WISCONSIN STATE LEGISLATURE COMMITTEE HEARING RECORDS

2003-04
(session year)

Assembly
(Assembly, Senate or Joint)

Committee on Public Health (AC-PH)

(Form Updated: 11/20/2008)

COMMITTEE NOTICES ...

➢ Committee Reports ... CR
**

➢ Executive Sessions ... ES
**

➢ Public Hearings ... PH
**

➢ Record of Comm. Proceedings ... RCP
**

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL ...

➢ Appointments ... Appt
**

Name:

➢ Clearinghouse Rules ... CRule
**

➢ Hearing Records ... HR (bills and resolutions)
**03hr_ab0894_AC-PH_pt01

➢ Miscellaneous ... Misc
**

Vote Record
Committee on Public Health

Date: 3/23/04

Moved by: Freese Seconded by: McCormick

AB ____ SB 426 Clearinghouse Rule ____

AJR ____ SJR ____ Appointment ____

AR ____ SR ____ Other ____

A/S Amdt ____

A/S Amdt ____ to A/S Amdt ____

A/S Sub Amdt ____

A/S Amdt ____ to A/S Sub Amdt ____

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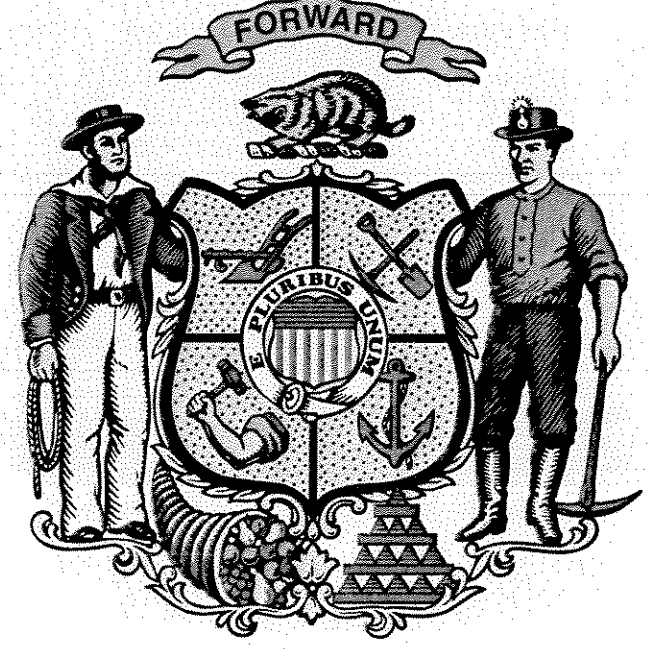
Be recommended for:
☐ Passage ☐ Adoption ☐ Confirmation ☑ Concurrence ☐ Indefinite Postponement
☐ Introduction ☐ Rejection ☐ Tabling ☐ Nonconcurrence

Committee Member	Aye	No	Absent	Not Voting
Representative J.A. Hines, Chair	☑	☐	☐	☐
Representative DuWayne Johnsrud	☐	☐	☑	☐
Representative Gregg Underheim	☑	☐	☐	☐
Representative Stephen Freese	☑	☐	☐	☐
Representative Terri McCormick	☑	☐	☐	☐
Representative Sheldon Wasserman	☑	☐	☐	☐
Representative Johnnie Morris	☑	☐	☐	☐
Representative Marlin Schneider	☐	☐	☑	☐
Totals:	6	0	2	____

☐ Motion Carried ☐ Motion Failed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MARSHFIELD CLINIC.

Where the future of medicine lives

DATE: March 3, 2004

FROM: Robert E. Phillips, M.D., Medical Director, Government Relations

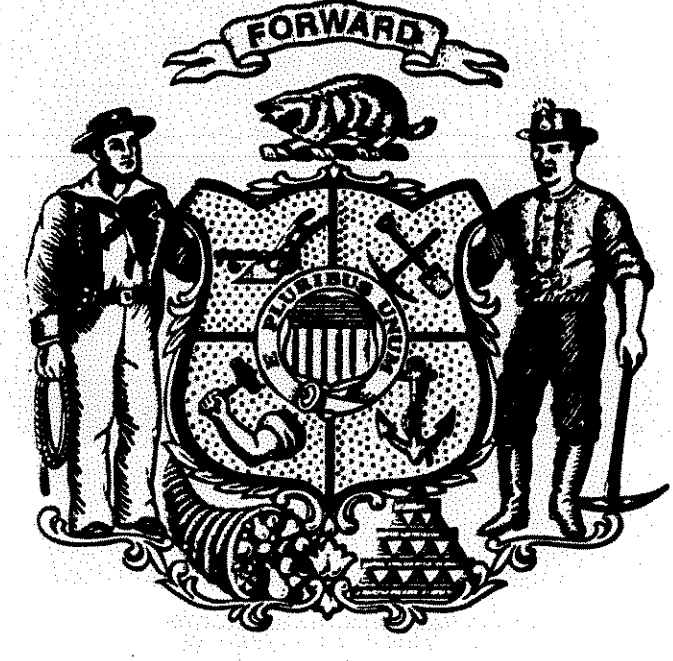
RE: SB 426

The purpose of this communication is to convey to you Marshfield Clinic's opposition to expand who may administer vaccinations in non-clinical settings, specifically those supervised by pharmacists. Recognizing that under current Wisconsin Statutes 450.035 licensed pharmacists who receive approved certification may administer vaccinations in their places of business, there exists the medical concern for serious, albeit rare, life threatening allergic reactions to constituents of vaccines for which immediate emergency care may be critical and life saving. This involves not just knowledge of basic cardiac resuscitation care, but also the administration of intravenous medications, establishing a patent airway and transferring an individual to a medical facility capable of treating such reactions.

We acknowledge the benefit that has occurred from access to vaccinations for the public historically. We also, in general, support health care educational activities. However, from a patient safety perspective, this legislation is not prudent.

We hope this information is helpful in discussion of this legislation.

If you have questions, please feel free to contact me directly at 715-221-8692.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REPRESENTATIVE CURTIS GIELOW
State of Wisconsin, Twenty-Third Assembly District

Testimony to the Assembly Committee on Public Health
on Assembly Bill 894 / Senate Bill 426

March 3, 2004

Mr. Chairman and Members:

Thank you for your consideration of Assembly Bill 894 / Senate Bill 426. As a pharmacist myself I have a great interest in this simple commonsense proposal.

Currently, licensed pharmacists are allowed to inject a patient for the purpose of teaching the patient self-administration techniques. This is done most often for insulin shots.

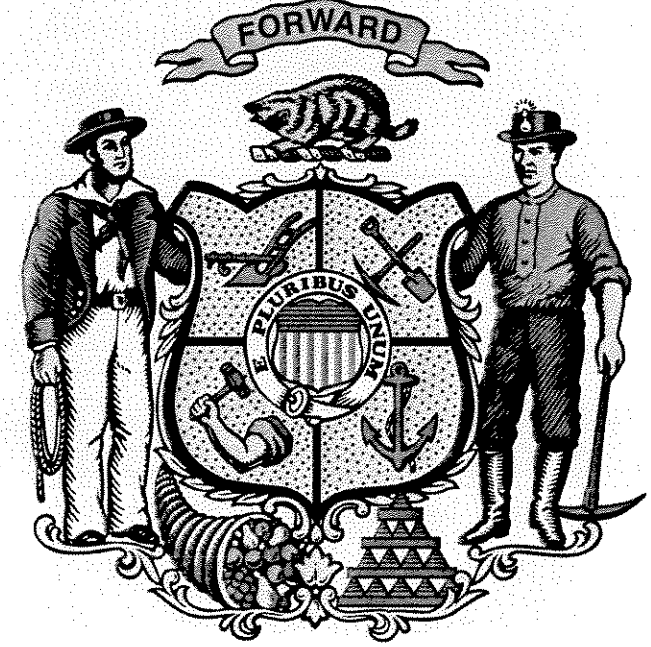
AB 894 and its Senate companion bill SB 426 would allow pharmacy interns who have completed all education requirements pertaining to the procedure, to administer vaccinations while the intern is completing a pharmacy internship under a licensed and insured pharmacist.

- Pharmacy intern students are already allowed to perform all other functions of a pharmacist under direct supervision of a licensed pharmacist.
- To be a pharmacy intern one must be in at least the second year of pharmacy school; must be currently enrolled in pharmacy school; and must have applied for a pharmacy license.
- Again, under the bill such injections could only be performed by interns under the direct supervision of a licensed pharmacist. Both the pharmacists and the intern must have completed appropriate vaccination courses.
- This legislation would allow interns to vaccinate only people over the age of 18, a restriction also currently applying to a regular licensed pharmacist.

This seems to me a commonsense way to provide hands-on training to aspiring pharmacists and I hope the committee will recommend the legislation for passage.

Thank you for your attention.

State Capitol: P.O. Box 8952 • Madison, Wisconsin 53708-8952
(608) 266-0486 • Toll-Free: (888) 534-0023 • Rep.Gielow@legis.state.wi.us
District: P.O. Box 504 • Mequon, Wisconsin 53092 • (262) 242-2728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Testimony before the Assembly Committee on Public Health

By Tom Engels, Vice President of Public Affairs for the Pharmacy Society of Wisconsin

The Pharmacy Society of Wisconsin represents over 2,000 pharmacists and pharmacy practices and we strongly support the passage Assembly Bill 894 and its Senate companion SB 426. This bill is a necessary addition to current state law as it relates to the education of pharmacists.

Current law already allows pharmacy interns to perform all the functions of a pharmacist while under the direct supervision of a pharmacist. Pharmacists in Wisconsin have been allowed in Wisconsin to administer vaccinations and prescribed drug products since 1997. However, pharmacists must meet educational requirements before performing these functions.

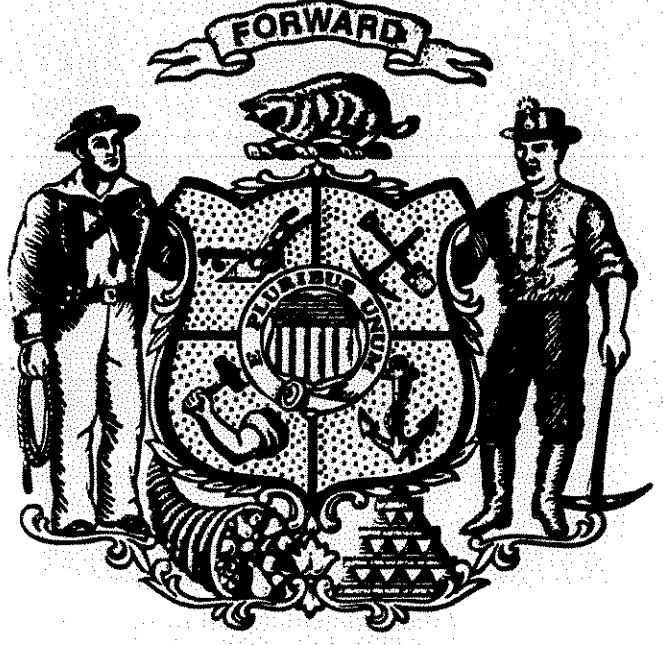
When the legislation was signed by former Gov. Thompson, a provision was included that prohibited pharmacists from delegating the authority to a pharmacy technician or another pharmacy employee. The Wisconsin Pharmacy Examining Board believes that a technical correction needs to be made to current law that allows qualified pharmacy interns to perform these functions under the direct supervision of a licensed pharmacist. In order to qualify, both the intern and pharmacist should meet the required educational criteria.

The intent of Assembly Bill 894 is to clarify current law and to provide for the full educational needs of pharmacists.

Although, the bill is simply a technical modification to a current law, it's a necessary correction. Pharmacy students are required to have 1,500 hours of clinical clerkship as a condition of licensure. Clinical clerkships allow hands-on patient care experience that is no different than that of medical or nursing students.

Working under the direct supervision of a pharmacist, interns can gain the experience they will need in all levels of pharmacy. Without this educational experience they will denied the opportunity to learn these skills before they are licensed. Without the passage of this bill, interns will continued to be denied an opportunity to assist with the administration of vaccines that save lives and prevent serious illness to thousands of Wisconsin citizens.

We urge the committee to take immediate action on Assembly Bill 894. Thank you and I will be glad to answer any questions members may have.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The role of pharmacists in the delivery of influenza vaccinations

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Abstract

Objectives: The purpose of this study is to determine whether influenza vaccine rates have increased in states where pharmacists can give vaccines. *Methods*: Secondary analysis of the Behavioral Risk Factor Surveillance System (BRFSS) from the years 1995 and 1999. Information regarding legislation allowing pharmacists to administer vaccines was obtained from the American Pharmaceutical Association. *Results*: Individuals aged 65 years and older who lived in states where pharmacists could provide vaccines had significantly higher ($P < 0.01$) influenza vaccine rates than individuals of this age who resided in states where pharmacists could not provide vaccines. *Conclusions*: Allowing pharmacists to provide vaccinations is associated with higher influenza vaccination rates for individuals aged 65 years and older.

Keywords: Pharmacists; Influenza; Vaccinations

1. Background

Influenza is a major cause of morbidity and mortality in the US. More than 200,000 hospitalizations and 20,000 deaths each year can be attributed to influenza [1,2]. Immunization is a key element in the prevention of influenza. However, adult immunization rates for influenza are well below the Healthy People 2010 goal of 90% [3]. Influenza immunization rates in 1995 ranged from 54 to 74% of the US population aged 65 years and over [4,5].

Obstacles to immunization have been reported in various studies [6–8]. These include patient-related (apathy, lack of knowledge, inability to pay, transportation), provider-related (missed opportunities, misconceptions regarding contraindications to immunizations), and clinic-related (inadequate staff and service hours) obstacles. Because the focus of health care has shifted towards prevention, it is of utmost importance to remove these obstacles.

Several strategies have been explored to help improve immunization rates against influenza. These include standing nursing orders, physician chart reminders, physician education, walk-in visits for vaccinations, and direct mailings to patients [9–11]. Another strategy that has been employed is allowing pharmacists to provide immunizations in their practice setting. As of August 2002, there were 35 states that allowed pharmacists to provide immunizations [12].

Pharmacists are in a unique position to help overcome many of the obstacles listed above because they are arguably the most accessible of all health care professionals [13]. Community pharmacies have the advantage of extended business hours and convenient locations [14]. In fact, approximately 250 million people walk into a pharmacy every week [15]. Pharmacists can not only educate patients about vaccines and promote immunization, but they can also administer these vaccinations in many states.

Several small-scale studies have examined pharmacists' abilities to increase vaccine awareness and administration [16–24]. Overall, immunization rates were shown to increase in these studies and patients were satisfied with pharmacists providing these immunizations. According to a report by the American Pharmaceutical Association (APhA), more than 300,000 vaccine doses were administered by over 2500 pharmacists nationwide in 1999 [16]. Allowing pharmacists to provide immunizations, however, does not remove all obstacles of the vaccine delivery process. Pharmacists themselves rated lack of time, concern for legal liability, and lack of reimbursement as the top three obstacles to the provision of immunization services [15].

The purpose of this study is to determine, using a large national dataset, whether immunization rates for influenza have increased in states where pharmacists can give vaccines.

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2. Methods

For this analysis, the 1995 and 1999 Behavioral Risk Factor Surveillance System (BRFSS) was used. The BRFSS is an annual telephone survey conducted by the Centers for Disease Control and Prevention that assesses health risks in the US. In this survey, individuals are asked, "During the past 12 months, have you had a flu shot?" The answer to this question was used to determine an individual's influenza vaccine status.

Information regarding legislation allowing pharmacists to administer vaccinations was obtained from the American Pharmaceutical Association (e-mail communication from Mitch Rothholz, APA, August 2002). States were then divided into two categories: those that allowed pharmacists to give immunizations and those that did not. A 1-year delay to allow for implementation of the legislation was allowed.

This study assessed influenza vaccine in two subgroups of the population: those aged 18–64 years and those aged 65 years and older. This breakdown was made because of the recommendation that all individuals 65 years and older should have the influenza vaccine while only a subset of individuals aged 18–64 years are recommended to be immunized [4].

2.1. Analysis

To address the complexity of the study question, two different analyses were performed.

2.2. Quasi-experimental

To assess the impact of legislation allowing pharmacists to administer vaccine, a quasi-experimental analysis was performed. As the number of states that allowed pharmacists to give vaccines varied from year to year, we conducted our analysis using a matched-pairs design. Sixteen states were taken from the BRFSS to compare influenza vaccination rates for individuals both 18–64 and 65 years and older. Eight of these states (Arkansas, Kansas, Nebraska, North Dakota, Oklahoma, Tennessee, Texas and Virginia) passed legislation in 1997 allowing pharmacists to administer vaccines while eight (Louisiana, Missouri, Iowa, Wyoming, Utah, West Virginia, Florida, and Maryland) had no legislation prior to 2000. Data for the years 1995 and 1999 were then analyzed. Chi-square analysis was used to compare the rates of vaccinations for each year and the location of vaccine delivery. The weighted percentages from the datasets were used in SUDAAN to determine nationally representative population estimates for comparison.

2.3. Logistic regression model

To determine the impact of allowing pharmacists to provide vaccines in a given year, a logistic regression model was created to account for other factors that may change influenza vaccine rates.

2.4. Variables

The external factors that were accounted for included the following.

State of residence: Two categories were created for this variable. These were states where pharmacists are allowed to provide vaccines and states where pharmacists cannot administer vaccines.

Sociodemographic variables: These included sex; income dichotomized into less than US$ 20,000 or greater than or equal to US$ 20,000; education classified as less then high school, high school graduate, some college, college graduate or higher; and race, which was classified by the BRFSS as White, Black, Asian/Pacific Islander, American Indian/Alaska native and other.

Health status was determined by the answer to the question, "How would you rate your overall health: excellent, very good, good, fair, or poor?"

Health insurance was determined by the answer to the question, "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?"

The issue of the cost of health care as a barrier was addressed using the proxy, "Was there a time during the last 12 months when you needed to see a doctor, but could not because of the cost?"

Again, SUDAAN was used to account for the complex sampling design of the BRFSS and nationally representative population estimates were made using weighted data.

3. Results

Fig. 1 shows the evolution of states allowing pharmacists to administer vaccinations. In 1995, nine states allowed pharmacists to administer vaccines. By 1999, this had increased to 30 states.

In 1995, states that were eventually to pass laws had more individuals aged 18–64 years immunized than states who did not pass these laws ($P < 0.01$). There was no significant difference for influenza vaccination rates for individuals greater than 65 years old between these two sets of states ($P = 0.10$). By 1999, states that allowed pharmacists to provide immunizations had significantly ($P < 0.01$) more individuals aged 18–64 years immunized than states without this legislation. These states also had significantly more individuals aged 65 years and older immunized against influenza than states that did not allow pharmacists to give immunizations ($P < 0.01$). These results are illustrated in Table 1.

The location where the flu vaccine was administered did not differ between the two groups of states. The majority of individuals received their flu vaccine in a physician's office. These results are shown in Table 2.

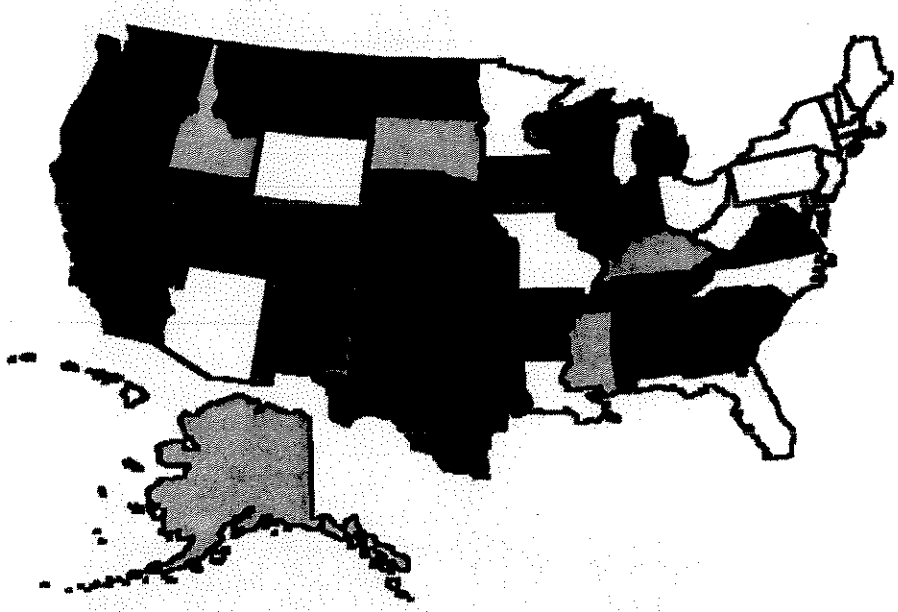

Fig. 1. Map of states allowing pharmacists to give immunizations and year of passage. Red: legislation passed in 1995 or earlier; yellow: legislation passed in 1996; blue: legislation passed in 1997; green: legislation passed in 1998; purple: legislation passed in 1999 (for interpretation of the references to color in this figure legend, the reader is referred to the web version of this article).

Table 1
Comparison of influenza vaccination rates

	States allowing pharmacists to immunize after 1997 (%)	States not allowing pharmacists to immunize after 1997 (%)	*P*-value
18–64 years old			
Immunization rates in 1995	20.5	16.6	<0.01
Immunization rates in 1999	25.5	21.6	<0.01
Overall change	5.0	5.0	
≥65 years old			
Immunization rates in 1995	57.7	61.2	0.10
Immunization rates in 1999	68.4	64.7	<0.01
Overall change	10.7	3.5	

The results of the logistic regression model are given in Table 3. As shown, in states where pharmacists are allowed to provide vaccinations, both individuals aged 18–64 years (odds ratio (OR) = 1.27; 95% confidence interval (CI) = 1.19–1.36) and individuals aged 65 years and older (OR = 1.22; 95% CI = 1.07–1.39) are more likely to receive influenza vaccines than individuals in states where pharmacists cannot provide vaccinations. For both individuals aged 18–64 years and those aged 65 years and older, poorer health status and presence of health insurance also

Table 2
Location of vaccine administration in 1999

Location of vaccine	States where pharmacists can provide vaccines (%)		States where pharmacists cannot provide vaccines (%)	
	18–64 years	≥65 years	18–64 years	≥65 years
A doctor's office or health maintenance organization	30.0	62.9	38.6	68.0
A health department	6.0	6.5	7.0	5.9
Another type of clinic or health center	11.0	12.0	9.7	10.2
A senior, recreation, or community center	1.0	5.0	1.2	4.7
A store	5.0	3.1	5.2	3.4
A hospital or emergency room	7.0	5.6	7.1	3.7
Workplace	33.6	1.7	25.4	1.0
Other	6.4	3.2	5.8	3.1

Table 3
Logistic regression model for influenza vaccination in 1999

	18–64 years		≥65 years	
	Odds ratio	95% CI	Odds ratio	95% CI
Residence				
State where pharmacists can immunize	1.27	1.19–1.36	1.22	1.07–1.39
State where pharmacists cannot immunize	1.00		1.00	
Gender				
Male	1.05	0.98–1.12	0.94	0.82–1.08
Female	1.00		1.00	
Race				
White	1.00		1.00	
Black	0.84	0.75–0.94	0.41	0.32–0.52
Asian/Pacific Islander	0.99	0.77–1.28	1.24	0.40–3.82
American Indian/Alaskan	1.07	0.81–1.42	0.65	0.32–1.32
Other	0.74	0.59–0.93	0.51	0.29–0.89
Income				
Less than US$ 20,000	1.07	0.99–1.16	0.86	0.75–1.00
More than US$ 20,000	1.00		1.00	
Health status				
Excellent/good/very good	1.00		1.00	
Fair/poor	1.76	1.58–1.95	1.16	1.01–1.34
Time could not afford to see a doctor				
Yes	0.64	0.57–0.73	0.70	0.51–0.96
No	1.00		1.00	
Health insurance				
Yes	1.89	1.68–2.12	2.22	1.49–3.32
No	1.00		1.00	

increased the chance of being vaccinated against influenza. Individuals who were black or had a self-perceived cost barrier to receiving health care had a decreased likelihood of being immunized in both age categories.

4. Discussion

In this comparison of two groups of states, legislation allowing pharmacists to administer vaccinations improved influenza vaccine rates for individuals 65 years and older. In addition, when looking at data from one specific year, individuals who resided in states where pharmacists were allowed to administer vaccines were more likely to be immunized than individuals who lived in states where pharmacists could not immunize. This difference held true after controlling for other demographic factors such as gender, race, income, health insurance and self-perceived health status.

The growth in influenza vaccine rates for individuals aged 18–64 years appears to be equal between the two states. However, both in 1995 and 1999, states where pharmacists could immunize patients after 1997 had higher influenza vaccination rates than states where this legislation was not passed. This is an important trend to note, especially in light of influenza vaccine shortages in recent years. During these times, it is imperative that those with the highest risk for influenza complications be immunized first.

For individuals aged 65 years and older, the influenza vaccination rates were also higher in states where pharmacists could immunize patients. The percent of individuals aged 65 years and older immunized against influenza was higher when examining aggregate number of individuals across states. Moreover, although legislation is state specific, aggregate numbers do not show changes per state but rather among a whole, defined as states with legislation. For example, one state with a large population may have experienced substantial growth while several smaller states had little growth, yet the overall estimate would show substantial growth. It is also important to note that the states may have had other operating policies or population differences that could account for this increase. Further research is needed to understand this phenomenon. Using states as a unit of analysis as opposed to population estimates may be a way to further explore this hypothesis.

As the logistic regression model for 1999 data shows, individuals are more likely to receive influenza vaccines in states where pharmacists can immunize. However, it is not known if this increase is a direct result of allowing pharmacists to vaccinate individuals. While demographic characteristics of the population do not explain this difference, other factors could explain this phenomenon. This could

include more direct to consumer advertising on the availability of the vaccine, more competitive pricing for the vaccine, or increased public awareness of the need for influenza vaccination in states where pharmacists provide immunization services. Further research is needed in this area to better understand why this difference exists.

In looking at where individuals received vaccines, we can see that the majority of individuals in both groups of states received their vaccines at a physician's office. While this explores the question of "where" patients received their vaccines it does not address the question of "who" administered their vaccination. Further research needs to explore this question to better understand what individuals are actually administering the vaccinations to individuals.

This study using existing national datasets supports previous exploratory studies that showed allowing pharmacists to provide immunizations increased local rates of influenza vaccines [17,19–24]. Pharmacists may be an important players in the delivery of immunizations. Pharmacists have long educated patients regarding the benefits of the influenza vaccination and have encouraged patients to get immunized by their primary care provider. However, the immunizer role has been a more difficult process, in part due to lack of state legislation and also due to misconceptions on the part of patients, primary care providers and pharmacists. Thus, even though legislative support is increasing, there are still obstacles that may limit this process for pharmacists. Because of the potential for increased vaccination rates, subsequent decreases in illness and cost benefits to the health care system with pharmacist-administered vaccinations, these barriers must be addressed.

There are several limitations to this data. First, this study is based on a secondary analysis of data that was collected for general health risk surveillance. As such, we could not determine what type of health care provider gave the vaccine to the individual surveyed. Also, the data were all self-report survey questions and verification of actual immunization status was not performed.

Secondly, the data used in this study was a secondary analysis of data collected in the 1995 and 1999 BRFSS. Due to the sampling method used by the BRFSS, national estimates for influenza vaccine rates can only be made from the data collected during odd-numbered years. There may have been other factors that occurred during this time period that led to an increase in influenza vaccine rates that could not be controlled for in our logistic regression model.

Despite its limitations, this study is important as it shows that individuals who live in states where pharmacists can administer vaccinations have higher influenza vaccination rates than individuals who reside in states where pharmacists cannot provide this service. Further research is needed to better understand the impact that allowing pharmacists to provide vaccinations can have on improving immunization rates in the US.

Acknowledgements

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