

**FISCAL NOTE**  
**Requested by Legislative Council**  
**01/29/2015**

Amendment to: SB 2320

- 1 A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2013-2015 Biennium		2015-2017 Biennium		2017-2019 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
<b>Revenues</b>				\$29,700		\$90,000
<b>Expenditures</b>			\$29,700	\$29,700	\$90,000	\$90,000
<b>Appropriations</b>			\$29,700	\$29,700	\$90,000	\$90,000

- 1 B. **County, city, school district and township fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

	2013-2015 Biennium	2015-2017 Biennium	2017-2019 Biennium
<b>Counties</b>			
<b>Cities</b>			
<b>School Districts</b>			
<b>Townships</b>			

- 2 A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

Amended SB 2320 relates to the establishment of a medication therapy management program for medicaid-eligible individuals, effective 1/1/2016.

- B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

SB 2320 requires the Department of Human Services to establish a medication therapy management program for medicaid eligible individuals. The fiscal impact for the Department is \$59,400, of which \$29,700 is General Fund and \$29,700 is federal funds. This fiscal impact was determined using a rate of \$20 per 15 minute visit, with 80 fifteen-minute visits per month, with the number of visits increasing by ten every month.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*

- A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

The other fund revenue is additional federal Medicaid funding the state will be able to access.

- B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

For the 2015-2017 biennium the Department would need a Medical Assistance grant line increase of \$59,400, of which \$29,700 is General Fund and \$29,700 is federal funds. For the 2017-2019 biennium the Department would need a Medical Assistance grant line increase of \$180,000 of which \$90,000 is General Fund and \$90,000 is federal funds.

- C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation or a part of the appropriation is included in the executive budget or relates to a continuing appropriation.*

For the 2015-2017 biennium the Department would need an appropriation increase of \$59,400, of which \$29,700 is General Fund and \$29,700 is federal funds. In the 2017-2019 biennium the Department would need an appropriation increase of \$180,000 of which \$90,000 is General Fund and \$90,000 is federal funds.

**Name:** Debra A McDermott

**Agency:** Human Services

**Telephone:** 328-3695

**Date Prepared:** 01/30/2015

**FISCAL NOTE**  
**Requested by Legislative Council**  
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**Name:** Debra A McDermott

**Agency:** Human Services

**Telephone:** 328-3695

**Date Prepared:** 01/30/2015

**FISCAL NOTE**  
**Requested by Legislative Council**  
**01/20/2015**

Bill/Resolution No.: SB 2320

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**Name:** Debra A McDermott

**Agency:** Human Services

**Telephone:** 328-3695

**Date Prepared:** 01/27/2015

**2015 SENATE HUMAN SERVICES**

**SB 2320**

# 2015 SENATE STANDING COMMITTEE MINUTES

Human Services Committee  
Red River Room, State Capitol

SB 2320  
1/28/2015  
22704

- Subcommittee  
 Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution:

A bill relating to the creation of a medication therapy management program for medicaid-eligible individuals

## Minutes:

Attach #1: Testimony by Mike Schwab  
Attach #2: Wall Street Journal, The Revolution at the Corner Drugstore  
Attach #3: Chapter 61-02-01 Pharmacy Permits  
Attach #4: Testimony by Katlyn Weigel  
Attach #5: Testimony by Brendan Joyce  
Attach #6: Written testimony by Steve Boehning

**Chairman Judy Lee** introduced SB 2320 to the committee. This is a collaborative outreach effort. Chairman Judy Lee provided Wall Street Journal article (attach #2)

**Mike Schwab**, Executive Vice President of the North Dakota Pharmacists Association, testified IN FAVOR of SB 2320 (attach #1) (1:44-6:50)

**Senator Warner** asked are there any issues with an assumption of liability where you are taking over some of the functions of the physicians, who would have malpractice insurance and taking on some of the recommendations that may have recourse later to judicial settlement where you are found to be malfeasant, and is there insurance available to pharmacists for that type of decision.

**Mr. Schwab** stated that all pharmacists have malpractice insurance. From an MTM perspective, these are services that are already allowed under the scope of practice for pharmacists. Any recommendations they make for therapy, they would still have to communicate that with the physician before they could implement such.

**Senator Howard Anderson, Jr.** provided a copy of Pharmacy Permits Chapter 61-02-01 (attach #3)

**Katlyn Weigel**, an NDSU College of Pharmacy PharmD candidate, testified IN FAVOR of SB 2320 (attach #4), (8:15-10:30)

**Julie Boyer**, practicing pharmacist, spoke IN FAVOR of SB 2320 (11:14-14:30). This is something they already utilize in their practice today, especially with Medicare and authorized insurance. In her experience, she has done 30 in the past year, beneficial to the patient. Allows client to sit face-to-face with the pharmacist, discuss their medications and what they are used for. Ms. Boyer provided testimony with examples of how this bill would support. It is also a good double-check to see where they are getting prescriptions from. As a new pharmacist, they get the training in school, and workshops how to use MTM.

**Chairman Judy Lee** indicated older people are more likely to use this. They want the personal touch with the pharmacist, where sometimes there is a mote between patient and doctor.

**Ms. Boyer** said they look at client profile on a daily basis for medications and they have good patient relationship.

No more testimony in favor

OPPOSITION of SB 2320

No opposing testimony

NEUTRAL of SB 2320

**Dr. Brendan Joyce**, PharmD, Administrator of Pharmacy Services, Medical Services Division of the Department of Human Services, testified IN NEUTRAL for SB 2230 (attach #5) (16:30-19:05)

**Chairman Judy Lee** stated fiscal note and read it.

Chairman Judy Lee asked if there are any comments about challenges of implementation or other things we should be considering from perspective of Department of Human Services

**Dr. Joyce** stated that anytime there is a new program there are things to be addressed. For example, the software to support reporting. None of these details are figured out. Pharmacies could be charged for software by whoever is using it, and payment rates would have to be appropriately adjusted. And there is also "time" for the administration.

**Chairman Judy Lee** asked if the implementation date of 01/01/2016 is realistic.

**Mr. Joyce** indicated yes. The reason for delay until January 1, 2016, would allow time for the design and getting approval through Centers for Medicaid and Management Services (CMS). It will require a different spot in the state plan and a different team at CMS. The only 3 MTM programs that CMS was aware of were Wisconsin, Minnesota, and Iowa. CMS is pleased with the successes in these three states.

**Senator Warner** the last time he went to pharmacy, waited 30 minutes to get to cashier. Time before it was 55 minutes, and then 45 minutes in line. He's always offered the chance to talk to pharmacist. Is this typical?

**Dr. Joyce** stated his position, working for Department of Human Services, the working conditions can be addressed by the board of pharmacy better. Pharmacies working in those facilities can discuss availability. The pharmacies that Mr. Joyce works at would schedule appointments for this.

**Chairman Judy Lee** to clarify, the delay is just to pick up the prescription?

**Senator Warner** yes.

No further Neutral

Closed Public Hearing on SB 2320.

Written testimony provided by **Steve Boehning**, R.Ph. Executive Secretary Linson Pharmacy (attach #6)

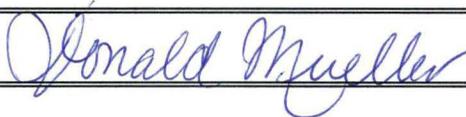
# 2015 SENATE STANDING COMMITTEE MINUTES

Human Services Committee  
Red River Room, State Capitol

SB 2320  
1/28/2015  
22743

- Subcommittee  
 Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution:

A bill relating to the creation of a medication therapy management program for medicaid-eligible individuals

## Minutes:

"Click to enter attachment information."

These are minutes from Senate Human Services Committee work on January 28, 2015.  
**Chairman Judy Lee** reviewed the fiscal note.

**Senator Howard Anderson, Jr.** made a motion for a recommendation of DO PASS on SB 2320 and re-refer to the Appropriations committee. The motion was seconded by **Senator Axness**.

## Discussion.

**Julie Schwab** stated that there should be an amendment with an effective date clause, and intern would do that. January 1, 2016.

Motion was withdrawn.

**Senator Howard Anderson, Jr.** made a motion for a recommendation to Amend SB 2320 that addresses the delayed implementation. The motion was seconded by **Senator Axness**.

Roll Call Vote for amendment.

6 Yes, 0 No, 0 Absent. Motion carried.

**Senator Howard Anderson, Jr.** made a motion for a recommendation to DO PASS SB 2320 as Amended. The motion was seconded by **Senator Axness**.

Roll Call Vote

5 Yes, 1 No, 0 Absent. Motion carried.

**Senator Howard Anderson, Jr.** will carry the bill to the floor.

January 28, 2015

TJ  
1/28/15

PROPOSED AMENDMENTS TO SENATE BILL NO. 2320

Page 1, line 3, after "individuals" insert "; and to provide an effective date"

Page 1, after line 21, insert:

**"SECTION 2. EFFECTIVE DATE.** This Act becomes effective on January 1, 2016."

Renumber accordingly

Date: 01/28 2015  
Roll Call Vote #: 8

2015 SENATE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. SB2320

Senate Human Services Committee

Subcommittee

Amendment LC# or Description: Date 15-0844-01001 T:12-02000

Recommendation:  Adopt Amendment  
 Do Pass     Do Not Pass     Without Committee Recommendation  
 As Amended     Rerefer to Appropriations  
 Place on Consent Calendar  
Other Actions:  Reconsider     \_\_\_\_\_

Motion Made By Anderson    Seconded By Axness

Senators	Yes	No	Senators	Yes	No
Senator Judy Lee (Chairman)	✓		Senator Tyler Axness	✓	
Senator Oley Larson (V-Chair)	✓		Senator John M. Warner	✓	
Senator Howard C. Anderson, Jr.	✓				
Senator Dick Dever	✓				

Total (Yes) 6 No 0

Absent 0

Floor Assignment \_\_\_\_\_

If the vote is on an amendment, briefly indicate intent:

**2015 SENATE STANDING COMMITTEE  
 ROLL CALL VOTES  
 BILL/RESOLUTION NO. SB 2320**

Senate Human Services Committee

Subcommittee

Amendment LC# or Description: 15.0844.01001 Title .02000

Recommendation:  Adopt Amendment  
 Do Pass  Do Not Pass  Without Committee Recommendation  
 As Amended  Rerefer to Appropriations  
 Place on Consent Calendar

Other Actions:  Reconsider  \_\_\_\_\_

Motion Made By Anderson Seconded By Arnes

Senators	Yes	No	Senators	Yes	No
Senator Judy Lee (Chairman)	✓		Senator Tyler Axness	✓	
Senator Oley Larson (V-Chair)		✓	Senator John M. Warner	✓	
Senator Howard C. Anderson, Jr.	✓				
Senator Dick Dever	✓				

Total (Yes) 5 No 1

Absent 0

Floor Assignment Anderson

If the vote is on an amendment, briefly indicate intent:

**REPORT OF STANDING COMMITTEE**

**SB 2320: Human Services Committee (Sen. J. Lee, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** and **BE REREFERRED** to the **Appropriations Committee** (5 YEAS, 1 NAYS, 0 ABSENT AND NOT VOTING). SB 2320 was placed on the Sixth order on the calendar.

Page 1, line 3, after "individuals" insert "; and to provide an effective date"

Page 1, after line 21, insert:

"**SECTION 2. EFFECTIVE DATE.** This Act becomes effective on January 1, 2016."

Renumber accordingly

**2015 SENATE APPROPRIATIONS**

**SB 2320**

# 2015 SENATE STANDING COMMITTEE MINUTES

## Appropriations Committee Harvest Room, State Capitol

SB 2320  
2/4/2015  
Job # 23171

Subcommittee

Conference Committee

Committee Clerk Signature

*Doris E. Perez*

### Explanation or reason for introduction of bill/resolution:

A Bill relating to the creation of a medication therapy management (MTM) program for Medicaid-eligible individuals.

### Minutes:

Attachment 1

Legislative Council - Michael Johnson  
OMB - Tammy Dolan

**Co-chairman Senator Krebsbach** called the committee to order on SB 2320.

**Judy Lee, State Senator, District 13, and Bill Sponsor:** The purpose is to have a medication therapy management program for our Medicaid citizens. By making sure folks are given counseling by pharmacists, to ensure that they are taking their medications, and refilling them properly. There are better outcomes for their health and positive results from the small investment for the medication management therapy fee in reducing costs for recurring problems like diabetes, high blood pressure etc... I would if possible allow you to hear from Dr. Hardy and what is going on with the recommendations. I am a strong supporter of this concept.

**Mike Schwab, Executive Vice President, ND Pharmacists Association:** Testified in favor of SB 2320. See attachment 1 defining what MTM (medication therapy management) is, some of its core elements and some of the benefits and savings

**Senator Bowman:** Could you give a scenario where the patient will save money? I assume the person has been to the medical professional who did the prescribing. What will happen in this bill that will change that and where we can actually measure the actual savings?

**Mike Schwab:** Patients sit down with Pharmacist for a medication review. Some patients may have chronic diseases and a number of specialists besides the primary care physician. The gist is that the pharmacist will go thru all prescriptions, look at the supplements, over the counter products and make sure there isn't duplication of therapy. This might be a more cost effective alternative for patients. As far as documentation, we (the pharmacist association) created our own documentation system which tracks all the health outcomes

of taking a medication. It tracks all the things that could be provided in terms of intervention and that could be documented in terms of secondary savings as well as primary savings.

**Senator Bowman**: If we implement the program, in the next biennium will you be able to show up what we actually saved?

**Mike Schwab**: That would be the intention. That is similar to ND PERS program; at the end of this year they will conduct another analysis of their diabetes program, claim to claim data, and the secondary outcomes in terms of healthier individuals and the documentation that has been provided over the last six years.

**Senator Carlisle**: Why this bill? Why wouldn't this be for OMB, in SB 2012 for the Human Services bill? Couldn't this be just part of the human service budget here?

**Mike Schwab**: We thought the budget was already set.

**Tammy Dolan** (OMB): It wasn't included in the Governor's budget; it could be added if needed.

**Senator Sorvaag**: Isn't this what your primary care physician is supposed to do? What do pharmacists know that they don't?

**Mike Schwab**: In terms of management and medication review, there's research showing the value of including the pharmacist in that process, not to supersede what physicians are doing but making sure they are an integral part of that healthcare team as the medication experts. There are numerous things that the pharmacist sees the physician doesn't. When they leave the hospital, they have different meds than before.

**Senator Kilzer**: Prescribing of proper medications certainly does rest with the primary provider. This person instructs the patient and also the family members. Often it's repeated by the nurse who spends additional time with the patient. The reimbursement, and the fiscal note, why is it so much larger in subsequent time periods. I would like to see the UND PERS study you made reference to.

**Mike Schwab**: The pharmacist is doing nothing independently but trying to prevent adverse drug events as well as duplication of therapy, cost barriers, etc. ... I will get you a copy of the UND study. As far as the fiscal note is concerned Brendon Joyce is here to discuss it.

**Senator Krebsbach**: there are two fiscal notes on this bill, 1/20/ and 1/29/15, the last one is after it left the Human Services Committee and after the first engrossment

**Senator Erbele**: Are any MTM services being offered in ND? Is this bill some way to capture some Medicaid dollars?

**Mike Schwab**: We has MTM services currently being offered by Blue Cross/Blue Shield of ND, by Sanford Health and all Medicare part D plans. Currently Medicaid does not. That's not the intent of the bill, outside of trying to work with Medicaid to have a healthier

**Senator Krebsbach** welcomed students from Carrington.

**Mike Schwab**: Reading the bill, it includes physicians and other health care providers, its adding pharmacists; we get paid/reimbursed for a product not for the services. The pharmacists would also be allowed to be paid.

**Brendon Joyce, Pharmacy Administrator for North Dakota Medicaid**: Assisted Deb McDermott in preparing the fiscal note. With any medication therapy management we would have to get federal approval thru a state plan amendment to start providing/paying for such services. We asked for the amendment to get section 2 - pushed back the effective date, which would account for the differences in the fiscal note. 2B of the fiscal note mentions how they came up with the data; the impact was determined by user rate of \$20/15 min visit, with 80 15 min visit/mo with number of visits increasing by ten every month. We based that on utilization data given by ND PERS and from the Patient Engagement Program at Sanford Health for Medicaid Expansion.

**Senator Carlisle**: (to Mike Schwab): Are the pharmacists getting any reimbursements now. Does the pharmacy get any reimbursement for helping me?

**Mike Schwab**: there are some limited services like immunizations. Outside of that it is for the product, for dispensing medication.

**Senator Kilzer** What happens if there's duplication. The nurse explains and charges, and then the Pharmacist explains and charges. If there's double billing; what happens, the department decides? Sometimes two times isn't enough >

**Mike Schwab** bill allows the department to establish the policies and procedures of the program. It allows the patient to have the services for certain duration (e.g. one time/yr.) The one who provided the initial payment is the one who will be paid

**Tony Welder**, Pharmacist, business owner: to respond to Senator **Kilzer**'s question. Wendy came to work for me, took an interest in patients with Asthma. She became very good at it. It was not pharmacist driven. The physicians liked that service. Don't know how much money she saved us, but the patients grew to love her and felt better. It was all in collaboration with the physician's office. That was a non-refunded service we did on our own. We were just trying something new.

**Brendon Joyce**, Pharmacy Administrator for Medicaid: Neutral position, to provide context for the potential uses of this. This bill does not give us specific requirements (for diabetes, asthma, etc...). We have a unique patient population. One of the areas we have seen: Hepatitis C, medications \$1K (\$28,000/month). We've had issues where doctors work with patients; they go to pharmacy, fill the prescription but do not finish the medication. I'd use it for intensive case management of some sort, we will help these patients stay on the medication, and making sure they've had their prescriptions refilled.

Senator Krebsbach closed the hearing on SB 2320.

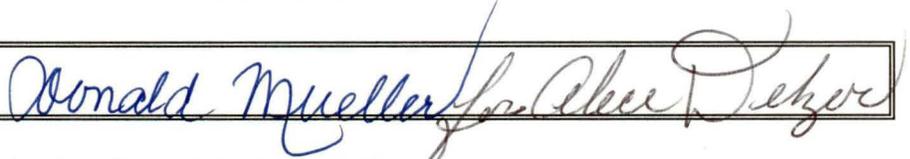
# 2015 SENATE STANDING COMMITTEE MINUTES

**Appropriations Committee**  
Harvest Room, State Capitol

SB 2320  
2/13/2015  
Job # 23840

- Subcommittee  
 Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution:

A Subcommittee hearing on DHS (Medication Therapy)

## Minutes:

Attachment #1

**Senator Kilzer** called the subcommittee hearing to order on Friday, February 13, 2015 at 10:30 am in regards to SB 2320.

PRESENT: Senator Kilzer, Senator Mathern, Senator Erbele, Larry Martin, OMB and Michael Johnson, Legislative Council.

**Senator Kilzer** stated they are interested in the finances of SB 2320, and reviewed the bill. It would a new mandate to the Department of Human Services and it is not presently charged out.

**Brendon Joyce**, the Pharmacy Administrator for Medical Services Division of Department of Human Services, provided an overview of the fiscal note. The simple explanation is under 2(b) in the fiscal note. They looked at other entities, including the Sanford Health Plan in regards to the Medicaid Expansion for the patient enhancement program, and they are doing \$20.00 for a 15 minute visit for Medicaid therapy management. If they identify a patient who needs special attention to make sure they will stay on the medication, they want to follow and help those patients. In prior testimony, he identified a Hepatitis "C" agent that costs \$1,000 per day, and how we want to make sure that if we have a patient on that medication, they will be guaranteed to finish the entire course of therapy; that their eligibility is straight, and that they are not moving next month. He provided further examples where in three instances, the patient took one month at \$28,000 or two months at \$56,000 and then stopped the medication. In the end, the medication was ineffective because the patient did not finish the full treatment. We can ask the pharmacy to work with identified patients and insure that the patient will be compliant, that they are ready to begin the medication treatment, not planning on moving and that they have proper insurance if they begin a new job. We would identify these patients that have high-cost medication and who need to be tracked to ensure they have the proper care.

**Senator Kilzer** asked if the Department of Human Services will identify the patients and which ones would be able to qualify for this special service.

**Mr. Joyce** responded yes, the Department of Human Services will work with the Drug Utilization Review Board and other interested parties to identify the areas of which we would want medication therapy management. These would be areas that would make sense that we ensure that we get the extra counselling done to make sure that the patient is going to have a better outcome. Hepatitis C is a low hanging fruit. If we are going to spend \$84,000 on a patient, we want to provide that medication therapy management for those patients to insure money well spent.

**Senator Kilzer** asked if Department of Human Services would identify the individuals rather than the physician or pharmacist who are writing the prescription or dispensing the medication.

**Dr. Joyce** indicated that Department of Human Services would control what qualifies for medication therapy management. Mr. Joyce gave an example of how it works for Medicare Part D. They will have thresholds, so for example, if someone is on 8 or more medications, they will pay for two separate sessions of medication therapy management in a calendar year. The threshold will determine who is qualified, and then it will be determined how many visits will be paid for a patient. Two visits per year per patient would equate to  $\$20 \times 2 = \$40$ . That is how the expenses will be controlled. We could also control the general growth based on the number of patients, but within the fiscal note funding.

**Senator Kilzer** asked for clarification that Sanford and Medicare do this now. **Dr. Joyce** confirmed yes. **Senator Kilzer** continued his question of how long have they been doing this?

**Mr. Joyce** stated that medication therapy management was part of Medicare Part D, starting in 2006. Sanford started the planning for their program in the past year. Blue Cross Blue Shield has been doing it. North Dakota Public Employees Retirement System has been doing it as well, but not how long. There are few state Medicaid agencies doing this - Minnesota, Wisconsin, and Iowa, and a few in the east, such as Maine.

**Senator Kilzer** asked if in each one of these 3<sup>rd</sup> party payers, is the 3<sup>rd</sup> party payer sets the conditions of what cases they will accept for this program and how much they will pay.

**Mr. Joyce** answered for the Medicaid agencies, it is set by the Department. For Medicare Part D, it is set by the Medicare program. Medicare tells the insurance companies what the thresholds are. They have stipulations which must be followed, and these are modified on an annual basis. They can increase the thresholds, but cannot take any away. So they could be more liberal in how many they see, or could add specific diseases if they wanted.

It was restated that Mr. Joyce works for Department of Human Services and is Neutral on SB 2320. He was unsure if SB 2320 originated from an interim committee or the department.

**Senator Mathern** indicated that the department runs a very sophisticated program in regards to monitoring the medications. Senator Mathern voiced his confidence in the fiscal note, but wondered why this was not forwarded as a proposal from the Department of Human Services.

**Mr. Joyce** responded that the Department of Human Services begins work on the budget far in advance of the legislative session. Priorities are set, and they take direction from the Governor and the budget is formulated to meet the requirements put forth. Medication Therapy Management has been discussed within the Department of Human Services and it has not made the prioritization list for the budget or OARs. Part of this is also impacted by time and what the Department of Human Services is doing.

**Senator Erbele** stated that you said this is already being used by other providers. Is there a track record of savings that they have recognized?

**Mr. Joyce** indicated there are statistics. Since this was not their bill, he does not have that information, in regards to North Dakota Public Employees Retirement System or other entities.

**Mr. Mike Schwab**, Executive Vice Presiden of the North Dakota Pharmacists Association was invited to the podium.

**Senator Kilzer** asked if Mr. Schwab would support the bill if the Department of Human Services makes your reimbursement level so low that you are losing money. The Department of Human Services has complete control over that aspect.

**Mr. Schwab** indicated that his assumption would be that a number of the providers would make that business decision. He would assume they would not provide the service if they are not reimbursed.

**Senator Kilzer** stated that he has concerns with the bill. He was unaware of the growth of third-party payers being financed for doing this. In his practice, Medicare and others were using the term "bundling", which is common terminology used by third-party payers. He stated that when he wrote prescriptions, there was a fee for the medical diagnosis and treatment which includes whatever would come under that, and it was not parceled out with individual charges, but instead it was "bundled" into one charge. This is new since 2006 with Medicare Part D.

**Mr. Schwab** added Medicare Part D in 2006, medication therapy management was a component of their plans. After the initial success after the first few years, they did make it mandatory for all Medicare Part D plans starting in 2009, and they continue to increase the areas in which to provide these services because of the positive impacts being provided. Blue Cross Blue Shield has a program for medication therapy management for over 140,000 individuals in North Dakota, and that has been running since 2012. The research shows not only healthier outcomes, but return on investment.

**Senator Kilzer** what is the reimbursement level for 15 minutes by Blue Cross Blue Shield and for Medicare?

**Mr. Schwab** stated it does vary. His opinion that the prepared fiscal note would be in line with what they are beginning to see. Some of the Medicare Part D plans vary more because of the various plans. Some may pay higher in reimbursement, but some of that has to do with what they are targeting and the amount of time it takes to do the targeted interventions.

**Senator Kilzer** do pharmacists lose or make money on Medicare in regards to the medication therapy treatment?

**Mr. Schwab** stated for the majority of these services, they would make a small margin in his opinion. Some of this depends on the degree of services. Sometimes, there are unanticipated situations that occur when the client comes to the service.

**Senator Kilzer** understands the value of checks and balances. It you have a nurse practitioner who is prescribing a drug, and a naturopath who is prescribing multi-vitamins that includes a high dose of Vitamin K, it behooves the pharmacist to be aware of this. In addition to dispensing medications, it is part of the duties of the pharmacist. Senator Kilzer invited anyone to the podium who would have the fees that are being charged for a 15 minute interval with the third parties.

**Marnie Walth**, representing Sanford Health, provided a study that addresses the return on investment for the medication therapy management program. (Attach #1). Ms. Walth referenced page 29 in the study. The mean paid to the pharmacist was \$8.44, but was unsure of the length of time that charge applied to. The seven-year study showed a return on investment of \$93.78 and they based that on cost avoidance. They support the bill for return-on-investment purposes, and also increased patient quality-of-care and increased patient education.

**Senator Kilzer** asked if in this study, was the variable controlled by the third-party payer and the variable would be the selection of cases that were included in the study.

**Ms. Walth** did not know that answer. When they talk about cost avoidance, it states "estimated cost avoidance."

**Senator Kilzer** asked **Mr. Joyce** if this bill were to pass, would you have a look back to see how much money you saved, like the study just presented.

**Mr. Joyce** stated yes, as part of the requirement within SB 2320, line 19, the program must facilitate the enrollment procedures, which will determine who qualifies to get the service, and enable consistent documentation of clinical and economic outcomes. Line 20 would be seen as the tracking and reporting, the quality review.

**Senator Kilzer** asked if **Mr. Joyce** has any objections to that mandate and that he would be able to comply with those mandates.

**Mr. Joyce** indicated they would comply with all mandates within the bill.

# 2015 SENATE STANDING COMMITTEE MINUTES

**Appropriations Committee**  
Harvest Room, State Capitol

SB 2320  
2/17/2015  
Job # 24033

- Subcommittee  
 Conference Committee

Committee Clerk Signature *Rose Lanning*

**Explanation or reason for introduction of bill/resolution:**

A Bill relating to the creation of a medication therapy management (MTM) program for Medicaid-eligible individuals.

**Minutes:**

**Senator Kilzer, Senator Erbele, and Senator Mathern** were all present.

**Senator Kilzer** said this bill was about the MTMs by pharmacys for explaining chronic diseases. He said he was not in favor of this bill when he read it but Human Services assured me this will only be used when necessary. Based upon that affirmation, I will vote for it - that's no amendments.

**Senator Erbele moved the bill 2320.**  
**Senator Mathern seconded.**

**Senator Erbele - yes**  
**Senator Kilzer - yes**  
**Senator Mathern - yes**

# 2015 SENATE STANDING COMMITTEE MINUTES

Appropriations Committee  
Harvest Room, State Capitol

SB 2320  
2/18/2015  
Job # 24040

- Subcommittee  
 Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution.

Relating to the creation of a medication therapy management program for medicaid-eligible individuals;

Minutes:

**Senator Kilzer:** This is the pharmacist/patient medication therapy management (MTM) and that is \$59,400 in the upcoming biennium and \$180,000 in the subsequent biennium - ½ state and ½ federal funds. This makes reimbursements to pharmacists and other providers who explain at length in detail the medication that patients are taking. It's designed for chronic diseases. I was against it until the department assured us that it will not be over utilized, so the committee voted Do Pass on SB 2320.

**Senator Kilzer moved Do Pass.**  
**Senator Heckaman seconded.**

**A Roll Call vote was taken. Yea: 12 Nay: 1 Absent: 0**

The bill goes back to the Human Services committee and Senator Anderson will carry the bill on the floor.

Date: 2-17-15  
Roll Call Vote #: 1

2015 SENATE STANDING COMMITTEE  
ROLL CALL VOTES  
BILL/RESOLUTION NO. 2320

Senate Appropriations Committee

Subcommittee

Amendment LC# or Description: \_\_\_\_\_

- Recommendation:  Adopt Amendment  
 Do Pass  Do Not Pass  Without Committee Recommendation  
 As Amended  Rerefer to Appropriations  
 Place on Consent Calendar  
Other Actions:  Reconsider  \_\_\_\_\_

Motion Made By Erbele Seconded By Mather

Senators	Yes	No	Senators	Yes	No
Chairman Holmberg			Senator Heckaman		
Senator Bowman			Senator Mather	✓	
Senator Krebsbach			Senator O'Connell		
Senator Carlisle			Senator Robinson		
Senator Sorvaag					
Senator G. Lee					
Senator Kilzer	✓				
Senator Erbele	✓				
Senator Wanzek					

Total (Yes) 3 No 0

Absent \_\_\_\_\_

Floor Assignment \_\_\_\_\_

If the vote is on an amendment, briefly indicate intent:

Date: 2-18-13  
 Roll Call Vote #: 1

**2015 SENATE STANDING COMMITTEE  
 ROLL CALL VOTES  
 BILL/RESOLUTION NO. 2320**

Senate Appropriations Committee

Subcommittee

Amendment LC# or Description: \_\_\_\_\_

- Recommendation:  Adopt Amendment  
 Do Pass     Do Not Pass     Without Committee Recommendation  
 As Amended     Rerefer to Appropriations  
 Place on Consent Calendar  
 Other Actions:  Reconsider     \_\_\_\_\_

Motion Made By Kilzer    Seconded By Heckaman

Senators	Yes	No	Senators	Yes	No
Chairman Holmberg	✓		Senator Heckaman	✓	
Senator Bowman	✓		Senator Mathern	✓	
Senator Krebsbach	✓		Senator O'Connell	✓	
Senator Carlisle	✓		Senator Robinson	✓	
Senator Sorvaag	✓				
Senator G. Lee		✓			
Senator Kilzer	✓				
Senator Erbele	✓				
Senator Wanzek	✓				

Total (Yes) 12    No 1

Absent 0

Floor Assignment Anderson Human Services H. Services

If the vote is on an amendment, briefly indicate intent:

**REPORT OF STANDING COMMITTEE**

**SB 2320, as engrossed: Appropriations Committee (Sen. Holmberg, Chairman)**  
recommends **DO PASS** (12 YEAS, 1 NAYS, 0 ABSENT AND NOT VOTING).  
Engrossed SB 2320 was placed on the Eleventh order on the calendar.

**2015 HOUSE HUMAN SERVICES**

**SB 2320**

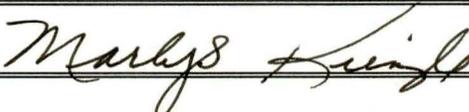
# 2015 HOUSE STANDING COMMITTEE MINUTES

Human Services Committee  
Fort Union Room, State Capitol

SB 2320  
3/10/2015  
Job # 24573

- Subcommittee  
 Conference Committee

Committee Clerk Signature



## Explanation or reason for introduction of bill/resolution:

Relating to the creation of a medication therapy management program for Medicaid eligible individuals.

## Minutes:

Attachment # 1, 2, 3

Chairman Weisz opened the hearing on SB 2320.

Sen. J. Lee District 33: Introduced and supported the bill. This bill is about "Medication Management". This bill permits pharmacists to provide service with Medication Management Therapy.

Chairman Weisz: Is this an extension of what we did on PURS with the diabetes program?

Sen. J. Lee: I guess it is and it proved to be effective.

5:50

Mike Schwab: Executive Vice-President of ND Pharmacists Association testified in support of the bill. (See Testimony #1)

11:30

Rep. Fehr: If someone is out of town and needs a refill somewhere else would there be any interference in getting your prescriptions?

Schwab: No it should not. To add to my testimony, we have had some questions with regards to it being perceived as this is a duplication of possibly a physician or nurse service and actually it often times it is not. The pharmacist does catches by far more medication errors and actually more drug events than any other discipline.

Rep. Oversen: Pertaining to the effective date, are we anticipating this will take some time to implement?

Schwab: I believe Brendan can respond to that.

Jake Decker: NDSU College of Pharmacy PharmD candidate representing the ND State Board of Pharmacy testified in support of the bill. (See Testimony #2)

Shelby Monson: Future pharmacists testified in support of the bill. (See Testimony #3)

Brendan Joyce: From Pharmacy Administrator for Medicaid DHS, in regards to Rep. Oversens question about the Effective Date, this bill would require the Department to get approval from the State Plan Amendment through CMS. That does take some time so we pushed the date back. I did provide a bill to Appropriations at the Senate and there were questions as to what type of patients would be qualifying. He named numerous drugs that they would assist with and some scenarios. The estimate in dollars within the 20 dollars for a 15 minute visit was brought up for the Fiscal Note.

Chairman Weisz: Closed the hearing

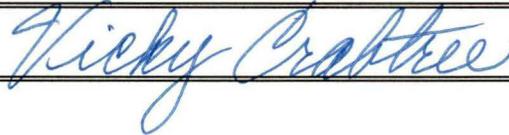
# 2015 HOUSE STANDING COMMITTEE MINUTES

**Human Services Committee**  
Fort Union Room, State Capitol

SB 2320  
3/10/2015  
Job #24600

- Subcommittee  
 Conference Committee

Committee Clerk Signature



## Minutes:

Chairman Weisz: (Took up SB 2320) We did a diabetes management program strictly for PERS and has been hugely successful. It had an \$800,000 and some fiscal note and had an awful time getting that through. I don't see any reason why this bill would be any less so and the fiscal note is much lower.

Rep. D. Anderson: I motion to approve engrossed SB 2320.

Rep. Fehr: Second.

Rep. Porter: And re-refer.

Chairman Weisz: Oh yes, and re-refer to Appropriations.

Chairman Weisz: We have a \$59,4000 fiscal effect so it will go to Appropriations.

ROLL CALL VOTE: 13 y 0 n 0 absent.

MOTION CARRIED

Bill Carrier: Rep. D. Anderson

Date: 3-10-15  
 Roll Call Vote #: 1

2015 HOUSE STANDING COMMITTEE  
 ROLL CALL VOTES 2320  
 BILL/RESOLUTION NO.

House Human Services Committee

Subcommittee

Amendment LC# or Description: \_\_\_\_\_

Recommendation:  Adopt Amendment  
 Do Pass  Do Not Pass  Without Committee Recommendation  
 As Amended  Rerefer to Appropriations  
 Place on Consent Calendar

Other Actions:  Reconsider  \_\_\_\_\_

Motion Made By Rep. D. Anderson Seconded By Rep. Fehr

Representatives	Yes	No	Representatives	Yes	No
Chairman Weisz	✓		Rep. Mooney	✓	
Vice-Chair Hofstad	✓		Rep. Muscha	✓	
Rep. Bert Anderson	✓		Rep. Oversen	✓	
Rep. Dick Anderson	✓				
Rep. Rich S. Becker	✓				
Rep. Damschen	✓				
Rep. Fehr	✓				
Rep. Kiefert	✓				
Rep. Porter	✓				
Rep. Seibel	✓				

Total (Yes) 13 No 0

Absent 0

Floor Assignment Rep. D. Anderson

If the vote is on an amendment, briefly indicate intent:

**REPORT OF STANDING COMMITTEE**

**SB 2320, as engrossed: Human Services Committee (Rep. Weisz, Chairman)** recommends **DO PASS** and **BE REREFERRED** to the **Appropriations Committee** (13 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). Engrossed SB 2320 was rereferred to the **Appropriations Committee**.

**2015 HOUSE APPROPRIATIONS**

**SB 2320**

# 2015 HOUSE STANDING COMMITTEE MINUTES

## Appropriations Committee - Human Resources Division Sakakawea Room, State Capitol

SB 2320  
3/23/2015  
25269

- Subcommittee  
 Conference Committee

Amanda Muschia

### Explanation or reason for introduction of bill/resolution:

A BILL for an Act to create and enact a new section to chapter 50-06 of the North Dakota Century Code, relating to the creation of a medication therapy management program for Medicaid-eligible individuals.

### Minutes:

Chairman Pollert called the committee to order.

Rep. Robin Weisz, District 14: SB 2320 has to do with medication management. We passed a similar diabetes medication management program similar back when we did the PERS plan. The intent was to manage the condition through the pharmacies and the pharmacists. It has been extremely successful. It was paying back two to one. To do a management of the person's condition this bill is looking at our Medicaid population. It is looking at a broad medication management program. We're going to enlist the help of the pharmacists and pharmacies in regulating and monitoring the drugs that they receive. Some drugs are an 80 some thousand dollar program and you have to take it for the whole program. If someone goes half way and quits they can't finish another day. It is to help people manage their medications. It's focusing on chronic conditions. Diabetes, asthma and pain would be monitored and more. Your committee thought this was would be a good idea. This is looking at doing it a little broader in the Medicaid system. This was unanimous in our committee and has a very minimal fiscal cost. It will pay off down the road. Now we're seeing our drug costs head north again. This is a tool to help manage that and ensure patients are getting the proper care and limit the drug costs.

Chairman Pollert: Wouldn't the pharmacists be doing this automatically when they pick up their medication?

Rep. Weisz: Not necessarily. It is their job to take a prescription and fill it. This will help meld that together. We passed the prescription drug monitoring program. We passed an addition to that having to do with the narcotics and the addictive drugs to help manage the program. A pharmacist may not know where they are all going. This tries to set up that structure so Medicaid can put that person in a program to be monitored by the physician

and the pharmacist. If one sees something weird they can pass it on. This is intended to help manage that better. It's been excellent in the diabetes program. We pay the pharmacist in that case to help manage that and have they come in on a regular basis. I look at this in the same vein. That this is strictly going to help us get a better handle and help manage the patient for a better outcome.

Rep. Nelson: Was there any opposition to this bill in your committee?

Rep. Weisz: None whatsoever.

Vice Chairman Bellew: There is still no guarantee that these patients will follow the advice of their pharmacist or doctor is there? I think it was mentioned that a pharmacist already does a lot of this without and extra charge.

Rep. Weisz: This is dealing strictly with the Medicaid population. It's more coordination between the physician and the pharmacist. They are coordinating the care because the pharmacist sees things that the physician may not. You can't force someone but it could help. The intent is if you have someone in the program they will only see one pharmacist. Putting them in with this protocol can certainly help.

Vice Chairman Bellew: How are they going to ensure that this patient is doing this?

Rep. Weisz: You can't fix everybody. But I think in general, most people who have a medical condition want to get healthy. In general if you have enough people working with them they will end up with a better outcome. They do call and check on them. You have more players insuring that person is being watched and taken care of.

Rep. Silbernagel: The fiscal note talks about number of visits. Where do those visits occur, at the clinic or at the pharmacy?

Rep. Weisz: This is where those visits will be with the pharmacists. You are expanding the area that the pharmacist has. The assumption is that they're paying for that additional visit to insure that once they leave the doctor's office they will follow the protocol. It is going beyond what the normal might be. You're trying to have a team to monitor them continually.

Rep. Silbernagel: Does the pharmacist apply for this 20 dollars or whatever per visit? How do they get their money?

Rep. Weisz: I would assume that they would bill department like they are now.

Chairman Pollert: There will be programs set up with DHS and a protocol that they are supposed to follow.

Rep. Weisz: We're already paying them for the PERS and the department can answer other questions about it.

Rep. Kreidt: Under the previous program with diabetes, are there some records that track success and how that program has worked?

Rep. Weisz: Yes they have. I can get that information for the committee. If I remember right, that one cost the state roughly \$800,000 a biennium to implement that. That is an intense program that we paid the pharmacist 700 dollars to ensure it would continue and it has been successful. They can track the conditions and the patients.

Chairman Pollert: Who is that information coming from?

Rep. Weisz: I received it from the Pharmacy Association and they received it from PERS.

Rep. Kreidt: Dealing with diabetics, we're taking a leap here. This is a lot larger expansion. This would include all the individuals no matter what they're being treated for.

Rep. Weisz: Not exactly. This program was designed for those who need maintenance medication. This is for chronic conditions, asthma, diabetes, chronic pain. It is looking at the maintenance to make sure it is done properly and not getting multiple. It brings the pharmacist a little more out in the forefront of working with the physician or nurse practitioner to ensure they are getting the best health outcome. It is limited to the ongoing medication needs.

Rep. Kreidt: We would be looking at a larger number of people here still.

Rep. Weisz: The potential is certainly there. That also means there is a lot more potential problem on the other end of spending. We want to control the spending and have a positive health outcome. If you want them to take care of a problem you want the proper health outcome and you also want them to get its worth. We are looking for better health outcomes and spending outcomes.

Rep. Kreidt: But you have no guarantee that someone is going to take the medication and if they stop that we are going to force them to continue. I would hope that if someone does stop that we wouldn't start over again.

Rep. Weisz: They're still on Medicaid and we still have to take care of their issues. We can't say you messed up now you're gone.

Chairman Pollert: Did they department do the fiscal note?

Rep. Weisz: Yes.

Rep. Silbernagel: I'm trying to understand what additional activity happens by the pharmacist over and above what is already required.

Mike Schwab, Executive Vice President, ND Pharmacy Association: A medication therapy management program is more designed to target those individuals who have chronic diseases. Based on the way the bill is drafted would be identified by the Department of Human Services in areas they feel they have high spend or areas where they feel the

pharmacists could help. The idea behind this is to bring the pharmacist full-circle with part of the health care team since they will see the person on a monthly basis more than likely. With medication therapy management services nurses can provide this in some of your hospital settings but the reality is your pharmacists are the most prevalent and most accessible in providing these services. They are required under all Medicare part D plans right now. BY CMS they are required and offered by BCBS, Sanford Health, and Medicaid Expansion. Medicaid is the only outlier at this time. From a patient perspective they will look at everything from over the counter medications to supplements and they will assess Medicaid related problems collectively with all their chronic diseases. It's a comprehensive med review at that time followed by targeted interventions based on the issues that are identified or any adverse drug events or any interactions that are taking place.

Chairman Pollert: This is for Medicaid-eligible individuals. If someone who was Medicaid-Eligible and says he wants a medication you will turn on your computer and figure out what they have. Will you automatically get that? Or will DHS send you a list?

Mike Schwab: Based on the way the bill is drafted, the Department would identify what areas they would like to see medication therapy medication provided and based on which ones they want us to look at we're able to track all health outcomes, health history, and return investment. We can track where we are saving money and if there is an expense.

Rep. Holman: Every time in the last 2-3 years that I've gone to the clinic you have to check off the medication. Will that be similar?

Mike Schwab: This is completely separate from a refill form. We sit down with the patient and go through every medication they are on. There is a series of protocols to follow. With a diabetic for example, you touch on exercise, life-style changes, environmental changes, blood pressure, and so on.

Chairman Pollert: If you are doing that anyway, why do you need the program?

Mike Schwab: For that, that's not necessarily taking place unless there is going to be a mechanism in place. The pharmacist isn't now unless it is a medication therapy management or comprehensive med review. That is completely different than you picking up your prescription at the counter.

Chairman Pollert: Specific medicine when entered in the computer will flash up with a message that this medicine is eligible for the list from DHS?

Mike Schwab: For an example with the PERS program. PERS identified a list of eligible that have diabetes and what takes place is upon their first fill of targeted diabetic medications become eligible for that program.

Chairman Pollert: This fiscal note starts January 1 of 2016. Then it's for the full 17-19 biennium.

Brendan Joyce, Pharmacy Administrator for Medicaid: We did the preparation of the fiscal note by reviewing the PERS plan and their growth over time. We reviewed the Sanford plan

that they are doing for the Medicaid expansion population and we projected as it states in here we added on ten more patients every month. As entities of identified patients, not all get the medication therapy management visit. They may not make the appointment or attend. We projected the growth. We are the ones who will identify the patients. We can ensure that it is exactly at this level if we need to. We can control the spicket.

Chairman Pollert: When they tap in that medication and it shows they are on DHSs list- the bill says it will interact with physicians and pharmacists. How does it act with physicians or does that info just become available?

Brendan Joyce: We would be identifying the patient, not the medication. They would be notified before their prescription fill. We can see the patients going to this pharmacy routinely or more than one pharmacy. We will then notify what they are eligible for or not. As they do every fill they will check each fill to see if it interacts with any of the medications around or any concern. We'll identify them beforehand. They'll know before and then it's up the pharmacy to get something scheduled with the patient.

Chairman Pollert: That initial response is because pharmacists are required to report if it is Medicaid. Then you would get those records.

Brendan Joyce: Yes, we process all the claims and have the records.

Rep. Nelson: Was it you that told us about the mishap that took place with the Hep C medication?

Brendan Joyce: I said there were a few patients that didn't complete their therapy with Medicaid, lost their eligibility or disappeared from the state.

Rep. Nelson: Somebody testified that there was a person who took twice as much as they should have.

Brendan Joyce: Yes

Rep. Nelson: If they were in this management plan, would that have prevented that?

Brendan Joyce: I would hope so. That is the intent to address those issues. If everyone did what they were supposed to this wouldn't happen. This will be a vehicle for us to help address that situation.

Rep. Nelson: In that case it would have paid for the appropriation of this bill with those 6 people?

Brendan Joyce: Yes.

Rep. Silbernagel: The physician has a responsibility to do this on the front-end correct?

Brendan Joyce: The physicians to a great job with the time they have. Often the patient doesn't follow up with the physician or here everything when they are in the physician's

office. There wouldn't be any need for MTM or disease management if everyone did what they were supposed to. It has been seen that there is a need for more.

Rep. Holman: I was filling a prescription on Saturday and the pharmacist said you had this filled at CVS five weeks ago. How well networked are pharmacies in ND?

Brendan Joyce: That depends on how well the payer is informing them. If you were paying cash they would not know. If you were all going under a single payer we will tell them they have this similar medication filled on this date at certain pharmacies. It's up to the payer to do that. If it's all cash there is no communication between pharmacies.

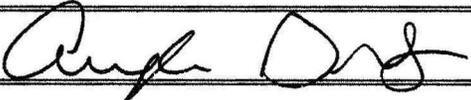
Chairman Pollert closed the hearing.

# 2015 HOUSE STANDING COMMITTEE MINUTES

Appropriations Committee - Human Resources Division  
Sakakawea Room, State Capitol

SB 2320  
4/1/2015  
Job 25679

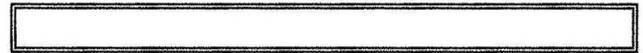
- Subcommittee  
 Conference Committee



## Explanation or reason for introduction of bill/resolution:

A BILL for an Act to create and enact a new section to chapter 50-06 of the North Dakota Century Code, relating to the creation of a medication therapy management program for Medicaid-eligible individuals.

## Minutes:



**Chairman Pollert** called the committee to order.

**Rep. Silbernagel:** I would move a Do Pass.

**Chairman Pollert:** No amendments?

**Rep. Silbernagel:** No.

**Rep. Holman:** Second.

**A Roll Call Vote was taken. Yes: 4, No: 2, Absent: 0. Motion passed.**

**Chairman Pollert:** Rep. Silbernagel will carry the bill to full appropriations.

**Chairman Pollert** closed the hearing.

# 2015 HOUSE STANDING COMMITTEE MINUTES

## Appropriations Committee Roughrider Room, State Capitol

SB 2320  
4/6/2015  
Job #25843

- Subcommittee  
 Conference Committee

Committee Clerk Signature

*Kenneth M. Tolson*

### Explanation or reason for introduction of bill/resolution:

Relating to the creation of a medication therapy management program for medicaid-eligible individuals; and to provide an effective date

### Minutes:

Chairman Jeff Delzer opened the hearing on SB 2320.

**Representative Silbernagel** spoke on the bill: SB 2320 creates a medication therapy management program for Medicaid-eligible individuals. The purpose of the medication therapy management program is to coordinate health care and improve the health of individuals in the identified population, and to help manage healthcare expenditures. DHS may involve physicians, pharmacists and other health professionals in the program; and these individuals are entitled to be reimbursed for their services. DHS, and they may request assistance from the pharmacists association in developing details. The fiscal note is \$59,400 in 2015-17, and \$180,000 in 2017-19. It will take a while to get the program up and running. DHS has a similar program in PERS that is currently up and running; and this is a carry-over to Medicaid recipients. I believe that program is generally perceived as being a successful program in helping to contain costs. DHS also has a similar program for medical care management, and this would include the medication piece to that program. Your committee, after visiting about this, recommends a Do Pass on this bill.

**Chairman Jeff Delzer:** How deep did you get into the fiscal note? Because from what I've been told, they're supposed to have some actual knowledge of what this can save on some of those other programs. Shouldn't there actually be a positive fiscal note then, instead of a negative one?

**Rep. Silbernagel:** We did not receive any "positive" financial pieces to this program. I believe, in the PERS piece, there is some evidence that there is some savings involved in that program. But on this particular one, we did not receive that information.

**Representative Pollert:** First off, the Do Pass was not unanimous; it was 4-2. We did get information from PERS because we did pass legislation dealing with the diabetes program. On the information that was sent out to us, for every dollar spent on that program, PERS study shows that it saves \$2.34. But it doesn't show that on the fiscal note.

**Chairman Jeff Delzer:** Did you have any discussion about putting some language in here to check that out and get some answers whether it actually saves or not, in two years, instead of just becoming part of the baseline budget?

**Representative Pollert:** We did not ask for that. We had no amendments to the bill.

**Chairman Jeff Delzer:** Alan, how tough would it be to put on an amendment that would ask for financial situation on that in two years?

**Alan (No further identification given):** We can add a reporting requirement, either to the next assembly or to an interim committee, or what are you wanting there?

**Chairman Jeff Delzer:** I would say to the next appropriations committees. Or the next legislative assembly.

**Rep. Pollert:** Mr. Chairman, do you want that in the form of a motion?

**Chairman Jeff Delzer:** I believe that would probably be a proper motion.

**Rep. Pollert:** As Alan said, I move to SB 2320.

**Rep. Silbernagel:** I second.

**Chairman Jeff Delzer:** We have a motion to amend SB 2320 with a reporting requirement for the next legislative assembly on the financial value of the program. Any discussion?

A VOICE VOTE WAS TAKEN. MOTION IS CARRIED.

**Rep. Silbernagel:** I move SB 2320 as amended with a Do Pass.

**Chairman Jeff Delzer:** We have a motion for a Do Pass As Amended, made by Rep. Silbernagel.

**Rep. Guggisberg:** I second.

**Chairman Jeff Delzer:** Any further discussion?

ROLL CALL VOTE WAS TAKEN. YES: 20 NO: 3 ABSENT: 0

MOTION CARRIES 20-3.

REP. SILBERNAGEL WILL CARRY.

**Chairman Jeff Delzer:** We'll double-check that amendment, and make sure it looks OK before we actually bring it back and change it.

**Chairman Jeff Delzer** closed the hearing on SB 2320.

JK  
4/7/15

PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2320

Page 1, line 3, after the semicolon insert "to provide for a department of human services report to the appropriations committees;"

Page 1, after line 21, insert:

**"SECTION 2. DEPARTMENT OF HUMAN SERVICES - MEDICAID  
MEDICATION THERAPY MANAGEMENT PROGRAM - REPORT TO SIXTY-FIFTH  
LEGISLATIVE ASSEMBLY.** The department of human services shall report to the appropriations committees of the sixty-fifth legislative assembly on the costs and benefits of the medication therapy management program for the biennium beginning July 1, 2015, and ending June 30, 2017."

Renumber accordingly

**STATEMENT OF PURPOSE OF AMENDMENT:**

A section is added to require the Department of Human Services to provide a report to the Appropriations Committees of the 65<sup>th</sup> Legislative Assembly on the costs and benefits of the medication therapy management program.





Date: 4/6/15  
 Roll Call Vote #: 2

2015 HOUSE STANDING COMMITTEE  
 ROLL CALL VOTES

BILL/RESOLUTION NO. 2320

House: Appropriations Committee

Subcommittee

Amendment LC# or Description: 15.0844.02001

Recommendation:  Adopt Amendment  
 Do Pass  Do Not Pass  Without Committee Recommendation  
 As Amended  Rerefer to Appropriations  
 Place on Consent Calendar  
 Other Actions:  Reconsider  \_\_\_\_\_

Motion Made By: Silbernagel Seconded By: Guggisberg

Representatives	Yes	No	Absent
Chairman Jeff Delzer		✓	
Vice Chairman Keith Kempenich	✓		
Representative Bellew		✓	
Representative Brandenburg	✓		
Representative Boehning	✓	✓	
Representative Dosch		✓	
Representative Kreidt	✓		
Representative Martinson	✓		
Representative Monson	✓		
Representative Nelson	✓		
Representative Pollert	✓		
Representative Sanford	✓		
Representative Schmidt	✓		
Representative Silbernagel	✓		
Representative Skarphol	✓		
Representative Streyle	✓		
Representative Thoreson	✓		
Representative Vigesaa	✓		
Representative Boe	✓		
Representative Glassheim	✓		
Representative Guggisberg	✓		
Representative Hogan	✓		
Representative Holman	✓		
TOTALS	20	3	

Floor Assignment: Silbernagel

If the vote is on an amendment, briefly indicate intent: \_\_\_\_\_

**REPORT OF STANDING COMMITTEE**

**SB 2320, as engrossed: Appropriations Committee (Rep. Delzer, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (20 YEAS, 3 NAYS, 0 ABSENT AND NOT VOTING). Engrossed SB 2320 was placed on the Sixth order on the calendar.

Page 1, line 3, after the semicolon insert "to provide for a department of human services report to the appropriations committees;"

Page 1, after line 21, insert:

**"SECTION 2. DEPARTMENT OF HUMAN SERVICES - MEDICAID  
MEDICATION THERAPY MANAGEMENT PROGRAM - REPORT TO SIXTY-FIFTH  
LEGISLATIVE ASSEMBLY.** The department of human services shall report to the appropriations committees of the sixty-fifth legislative assembly on the costs and benefits of the medication therapy management program for the biennium beginning July 1, 2015, and ending June 30, 2017."

Re-number accordingly

**STATEMENT OF PURPOSE OF AMENDMENT:**

A section is added to require the Department of Human Services to provide a report to the Appropriations Committees of the 65<sup>th</sup> Legislative Assembly on the costs and benefits of the medication therapy management program.

**2015 TESTIMONY**

**SB 2320**

Madam Chair and members of the committee, for the record, my name is Mike Schwab the Executive Vice President of the North Dakota Pharmacists Association. We are here today in support of HB 2320.

Over the past decade, medication therapy management (MTM) services provided by pharmacists has gained widespread attention for achieving improved outcomes in patients with chronic health care issues, while also reducing health care costs.

**What is MTM?**

MTM focuses on patients with chronic conditions that require maintenance medications, such as high cholesterol, asthma, diabetes, CHF and pain. MTM is designed to catch "at risk" patients through a series of interventions by health care providers, with pharmacists being the most accessible and prevalent in providing such services.

**What are some of the core elements of an MTM service?**

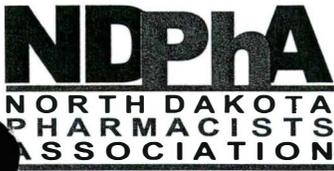
- Review all current medications including nonprescription agents (OTC).
- Assess any medication-related problems.
- Provide a personal medication record to the patient and primary care provider for care coordination.
- Compile a medication-related action plan for tracking patient self-management.
- Identify cases needing targeted interventions including collaborating with other clinicians.

Studies of pharmacists providing MTM services to improve therapeutic outcomes indicate that such services can improve health outcomes and reduce costs. Below we have listed some of the benefits and PROVEN return on investment from MTM services.

- Minnesota Medicaid MTM program resulted in a 31% reduction in total health care spend per patient. The savings exceeded the cost of services by 12:1.
- The Checkmeds program in North Carolina MTM program has generated a savings of approximately \$66.7 million in overall health care costs, which included \$35 million from avoided hospitalization and \$8 million in drug product cost savings.
- Ohio's Medicaid MTM program's total savings including avoided hospitalizations, emergency visits, and unnecessary consumption are yielding a ROI of 4:1.
- **NDPERS Collaborative Drug Therapy program of diabetes in the first two years (2009-2011) provided a \$71.14 savings per month for those members in the program. Just hard claims data pre and post program showed a \$2.34 return for every dollar being spent. Thanks to this legislature, NDPERS, BC/BS of ND and our pharmacists, the program and the results were actually featured in the America's Pharmacist Journal a couple of years ago.**

Centers for Medicare and Medicaid currently require all Medicare Part D plans to include MTM services into their plans benefit structure for seniors due to the success of MTM services in providing healthier outcomes and return on investment. There are currently 18 states that have some type of MTM service being offered and reimbursed.

The implementation and expansion of MTM services has been highlighted and supported by the U.S. Surgeon General calling for the full integration of pharmacists into health care teams and allowing them to use their full scope of practice. On January 13<sup>th</sup> of this year, the National Governor's Association released a paper calling for states to fully integrate pharmacists into the health care continuum and to use their expertise as the medication experts through services such as MTM.



Medication non-adherence costs this country over \$100 billion dollars annually. As part of the efforts to increase medication adherence and actively engage patients in their own health, MTM services should be implemented to help any patient with medication-related problems.

Again, we ask for your support of SB 2320. I would like to thank you for your time and attention today. I would be happy to try and answer any questions that you might have for me.

Respectfully Submitted,

A handwritten signature in cursive script that reads "Mike".

Mike Schwab

EVP NDPhA



J# 22704 Attach#2  
SB 2320  
01/28/15

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<http://www.wsj.com/articles/the-weekend-interview-the-revolution-at-the-corner-drugstore-1422056524>

THE WEEKEND INTERVIEW

## The Revolution at the Corner Drugstore

The CVS chief executive on upending the debate about costly specialty drugs and how he's going to make sure you take your medicine.

By **JOSEPH RAGO**

Jan. 23, 2015 6:42 p.m. ET

*Woonsocket, R.I.*

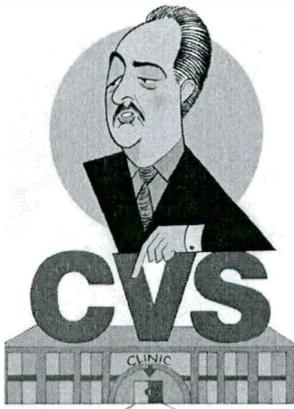


ILLUSTRATION: KEN FALLIN

For the better part of a year, the worlds of health-care finance and health-care politics have been scandalized by the specialty drug called Sovaldi. The \$84,000 cost for a course of treatment of this hepatitis-C cure was said to reveal that pharmaceutical prices were irrational or abusive; that markets were helpless to respond; and that, absent government intercession, this new wave of complex biological therapies would bankrupt the nation.

Then, this winter, all of a sudden, discipline and competition arrived. The response has largely come in the form of new hep-C medicines and pharmacy-benefit managers, or PBMs, a kind of quasi-insurance company that purchases medications in bulk from drug makers, negotiates prices and oversees patient drug plans. The controversy continues to boil, though the CEO of the second-largest PBM in the U.S., Larry Merlo, exhibits little of the Sovaldi-fueled acrimony of his industry colleagues,

much less the self-defeating policy responses.

“We saw the expected growth in specialty pharmacy coming. The latest trends around specialty say that unabated—*unabated*—we’re going to see midteens growth for the foreseeable future,” Mr. Merlo says of the rise of specialty-drug spending, tapping the table in his office with an index finger for emphasis. In other words, there are real problems, but there are solutions too, and the costs are manageable.

Mr. Merlo heads CVS Health, which in the age of the Affordable Care Act is expanding beyond the drugstore around the corner, sometimes radically. About 100 million Americans are CVS customers each year, whether in a brick-and-mortar outlet, paying a visit to one of its 960 “minute clinics,” or through its PBM unit, Caremark. CVS fills more than one of every five prescriptions in the U.S., either in-store or via mail. The company supplies fully 1% of all federal corporate-tax revenue.

In the case of specialty drugs, CVS is now the largest supplier and dispenses about 25% of prescriptions in the \$86 billion business. Mr. Merlo expects these therapies to grow to 50% of total pharmaceutical spending, from 38% today, as innovations for unmet medical needs—or even common conditions like high cholesterol, which will be targeted by the forthcoming PCSK9 inhibitors—come to market.

So what to do? Think of an “illustrative trend” of a 20% growth rate in specialty drug costs, Mr. Merlo says. He estimates that CVS Caremark, which covers 65 million people, can erase as much as 16 percentage points. PBMs create tiers of preferred drugs, for example, which give patients an incentive to choose cheaper generics over name brands. Other management tools, like drug formularies, narrow pharmacy networks, care coordination, step therapy and the like, can add to the savings.

The hepatitis-C shakeout is more contested. The first-to-market maker of Sovaldi, Gilead Sciences, followed with a next-generation treatment called Harvoni, while AbbVie brought out Viekira Pak. More are in the pipeline. Express Scripts, the largest PBM and a vocal Gilead critic, signed an exclusive deal with AbbVie. In January, CVS turned around and made Harvoni and Sovaldi the preferred hep-C treatments on its own PBM formularies. Both PBMs almost certainly received concessions on list prices in return for offering one therapy in

lieu of competitors, though details haven't been disclosed.

One way of reading all this is that the drug makers are being forced to compete, even while they retain intellectual-property protection. But it has stirred a new debate about patient access to needed medicines, and whether the limits of closed formularies will interfere with medical decision-making and in the long run cost patients or society more.

Obviously PBMs make individual exceptions and conduct clinical reviews, with a goal of generating the best value at the lowest cost. But the strategies do illustrate the trade-offs that are increasingly coming to define U.S. health care—and who will decide.

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Mr. Merlo observes that CVS Caremark's clients—whether health plans, self-insured employers or government programs like Medicare and Medicaid—“can pick and choose, they can mix and match, how aggressive they want to be to satisfy the goal of the appropriate level of cost, not at the expense of quality.” But as he sees it, individuals are increasingly dominant.

What Mr. Merlo calls “the retailization of health care” is accelerating, with consumers taking more responsibility for their own care choices, sharing more of the costs and becoming “part of the thought process and part of the solution. . . I think consumers will have more decision-making, and with that comes more accountability.”

In part, this trend is a response to what Mr. Merlo sees as the defining challenge of American health care: “the quality-cost conundrum,” or how “to improve health outcomes at lower costs” amid a changing mix of how the U.S. finances health care. The Affordable Care Act is expanding insurance coverage, especially through Medicaid. What he calls the “silver tsunami,” or the 10,000 people turning 65 each day, is swelling the Medicare rolls. Employers and health plans are as “intensely focused” as ever “on reducing the cost of care.”

Mr. Merlo thinks the “ultimate answer” for high drug prices are payment methods that reward value and outcomes and allow everyone “to share the benefits.” He adds: “We've operated on a fee-for-service model, you know, forever.” That is changing, but “we're in the top of the second inning. We're very, very early.”

2.4

Still, “consumers have been left out of the process for years,” Mr. Merlo says, and now require new “education, tools and transparency.” The third-party-payer system for decades cast medicine as business-to-business transactions and thus left many health-care companies with no comprehension of normal people and their needs, preferences and sometimes irrationalities. Long retail experience is providing different answers.

“Obviously you think of our retail pharmacies,” says Mr. Merlo, a pharmacist by training and CVS chief since 2011. He is repositioning the company and thinks the better description of CVS is “an integrated pharmacy-care organization. Our purpose, our goal is to help people on their path to better health.”

Take CVS’s 960 walk-in clinics in 31 states and growing, which together constitute the biggest retail clinic in the country, with 23 million visits to date. Nurse practitioners treat minor acute ailments like strep throat, ear infections or sprains, and offer immunizations. Convenient (open on nights and weekends, with no appointments) and affordable (40% to 80% lower than traditional providers, with posted prices), these clinics can help solve one problem: “the confluence between more people entering the insured market and at the same time a growing shortage of primary-care physicians,” Mr. Merlo says.

They can also reduce spending by migrating treatment “at a fraction of the cost” from more-expensive settings like emergency rooms. “We have a lot of employees here at CVS Health”—about 200,000—“and sometimes that becomes our best learning,” Mr. Merlo explains. A recent internal study of CVS workers who used its walk-in clinics suggested their overall health costs are 8% lower than those with the same age and health status who don’t. A shelf of academic research shows the quality of care at such clinics is the same or sometimes better than the ER.

The pharmacist, Mr. Merlo says, isn’t often imagined on the front lines of medicine—but should be. Advanced pharmaceutical therapies, for diseases like multiple sclerosis and HIV, are often more complex than simply taking a pill. But sometimes the opposite is true, and Mr. Merlo notes that adherence—ensuring that patients take the medications they are prescribed—is one area where CVS can contribute.

About half of all Americans suffer from one or more chronic conditions such as high cholesterol, diabetes or asthma. “More times than not,” Mr. Merlo says, “the

treatment for those diseases is prescription therapy, and that's where the statistics start to get alarming—it's a huge opportunity to take unnecessary costs out of the system. One out of four people drop off therapy. They don't even get the first refill. By the time one year goes by after someone is newly diagnosed, as many as three of four will stop taking their medication or not take the medication as prescribed."

One consensus economic estimate is that this adds about \$300 billion a year to national health expenditures—as when a patient fails to take statins and has a heart attack or stroke. The tragedy is that the sickest people tend to be the least adherent.

"There's no one reason, there's no one answer," Mr. Merlo says. Forgetfulness is common. The medication's benefits may be imperceptible and patients may not feel any different as a result, or they experience side effects like the muscle cramps of statins, or they find a treatment regimen involving multiple drugs and doses too complex to understand.

CVS has launched a campaign "to make sure that the right patient is on the right therapy at the right time at the right dosage," Mr. Merlo says. The company aims to improve adherence by as much as 15% by 2017. The goal is to "manage the pharmacy patient, not just the administration of the drug."

To take one example, only a few years ago prescriptions were printed out and handed to the patient or submitted to the pharmacy by fax. Physicians and pharmacists often had no idea what happened next or any reliable method to know. Now 70% of prescriptions are submitted electronically, creating a digital trail and actionable information.

CVS technologists mine prescription and claims data and "identify gaps in care and keep people on their medications," Mr. Merlo says. The system might then send a text message when someone has forgotten to refill a prescription. A pharmacist is prompted to discuss the importance of taking medication during the patient's next visits, and CVS alerts the prescribing doctor.

But most often, a trusted clinician who listens and seems to care is best. For all the technological progress, CVS figures a one-on-one conversation with a pharmacist is two to three times more effective than any other method to change patient behavior—in a way, the human element that often goes missing in the U.S. health-care debate.

“I can pick up the phone and in a matter of minutes I can talk to the pharmacist, I can have a conversation,” Mr. Merlo says. “Can I really do that anywhere else cross health-care delivery?”

2.6

Mark it down as another way that private innovation is finding ways to serve patients despite, or because of, the policy mess in Washington.

*Mr. Rago is a member of the Journal editorial board.*

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CHAPTER 61-02-01  
PHARMACY PERMITS

Attach #3  
SB 2320  
Final Copy 01/28/15  
J# 22704

Section

- 61-02-01-01 Permit Required
- 61-02-01-02 Application for Permit
- 61-02-01-03 Pharmaceutical Compounding Standards
- 61-02-01-04 Permit Not Transferable
- 61-02-01-05 Change of Ownership
- 61-02-01-06 Affidavit of Ownership
- 61-02-01-07 Renewal of Permits
- 61-02-01-08 Change of Location
- 61-02-01-09 Permit for Heirs at Law of Pharmacist
- 61-02-01-10 Pharmacist-in-Charge -Requirement - Definitions - Duties
- 61-02-01-11 Pharmacist-in-Charge - Termination of Service
- 61-02-01-12 Posting of Permit
- 61-02-01-13 Pharmacist on Duty
- 61-02-01-14 Limitation on Rent
- 61-02-01-15 Closing a Pharmacy
- 61-02-01-16 Transfer of Controlled Substances When Selling a Business
- 61-02-01-17 Identification
- 61-02-01-18 Continuous Quality Improvement
- 61-02-01-19 Policy and Procedure Manual Required

**61-02-01-18 Continuous Quality Improvement**

61-02-01-18-01 Definitions: In this chapter, unless the context or subject matter otherwise requires:

1. "Actively Reports" means reporting all dispensing errors and analysis of such errors to a patient safety organization as soon as practical or at least within 30 days of identifying the error.
2. "Analysis" means a review of the findings collected and documented on each dispensing error, assessment of the cause and any factors contributing to the dispensing error, and any recommendation for remedial action to improve pharmacy systems and workflow processes to prevent or reduce future errors.
3. "Dispensing error" means one or more of the following discovered after the final verification by the pharmacist:
  - a. Variation from the prescriber's prescription drug order, including, but not limited to:
    - i. Incorrect drug;
    - ii. Incorrect drug strength;

3.2

- iii. Incorrect dosage form;
  - iv. Incorrect patient; or
  - v. Inadequate or incorrect packaging, labeling, or directions.
- b. Failure to exercise professional judgment in identifying and managing:
- i. Therapeutic duplication;
  - ii. Drug-disease contraindications, if known;
  - iii. Drug-drug interactions, if known;
  - iv. Incorrect drug dosage or duration of drug treatment; interactions;
  - v. A clinically significant, avoidable delay in therapy; or
  - vi. Any other significant, actual or potential problem with a patient's drug therapy.
- c. Delivery of a drug to the incorrect patient.
- d. Variation in bulk repackaging or filling of automated devices, including, but not limited to:
- i. Incorrect drug;
  - ii. Incorrect drug strength;
  - iii. Incorrect dosage form; or
  - iv. nadequate or incorrect packaging or labeling.
4. "Incident" A patient safety event that reached the patient, whether or not the patient was harmed.
5. "Near Miss" A patient safety event that did not or could not have reached the patient.
6. "Patient safety organization" means an organization that has as its primary mission continuous quality improvement under the Patient Safety and Quality Improvement Act of 2005 (P.L. 109-41) and is credentialed by the Agency for Healthcare Research and Quality.
7. "Unsafe Condition" Any circumstance that increases the probability of a patient safety event.

61-02-01-18-02 Continuous Quality Improvement Program

1. Each pharmacy permittee shall establish a Continuous Quality Improvement (CQI) Program for the purpose of detecting, documenting, assessing, and preventing incidents, near misses, and unsafe conditions.
2. A pharmacy permittee meets the requirements if they meet the following:
  - a. Maintains and complies with the policies and procedures as noted in (4);
  - b. The pharmacy reports incidents, near misses and unsafe events through either:
    - i. a contracted Patient Safety Organization (PSO) that is listed as an Agency for Health Research and Quality (AHRQ) on [www.ahrq.com](http://www.ahrq.com) whose primary mission is pharmacy continuous quality improvement; or,
    - ii. an internal program to the pharmacy which is acceptable to the Board where proper documentation and evaluation can be completed
3. At a minimum, a CQI Program shall include provisions to:
  - a. Designate an individual or individuals responsible for implementing, maintaining, and monitoring the CQI Program, which is managed in accordance with written policies and procedures maintained in the pharmacy in an immediately retrievable form;
  - b. Initiate documentation of incidents, near misses, and unsafe conditions as soon as possible, but no more than seven days, after determining their occurrence;
4. Policies and Procedures in compliance with 61-02-01-19 and must include.
  - a. Train all pharmacy personnel in relevant phases of the CQI program;
  - b. Identify and document reportable incidents and near misses and unsafe events;
  - c. Minimize the impact of incidents and near misses and unsafe events on patients;
  - d. Analyze data collected to assess the causes and any contributing factors relating to incidents and near misses and unsafe events;

- 3-4
- e. Use the findings to formulate an appropriate response and to develop pharmacy systems and workflow processes designed to prevent and reduce incidents and near misses and unsafe events; and
  - f. Periodically, but at least quarterly, meet with appropriate pharmacy personnel to review findings and inform personnel of changes that have been made to pharmacy policies, procedures, systems, or processes as a result of CQI program findings.

5. Quality Self-Audit

- a. Each Pharmacy shall conduct a Quality Self-Audit at least quarterly to determine whether the occurrence of incidents, near misses, and unsafe conditions has decreased and whether there has been compliance with preventative procedures, and to develop a plan for improved adherence with the CQI Program in the future. Each pharmacy shall conduct a Quality Self-Audit upon change of Pharmacist-in-Charge to familiarize that Person with the Pharmacy's CQI Program.

6. Protection from Discovery

- a. Records that are generated as a component of a pharmacy's ongoing quality assurance program and that are maintained for that program are peer review documents and are not subject to subpoena or discovery in an arbitration or civil proceeding.
  - b. Records that are generated as a component of a pharmacy's ongoing quality assurance program and that are maintained for that program are confidential and shall not be released, distributed or communicated in any manner, except as provided by these rule or the permittee's policies and procedures. Recognizing the importance of sharing information with staff, experts, consultants, and others is necessary in reducing medication errors, information used as a part of the permittee's quality program in any manner shall not compromise the confidentiality and privilege of such information.
  - c. This subsection does not prohibit a patient from accessing the patient's prescription records or affect the discoverability of any records that are not generated solely as a component of a pharmacy's ongoing quality assurance program and maintained solely for that program.
7. The Board's regulatory oversight activities regarding a pharmacy's CQI program are limited to inspection of the pharmacy's CQI policies and procedures and enforcing the pharmacy's compliance with those policies and procedures.
8. An analysis or summary of findings, produced within six months of submission, shall be evidence of compliance with the records and data collection provisions.

A permittee shall not be required to produce data, charts, error reports or findings collected and used in compiling an analysis summary.

9. Notwithstanding paragraphs (6) and (8), If pharmacy is reporting to a Patient Safety Organization whose primary mission is continuous quality improvement all data and records are privileged and confidential as provided in the 2005 Patient Safety and Quality Improvement Act of 2005 and implementing regulations.



State of North Dakota  
Jack Dalrymple, Governor

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**STATE BOARD OF PHARMACY**

Attach #4  
SB2320  
01/28/15  
J# 22704

E-mail= [Mhardy@btinet.net](mailto:Mhardy@btinet.net) [www.nodakpharmacy.com](http://www.nodakpharmacy.com)

Mark J. Hardy, PharmD, R.Ph.  
Executive Director

**Senate Bill 2320 – Medication Therapy Management for Medicaid  
Senate Human Services Committee – Red River Room  
10:00 AM - Wednesday – January 28, 2015**

Chairperson Lee, members of the Senate Human Services Committee, for the record I am Katlyn Weigel, an NDSU College of Pharmacy PharmD candidate completing a rotation with the North Dakota State Board of Pharmacy. I will be providing testimony on behalf of the Board of Pharmacy on Senate Bill 2320 Medication Therapy Management for Medicaid eligible individuals.

The Board of Pharmacy supports the provision of SB2320 for establishing a medication therapy management program for Medicaid eligible patients.

The public benefits greatly from the pharmacists' expertise and knowledge in working directly with patients to achieve optimal therapeutic drug regimens. Medication Therapy Management has shown to improve health outcomes by decreasing emergency room visits and hospitalizations in patients receiving the service. The profession is supportive in expanding its impact directly to the public at large.

An important component of medication therapy management is ensuring proper communication to other healthcare professionals to ensure collaboration of care for the patients. Equally important is the necessity of the pharmacist to provide a healthcare record for the patient on the interactions and interventions which the pharmacist has made with the patient.

The North Dakota Pharmacists Association [NDPhA] has been a leader with their electronic recordkeeping system in the "About the Patient Program" through the North Dakota Public Employees Retirement System [PERS]. We believe they can expand on that success to provide a service to the Department of Human Services.

Thank you for the opportunity to speak on this bill. If you have any questions, the Board of Pharmacy Executive Director Mark Hardy, PharmD and I will be happy to answer them.

**Testimony  
Senate Bill 2320  
Senate Human Services Committee  
Senator Judy Lee, Chairman  
January 28, 2015**

Attachment #5  
SB 2320  
01/28/15  
JH 22704

Chairman Lee, and members of the Senate Human Services Committee, I am Brendan Joyce, PharmD, Administrator of Pharmacy Services, Medical Services Division of the Department of Human Services (Department). I am here today to provide information regarding Senate Bill 2320.

This bill will require the Department to establish a Medication Therapy Management (MTM) program for Medicaid eligible individuals (traditional Medicaid, not expansion). The Department would likely model the Medicaid MTM program after a number of similar MTM programs such as Medicare Part D, North Dakota Public Employees Retirement System, as well as the upcoming Sanford Health Plan's Patient Engagement Program for the Medicaid Expansion population.

Implementing an MTM program and paying for the services would require the Department to secure Centers for Medicare and Medicaid Services approval with a Medicaid State Plan Amendment. Therefore, the Department will be responsible for determining the requirements for patient inclusion, the requirements for provider inclusion, and payment for the MTM services. The Department would work with interested parties to ensure appropriate requirements and payment structure are reached.

To prepare the fiscal note, the Department reviewed the MTM programs mentioned above to estimate anticipated utilization and expenditures in this program as it launches and grows over time. Specific disease states or potential inclusion criteria (e.g. number of patients using 11 or more

medications) were not part of the fiscal note preparation since we would want more time and input from interested parties in developing the inclusion criteria.

This concludes my testimony. I would be happy to answer any questions the committee may have. Thank you.

Attach #6  
SB 2320  
01/28/15  
C# 22704

From: [linsonpharmacy@ideaone.net](mailto:linsonpharmacy@ideaone.net) [mailto:[linsonpharmacy@ideaone.net](mailto:linsonpharmacy@ideaone.net)]

Sent: Monday, January 26, 2015 4:44 PM

To: Lee, Judy E.; Kempenich, Keith A.; Karls, Karen; Weisz, Robin L.; Heckaman, Joan M.; Wanzek, Terry M.

Subject: Senate Bill 2320

Dear Honorable Members of the North Dakota Legislature;

I am sending this email to you in support of SB 2320 and the establishment of MTM services for North Dakota Medicaid. I am a practicing pharmacist and the current president of the North Dakota Pharmacist Association. I had hoped to attend the hearing on this bill but unfortunately cannot make it out to Bismarck.

I think this bill will improve health and reduce costs within the North Dakota Medicaid system. Pharmacists are one of the most prevalent and accessible health care professional and interventions by pharmacists has been proven to greatly lower health care spend. Incorrect use of medications or not being adherent to therapy is huge problem nationally.

This causes a much higher incidence of hospitalizations and other health care complications that drive spend up astronomically. Pharmacists are uniquely positioned to help patients and lower costs.

Minnesota's Medicaid MTM program resulted in a 31% reduction in total health care spend per patient. The savings exceeded the cost of services by 12:1. The CheckMeds program in North Carolina has generated a savings of approx. \$66.7 million in overall health care costs, which included \$35 million from avoided hospitalizations and \$8 million in drug product cost savings. Ohio's Medicaid MTM program is yielding a 4:1 return on investment. NDPERS Collaborative Drug Therapy program of diabetes care in the first 2 years provided \$71.14 savings per month for those members in the program. Hard claims data is showing a return of \$2.34 for every \$1 spent. CMS is now requiring all Medicare Part D plans to include MTM services in their plan designs due to increased health outcomes and return on investment.

Pharmacist interventions have shown over and over again to improve health outcomes and to lower health care spend. I would appreciate consideration of a YES VOTE ON SB 2320.

--

Steve Boehning, R.Ph., Executive Secretary Linson Pharmacy

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SB 2320  
2-4-15  
#1

Senate Appropriations Committee

SB 2320 10:00

02-04-15

Chairman Holmberg and members of the committee, for the record, my name is Mike Schwab, the Executive Vice President of the North Dakota Pharmacists Association. We are here today in support of SB 2320.

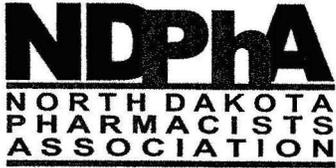
Over the past decade, medication therapy management (MTM) services provided by pharmacists has gained widespread attention for achieving improved outcomes in patients with chronic health care issues, while also reducing health care costs.

#### **What is MTM?**

MTM focuses on patients with chronic conditions that require maintenance medications, such as high cholesterol, asthma, diabetes, CHF and pain. MTM is designed to catch "at risk" patients through a series of interventions by health care providers, with pharmacists being the most accessible and prevalent in providing such services.

#### **What are some of the core elements of an MTM service?**

- Review all current medications including nonprescription agents (OTC).
- Assess any medication-related problems.
- Provide a personal medication record to the patient and primary care provider for care coordination.
- Compile a medication-related action plan for tracking patient self-management.
- Identify cases needing targeted interventions including collaborating with other clinicians.

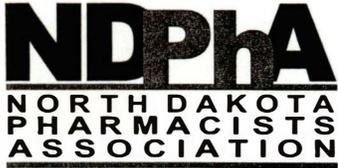


All interventions are communicated with the patient's primary healthcare provider(s). All recommendations or changes to drug therapy still need to be approved by the patient's primary healthcare provider and documented accordingly.

Studies of pharmacists providing MTM services to improve therapeutic outcomes indicate that such services can improve health outcomes and reduce costs. Below we have listed some of the benefits and PROVEN return on investment received from offering and implementing MTM services.

- Minnesota Medicaid MTM program resulted in a 31% reduction in total health care spend per patient. The savings exceeded the cost of services by 12:1.
- North Carolina MTM program (CheckMeds) has generated a savings of approximately \$66.7 million in overall health care costs, which included \$35 million from avoided hospitalization and \$8 million in drug product cost savings.
- Ohio's Medicaid MTM program's total savings including avoided hospitalizations, emergency visits, and unnecessary consumption are yielding a ROI of 4:1.
- NDPERS Collaborative Drug Therapy program of diabetes in the first two years **provided a \$71.14 savings per month for those members in the program. Just hard claims data pre and post program showed a \$2.34 return for every dollar being spent. Thanks to this legislature, NDPERS, BC/BS of ND and our pharmacists, the program and the results, were actually featured in the America's Pharmacist Journal a couple of years ago.**

1.2



The Centers for Medicare and Medicaid currently require all Medicare Part D plans to include MTM services into their plans benefit structure for seniors due to the success of MTM services in providing healthier outcomes and return on investment. There are currently 18 states that have some type of MTM service being offered and reimbursed.

The implementation and expansion of MTM services has been highlighted and supported by the U.S. Surgeon General calling for the full integration of pharmacists into health care teams and allowing them to use their full scope of practice. On January 13<sup>th</sup> of this year, the National Governor's Association released a paper calling for states to fully integrate pharmacists into the health care continuum and to use their expertise as the medication experts through services such as MTM.

Medication non-adherence costs this country over \$100 billion dollars annually. As part of efforts to increase medication adherence and actively engage patients in their own health self-management, MTM services should be implemented to help any patient with medication-related problems or the prevention of such.

Again, we ask for your support of SB 2320. I would like to thank you for your time and attention today. I would be happy to try and answer any questions that you might have for me.

Respectfully Submitted,

A handwritten signature in black ink that reads "Mike Schwab". The signature is written in a cursive style with a long, sweeping underline.

Mike Schwab

EVP NDPhA

1.3

# Analysis of Pharmacist-Provided Medication Therapy Management (MTM) Services in Community Pharmacies Over 7 Years

#1  
Sub  
38 2320  
2-13-15  
J#23840

Mitchell J. Barnett, PharmD, MS; Jessica Frank, PharmD; Heidi Wehring, PharmD; Brand Newland, PharmD; Shannon VonMuenster, PharmD; Patty Kumbera, BPharm; Tom Halterman, BPharm; and Paul J. Perry, PhD

## ABSTRACT

**BACKGROUND:** Although community pharmacists have historically been paid primarily for drug distribution and dispensing services, medication therapy management (MTM) services evolved in the 1990s as a means for pharmacists and other providers to assist physicians and patients in managing clinical, service, and cost outcomes of drug therapy. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA 2003) and the subsequent implementation of Medicare Part D in January 2006 for the more than 20 million Medicare beneficiaries enrolled in the Part D benefit formalized MTM services for a subset of high-cost patients. Although Medicare Part D has provided a new opportunity for defining the value of pharmacist-provided MTM services in the health care system, few publications exist which quantify changes in the provision of pharmacist-provided MTM services over time.

**OBJECTIVES:** To (a) describe the changes over a 7-year period in the primary types of MTM services provided by community pharmacies that have contracted with drug plan sponsors through an MTM administrative services company, and (b) quantify potential MTM-related cost savings based on pharmacists' self-assessments of the likely effects of their interventions on health care utilization.

**METHODS:** Medication therapy management claims from a multi-state MTM administrative services company were analyzed over the 7-year period from January 1, 2000, through December 31, 2006. Data extracted from each MTM claim included patient demographics (e.g., age and gender), the drug and type that triggered the intervention (e.g., drug therapeutic class and therapy type as either acute, intermittent, or chronic), and specific information about the service provided (e.g., Reason, Action, Result, and Estimated Cost Avoidance [ECA]). ECA values are derived from average national health care utilization costs, which are applied to pharmacist self-assessment of the "reasonable and foreseeable" outcome of the intervention. ECA values are updated annually for medical care inflation.

**RESULTS:** From a database of nearly 100,000 MTM claims, a convenience sample of 50 plan sponsors was selected. After exclusion of claims with missing or potentially duplicate data, there were 76,148 claims for 23,798 patients from community pharmacy MTM providers in 47 states. Over the 7-year period from January 1, 2000, through December 31, 2006, the mean ([SD] median) pharmacy reimbursement was \$8.44 ([\$5.19] \$7.00) per MTM service, and the mean ([SD] median) ECA was \$93.78 ([\$1,022.23] \$5.00). During the 7-year period, pharmacist-provided MTM interventions changed from primarily education and monitoring for new or changed prescription therapies to prescriber consultations regarding cost-efficacy management (Pearson chi-square  $P < 0.001$ ). Services also shifted from claims involving acute medications (e.g. penicillin antibiotics, macrolide antibiotics, and narcotic analgesics) to services involving chronic medications (e.g., lipid lowering agents, angiotensin-converting enzyme [ACE] inhibitors, and beta-blockers;  $P < 0.001$ ), resulting in significant changes in the therapeutic classes associated with MTM claims and an increase in the proportion of older patients served ( $P < 0.001$ ). These trends resulted in higher pharmacy reimbursements and greater ECA per claim over time ( $P < 0.001$ ).

**CONCLUSION:** MTM interventions over a 7-year period evolved from primarily the provision of patient education involving acute medications

towards consultation-type services for chronic medications. These changes were associated with increases in reimbursement amounts and pharmacist-estimated cost savings. It is uncertain if this shift in service type is a result of clinical need, documentation requirements, or reimbursement opportunities.

*J Manag Care Pharm.* 2009;15(1):18-31

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## What is already known about this subject

- Community pharmacists have historically been paid primarily for drug distribution and dispensing services.
- Medication Therapy Management (MTM) was officially recognized in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA 2003), including the objectives to increase patient adherence, prevent drug complications, and enhance patient understanding of their medication therapy.
- To date, pharmacist-provided MTM services have been shown to reduce patient out-of-pocket costs through interventions such as generic substitution and therapeutic interchange.

## What this study adds

- MTM services provided by community pharmacists have changed significantly over a relatively short period of time. MTM interventions appear to be evolving from the provision of patient education regarding acute medications toward consultation-type services with prescribers regarding chronic medications.
- This evolution in pharmacist intervention-type was associated with higher pharmacy reimbursements for MTM services.
- Based on pharmacists' self-assessments of the expected effects of their interventions on health care utilization, estimated cost avoidance attributable to MTM has increased over time and exceeds the pharmacist reimbursement amount for the performance of these services.

Medication Therapy Management (MTM) was officially recognized by Congress in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA 2003).<sup>1</sup> Section 423.153(d) of MMA 2003 established the requirements that Medicare Part D plans must meet regarding quality and cost control, including the requirements for MTM

#1-1

Programs “designed” to “optimize therapeutic outcomes through improved medication use” and “reduce the risk of adverse events, including adverse drug reactions.”<sup>2</sup> The Centers for Medicare and Medicaid Services (CMS) require each Medicare Part D plan to establish an MTM program for targeted beneficiaries as part of its benefit.<sup>3</sup> CMS classifies targeted beneficiaries as Part D enrollees who have multiple chronic disease states (number and type determined by the plan sponsor), are taking multiple Part D covered drugs (number determined by the plan sponsor), and are likely to incur annual costs of at least \$4,000 for all Part D-covered drugs (2006 predetermined level specified by the Secretary).<sup>2</sup> Part D plans are required to offer an MTM benefit to those enrollees who meet these criteria but may also extend the benefit to all plan enrollees. Plans can choose to offer the MTM benefit as an opt-in or opt-out benefit.

Requirements of an MTM program as outlined by CMS are somewhat ambiguous; however, CMS does require that programs be designed to increase patient adherence to medication regimens, enhance patient understanding of their medication therapy, and prevent drug complications, conflicts, and drug interactions. Although several professional pharmacy associations have attempted to interpret CMS guidance and define specific requirements of MTM for the pharmacy profession, MTM services provided to Medicare beneficiaries continue to vary from sponsor to sponsor.<sup>4-8</sup>

Community pharmacists have historically been paid primarily for drug distribution and dispensing services provided to patients. By year-end 2008, most pharmacists have heard of MTM and many have begun providing MTM services in their practice setting. Some pharmacists have been providing MTM-like professional services for years by participating in programs such as Project Improve Persistence and Compliance with Therapy (ImPACT), the Asheville Project, or other employer- or commercially sponsored programs.<sup>9-10</sup> However, the advent of Medicare Part D provides pharmacists with a larger opportunity to perform professional services and receive compensation for their medication expertise. Medicare Part D also creates a relatively new opportunity to better define the value of pharmacist-provided MTM services to the health care system, although assessment of the value of such pharmacist-provided MTM services is still in its infancy.<sup>11</sup>

Outcomes Pharmaceutical Health Care is a pharmacist-owned and pharmacist-operated MTM administrative services company that began operation in 1999 to advance the delivery of face-to-face pharmacist-provided MTM services in community pharmacies. Fees are collected by the MTM administrative services company from health plans or other benefit providers, and pharmacies are in turn reimbursed by the administrative services company for MTM services provided to eligible enrollees.

Since 1999, this MTM administrative services company has built a comprehensive system enabling pharmacist-provided MTM services, which includes: a national pharmacy network,

pharmacist training modules, an Internet-based documentation and billing system, quality assurance procedures, claim payment processing, and data reporting. This MTM administrative services company has administered programs on behalf of self-insured employers, union health plans, a state Medicaid program, pharmaceutical manufacturers (e.g., compliance and persistence programs or community-based research projects), Medicare Part D plan sponsors (including both Prescription Drug Plans and Medicare Advantage Plans) and others.

An early innovation for this MTM administrative services company was the development and implementation of a proprietary Internet-based documentation and billing system in 2000, allowing the capture of claim information submitted by participating pharmacies.<sup>12</sup> The information collected during the provision of MTM services over 7 years through 2006 represents perhaps the most extensive MTM database available. Further, the database is particularly suited to quantify changes in pharmacist-provided MTM services over time because it includes detailed information about each intervention, patient-level demographics, and estimates of cost savings associated with pharmacist interventions.

Analyses of a convenience subsample of MTM plan sponsors in the database of this MTM administrative service company over a 7-year timeframe are presented here for the first time. Specific objectives of this study were to (a) identify trends associated with the provision of MTM services provided by pharmacists, and (b) quantify potential MTM-related cost savings derived from pharmacists' self-assessments of the likely impact of their interventions on health care utilization. Consent (P#0108) for this study was approved by the Touro University Institutional Review Board.

## **Methods**

### **Database and Patients**

The MTM administrative service company's database is comprised of MTM services collected from pharmacy-submitted claims for pharmacist-provided interventions. MTM program sponsors identify patients eligible for MTM services and provide the MTM administrative services company with prescription claims data for each eligible member. The prescription claims data are then used to refer patients to primary dispensing pharmacies through the Internet-based documentation and billing system. The pharmacist identifies when a patient needs an MTM service (“pull referral”) in addition to acting on targeted interventions sent by the MTM administrative services company (“push referral”) for specific patients. Payments to pharmacies are processed when claims are submitted through the proprietary Internet-based MTM documentation system. The Internet-based system captures information gathered during the pharmacist documentation process and includes detailed information about each intervention provided. Data are stored by client (plan sponsor) and can be queried through an Internet interface. Pharmacies become MTM providers in the network of this MTM administrative services

#1 - 2

company by completing a network participation agreement, and each pharmacist that provides MTM services at the participating pharmacy must complete a "Personal Pharmacist" training program. The training program includes the details of billing and documentation for MTM services, such as selection of the most reasonable and foreseeable estimated cost avoidance (ECA) level for each intervention provided (e.g., routine education/monitoring not expected to result in cost savings vs. avoidance of inpatient hospitalization). The 7-year time period of this study was January 1, 2000, through December 31, 2006.

The network of pharmacies for this MTM administrative services company includes a diverse mix of independent, franchise, chain, health-system, and consultant pharmacy providers, located in 47 states during the time period of this study. Eligible patients for MTM services provided by community pharmacists are members of benefit plans that have contracted with the MTM administrative services company. Some MTM sponsors choose to offer the MTM benefit to a subset of enrollees (e.g., high prescription utilizers, targeted disease states), while others choose to offer the benefit to all enrollees. Benefit plans or insurance providers hire the MTM administrative services company to serve as a business partner in the administration of MTM services, including quality control. The MTM administrative services company functions as a stand-alone entity, enabling pharmacists access to a group of enrollees eligible for MTM services as well as providing an efficient mechanism with which to bill and receive payment for these services. Program fees collected by the MTM administrative services company from MTM sponsors are typically capitated fees (i.e., per member per month) and are used to reimburse pharmacies for MTM services provided to benefit enrollees and to cover program administrative costs.

### **Outcome Claims**

The documentation of an MTM claim is a 5-step process. In the first 3 steps of claim documentation, the pharmacist selects a Reason, Action, and Result. The Reason can be thought of as the "Indication for Service," the Action the "Professional Service" provided, and the Result the "Outcome of Service" of the intervention.<sup>13</sup> To facilitate the documentation process, Reason, Action, and Result fields are linked in a sequential manner, whereby the selection of a Reason governs possible choices for Action, and the selection of an Action governs possible choices for Result.

The fourth step in the MTM documentation process involves the pharmacist choosing the most reasonable and foreseeable ECA level, a severity rating of the MTM service provided. ECA is derived from average national health care utilization costs using a previously developed methodology.<sup>14-15</sup> The pharmacist-derived assessments of "reasonable and foreseeable" outcomes from the intervention are linked to actual ECA dollar values (e.g., \$307 per avoided physician visit, \$605 per avoided emergency room visit, and \$17,706 per avoided hospital admission in 2006). ECA values are updated annually to reflect inflation. In the final step of

the documentation process, pharmacists are required to provide detailed notes pertaining to the intervention and substantiate the rationale for the ECA level selected. The required notes are input as free text.

A proprietary MTM claim worksheet, similar to a physician superbill, is made available for pharmacists to use at the point of service (Appendix). Pharmacist worksheet information is used to generate MTM claim information which is submitted via the online documentation and billing system. This Internet-mediated interface is formatted to be similar to the MTM claim worksheet to facilitate real time capture of information. The data fields in the MTM claim documentation are listed in Table 1. Professional service fees for the MTM services provided are tied to the Reason-Action-Result fields selected on the claim worksheet and defined by the fee schedule of the MTM administrative services company. Because the Reason, Action, and Result fields are linked, as described above, the choice of Reason (Indication for Service) in effect determines the MTM fee associated with the intervention. MTM fees are \$0 and \$2 for claims with a Result (Outcome of Service) of Patient or Prescriber Refusal, respectively.

To ensure a high level of quality and provide a feedback mechanism, an outside company verifies the integrity of each claim. The quality assurance team comprises clinical pharmacists, and each claim is reviewed before reimbursement to the pharmacy is processed. The quality assurance process includes verification that MTM claim documentation is in accordance with the MTM administrative services company's policies and procedures and that the ECA level selected is reasonable and foreseeable. Claims lacking sufficient documentation of the MTM service provided, as well as those with an inappropriate ECA level (e.g., ECA Level 6 [avoidance of a hospital admission] is inappropriately selected for a cost efficacy management [therapeutic substitution] intervention) are returned to the pharmacist for further review and resubmission or rejection. Claims rejected for insufficient documentation or inappropriate or unverifiable ECA level represent a small percentage (<3.0%) of total claims and were not included in this analysis.

### **Data Elements**

Data extracted from each claim included patient demographic information (e.g., age and gender), specific information about the medication triggering the intervention (e.g., date of service, therapeutic class, and therapy type specified as acute, chronic or intermediate/other), and specific information about the service provided (e.g., Reason, Action, Result, ECA and associated ECA dollar amount). Acute therapy included medications used for a limited time period (e.g., antibiotic and one-time narcotic analgesic prescriptions), chronic therapy included medications prescribed for chronic conditions (e.g., lipid-lowering and anti-hypertensive medications), and intermediate/other medications included primarily seasonal allergy treatments. In addition, pharmacy payment information was extracted.

## Analysis of Pharmacist-Provided Medication Therapy Management (MTM) Services in Community Pharmacies Over 7 Years

**TABLE 1** Documentation of Interventions and Description of Levels of Estimated Cost Avoidance (ECA)<sup>a</sup>

1. Indication for MTM Service (REASON)	Description/Examples
1.1 Complex drug therapy	Typically applies to the presentation of a patient taking multiple medications (e.g., a patient taking 4 or more chronic medications). A few plan sponsors have slightly different thresholds (e.g., 6 or more chronic medications).
1.2 Cost-efficacy management	An order for a drug product where a more cost-effective therapeutic alternative is available (e.g., a patient is prescribed a tier-3 medication when a tier-1 medication is available and appropriate for the indication).
1.3 New or changed therapy	An order to initiate new prescription therapy or change an existing prescription therapy (e.g., patient presents with a new prescription for an antibiotic).
1.4 OTC therapy	Patient with an untreated indication for OTC therapy (e.g., male patient with an enlarged prostate seeks pharmacist's advice on avoiding cold medication containing an antihistamine).
<b>Drug Therapy Problems Detected</b>	
<b>1.5 Drug Therapy Indication</b>	
1.5a. Needs therapy	Patient with an untreated indication for prescription therapy (e.g., a patient is post-myocardial infarction and has not been prescribed a beta-blocker).
1.5b. Unnecessary therapy	An order to initiate or continue drug therapy that is not indicated (e.g., patient continued on histamine-2 blocker or proton-pump inhibitor therapy after resolution of an acute gastrointestinal episode).
<b>1.6 Drug Therapy Efficacy</b>	
1.6a. Suboptimal drug selection	An order to initiate or continue a drug therapy with suboptimal efficacy (e.g., patient with systolic heart failure receives a new prescription for propranolol or other beta-blocker not shown to decrease mortality).
1.6b. Insufficient dose or duration	An order to initiate or continue drug therapy at a dose or duration insufficient to be effective (e.g., a patient presents with uncontrolled blood sugar and is not on optimal dose of antidiabetic medication).
<b>1.7 Drug Therapy Safety</b>	
1.7a. Adverse drug reaction	A drug order with an adverse reaction risk significant enough to render the therapy unsafe, including side effects and allergic or idiosyncratic reactions (e.g., patient is on statin therapy and reports leg pain).
1.7b. Drug interaction	A drug order with a drug interaction risk significant enough to render the therapy unsafe (e.g., patient is prescribed sildenafil and a nitrate by different prescribers).
1.7c. Excessive dose or duration	An order to initiate or continue drug therapy at a dose or duration too excessive to be safe (e.g. antibiotic for a 6 year-old patient prescribed at an adult dosage).
<b>1.8 Drug Therapy Compliance</b>	
1.8a. Overuse	Patient has demonstrated overuse of a drug product and as a result is noncompliant (e.g., 30-day supply of medication lasts 15 days).
1.8b. Underuse	Patient has demonstrated underuse of a drug product and as a result is noncompliant (e.g., patient's asthma is not controlled due to underuse of long-acting inhaler and overuse of short-acting inhaler).
1.8c. Administration technique	A patient who has demonstrated inappropriate administration/technique of a drug product and as a result is non-compliant (e.g. inappropriate inhaler technique).
1.9 Other	A patient or physician intervention that results in a significant health care cost or quality improvement that does not correspond with other available billing codes.
<b>2. Professional Service (ACTION)</b>	
2.1. CMR	Comprehensive review of a patient's drug profile to identify any cost-efficacy issues or drug therapy problems.
2.2 Prescriber consultation	Consulting a prescriber to recommend a drug order change due to either a cost-efficacy issue or drug therapy problem.
2.3 Patient consultation	Consulting a patient to address a cost-efficacy issue or compliance-related drug therapy problem.
2.4 Patient education and monitoring	Patient education and monitoring of a drug therapy. Minimum patient education includes information related to the name of the drug, therapeutic class, directions for use, side effects, warnings, storage requirements, missed dose actions, and appropriate written material. Minimum patient monitoring includes collecting information about change in patient-reportable symptoms, side effects, compliance, and additional patient questions.
2.5 Patient compliance consultation	Consulting a patient to address medication overuse, underuse, or inappropriate administration technique. Pharmacist should provide follow-up monitoring to assess if compliance has been altered.
2.6 Other	Professional service provided not covered in above (e.g., patient-specific special project).
<b>3. Outcome of Service (RESULT)</b>	
3.1 CMR with drug therapy problem(s)	Completion of a CMR that results in an additional intervention being conducted due to the identification of a cost-efficacy issue or a drug therapy problem.
3.2 CMR without drug therapy problem(s)	Completion of a CMR that does not result in an additional intervention.
3.3 Initiation of a cost-effective drug	Prescriber approval of a more cost-effective drug following a pharmacist recommendation to change a drug order due to a cost-efficacy issue.
3.4 Therapeutic success	A monitoring situation in which the pharmacist has determined that a patient's condition(s) are resolved or stabilized as a result of drug therapy.

# 1 - 4

## Analysis of Pharmacist-Provided Medication Therapy Management (MTM) Services in Community Pharmacies Over 7 Years

**TABLE 1** Documentation of Interventions and Description of Levels of Estimated Cost Avoidance (ECA)<sup>a</sup>  
(continued from previous page)

3.5 Therapeutic failure	Monitoring situation in which the pharmacist has determined that a patient's condition(s) are unresolved, unstable, or worsened as a result of drug therapy.
<b>Drug Therapy Problems Resolved</b>	
<b>3.6 Drug Therapy Indication</b>	
3.6a Initiated new therapy	Prescriber approval of a pharmacist recommendation to initiate a drug order for an untreated indication.
3.6b Discontinued therapy	Prescriber approval of a pharmacist recommendation to discontinue a drug order that is not indicated.
<b>3.7 Drug Therapy Efficacy</b>	
3.7a Changed drug	Prescriber approval of a pharmacist recommendation to change a drug order that has suboptimal efficacy.
3.7b Increased dose/duration	Prescriber approval of a pharmacist recommendation to change a drug order that has a dose or duration insufficient to be effective.
<b>3.8 Drug Therapy Safety</b>	
3.8a Altered regimen/changed drug	Prescriber approval of a pharmacist recommendation to change a drug order with an adverse reaction or drug interaction risk significant enough to render the therapy unsafe.
3.8b Decreased dose/duration	Prescriber approval of a pharmacist recommendation to change a drug order that has a dose or duration too excessive to be safe.
<b>3.9 Drug Therapy Compliance</b>	
3.9a Altered compliance	Altering a patient's behavior to become compliant with a drug therapy that he or she had previously been overusing or underusing (e.g., patient's receipt of refill is within an appropriate interval, such as $\pm 20\%$ of the days supply dispensed).
3.9b Altered administration/technique	Altering a patient's behavior to become compliant with a drug therapy that had previously been administered with inappropriate technique.
3.10 Patient refusal	Patient refusal to (a) participate in a CMR, (b) receive Patient Education/Monitoring, (c) permit a physician consultation on cost-efficacy issues, or (d) alter compliance-related behavior.
3.11 Prescriber refusal	Prescriber refusal of a pharmacist recommendation to change a drug order associated with a cost-efficacy issue or a drug therapy problem.
3.12 Other	Patient or physician intervention that results in significant health care cost or quality improvement that does not correspond with other available billing codes.
<b>4. ECA Levels<sup>a</sup></b>	
For each MTM claim, the pharmacist must select the most reasonable and foreseeable ECA from 1 of the 8 available levels below.	
4.1 Level 1 – Improved quality of care	Completed patient education/monitoring whether therapeutic success or failure, all CMRs, and all other interventions that do not result in any reasonable and foreseeable cost avoidance.
4.2 Level 2 – Reduced drug product cost	Cost-efficacy management in combination with prescriber consultations that result in changes in prescribed therapy.
4.3 Level 3 – Avoided physician visit	Drug therapy problem identified and resolved by the pharmacist for which it is reasonable and foreseeable that the patient would have visited a physician if not addressed by the pharmacist.
4.4 Level 4 – Avoided new prescription order	Drug therapy problem identified and resolved by the pharmacist for which it is reasonable and foreseeable that the patient would have obtained a new prescription order if not addressed by the pharmacist.
4.5 Level 5 – Avoided emergency room visit	Drug therapy problem identified and resolved by the pharmacist for which it is reasonable and foreseeable that the patient would have needed to visit the ER if not addressed by the pharmacist.
4.6 Level 6 – Avoided hospital admission	Drug therapy problem identified and resolved by the pharmacist for which it is reasonable and foreseeable that the patient would have been admitted to the hospital if not addressed by the pharmacist.
4.7 Level 7 – Avoided life-threatening event	Drug therapy problem identified and resolved by the pharmacist for which it is reasonable and foreseeable that the patient would have faced a life-threatening situation if not addressed by the pharmacist.
4.8 Prescriber or patient refusal of recommendation	Prescriber refuses drug therapy problem recommendation or patient refuses comprehensive medication review, education/monitoring, medication change, or compliance recommendation.

<sup>a</sup> For each MTM claim, the pharmacist must document an ECA level, a severity rating assigned to the MTM service among 8 ECA levels. "Reasonable and foreseeable" is the self-reported test for avoidance of an outcome associated with a problem identified and resolved by the pharmacist.

CMR = comprehensive medication review; ECA = estimated cost avoidance; ER = emergency room; MTM = medication therapy management; OTC = over-the-counter.

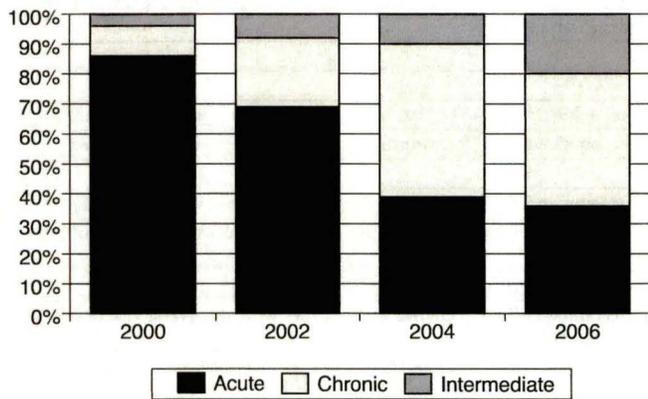
### Study Sample

A convenience sample of 50 MTM programs covering a 7-year time period from January 1, 2000, through December 31, 2006 was selected for analysis. The 50 programs represented approximately 90% of the drug plan sponsors of the MTM administra-

tive services company. Some data were not available for analysis because of confidentiality agreements with some drug plan sponsors and a few drug plan sponsors that did not use the Internet-based system. In addition, several individualized disease management programs using the Internet-based system during

#1-5

**FIGURE 1** MTM Claims Over 7 Years by Drug Therapy Type



Acute is defined as one-time use medications such as penicillin antibiotics, macrolide antibiotics, and one-time narcotic analgesics. Chronic is defined as medications prescribed for chronic conditions such as lipid-lowering agents, angiotensin converting enzyme (ACE) inhibitors, and beta-blockers. Examples of intermediate/other category include medications for seasonal allergy.

MTM = medication therapy management.

the study timeframe were excluded from this analysis.

Over 82,000 claims for 25,143 unique beneficiaries from the 50 drug plan sponsors were originally eligible for analysis. Before analysis, 1,874 claims with missing drug or incomplete patient (age and gender) information were excluded. In addition, claims from the same pharmacy with the same drug and date of service for the same beneficiary (n=3,303) also were excluded because it was thought that these most likely represented duplicate claims. These exclusions left a final analytical cohort of 76,148 claims from 50 groups administered by the MTM administrative services company. These claims represent MTM interventions performed by 1,158 unique pharmacists at 1,054 unique pharmacies for 23,798 patients.

### Analytic Strategy

Analyses were performed on the sample of 76,148 MTM claims. Distributions of the Reasons, Actions, Results, and ECA for pharmacist-generated MTM interventions were calculated, along with measures of central tendency and dispersion (mean, median, and SD) for pharmacy reimbursement per claim and ECA dollar amount. Descriptors of the unique patients comprising the study cohort also were generated. Trends occurring in MTM interventions over time were explored by comparing claims in years 2000, 2002, 2004, and 2006. These years represent time periods at the beginning, end, and 2 midpoints in the study time frame. Differences were tested for significance using Pearson chi-square tests for categorical variables and Analysis of Variance (ANOVA) for continuous variables. All analyses were conducted using SAS for Windows, Version 9.1 (SAS Institute, Cary, NC).

### Results

Data analyses for a selected subsample of MTM claims from 2000 through 2006 showed 76,148 sampled pharmacist interventions. The average age of a patient receiving MTM services over the 7-year study period was 44 years, and 39% were male (Table 2). The mean ([SD] median) MTM interventions over the 7 years were 3.2 ([3.5] 2.0) per patient. Half of the MTM interventions (49.9%) were related to medication therapy classified as acute, while 37.9% were related to therapy classified as chronic, and 12.2% of the interventions involved "intermediate" or "other" medications. The most common drug categories were antimicrobial (e.g., penicillins, macrolides), cardiovascular (e.g., statin or other lipid-lowering), and central nervous system (e.g., narcotic analgesic) agents. The most common Reason for MTM intervention was new/changed therapy (85.6%); the most common Action was patient education/monitoring (86.7%); and the most common Result was therapeutic success (70.2%; self-determined by the pharmacist). The most common ECA level selected was Level 1—Improved Quality of Care (78.8%). Interventions resulted in a mean ([SD] median) \$8.44 ([5.19] \$7.00) in reimbursement per intervention to the pharmacy, with an ECA of \$93.78 ([1,022] \$5.00) per claim.

The characteristics of the patients who received MTM services changed from 2000 to 2006, including an increase in the average age from 30.4 years to 57.6 years ( $P < 0.001$ ) and a decrease in the percentage of males, from 39.6% to 35.4% ( $P < 0.001$ ; Table 3). However, no significant differences in the mean number of MTM interventions received per patient per year from 2000 to 2006 (from 2.0 to 1.8,  $P = 0.104$ ) were observed. The classification of medication therapy associated with the MTM services changed from 2000 to 2006, with a decrease in interventions for acute medications from 86.0% to 35.6% ( $P < 0.001$ ) and a corresponding increase in interventions for chronic medications from 10.2% to 43.7% ( $P < 0.001$ ; Figure 1). Changes were also observed in drug categories over time, with decreases in antimicrobials (from 35.5% to 8.7%,  $P < 0.001$ ) and increases in cardiovascular and central nervous system agents (from 8.2% to 21.6%,  $P < 0.001$  and 5.7% to 22.7%,  $P < 0.001$ , respectively; Table 3). The most common agents associated with MTM services in 2000 were penicillins (11.1%) versus statins and other lipid lowering agents (12.5%) in 2006.

Corresponding shifts in the Reasons, Actions, and Results for MTM services over time also were observed. Notable changes in the Reason for pharmacist intervention included a decrease in new/changed drug therapy (from 87.1% to 40.0%,  $P < 0.001$ ) and an increase in cost-efficacy management (from 9.6% to 18.2%,  $P < 0.001$ ) from 2000 to 2006. The observed increase in cost-efficacy management claims was driven by pharmacist-initiated therapeutic substitution from a brand to a similarly effective, within-class generic product (e.g., escitalopram [Lexapro] to citalopram).

#1-6

## Analysis of Pharmacist-Provided Medication Therapy Management (MTM) Services in Community Pharmacies Over 7 Years

**TABLE 2** Seven-Year Summary of MTM Encounter Data

	Results		Results
<b>Patient Characteristics</b>	<b>n = 23,798</b>	<b>Characteristics of MTM Claims</b>	<b>n = 76,148</b>
Mean [SD] age in years	44.2 [26.5]	2.2 Prescriber consultation	8.7% (6,617)
% male	38.9%	2.3 Patient consultation	2.6% (1,964)
Mean ([SD] median) claims per patient over 7-year study time period	3.2 ([3.5] 2.0)	2.4 Patient education and monitoring	86.7% (66,048)
<b>Characteristics of MTM Claims</b>	<b>n = 76,148</b>	2.5 Patient compliance consultation	0.1% (114)
<b>Therapy Type: Intervention<sup>a</sup> - % (n)</b>		2.6 Other	0.1% (89)
Acute	49.9% (38,029)	<b>Result of MTM Intervention - % (n)</b>	
Chronic	37.9% (28,829)	3.1 CMR with drug therapy problem(s)	0.9% (661)
Intermediate/Other	12.2% (9,290)	3.2 CMR without drug therapy problem(s)	0.9% (655)
<b>Most Common Drug Categories - % (n)</b>		3.3 Initiation of a cost-effective drug	4.2% (3,180)
Antimicrobial	24.1% (18,383)	3.4 Therapeutic success	70.2% (53,474)
Cardiovascular system	14.4% (10,994)	3.5 Therapeutic failure	5.3% (4,024)
Central nervous system	10.6% (8,083)	3.6 Drug Therapy Indication	
<b>Most Common Drug Sub-Categories - % (n)</b>		3.6a Initiated new therapy	0.6% (430)
Penicillin antibiotics	7.3% (5,543)	3.6b Discontinued therapy	0.6% (466)
Narcotic analgesics	6.4% (4,858)	3.7 Drug Therapy Efficacy	
Macrolide antibiotics	5.1% (3,849)	3.7a Changed drug	0.6% (462)
Statins and other lipid lowering agents	3.7% (2,808)	3.7b Increased dose/duration	0.4% (303)
<b>Reasons for MTM Intervention - % (n)</b>		3.8 Drug Therapy Safety	
1.1 Complex drug therapy	1.9% (1,430)	3.8a Altered regimen/changed drug	0.9% (651)
1.2 Cost-efficacy management	4.8% (3,656)	3.8b Decreased dose/duration	0.4% (323)
1.3 New or changed drug therapy	85.6% (65,199)	3.9 Drug Therapy Compliance	
1.4 OTC therapy	1.1% (849)	3.9a Altered compliance	1.6% (1,233)
1.5 Drug Therapy Indication		3.9b Altered administration/technique	0.4% (282)
1.5a. Needs therapy	0.6% (468)	3.10 Patient refusal	11.7% (8,906)
1.5b. Unnecessary therapy	0.8% (625)	3.11 Prescriber refusal	1.0% (778)
1.6 Drug Therapy Efficacy		3.12 Other	0.4% (320)
1.6a. Suboptimal drug selection	0.7% (530)	<b>Estimated Cost Avoidance Level<sup>b</sup> - % (n)</b>	
1.6b. Insufficient dose or duration	0.4% (331)	4.1 Improved quality of care	78.8% (60,032)
1.7 Drug Therapy Safety		4.2 Reduced drug product cost	4.7% (3,602)
1.7a. Adverse drug reaction	0.7% (511)	4.3 Avoided physician visit	2.4% (1,830)
1.7b. Drug interaction	0.5% (365)	4.4 Avoided new prescription order	0.6% (485)
1.7c. Excessive dose or duration	0.5% (353)	4.5 Avoided emergency room visit	0.4% (285)
1.8 Drug therapy compliance		4.6 Avoided hospital admission	0.3% (195)
1.8a. Overuse	0.2% (124)	4.7 Avoided life-threatening event	0.1% (92)
1.8b. Underuse	1.6% (1,185)	4.8 Prescriber or patient refusal of recommendation	12.6% (9,627)
1.8c. Administration technique	0.4% (293)	<b>Mean [SD] MTM Claim Reimbursement and Estimated Cost</b>	
1.9 Other	0.3% (229)	Mean [SD] median pharmacy reimbursement	\$8.44 [\$5.19] \$7.00
<b>Action or MTM Intervention - % (n)</b>		Mean [SD] median ECA	\$93.78 [\$1,022.23] \$5.00
2.1 CMR	1.7% (1,316)		

<sup>a</sup>Acute is defined as one-time use medications; examples include penicillin antibiotics, macrolide antibiotics, and one-time narcotic analgesics. Chronic is defined as medications prescribed for chronic conditions; examples include lipid lowering agents, ACE inhibitors, and beta-blockers. Examples of intermediate/other include medications such as seasonal allergy treatments.

<sup>b</sup>Self-assessed by the pharmacist when recording the intervention.

ACE = angiotensin-converting enzyme; CMR = comprehensive medication review; DTP = drug therapy problems (e.g., drug interactions, adverse drug reactions, insufficient dose/duration); MTM = medication therapy management; OTC = over-the-counter; Rx = prescription.

Specific subcategories related to drug therapy problems detected over the 7 years were also explored. Specific examples of pharmacist-identified drug therapy problems included patients

with systolic heart failure receiving a prescription for propranolol or other beta-blocker not shown to decrease mortality (Suboptimal Drug Selection); patients skipping maintenance antipsychotic or

# 1 - M

## Analysis of Pharmacist-Provided Medication Therapy Management (MTM) Services in Community Pharmacies Over 7 Years

**TABLE 3** Changes in Characteristics of Patients and MTM Claims Over 7 Years

	Year 2000	Year 2002	Year 2004	Year 2006	P Value (Overall Differences) <sup>a</sup>
<b>Characteristics of Patients (n)</b>	<b>(2,070)</b>	<b>(5,427)</b>	<b>(4,216)</b>	<b>(1,995)</b>	
Mean [SD] age	30.4 [19.0]	31.6 [19.6]	41.8 [26.1]	57.6 [24.8]	<0.001 <sup>a</sup>
% male	39.6%	41.5%	40.4%	35.4%	<0.001
Average # [SD] claims per patient	2.0 [1.8]	2.3 [2.1]	2.8 [3.2]	1.8 [2.0]	0.104 <sup>a</sup>
<b>Characteristics of MTM claims</b>	<b>(n=4,065)</b>	<b>(n=12,338)</b>	<b>(n=11,452)</b>	<b>(n=3,525)</b>	
<b>Therapy Type Initiating Intervention<sup>b</sup> - % (n)</b>					
Acute	86.0% (3,495)	69.4% (8,559)	39.2% (4,486)	35.6% (1,255)	<0.001
Chronic	10.2% (414)	22.8% (2,819)	50.6% (5,793)	43.7% (1,540)	<0.001
Intermediate/other	3.8% (156)	7.8% (960)	10.2% (1,173)	20.7% (730)	<0.001
<b>Most Common Drug Categories - % (n)</b>					
Antimicrobial	35.5% (1,444)	33.9% (4,186)	15.8% (1,815)	8.7% (305)	<0.001
Cardiovascular system	8.2% (332)	6.3% (773)	16.7% (1,907)	21.6% (760)	<0.001
Central nervous system	5.7% (233)	7.7% (945)	14.5% (1,663)	22.7% (802)	<0.001
<b>Most Common Drug Sub-Categories - % (n)</b>					
Penicillin antibiotics	11.1% (452)	11.1% (1,375)	4.8% (544)	2.0% (70)	<0.001
Narcotic analgesics	5.3% (217)	5.5% (682)	8.2% (941)	3.3% (116)	<0.001
Macrolide antibiotics	8.2% (332)	7.8% (964)	2.8% (321)	1.5% (52)	<0.001
Statins and other lipid-lowering agents	2.3% (95)	1.7% (215)	3.6% (408)	12.5% (441)	<0.001
<b>Primary Reason for MTM Intervention - % (n)</b>					
1.1 Complex drug therapy <sup>c</sup>	0.0% (0)	0.0% (0)	1.2% (139)	6.6% (231)	<0.001
1.2 Cost-efficacy management	9.6% (390)	3.6% (446)	1.2% (134)	18.2% (640)	<0.001
1.3 New or changed drug therapy	87.1% (3,541)	94.0% (11,602)	88.1% (10,089)	40.0% (1,409)	<0.001
1.4 OTC therapy	0.0% (0)	0.3% (32)	0.6% (72)	9.2% (323)	<0.001
1.5 Drug therapy indication					
1.5a. Needs therapy	0.5% (21)	0.2% (30)	0.9% (101)	2.4% (79)	<0.001
1.5b. Unnecessary therapy	0.1% (4)	0.0% (5)	1.6% (177)	2.6% (92)	<0.001
1.6 Drug therapy efficacy					
1.6a. Suboptimal drug selection	0.2% (9)	0.1% (16)	0.6% (65)	4.3% (142)	<0.001
1.6b. Insufficient dose or duration	0.4% (18)	0.2% (22)	0.6% (69)	0.7% (23)	<0.001
1.7 Drug therapy safety					
1.7a. Adverse drug reaction	0.5% (22)	0.4% (48)	0.9% (98)	0.9% (31)	<0.001
1.7b. Drug interaction	0.3% (12)	0.2% (18)	0.6% (70)	0.5% (17)	<0.001
1.7c. Excessive dose or duration	0.3% (12)	0.2% (23)	0.9% (100)	0.5% (18)	<0.001
1.8 Drug therapy compliance					
1.8a. Overuse	0.1% (2)	0.1% (12)	0.2% (19)	0.1% (5)	0.226
1.8b. Underuse	0.5% (19)	0.5% (57)	1.6% (182)	11.8% (416)	<0.001
1.8c. Administration technique	0.2% (7)	0.1% (16)	0.4% (42)	0.9% (30)	<0.001
1.9 Other	0.2% (8)	0.1% (11)	0.8% (95)	2.0% (69)	<0.001
<b>Action or MTM Intervention - % (n)</b>					
2.1 CMR <sup>c</sup>	0.0% (0)	0.0% (0)	1.2% (139)	3.3% (117)	<0.001
2.2 Prescriber consultation	12.1% (491)	4.4% (539)	7.0% (801)	27.8% (980)	<0.001
2.3 Patient consultation	0.8% (33)	1.3% (165)	2.3% (262)	16.5% (582)	<0.001
2.4 Patient education or monitoring	87.1% (3,541)	94.3% (11,634)	88.7% (10,161)	49.1% (1,732)	<0.001
2.5 Patient compliance consultation <sup>c</sup>	0.0% (0)	0.0% (0)	0.0% (0)	3.2% (114)	<0.001
2.6 Other <sup>c</sup>	0.0% (0)	0.0% (0)	0.8% (89)	0.0% (0)	0.063
<b>Result of MTM Intervention - % (n)</b>					
3.1 CMR with DTP(s) <sup>c</sup>	0.0% (0)	0.0% (0)	0.7% (75)	0.8% (30)	<0.001
3.2 CMR without DTP(s) <sup>c</sup>	0.0% (0)	0.0% (0)	0.6% (64)	2.4% (87)	<0.001
3.3 Initiation of cost-effective drug	9.4% (382)	2.8% (350)	1.0% (114)	13.2% (467)	<0.001

# 1-8

## Analysis of Pharmacist-Provided Medication Therapy Management (MTM) Services in Community Pharmacies Over 7 Years

**TABLE 3** Changes in Characteristics of Patients and MTM Claims Over 7 Years  
(continued from previous page)

	Year 2000	Year 2002	Year 2004	Year 2006	P Value (Overall Differences) <sup>a</sup>
3.4 Therapeutic success	75.2% (3,055)	70.3% (8,677)	77.6% (8,892)	46.4% (1,634)	<0.001
3.5 Therapeutic failure	8.1% (331)	5.5% (673)	5.5% (626)	1.8% (63)	<0.001
3.6 Drug therapy indication					
3.6a Initiated new therapy	0.5% (21)	0.3% (31)	0.8% (88)	2.0% (69)	<0.001
3.6b Discontinued therapy	0.1% (4)	0.0% (3)	1.2% (137)	2.3% (80)	<0.001
3.7 Drug therapy efficacy					
3.7a Changed drug	0.2% (9)	0.1% (14)	0.5% (54)	3.1% (110)	<0.001
3.7b Increased dose/duration	0.4% (17)	0.2% (22)	0.5% (59)	0.6% (20)	<0.001
3.8 Drug therapy safety					
3.8a Altered regimen/changed drug	0.8% (34)	0.4% (55)	1.1% (128)	1.1% (40)	<0.001
3.8b Decreased dose/duration	0.3% (10)	0.2% (19)	0.7% (83)	0.6% (21)	<0.001
3.9 Drug therapy compliance					
3.9a Altered compliance	0.5% (19)	0.5% (64)	1.7% (190)	12.3% (434)	<0.001
3.9b Altered administration-technique	0.2% (7)	0.1% (11)	0.3% (39)	0.6% (23)	<0.001
3.10 Patient refusal	3.9% (159)	19.2% (2,372)	5.9% (675)	3.8% (133)	<0.001
3.11 Prescriber refusal	0.3% (11)	0.3% (38)	1.2% (133)	4.6% (162)	<0.001
3.12 Other	0.1% (6)	0.1% (9)	0.8% (95)	4.3% (152)	<0.001
<b>ECA Level - % (n)</b>					
4.1 Improved quality of care	85.1% (3,461)	76.0% (9,375)	86.2% (9,871)	66.1% (2,331)	<0.001
4.2 Reduced drug product cost	9.6% (391)	2.9% (361)	2.1% (245)	15.0% (528)	<0.001
4.3 Avoided physician visit	2.0% (80)	0.9% (113)	2.6% (299)	7.6% (267)	<0.001
4.4 Avoided new Rx order	0.7% (27)	0.4% (48)	1.0% (113)	0.4% (15)	0.045
4.5 Avoided ER Visit	0.2% (7)	0.1% (18)	0.5% (52)	0.7% (24)	0.061
4.6 Avoided hospital admission	0.0% (1)	0.1% (13)	0.4% (43)	1.7% (61)	<0.001
4.7 Avoided life-threatening event	0.0% (0)	0.1% (9)	0.2% (19)	0.1% (4)	0.068
4.8 Prescriber or patient refusal	2.4% (98)	19.5% (2,401)	7.1% (810)	8.4% (295)	<0.001
<b>MTM claim reimbursement and cost avoidance</b>					
Mean [SD] pharmacy reimbursement	\$7.65 [\$3.03]	\$5.97 [\$3.34]	\$9.25 [\$4.51]	\$12.28 [\$6.65]	<0.001 <sup>a</sup>
Mean [SD] ECA	\$24.18 [\$139.33]	\$37.47 [\$566.98]	\$114.39 [\$1,197.65]	\$429.39 [\$2,420.77]	<0.001 <sup>a</sup>

<sup>a</sup> All P values derived from Pearson chi-square except ANOVA where marked by this superscript.

<sup>b</sup> Acute is defined as one-time use medications; examples include penicillin antibiotics, macrolide antibiotics, and one-time narcotic analgesics. Chronic is defined as medications prescribed for chronic conditions; examples include lipid lowering agents, ACE inhibitors, and beta-blockers. Examples of intermediate/other include medications such as seasonal allergy treatments.

<sup>c</sup> Category not available during all years of study.

ACE=angiotensin-converting enzyme; ANOVA=Analysis of Variance; CMR=comprehensive medication review; DTP=drug therapy problems (e.g., drug interactions, adverse drug reactions, insufficient dose/duration); ECA=estimated cost avoidance; ER=emergency room; MTM=medication therapy management; OTC=over-the-counter; Rx=prescription fill.

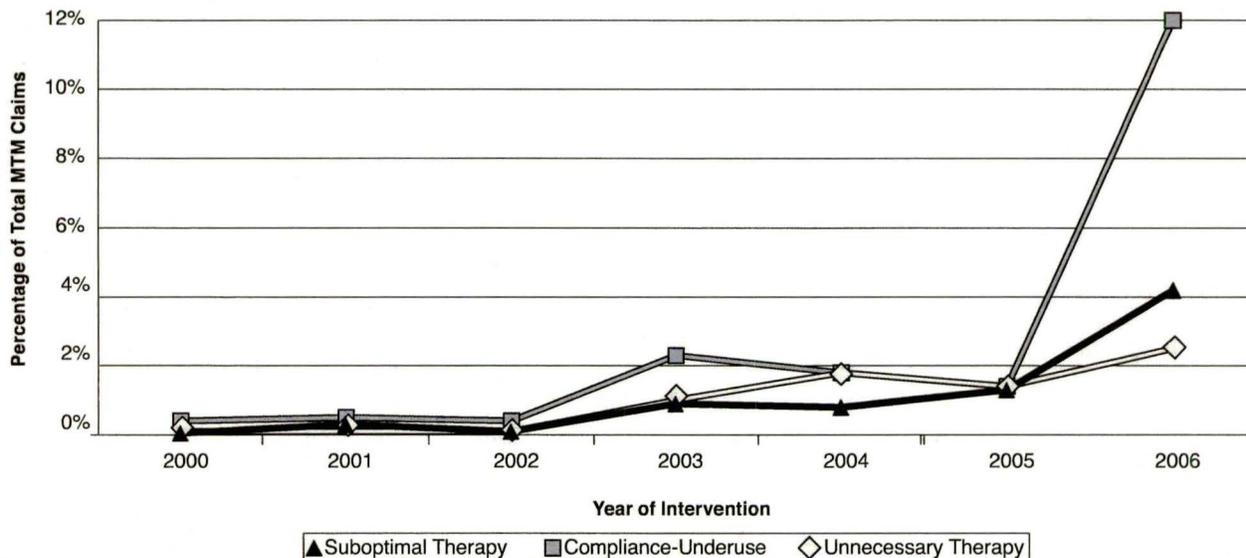
oral diabetic medications (Compliance-Underuse); and patients receiving continued histamine-2 blocker or proton-pump inhibitor therapy after resolution of an acute gastrointestinal episode (Unnecessary Therapy). (See Appendix worksheet for complete list of 10 specific subcategories of drug therapy problems from which the MTM pharmacist could choose). Subcategories showing the greatest relative increases from 2000 to 2006 (Figure 2) included: Suboptimal Drug Selection (from 0.2% to 4.3%,  $P<0.001$ ), Unnecessary Therapy (from 0.1% to 2.6%,  $P<0.001$ );

and Compliance-Underuse (from 0.5% to 11.8%,  $P<0.001$ ).

Notable changes in the "Action" of MTM interventions provided from 2000 to 2006 included a shift from patient education/monitoring (87.1% to 49.1%,  $P<0.001$ ) to more prescriber consultations (12.1% to 27.8%,  $P<0.001$ ). Changes in the "Result" associated with the MTM intervention included a shift from the outcome of therapeutic success (75.2% to 46.4%,  $P<0.001$ ) to an alteration in medication compliance (0.5% to 12.3%,  $P<0.001$ ). In addition, it should be noted that, although 11.7% of claims

#1-9

**FIGURE 2** Change in the Reasons for MTM Intervention Over 7 years for 3 Drug Therapy Subcategories With the Greatest Relative Increase



These are categories of drug therapy problems. An example of suboptimal therapy includes a patient with heart failure receiving a prescription for a beta-blocker not shown to decrease mortality; compliance-underuse includes a patient skipping a maintenance medication dose; and unnecessary therapy is continued proton-pump inhibitor therapy after resolution of an acute gastrointestinal episode. MTM=medication therapy management.

documented over the 7-year study period were patient refusals, the patient refusal rate steadily declined from a high of 19.2% in 2002 to 3.8% in 2006. This trend can be attributed to 2 possible factors—the claims date back to the early 2000’s, when MTM services were not as widely recognized and a change in the ability of both pharmacists and the MTM administrative services company to show the value of MTM services to patients. Somewhat surprisingly, prescriber refusal increased during a similar period, from less than 1% in 2000 to 4.6% in 2006. The increase in prescriber refusal is likely related to the marked increase in interventions involving prescriber consultations that occurred during this time period. Notable changes in the ECA level (Outcome of Service) from 2000 to 2006 included fewer claims submitted with improved quality of care (from 85.1% to 66.1%,  $P<0.001$ ) and an increase in claims submitted with ECA related to reduction in drug costs (from 9.6% to 15.0%,  $P<0.001$ ).

Finally, examination of changes in MTM reimbursement over time revealed a greater than 60% increase in the mean (SD) pharmacy payment from \$7.65 (\$3.03) in 2000 to \$12.28 (\$6.65) in 2006. The ECA mean (SD) dollar amount per claim increased from \$24.18 (\$139) to \$429 (\$2,421) from 2000 to 2006 ( $P<0.001$ ). It should be noted that a relatively small number of high-impact claims led to significant changes in the ECA in the latter portion of the evaluated time period. Specifically, notable

increases in the percentage of total claims that were assigned ECA Level 4.6, avoidance of a hospital admission, occurred in both 2004 and 2006 relative to previous years.

**Discussion**

This MTM administrative services company has one of the largest databases of MTM service claims and includes a nationwide sample of claims submitted over more than 7 years. The present study represents the first analysis of the MTM claims in this database. The MTM administrative services company has adopted a cost avoidance model as a means to demonstrate the value that pharmacists add to the U.S. health care system, and this study includes the first report of pharmacist self-assessment of the ECA associated with MTM interventions. Examination of claims from 50 MTM programs over a 7-year period found that the types of pharmacist-provided MTM services have changed over time, associated with increases in mean MTM reimbursement to pharmacies and ECA.

Over the past several years, MTM interventions have evolved from the provision of patient education involving acute medications toward consultation-type services for chronic medications. These shifts suggest that the provision of MTM services will become increasingly vital as the population ages. Specific trends related to drug therapy problems included an increase in services related to suboptimal drug selection, unnecessary therapy,

#1-10

and compliance-underuse. In addition, the MTM services evaluated in this study show an increase over time in the MTM-related ECA derived from pharmacists' self-assessments. This change suggests that pharmacists are well-suited and positioned to identify, resolve and prevent medication-related complications that result in substantial health care costs. However, it should be noted that since this study lacked a comparison group, other explanations for observed changes in MTM services cannot be fully dismissed. Other plausible explanations include changes in the number and demographics of the populations served, as well as possible changes in pharmacist documentation patterns related to MTM interventions.

In a landmark 1995 study, Johnson and Bootman projected the costs associated with drug therapy problems to be \$76.6 billion.<sup>14</sup> In an update 6 years later, the projected costs associated with drug therapy problems had increased to \$177.4 billion.<sup>15</sup> The authors also expressed that the high costs of drug-related morbidity and mortality should play a factor in health policy decisions and that pharmaceutical care, now termed Medication Therapy Management, could be a strategy to prevent drug therapy problems and reduce associated costs.<sup>14</sup> A 2005 study by Stebbins et al. of pharmacist provided MTM type services found that pharmacists could significantly decrease patients' out-of-pocket expenses by enrolling patients in manufacturer-sponsored patient assistance programs, switching patients to appropriate generic or therapeutic alternatives, and employing other cost-saving measures such as tablet splitting.<sup>16</sup> Pharmacists at the clinic were able to save the average patient over \$90 during the first year of the study and over \$60 during the second year of the study. Although the findings of the study by Stebbins et al. are encouraging, it should be noted that they were limited to elderly lower-income patients who used a single medical clinic, and that the cost-saving estimates were limited to savings in out-of-pocket prescription drug expenses.

The current study suggests that MTM services provided by community pharmacists may have favorable effects beyond educational benefits and out-of-pocket medication costs for patients and MTM program sponsors. Specifically, MTM services provided by community pharmacists may have a favorable effect on medical costs associated with avoidance of physician visits, emergency room visits, hospital admissions, etc. The proportion of MTM claims in which pharmacists self-rated their services as avoiding higher dollar medical cost events increased from 2000 to 2006. While the exact reason for these sharp increases is unknown, this trend is expected to continue as pharmacists are given more opportunities to provide MTM services and receive reimbursement for the identification and resolution of increasingly complex drug therapy problems. Further, this observation may reflect the expanding role of pharmacists in the avoidance of significant

morbidity and mortality as MTM programs mature. Activities undertaken to avoid high-cost medical events included ensuring that patients were on appropriate guideline-recommended therapy, such as aspirin and beta-blocker use in patients following a myocardial infarction and use of ACE inhibitors in diabetic patients without a contraindication. Other specific examples of pharmacist interventions that were considered as preventing a hospitalization included patients taking multiple beta-blockers, patients prescribed multiple potassium products, patients reporting severe cramps or leg pains while on statin therapy, and mental health patients grossly noncompliant on chronic antipsychotic therapy.

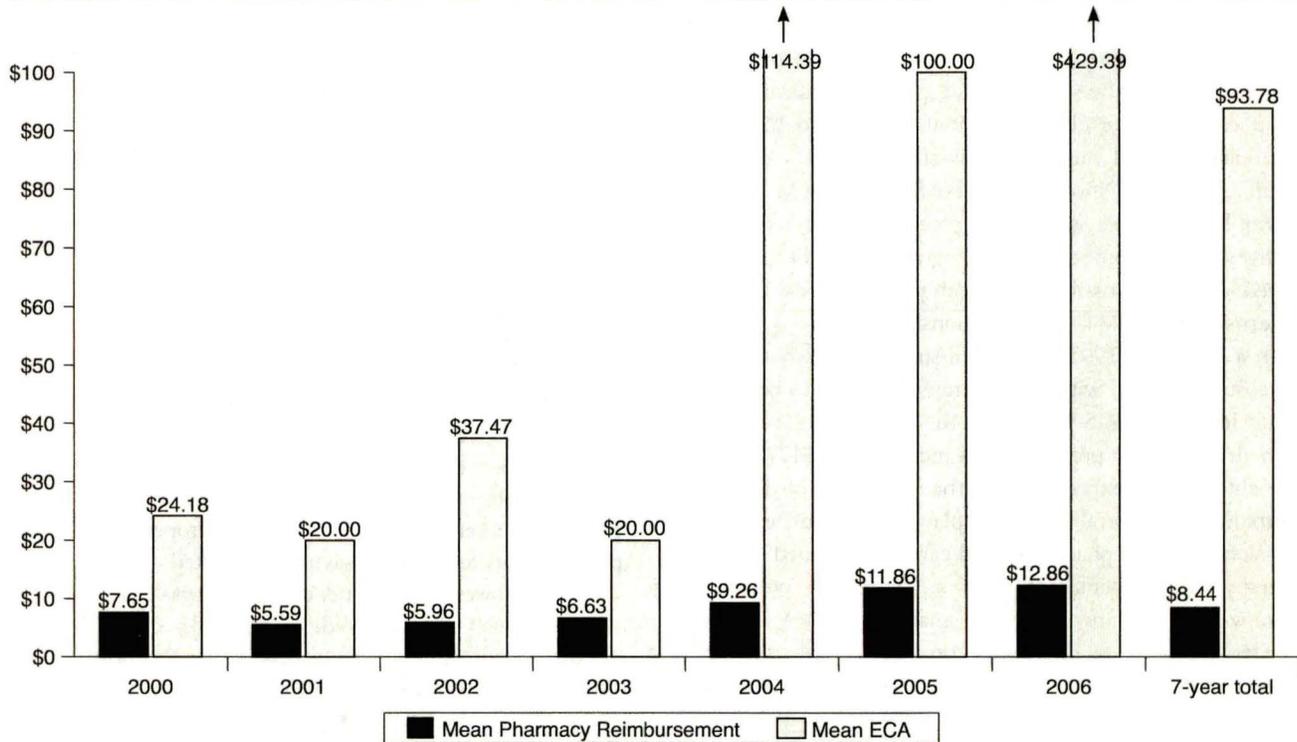
### **Limitations**

Foremost among the study limitations are the self-reported estimates of cost avoidance without follow-up assessment of the actual avoidance of health care utilization events, such as office visits and hospitalizations. In addition, a recent (2008) study of pharmacist interventions, conducted by Kroner et al., found that projected medication cost savings overstated actual cost savings by 14%.<sup>17</sup> However the Kroner et al. study was limited to medication conversion savings and did not include cost-saving analyses of other resources, such as physician visits and hospitalizations, which were included in the present study. Second, the absence of a comparison group makes this a descriptive report without the ability to attribute outcomes to the pharmacist interventions; there is no way to determine if the billed MTM intervention would have been performed without the MTM administrative services company's network, either by another health care provider or by a patient representative.

Third, the study employed a sample of MTM claims from some but not all MTM programs in the database of the MTM administrative services company. For example, the company administers a number of comprehensive disease state management programs, and the claims for these programs were not included in this analysis because they use a different documentation and billing system. In addition, not all MTM programs were active throughout the entire study timeframe. While most original plans renewed their contract for services, some plans left and other plans were added; thus some observed trends may be attributable to changes in the eligibility cohort. In addition, data were presented for even calendar years, but many programs were administered in accordance with insurer fiscal year dates. Thus, the apparent relative decrease in the number of patients and claims in 2006 is misleading. Follow-up analyses from calendar year 2005 and early calendar year 2007 show an upward trend in the number of patients provided MTM services by this MTM administration company. In addition, it should be noted that the claims represent real-world pharmacist MTM interventions across a 7-year time period, from 2000-2006, and encompass 50 MTM programs which were administered nationally to a wide variety of patients.

A 1- 11

**FIGURE 3** Mean Pharmacy Payment for MTM Services and Mean ECA



ECA = estimated cost avoidance; MTM = medication therapy management.

**Conclusions**

MTM services appear to be evolving from patient education involving acute medications to more complex prescriber

consultation-type services for older patients receiving chronic medications. Further, these changes are associated with greater reimbursement amounts and greater estimated cost savings. While the causal factors underlying these changes remain to be fully explained, the changes appear to be directly linked to requirements outlined in Medicare Part D legislation. Opportunities beyond Medicare Part D are likely to expand as well, particularly for employers and other government-sponsored programs.

**Authors**

MITCHELL J. BARNETT, PharmD, MS, is Assistant Professor; SHANNON VONMUENSTER, PharmD, is Fellow and Clinical Instructor; HEIDI WEHRING, PharmD, at the time of this study was Assistant Professor; and PAUL J. PERRY, PhD, is Professor and Chair at Touro University, College of Pharmacy, Clinical Division, Vallejo, California. JESSICA FRANK, PharmD, is Director of Clinical Services; BRAND NEWLAND, PharmD, is Vice President; PATTY KUMBERA, BSPHarm, is a co-founder and Chief Operating Officer; and TOM HALTERMAN, BSPHarm, is a co-founder and Chief Executive Officer at Outcomes Pharmaceutical Health Care, Des Moines, Iowa.

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**DISCLOSURES**

There was no external funding for this research. Four of the authors are employees of the MTM administrative services company described in this article. The authors acknowledge Danielle M. Richardson, BS, PharmD Candidate, for her assistance in the preparation of this manuscript.

Concept and design, data collection, data interpretation, and revision of the manuscript were primarily the work of Barnett. Newland and Perry assisted with concept and design and with data interpretation, Frank and Newland assisted with data collection, and Frank and VonMuenster assisted with revision of the manuscript. The work of writing the manuscript was shared equally by Barnett, Wehring, Kumbera, and Halterman.

#1-12

## Analysis of Pharmacist-Provided Medication Therapy Management (MTM) Services in Community Pharmacies Over 7 Years

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House Human Services Committee

SB 2320 11:00 AM

03-10-15

Chairman Weisz and members of the committee, for the record, my name is Mike Schwab the Executive Vice President of the North Dakota Pharmacists Association. We are here today in support of SB 2320.

Over the past decade, medication therapy management (MTM) services provided by pharmacists has gained widespread attention for achieving improved outcomes in patients with chronic health care issues, while also reducing health care costs.

**What is MTM?**

MTM focuses on patients with chronic conditions that require maintenance medications, such as high cholesterol, asthma, diabetes, CHF and pain. MTM is designed to catch "at risk" patients through a series of interventions by health care providers, with pharmacists being the most accessible and prevalent in providing such services.

**What are some of the core elements of an MTM service?**

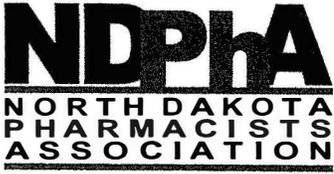
- Review all current medications including nonprescription agents (OTC).
- Assess any medication-related problems.
- Provide a personal medication record to the patient and primary care provider for care coordination.
- Compile a medication-related action plan for tracking patient self-management.
- Identify cases needing targeted interventions including collaborating with other clinicians.

Studies of pharmacists providing MTM services to improve therapeutic outcomes indicate that such services can improve health outcomes and reduce costs. Below we have listed some of the benefits and PROVEN return on investment from MTM services.

- Minnesota Medicaid MTM program resulted in a 31% reduction in total health care spend per patient. The savings exceeded the cost of services by 12:1.
- The Checkmeds program in North Carolina MTM program has generated a savings of approximately \$66.7 million in overall health care costs, which included \$35 million from avoided hospitalization and \$8 million in drug product cost savings.
- Ohio's Medicaid MTM program's total savings including avoided hospitalizations, emergency visits, and unnecessary consumption are yielding a ROI of 4:1.
- NDPERS Collaborative Drug Therapy program of just diabetes in the first two years (2009-2011) provided a \$71.14 savings per month for those members in the program. Just hard claims data pre and post program showed a \$2.34 return for every dollar being spent. Thanks to this legislature, NDPERS, BC/BS of ND and our pharmacists, the program and the results were actually featured in the America's Pharmacist Journal a couple of years ago.

Centers for Medicare and Medicaid currently require all Medicare Part D plans to include MTM services into their plans benefit structure for seniors due to the success of MTM services in providing healthier outcomes and return on investment. There are currently 18 states that have some type of MTM service being offered and reimbursed under state plans. BC/BS of ND offers MTM services under their plan design and recently Sanford Health Plan decided to offer MTM services under Medicaid Expansion.

The implementation and expansion of MTM services has been highlighted and supported by the U.S. Surgeon General calling for the full integration of pharmacists into health care teams and allowing them to use their full scope of practice. On January 13<sup>th</sup> of this year, the National Governor's Association released a paper calling for states to fully integrate



pharmacist's into the health care continuum and to use their expertise as the medication experts through services such as MTM.

Medication non-adherence costs this country over \$100 billion dollars annually. As part of the efforts to increase medication adherence and actively engage patients in their own health, MTM services should be implemented to help any patient with medication-related problems.

Again, we ask for your support of SB 2320. I would like to thank you for your time and attention today. I would be happy to try and answer any questions that you might have for me.

Respectfully Submitted,

A handwritten signature in black ink that reads "Mike Schwab". The signature is written in a cursive, flowing style.

Mike Schwab

EVP NDPhA

## **MTM Medication Adherence information:**

1. Hosp Pharm. 2014 Oct;49(9):826-38. doi: 10.1310/hpj4909-826.

### **A quantitative evaluation of medication histories and reconciliation by discipline.**

Kramer JS<sup>1</sup>, Stewart MR<sup>2</sup>, Fogg SM<sup>1</sup>, Schminke BC<sup>1</sup>, Zackula RE<sup>3</sup>, Nester TM<sup>1</sup>, Eidem LA<sup>1</sup>, Rosendale JC<sup>1</sup>, Ragan RH<sup>1</sup>, Bond JA<sup>1</sup>, Goertzen KW<sup>1</sup>.

#### **Author information**

#### **Abstract**

#### **BACKGROUND/OBJECTIVE:**

Medication reconciliation at transitions of care decreases medication errors, hospitalizations, and adverse drug events. We compared inpatient medication histories and reconciliation across disciplines and evaluated the nature of discrepancies.

#### **METHODS:**

We conducted a prospective cohort study of patients admitted from the emergency department at our 760-bed hospital. Eligible patients had their medication histories conducted and reconciled in order by the admitting nurse (RN), certified pharmacy technician (CPhT), and pharmacist (RPh). Discharge medication reconciliation was not altered. Admission and discharge discrepancies were categorized by discipline, error type, and drug class and were assigned a criticality index score. A discrepancy rating system systematically measured discrepancies.

#### **RESULTS:**

Of 175 consented patients, 153 were evaluated. Total admission and discharge discrepancies were 1,461 and 369, respectively. The average number of medications per participant at admission was 8.59 (1,314) with 9.41 (1,374) at discharge. Most discrepancies were committed by RNs: 53.2% (777) at admission and 56.1% (207) at discharge. The majority were omitted or incorrect. RNs had significantly higher admission discrepancy rates per medication (0.59) compared with CPhTs (0.36) and RPhs (0.16) (P < .001). RPhs corrected significantly more discrepancies per participant than RNs (6.39 vs 0.48; P < .001); average criticality index reduction was 79.0%. Estimated prevented adverse drug events (pADEs) cost savings were \$589,744.

#### **CONCLUSIONS:**

RPhs (pharmacists) committed the fewest discrepancies compared with RNs and CPhTs, resulting in more accurate medication histories and reconciliation. RPh involvement also prevented the greatest number of medication errors, contributing to considerable Adverse Drug Event (ADE)-related cost savings.



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Executive Director

**Senate Bill 2320 – Medication Therapy Management for Medicaid  
House Human Services Committee – Fort Union Room  
11:00 AM - Tuesday – March 10, 2015**

Chairman Weisz, members of the House Human Services Committee, for the record I am Jake Decker, an NDSU College of Pharmacy PharmD candidate completing a rotation with the North Dakota State Board of Pharmacy. I will be providing testimony on behalf of the Board of Pharmacy on House Bill 2320 Medication Therapy Management for Medicaid eligible individuals.

The Board of Pharmacy supports the provision of HB2320 for establishing a medication therapy management program for Medicaid eligible patients.

The public benefits greatly from the knowledge that a pharmacist provides a patient through direct one on one contact. Using medication therapy management to achieve optimal therapeutic drug regimens is not only beneficial to the overall health of the patient but is also beneficial to the cost of their healthcare overall. The Minnesota medication therapy management program resulted in a 31% reduction of total health care spent per patient. This resulted in a savings of \$8,197 to \$11,965 savings per patient.

An important component of medication therapy management is ensuring proper communication to other healthcare professionals to ensure collaboration of care for the patients. Equally important is the necessity of the pharmacist to provide a healthcare record for the patient on the interactions and interventions which the pharmacist had made with the patient.

The North Dakota Pharmacists Association [NDPhA] has been a leader with their electronic recordkeeping system "*About the Patient Program*" through the North Dakota Employees Retirement Systems [PERS]. We believe they can expand on that success to provide a service to the Department of Human Services.

Thank you for the opportunity to speak on this bill. If you have any questions, the Board of Pharmacy Executive Director Mark Hardy, PharmD and I will be happy to answer them.

#3

House Human Services Committee

Re: SB 2320

03-10-15

Chairman Weisz and members of the committee, for the record my name is Shelby Monson, a future pharmacist who will be practicing in North Dakota. I am here today in support of SB 2320, which would create a medication therapy management program for Medicaid-eligible individuals.

As I have progressed through my schooling, I have become aware of the numerous benefits medication therapy management (MTM) has to offer. Pharmacists are medication-use experts, therefore, it is certain that the public will profit from such services from pharmacists. I have had first-hand experience with MTM as I have participated in a MTM clinic. A few of the benefits that I have witnessed include improved patient compliance, increased patient involvement in their care, decreased costs, and identification and resolution of medication-related problems. Commonly identified medication-related problems include:

- splitting tablets that should not be split
- medication taken as needed when it should be taken daily to provide benefit
- medication taken at the wrong time of day
- medication duplications and interactions

Additionally, MTM programs improve collaboration among the pharmacist, the patient, and the patient's healthcare team. Because many individuals have multiple chronic diseases, they may see multiple healthcare providers. Medication therapy management services are documented and any recommendations are discussed with the patient's healthcare providers and the patient, ultimately improving patient care. Pharmacists providing MTM services play a key role in reconciling patients' medication lists.

Thank you for the opportunity to speak on this bill. Please let me know if you have any questions and I will do my best to answer them for you.

Respectfully Submitted,

Shelby Monson  
2015 Pharm.D. Candidate