physician, but not associated with the physician in our data, as physician-dispensed prescriptions. Second, the improvement in the completeness of the NDCs may affect how the prevalence and growth of repackaged drugs were quantified because repackaged drugs were identified only based on the Medi-Span® indicator for repackaged drugs, which is dependent on the completeness of NDCs. However, for several states, including California and Florida, NDCs were complete for all the data sources in our data throughout the entire study period. For these states, the prevalence and growth of repackaging are most likely to be accurately quantified.[13] Third, the price comparisons in this study were made for individual drugs, which were identified through the NDCs. To ensure the accuracy of the prices paid for physician- and pharmacy-dispensed prescriptions for individual drugs, we excluded a few data sources which had less complete NDCs in the earlier years of the study period. It is unlikely that, for the same drug in the same market, the prices paid by the payors (or data sources) included for the price comparison were very different from the prices paid by those excluded. In addition, we made sure that the data sources included accounted for a significant share of the market in each state. For these reasons, we believe that the levels and trends in the prices paid for physician- and pharmacy-dispensed prescriptions were measured properly across the years studied.

CAPTURING PRESCRIPTIONS THAT WERE FILLED BY INJURED WORKERS

There was substantial variation across states in the percentage of claims with more than seven days of lost time that had at least one prescription paid by a workers' compensation payor, as shown in Table 2.1. It is not surprising that physician prescribing practices vary from state to state. The WCRI CompScope™ Medical Benchmarks identify large variations in other types of medical practice patterns (e.g., surgery rates, use of diagnostics, and frequency and timing of pain management). However, we expected that most cases in which the worker lost more than seven days of work would be sufficiently serious to warrant a prescription, and yet a number of them did not have prescriptions in our data.

There are several possible reasons for this. First, chiropractors provide care as the sole treating provider more often in some states than in others. Since chiropractors do not prescribe, interstate variation in the level of involvement of chiropractors as treating providers may be part of the explanation.

Second, some prescriptions may be paid for by non-workers' compensation payors, in part because pharmacies may be submitting them to other payors—especially for workers who have prescription coverage in their non-occupational health insurance. This is consistent with a study of workers' compensation cases of state employees in

[12] By construction, the provider group definitively identifies services provided and billed by the physician. Since all prescriptions were identified by using NDCs and data source-specific codes for prescriptions, those prescriptions associated with the physician as a provider group are most likely physician-dispensed prescriptions. We observed that the NDCs were increasingly more complete among this set of prescriptions.

[13] In this study, we report the percentage of all prescriptions that were for repackaged drugs only for California. See Chapter 6, in which we discuss changes in physician dispensing and repackaging in California before and after the fee schedule change in 2007 that equalized the prices paid for physician- and pharmacy-dispensed prescriptions.

New York,[14] all of whom were covered by group health insurance that included prescription coverage (Stapleton et al., 2001). By combining the records of the state fund and the group health insurers' interviews with workers, the study found that 21 percent of all drug expenditures for those injured workers were paid by the state fund, 69 percent by health insurers, and 9 percent by the worker without reimbursement.

Third, some workers may have paid for their prescriptions out of pocket and received reimbursements subsequently from workers' compensation payors. Some of these transactions might not be captured in our data if they were not submitted or were misidentified since they go through very different channels. However, our case review of individual claims did not find strong evidence suggesting that this would be a major contributing factor to the missing prescription issue.[15]

It is possible that some results based on claims with prescriptions, especially for the per-claim utilization measures, may be biased for benchmarking the costs and utilization of prescriptions filled by injured workers because of the reasons stated previously. We assessed the extent of this potential bias with a sensitivity analysis. Based on our analysis, we concluded that although it is possible, this was unlikely to affect the results in a material way. For this study, since it is relies more on the data at the prescription-transaction level and less on per-claim utilization, the results presented in this report should be less sensitive to the issue discussed.

LIMITATIONS AND CAVEATS

The trends analyses in this report were based on claims with an average 12 months' experience. The reader should be aware that these are only snapshots of prescribing and dispensing patterns during the first year of injury, on average. Prescribing patterns may be different for subsequent years or longer maturities. In addition, we focus on claims where the worker had at least seven days of lost time from work and at least one prescription paid by a workers' compensation payor.

Compared with data on other medical services, the data provided to WCRI on workers' compensation prescriptions were less complete for some data sources. We excluded these data sources where our tests suggested that the data provided were not complete and were likely to bias the study results. The data are not necessarily representative of the population of cases in some states. The data cover the voluntary market, the self-insured market, and state funds where they exist, but do not cover the small residual market in states with distinct residual markets. For two states, we are also missing data from some large regional insurers.

[14] The New York State Insurance Fund handles the workers' compensation claims of state employees.

[15] To assess the extent of this issue, we conducted individual case reviews of 50 cases with several data sources. In these reviews, we found some incidences where the payment transactions indicated a reimbursement for an out-of-pocket payment, some of which might have been paid for prescription drugs. However, this only involved approximately 10–15 percent of the cases we reviewed, which is not enough to explain the large difference we observed in the measure.

3

PREVALENCE AND GROWTH OF PHYSICIAN DISPENSING

Physician dispensing was common and growing in 2010/2011 in many of the states studied.[1] In 13 of the 20 study states that permit physician dispensing, at least 1 in 6 prescriptions was dispensed at a physician's office. In 6 of these states (California, Florida, Illinois, Georgia, Maryland, and Arizona), physicians dispensed at least 1 in 3 prescriptions. Physician-dispensed prescriptions accounted for 47 to 63 percent of the total cost of prescriptions in these states, except Arizona (28 percent). See Figures 3.1–3.2 and Table 3.1. Among the 7 other states where physicians dispensed at least 1 in 6 prescriptions in the state, physicians' share of prescription payments ranged from 12 percent in New Jersey at the low end to 37 percent of all prescription spending in Connecticut at the high end. Note that in most states, physician dispensing accounted for a larger share of total prescription spending than its share of all prescriptions dispensed. This occurred because the prices of physician-dispensed prescriptions were much higher than pharmacy-dispensed prescriptions for the same drugs, which was especially the case for Illinois, Florida, Georgia, Maryland, and Louisiana.[2]

As indicated in Figures 3.1–3.2 and Table 3.1, five states recently adopted reforms aimed at reducing the costs of physician-dispensed prescriptions. Among the five states, California and Arizona have post-reform experience showing in the data.[3] The data included in this report for the other three states (Georgia, South Carolina, and Tennessee) are pre-reform. In addition, Florida now prohibits physicians from dispensing Schedule II and III narcotics. This change occurred after the period examined in this study.

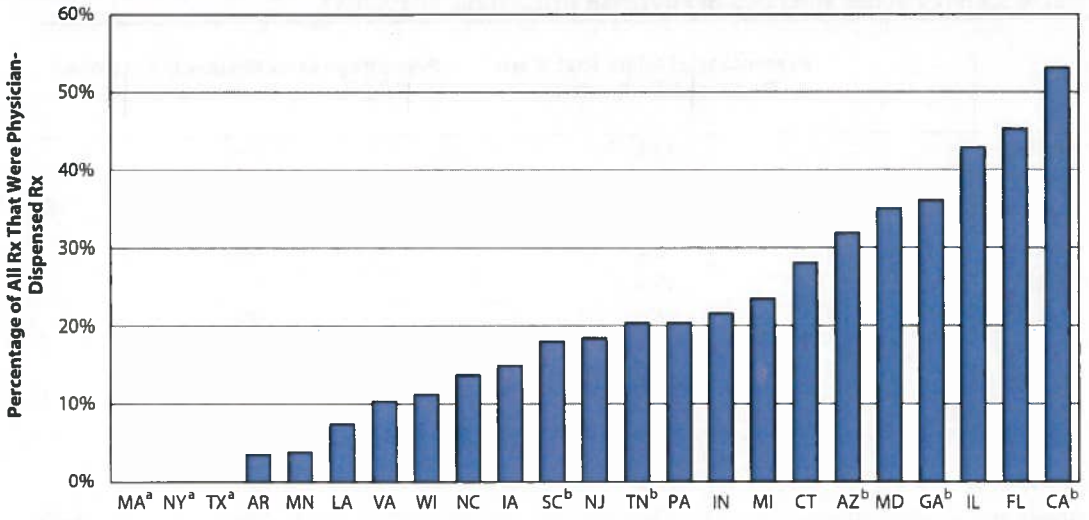
Among the ten states where physician dispensing was less common, three states (Massachusetts, New York, and Texas) prohibit physician dispensing by law. In Arkansas, physicians are permitted to dispense prescription drugs, but physician-dispensed drugs are subject to the same fee schedule as pharmacies in the state, which requires reporting the purchasing price for the drug dispensed. No dispensing fees are paid for physician-dispensed prescriptions. Minnesota also permits physician dispensing, but the state Board of Medical Practice requires physicians who dispense medications to register with the Board. In addition, physicians are required to disclose to patients that the physician profits from dispensing the drug and that the patient has the option of obtaining the drugs elsewhere. Louisiana limits physician dispensing by the type of drug. Appendix A summarizes state policies and major changes on pharmacy fee schedules and physician dispensing.

[1] 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions filled and paid for through March 31, 2011. Similar notation is used for other years.

[2] Chapter 4 presents price comparisons between physician- and pharmacy-dispensed prescriptions for the same drug.

[3] Lessons learned from the California post-reform experience are discussed in Chapter 6. We do not specifically discuss the early results of the Arizona reforms in this report.

Figure 3.1 Percentage of All Prescriptions That Were Dispensed by Physicians, 2010/2011



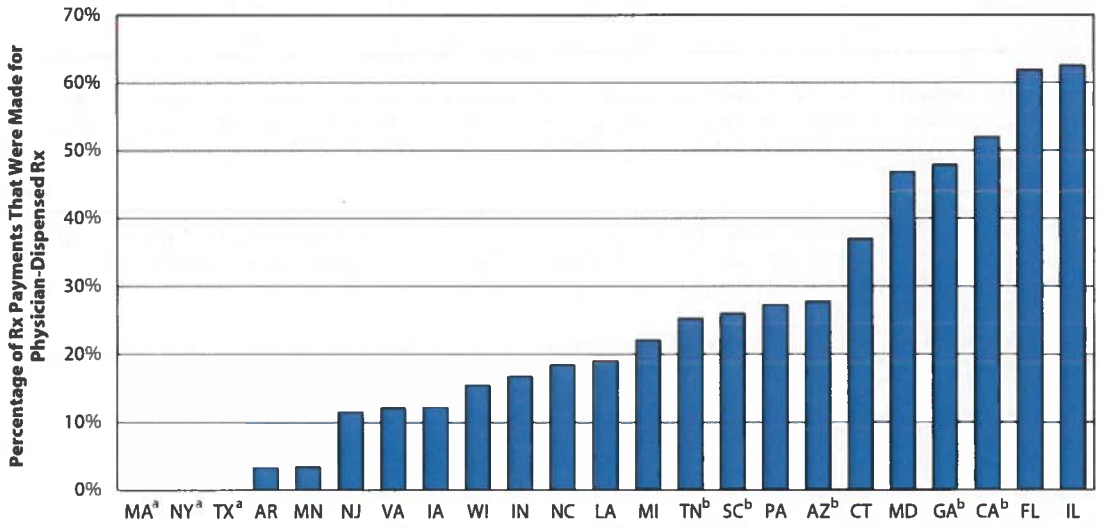
Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011.

[a] In Massachusetts, New York, and Texas, physician dispensing is not allowed in general (see Appendix A for more detail).

[b] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician-dispensed prescriptions (see Appendix A for more detail). For California and Arizona, the data included reflect post-reform experience in the state. For Georgia, South Carolina, and Tennessee, the data included are pre-reform. Lessons learned from California's post-reform experience are discussed in Chapter 6.

Key: Rx: prescriptions.

Figure 3.2 Percentage of Prescription Payments That Were for Physician-Dispensed Prescriptions, 2010/2011



Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011.

[a] In Massachusetts, New York, and Texas, physician dispensing is not allowed in general (see Appendix A for more detail).

[b] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician-dispensed prescriptions (see Appendix A for more detail). For California and Arizona, the data included reflect post-reform experience in the state. For Georgia, South Carolina, and Tennessee, the data included are pre-reform. Lessons learned from California's post-reform experience are discussed in Chapter 6.

Key: Rx: prescriptions.

Table 3.1 Prevalence and Costs of Physician Dispensing, 2010/2011

State	Percentage of All Rx That Were Dispensed by Physicians	Percentage of Rx Payments That Were Paid for Physician-Dispensed Rx
Illinois	43%	63%
Florida	45%	62%
California[a]	53%	52%
Georgia[a]	36%	48%
Maryland	35%	47%
Connecticut	28%	37%
Arizona[a]	32%	28%
Pennsylvania	20%	27%
South Carolina[a]	18%	26%
Tennessee[a]	20%	25%
Michigan	24%	22%
Louisiana	7%	19%
North Carolina	14%	18%
Indiana	22%	17%
Wisconsin	11%	15%
Iowa	15%	12%
Virginia	10%	12%
New Jersey	18%	12%
Minnesota	4%	3%
Arkansas	4%	3%
Massachusetts[b]	n/a	n/a
New York[b]	n/a	n/a
Texas[b]	n/a	n/a

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011.

[a] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician-dispensed prescriptions (see Appendix A for more detail). For California and Arizona, the data included reflect post-reform experience in the state. For Georgia, South Carolina, and Tennessee, the data included are pre-reform. Lessons learned from California's post-reform experience are discussed in Chapter 6.

[b] In Massachusetts, New York, and Texas, physician dispensing is not allowed in general (see Appendix A for more detail).

Key: n/a: not applicable; Rx: prescriptions.

Over the study period from 2007/2008 to 2010/2011, physician dispensing of prescription drugs became increasingly common in most states that we studied (Table 3.2). In 9 of the 23 states studied, the share of prescription spending represented by physician dispensing grew rapidly or very rapidly. Most striking was Illinois, where physician-dispensed prescriptions grew to 63 percent of total prescription spending—up from 22 percent in just three years.

Table 3.2 Growth of Physician Dispensing, 2007/2008–2010/2011

State	Percentage of All Rx That Were Dispensed by Physicians		Percentage Point Change	Percentage of Rx Payments That Were Paid for Physician-Dispensed Rx		Percentage Point Change
	2007/2008	2010/2011		2007/2008	2010/2011	
Illinois	26%	43%	17	22%	63%	41
Connecticut	18%	28%	10	16%	37%	21
Florida	35%	45%	10	43%	62%	19
South Carolina[a]	12%	18%	6	10%	26%	16
Georgia[a]	30%	36%	6	32%	48%	16
Pennsylvania	17%	20%	3	15%	27%	12
Tennessee[a]	15%	20%	5	14%	25%	11
Maryland	33%	35%	2	36%	47%	11
Wisconsin	8%	11%	3	5%	15%	10
North Carolina	12%	14%	2	10%	18%	8
Indiana	17%	22%	5	9%	17%	8
Virginia	7%	10%	3	5%	12%	7
Michigan	23%	24%	1	15%	22%	7
Arizona[a]	27%	32%	5	23%	28%	5
Louisiana	11%	7%	-4	17%	19%	2
New Jersey	11%	18%	7	10%	12%	2
Iowa	16%	15%	-1	11%	12%	1
Minnesota	3%	4%	1	2%	3%	1
Arkansas	2%	4%	2	2%	3%	1
California[a]	56%	53%	-3	55%	52%	-3
Massachusetts[b]	n/a	n/a	n/a	n/a	n/a	n/a
New York[b]	n/a	n/a	n/a	n/a	n/a	n/a
Texas[b]	n/a	n/a	n/a	n/a	n/a	n/a

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011; similar notation is used for other years.

[a] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician dispensing (see Appendix A for more detail). The data included are partially post-reform for Arizona, post-reform for California, and pre-reform for Georgia, South Carolina, and Tennessee. Lessons learned from California's post-reform experience are discussed in Chapter 6.

[b] In Massachusetts, New York, and Texas, physician dispensing is not allowed in general (see Appendix A for more detail).

Key: n/a: not applicable; Rx: prescriptions.

Very rapid increases in spending on physician-dispensed prescriptions were seen in Connecticut (21 percentage points), Florida (19 percentage points), South Carolina (16 points), and Georgia (16 points). Note that both South Carolina and Georgia recently adopted reforms, after the period covered by these data, aimed at reducing the costs of physician dispensing.

In Pennsylvania, Tennessee, Maryland, and Wisconsin (listed in Table 3.2), rapid growth was also seen in physicians' share of prescription payments, although the frequency of physician dispensing increased moderately. This occurred because of large increases in the prices of physician-dispensed drugs, while the prices paid to pharmacies for the same medications changed little or fell. One of these states (Tennessee) adopted reforms aimed at reducing the costs of physician dispensing, after the period covered by the data.

The striking growth of physician dispensing in Illinois (over three years) deserves more discussion. It was the product of the following:

- A large increase in the frequency of physician dispensing—from 26 to 43 percent of all prescriptions.
- Rapid increases in the prices paid for common drugs when dispensed by physicians, while the prices of the same drug dispensed by pharmacies changed little or fell. For example, the average price paid for physician-dispensed hydrocodone-acetaminophen (Vicodin®)[4] grew by 66 percent between 2007/2008 and 2010/2011 claims, while the price of the same drug dispensed at pharmacies remained stable (Table 4.2).
- Physician-dispensers increasingly prescribed and dispensed medications that were available at much lower prices at pharmacies without prescriptions (e.g., over-the-counter drugs). For example, omeprazole (Prilosec®) was prescribed for less than 1 percent of patients in 2007/2008, but for 7 percent of patients in 2010/2011. Almost all of these prescriptions were dispensed by physicians (94 percent of all prescriptions for the drug in 2010/2011 claims) rather than pharmacies. The prices paid to physician-dispensers for omeprazole (Prilosec®) increased from $4.71 to $8.08 per pill over that period (Table 5.1). The cost per pill at Walgreens without a prescription was $0.64.[5]

It is worth noting that meloxicam (Mobic®) was another drug that was increasingly prescribed and dispensed by physicians over the study period, contributing to the rapid growth in frequency and costs of physician dispensing.

Meloxicam (Mobic®) is a nonsteroidal anti-inflammatory agent (NSAID) commonly used to treat mild to moderate pain and inflammation in the back, neck, and leg. In mid-2006, several generic versions of the brand name Mobic® were approved by the FDA. In the subsequent years, repackaged generic Mobic®, or meloxicam, became available in the market.

As Table 3.3 shows, physician-dispensed meloxicam (Mobic®) increased considerably. This can be seen in several states where physician dispensing grew rapidly. In Illinois, for example, 9 percent of physician-dispensed prescriptions were for meloxicam (Mobic®) in 2010/2011, up by 7 percentage points (Table 3.3). At the same time, physicians' share of meloxicam (Mobic®) prescriptions also increased—in Illinois, 80 percent of meloxicam prescriptions were dispensed by physicians in 2010/2011, increased from 29 percent in 2007/2008. As a result, 14 percent of patients in Illinois received meloxicam (Mobic®) in 2010/2011; only 4 percent received it in 2007/2008. Note that the average price paid for generic meloxicam (Mobic®) was $2.92 per pill at pharmacies, but $5.81 per pill when dispensed by physicians in 2010/2011 claims (Table 4.1). The increased use of meloxicam (Mobic®) was accompanied by a decrease in prescriptions for less-expensive

[4] When discussing a specific drug, we use the drug name that reflects the active ingredients of the drug and include a brand name in parentheses that has the same active ingredients. For example, hydrocodone-acetaminophen has two active ingredients—hydrocodone and acetaminophen. Vicodin® and Norco® are two brand names for hydrocodone-acetaminophen. Throughout the report, we refer to this drug as *hydrocodone-acetaminophen (Vicodin®)* for brevity; similar notation is used for other drugs.

[5] The price for a 42-count box of Prilosec OTC® is $26.99. Prices were retrieved on May 29, 2012, from www.walgreens.com.

ibuprofen (Motrin®). According to one expert who reviewed a draft of the report, there is a lack of medical evidence suggesting that meloxicam (Mobic®) is more effective than ibuprofen (Motrin®). However, the cost for meloxicam (Mobic®) was much higher when dispensed by physicians.

Table 3.3 Changes in Prescribing and Dispensing of Certain Drugs for Selected States,[a] 2007/2008 and 2010/2011

	Percentage of MDRx That Were for the Drug Dispensed by Physicians		Percentage Point Change	Percentage of Rx for the Drug That Were MDRx		Percentage Point Change
	2007/2008	2010/2011		2007/2008	2010/2011	
Illinois						
Meloxicam (Mobic®)	2%	9%	7	29%	80%	51
Omeprazole (Prilosec®)	0%	6%	6	64%	94%	30
Connecticut						
Meloxicam (Mobic®)	1%	6%	5	18%	64%	46
Omeprazole (Prilosec®)	0%	1%	1	80%	61%	-19
Florida						
Meloxicam (Mobic®)	2%	10%	8	40%	74%	34
Omeprazole (Prilosec®)	2%	4%	2	87%	90%	3
South Carolina[b]						
Meloxicam (Mobic®)	1%	8%	7	9%	40%	31
Omeprazole (Prilosec®)	0%	0%	0	0%	9%	9
Georgia[b]						
Meloxicam (Mobic®)	3%	8%	5	41%	59%	18
Omeprazole (Prilosec®)	0%	3%	3	59%	87%	28
Pennsylvania						
Meloxicam (Mobic®)	2%	6%	4	27%	45%	18
Omeprazole (Prilosec®)	0%	1%	1	13%	42%	29
Tennessee[b]						
Meloxicam (Mobic®)	5%	10%	5	24%	39%	15
Omeprazole (Prilosec®)	0%	0%	0	22%	21%	-1
Maryland						
Meloxicam (Mobic®)	1%	5%	4	28%	65%	37
Omeprazole (Prilosec®)	1%	2%	1	66%	97%	31
Wisconsin						
Meloxicam (Mobic®)	1%	5%	4	6%	30%	24
Omeprazole (Prilosec®)	0%	1%	1	0%	17%	17

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011; similar notation is used for other years.

[a] Included are the states where physicians' share of drug spending grew rapidly or very rapidly (see Table 3.2).

[b] The data included are pre-reform for Georgia, South Carolina, and Tennessee, where the recent reforms were aimed at reducing the prices paid for physician-dispensed prescriptions.

Key: MDRx: physician-dispensed prescriptions; Rx: prescriptions.

4

PRICE PREMIUM PAID FOR PHYSICIAN-DISPENSED PRESCRIPTIONS

For many drugs that were commonly dispensed by physicians, the prices per pill paid to dispensing physicians averaged 60–300 percent higher than the prices paid to pharmacies if the same prescriptions were filled at pharmacies.[1] Over the study period, the prices for physician-dispensed prescriptions also grew rapidly in many states, while the prices paid to pharmacies for the same drugs had little change or fell.[2]

Table 4.1 compares the prices paid for physician-dispensed and pharmacy-dispensed prescriptions, for each of the five drugs that were most commonly dispensed by physicians in 2010/2011.[3] The states included are the 19 states in our sample where physician dispensing was permitted, except California.[4] For each of the five common drugs, the states are ordered from left to right by lowest to highest price premium for physician-dispensed drugs.

Hydrocodone-acetaminophen (Vicodin®) is the most common narcotic medication dispensed by physicians as well as pharmacies. When physicians dispensed the drug, the average price per pill paid to dispensing physicians was approximately 60–300 percent higher than what pharmacies were paid if the same prescription was filled at a pharmacy (Table 4.1). In Maryland, the unit price for hydrocodone-acetaminophen (Vicodin®) was $1.48 per pill when physicians dispensed the drug, more than four times the price paid to pharmacies for the same drug. Connecticut was the second highest—the average price paid per pill for hydrocodone-acetaminophen (Vicodin®) was $1.43 if dispensed by a physician and $0.37 if filled at a pharmacy. Arizona had an average unit price of $0.74 per pill for physician-dispensed prescriptions and $0.44 per pill for pharmacies. Note that the fee schedule changes in Arizona, effective October 2009, were aimed at reducing the costs of physician-dispensed prescriptions by setting reimbursement for physician-dispensed

[1] The percentage of the prices paid to physicians over and above what is paid to pharmacies is often referred to as a *price premium* for physician dispensing. The price premiums can be seen for nearly all common drugs dispensed by physicians although they vary by state and by the type of drug.

[2] The higher and steadily growing prices for physician-dispensed prescriptions were mainly because of physician dispensing of repackaged drugs.

[3] The five drugs were the highest ranking drugs based on the share of physician-dispensed prescriptions for each individual drug in many states studied, especially the states where physician dispensing was common. Since the distribution varied from one state to another, several other drugs were among the five highest ranking drugs in some states. For simplicity, we selected these five drugs for the report. These five drugs accounted for 50–60 percent of physician-dispensed prescriptions in all study states except Georgia, Maryland, and Louisiana (45–50 percent) and Florida (43 percent). The five drugs were also commonly used to treat injured workers in each state regardless of dispensing point. In our sample, these five drugs combined represent 40–55 percent of all prescriptions in all states except New Jersey (32 percent).

[4] California is not included in the analysis in this chapter. Lessons learned from the California post-reform experience are discussed in Chapter 6.

Table 4.1 Comparing Prices per Pill Paid for Physician- and Pharmacy-Dispensed Prescriptions for Top Five Common Drugs, 2010/2011[a]

	MN	AZ[b]	AR	IN	IA	TN[b]	GA[b]	VA	FL	IL	LA	WI	NC	SC[b]	NJ	PA	MI	CT	MD
Hydrocodone-acetaminophen (Vicodin®)																			
Prices per pill paid for MDRx	$0.47	$0.74	$1.07	$1.05	$1.02	$1.11	$1.02	$0.94	$1.08	$1.44	$1.17	$1.14	$1.35	$1.20	$1.23	$1.13	$0.98	$1.43	$1.48
Prices per pill paid for PDRx	$0.30	$0.44	$0.54	$0.51	$0.48	$0.52	$0.47	$0.43	$0.43	$0.53	$0.43	$0.41	$0.47	$0.41	$0.40	$0.35	$0.29	$0.37	$0.36
% of MDRx price above PDRx	57%	68%	98%	106%	113%	113%	117%	119%	151%	172%	172%	178%	187%	193%	208%	223%	238%	286%	311%
	AR	**MN**	**IN**	**AZ[b]**	**WI**	**FL**	**TN[b]**	**VA**	**IA**	**CT**	**NC**	**IL**	**GA[b]**	**SC[b]**	**NJ**	**LA**	**MD**	**MI**	**PA**
Ibuprofen (Motrin®)																			
Prices per pill paid for MDRx	–	–	$0.42	$0.49	$0.47	$0.58	$0.56	$0.53	$0.55	$0.57	$0.59	$0.59	$0.62	$0.60	$0.64	$0.68	$0.62	$0.58	$0.82
Prices per pill paid for PDRx	$0.28	$0.23	$0.30	$0.30	$0.27	$0.31	$0.29	$0.27	$0.28	$0.29	$0.27	$0.27	$0.28	$0.26	$0.27	$0.28	$0.25	$0.20	$0.26
% of MDRx price above PDRx	–	–	40%	63%	74%	87%	93%	96%	96%	97%	119%	119%	121%	131%	137%	143%	148%	190%	215%
	AR	**MN**	**VA**	**IA**	**IN**	**AZ[b]**	**TN[b]**	**WI**	**GA[b]**	**NJ**	**PA**	**FL**	**SC[b]**	**MI**	**IL**	**CT**	**NC**	**MD**	**LA**
Meloxicam (Mobic®)																			
Prices per pill paid for MDRx	–	–	–	–	$4.07	$3.62	$4.66	$4.85	$4.62	$4.34	$4.76	$5.25	$4.74	$3.99	$5.81	$5.25	$7.62	$5.02	$8.11
Prices per pill paid for PDRx	$3.10	$2.53	$3.26	$3.07	$3.50	$2.94	$3.60	$3.60	$3.28	$3.04	$3.26	$3.38	$2.91	$2.01	$2.92	$2.15	$3.00	$1.76	$2.49
% of MDRx price above PDRx	–	–	–	–	16%	23%	29%	35%	41%	43%	46%	55%	63%	99%	99%	144%	154%	185%	226%
	AR	**MN**	**AZ[b]**	**IN**	**FL**	**NJ**	**TN[b]**	**WI**	**GA[b]**	**IA**	**IL**	**PA**	**VA**	**SC[b]**	**NC**	**MD**	**CT**	**MI**	**LA**
Tramadol HCL (Ultram®)																			
Prices per pill paid for MDRx	–	–	$1.06	$1.37	$1.46	$1.67	$1.54	$1.60	$1.45	$1.46	$1.60	$1.66	$1.66	$1.52	$1.70	$1.52	$1.55	$1.23	$2.36
Prices per pill paid for PDRx	$0.83	$0.68	$0.72	$0.82	$0.84	$0.95	$0.87	$0.90	$0.81	$0.80	$0.82	$0.81	$0.79	$0.71	$0.77	$0.64	$0.65	$0.43	$0.71
% of MDRx price above PDRx	–	–	47%	67%	74%	76%	77%	78%	79%	83%	95%	105%	110%	114%	121%	138%	138%	186%	232%
	AR	**MN**	**IN**	**IA**	**AZ[b]**	**TN[b]**	**VA**	**WI**	**GA[b]**	**NC**	**NJ**	**SC[b]**	**CT**	**IL**	**FL**	**PA**	**MI**	**MD**	**LA**
Cyclobenzaprine HCL (Flexeril®)																			
Prices per pill paid for MDRx	–	–	$1.09	$1.06	$1.20	$1.42	$1.34	$1.33	$1.44	$1.55	$1.60	$1.51	$1.55	$1.63	$1.70	$1.78	$1.36	$1.78	$2.44
Prices per pill paid for PDRx	$0.98	$0.77	$1.11	$1.06	$1.03	$1.11	$1.04	$0.97	$1.04	$1.05	$1.02	$0.96	$0.98	$1.03	$1.07	$0.97	$0.58	$0.75	$0.82
% of MDRx price above PDRx	–	–	-2%	0%	17%	28%	29%	37%	38%	48%	57%	57%	58%	58%	59%	84%	134%	137%	198%

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011.

[a] In Massachusetts, New York, and Texas, physicians are not allowed in general to dispense prescription drugs (see Appendix A for more detail). These three states are not included in this analysis.

[b] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician-dispensed prescriptions (see Appendix A for more detail). For Arizona, the data included reflect the early results of post-reform experience in the state. For Georgia, South Carolina, and Tennessee, the data included are pre-reform. California is not included in the analysis in this chapter. Lessons learned from California's post-reform experience are discussed in Chapter 6.

Key: –: not reported because the cell size is less than 30 prescriptions; MDRx: physician-dispensed prescriptions; PDRx: pharmacy-dispensed prescriptions.

drugs to the average wholesale price (AWP) of the underlying drug product using the original manufacturer NDC when repackaged drugs were dispensed.[5]

Ibuprofen (Motrin®) is the most commonly prescribed non-narcotic medication. Among the states analyzed, the price premium for physician-dispensed prescriptions ranged from 40 percent in Indiana to 215 percent in Pennsylvania. In Pennsylvania, for example, the average price paid for this drug was $0.82 per pill when it was dispensed by physicians compared with $0.26 per pill when pharmacies dispensed the drug.

Meloxicam (Mobic®) is an NSAID commonly used to treat mild to moderate pain and inflammation in the back, neck, and leg. Mobic® is the brand name of the medication, which was the only drug product available in the market until several generic versions of Mobic® were approved by the FDA in 2006. Since then, we have seen a large increase in the use of repackaged generic meloxicam, often dispensed by physicians. Table 4.1 shows that in several states where physician dispensing was frequent, the average price per pill paid to physicians when they dispensed meloxicam (Mobic®) was between 4 and 8 dollars, approximately 40 to 220 percent higher than the average price per pill paid to pharmacies for the same drug. Physician dispensing in Louisiana was less common (Table 3.1), but when physicians dispensed, the price premium for meloxicam (Mobic®) was much higher than for the same drug when dispensed at pharmacies—it cost an average of $8.11 per pill when a physician dispensed the drug, 226 percent higher than what was paid to pharmacies for the same drug ($2.49 per pill).

Tramadol HCL (Ultram®), another pain medication, was often dispensed by physicians. In most states analyzed, the average price per pill paid for tramadol HCL (Ultram®) when dispensed by physicians was approximately 50–230 percent higher than the prices paid to pharmacies for the same drug.[6] In Louisiana, for example, the average price paid for tramadol HCL (Ultram®) was $2.36 per pill when the prescriptions were dispensed by physicians, 232 percent higher than what was paid when dispensed at pharmacies ($0.71 per pill).

Cyclobenzaprine HCL (Flexeril®) is a muscle relaxant used to relieve pain and discomfort caused by sprains, strains, and other muscle injuries. We also saw a considerable price premium for this drug when a physician dispensed it. Table 4.1 shows that when a physician dispensed, the prices paid for cyclobenzaprine HCL (Flexeril®) in many states were approximately 30 to 140 percent higher than what was paid if the same prescription were filled at a pharmacy. Louisiana stood out again with a much higher price premium paid for cyclobenzaprine HCL (Flexeril®). In Louisiana, the price paid for physician-dispensed cyclobenzaprine HCL (Flexeril®) was $2.44 per pill, 198 percent higher than the price paid when the same drug was dispensed at a pharmacy ($0.82 per pill).

Overall, we often found large price premiums when physicians dispensed prescriptions for these commonly prescribed drugs. The evidence was consistent among the states where physician dispensing was frequent.

Over the study period from 2007/2008 to 2010/2011, we saw large increases in prices paid for some common drugs when physicians dispensed these drugs, but not when pharmacies dispensed the same drugs. The percentage increases between 2007/2008 and 2010/2011 were as high as 50–70 percent for some drugs

[5] See Appendix A for a summary of state policies on pharmacy fee schedules and physician dispensing. In a detailed data review, we saw some evidence suggesting that during a short period of time immediately after the fee schedule changes in Arizona, some physician-dispensers might have been paid higher prices for some prescriptions dispensed, compared with what was paid for the same drug before the fee schedule changes. Note that the Arizona workers' compensation pharmacy fee schedule for generic drugs was set to the AWP minus 15 percent, plus a dispensing fee.

[6] California is not included in the analysis in this chapter since it had major changes over the study period that equalized the prices paid for physician- and pharmacy-dispensed prescriptions.

that were dispensed by physicians in some states. In contrast, the average price paid to pharmacies for the same drug was fairly stable or decreased.[7]

Table 4.2 shows the changes between 2007/2008 and 2010/2011 in the average price per pill paid for physician- and pharmacy-dispensed prescriptions for the top five drugs that were most commonly dispensed by physicians. Included in the table are the states with rapid or very rapid growth in the cost share of physician dispensing. We discuss the results for several states to illustrate the divergent trends in the prices paid for physician- and pharmacy-dispensed prescriptions. For some states, we mention additional drugs that have also experienced rapid increases in price.[8]

In Illinois, we saw dramatic increases in the prices paid for most drugs that were commonly dispensed by Illinois physicians, 20–60 percent increases over the three-year period. As Table 4.2 shows, the average price paid to physicians for hydrocodone-acetaminophen (Vicodin®) increased 66 percent, from $0.87 per pill in 2007/2008 to $1.44 per pill in 2010/2011. Prices paid increased 39 percent for meloxicam (Mobic®) and 24 percent for tramadol HCL (Ultram®) over the three-year period. In a sharp contrast, the prices per pill paid to pharmacies for the same common drugs remained stable or decreased slightly over the same period.

In Florida, prices paid to physicians increased for a number of drugs that were commonly dispensed by physicians, including cyclobenzaprine HCL (Flexeril®), naproxen (Aleve®), cephalexin (Keflex®), and propoxyphene-N w/APAP (Darvocet-N®). Table 4.2 shows that the price paid for cyclobenzaprine HCL (Flexeril®) was $1.44 per pill in 2007/2008, which increased 18 percent to $1.70 per pill in 2010/2011. Over the same period, the unit price paid to pharmacies for most common drugs remained stable or dropped. Note that the prices paid to physicians increased in Florida, but the rate of growth appears to have been slower over three years, compared with that in the other study states.

In South Carolina, the prices paid for hydrocodone-acetaminophen (Vicodin®) increased 50 percent between 2007/2008 and 2010/2011, while the prices paid to pharmacies for the same drug decreased by 11 percent. Prices paid to physicians for meloxicam (Mobic®) also increased in South Carolina by 37 percent, while the prices of the same drug when dispensed at pharmacies dropped 23 percent. Prices paid to physicians for several other drugs also had a double-digit increase over three years, including naproxen (Aleve®).

[7] The decreases in the prices paid for pharmacy-dispensed prescriptions that appear in our data might have been the result of a number of factors, including increased network penetration, network discounts, and increased use of mail order services. Our benchmark metrics do not cover these dimensions in the forthcoming third edition of WCRI's Prescription Benchmarks—we may expand the benchmark metrics in future studies. Note that the average price per pill paid for individual drugs used in the price comparison was the price for generic versions of the drug. This measure is more appropriate to use because it ensures more comparable results and most of the drugs commonly dispensed by physicians are generics. As a result, an increased use of generic drugs over time does not explain why we see a price drop for pharmacy-dispensed prescriptions.

[8] For brevity, these additional drugs are not included in Table 4.2.

Table 4.2 Trends in Prices per Pill Paid for Physician- and Pharmacy-Dispensed Prescriptions for Selected States,[a] 2007/2008–2010/2011

	2007/2008	2008/2009	2009/2010	2010/2011	Percentage Change from 2007/2008 to 2010/2011
Connecticut					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$0.93	$1.53	$1.47	$1.43	54%
Pharmacy-dispensed Rx	$0.41	$0.41	$0.36	$0.37	-10%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.53	$0.58	$0.57	$0.57	8%
Pharmacy-dispensed Rx	$0.34	$0.32	$0.28	$0.29	-15%
Meloxicam (Mobic®)					
Physician-dispensed Rx	$4.87	$5.04	$5.40	$5.25	8%
Pharmacy-dispensed Rx	$2.99	$3.41	$2.00	$2.15	-28%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.57	$1.65	$1.52	$1.55	-1%
Pharmacy-dispensed Rx	$0.81	$0.78	$0.64	$0.65	-20%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.48	$1.52	$1.43	$1.55	5%
Pharmacy-dispensed Rx	$1.22	$1.17	$0.95	$0.98	-20%
Florida					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$1.08	$1.11	$1.15	$1.08	0%
Pharmacy-dispensed Rx	$0.49	$0.49	$0.43	$0.43	-12%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.54	$0.57	$0.57	$0.58	7%
Pharmacy-dispensed Rx	$0.33	$0.33	$0.32	$0.31	-6%
Meloxicam (Mobic®)					
Physician-dispensed Rx	$5.27	$5.53	$5.11	$5.25	0%
Pharmacy-dispensed Rx	$3.52	$3.62	$3.49	$3.38	-4%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.42	$1.48	$1.51	$1.46	3%
Pharmacy-dispensed Rx	$0.83	$0.82	$0.81	$0.84	1%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.44	$1.56	$1.71	$1.70	18%
Pharmacy-dispensed Rx	$1.15	$1.13	$1.09	$1.07	-7%
Georgia[b]					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$0.96	$0.97	$1.11	$1.02	6%
Pharmacy-dispensed Rx	$0.51	$0.51	$0.49	$0.47	-8%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.60	$0.57	$0.59	$0.62	3%
Pharmacy-dispensed Rx	$0.35	$0.34	$0.32	$0.28	-20%
Meloxicam (Mobic®)					
Physician-dispensed Rx	$6.31	$5.35	$4.91	$4.62	-27%
Pharmacy-dispensed Rx	$3.90	$3.55	$3.45	$3.28	-16%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.66	$1.71	$1.55	$1.45	-13%
Pharmacy-dispensed Rx	$0.85	$0.83	$0.82	$0.81	-5%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.59	$1.48	$1.44	$1.44	-9%
Pharmacy-dispensed Rx	$1.15	$1.16	$1.08	$1.04	-10%

continued

Table 4.2 Trends in Prices per Pill Paid for Physician- and Pharmacy-Dispensed Prescriptions for Selected States,[a] 2007/2008–2010/2011 (continued)

	2007/2008	2008/2009	2009/2010	2010/2011	Percentage Change from 2007/2008 to 2010/2011
Illinois					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$0.87	$1.13	$1.35	$1.44	66%
Pharmacy-dispensed Rx	$0.54	$0.55	$0.53	$0.53	-2%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.56	$0.57	$0.60	$0.59	5%
Pharmacy-dispensed Rx	$0.33	$0.33	$0.30	$0.27	-18%
Meloxicam (Mobic®)					
Physician-dispensed Rx	$4.17	$4.89	$5.97	$5.81	39%
Pharmacy-dispensed Rx	$3.82	$3.77	$3.50	$2.92	-24%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.29	$1.45	$1.57	$1.60	24%
Pharmacy-dispensed Rx	$0.84	$0.84	$0.84	$0.82	-2%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.41	$1.48	$1.55	$1.63	16%
Pharmacy-dispensed Rx	$1.13	$1.10	$1.03	$1.03	-9%
Maryland					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$0.83	$1.03	$1.54	$1.48	78%
Pharmacy-dispensed Rx	$0.39	$0.37	$0.38	$0.36	-8%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.57	$0.60	$0.61	$0.62	9%
Pharmacy-dispensed Rx	$0.29	$0.28	$0.27	$0.25	-14%
Meloxicam (Mobic®)					
Physician-dispensed Rx	$3.13	$3.92	$5.42	$5.02	60%
Pharmacy-dispensed Rx	$2.22	$2.27	$2.09	$1.76	-21%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.40	$1.51	$1.54	$1.52	9%
Pharmacy-dispensed Rx	$0.66	$0.62	$0.63	$0.64	-3%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.44	$1.52	$1.55	$1.78	24%
Pharmacy-dispensed Rx	$0.93	$0.82	$0.76	$0.75	-19%
Pennsylvania					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$0.92	$0.78	$1.09	$1.13	23%
Pharmacy-dispensed Rx	$0.39	$0.37	$0.34	$0.35	-10%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.65	$0.64	$0.75	$0.82	26%
Pharmacy-dispensed Rx	$0.30	$0.29	$0.27	$0.26	-13%
Meloxicam (Mobic®)					
Physician-dispensed Rx	–	$3.41	$4.36	$4.76	–
Pharmacy-dispensed Rx	$3.79	$3.70	$3.47	$3.26	-14%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.47	$1.43	$1.61	$1.66	13%
Pharmacy-dispensed Rx	$0.82	$0.80	$0.77	$0.81	-1%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.46	$1.52	$1.52	$1.78	22%
Pharmacy-dispensed Rx	$1.17	$1.09	$1.03	$0.97	-17%

continued

Table 4.2 Trends in Prices per Pill Paid for Physician- and Pharmacy-Dispensed Prescriptions for Selected States,[a] 2007/2008–2010/2011 (continued)

	2007/2008	2008/2009	2009/2010	2010/2011	Percentage Change from 2007/2008 to 2010/2011
South Carolina[b]					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$0.80	$1.11	$1.09	$1.20	50%
Pharmacy-dispensed Rx	$0.46	$0.46	$0.43	$0.41	-11%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.53	$0.61	$0.58	$0.60	13%
Pharmacy-dispensed Rx	$0.35	$0.32	$0.29	$0.26	-26%
Meloxicam (Mobic®)					
Physician-dispensed Rx	$3.46	$4.10	$4.31	$4.74	37%
Pharmacy-dispensed Rx	$3.80	$3.52	$2.91	$2.91	-23%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.42	$1.43	$1.48	$1.52	7%
Pharmacy-dispensed Rx	$0.81	$0.82	$0.83	$0.71	-12%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.33	$1.43	$1.52	$1.51	14%
Pharmacy-dispensed Rx	$1.16	$1.14	$0.99	$0.96	-17%
Tennessee[b]					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$1.05	$1.01	$1.06	$1.11	6%
Pharmacy-dispensed Rx	$0.53	$0.53	$0.52	$0.52	-2%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.47	$0.45	$0.47	$0.56	19%
Pharmacy-dispensed Rx	$0.34	$0.33	$0.32	$0.29	-15%
Meloxicam (Mobic®)					
Physician-dispensed Rx	$4.04	$3.79	$4.09	$4.66	15%
Pharmacy-dispensed Rx	$3.62	$3.85	$3.54	$3.60	-1%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.46	$1.55	$1.46	$1.54	5%
Pharmacy-dispensed Rx	$0.85	$0.82	$0.86	$0.87	2%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.33	$1.29	$1.36	$1.42	7%
Pharmacy-dispensed Rx	$1.11	$1.10	$1.11	$1.11	0%
Wisconsin					
Hydrocodone-acetaminophen (Vicodin®)					
Physician-dispensed Rx	$0.77	$0.86	$0.97	$1.14	48%
Pharmacy-dispensed Rx	$0.46	$0.46	$0.42	$0.41	-11%
Ibuprofen (Motrin®)					
Physician-dispensed Rx	$0.44	$0.44	$0.49	$0.47	7%
Pharmacy-dispensed Rx	$0.31	$0.30	$0.28	$0.27	-13%
Meloxicam (Mobic®)					
Physician-dispensed Rx	–	–	$5.60	$4.85	–
Pharmacy-dispensed Rx	$3.61	$3.69	$3.74	$3.60	0%
Tramadol HCL (Ultram®)					
Physician-dispensed Rx	$1.17	$1.46	$1.52	$1.60	37%
Pharmacy-dispensed Rx	$0.79	$0.80	$0.77	$0.90	14%
Cyclobenzaprine HCL (Flexeril®)					
Physician-dispensed Rx	$1.32	$1.32	$1.08	$1.33	1%
Pharmacy-dispensed Rx	$1.05	$1.05	$1.01	$0.97	-8%

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2007/2008 refers to claims with injuries occurring from October 2006 through September 2007 and prescriptions filled through March 2008; similar notation is used for other years.

[a] We reported the prices and percentage changes in prices paid for physician- and pharmacy-dispensed prescriptions for the states where physicians' share of drug spending grew rapidly or very rapidly (see Table 3.2).

[b] The data included are pre-reform for Georgia, South Carolina, and Tennessee, where the recent reforms were aimed at reducing the prices paid for physician-dispensed prescriptions.

Key: –: not reported because the cell size is less than 30 prescriptions; Rx: prescriptions.

In Georgia, the prices paid for physician-dispensed hydrocodone-acetaminophen (Vicodin®) increased by 6 percent, while the prices paid to pharmacies for the same drug dropped 8 percent. A double-digit increase in prices paid to physicians was also seen for gabapentin (Neurontin®) and tramadol-acetaminophen (Ultracet®), while the prices paid to pharmacies for the same drugs fell over the three-year period. For a number of common drugs dispensed by physicians in the state, it appears that the prices paid to both pharmacies and physicians fell over the three years. However, the prices per pill paid for physician-dispensed prescriptions were still higher than the prices paid to pharmacies for the same drug (Table 4.2).

In Connecticut, we saw large increases for several drugs that were commonly dispensed by physicians, including hydrocodone-acetaminophen (Vicodin®), propoxyphene-N w/APAP (Darvocet-N®), and gabapentin (Neurontin®). Table 4.2 shows that the prices paid for hydrocodone-acetaminophen (Vicodin®) increased from $0.93 to $1.43 per pill when physicians dispensed the drug, a 54 percent increase over the three-year period. In contrast, the unit price paid to pharmacies for the same drug decreased from $0.41 to $0.37 per pill over the same period.

In Pennsylvania, Tennessee, Maryland, and Wisconsin, where physicians' share of drug spending grew rapidly, prices paid for physician-dispensed prescriptions also increased for several drugs commonly dispensed by physicians, while prices paid to pharmacies changed little or fell. For example, the average price per pill paid to physicians for hydrocodone-acetaminophen (Vicodin®) increased 78 percent in Maryland, 48 percent in Wisconsin, 23 percent in Pennsylvania, and 6 percent in Tennessee, while the prices paid to pharmacies for the same drug fell by 2 to 11 percent in the four states.

5

CERTAIN DRUGS PRESCRIBED ONLY WHEN PHYSICIANS DISPENSE

The price premium paid to dispensing physicians over and above what is paid to pharmacies for the same drugs directly adds to the costs of prescriptions. It may also add indirectly to the prescription costs, because a higher price premium may influence physician prescribing patterns such that a physician may prescribe certain medications to the patient, based less on clinical indications and more on the profitability of the drug.[1]

We found some evidence suggesting that this might be the case. As Figure 5.1 shows, in most study states, few injured workers (less than 2 percent of claims with prescriptions) received a prescription for either omeprazole (Prilosec®) or ranitidine HCL (Zantac®), two ulcer drugs that are commonly used for acid reflux and are available over the counter at pharmacies. However, these two drugs were prescribed for approximately 8–11 percent of the claims with prescriptions in Illinois, Maryland, Georgia, and Florida.

Table 5.1 shows the frequency of prescribing either of the two drugs, the prevalence of physician dispensing, and the prices paid for physician- and pharmacy-dispensed prescriptions for each of the two drugs.[2] Included in the table are the results for all study states except California.[3] The states where physician dispensing was most common are listed on the far right of the table.

The table shows that in 2010/2011 claims, omeprazole (Prilosec®) and ranitidine HCL (Zantac®) were rarely prescribed in most study states. However, among the states where physician dispensing was common, especially in Florida, Georgia, Illinois, and Maryland, 8–11 percent of the injured workers were given either omeprazole (Prilosec®) or ranitidine HCL (Zantac®) or both. In three of the four states, the average prices per pill paid for the two drugs when dispensed by physicians were nearly twice as high as what were paid to pharmacies for the same drug.[4]

It should be noted that the retail price for Prilosec OTC®, which is the same as generic omeprazole 20

[1] What we found is consistent with economic theory and a large amount of empirical evidence for overutilization of medical services in the presence of self-referral. Research has found an over-prescribing of certain medications because of the financial incentive associated with physician dispensing. Studies on this topic include a study of physician dispensing in California workers' compensation (Nehauser et al., 2006) and three studies outside workers' compensation in Japan (Iizuka, 2007), Taiwan (Chen et al., 2011), and China (Currie, et al., 2010).

[2] The price premium, reflected in the price comparison, is the amount paid to physicians for a drug that is over and above the price paid for the same drug when dispensed at pharmacies.

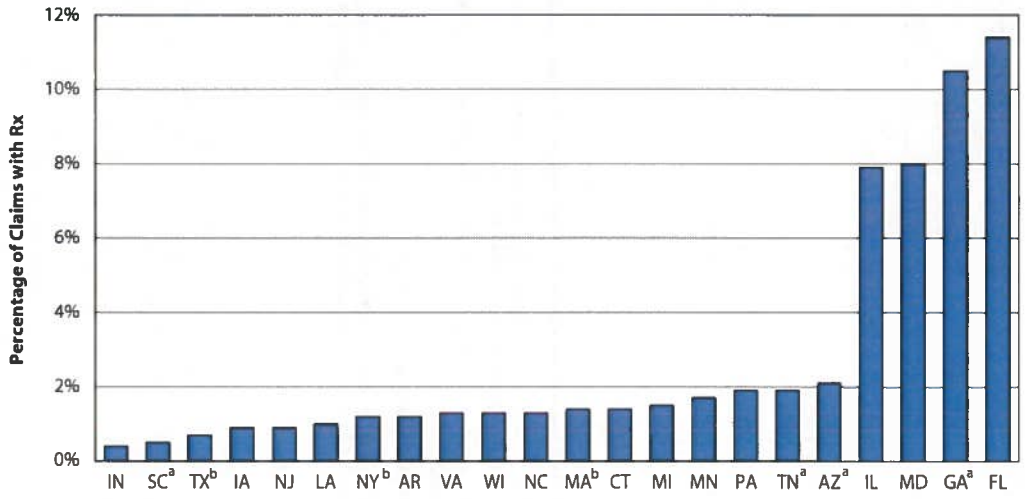
[3] California is not included in the analysis in this chapter. For an analysis of California's post-reform experience, please see Chapter 6.

[4] Note that the prices paid to pharmacies for the same drug were higher in Illinois and Maryland than in Florida and Georgia. This is likely due to the fact that Illinois and Maryland did not have pharmacy fee schedules while Florida and Georgia tied their pharmacy fee schedules to the AWP.

mg, is about 64 cents per pill.[5] Zantac® is less expensive than Prilosec®—the price for nonprescription Zantac® is about 33–42 cents per pill, depending on strength and quantity.[6]

The results presented above suggest that some physician-dispensers may prescribe certain drugs because of the extra income to be obtained from dispensing and that when not dispensing, these doctors either do not use the medications for their patients, or suggest that the patient obtain the medication from the drug store or grocery store without the need for a prescription. Also, in the states where these drugs were prescribed, a vast majority of these prescriptions were dispensed by physicians, rather than dispensed at pharmacies.

Figure 5.1 Percentage of Claims with Prescriptions That Had Omeprazole (Prilosec®) or Ranitidine HCL (Zantac®), 2010/2011



Notes: The underlying data include claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011.

[a] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician-dispensed prescriptions (see Appendix A for more detail). The data included reflect the early post-reform results for Arizona and are pre-reform for Georgia, South Carolina, and Tennessee. California is not included in the analysis in this chapter. Lessons learned from California's post-reform experience are discussed in Chapter 6.

[b] In Massachusetts, New York, and Texas, physician dispensing is not allowed in general (see Appendix A for more detail).

Key: Rx: prescriptions.

[5] The price for a 42-count box of Prilosec OTC® is $26.99. Prices were retrieved on May 29, 2012, from www.walgreens.com.

[6] The unit price per pill for a 30-pill bottle of Zantac® is 33 cents and for a 24-pill box of Zantac® 150 mg is about 42 cents. Prices were retrieved on May 29, 2012, from www.walgreens.com.

Table 5.1 Prescribing Patterns Associated with Physician Dispensing: Omeprazole (Prilosec®) and Ranitidine HCL (Zantac®), 2010/2011[a]

Measure	MA[b]	NY[b]	TX[b]	AR	MN	LA	VA	WI	NC	IA	SC[c]	NJ	TN[c]	PA	IN	MI	CT	AZ[c]	MD	GA[c]	IL	FL
Likelihood of prescribing certain drugs																						
% of claims that had omeprazole (Prilosec®) or ranitidine HCL (Zantac®)	1%	1%	<1%	1%	2%	1%	1%	1%	1%	<1%	<1%	<1%	2%	2%	<1%	2%	1%	2%	8%	11%	8%	11%
Prevalence of physician dispensing																						
% of all Rx that were dispensed by physicians	1%	1%	2%	4%	4%	7%	10%	11%	14%	15%	18%	18%	20%	20%	22%	24%	28%	32%	35%	36%	43%	45%
Price comparison																						
Prices per pill paid for omeprazole (Prilosec®) when dispensed by…																						
Physicians	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	$5.27	$6.10	$8.08	$7.07
Pharmacies	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	$4.74	$3.00	$4.49	$3.64
Walgreens[a]																			$0.64	$0.64	$0.64	$0.64
Prices per pill paid for ranitidine HCL (Zantac®) when dispensed by…																						
Physicians	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	$3.91	$4.21	$6.88	$4.81
Pharmacies	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	$3.84	$2.35	$3.63	$2.63
Walgreens[a]																			$0.42	$0.42	$0.42	$0.42

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring from October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011.

[a] Prilosec OTC® acid reducer is the same as prescription Prilosec® 20 mg. The price for a 42-count box of Prilosec OTC® is $26.99. The unit price per pill for a 30-pill bottle of Zantac® is 33 cents and for a 24-pill box of Zantac® 150 mg is about 42 cents. Prices were retrieved on May 29, 2012, from www.walgreens.com.

[b] In Massachusetts, New York, and Texas, physician dispensing is not allowed in general (see Appendix A for more detail).

[c] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician-dispensed prescriptions (see Appendix A for more detail). The data included reflect the early post-reform results for Arizona and are pre-reform for Georgia, South Carolina, and Tennessee. California is not included in the analysis in this chapter. Lessons learned from California's post-reform experience are discussed in Chapter 6.

Key: –: not reported because only a small percentage of claims had the drug; Rx: prescriptions.

6

PATIENT ACCESS TO PHYSICIAN-DISPENSED DRUGS: LESSONS FROM THE CALIFORNIA REFORMS

When reforms are considered in various states, a common concern is that patients may no longer have access to physician-dispensed medications if physicians are not paid a large price premium over what pharmacies are paid for the same drug. In March 2007, California adopted reforms that equalized the prices paid to physicians and pharmacies for the same drugs dispensed. The experience in California should be useful for other states considering reforms.

Supporters of physician dispensing often raise two concerns about reforms that reduce the prices paid for physician-dispensed drugs:

- Patient access and outcomes would be hurt. Physicians would stop dispensing prescription drugs in response to the large drop in the prices. If this occurs, patient compliance with medication therapy would suffer and, therefore, the quality of care and patient outcomes would suffer.
- Prescription costs would increase because physicians dispense lower price generic drugs more frequently than pharmacies.

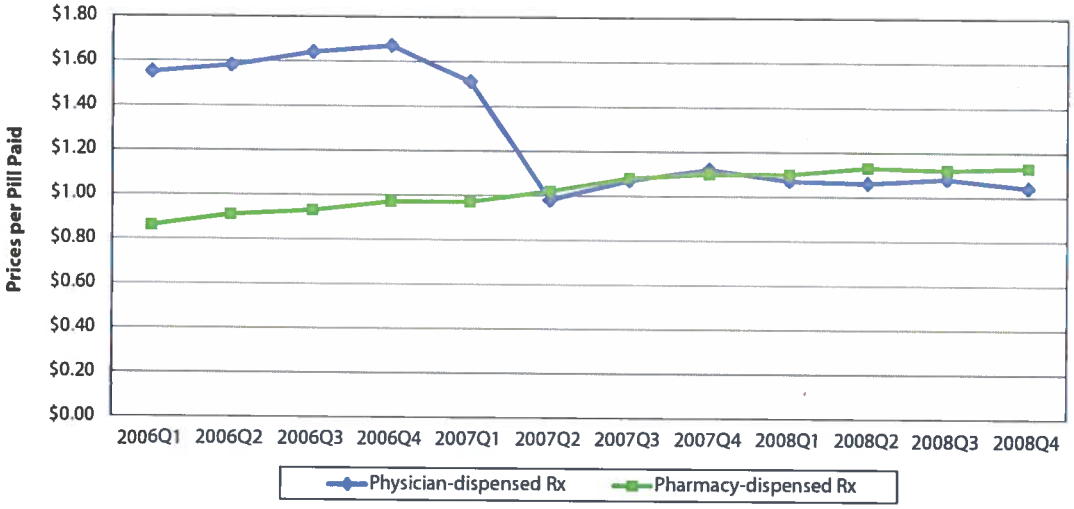
As a result of the California reforms, the average price per pill paid for physician-dispensed prescriptions decreased to the same level as that for pharmacy-dispensed prescriptions (Figure 6.1).

The prices paid to dispensing physicians and pharmacies for the same drug were similar for most common drugs after the fee schedule change in California (Table 6.1). Prior to the reforms (2006/2007), for example, the average price per pill paid for tramadol HCL (Ultram®) was $1.33 per pill when dispensed by physicians and $0.54 per pill when filled at a pharmacy. After the reforms (2008/2009), the prices for tramadol HCL (Ultram®) were the same for physician- and pharmacy-dispensed prescriptions, averaging $0.49 per pill. Similar results can be seen for most other drugs that were commonly dispensed by physicians in California.

The 2007 fee schedule change in California nearly eliminated the use of more-expensive repackaged drugs. Despite that, many California physicians continued to dispense prescription drugs, and often dispensed the same drugs as they did pre-reform. The difference was that instead of using repackaged drugs, physicians in post-reform California often dispensed the same drugs but obtained from manufacturers rather than repackagers, at the same prices paid to pharmacies in the state. As Figure 6.2 shows, the percentage of all prescriptions that were dispensed by physicians decreased from about 55 percent in the first quarter of 2007

(immediately prior to the reforms) to 44 percent in the first quarter of 2008 (after the reforms).[1] Over the same period of time, the percentage of all prescriptions that were for repackaged drugs decreased from 43 to 11 percent. Many physicians continued to dispense prescription drugs to their patients.[2]

Figure 6.1 Changes in Prices per Pill Paid for Physician- and Pharmacy-Dispensed Prescriptions: California Pre- and Post-Reform Experience, 2006–2008[a]



Notes: The underlying data include prescriptions filled from January 2006 to December 2008 for claims with more than seven days of lost time that had injuries occurring within two years prior to a given quarter. 2006Q1 refers to the first quarter of 2006; similar notation is used for other quarters.

[a] Effective March 2007, California had fee schedule changes that equalized physician- and pharmacy-dispensed prescriptions. We report the California results to provide evidence for several study states where similar changes have been made or physician dispensing has been actively debated in recent years. California's post-reform results are described and analyzed in a report by the California Workers' Compensation Institute (Swedlow and Ireland, 2009).

Key: Rx: prescriptions.

[1] To assess the impact of California's fee schedule reforms on dispensing patterns, we did a separate analysis that measured the percentage of prescriptions for physician-dispensed and repackaged drugs on a quarterly basis. This type of analysis focuses on prescriptions filled during a calendar quarter. To hold the claim maturity constant, we included claims that had injuries occurring within two years prior to a given calendar quarter. This was the same analysis we did in *Prescription Benchmarks for Florida, 2nd Edition* (Wang and Liu, 2011b). Note that the estimated physician share of prescriptions for the same calendar quarter in this current study was higher than reported in the 2011 study, especially for the later quarters of the analysis period. The difference was largely due to several improvements made to the pharmacy data, including more complete data from the most recent data submission and improved mapping of dispensing points, which remapped prescriptions billed by occupational rehabilitation centers and other physician groups to physician-dispensed prescriptions.

[2] Those physicians who continued to dispense and dispensed non-repackaged drugs may likely be affiliated with physician groups, multispecialty clinics, or occupational rehabilitation centers which may have an onsite pharmacy. The physician-dispensed prescriptions we identified include prescriptions filled with repackaged drugs and the drugs that were identified as being dispensed by physicians in their offices (including the offices of independent practitioners, occupational rehabilitation centers, and multispecialty clinics). See Chapter 2 for a more detailed description of our definition of physician-dispensed prescriptions and how we identified them in the data.

Table 6.1 Changes in Prices per Pill Paid to Physicians and Pharmacies for Top Five Common Drugs: California Pre- and Post-Reform Experience, 2006/2007 and 2008/2009[a]

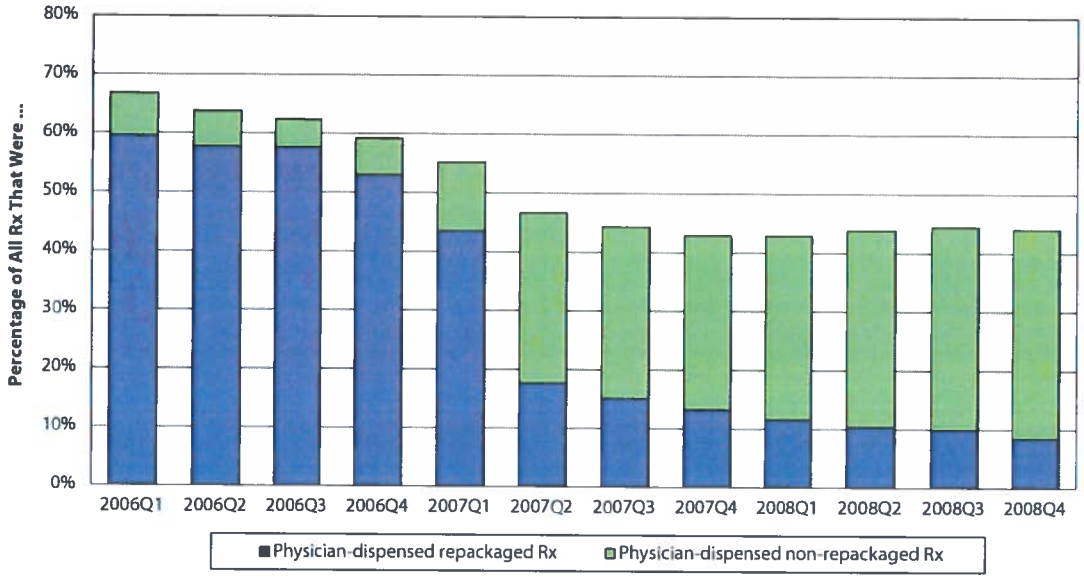
	Average Price per Pill Paid		Percentage of Prices Paid for MDRx above PDRx
	MDRx	PDRx	
Hydrocodone-acetaminophen (Vicodin®)			
Pre-reform 2006/2007	$0.85	$0.43	98%
Post-reform 2008/2009	$0.52	$0.48	8%
Ibuprofen (Motrin®)			
Pre-reform 2006/2007	$0.59	$0.23	157%
Post-reform 2008/2009	$0.28	$0.22	27%
Meloxicam (Mobic®)			
Pre-reform 2006/2007	$3.87	$2.07	87%
Post-reform 2008/2009	$0.88	$0.83	6%
Tramadol HCL (Ultram®)			
Pre-reform 2006/2007	$1.33	$0.54	146%
Post-reform 2008/2009	$0.49	$0.49	0%
Cyclobenzaprine HCL (Flexeril®)			
Pre-reform 2006/2007	$1.43	$0.64	123%
Post-reform 2008/2009	$0.52	$0.54	-4%

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2008/2009 refers to claims with injuries occurring from October 1, 2007, through September 30, 2008, and prescriptions filled through March 31, 2009; similar notation is used for other years.

[a] Effective March 2007, California had fee schedule changes that equalized physician- and pharmacy-dispensed prescriptions. We report the California results to provide evidence for several study states where similar changes have been made or physician dispensing has been actively debated in recent years. The post-reform results are described and analyzed in a report by the California Workers' Compensation Institute (Swedlow and Ireland, 2009).

Key: MDRx: physician-dispensed prescriptions; PDRx: pharmacy-dispensed prescriptions; Rx: prescriptions.

Figure 6.2 Changes in Physician Dispensing Patterns: California Pre- and Post-Reform Experience, 2006–2008[a]



Notes: The underlying data include prescriptions filled from January 2006 to December 2008 for claims with more than seven days of lost time that had injuries occurring within two years prior to a given quarter. 2006Q1 refers to the first quarter of 2006; similar notation is used for other quarters.

[a] Effective March 2007, California had fee schedule changes that equalized physician- and pharmacy-dispensed prescriptions. We report the California results to provide evidence for several study states where similar changes have been made or physician dispensing has been actively debated in recent years. California's post-reform results are described and analyzed in a report by the California Workers' Compensation Institute (Swedlow and Ireland, 2009).

Key: Rx: prescriptions.

We did see that prescribing practices might have changed for several drugs that were more commonly prescribed in states where physician dispensing was common, but prescribed less often in states where physician dispensing was less common. One such drug is carisoprodol (Soma®), a muscle relaxant often used to treat muscle spasms caused by an injury or other muscle problems. As Table 6.2 shows, 19 percent of California injured workers with prescriptions received carisoprodol (Soma®) in 2006/2007. After the reimbursement rates were reduced from an average of $3.16 to $0.66 per pill, we found the drug was prescribed to 13 percent of patients in 2008/2009. It is worth noting that the use of carisoprodol (Soma®) is controversial. Although it is a potent muscle relaxant and relatively inexpensive, the side effects of the drug and its potential for drug abuse and dependence raised concerns about inappropriate utilization leading to potential mental and physical impairment, even fatal overdose. Because of these drug safety concerns, this drug has been excluded from the formularies adopted by workers' compensation agencies in Texas and Washington State.

Table 6.2 Changes in Prescribing Patterns for Carisoprodol (Soma®): California Pre- and Post-Reform Experience, 2006/2007 and 2008/2009[a]

	Pre-Reform 2006/2007	Post-Reform 2008/2009	Percentage (point) Change
% of claims with Rx that had carisoprodol (Soma®)	19%	13%	-6
% of claims with Rx that had carisoprodol (Soma®) dispensed by physicians	17%	9%	-8
Prevalence of physician dispensing/repackaging			
% of all Rx that were physician-dispensed Rx	64%	53%	-11
% of all Rx that were for repackaged drugs[b]	60%	11%	-49
Prices for MDRx and PDRx			
Average price per pill paid for carisoprodol (Soma®) when dispensed by…			
Physicians	$3.16	$0.66	-79%
Pharmacies	$0.55	$0.63	15%

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2008/2009 refers to claims with injuries occurring from October 1, 2007, through September 30, 2008, and prescriptions filled through March 31, 2009; similar notation is used for other years.

[a] Effective March 2007, California had fee schedule changes that equalized physician- and pharmacy-dispensed prescriptions. We report the California results to provide evidence for several study states where similar changes have been made or physician dispensing has been actively debated in recent years. California's post-reform results are described and analyzed in a report by the California Workers' Compensation Institute (Swedlow and Ireland, 2009).

[b] By our definition, repackaged drugs are classified as physician dispensed. See Chapter 2 for more details.

Key: MDRx: physician-dispensed prescriptions; PDRx: pharmacy-dispensed prescriptions; Rx: prescriptions.

We also saw changes in the prescribing patterns of two drugs—omeprazole (Prilosec®) and ranitidine HCL (Zantac®), both of which are indicated for acid reflux and may be used to protect against gastric irritation or erosion from taking NSAIDs.[3] However, the prices paid for the two drugs were different—omeprazole (Prilosec®) was more expensive than ranitidine HCL (Zantac®), but the price premium for ranitidine HCL was much higher when dispensed by physicians prior to the 2007 fee schedule changes in California (Table 6.3). It appears that the combined frequency of prescribing and dispensing the two drugs changed little, but omeprazole (Prilosec®) was used more often to substitute for ranitidine HCL (Zantac®).

Table 6.3 shows the substitution that occurred before and after the 2007 reforms that equalized prices paid for physician- and pharmacy-dispensed prescriptions in California. As Table 6.3 shows, the percentage of claims that received prescriptions for ranitidine HCL (Zantac®) decreased from 12 to 3 percent while omeprazole (Prilosec®) increased from 2 to 14 percent. The average price paid for ranitidine HCL (Zantac®) was $3.08 per pill when dispensed by physicians before the 2007 fee schedule change, which dropped to $1.02 per pill after the fee schedule change. Omeprazole (Prilosec®) was more expensive than ranitidine HCL (Zantac®)—$3.15 per pill for Prilosec® and $1.02 per pill for Zantac® when physician-dispensed post-reform.

[3] According to two physicians who reviewed a draft of the report, there is medical evidence that omeprazole (Prilosec®) is somewhat more effective than ranitidine HCL (Zantac®) in treating the ulcer disease that results from taking NSAIDs. This might help to explain why physicians used omeprazole (Prilosec®) more often after the 2007 fee schedule changes.

However, the price reduction post-reform for omeprazole (Prilosec®) was smaller than that for ranitidine HCL (Zantac®), as shown in Table 6.3. Also note that both drugs were available at much lower costs at pharmacies without prescriptions.[4]

Table 6.3 Changes in Prescribing Patterns for Ranitidine HCL (Zantac®) and Omeprazole (Prilosec®): California Pre- and Post-Reform Experience, 2006/2007 and 2008/2009[a]

	Pre-Reform 2006/2007	Post-Reform 2008/2009	Percentage (point) Change
% of claims with Rx that had the drug…			
Omeprazole (Prilosec®)	2%	14%	12
Ranitidine HCL (Zantac®)	12%	3%	-9
% of claims with Rx that had the drug dispensed by physicians…			
Omeprazole (Prilosec®)	1%	12%	11
Ranitidine HCL (Zantac®)	12%	2%	-10
Prevalence of physician dispensing/repackaging			
% of all Rx that were physician-dispensed Rx	64%	53%	-11
% of all Rx that were for repackaged drugs[b]	60%	11%	-49
Prices for MDRx and PDRx			
Average price per pill paid for MDRx			
Omeprazole (Prilosec®)	$4.28	$3.15	-26%
Ranitidine HCL (Zantac®)	$3.08	$1.02	-67%
Average price per pill paid for PDRx			
Omeprazole (Prilosec®)	$3.60	$3.44	-4%
Ranitidine HCL (Zantac®)	$0.53	$0.50	-6%

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2008/2009 refers to claims with injuries occurring from October 1, 2007, through September 30, 2008, and prescriptions filled through March 31, 2009; similar notation is used for other years.

[a] Effective March 2007, California had fee schedule changes that equalized physician- and pharmacy-dispensed prescriptions. We report the California results to provide evidence for several study states where similar changes have been made or physician dispensing has been actively debated in recent years. California's post-reform results are described and analyzed in a report by the California Workers' Compensation Institute (Swedlow and Ireland, 2009).

[b] By our definition, repackaged drugs are classified as physician dispensed. See Chapter 2 for more details.

Key: MDRx: physician-dispensed prescriptions; PDRx: pharmacy-dispensed prescriptions; Rx: prescriptions.

Would patient compliance with medication therapy suffer if some physicians stop dispensing? Some supporters of physician dispensing argue that an injured worker may not fill the prescription if he or she has to go to a pharmacy instead of conveniently getting the pills at the physician's office. As previously described, many physicians continued to dispense prescriptions in California after the fee schedule change. The results

[4] See Chapter 5 for prices available for the two drugs at www.walgreens.com.

did suggest that some physicians may stop dispensing in response to a large price reduction. The patients of those physicians would have to go to a pharmacy to fill a prescription. However, after looking at the distance to pharmacies that were willing to fill workers' compensation prescriptions from the homes of injured workers and from the offices of the physicians visited, Neuhauser and his colleagues found no evidence that the 2007 fee schedule change in California would be likely to compromise workers' access to needed medicine—most injured workers had convenient access to pharmacies willing to fill workers' compensation prescriptions (Neuhauser et al., 2006).[5]

It is also worth noting that 65–76 percent of all prescriptions were for pain medications, depending on the state (Wang and Liu, 2011a). The problems of noncompliance are clear for maintenance drugs, such as drugs for hypertension or high cholesterol. It is less clear what sort of compliance problems may arise with pain medications among injured workers.[6]

The second concern often expressed by supporters of physician dispensing is that prescription costs would increase because physicians dispense generic drugs more often than pharmacies. In raising this concern, these advocates sometimes cite WCRI studies in a way which unfortunately reflects a misunderstanding of what the data show.

Tables 6.4 and 6.5 present additional data, from California pre- and post-reform experience, that help clarify the issues related to this concern. Table 6.4 shows that for specific drugs commonly dispensed by physicians in pre-reform California, physicians and pharmacies dispense generics equally often, except for tramadol HCL (Ultram®). Among these common drugs, the prices per pill paid to physicians for a specific drug were approximately 100–500 percent higher than what were paid to pharmacies for the same drug (Table 6.4). After the 2007 fee schedule change, physicians' share of prescriptions for each of the same drugs decreased in California, but little change was seen in the percentage of generics between physician- and pharmacy-dispensed prescriptions. At the same time, the prices paid per pill for the same drug when dispensed by physicians were similar to what was paid to pharmacies (Table 6.5).

Overall, for specific drugs that are commonly dispensed by physicians, physicians and pharmacies dispense generics equally often. However, physicians rarely dispense drugs that are only available as brand names, which are more often dispensed by pharmacies. California's pre- and post-reform experience suggests that if some physicians stop dispensing prescription drugs in response to a large price reduction, pharmacies would dispense the same prescriptions at a lower price than if the same drug were dispensed by a physician, resulting in a decrease in prescription costs.

[5] The authors found that in 2004, the average worker lived within 1.2 miles of a pharmacy. If workers needed to go to a pharmacy from their physicians' offices, they could travel less than 1 mile to a pharmacy willing to fill workers' compensation prescriptions.

[6] According to one expert who reviewed a draft of the report, there are few studies that provide medical evidence supporting the notion that physician dispensing of prescription drugs helps improve the compliance of medication therapy, especially for the medications used for palliative care.

Table 6.4 Percentage of Generics Dispensed by and Prices Paid to Physicians and Pharmacies in Pre-Reform California, 2006/2007

Top 10 Drugs Commonly Dispensed by Physicians in California (73% of all MDRx in 2006/2007)	Percentage of All MDRx That Were for the Drug	Percentage of Rx for Generic Rx		Average Price per Pill Paid for Generic Rx		
		MDRx	PDRx	MDRx	PDRx	Percentage Difference
Hydrocodone-acetaminophen (Vicodin®)	16%	100%	100%	$0.85	$0.43	98%
Ibuprofen (Motrin®)	16%	100%	100%	$0.59	$0.23	157%
Naproxen (Aleve®)	10%	99%	100%	$1.76	$0.56	214%
Carisoprodol (Soma®)	8%	100%	100%	$3.16	$0.55	475%
Ranitidine HCL (Zantac®)	6%	100%	100%	$3.08	$0.53	481%
Propoxyphene-N w/APAP (Darvocet-N®)	5%	99%	99%	$1.05	$0.44	139%
Cyclobenzaprine HCL (Flexeril®)	5%	97%	95%	$1.43	$0.64	123%
Tramadol HCL (Ultram®)	4%	98%	88%	$1.33	$0.54	146%
Cephalexin (Keflex®)	2%	100%	100%	$2.74	$0.79	247%
Etodolac (Lodine®)	2%	99%	100%	$1.91	$0.96	99%

Notes: The underlying data include claims with more than seven days of lost time that had prescriptions filled over the defined period. 2006/2007 refers to claims with injuries occurring from October 1, 2005, through September 30, 2006, and prescriptions filled through March 31, 2007.

Key: MDRx: physician-dispensed prescriptions; PDRx: pharmacy-dispensed prescriptions; Rx: prescriptions.

Table 6.5 Physicians' Share of Prescriptions in Pre- and Post-Reform California and Percentage of Generics Dispensed by and Prices Paid to Physicians and Pharmacies in Post-Reform California

Top 10 Drugs Commonly Dispensed by Physicians in California (46% of all MDRx in 2008/2009)	Percentage of Rx for the Drug That Were MDRx		Percentage of Rx for Generic Rx		Average Price per Pill Paid for Generic Rx		
	2006/2007	2008/2009	MDRx	PDRx	MDRx	PDRx	Percentage Difference
Hydrocodone-acetaminophen (Vicodin®)	55%	36%	99%	100%	$0.52	$0.48	8%
Ibuprofen (Motrin®)	83%	53%	99%	100%	$0.28	$0.22	27%
Naproxen (Aleve®)	88%	59%	99%	100%	$0.69	$0.54	28%
Carisoprodol (Soma®)	83%	54%	100%	94%	$0.66	$0.50	32%
Ranitidine HCL (Zantac®)	95%	69%	100%	100%	n/a	$0.50	n/a
Propoxyphene-N w/APAP (Darvocet-N®)	75%	50%	99%	100%	$0.40	$0.41	-2%
Cyclobenzaprine HCL (Flexeril®)	77%	51%	88%	85%	$0.52	$0.54	-4%
Tramadol HCL (Ultram®)	74%	53%	99%	79%	$0.49	$0.49	0%
Cephalexin (Keflex®)	68%	35%	99%	97%	$0.82	$0.80	2%
Etodolac (Lodine®)	87%	77%	99%	100%	$1.00	$0.86	16%

Notes: The underlying data include claims with more than seven days of lost time that had prescriptions filled over the defined period. 2006/2007 refers to claims with injuries occurring from October 1, 2005, through September 30, 2006, and prescriptions filled through March 31, 2007; similar notation is used for other years.

Key: MDRx: physician-dispensed prescriptions; n/a: not applicable (less than 1 percent of MDRx); PDRx: pharmacy-dispensed prescriptions; Rx: prescriptions.

APPENDIX A:

STATE POLICIES ON PHARMACY FEE SCHEDULES AND PHYSICIAN DISPENSING

Table A.1 provides a summary of state policies regarding pharmacy fee schedules and physician dispensing. The information is provided to help the readers when they interpret the results reported. Several sources were used to update the summary, including

- information about the state laws, regulations, and policies documented in two previous WCRI reports (Victor and Petrova, 2006a and 2006b) and the Medical Cost Containment Inventory (WCRI, 2011);
- information on public policies and recent developments shared by two pharmacy benefit management organizations—PMSI and Progressive Medical, Inc.; and
- information collected, by WCRI staff, through numerous phone calls to state agencies, emails exchanged with a number of system participants who are knowledgeable about pharmacy fee schedules, and internet searches of online documents.

As of June 2012, 3 of the 23 study states (Massachusetts, New York, and Texas) prohibit physicians from dispensing prescription drugs by law. For each of the three states, there are certain exceptions to the prohibition law. In Massachusetts, physicians may dispense drugs only when necessary for the immediate and proper treatment of the patient until it is possible for the patient to have a prescription filled at a pharmacy.[1] Physicians in New York may dispense up to a 72-hour supply of prescription drugs in a number of restricted circumstances, including dispensing drugs in a medical emergency, in an office which is situated 10 miles or more from a registered pharmacy, or at no charge to their patients.[2] In Texas, physicians are allowed to dispense prescription drugs in rural counties in the state.[3]

Several states permit physician dispensing, but in some states, such as Arkansas and Minnesota, state medical practices appear to be restrictive. In Arkansas, physicians are permitted to dispense prescription drugs, but physician-dispensed drugs are subject to the same fee schedule as pharmacy-dispensed drugs. According to the pharmacy fee schedule, dispensing physicians (as well as pharmacists) are required to report the purchasing price for the drug dispensed, and physicians do not receive dispensing fees for drugs dispensed in their offices. Moreover, under the Arkansas Medical Practices Act, no physicians licensed in the state shall dispense narcotic drugs without prior approval by the Arkansas State Medical Board after application to the board and on the showing of need. Minnesota permits physician dispensing, but the state Board of Medical Practice requires physicians who dispense medications to register with the Board. In addition, physicians are

[1] See the Massachusetts Administration of the Government, Title XV, Chapter 94C, Section 9 for more details.

[2] See the New York Education Law Article 137, Section 6807(2) for more details.

[3] A rural area is defined as an area in which there is no pharmacy within a 15-mile radius of the physician's office and which is within either a county with a total population of 5,000 or less or a city or town with a population of less than 2,500, according to the most recent federal census (see Texas Administrative Code, Title 22, part 9 for more details).

required to disclose to patients that the physician profits from dispensing the drug and that the patient has the option of obtaining the drug elsewhere.

Louisiana limits physician dispensing of narcotics to a 48-hour supply, but physicians are permitted to dispense non-narcotic drugs. In Florida, physicians are prohibited from dispensing Schedule II and Schedule III narcotics.

Five states (Arizona, California, Georgia, South Carolina, and Tennessee) allow physician dispensing but have adopted reforms aimed at limiting price markups for physician-dispensed prescriptions.[4] For the rest of the states, state policies are either permissive or silent regarding physician dispensing.

It is worth noting that several states in this group had frequent physician dispensing and experienced large growth of physician dispensing over the study period. In Florida, physician dispensing of prescription drugs other than Schedule II and III narcotics has been actively debated during the legislative sessions of the past few years, but the state policy remains silent on physician dispensing. In Maryland, a change in reimbursement for physician-dispensed prescriptions was proposed, but no changes have been made to address issues of physician dispensing.

[4] The fee schedule changes related to physician dispensing in Tennessee were delayed from June 2012 to August 2012. The delay only affected the effective date, not the substance of the fee schedule changes.

Table A.1 Summary of State Policies on Fee Schedules for Physician- and Pharmacy-Dispensed Prescription Drugs

State	Major Changes Since 2007	Workers' Compensation Pharmacy Fee Schedule			Physician Dispensing of Prescription Drugs		
		Maximum Rates Set Using Formulaic Fee Schedule	Reimbursement for Brand Name Drugs[a]	Reimbursement for Generic Drugs[a]	Physician Dispensing	Licensing Requirements and Restrictions	Workers' Compensation Fee Schedule for Repackaged/Physician-Dispensed Drugs
Arkansas		Yes	Lesser of AWP or provider's usual charge, $5.13	Lesser of AWP or provider's usual charge, $5.13	Limited[b]	License for dispensing required, only for 72-hour supply for emergency	No dispensing fee for doctors
Arizona	Reimbursements for physician-dispensed Rx (September 2009)	Yes	AWP - 5%, $7.00	AWP - 15%, $7.00	Allowed	License for dispensing required	Reimbursements set to AWP of underlying NDC, effective October 2009[c]
California	Reimbursements for physician-dispensed Rx (March 2007)	Yes	AWP - 17%, $7.25	Lesser of AWP - 17% or CA-MAC or FUL, $7.25	Allowed	No license required	Reimbursements set to Medicaid level using underlying NDC, effective March 2007[d]
Connecticut		Yes	AWP, $5.00	AWP, $8.00	Silent	License for dispensing required for controlled substances; no license required in general	Silent
Florida	Prohibition of physician dispensing of Schedule II and III narcotics (2011)	Yes	AWP, $4.18	AWP, $4.18	Prohibited for Schedule II and III narcotics, effective 2011; silent for other prescription drugs	License for dispensing required	Silent[e]
Georgia	Reimbursements for physician-dispensed Rx (April 2011)	Yes	AWP, $4.06	AWP, $6.08	Allowed	No license required (state law allows physicians to dispense after notifying the GA Composite Medical Board in writing of their intent as a dispensing physician)	Reimbursements set to AWP of underlying NDC, effective April 2011[f]
Illinois	Reimbursements for physician-dispensed Rx (2011)	No	Provider's U&C	Provider's U&C	Allowed	Not available	Reimbursements set to AWP plus $4.18 dispensing fee, effective June 2011[g]
Indiana		No	Provider's U&C	Provider's U&C	Silent	License for dispensing required; physician assistant cannot dispense	Silent
Iowa		No	Provider's U&C	Provider's U&C	Silent	License for dispensing required	Silent
Louisiana		Yes	AWP + 10%, $5.77	AWP + 40%, $5.77	Allowed for non-narcotic drugs; limited for narcotics to 48-hour supply	License for dispensing required	Silent[h]
Maryland		No	Provider's U&C	Provider's U&C	Permitted	License for dispensing required	Silent[i]

continued

Table A.1 Summary of State Policies on Fee Schedules for Physician- and Pharmacy-Dispensed Prescription Drugs (continued)

State	Major Changes Since 2007	Workers' Compensation Pharmacy Fee Schedule			Physician Dispensing of Prescription Drugs		
		Maximum Rates Set Using Formulaic Fee Schedule	Reimbursement for Brand Name Drugs[a]	Reimbursement for Generic Drugs[a]	Physician Dispensing	Licensing Requirements and Restrictions	Workers' Compensation Fee Schedule for Repackaged/Physician-Dispensed Drugs
Massachusetts		Yes	WAC + 5%, $3.00[j]	FUL, $3.00[j]	Prohibited in general[k]	n/a	n/a
Michigan		Yes	AWP - 10%, $3.50	AWP - 10%, $5.50	Permitted	License for dispensing controlled substances required	Reimbursement set to AWP - 10%, plus a dispensing fee[l]
Minnesota		Yes	Bi-furcated Paper: AWP, $5.14 Electronic: AWP - 12%, $5.14	Bi-furcated Paper: AWP, $5.14 Electronic: Lesser of AWP - 12% or MAC, $3.65	Limited[m]	No license required	Not available
New Jersey		No	Provider's U&C	Provider's U&C	Limited to only 7-day supply, with rural exceptions	No license required	Not available
New York	Pharmacy fee schedule (2008)	Yes	AWP - 12%, $4.00	AWP - 20%, $5.00	Prohibited in general[k]	n/a	Reimbursements set to AWP of underlying NDC
North Carolina		No	Provider's U&C	Provider's U&C	Permitted	License for dispensing required	Not available
Pennsylvania		Yes	AWP + 10%[n]	AWP + 10%[n]	Permitted	No license required	Reimbursements limited to AWP + 10%[o]
South Carolina	Reimbursements for physician-dispensed Rx (2011)	Yes	AWP, $5.00	AWP, $5.00	Allowed	License for dispensing required	Reimbursements set to AWP of underlying NDC, with no dispensing fee, effective December 2011[p]
Tennessee	Reimbursements for physician-dispensed Rx (2012)	Yes	AWP, $5.10	AWP, $5.10	Permitted	No license required	Reimbursement set to AWP of underlying NDC, effective August 2012[q]
Texas		Yes	AWP + 9%, $4.00	AWP + 25%, $4.00	Prohibited in general[k]	n/a	n/a
Virginia		No	Provider's U&C	Provider's U&C	Permitted[r]	License for dispensing required, inspection of location required	Not available
Wisconsin		Yes	AWP, $3.00	AWP, $3.00	Permitted	No license required	Not available

Note: Policies are current as of June 2012. Indicated in the major changes column are policy changes that have been made since 2007, affecting reimbursements for pharmacy- and physician-dispensed prescriptions. Web site addresses are valid as of June 20, 2012.

[a] The data presented are the reimbursement rate, plus a dispensing fee.

[b] In Arkansas, physicians are permitted to dispense prescription drugs, but physician-dispensed drugs are subject to the same fee schedule as pharmacies in the state, which requires reporting the purchasing price for the drug dispensed. No dispensing fees are paid for physician-dispensed prescriptions. Moreover, under the Arkansas Medical Practices Act, no physicians licensed shall dispense narcotic drugs without prior approval by the Arkansas State Medical Board after application to the board and on the showing of need.

continued

Table A.1 Summary of State Policies on Fee Schedules for Physician- and Pharmacy-Dispensed Prescription Drugs (continued)

[c] Effective September 2009, Arizona changed the fee schedule to set reimbursement for repackaged drugs to the AWP of the original manufacturer NDCs of the same drug product, with a dispensing fee of $7.00. If the original manufacturer NDC of the underlying drug product is not provided or unknown, the discretion is vested in the payor to select which AWP to use when making payment for repackaged drugs dispensed. Information about the fee schedule changes can be found at http://www.ica.state.az.us/Director/DIR_FSList2011.aspx.

[d] If the underlying NDC for the repackaged drug is not in the Medi-Cal database, the maximum fee shall be 83 percent of the AWP of the lowest-priced therapeutically equivalent drug, calculated on a per unit base, plus the dispensing fee. Note that effective January 1, 2012, California had new caps on fees for physician-dispensed compound drugs, limiting the maximum reimbursement to no more than 300 percent of documented paid costs, but in no case more than $20 above documented paid costs (CA Labor Code 5300-5318, Section 5301.7 (2)).

[e] In Florida, legislation passed in 2011 prohibited physicians from dispensing Schedule II and III narcotics. Measures of capping prices paid for physician-dispensed prescription drugs were debated during the legislative sessions in 2011 and 2012, and no changes have been made regarding reimbursement for physician-dispensed prescription drugs.

[f] Effective April 2011, Georgia's rule restricts the basis of calculating reimbursement rates for repackaged drugs to the current AWP (published as of the date of dispensing) of the original manufacturer NDC of the same drug dispensed by the physician when repackaged drugs were dispensed. Information about the fee schedule reforms can be found at http://sbwc.georgia.gov/april-1-2011-medical-fee-schedule-updates.

[g] In Illinois, the Fee Schedule Committee created a new fee schedule for prescriptions filled and dispensed outside of a licensed pharmacy. The new fee schedule required reimbursement for physician-dispensed drugs to be capped at the AWP, plus a $4.18 dispensing fee. However, it did not explicitly require the original manufacturer NDCs to be used for pricing; this issue is currently being revisited in the state.

[h] Louisiana currently has no price control for physician-dispensed prescriptions. The Workers' Compensation Commission established a Task Force in 2012 to look into issues related to physician dispensing.

[i] In Maryland, there were regulatory activities in recent years aimed at capping the prices for repackaged drugs, but no policy changes were made.

[j] Massachusetts' pharmacy fee schedule is tied to the State Medicaid Program, which is equivalent to AWP - 16 percent, plus the dispensing fee.

[k] In three states (Massachusetts, New York, and Texas), physician dispensing is prohibited in general, with some exceptions. For some examples of the exceptions, see the text in Appendix A.

[l] In Michigan, legislation was pending to tie the reimbursements for physician-dispensed drugs to underlying NDCs. Based on the proposed rules, the reimbursements for repackaged pharmaceuticals would be based on the Redbook manufacturer's AWP - 10 percent, plus a dispensing fee ($3.50 for brand name drugs and $5.50 for generics). All pharmaceutical bills submitted for repackaged products would include the original manufacturer NDC. (See Michigan Department of Licensing and Regulator Affairs, Workers' Compensation Agency, Sections 205 Rule 418.101003a, referenced in R 418.10107 - Reimbursement for dispensed medications.)

[m] Minnesota permits physician dispensing, but the state Board of Medical Practice requires physicians who dispense medications to register with the Board. In addition, physicians are required to disclose to patients that the physician profits from dispensing the drug and that the patient has the option of obtaining the drug elsewhere.

[n] For Pennsylvania, no dispensing fee was indicated in the statute, which has been in effect since November 1995.

[o] In Pennsylvania, when a prescription is filled at a physician's office, payment for the prescription drug is limited to 110 percent of the AWP of the product. Physicians may not bill, or otherwise hold the patient liable, for the difference between the actual charge for the prescription drug and 110 percent of the AWP of the product (see Chapter 127.135). Note that the policy was silent regarding whether the underlying NDCs should be used for reimbursement.

[p] In South Carolina, Medi-Span® is used to determine the AWP. If the NDC is not in Medi-Span®, any nationally published pharmacy price index may be used as a secondary source, effective December 2011 (see South Carolina Workers' Compensation Commission Pharmacy Fee Schedule Effective December 19, 2011, Section 10, which can be found at http://www.wcc.sc.gov/insurance/Pages/MedicalServicesDivision.aspx.)

[q] In Tennessee, all pharmaceutical bills submitted for repackaged or compounded products must include the original manufacturer NDCs, registered with the U.S. Food and Drug Administration (FDA). The reimbursement amount is based on the current published manufacturer's AWP of the product, calculated on a per unit basis, as of the date of dispensing. If the original manufacturer NDC is not provided on the bill, the reimbursement shall be based on the AWP of the lowest-priced therapeutically equivalent drug, calculated on a per unit basis. See Chapter Number 0800-02-18, which can be found at http://www.tn.gov/sos/rules_filings/03-09-12.pdf.

[r] In Virginia, physicians may dispense prescription drugs only within specific limits set by the Board of Pharmacy.

Key: AWP: average wholesale price; BLP: baseline price; FUL: Federal Upper Limit; MAC: maximum allowable cost; n/a: not applicable; NDC: National Drug Code; U&C: usual and customary fees; WAC: wholesale acquisition cost.

Sources: Victor and Petrova, 2006a and 2006b; WCRI, 2011; information shared by PMSI and Progressive Medical, Inc.; information from state agencies, system participants, and online searches.

APPENDIX B:

POTENTIAL IMPACT OF DIFFERENT QUANTITY AND STRENGTH ON PRICE COMPARISONS

In Chapter 2, we discussed the method used for comparing the prices per pill paid for physician- and pharmacy-dispensed prescriptions. One concern was that the difference in the strength and the quantity per prescription between physician- and pharmacy-dispensed prescriptions in a state might affect the result of price comparisons. We address this issue and provide test results in this appendix.

When comparing the prices paid for physician- and pharmacy-dispensed prescriptions, we used the average price per pill paid for a specific drug and focused on comparing the prices paid for the generic drugs that were most commonly dispensed by physicians.

The price per pill paid for a generic drug has an obvious advantage over the price per prescription because it takes into account the difference in the number of pills per prescription and the difference in price between brand names and generics. However, the same measure may still reflect price differentials in the strength and per-packet quantity to the extent that a large difference exists between physician- and pharmacy-dispensed prescriptions. We tested how sensitive the result of the price comparison could be to this issue using 5 mg hydrocodone-acetaminophen (Vicodin®) with 30 and 60 pills per prescription as an example. As Table B.1 shows, the price premiums for physician-dispensed prescriptions above the prices for pharmacy-dispensed prescriptions were consistent with the results reported, for the states where we had enough observations (i.e., a minimum of 30 prescriptions included in the computation).

Based on the results of the test, we believe that these two potential confounding factors are unlikely to distort the results of price comparisons, especially in the states where the differences were substantial.

Table B.1 Prices per Pill Paid for Physician- and Pharmacy-Dispensed Prescriptions: Example of Hydrocodone-Acetaminophen, Holding Quantity and Strength Constant, 2010/2011

	AR	AZ[a]	CA[a]	CT	FL	GA[a]	IA	IL	IN	LA	MA[b]	MD	MI	MN	NC	NJ	NY[b]	PA	SC[a]	TN[a]	TX[b]	VA	WI
Prices per pill paid for hydrocodone-acetaminophen (5 mg, 30 pills per Rx)																							
MDRx	–	$0.69	$0.57	$1.58	$1.02	$1.17	–	$1.33	$0.87	–	n/a	–	$1.17	–	$1.30	–	n/a	$1.36	$1.34	$1.10	n/a	–	$1.23
PDRx	$0.49	$0.45	$0.51	$0.35	$0.38	$0.39	$0.48	$0.49	$0.45	$0.45	$0.29	$0.35	$0.30	$0.34	$0.44	$0.38	$0.38	$0.30	$0.35	$0.46	$0.43	$0.42	$0.40
Percentage difference	–	54%	11%	358%	167%	196%	–	172%	94%	–	n/a	–	293%	–	196%	–	n/a	357%	279%	141%	n/a	–	207%
Prices per pill paid for hydrocodone-acetaminophen (5 mg, 60 pills per Rx)																							
MDRx	–	–	$0.53	–	$0.92	$1.10	–	$1.52	–	–	n/a	–	–	–	$1.09	–	n/a	$0.88	–	$1.00	n/a	–	–
PDRx	$0.45	$0.40	$0.41	$0.28	$0.34	$0.36	$0.39	$0.44	$0.45	$0.46	$0.26	$0.32	$0.24	$0.26	$0.36	$0.33	$0.30	$0.30	$0.30	$0.37	$0.42	$0.34	$0.35
Percentage difference	–	–	29%	–	171%	207%	–	246%	–	–	n/a	–	–	–	202%	–	n/a	197%	–	172%	n/a	–	–

Notes: The underlying data include prescriptions for claims with more than seven days of lost time that had prescriptions filled and paid for by a workers' compensation payor over the defined period. 2010/2011 refers to claims with injuries occurring in October 1, 2009, through September 30, 2010, and prescriptions through March 31, 2011.

[a] Five states (Arizona, California, Georgia, South Carolina, and Tennessee) recently adopted reforms aimed at reducing the costs of physician dispensing (see Appendix A for more detail). The data included are post-reform for Arizona and California, and pre-reform for Georgia, South Carolina, and Tennessee.

[b] In Massachusetts, New York, and Texas, physician dispensing is not allowed in general (see Appendix A for more detail).

Key: –: not reported because the cell size is less than 30 prescriptions; MDRx: physician-dispensed prescriptions; n/a: not applicable; PDRx: pharmacy-dispensed prescriptions; Rx: prescriptions.

GLOSSARY

average wholesale price (AWP): Published by First DataBank and Medi-Span®. The AWP operates as an available price index that represents the most common wholesaler price charged to customers.[1] The AWP does not necessarily represent the actual sales price in any single transaction. The payors may negotiate for lower prices. In workers' compensation systems, however, the AWP is often used as a price benchmark for pharmacy reimbursements of prescription drugs.

brand name drug: A drug known by a specific registered name and/or trademark with a chemical formulation currently under patent by its owner/manufacturer.

compound drugs: Compound drugs are not available through traditional prescriptions and are prepared by a pharmacist to customize a medication to meet a patient's individual needs. They are also known as *compounded drugs.* Convenience in administration of medication is a large component of compounded drugs. Examples of convenient administration include a transdermal preparation for topical use or suspension for oral use.

Current Procedural Terminology (CPT) codes: A system of coding used to identify procedures and services performed by physicians and other medical providers.

generic alternative: A drug that does not necessarily contain the same active chemical ingredient as a brand name pharmaceutical but has been categorized as belonging to the same pharmacological or therapeutic class as the branded product.

generic equivalent: A drug which contains the same active chemical ingredients as the original patented brand name pharmaceutical. A generic equivalent or "generic" drug is considered to be identical to the original in dose, strength, route of administration, safety, efficacy, and intended use.

manufacturer NDC: See underlying NDC.

Medi-Span®: A publisher which offers a series of comprehensive drug databases, tools, and applications utilized by health care professionals. Medi-Span® is part of Wolters Kluwer Health, Inc.

MDRx: The symbol used to indicate physician-dispensed prescriptions.

Narcotic: A legal term that is used to classify substances, such as opioids, under the Single Convention on Narcotic Drugs, 1961, and the U.S. Controlled Substance Act. Since marijuana and cocaine are also legally classified as narcotics, some may prefer to use the terms *opiate, opioid,* or *prescription narcotics* when discussing the medical use of narcotics for pain relief. We use *narcotics* to refer to prescription narcotics in this report.

National Drug Code (NDC): A unique 11-digit code assigned by the U.S. Food and Drug Administration (FDA) to each medication in the United States that is intended for use on humans. The number identifies the specific drug product, its strength and dosage, package size, manufacturer, and repackaging firm.

non-repackaged drugs: Refers to the drugs produced and labeled by the original manufacturers of the drug. The term is mostly used in the context of physician dispensing as a counterpart of repackaged

[1] Medi-Span®. 2005. *Master Drug Data Base (MDDB®) v2.5: Documentation Manual.* Published by Wolters Kluwer Health, Inc.

drugs. See repackaged drugs.

over-the-counter (OTC) medication: Refers to a drug that does not require a prescription, for which the FDA determines that the drug can be safely self-prescribed by non-physicians. OTC drugs are available at a drug store or grocery store. Motrin®, Prilosec®, and Zantac® (described in this report) are among the common OTC drugs.

PDRx: The symbol used to indicate pharmacy-dispensed prescriptions.

pharmacy benefit manager (PBM): A firm that contracts with payors to manage their prescription benefits through price discounts, utilization management, data processing, and other services. A PBM may have its own pharmacies or contracts with pharmacies for price discounts.

pharmacy fee schedule: A schedule of maximum reimbursement levels for drugs dispensed at pharmacies as part of workers' compensation laws.

physician-dispenser: Physicians who write prescriptions and dispense the prescribed medications at their offices directly to the patient and receive payments for the medications dispensed.

physician dispensing: Refers to the practice of physicians dispensing prescription drugs at their offices directly to the patient. There are three states in our study where physician dispensing is prohibited in general—Massachusetts, New York, and Texas.

price premium for physician dispensing: Refers to the percentage difference in the price paid for physician-dispensed prescriptions that is over and above the price paid to pharmacies for the same drug.

repackaged drugs: Refers to drugs that are repackaged by a repackager into smaller, ready-to-dispense quantities from larger bulk containers of the same drug produced by manufacturers. Repackaged drugs have to be approved by the FDA, which assigns an NDC for each repackaged drug (a.k.a., repackager NDC). The AWP of a repackager NDC for a drug is usually higher than the AWP of a manufacturer NDC for the same drug.

repackager NDC: Refers to the NDC of a repackaged drug. A repackaged drug has to be approved by the FDA, which then assigns it a new NDC. The AWP of a repackager NDC for a drug is usually higher than the AWP of a manufacturer NDC for the same drug.

Rx: The symbol used to indicate prescriptions.

single-source drugs: The brand name drugs that are under patent protection. The patent guarantees that no other pharmaceutical companies may manufacture the drug until the patent expires. A single-source drug contains a unique active ingredient (responsible for the drug's effect), dosage, and dosage form, all of which are approved by the FDA as safe and effective to treat a particular illness and protected under the patent.

underlying NDC: Refers to the NDC of the original drug that is underlying the repackaged drugs dispensed by physicians. It is also known as *original NDC* or *manufacturer NDC* as opposed to *repackager NDC.*

wholesale acquisition cost (WAC): Represents the cost at which wholesalers purchase drug products from a pharmaceutical manufacturer, as reported by that manufacturer. The WAC does not necessarily represent the actual sales price in any single transaction, as any manufacturer may agree to sell its product at a lower price through inclusion of discounts or rebates. The WAC is typically lower than the AWP.

REFERENCES

Afendulis, C., and D. P. Kessler. 2006. *Tradeoffs from integrating diagnosis and treatment in markets for health care.* National Bureau of Economic Research working paper 12623. Retrieved from http://www.nber.org/papers/w12623 (accessed July 16, 2012).

Aronovitz, L. 1994. *Referrals to physician-owned imaging facilities warrant HCFA's scrutiny.* General Accounting Office (GAO) report to the U.S. House of Representatives: Washington, DC. Publication GAO/HEHS-95-2.

Baker, L. 2010. Acquisition of MRI equipment by doctors drives up imaging use and spending. *Health Affairs* 29 (12): 2252–2259.

California Workers' Compensation Institute (CWCI). 2005. *California workers' compensation repackaged drugs analysis: 2004 dates of service (prescriptions).* Oakland, CA: CWCI.

Chen, B., P. Gertler, and C. Yang. 2011. *Physician ownership of non-physician medical services.* Stanford University APARC Seminar Series. Retrieved from http://iis-db.stanford.edu/evnts/6569/Chen_051711.ppt (accessed July 16, 2012).

_____. 2010. *Legal restrictions on physician ownership of non-physician medical services.* Working paper. Retrieved from http://www.econ.uchile.cl/uploads/addon/archivo/post/5720/GertlerRestrictingPhysicansfromOwningNonPhysicanMedicalServices.pdf (accessed July 16, 2012).

Currie, J., W. Lin, and W. Zhang. 2010. *Patient knowledge and antibiotic abuse: Evidence from an audit study in China.* National Bureau of Economic Research working paper 16602. Retrieved from http://www.nber.org/papers/w16602 (accessed July 16, 2012).

Eggleston, K. 2011. *Prescribing institutions: Explaining the evolution of physician dispensing.* Asia Health Policy Program working paper #24. Stanford University. Retrieved from http://iis-db.stanford.edu/pubs/23374/AHPPwp_24.pdf (accessed July 16, 2012).

Gazelle, G., E. Halpern, H. Ryan, and A. Tramontano. 2007. Utilization of diagnostic medical imaging: Comparison of radiologist referral versus same-specialty referral. *Radiology* 245 (2): 517.

Hillman, B., C. Joseph, M. Mabry, J. Sunshine, S. Kennedy, and M. Noether. 1990. Frequency and cost of diagnostic imaging in office practice: A comparison of self-referring and radiologist-referring physicians. *New England Journal of Medicine* 323: 1604–1608.

Hillman, B., G. Olson, R. Colbert, and L. Bernhardt. 1995. Response to a payment policy denying professional charges for diagnostic imaging by nonradiologist physicians. *The Journal of the American Medical Association* 274 (11): 885–887.

Hillman, B., G. Olson, P. Griffith, J. Sunshine, C. Joseph, S. Kennedy, W. Nelson, and L. Bernhardt. 1992. Physicians' utilization and charges for outpatient diagnostic imaging in a Medicare population. *The Journal of the American Medical Association* 268 (15): 2050–2054.

Iizuka, T. 2007. Experts' agency problems: evidence from the prescription drug market in Japan. *RAND Journal of Economics* 38 (3): 844–862.

Jacobson, M., and J. P. Newhouse. 2010. Expect the unexpected? Physicians' responses to payment changes. *Expert Voices* (November 2010). The NIHCM Foundation. Retrieved from http://nihcm.org/pdf/EV-JacobsonNewhouseFINAL.pdf (accessed July 16, 2012).

Jacobson, M., C. C. Earle, J. P. Newhouse. 2011. Geographic variation in physicians' responses to a reimbursement change. *The New England Journal of Medicine* 365 (22): 2049–2052.

Lipton, B., C. Laws, and L. Li. 2011. *Workers' compensation prescription drug study: 2011 update.* Boca Raton, FL: NCCI Holdings, Inc.

Manchikanti, L., and E. B. McMahon. 2007. Physician refer thyself: Is Stark II, Phase III the final voyage? *Pain Physician* 10: 725–741.

Medi-Span®. 2005. *Master drug data base (MDDB®) v2.5: Documentation manual.* Indianapolis, IN: Wolters Kluwer Health, Inc.

Mitchell, J. 2005. Effects of physician-owned limited-service hospitals: Evidence from Arizona. *Health Affairs* Supplemental Web Exclusives: W5-481-90.

Mitchell, J., and T. Sass. 1995. Physician ownership of ancillary services: Indirect demand inducement or quality assurance? *Journal of Health Economics* 14 (3): 263–289.

Mitchell, J., and E. Scott. 1992. Physician ownership of physical therapy services. *The Journal of the American Medical Association* 268 (15): 2055–2059.

Neuhauser, F., A. Swedlow, L. Gardner, and E. Edelstein. 2000. *Study of the cost of pharmaceuticals in workers' compensation.* Oakland, CA: Commission on Health and Safety and Workers' Compensation. Retrieved from http://www.dir.ca.gov/CHSWC/Pharmacy/Pharmareport.html (accessed July 16, 2012).

Neuhauser, F., A. Swedlow, and B. Wynn. 2006. *Impact of physician-dispensing of repackaged drugs on California workers' compensation, employers cost, and workers' access to quality of care.* A study for the Commission on Health and Safety and Workers' Compensation.

PMSI. 2011. *Annual drug trends report for workers' compensation: Pharmacy spend trends and impacts.* Tampa, FL: PMSI.

Rodwin, M., and E. Okamoto. 2000. Physicians' conflicts of interest in Japan and the United States: Lessons for the United States. *Journal of Health Politics, Policy and Law* 25 (2): 343–375.

Stapleton, D., G., Livermore, J. Cores, M. Nowak, and E. Eiseman. 2001. *Evaluation of the New York State ONECARD Rx workers' compensation benefit: Final report.* Prepared for State of New York, Department of Civil Service. Project Officer: Stephanie Washington. Prepared by the Lewin Group, Inc. and Cornell University. Retrieved from http://www.umassmed.edu/uploadedfiles/NYStateONECARDRx.pdf (accessed July 16, 2012).

Swedlow, A. 2005. *Changes in prescription drug utilization, reimbursement and accessibility following adoption of the California workers' compensation pharmacy fee schedule.* Early returns on workers' comp medical reforms: Part 4. Oakland, CA: CWCI.

Swedlow, A., and J. Ireland. 2009. *Analysis of post-reform outcomes: Changes in pharmaceutical utilization and reimbursement in the California workers' compensation system.* Oakland, CA: CWCI.

U.S. Census Bureau. 2008. *Income, poverty, and health insurance coverage in the United States: 2007.* Retrieved from http://www.census.gov/prod/2008pubs/p60-235.pdf (accessed July 16, 2012).

U.S. Department of Health and Human Services, Office of the Inspector General (OIG). 1989. *Financial arrangements between physicians and health care business.* OAI-12-88-01410. May 1989.

U.S. General Accounting Office (GAO). 2003. *Specialty hospitals: Geographic location, services provided, and financial performance.* Report to Congress. GAO-04-167. October 2003.

Victor, R., and P. Petrova. 2006a. *The cost and use of pharmaceuticals in workers' compensation: A guide for policymakers.* Cambridge, MA: Workers Compensation Research Institute.

_____. 2006b. *State policies affecting the cost and use of pharmaceuticals in workers' compensation: A national inventory.* Cambridge, MA: Workers Compensation Research Institute.

Wang, D., and T. Liu. 2011a. *Prescription benchmarks, 2nd edition: Trends and interstate comparisons.* Cambridge, MA: Workers Compensation Research Institute.

_____. 2011b. *Prescription benchmarks for Florida, 2nd edition.* Cambridge, MA: Workers Compensation Research Institute.

Workers Compensation Research Institute (WCRI). 2011. *Workers' compensation medical cost containment: A national inventory, 2011.* Cambridge, MA: Workers Compensation Research Institute.

Wynn, B. 2005. *Paying for repackaged drugs under the California workers' compensation official medical fee schedule.* Santa Monica, CA: RAND.

Yee, C. 2012. *Why surgeon owners of ambulatory surgical centers do more surgery than non-owners.* Cambridge, MA: Workers Compensation Research Institute.

OTHER WCRI PUBLICATIONS

MEDICAL COSTS, UTILIZATION, AND HEALTH CARE DELIVERY

DESIGNING WORKERS' COMPENSATION MEDICAL FEE SCHEDULES. Olesya Fomenko and Te-Chun Liu. June 2012. wc-12-19.

COMPSCOPE™ MEDICAL BENCHMARKS FOR CALIFORNIA, 12TH EDITION. Rui Yang. May 2012. wc-12-02.

COMPSCOPE™ MEDICAL BENCHMARKS FOR FLORIDA, 12TH EDITION. Rui Yang. May 2012. wc-12-03.

ILLINOIS MEDICAL COST DRIVERS PRIOR TO 2011 REFORMS: COMPSCOPE™ MEDICAL BENCHMARKS, 12TH EDITION. Evelina Radeva. May 2012. wc-12-04.

COMPSCOPE™ MEDICAL BENCHMARKS FOR LOUISIANA, 12TH EDITION. Carol A. Telles. May 2012. wc-12-05.

COMPSCOPE™ MEDICAL BENCHMARKS FOR MARYLAND, 12TH EDITION. Rui Yang. May 2012. wc-12-06.

COMPSCOPE™ MEDICAL BENCHMARKS FOR MASSACHUSETTS, 12TH EDITION. Evelina Radeva. May 2012. wc-12-07.

COMPSCOPE™ MEDICAL BENCHMARKS FOR MICHIGAN, 12TH EDITION. Bogdan Savych. May 2012. wc-12-08.

MEDICAL BENCHMARKS FOR MINNESOTA, COMPSCOPE™ 12TH EDITION. Sharon E. Belton. May 2012. wc-12-09.

MEDICAL BENCHMARKS FOR NEW JERSEY, COMPSCOPE™ 12TH EDITION. Carol A. Telles. May 2012. wc-12-10.

EARLY IMPACT OF OUTPATIENT FEE SCHEDULE REDUCTION IN NORTH CAROLINA: COMPSCOPE™ MEDICAL BENCHMARKS, 12TH EDITION. Carol A. Telles. May 2012. wc-12-11.

COMPSCOPE™ MEDICAL BENCHMARKS FOR PENNSYLVANIA, 12TH EDITION. Evelina Radeva. May 2012. wc-12-12.

MONITORING THE IMPACT OF REFORMS IN TEXAS: COMPSCOPE™ MEDICAL BENCHMARKS, 12TH EDITION. Carol A. Telles. May 2012. wc-12-13.

MEDICAL BENCHMARKS FOR VIRGINIA, COMPSCOPE™ 12TH EDITION. Carol A. Telles. May 2012. wc-12-14.

COMPSCOPE™ MEDICAL BENCHMARKS FOR WISCONSIN, 12TH EDITION. Evelina Radeva. May 2012. wc-12-15.

WHY SURGEON OWNERS OF AMBULATORY SURGICAL CENTERS DO MORE SURGERY THAN NON-OWNERS. Christine A. Yee. May 2012. wc-12-17.

WCRI MEDICAL PRICE INDEX FOR WORKERS' COMPENSATION, FOURTH EDITION (MPI-WC). Rui Yang and Olesya Fomenko. March 2012. wc-12-20.

HOSPITAL OUTPATIENT COST INDEX FOR WORKERS' COMPENSATION. Rui Yang and Olesya Fomenko. January 2012. wc-12-01.

WCRI MEDICAL PRICE INDEX FOR WORKERS' COMPENSATION, THIRD EDITION (MPI-WC). Rui Yang. August 2011. wc-11-37.

PRESCRIPTION BENCHMARKS, 2ND EDITION: TRENDS AND INTERSTATE COMPARISONS. Dongchun Wang and Te-Chun Liu. July 2011. wc-11-31.

PRESCRIPTION BENCHMARKS FOR FLORIDA, 2ND EDITION. Dongchun Wang and Te-Chun Liu. July 2011. wc-11-32.

PRESCRIPTION BENCHMARKS FOR WASHINGTON. Dongchun Wang and Te-Chun Liu. July 2011. wc-11-33.

INTERSTATE VARIATIONS IN USE OF NARCOTICS. Dongchun Wang, Kathryn Mueller, and Dean Hashimoto. July 2011. wc-11-01.

IMPACT OF PREAUTHORIZATION ON MEDICAL CARE IN TEXAS. Christine A. Yee, Philip S. Borba, and Nicole Coomer. June 2011. wc-11-34.

WORKERS' COMPENSATION MEDICAL COST CONTAINMENT: A NATIONAL INVENTORY, 2011. April 2011. wc-11-35.

PRESCRIPTION BENCHMARKS FOR MINNESOTA. Dongchun Wang and Richard A. Victor. October 2010. wc-10-53.

PRESCRIPTION BENCHMARKS FOR FLORIDA. Dongchun Wang and Richard A. Victor. March 2010. wc-10-06.

PRESCRIPTION BENCHMARKS FOR ILLINOIS. Dongchun Wang and Richard A. Victor. March 2010. wc-10-05.

PRESCRIPTION BENCHMARKS FOR LOUISIANA. Dongchun Wang and Richard A. Victor. March 2010. wc-10-10.

PRESCRIPTION BENCHMARKS FOR MARYLAND. Dongchun Wang and Richard A. Victor. March 2010. wc-10-08.

PRESCRIPTION BENCHMARKS FOR MASSACHUSETTS. Dongchun Wang and Richard A. Victor. March 2010. wc-10-07.

PRESCRIPTION BENCHMARKS FOR MICHIGAN. Dongchun Wang and Richard A. Victor. March 2010. wc-10-09.

PRESCRIPTION BENCHMARKS FOR NORTH CAROLINA. Dongchun Wang and Richard A. Victor. March 2010. wc-10-16.

PRESCRIPTION BENCHMARKS FOR NEW JERSEY. Dongchun Wang and Richard A. Victor. March 2010. wc-10-15.

PRESCRIPTION BENCHMARKS FOR PENNSYLVANIA. Dongchun Wang and Richard A. Victor. March 2010. wc-10-11.

PRESCRIPTION BENCHMARKS FOR TENNESSEE. Dongchun Wang and Richard A. Victor. March 2010. wc-10-13.

PRESCRIPTION BENCHMARKS FOR TEXAS. Dongchun Wang and Richard A. Victor. March 2010. wc-10-12.

PRESCRIPTION BENCHMARKS FOR WISCONSIN. Dongchun Wang and Richard A. Victor. March 2010. wc-10-14.

FEE SCHEDULES FOR HOSPITALS AND AMBULATORY SURGICAL CENTERS: A GUIDE FOR POLICYMAKERS. Nicole M. Coomer. February 2010. wc-10-01.

NATIONAL INVENTORY OF WORKERS' COMPENSATION FEE SCHEDULES FOR HOSPITALS AND AMBULATORY SURGICAL CENTERS. Nicole M. Coomer. February 2010. wc-10-02.

WORKERS' COMPENSATION MEDICAL COST CONTAINMENT: A NATIONAL INVENTORY. August 2009. wc-09-15.

WCRI FLASHREPORT: *INFORMATION REQUESTED BY MEDICARE TO SUPPORT DECISION-MAKING ON MEDICARE SECONDARY PAYER REGULATIONS.* Ramona P. Tanabe. April 2009. fr-09-01.

WCRI MEDICAL PRICE INDEX FOR WORKERS' COMPENSATION, SECOND EDITION (MPI-WC). Stacey M. Eccleston with the assistance of Juxiang Liu. June 2008. wc-08-29.

WCRI FLASHREPORT: *CONNECTICUT FEE SCHEDULE RATES COMPARED TO STATE MEDICARE RATES: COMMON MEDICAL SERVICES DELIVERED TO INJURED WORKERS BY NONHOSPITAL PROVIDERS.* Stacey M. Eccleston. December 2007. fr-07-04.

WCRI FLASHREPORT: *WHAT ARE THE MOST IMPORTANT MEDICAL CONDITIONS IN WORKERS' COMPENSATION.* August 2007. fr-07-03.

WCRI FLASHREPORT: *WHAT ARE THE MOST IMPORTANT MEDICAL CONDITIONS IN NEW YORK WORKERS' COMPENSATION.* July 2007. fr-07-02.

WCRI FLASHREPORT: *ANALYSIS OF ILLUSTRATIVE MEDICAL FEE SCHEDULES IN WISCONSIN.* Stacey M. Eccleston, Te-Chun Liu, and Richard A. Victor. March 2007. fr-07-01.

WCRI MEDICAL PRICE INDEX FOR WORKERS' COMPENSATION: THE MPI-WC, FIRST EDITION. Stacey M. Eccleston. February 2007. wc-07-33.

BENCHMARKS FOR DESIGNING WORKERS' COMPENSATION MEDICAL FEE SCHEDULES: 2006. Stacey M. Eccleston and Te-Chun Liu. October 2006. wc-06-14.

ANALYSIS OF THE WORKERS' COMPENSATION MEDICAL FEE SCHEDULES IN ILLINOIS. Stacey M. Eccleston. July 2006. wc-06-28.

STATE POLICIES AFFECTING THE COST AND USE OF PHARMACEUTICALS IN WORKERS' COMPENSATION: A NATIONAL INVENTORY. Richard A. Victor and Petia Petrova. June 2006. wc-06-30.

THE COST AND USE OF PHARMACEUTICALS IN WORKERS' COMPENSATION: A GUIDE FOR POLICYMAKERS. Richard A. Victor and Petia Petrova. June 2006. wc-06-13.

HOW DOES THE MASSACHUSETTS MEDICAL FEE SCHEDULE COMPARE TO PRICES ACTUALLY PAID IN WORKERS' COMPENSATION? Stacey M. Eccleston. April 2006. wc-06-27.

THE IMPACT OF PROVIDER CHOICE ON WORKERS' COMPENSATION COSTS AND OUTCOMES. Richard A. Victor, Peter S. Barth, and David Neumark, with the assistance of Te-Chun Liu. November 2005. wc-05-14.

ADVERSE SURPRISES IN WORKERS' COMPENSATION: CASES WITH SIGNIFICANT UNANTICIPATED MEDICAL CARE AND COSTS. Richard A. Victor. June 2005. wc-05-16.

WCRI FLASHREPORT: *ANALYSIS OF THE PROPOSED WORKERS' COMPENSATION FEE SCHEDULE IN TENNESSEE.* Stacey M. Eccleston and Xiaoping Zhao. January 2005. fr-05-01.

WCRI FLASHREPORT: *ANALYSIS OF SERVICES DELIVERED AT CHIROPRACTIC VISITS IN TEXAS COMPARED TO OTHER STATES.* Stacey M. Eccleston and Xiaoping Zhao. July 2004. fr-04-07.

WCRI FLASHREPORT: *SUPPLEMENT TO BENCHMARKING THE 2004 PENNSYLVANIA WORKERS' COMPENSATION MEDICAL FEE SCHEDULE.* Stacey M. Eccleston and Xiaoping Zhao. May 2004. fr-04-06.

WCRI FLASHREPORT: *IS CHIROPRACTIC CARE A COST DRIVER IN TEXAS? RECONCILING STUDIES BY WCRI AND MGT/TEXAS CHIROPRACTIC ASSOCIATION.* April 2004. fr-04-05.

WCRI FLASHREPORT: *POTENTIAL IMPACT OF A LIMIT ON CHIROPRACTIC VISITS IN TEXAS.* Stacey M. Eccleston. April 2004. fr-04-04.

WCRI FLASHREPORT: *ARE HIGHER CHIROPRACTIC VISITS PER CLAIM DRIVEN BY "OUTLIER" PROVIDERS?* Richard A. Victor April 2004. fr-04-03.

WCRI FLASHREPORT: *BENCHMARKING THE 2004 PENNSYLVANIA WORKERS' COMPENSATION MEDICAL FEE SCHEDULE.* Stacey M. Eccleston and Xiaoping Zhao. March 2004. fr-04-01.

EVIDENCE OF EFFECTIVENESS OF POLICY LEVERS TO CONTAIN MEDICAL COSTS IN WORKERS' COMPENSATION. Richard A. Victor. November 2003. wc-03-08.

WCRI MEDICAL PRICE INDEX FOR WORKERS' COMPENSATION. Dongchun Wang and Xiaoping Zhao. October 2003. WC-03-05.

WCRI FLASHREPORT: *WHERE THE MEDICAL DOLLAR GOES? HOW CALIFORNIA COMPARES TO OTHER STATES.* Richard A. Victor and Stacey M. Eccleston. March 2003. FR-03-03.

PATTERNS AND COSTS OF PHYSICAL MEDICINE: COMPARISON OF CHIROPRACTIC AND PHYSICIAN-DIRECTED CARE. Richard A. Victor and Dongchun Wang. December 2002. WC-02-07.

PROVIDER CHOICE LAWS, NETWORK INVOLVEMENT, AND MEDICAL COSTS. Richard A. Victor, Dongchun Wang, and Philip Borba. December 2002. WC-02-05.

WCRI FLASHREPORT: *ANALYSIS OF PAYMENTS TO HOSPITALS AND SURGERY CENTERS IN FLORIDA WORKERS' COMPENSATION.* Stacey M. Eccleston and Xiaoping Zhao. December 2002. FR-02-03.

BENCHMARKS FOR DESIGNING WORKERS' COMPENSATION MEDICAL FEE SCHEDULES: 2001–2002. Stacey M. Eccleston, Aniko Laszlo, Xiaoping Zhao, and Michael Watson. August 2002. WC-02-02.

WCRI FLASHREPORT: *CHANGES IN MICHIGAN'S WORKERS' COMPENSATION MEDICAL FEE SCHEDULE: 1996–2002.* Stacey M. Eccleston. December 2002. FR-02-02.

TARGETING MORE COSTLY CARE: AREA VARIATION IN TEXAS MEDICAL COSTS AND UTILIZATION. Richard A. Victor and N. Michael Helvacian. May 2002. WC-02-03.

WCRI FLASHREPORT: *COMPARING THE PENNSYLVANIA WORKERS' COMPENSATION FEE SCHEDULE WITH MEDICARE RATES: EVIDENCE FROM 160 IMPORTANT MEDICAL PROCEDURES.* Richard A. Victor, Stacey M. Eccleston, and Xiaoping Zhao. November 2001. FR-01-07.

WCRI FLASHREPORT: *BENCHMARKING PENNSYLVANIA'S WORKERS' COMPENSATION MEDICAL FEE SCHEDULE.* Stacey M. Eccleston and Xiaoping Zhao. October 2001. FR-01-06.

WCRI FLASHREPORT: *BENCHMARKING CALIFORNIA'S WORKERS' COMPENSATION MEDICAL FEE SCHEDULES.* Stacey M. Eccleston. August 2001. FR-01-04.

MANAGED CARE AND MEDICAL COST CONTAINMENT IN WORKERS' COMPENSATION: A NATIONAL INVENTORY, 2001–2002. Ramona P. Tanabe and Susan M. Murray. December 2001. WC-01-04.

WCRI FLASHREPORT: *BENCHMARKING FLORIDA'S WORKERS' COMPENSATION MEDICAL FEE SCHEDULES.* Stacey M. Eccleston and Aniko Laszlo. August 2001. FR-01-03.

THE IMPACT OF INITIAL TREATMENT BY NETWORK PROVIDERS ON WORKERS' COMPENSATION MEDICAL COSTS AND DISABILITY PAYMENTS. Sharon E. Fox, Richard A. Victor, Xiaoping Zhao, and Igor Polevoy. August 2001. DM-01-01.

THE IMPACT OF WORKERS' COMPENSATION NETWORKS ON MEDICAL AND DISABILITY PAYMENTS. William G. Johnson, Marjorie L. Baldwin, and Steven C. Marcus. November 1999. WC-99-5.

FEE SCHEDULE BENCHMARK ANALYSIS: OHIO. Philip L. Burstein. December 1996. FS-96-1.

THE RBRVS AS A MODEL FOR WORKERS' COMPENSATION MEDICAL FEE SCHEDULES: PROS AND CONS. Philip L. Burstein. July 1996. WC-96-5.

BENCHMARKS FOR DESIGNING WORKERS' COMPENSATION MEDICAL FEE SCHEDULES: 1995–1996. Philip L. Burstein. May 1996. WC-96-2.

FEE SCHEDULE BENCHMARK ANALYSIS: NORTH CAROLINA. Philip L. Burstein. December 1995. FS-95-2.

FEE SCHEDULE BENCHMARK ANALYSIS: COLORADO. Philip L. Burstein. August 1995. FS-95-1.

BENCHMARKS FOR DESIGNING WORKERS' COMPENSATION MEDICAL FEE SCHEDULES: 1994–1995. Philip L. Burstein. December 1994. WC-94-7.

REVIEW, REGULATE, OR REFORM: WHAT WORKS TO CONTROL WORKERS' COMPENSATION MEDICAL COSTS. Thomas W. Grannemann, ed. September 1994. WC-94-5.

FEE SCHEDULE BENCHMARK ANALYSIS: MICHIGAN. Philip L. Burstein. September 1994. FS-94-1.

MEDICOLEGAL FEES IN CALIFORNIA: AN ASSESSMENT. Leslie I. Boden. March 1994. WC-94-1.

BENCHMARKS FOR DESIGNING WORKERS' COMPENSATION MEDICAL FEE SCHEDULES. Stacey M. Eccleston, Thomas W. Grannemann, and James F. Dunleavy. December 1993. WC-93-4.

HOW CHOICE OF PROVIDER AND RECESSIONS AFFECT MEDICAL COSTS IN WORKERS' COMPENSATION. Richard B. Victor and Charles A. Fleischman. June 1990. WC-90-2.

MEDICAL COSTS IN WORKERS' COMPENSATION: TRENDS & INTERSTATE COMPARISONS. Leslie I. Boden and Charles A. Fleischman. December 1989. WC-89-5.

Worker Outcomes

How have worker outcomes and medical costs changed in Wisconsin? Sharon E. Belton and Te-Chun Liu. May 2010. WC-10-04.

Comparing outcomes for injured workers in Michigan. Sharon E. Belton and Te-Chun Liu. June 2009. WC-09-31.

Comparing outcomes for injured workers in Maryland. Sharon E. Belton and Te-Chun Liu. June 2008. WC-08-15.

Comparing outcomes for injured workers in nine large states. Sharon E. Belton, Richard A. Victor, and Te-Chun Liu, with the assistance of Pinghui Li. May 2007. WC-07-14.

Comparing outcomes for injured workers in seven large states. Sharon E. Fox, Richard A. Victor, and Te-Chun Liu, with the assistance of Pinghui Li. February 2006. WC-06-01.

WCRI FLASHREPORT: *Worker outcomes in Texas by type of injury.* Richard A. Victor. February 2005. FR-05-02.

Outcomes for injured workers in California, Massachusetts, Pennsylvania, and Texas. Richard A. Victor, Peter S. Barth, and Te-Chun Liu, with the assistance of Pinghui Li. December 2003. WC-03-07.

Outcomes for injured workers in Texas. Peter S. Barth and Richard A. Victor, with the assistance of Pinghui Li and Te-Chun Liu. July 2003. WC-03-02.

The workers' story: results of a survey of workers injured in Wisconsin. Monica Galizzi, Leslie I. Boden, and Te-Chun Liu. December 1998. WC-98-5.

Workers' compensation medical care: effective measurement of outcomes. Kate Kimpan. October 1996. WC-96-7.

Benefits and Return to Work

Return to work after a lump-sum settlement. Bogdan Savych. July 2012. WC-12-21.

Factors influencing return to work for injured workers: lessons from Pennsylvania and Wisconsin. Sharon E. Belton. November 2011. WC-11-39.

The impact of the 2004 PPD reforms in Tennessee: early evidence. Evelina Radeva and Carol Telles. May 2008. FR-08-02.

Factors that influence the amount and probability of permanent partial disability benefits. Philip S. Borba and Mike Helvacian. June 2006. WC-06-16.

Return-to-work outcomes of injured workers: evidence from California, Massachusetts, Pennsylvania, and Texas. Sharon E. Fox, Philip S. Borba, and Te-Chun Liu. May 2005. WC-05-15.

Who obtains permanent partial disability benefits: a six state analysis. Peter S. Barth, N. Michael Helvacian, and Te-Chun Liu. December 2002. WC-02-04.

WCRI FLASHREPORT: *Benchmarking Oregon's permanent partial disability benefits.* Duncan S. Ballantyne and Michael Manley. July 2002. FR-02-01.

WCRI FLASHREPORT: *Benchmarking Florida's permanent impairment benefits.* Richard A. Victor and Duncan S. Ballantyne. September 2001. FR-01-05.

Permanent partial disability benefits: interstate differences. Peter S. Barth and Michael Niss. September 1999. WC-99-2.

Measuring income losses of injured workers: a study of the Wisconsin system—A WCRI Technical Paper. Leslie I. Boden and Monica Galizzi. November 1998.

Permanent partial disability in Tennessee: similar benefits for similar injuries? Leslie I. Boden. November 1997. WC-97-5.

What are the most important factors shaping return to work? evidence from Wisconsin. Monica Galizzi and Leslie I. Boden. October 1996. WC-96-6.

Do low TTD maximums encourage high PPD utilization: re-examining the conventional wisdom. John A. Gardner. January 1992. WC-92-2.

Benefit increases and system utilization: the Connecticut experience. John A. Gardner. December 1991. WC-91-5.

Designing benefit structures for temporary disability: a guide for policymakers—Two-Volume Publication. Richard B. Victor and Charles A. Fleischman. December 1989. WC-89-4.

RETURN TO WORK INCENTIVES: LESSONS FOR POLICYMAKERS FROM ECONOMIC STUDIES. John A. Gardner. June 1989. WC-89-2.

INCOME REPLACEMENT FOR LONG-TERM DISABILITY: THE ROLE OF WORKERS' COMPENSATION AND SSDI. Karen R. DeVol. December 1986. SP-86-2.

COST DRIVERS AND BENCHMARKS OF SYSTEM PERFORMANCE

COMPSCOPE™ BENCHMARKS FOR CALIFORNIA, 12TH EDITION. Rui Yang, with the assistance of Syd Allan. December 2011. WC-11-41.

COMPSCOPE™ BENCHMARKS FOR FLORIDA, 12TH EDITION. Rui Yang, with the assistance of Syd Allan. December 2011. WC-11-42.

BASELINE FOR MONITORING THE IMPACT OF 2011 REFORMS IN ILLINOIS: COMPSCOPE™ BENCHMARKS, 12TH EDITION. Evelina Radeva, with the assistance of Syd Allan. December 2011. WC-11-43.

COMPSCOPE™ BENCHMARKS FOR LOUISIANA, 12TH EDITION. Carol A. Telles, with the assistance of Syd Allan. December 2011. WC-11-44.

COMPSCOPE™ BENCHMARKS FOR MARYLAND, 12TH EDITION. Rui Yang, with the assistance of Syd Allan. December 2011. WC-11-45.

COMPSCOPE™ BENCHMARKS FOR MASSACHUSETTS, 12TH EDITION. Evelina Radeva, with the assistance of Syd Allan. December 2011. WC-11-46.

COMPSCOPE™ BENCHMARKS FOR MICHIGAN, 12TH EDITION. Bogdan Savych, with the assistance of Syd Allan. December 2011. WC-11-47.

BENCHMARKS FOR MINNESOTA, COMPSCOPE™ 12TH EDITION. Carol A. Telles, with the assistance of Syd Allan. December 2011. WC-11-48.

BENCHMARKS FOR NEW JERSEY, COMPSCOPE™ 12TH EDITION. Carol A. Telles, with the assistance of Syd Allan. December 2011. WC-11-49.

BASELINE FOR EVALUATING IMPACT OF 2011 REFORMS IN NORTH CAROLINA: COMPSCOPE™ BENCHMARKS, 12TH EDITION. Carol A. Telles, with the assistance of Syd Allan. December 2011. WC-11-50.

COMPSCOPE™ BENCHMARKS FOR PENNSYLVANIA, 12TH EDITION. Evelina Radeva, with the assistance of Syd Allan. December 2011. WC-11-51.

MONITORING THE IMPACT OF REFORMS AND RECESSION IN TEXAS: COMPSCOPE™ BENCHMARKS, 12TH EDITION. Carol A. Telles, with the assistance of Syd Allan. December 2011. WC-11-52.

BENCHMARKS FOR VIRGINIA, COMPSCOPE™ 12TH EDITION. Carol A. Telles, with the assistance of Syd Allan. December 2011. WC-11-53.

COMPSCOPE™ BENCHMARKS FOR WISCONSIN, 12TH EDITION. Evelina Radeva, with the assistance of Syd Allan. December 2011. WC-11-54.

EARLY IMPACT OF 2007 REFORMS IN NEW YORK. Carol A. Telles and Ramona P. Tanabe. December 2011. WC-11-38.

COMPSCOPE™ BENCHMARKS FOR TENNESSEE, 11TH EDITION. Evelina Radeva, Nicole M. Coomer, Bogdan Savych, Carol A. Telles, Rui Yang, and Ramona P. Tanabe, with the assistance of Syd Allan. January 2011. WC-11-13.

BASELINE TRENDS FOR EVALUATING THE IMPACT OF THE 2007 REFORMS IN NEW YORK. Ramona P. Tanabe and Carol A. Telles. November 2010. WC-10-36.

UPDATED BASELINE FOR EVALUATING THE IMPACT OF THE 2007 REFORMS IN NEW YORK. Ramona P. Tanabe, Stacey Eccleston, and Carol A. Telles. April 2009. WC-09-14.

INTERSTATE VARIATIONS IN MEDICAL PRACTICE PATTERNS FOR LOW BACK CONDITIONS. Dongchun Wang, Kathryn Meuller, Dean Hashimoto, Sharon Belton, and Xiaoping Zhao. June 2008. WC-08-28.

WCRI FLASHREPORT: *TIMELINESS OF INJURY REPORTING AND FIRST INDEMNITY PAYMENT IN NEW YORK: A COMPARISON WITH 14 STATES.* Carol A. Telles and Ramona P. Tanabe. March 2008. FR-08-01.

BASELINE FOR EVALUATING THE IMPACT OF THE 2007 REFORMS IN NEW YORK. Ramona P. Tanabe, Stacey Eccleston, and Carol A. Telles. March 2008. WC-08-14.

WHY ARE BENEFIT DELIVERY EXPENSES HIGHER IN CALIFORNIA AND FLORIDA? Duncan S. Ballantyne and Carol A. Telles. December 2002. WC-02-06.

COMPSCOPE™ BENCHMARKS: MASSACHUSETTS, 1994–1999. Carol A. Telles, Aniko Laszlo, and Te-Chun Liu. January 2002. CS-01-03.

COMPSCOPE™ BENCHMARKS: FLORIDA, 1994–1999. N. Michael Helvacian and Seth A. Read. September 2001. CS-01-1.

WCRI FLASHREPORT: *WHERE THE WORKERS' COMPENSATION DOLLAR GOES.* Richard A. Victor and Carol A. Telles. August 2001. FR-01-01.

PREDICTORS OF MULTIPLE WORKERS' COMPENSATION CLAIMS IN WISCONSIN. Glenn A. Gotz, Te-Chun Liu, and Monica Galizzi. November 2000. WC-00-7.

AREA VARIATIONS IN TEXAS BENEFIT PAYMENTS AND CLAIM EXPENSES. Glenn A. Gotz, Te-Chun Liu, Christopher J. Mazingo, and Douglas J. Tattrie. May 2000. WC-00-3.

AREA VARIATIONS IN CALIFORNIA BENEFIT PAYMENTS AND CLAIM EXPENSES. Glenn A. Gotz, Te-Chun Liu, and Christopher J. Mazingo. May 2000. WC-00-2.

AREA VARIATIONS IN PENNSYLVANIA BENEFIT PAYMENTS AND CLAIM EXPENSES. Glenn A. Gotz, Te-Chun Liu, and Christopher J. Mazingo. May 2000. WC-00-1.

BENCHMARKING THE PERFORMANCE OF WORKERS' COMPENSATION SYSTEMS: COMPSCOPE™ MEASURES FOR MINNESOTA. H. Brandon Haller and Seth A. Read. June 2000. CS-00-2.

BENCHMARKING THE PERFORMANCE OF WORKERS' COMPENSATION SYSTEMS: COMPSCOPE™ MEASURES FOR MASSACHUSETTS. Carol A. Telles and Tara L. Nells. December 1999. CS-99-3.

BENCHMARKING THE PERFORMANCE OF WORKERS' COMPENSATION SYSTEMS: COMPSCOPE™ MEASURES FOR CALIFORNIA. Sharon E. Fox and Tara L. Nells. December 1999. CS-99-2.

BENCHMARKING THE PERFORMANCE OF WORKERS' COMPENSATION SYSTEMS: COMPSCOPE™ MEASURES FOR PENNSYLVANIA. Sharon E. Fox and Tara L. Nells. November 1999. CS-99-1.

COST DRIVERS AND SYSTEM PERFORMANCE IN A COURT-BASED SYSTEM: TENNESSEE. John A. Gardner, Carol A. Telles, and Gretchen A. Moss. June 1996. WC-96-4.

THE 1991 REFORMS IN MASSACHUSETTS: AN ASSESSMENT OF IMPACT. John A. Gardner, Carol A. Telles, and Gretchen A. Moss. May 1996. WC-96-3.

THE IMPACT OF OREGON'S COST CONTAINMENT REFORMS. John A. Gardner, Carol A. Telles, and Gretchen A. Moss. February 1996. WC-96-1.

COST DRIVERS AND SYSTEM CHANGE IN GEORGIA, 1984–1994. John A. Gardner, Carol A. Telles, and Gretchen A. Moss. November 1995. WC-95-3.

COST DRIVERS IN MISSOURI. John A. Gardner, Richard A. Victor, Carol A. Telles, and Gretchen A. Moss. December 1994. WC-94-6.

COST DRIVERS IN NEW JERSEY. John A. Gardner, Richard A. Victor, Carol A. Telles, and Gretchen A. Moss. September 1994. WC-94-4.

COST DRIVERS IN SIX STATES. Richard A. Victor, John A. Gardner, Daniel Sweeney, and Carol A. Telles. December 1992. WC-92-9.

PERFORMANCE INDICATORS FOR PERMANENT DISABILITY: LOW-BACK INJURIES IN TEXAS. Sara R. Pease. August 1988. WC-88-4.

PERFORMANCE INDICATORS FOR PERMANENT DISABILITY: LOW-BACK INJURIES IN NEW JERSEY. Sara R. Pease. December 1987. WC-87-5.

PERFORMANCE INDICATORS FOR PERMANENT DISABILITY: LOW-BACK INJURIES IN WISCONSIN. Sara R. Pease. December 1987. WC-87-4.

ADMINISTRATION/LITIGATION

WORKERS' COMPENSATION LAWS AS OF JANUARY 2012. Joint publication of IAIABC and WCRI. Ramona P. Tanabe. March 2012. WC-12-18.

WORKERS' COMPENSATION LAWS, 3RD EDITION. Joint publication of IAIABC and WCRI. Ramona P. Tanabe. October 2010. WC-10-52.

AVOIDING LITIGATION: WHAT CAN EMPLOYERS, INSURERS, AND STATE WORKERS' COMPENSATION AGENCIES DO?. Richard A. Victor and Bogdan Savych. July 2010. WC-10-18.

WORKERS' COMPENSATION LAWS, 2ND EDITION. Joint publication of IAIABC and WCRI. June 2009. WC-09-30.

DID THE FLORIDA REFORMS REDUCE ATTORNEY INVOLVEMENT? Bogdan Savych and Richard A. Victor. June 2009. WC-09-16.

LESSONS FROM THE OREGON WORKERS' COMPENSATION SYSTEM. Duncan S. Ballantyne. March 2008. WC-08-13.

WORKERS' COMPENSATION IN MONTANA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. March 2007. WC-07-12.

WORKERS' COMPENSATION IN NEVADA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. December 2006. WC-06-15.

WORKERS' COMPENSATION IN HAWAII: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. April 2006. WC-06-12.

WORKERS' COMPENSATION IN ARKANSAS: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. August 2005. WC-05-18.

WORKERS' COMPENSATION IN MISSISSIPPI: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. May 2005. WC-05-13.

WORKERS' COMPENSATION IN ARIZONA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. September 2004. WC-04-05.

WORKERS' COMPENSATION IN IOWA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. April 2004. WC-04-02.

WCRI FLASHREPORT: *MEASURING THE COMPLEXITY OF THE WORKERS' COMPENSATION DISPUTE RESOLUTION PROCESSES IN TENNESSEE.* Richard A. Victor. April 2004. FR-04-02.

REVISITING WORKERS' COMPENSATION IN MISSOURI: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. December 2003. WC-03-06.

WORKERS' COMPENSATION IN TENNESSEE: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. April 2003. WC-03-01.

REVISITING WORKERS' COMPENSATION IN NEW YORK: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. January 2002. WC-01-05.

WORKERS' COMPENSATION IN KENTUCKY: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. June 2001. WC-01-01.

WORKERS' COMPENSATION IN OHIO: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. October 2000. WC-00-5.

WORKERS' COMPENSATION IN LOUISIANA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. November 1999. WC-99-4.

WORKERS' COMPENSATION IN FLORIDA: ADMINISTRATIVE INVENTORY. Peter S. Barth. August 1999. WC-99-3.

MEASURING DISPUTE RESOLUTION OUTCOMES: A LITERATURE REVIEW WITH IMPLICATIONS FOR WORKERS' COMPENSATION. Duncan S. Ballantyne and Christopher J. Mazingo. April 1999. WC-99-1.

REVISITING WORKERS' COMPENSATION IN CONNECTICUT: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. September 1998. WC-98-4.

DISPUTE PREVENTION AND RESOLUTION IN WORKERS' COMPENSATION: A NATIONAL INVENTORY, 1997–1998. Duncan S. Ballantyne. May 1998. WC-98-3.

WORKERS' COMPENSATION IN OKLAHOMA: ADMINISTRATIVE INVENTORY. Michael Niss. April 1998. WC-98-2.

WORKERS' COMPENSATION ADVISORY COUNCILS: A NATIONAL INVENTORY, 1997–1998. Sharon E. Fox. March 1998. WC-98-1.

THE ROLE OF ADVISORY COUNCILS IN WORKERS' COMPENSATION SYSTEMS: OBSERVATIONS FROM WISCONSIN. Sharon E. Fox. November 1997.

REVISITING WORKERS' COMPENSATION IN MICHIGAN: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Lawrence Shiman. October 1997. WC-97-4.

REVISITING WORKERS' COMPENSATION IN MINNESOTA: ADMINISTRATIVE INVENTORY. Carol A. Telles and Lawrence Shiman. September 1997. WC-97-3.

REVISITING WORKERS' COMPENSATION IN CALIFORNIA: ADMINISTRATIVE INVENTORY. Carol A. Telles and Sharon E. Fox. June 1997. WC-97-2.

REVISITING WORKERS' COMPENSATION IN PENNSYLVANIA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. March 1997. WC-97-1.

REVISITING WORKERS' COMPENSATION IN WASHINGTON: ADMINISTRATIVE INVENTORY. Carol A. Telles and Sharon E. Fox. December 1996. WC-96-10.

WORKERS' COMPENSATION IN ILLINOIS: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Karen M. Joyce. November 1996. WC-96-9.

WORKERS' COMPENSATION IN COLORADO: ADMINISTRATIVE INVENTORY. Carol A. Telles and Sharon E. Fox. October 1996. WC-96-8.

WORKERS' COMPENSATION IN OREGON: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and James F. Dunleavy. December 1995. WC-95-2.

REVISITING WORKERS' COMPENSATION IN TEXAS: ADMINISTRATIVE INVENTORY. Peter S. Barth and Stacey M. Eccleston. April 1995. WC-95-1.

WORKERS' COMPENSATION IN VIRGINIA: ADMINISTRATIVE INVENTORY. Carol A. Telles and Duncan S. Ballantyne. April 1994. WC-94-3.

WORKERS' COMPENSATION IN NEW JERSEY: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and James F. Dunleavy. April 1994. WC-94-2.

WORKERS' COMPENSATION IN NORTH CAROLINA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne. December 1993. WC-93-5.

WORKERS' COMPENSATION IN MISSOURI: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Carol A. Telles. May 1993. WC-93-1.

WORKERS' COMPENSATION IN CALIFORNIA: ADMINISTRATIVE INVENTORY. Peter S. Barth and Carol A. Telles. December 1992. WC-92-8.

WORKERS' COMPENSATION IN WISCONSIN: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Carol A. Telles. November 1992. WC-92-7.

WORKERS' COMPENSATION IN NEW YORK: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Carol A. Telles. October 1992. WC-92-6.

THE AMA GUIDES IN MARYLAND: AN ASSESSMENT. Leslie I. Boden. September 1992. WC-92-5.

WORKERS' COMPENSATION IN GEORGIA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Stacey M. Eccleston. September 1992. WC-92-4.

WORKERS' COMPENSATION IN PENNSYLVANIA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Carol A. Telles. December 1991. WC-91-4.

REDUCING LITIGATION: USING DISABILITY GUIDELINES AND STATE EVALUATORS IN OREGON. Leslie I. Boden, Daniel E. Kern, and John A. Gardner. October 1991. WC-91-3.

WORKERS' COMPENSATION IN MINNESOTA: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Carol A. Telles. June 1991. WC-91-1.

WORKERS' COMPENSATION IN MAINE: ADMINISTRATIVE INVENTORY. Duncan S. Ballantyne and Stacey M. Eccleston. December 1990. WC-90-5.

WORKERS' COMPENSATION IN MICHIGAN: ADMINISTRATIVE INVENTORY. H. Allan Hunt and Stacey M. Eccleston. January 1990. WC-90-1.

WORKERS' COMPENSATION IN WASHINGTON: ADMINISTRATIVE INVENTORY. Sara R. Pease. November 1989. WC-89-3.

WORKERS' COMPENSATION IN TEXAS: ADMINISTRATIVE INVENTORY. Peter S. Barth, Richard B. Victor, and Stacey M. Eccleston. March 1989. WC-89-1.

REDUCING LITIGATION: EVIDENCE FROM WISCONSIN. Leslie I. Boden. December 1988. WC-88-7.

WORKERS' COMPENSATION IN CONNECTICUT: ADMINISTRATIVE INVENTORY. Peter S. Barth. December 1987. WC-87-3.

USE OF MEDICAL EVIDENCE: LOW-BACK PERMANENT PARTIAL DISABILITY CLAIMS IN NEW JERSEY. Leslie I. Boden. December 1987. WC-87-2.

USE OF MEDICAL EVIDENCE: LOW-BACK PERMANENT PARTIAL DISABILITY CLAIMS IN MARYLAND. Leslie I. Boden. September 1986. SP-86-1.

Vocational Rehabilitation

IMPROVING VOCATIONAL REHABILITATION OUTCOMES: OPPORTUNITIES FOR EARLY INTERVENTION. John A. Gardner. August 1988. WC-88-3.

APPROPRIATENESS AND EFFECTIVENESS OF VOCATIONAL REHABILITATION IN FLORIDA: COSTS, REFERRALS, SERVICES, AND OUTCOMES. John A. Gardner. February 1988. WC-88-2.

VOCATIONAL REHABILITATION IN FLORIDA WORKERS' COMPENSATION: REHABILITANTS, SERVICES, COSTS, AND OUTCOMES. John A. Gardner. February 1988. WC-88-1.

VOCATIONAL REHABILITATION OUTCOMES: EVIDENCE FROM NEW YORK. John A. Gardner. December 1986. WC-86-1.

VOCATIONAL REHABILITATION IN WORKERS' COMPENSATION: ISSUES AND EVIDENCE. John A. Gardner. June 1985. S-85-1.

Occupational Disease

LIABILITY FOR EMPLOYEE GRIEVANCES: MENTAL STRESS AND WRONGFUL TERMINATION. Richard B. Victor, ed. October 1988. WC-88-6.

ASBESTOS CLAIMS: THE DECISION TO USE WORKERS' COMPENSATION AND TORT. Robert I. Field and Richard B. Victor. September 1988. WC-88-5.

OTHER

WORKERS' COMPENSATION: WHERE HAVE WE COME FROM? WHERE ARE WE GOING?. Richard A. Victor and Linda L. Carrubba, eds. November 2010. WC-10-33.

RECESSION, FEAR OF JOB LOSS, AND RETURN TO WORK. Richard A. Victor and Bogdan Savych. April 2010. WC-10-03.

WCRI FLASHREPORT: *WHAT ARE THE PREVALENCE AND SIZE OF LUMP-SUM PAYMENTS IN WORKERS' COMPENSATION: ESTIMATES RELEVANT FOR MEDICARE SET-ASIDES*. Richard A. Victor, Carol A. Telles, and Rui Yang. November 2006. FR-06-01.

THE FUTURE OF WORKERS' COMPENSATION: OPPORTUNITIES AND CHALLENGES. Richard A. Victor, ed. April 2004. WC-04-03.

MANAGING CATASTROPHIC EVENTS IN WORKERS' COMPENSATION: LESSONS FROM 9/11. Ramona P. Tanabe, ed. March 2003. WC-03-03.

WCRI FLASHREPORT: *WORKERS' COMPENSATION IN CALIFORNIA: LESSONS FROM RECENT WCRI STUDIES*. Richard A. Victor. March 2003. FR-03-02.

WCRI FLASHREPORT: *WORKERS' COMPENSATION IN FLORIDA: LESSONS FROM RECENT WCRI STUDIES*. Richard A. Victor. February 2003. FR-03-01.

WORKERS' COMPENSATION AND THE CHANGING AGE OF THE WORKFORCE. Douglas J. Tattrie, Glenn A. Gotz, and Te-Chun Liu. December 2000. WC-00-6.

MEDICAL PRIVACY LEGISLATION: IMPLICATIONS FOR WORKERS' COMPENSATION. Ramona P. Tanabe, ed. November 2000. WC-00-4.

THE IMPLICATIONS OF CHANGING EMPLOYMENT RELATIONS FOR WORKERS' COMPENSATION. Glenn A. Gotz, ed. December 1999. WC-99-6.

WORKERS' COMPENSATION SUCCESS STORIES. Richard A. Victor, ed. July 1993. WC-93-3.

THE AMERICANS WITH DISABILITIES ACT: IMPLICATIONS FOR WORKERS' COMPENSATION. Stacey M. Eccleston, ed. July 1992. WC-92-3.

TWENTY-FOUR-HOUR COVERAGE. Richard A. Victor, ed. June 1991. WC-91-2.

These publications can be obtained by visiting our web site at **www.wcrinet.org** or by sending a written request by fax to (617) 661-9284, or by mail to

Publications Department
Workers Compensation Research Institute
955 Massachusetts Avenue
Cambridge, MA 02139

About the Institute

The Workers Compensation Research Institute is a nonpartisan, not-for-profit research organization providing objective information about public policy issues involving workers' compensation systems.

The Institute does not take positions on the issues it researches; rather it provides information obtained through studies and data collection efforts that conform to recognized scientific methods, with objectivity further ensured through rigorous peer review procedures.

The Institute's work helps those interested in improving workers' compensation systems by providing new, objective, empirical information that bears on certain vital questions:

- How serious are the problems that policymakers want to address?
- What are the consequences of proposed solutions?
- Are there alternative solutions that merit consideration? What are their consequences?

The Institute's work takes several forms:

- Original research studies on major issues confronting workers' compensation systems
- Original research studies of individual state systems where policymakers have shown an interest in reform and where there is an unmet need for objective information
- Sourcebooks that bring together information from a variety of sources to provide unique, convenient reference works on specific issues
- Periodic research briefs that report on significant new research, data, and issues in the field
- Benchmarking reports that identify key outcomes of state systems

pmsi Pharmacy

Examining the Use of Physician Dispensing

The practice of physician dispensing in workers' compensation may appear to be a simple concept at face value, but it has both benefits and drawbacks that should be examined and considered.

Physician Dispensing in Workers' Compensation

Physician dispensing has deep historical roots in the late 19th and early 20th centuries, when the practice of physicians dispensing prescription drugs was common. There were several reasons that this practice became less common over the years:

- Retail pharmacies grew rapidly and began to serve as the main distribution channel for prescription drugs
- The number of new state and federal dispensing requirements began to skyrocket, making it much tougher for physicians to remain in compliance
- The number of medications available increased, making it much harder for physicians to maintain inventory required to meet patient demand
- Malpractice insurance rates increased, causing physicians to be less willing to accept liability associated with dispensing medications

In workers' compensation, physician dispensing began to surface in California in the middle of the last decade, as physicians partnering with companies that directly market repackaging dispensing systems found a secondary stream of income to fill gaps created by reimbursement cuts in the commercial, workers' compensation and government markets.

Today, new technology platforms have made it easier for physicians to manage inventory, track prescribing trends, maintain patient and invoice records, and check for potentially harmful drug interactions. Consequently, drug repackaging companies are marketing their repackaging technology to physicians and clinics across the country, promoting the financial benefits of physician dispensing. As a result, the percentage of physicians dispensing drugs has risen to an estimated 7% – 10%, according to an article posted on the American Association of State Compensation Insurance Funds (AASCIF) website.

The Concern over Physician Dispensing

Though physician dispensing often can be appropriate, there is a growing concern that this practice is contributing to rising pharmacy costs for workers' compensation claims payors. Many payors in the workers' compensation industry see physician dispensing as a major concern. This results from the fact that unmanaged repackaging and dispensing of drugs by physicians can inject unnecessary costs into the system and challenges the proper management of injured workers' care. Issues related to physician dispensing include:

- Inflated charges for commonly dispensed drugs due to the creation of new NDCs (see Figure 1)
  - Repackaging of medications into an odd fill amount such as 9, 21 or 40, which is not typical for a retail prescription, drives creation of a new NDC
  - New NDCs created through physician-dispensed medications do not have a recognizable AWP
  - The AWP or "sticker price" is assigned by the entity who repackaged the medication

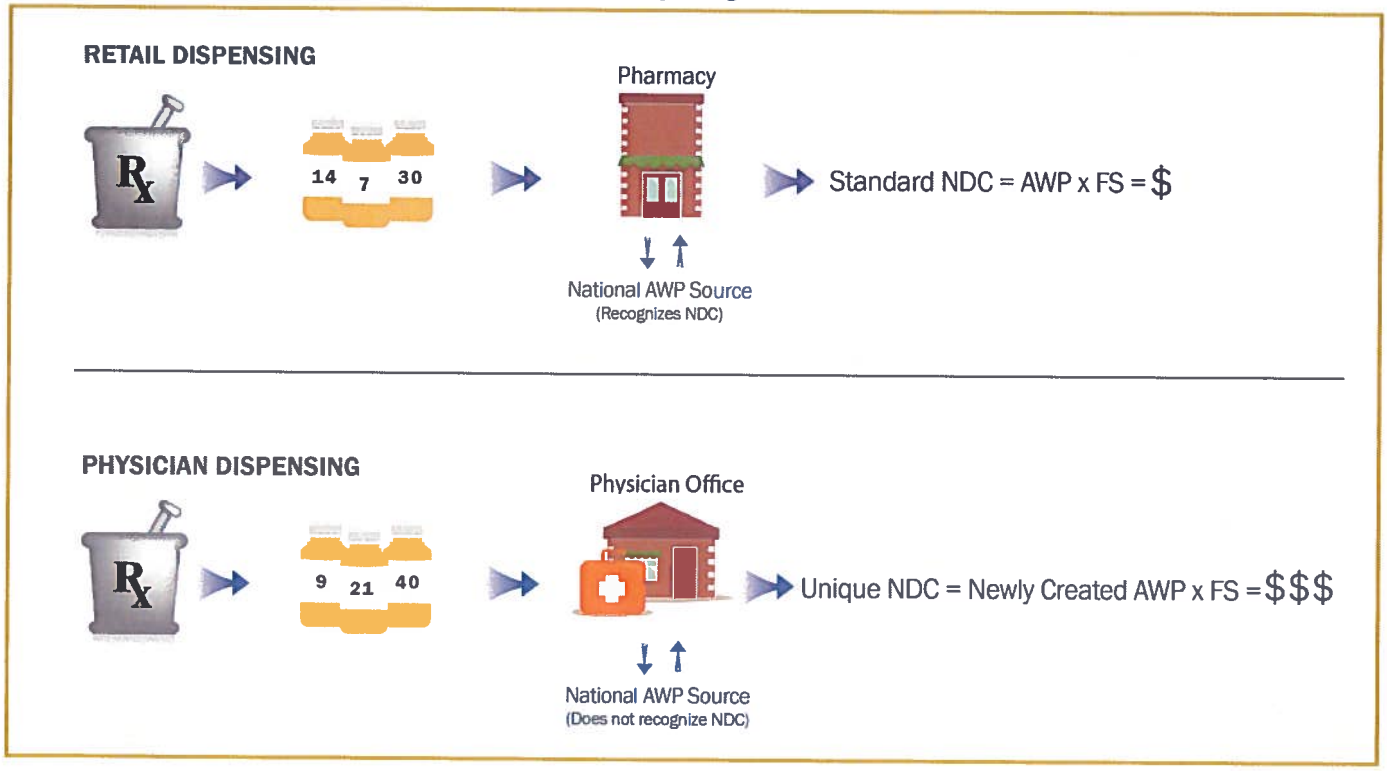
The Practice of Physician Dispensing

Physician dispensing is defined as the provision of medication directly to the patient from the physician. The medication dispensed is the same as that available through a traditional pharmacy, however the patient receives the medication at the physician's office instead of the pharmacy.

Many times, medications dispensed by the physician have been moved from their original bulk quantity into smaller quantity packages. This practice is known as repackaging.

The formation of a new National Drug Code (NDC) also results in a new Average Wholesale Price (AWP) being assigned. These AWP rates can be higher than prescriptions dispensed in the retail or mail channel and often outside of the control of State Fee Schedules.

Figure 1: Cost of Retail Pharmacy Dispensing vs. Physician Dispensing



  - The new AWP for the NDC, when applied through the State Fee Schedule reimbursement calculations, can inflate drug costs anywhere from 40% – 400% above reimbursement rates for the same drug dispensed by a retail pharmacy

- Avoidance of State Fee Schedules and pharmacy cost controls
  - Many workers' compensation State Fee Schedules do not make a provision for physician-dispensed medications
  - Physician dispensing transactions occur outside the normal PBM channel, which means PBM cost containment controls are not usually applied
  - Due to a lack of consistency in quantity and pricing for repackaged drugs, bill review systems are unable to identify physician-dispensed medications and pharmacy providers, in addition to the fact that most doctors bill these drugs and associated office visits on the same bill, making it difficult for bill review companies and payors to separate the two distinct costs
- Increased risk to injured worker care
  - Physicians may not have access to the profile of medications dispensed and utilized outside the office, which can cause safety concerns, specifically with regard to narcotic usage

Creating NDCs and AWPs

When a medication is repackaged and/or relabeled from the original manufacturer's package into unit-dose packs, odd quantities or smaller quantities, the FDA mandates that a unique NDC must be generated and then submitted for approval. The organizations that repackage the medication are also responsible for assigning the AWP for the new NDC and reporting this information to AWP reporting databases.

There are no regulations or laws on how the entity assigns the AWP or how high the AWP can be. This typically results in the AWP for a unique NDC being much higher than the AWP of the original NDC.

The National Council on Compensation Insurance (NCCI) 2010 update of the Workers' Compensation Prescription Drug Study brought to light the issue of physician dispensing by revealing a marked increase, from 14% in 2007 to 22% in 2008, in the percentage of workers' compensation prescription drug dollars related to physician dispensing—with some projections estimating that this amount may exceed 35% in 2011. With these statistics in mind, many states have taken or are taking regulatory and legislative action to control the practice of physician dispensing, while maintaining the medically necessary usage of this form of pharmacy treatment when clinically beneficial.

Recent Regulatory Trends

In Georgia, the Board of Workers' Compensation (BWC) recently adopted revised language to their medical Fee Schedule. Included in these revisions are specific requirements and controls for billing and reimbursement of repackaged drug products. In particular, the adopted changes require the use of the original manufacturer NDC, allowing the corresponding AWP on the day the medication is dispensed to be used when calculating reimbursement rates. By inserting additional language requiring provision of original NDCs, the BWC hopes to control the rising cost of repackaged drugs.

The Alabama Workers' Compensation Division (WCD) has also amended its pharmacy Fee Schedule to specifically address billing and reimbursement for repackaged and relabeled medications. The state workers' compensation regulations now require bills for repackaged or relabeled medications to specify the original manufacturer NDC along with the repackaged/relabeled NDC. Costs are being controlled by basing reimbursement on the lesser of the AWP (original manufacturer AWP or new repackaged/relabeled AWP) on the date of service.

Other states such as Arizona, California and Mississippi have made changes to address physician dispensing and states such as Illinois, Maryland and South Carolina are considering similar measures.

Average Wholesale Price (AWP)

AWP is reported by the manufacturer or calculated based on a markup specified by the manufacturer. This markup is typically based on the Wholesale Acquisition Cost (WAC). The AWP is linked to the medication's NDC and is reported to the industry AWP databases (e.g., First DataBank, Medi-Span®, Red Book) for publication and use in pricing medications. If an AWP is not provided, then industry databases may calculate the AWP based on the WAC provided and a multiplier of no more than 1.2.

Validity and Safety Concerns

Although acetaminophen is readily available over the counter, physicians dispense it because it is considered first-line therapy for treatment of pain in many injuries. For this reason, acetaminophen dispensed by physicians represents 47% of all PMSI acetaminophen prescriptions; however, it was only repackaged 17% of the time. PMSI also found cost inflation of 58.2% to 739.8% for the most commonly dispensed medications.

PMSI acknowledges that physician dispensing can have legitimate uses for proper medical treatment of an injured worker, especially if dispensed at occupational medical clinics or for specific medications that require physician oversight. The Institute for Safe Medication Practices (ISMP) has indicated that patients should only receive antibiotics or first fill of pain relievers from a physician's office for medications that are needed immediately. Depending on the patient, there also can be therapeutic compliance benefits for medications dispensed directly by physicians. However, physician-dispensed prescriptions during the first 30 days of an injury are a growing contributor to rising workers' compensation out-of-network costs.

In addition to the cost issue, use of medications dispensed from a physician's office presents greater risk with medication safety, including:

- Greater potential drug-drug or drug-disease interactions with other medications the patient may be receiving (outside their workers' compensation prescription profile)
- Potential for multiple prescribers, which may lead to overuse or duplication of a medication as well as overdose of damaging pain medications, such as acetaminophen, which is known to be a prevalent problem

The Future of Physician Dispensing

The growth of physician dispensing will continue to be a concern for states and those paying workers' compensation claims costs. In some states, changes are being made to address the potential cost inflation associated with this method of dispensing medications without disrupting the care to the patient. It is likely that more states will continue to address the cost of physician dispensing, without prohibiting this method of medication delivery. Payors and PBMs like PMSI continue to work closely with state legislators and regulators to provide insight on the pros and cons of physician dispensing, in order to create a balance for both payors and physician dispensers, and to promote positive public policies to control costs while protecting legitimate pharmacy therapy access.

Proven Solutions for Cost Containment

877.ASK.PMSI
www.pmsionline.com

Follow Us

Medicine dispensing

Cui bono?

A proposal by the National Association of General Practitioners for doctors to dispense medicines directly to patients has caused concern among pharmacists. The association plans a feasibility study into members supplying commonly prescribed medicines such as antibiotics and blood pressure tablets to patients.

However, the Irish Pharmaceutical Union has cried foul on any encroachment on its medicines-dispensing territory which is worth in the region of €2.7 billion a year. It cites the risk of prescribing errors and a financial conflict of interest as reasons to oppose the move. "Patients would legitimately fear that where their GP was profiting directly from the choice of medicine prescribed, their treatment may be influenced by the profit motive. This is not in the interests of the patient or of the healthcare system which must ultimately cover the cost," it said.

In fact, there is no impediment to fully registered doctors dispensing medicines. The dispensing of medicines by doctors is covered by the Medicinal Products (Prescription and Control of Supply) Regulations 2003. Regulation 20 (3) says doctors and dentists may supply prescription and non-prescription medicinal products to their patients in the course of their professional practice.

Doctors in isolated parts of the Republic have special contracts with the Health Service Executive when they work in designated dispensing practices. For many years, rather than receive a written prescription, patients with medical cards in these practices have received their regular medication directly from their general practitioner.

Perhaps the most important question is, cui bono? Doctors stand to increase their income and may look forward to a modest profit on the arrangement. Patients gain convenience and may benefit from competitive pricing. Medical Council ethics rules should ensure no conflict of interest and that patients are informed in advance of the cost of dispensed medicines. The exchequer may benefit from a modest reduction in its overall drugs bill. And pharmacists are likely to continue to dispense the bulk of medicines in Ireland.

Prescriber Dispensing

(continued from page 211)

systems to physicians "are very likely non-compliant with many North Carolina laws governing the practice of pharmacy." The Board notes that some of these companies may fit the North Carolina definition of a pharmacy and require licensure by the Board, while others may be considered wholesalers or repackagers, requiring licensure by the North Carolina Department of Agriculture.

Safeguards Provided by Pharmacists

Medication safety and pharmacist organizations, as well as pharmacy regulators, agree that the second check of the prescribed drug therapy by the pharmacist is one of the most important safeguards that is bypassed with in-office dispensing. The NABP *Model Act* includes language detailing the components of DUR including checking for known allergies, rational therapy contraindications, reasonable dose, potential adverse reactions, and therapeutic duplication, among other necessary steps. ISMP notes that the second check may involve use of specialized software to detect prescribing errors and that physicians "may not have access to software that pharmacists can access to screen prescribed drug therapy for overdoses, sub-therapeutic doses, drug-drug interactions among all medications the patient takes, . . . contraindications due to allergies or disease state, and duplicate therapy." Another possible barrier to DUR in the physician office setting may be the use of automatic dispensing systems (ADS). In a *Journal of Managed Care Pharmacy* article focusing on in-office dispensing of generic antibiotic samples, pharmacist authors explain that dispensing by ADS "does not include a drug utilization review (DUR) as performed by a pharmacist prior to dispensing. In the process of conducting the DUR, drug-drug interactions are often discovered and appropriateness of antibiotic choice and dosing regimen are reviewed." The authors note the errors are often identified and avoided when the pharmacist then consults with the prescriber regarding the most appropriate therapy for the patient.

> The second check of the prescribed drug therapy by the pharmacist is one of the most important safeguards that is bypassed with in-office dispensing.

Numerous other pharmacy practice requirements included in the NABP *Model Act* would be important to consider for physician in-office dispensing regulations. The *Model Act* provides language for the responsibilities of the pharmacist-in-charge such as developing policies and procedures for the procurement, storage, and record keeping of drugs, as well as for maintaining ADS. Language detailing the requirements of a prescription drug order, proper labeling, prepacking of drug products, patient record keeping, and patient counseling are also provided in the *Model Act*. ISMP recommends that physician dispensing follow the same high standards to which pharmacists must adhere, and the organization believes that without proper regulatory oversight, in-office dispensing may be prone to "lax procedures for medication labeling, record-keeping, storage, and supervision of the dispenser." The American Academy of Family Physicians agrees that prescriber dispensing and pharmacy dispensing should be held to the same high standards of care.

State Laws Vary for Physician Dispensing

At present, laws and regulations related to physician dispensing vary widely from state to state. In some states, such as Michigan, North Carolina, and Virginia, the practice of physician dispensing is regulated by the board of pharmacy and doctors in these states must comply with the same regulations that govern pharmacy practice. The Michigan Board of Pharmacy requires that physician dispensers obtain a license for each location where drug storage and dispensing will occur. Michigan also requires that physicians post a visible notice to consumers advising patients on cost issues, and also advising that they ask questions about their prescribed medications and that, in order to avoid dangerous drug interactions, they let the doctor know if they are taking other medications. The Virginia Board of Pharmacy may license a physician "to dispense drugs to persons to whom a pharmaceutical service is not reasonably available."

Some states, including Maryland and Arkansas, require the dispensing physician to obtain a special permit from the board of physicians. In Maryland, the physician must demonstrate that the dispensing of prescription drugs is in the public interest, and the permit allows the physician to dispense only when a pharmacy is not conveniently available to the patient. Similarly in Illinois, Louisiana, Oregon, and Texas, for example, the practice of physician dispensing is regulated by the state medical board. Illinois law requires that prescribers dispensing medications adhere to the "standards that govern dispensing by pharmacists including: proper medication storage, labeling, record keeping and patient counseling" indicates the Illinois Council of Health-System Pharmacists. Texas allows physician dispensing of dangerous drugs in clearly defined rural areas where a pharmacy is not convenient, and the practitioner must notify the Texas State Board of Pharmacy and the State Board of Medical Examiners.

Utah, until recently, restricted prescriber dispensing to in-office samples and dispensing of cosmetic

NACDS NATIONAL ASSOCIATION OF CHAIN DRUG STORES

November 24, 2008

Via Email ADJeffers@dhmh.state.md.us
Anna D. Jeffers, Esq.
Legislative and Regulations Manager
Maryland Board of Pharmacy
4201 Patterson Avenue
Baltimore, MD 21215

RE: Comments on Proposed Regulations for Physician Dispensing COMAR 10.13.01

Dear Ms. Jeffers:

On behalf of its members operating approximately 775 retail pharmacies in the State of Maryland, the National Association of Chain Drug Stores (NACDS) thanks the Board of Pharmacy for consideration of our comments regarding the proposed regulations for physician, dentist, and podiatrist dispensing. We appreciate the Board of Pharmacy's commitment and efforts in proposing these regulations and willingness to hear our member's comments and concerns. We ask that the proposed regulation set a 15 mile limit in regards to dispensing by physicians, dentists, and podiatrists as this is reasonable and in the best interests of patient safety.

Pharmacies and pharmacists provide optimal services for dispensing prescription drugs to patients.

- Pharmacies and pharmacists are subject to stringent Maryland laws and regulations that comprehensively regulate pharmacy practice and dispensing to patients.
- Pharmacies must meet strong licensure standards including inspections and compliance with standards for pharmacy practice.
- Maryland state pharmacy laws and regulations establish the education, training, and experience requirements that pharmacists must meet including licensure, education, continuing education, and other requirements for pharmacists to be permitted to provide pharmacy services.

Pharmacists are highly and specifically educated to dispense medications to patients and provide patients with counseling on proper use of drugs.

- Pharmacists are uniquely qualified to serve as the medication use expert for advising and counseling patients and providing advice to other health care providers on the use of medications.
- Pharmacists must graduate from an accredited pharmacy school and be licensed in the state.

413 North Lee Street
P.O. Box 1417-D49
Alexandria, Virginia
22313-1480

(703) 549-3001
Fax (703) 836-4869
www.nacds.org

- All pharmacists are now required to graduate from a Doctor of Pharmacy degree program consisting of a minimum of 6 years of education with 2 years pre-pharmacy school and 4 years of pharmacy school.
- Pharmacists' education and training is extensive and includes clinical training directly with patients for advice on their care and training.
- After graduation from pharmacy school, pharmacists in all states must pass the National Association of Boards of Pharmacy Pharmacist Licensure Exam ("NAPLEX").

Numerous other reasons provide ample support for pharmacies as the optimal providers for dispensing prescription drugs to patients.

- Patients should have the right to choose the pharmacy where there prescriptions are filled and is most convenient for them.
- Patients will need to have prescriptions refilled and would be inconvenienced by having to return to the prescriber when pharmacies are conveniently located near their home or work.
- Pharmacies have full inventories of drugs available for their patients including cost-effective generic drugs whereas this vast selection of drugs would not be available at the medical, dental or podiatrist offices.
- Pharmacies are required to label the dispensed medications with specific information and to provide specific patient written information with each fill.
- Prescriptions should be written by the prescriber and dispensed at the pharmacy of the patient's choice to prevent conflicts of interest.
- Pharmacy dispensing provides a system of checks and balances to detect and prevent potential drug interactions and other potential concerns. We note that the American Medical Association policy H-120.990 on physician dispensing points out that physician dispensing should be in the best interests of the patient.
- Pharmacies are conveniently located throughout the state and open long hours for the patient's convenience and to use the pharmacy that is optimal for their needs.'

We appreciate the opportunity to present our views and thank you for consideration of these comments.

Sincerely,

Diane Darvey

Diane L. Darvey, Pharm.D., JD
Director, Legislative and Affairs

TEXAS Pharmacy Association
Advancing, Protecting & Unifying the Profession of Pharmacy since 1879

NACDS NATIONAL ASSOCIATION OF CHAIN DRUG STORES

Texas Pharmacy Business Council

TEXAS FEDERATION OF DRUG STORES
"The Voice of Chain Pharmacy in the State of Texas"

NCPA NATIONAL COMMUNITY PHARMACISTS ASSOCIATION

Texas TRUECARE

TxIPA.org
Texas Independent Pharmacies Association

ALLIANCE of Independent Pharmacists of TEXAS

All of the Pharmacy Organizations OPPOSE SB 588 by Sen. Huffman

Allowing physicians and optometrists to sell certain (11) aesthetic drugs directly to patients.

For numerous decades, it has been the law that one who prescribes medication to a patient MAY NOT ALSO SELL (dispense) the medications to the patient… and for good reasons;

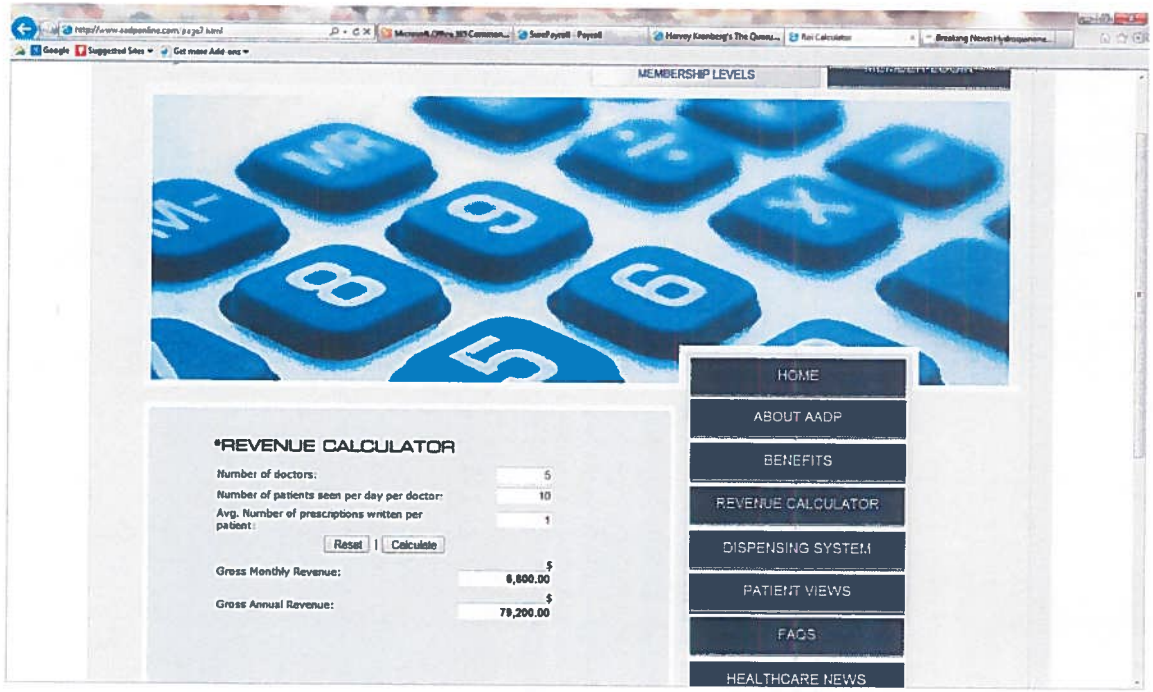
- ✓ ***From an ethical perspective – you don't want the prescribers medical judgement influenced by which drug he has in stock, which drug is more profitable, or which drugs in stock are about to to expire.***
- ✓ ***The physicians office will not be able to meet the same rigid standards required of a pharmacy for inventory, security and record keeping.***
- ✓ ***Current law (Section 158.003, Occupations Code) already allows a physician to dispense medication in rural counties, but not at a profit….***
- ✓ ***Pharmacists and pharmacy technicians are licensed by the Texas Board of Pharmacy with special education and training. Physicians and their staff will not have special training in operating a pharmacy.***
- ✓ ***Pharmacists have a more complete medication history for all patients – especially those who see multiple physicians. Pharmacists provide a public safety benefit by evaluating ALL of the patients medications.***

What problem is SB 588 trying to solve? – Currently physicians can dispense where a pharmacy is not available – just not at a profit, and at your local pharmacy the patient is able to shop for the best price.

This document prepared by:
Bradford T. Shields
512-413-2700
TEXAS LEGISLATIVE ASSOCIATES
Brad Shields

Don't tell me that HB 1483 isn't about the $$$$

The Drug Company behind this bill *even has a website that shows the doctor how much $$$ they can make.....*



TEXAS LEGISLATIVE ASSOCIATES

Brad Shields

This document produced by;
Bradford Shields
brad@bradshields.com
512-413-2700

Concerns with Physician Dispensing

Chain pharmacy opposes Texas Senate Bill 2422 which would permit physicians to dispense drugs for profit to their patients. There are numerous reasons why it is not in the best interest of the public permit this practice. We urge you to consider the following:

- Pharmacists and pharmacies provide optimal services for dispensing prescription drugs to patients.
  - Pharmacists are subject to stringent Texas laws and regulations that comprehensively ensure that pharmacists meet appropriate education and training requirements before they become licensed to pharmacy practice and dispense prescription drugs to patients.
  - Texas state pharmacy laws and regulations establish the education, training, and experience requirements that pharmacists must meet including licensure, education, continuing education, and other requirements for pharmacists to be permitted to provide pharmacy services.
  - Pharmacies must meet strong licensure standards including inspections and compliance with standards for pharmacy practice. Under Senate Bill 2422, it is unclear whether or not physicians dispensing drugs from their offices would be subject to these standards.

  There are sound public health reasons for the laws and regulations that pharmacists and pharmacies are subject to; exempting physicians who dispense from having to comply with these requirements would be a disservice to the people of Texas.

- Pharmacists are highly and specifically educated to dispense medications to patients and provide patients with counseling on proper use of drugs.
  - Pharmacists are uniquely qualified to serve as the medication use expert for advising and counseling patients and providing advice to other health care providers on the use of medications.
  - Pharmacists must graduate from an accredited pharmacy school and be licensed in the state.
  - All pharmacists are now required to graduate from a Doctor of Pharmacy degree program consisting of a minimum of 6 years of education with 2 years pre-pharmacy school and 4 years of pharmacy school.
  - Pharmacists' education and training is extensive and includes clinical training directly with patients for advice on their care and training.
  - After graduation from pharmacy school, pharmacists in all states must pass the National Association of Boards of Pharmacy Pharmacist Licensure Exam ("NAPLEX").
- Numerous other reasons provide ample support for pharmacists and pharmacies as the optimal providers for dispensing prescription drugs to patients.
  - Senate Bill 2422 seemingly runs contrary to the intent of the current law[1] in Texas that is meant to secure patients' right to select a pharmacy of their choice to fill their prescription at the pharmacy most convenient for them.

---

[1] TX INS Art. 21.52B addresses freedom of choice from a health plan perspective

- Patients will need to have prescriptions refilled and would be inconvenienced by having to return to their physician's office when pharmacies are conveniently located near their home or work.
- Pharmacies have full inventories of drugs available for their patients including cost-effective generic drugs whereas this vast selection of drugs would not be available at physician offices.
- Pharmacies are required to label the dispensed medications with specific information and to provide specific patient written information with each fill.
- Prescriptions should be written by the prescriber and dispensed at the pharmacy of the patient's choice to prevent conflicts of interest.
- Pharmacy dispensing provides a system of checks and balances to detect and prevent potential drug interactions and other potential concerns. We note that the American Medical Association policy H-120.990 on physician dispensing points out that physician dispensing should be in the best interests of the patient.
- Pharmacies are conveniently located throughout the state and open long hours for the patient's convenience and to use the pharmacy that is optimal for their needs.'

ALLIANCE of Independent Pharmacists of TEXAS

Pharmacy member associations in Texas are deeply concerned about the prospect of developing the Class I Pharmacy License located in a physician's office. This new license would circumvent existing safeguards for the dispensing of certain prescription cosmetic drugs by allowing physicians and optometrists to sell these medications directly. It is the role of pharmacists, who are trained specifically in drug interactions, side effects and allergies, to dispense medications.

- **Allowing physicians to prescribe and dispense creates patient safety concerns.** Pharmacists are the only healthcare providers that see all pharmaceuticals dispensed to determine if any drug interactions exist. Pharmacists and pharmacy technicians are licensed by the state to handle pharmaceuticals only after extensive training and know to ask specific questions of the patients. Physicians and their staff have no such training or expertise. Our state's system of healthcare checks and balances will be jeopardized under this license.

- **Inherit Conflict of Interest:** When a drug manufacturer applies with the FDA, they have options to apply for their drug being prescription only or also considered for over the counter. This license would create an anti-free market incentive by drug companies to lobby doctors to prescribe and dispense drugs without options for less expensive over-the-counter medications. This hidden relationship between doctors and drug companies will ultimately increase costs and hurt patients.

We understand the proposal includes a provision for TSBP oversight, but the concern remains for lack of continuous pharmacist supervision and in many cases, the lack of a doctor being present to dispense the medicine. As you may understand, many of these Medspas are not owned by doctors and only have a "medical director" on payroll that comes through occasionally to "check" patient files, but does not oversee the procedures being done by office staff. We are truly concerned that administrative staff who do not have any medical training will be allowed to dispense drugs that are listed under the new license.

As you may recall, Governor Rick Perry vetoed SB 227, which would have allowed dispensation of aesthetic pharmaceuticals by physicians and therapeutic optometrists. In Governor Perry's veto proclamation he stated,

> *"SB 227 would circumvent existing safeguards for the dispensing of certain prescription cosmetic drugs by allowing physicians to sell these medications directly. It is the role of the pharmacists—who are trained specifically in drug interactions, side effects and allergies—to dispense the medications." Perry continued by stating, "I share concerns with the health care community that though these drugs are used for aesthetic purposes, they are still prescription-strength drugs with potentially dangerous side effects and interactions, and therefore should remain subject to existing protocols and oversight."*

Ultimately, there is no sound reason to create a new class of pharmacy in a physician's office. As this conversation continues, we look forward to working with TSBP to ensure the safety of all Texans is first priority.

400 W. 15th Street, Ste. 950 | Austin, TX 78701
Phone: (512) 487-4009 | Fax: (512) 482-6891 | www.aiptexas.org

ASK GOVERNOR STITT TO VETO HB 3862

HB 3862 changed the scope of practice for optometry by permitting them to dispense drugs including hydrocodone- out of their office - with no substantial regulatory oversight.

Please take a moment to contact Governor Stitt in care of Michael.Rogers@sos.ok.gov. Ask Governor Stitt to Veto HB 3862.

- Optometrists only spend 8 hours in pharmacology - pharmacists are trained to do a comprehensive review of the patient's full medication regimen to ensure medications work well together and to avoid interaction.
- Optometrists do not have the patient's complete medical history/pharmaceutical history that would prevent drug interactions or show medicines from other providers
- There is no requirement to comply with federal track and trace that proves the origin and legitimacy of the medicine
- Optometrists are not subject to the same oversight as pharmacists such as reporting dispensing to the PDMP
- There is no accountability for record keeping, temperature controls, security, etc.
- Would be able to prescribe and dispense opioids which creates a new channel for drug seekers
- Pharmacists are the second set of eyes for the prescriber that helps prevent medication errors
- The bill doesn't appear to solve a need as there is plenty of access to medications available through the pharmacy.

Time is of the essence so please send an email today!