



November 19, 2004

The Honorable Senator Carol Roessler, Co-chairperson  
Joint Legislative Audit Committee  
P. O. Box 7882  
Madison, WI 53707-7882

Dear Senator Roessler:

**Thank you for your support of Representative Wasserman's request to conduct an audit of the Physician Office Visit Data program (POVD).** As the chair, I have reviewed the history of the board and its duties, as well as its progress and that of the Bureau on Health information. At the October 5<sup>th</sup> meeting, the Board decided to undertake a strategic planning process to chart its future course.

I appreciate the comments you provided during the hearing regarding the legislative intent and history of the program, as well as other initiatives now in place. We look forward to the results of the audit and the guidance those results may provide, both in the near term and the long term.

I am more than happy to discuss this in person. I can be reached directly at (608) 250-1051. You may also contact our Director of Governmental Affairs, Michael Heifetz, at (608) 250-1225. We look forward to working with you!

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin R. Hayden", is written over a light-colored background.

Kevin R. Hayden  
President and CAO

November 19, 2004

Volume 48, Issue 44

## Legislature Approves Audit of POVD WHA backed audit request

The Legislature's Joint Audit Committee this week approved a request for a formal audit of the Physician Office Visit Data (POVD) program. Authorization for the in-depth review was granted by a unanimous vote of the Committee and will be conducted by the Legislative Audit Bureau.

The audit comes as the result of a formal request submitted July 14 by Rep. Sheldon Wasserman (D-Milwaukee). Wasserman, who is a physician, is one of many in the medical community who have been critical of the program and its implementation. POVD, which collects claims data from approximately half of the state's physicians, is funded through a \$75/year assessment on all Wisconsin physicians.

The audit will include a staffing and expenditure analysis, an evaluation of whether the program is being effective, a comparison of POVD and programs run by private sectors, an assessment of the privacy issues for patients and providers, and a review of compliance with statutory requirements.



Rep. Sheldon  
Wasserman

"It is clear that even (BHI) board members are not getting sufficient information on POVD program finances, whether POV data is valid and if it can measure quality," Wasserman said in testimony before the Joint Audit Committee.

In its roughly six-year existence, the POVD program has released very little useable data, a situation also noted by Wasserman. "The Wisconsin Hospital Association's similar data collection effort (WHA Information Center) was operational in less than a year, with fewer employees. The WHA and Wisconsin Collaborative for Health Care Quality are demonstrating how private sector models are making government mandates obsolete."

In an October 22 letter to the Joint Audit Committee, WHA indicated its support for the audit request. "To our knowledge, there has never been a formal or significant performance review of the POVD program or of any health care data programs administered by BHI," WHA's letter stated. "Before the

*(continued on page 4)*

### *We're Moving to Fitchburg!*

Our new address, effective December 4, 2004, is:

**Mailing Address:** PO Box 259038, Madison, WI 53725-9038  
**Shipping Address:** 5510 Research Park Drive, Madison, WI 53711

Our phone and fax numbers will remain the same.  
Phone: 608-274-1820 / Fax: 608-274-8554

Please update your records for Wisconsin Hospital Association, Inc.,  
WHA Financial Solutions, Inc. and WHA Information Center, LLC.

Visit [www.wha.org/about/whamap.pdf](http://www.wha.org/about/whamap.pdf) for directions and a map to our new location.

## New Survey Finds Consumer Use of Quality Reports Increasing Consumers beginning to use data, rely less on family, friends

Five years after the release of the Institute of Medicine's report on medical errors, a new national survey shows that people are more aware of the issue of health care quality and safety, but most are still not aware of the quality improvement efforts that are taking place on their behalf in the nation's health care system. Respondents indicated that they are beginning to use information they find on the Internet on the quality and safety of hospital and physician services.

"This is what we expect will happen over time. As information becomes more available, consumers will begin to use it to make decisions," according to Dana Richardson, WHA vice president for quality initiatives. "With CheckPoint, Wisconsin hospitals anticipated the need for this information. Our challenge is to stay one step ahead of consumer demand."

Those who saw health quality information on hospitals or health plans and chose not to use it were most likely to say they did not use it because they did not need to make a decision about their care at the time or the information they saw was not specific to their health concerns.

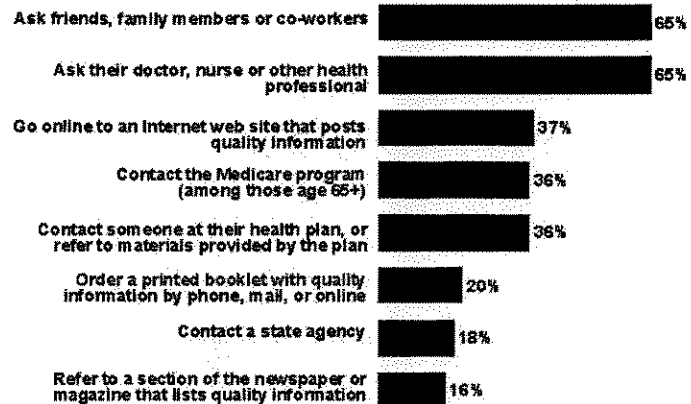
Of particular interest to Richardson was the fact that only 10 percent of the respondents indicated that the information they saw about quality was confusing or difficult to understand, while 53 percent said if they didn't find value in the information, it was because it was not specific enough about their condition or concern.

"We have to make sure that as we provide information to consumers, we don't over simplify it to the point where we drop specifics that they are looking for," Richardson said. "When someone has a concern, diagnosis, or a chronic condition, their learning curve may be short and steep. This study indicates that they don't place as much value on information that is generalized or simplified."

*The National Survey on Consumers' Experiences With Patient Safety and Quality Information* is a joint project of the Kaiser Family Foundation, the Agency for Healthcare Research and Quality, and the Harvard School of Public Health. The survey and summary are available at [www.kff.org](http://www.kff.org).

### Finding Quality Information

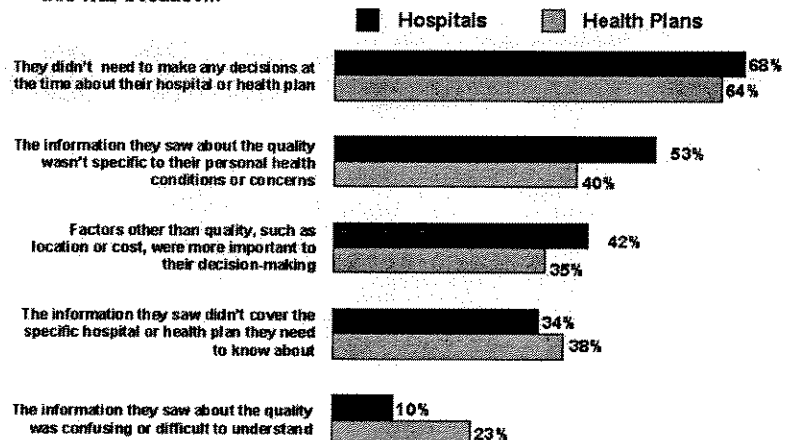
Percent who say they would be "very likely" to do each to try to find health care quality information...



Source: Kaiser Family Foundation / Agency for Healthcare Research and Quality / Harvard School of Public Health. *National Survey on Consumers' Experiences With Patient Safety and Quality Information*, November 2004 (Conducted July 7 - September 8, 2005).

### Why People Didn't Use Quality Information

Among those who saw quality information but did not use it, the percent who say this was because...



Source: Kaiser Family Foundation / Agency for Healthcare Research and Quality / Harvard School of Public Health. *National Survey on Consumers' Experiences With Patient Safety and Quality Information*, November 2004 (Conducted July 7 - September 8, 2005).

## **WHA's Courtroom Advocacy Moves to Protect Future Wisconsin Physicians**

On November 23, WHA, together with the Wisconsin Medical Society (WMS) and the American Medical Association (AMA), will be filing a request to file an amicus brief with the Supreme Court in *Phelps v. PIC Wisconsin*. This case will require the Court to consider whether a first-year medical resident is afforded protection under Wisconsin's cap on noneconomic damages in medical malpractice cases and whether communications regarding such a resident's work are protected by Wisconsin's peer review privilege. The case also presents issues regarding the standard of care applicable to a first-year resident, a defendant's right to a jury trial, and the applicability of Wisconsin's noneconomic damage caps to a sibling's loss of consortium claim.

WHA, WMS, and the AMA filed the request because of their concern that the Court's ruling in this appeal with respect to first-year medical residents will have serious consequences on the health care delivery system in Wisconsin as a whole. According to Laura Leitch, WHA Vice President and General Counsel, "Wisconsin is beginning to experience a physician shortage. Supporting graduate medical education in Wisconsin is an important priority for WHA because there is a correlation between physicians who complete their residency in Wisconsin and physicians who ultimately practice in Wisconsin."

You can read the Court of Appeals decision at [www.wicourts.gov/ca/opinions/03/pdf/03-0580.pdf](http://www.wicourts.gov/ca/opinions/03/pdf/03-0580.pdf).

## **New Rule Requires Hospitals to Voluntarily Self-Designate Trauma Status**

The Department of Health and Family Services (DHFS), the State Trauma Advisory Council (STAC) and trauma professionals from nearly 30 hospitals, along with the Wisconsin Hospital Association, have been working towards the implementation of a statewide trauma care system. The major goals of the trauma care system are to decrease mortality and morbidity of severely injured patients and to match resources with the needs of the trauma patient. The new Administrative Rules to govern the system will go into effect January 1, 2005 and will include requirements for classification as required by State Statute 146. Included in the rules is a requirement that all hospitals self-determine their respective trauma designation. The rules also encourage hospitals to apply for state designation as a trauma center. Participation in the statewide trauma care system is strictly voluntary.

Hospitals may designate themselves as Level III or Level IV trauma unless they opt out. Level I and Level II trauma designation occurs only through verification by the American College of Surgeons. Expected and desired criteria for Level III and Level IV trauma centers will be sent to all hospitals to facilitate the self-designation process. In December of 2004, the State will mail a copy of the new Administrative Rules and the assessment criteria for Level III and Level IV to all hospital and health system CEOs. In addition, an application form will be sent that can be returned when requesting state designation. Hospitals will have until March 2005 to select their level of participation in the new trauma care system. They will then have until July 1, 2005 to upgrade their services to meet their respective self-designation level. The new trauma care system is expected to begin in July 2005. For more information, contact Bill Bazan at [bbazan@mailbag.com](mailto:bbazan@mailbag.com).

## **Continued from page 1 . . . Legislature Approves Audit of POVD**

legislature entertains any new state-run or mandated data programs (including a massive new data public authority), it is absolutely critical, and simply reasonable, to understand and learn from the experience and past performance. An audit of BHI will help do just that."

Both WHA and WHAIC anticipate being involved in the audit process. "Given the charge of the audit and our history with health care data collection, we look forward to discussing our experiences with BHI and sharing our insights," said WHA Senior Vice President Eric Borgerding. "This is about moving forward, but to do that you have to learn from the past, as we are doing with WHAIC."

## President's Column

- ✓ Wisconsin Republicans might want to request a "timeout" to look at recent election results in Colorado, the birthplace of the Taxpayer Bill of Rights (TABOR) that some would like to enact here in Wisconsin. In Colorado, Democrats seized control of both chambers of the state legislature for the first time in 44 years! And local pundits say that widespread voter discontent over the impact that Colorado's TABOR has had on education and health programs was a major reason for Democratic success.
- ✓ Who says that tobacco taxes are politically unpopular? Not voters in three states who overwhelmingly supported increasing tobacco taxes on initiative and referendum ballots on November 2. Voters in Colorado, Oklahoma and Montana (red states!) by wide margins approved statewide measures increasing tobacco taxes and directing at least part of the new revenue to health care programs.

In Montana, the cigarette tax will increase by \$1.00...to \$1.70 per pack... and taxes on other tobacco products will increase by 50 percent. Almost two-thirds of Montana voters supported the increases.

In Oklahoma, the cigarette tax will jump 80 cents, a huge increase supported by 53 percent of that state's voters.

In Colorado (TABOR country), 61 percent of voters supported a state constitutional amendment that increases the cigarette tax by 64 cents and taxes on other tobacco products by 40 percent. Most of that money will go to finance health-related programs.

Wisconsin's current tobacco tax of 77 cents is significantly less than the national average and Medicaid payment rates are among the lowest in the nation. WHA will be strongly supporting a tax (we'll call it a "fee") increase in 2005 with new revenues targeted to improve woefully low Medicaid provider payments.

- ✓ The State of Illinois is a national leader in high medical liability insurance rates. But that hasn't stopped huge increases from being implemented this year. According to *Medical Liability Monitor*, Illinois obstetricians/gynecologists now pay \$230,000 in annual premiums, a 50-plus percent increase over 2003. General surgeons are paying \$183,500, an 84 percent jump over last year, and internists pay close to \$60,000, a 40-plus percent increase.

Last year's WHA/WMS Task Force on Wisconsin's Future Physician Workforce noted that the Badger State's relatively favorable malpractice environment is a real plus when it comes to attracting and retaining physicians. A look south confirms that finding.

Steve Brenton  
President

POVD - DHFS

- don't have accounting
- don't have a product today
- \$5 mill from dis
- increasing phys. funds - not justify why exists
- 20% chew up 80% of resources
- 91% of dis were taking medical patients
- dropped 81% in 5 years
- \$70/yr. → 1.2 mil, 600,000/yr
- rather pay for comm. health care not willing to
- Helene doesn't want it
- 17 DHFS → 4 WHA
- still not able to - Gov may get rid of

144 papers - write name, address, #

- BHI
- DRL
- OCT

) duplication of effort

Credentialed smart

- save state \$
- regulatory burden

think transparency coming - not under POVD

# POVD

CR: no intention of eliminating this provision

Sec. Nelson & Susan Wood (4/04)

public health info bits & pieces  
one of weaknesses

help purchasers know

audit useful

32 - consultant

5 full-time  
web deployment

→ max 12 - audit

report published - sent to all members  
send any updates w/ it  
as necessary

50 large employers

← CEO control cost

Dr. Rod Harms, Hortonville

- doesn't address the patient is not  
involved there

- diabetes

may health purchasers taking a disease

entity -  
→ start w/ patient

need audit on this

7-0

Ressler - Lassa



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BHI Bds Surgery

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**Asbjornson, Karen**

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**From:** Roessler, Carol  
**Sent:** Wednesday, November 24, 2004 10:10 AM  
**To:** Cale Battles; Dave Cullen; Dean Kaufert; Diane Handrick; Diane Harmelink; Eric Phillips; Glenn Wavrunek; James Chrisman; Janice Mueller; Jennifer Toftness; Jessica Kelly; Karen Asbjornson; Marcie Malszycki; Mark Pocan; Matt Kussow; Melissa Gilbert; Pam Matthews; Pam Shannon; Ritch Williams; Samantha Kerkman; Sarah Popp; Sherab Lhatsang; Suzanne Jeskewitz; Cynthia Boley; Dan Kursevski; David Volz; Eric Esser; Katy Venskus; Monica Groves; Sen.Cowles; Sen.Darling; Sen.Lassa; Sen.Piale; Todd Stuart  
**Cc:** Mueller, Janice  
**Subject:** Re: Report for Audit Committee members



POV\_Selected\_Anal  
ysis\_.doc

Hello again Joint Legislative Audit Committee Members,

Attached is the Physician Office Visit Data analysis from DHFS that was requested by the Joint Legislative Audit Committee.

Please note the report is 49 pages long.

Sincerely,

Carol Roessler  
State Senator  
18th Senate District

# Physician Office Visit Data

## *Selected Analyses*

A demonstration of the potential use  
for  
data in the public use files

December 3, 2003

Prepared by

Wen-Jan Tuan

Bureau of Health Information  
Department of Health and Family Services  
State of Wisconsin

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## Submitting Physicians Count

The table below provides a summary statistics on the number of physicians submitting their POV data in reporting periods 2003-1 and 2003-2, by each submitting organization. The submitting organizations are listed in their alphabetic order.

**Table.** Counts of reported physician by submitting organizations

Submitting Organization	Submitting Physician Counts	
	Period 1	Period 2
Aurora Health Care	697	730
Beloit Clinic, S.C.	57	57
Covenant	114	92
Dean Health System	376	429
Franciscan Skemp Healthcare	144	144
Group Health Cooperative of South Central Wisconsin	26	32
Gundersen Lutheran	313	324
Luther Midelfort - Mayo Health System	175	183
Marshfield Clinic	749	763
Medical College of Wisconsin	509	484
Mercy Health System	150	145
Thedacare Health Systems	87	94
University of Wisconsin Medical Foundation	866	896

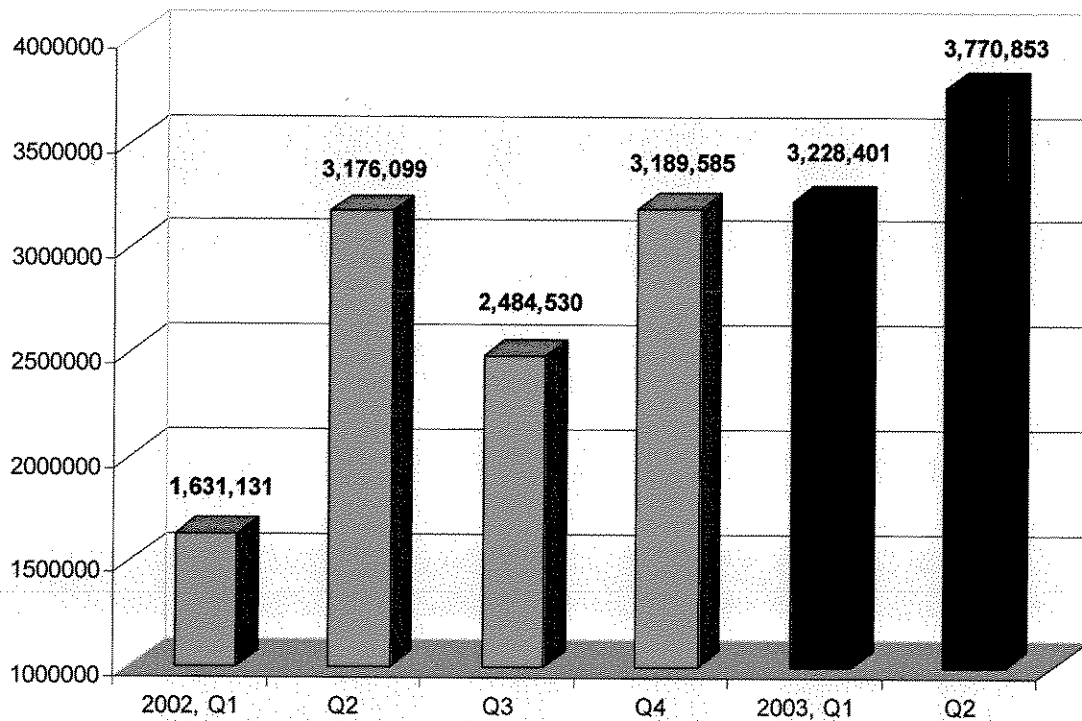
Date: 10/31/2003

## Data Quality Overview

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Below is a bar chart providing the number of service records submitted during the last two years.

**Figure.** Distribution of service record counts

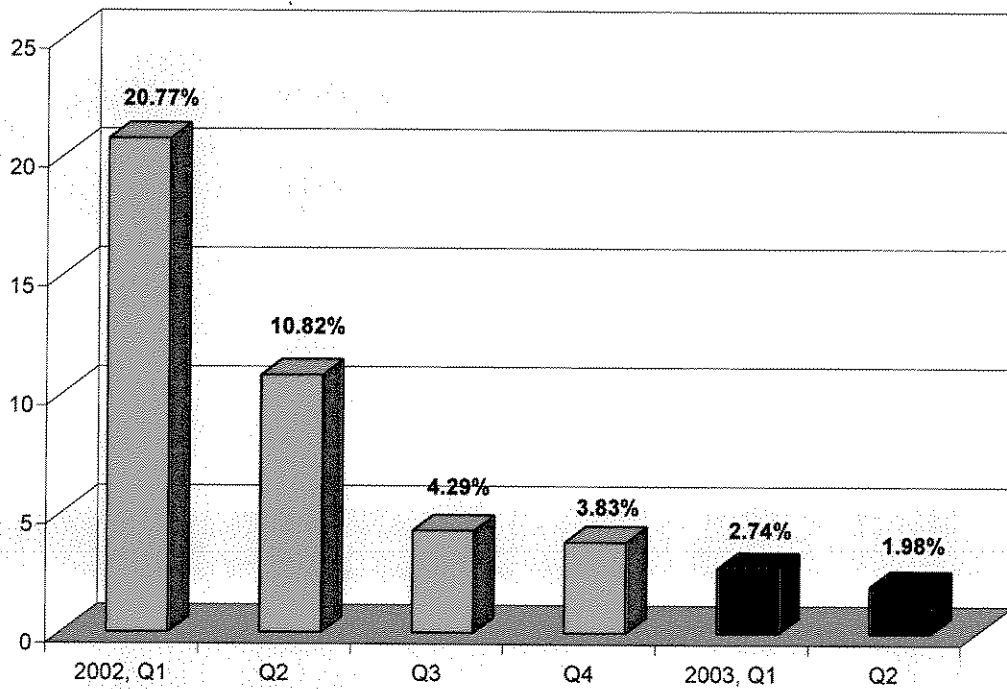


Date: 10/03/2003



Below is a bar chart providing an error rate distribution over six reporting periods. Be aware that, because data submitting in Year 2002 were considered training data, the error correction process was not enforced. This figure allows readers to see the improvement of data quality over time.

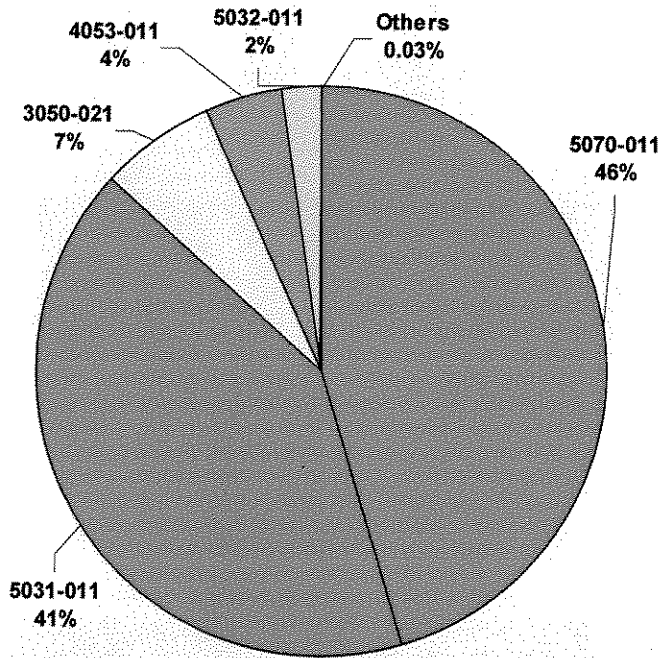
**Figure.** Error rate distribution over various reporting years and periods



Date: 10/03/2003

A summary of the top five most major error types occurred in reporting period 2003-1 is presented in the following analyses. The field-level processing error, "Must be a valid CPT-4 or HCPCS code " (Edit No.5070-011), counted about 45.28% of the total field-level errors.

**Figure.** Distribution of top 5 most frequent error types in 2003-1



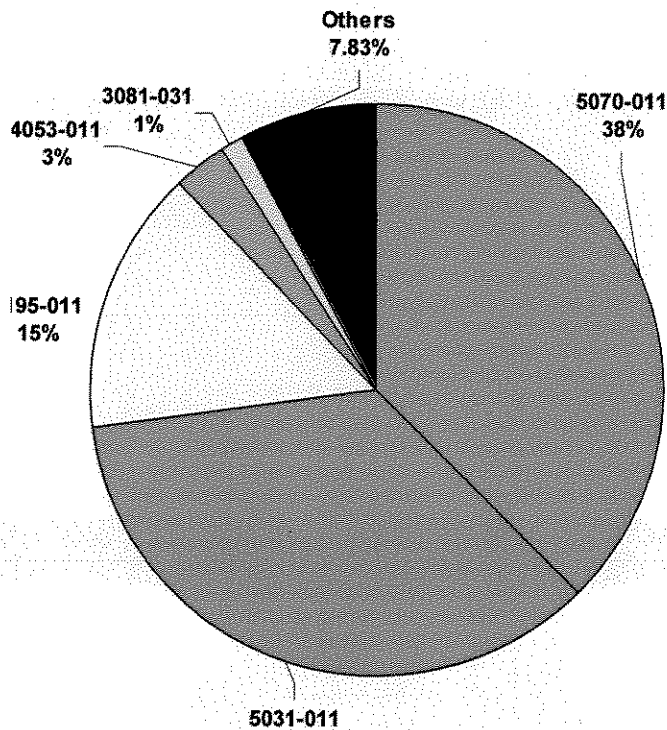
**Table.** Description of Top 5 most frequent error types in 2003-1

Code	Error Description	Percent (%)
5070-011	Must be a valid CPT-4 or HCPCS code.	45.28
5031-011	Must be a valid ICD-9-CM code.	41.33
3050-021	Must be a valid date in CCYYMMDD format.	6.81
4053-011	Must be in a valid UPIN format or blank.	4.33
5032-011	Must be a valid ICD-9-CM code or blank.	2.22
Others		0.03

Date: 10/28/2003

A summary of the top five most major error types occurred in reporting period 2003-2 is presented in the following analyses. Again, the field-level processing error, "Must be a valid CPT-4 or HCPCS code " (Edit No.5070-011), counted almost 38% of the total field-level errors.

**Figure.** Distribution of top 5 most frequent error types in 2003-2



**Table.** Description of Top 5 most frequent error types in 2003-2

Error	Description	Percent (%)
5070-011	Must be a valid CPT-4 or HCPCS code.	37.58
5031-011	Must be a valid ICD-9-CM code.	35.33
5191-011	Must be a valid Wisconsin ZIP code.	14.84
4053-011	Must be in a valid UPIN format or blank.	3.21
3081-031	If this element is equal to EM, AA or OA, then ...	1.21
Others		7.83

## Physician Office Visits

The table below provides an estimate of the number of patient office visits reported by each submitting organization in reporting periods 2003-1 and 2003-2. The counts of total office visits by each reporting period are also calculated and presented.

**Table.** Estimated number of visits submitted in 2003 Q1 and Q2

Submitting Organization	Visit Counts	
	Period 1	Period 2
Aurora Health Care	424,971	450,787
Beloit Clinic, S.C.	42,467	42,109
Covenant	72,784	69,380
Dean Health System	238,997	261,519
Franciscan Skemp Healthcare	121,294	113,660
Group Health Cooperative of South Central Wisconsin	28,042	27,149
Gundersen Lutheran	124,459	177,025
Luther Midelfort - Mayo Health System	99,629	132,516
Marshfield Clinic	310,382	455,780
Medical College of Wisconsin	45,817	33,012
Mercy Health System	94,812	96,127
Thedacare Health Systems	85,331	87,536
University of Wisconsin Medical Foundation	250,960	380,627

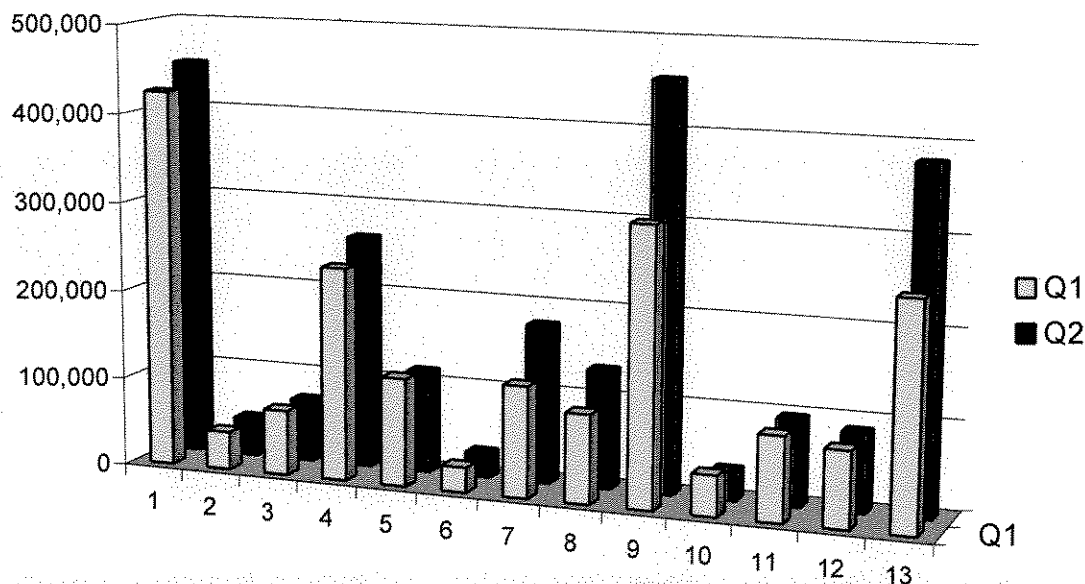
Total visit counts for 2003-1: 1,939,945

Total visit counts for 2003-2: 2,327,227

Date: 11/12/2003

The bar chart below provides a summary distribution of the estimated number of office visits reported by each submitting organization in reporting periods 2003-1 and 2003-2.

**Figure.** Distribution of estimated number of office visits in 2003-1 and 2003-2



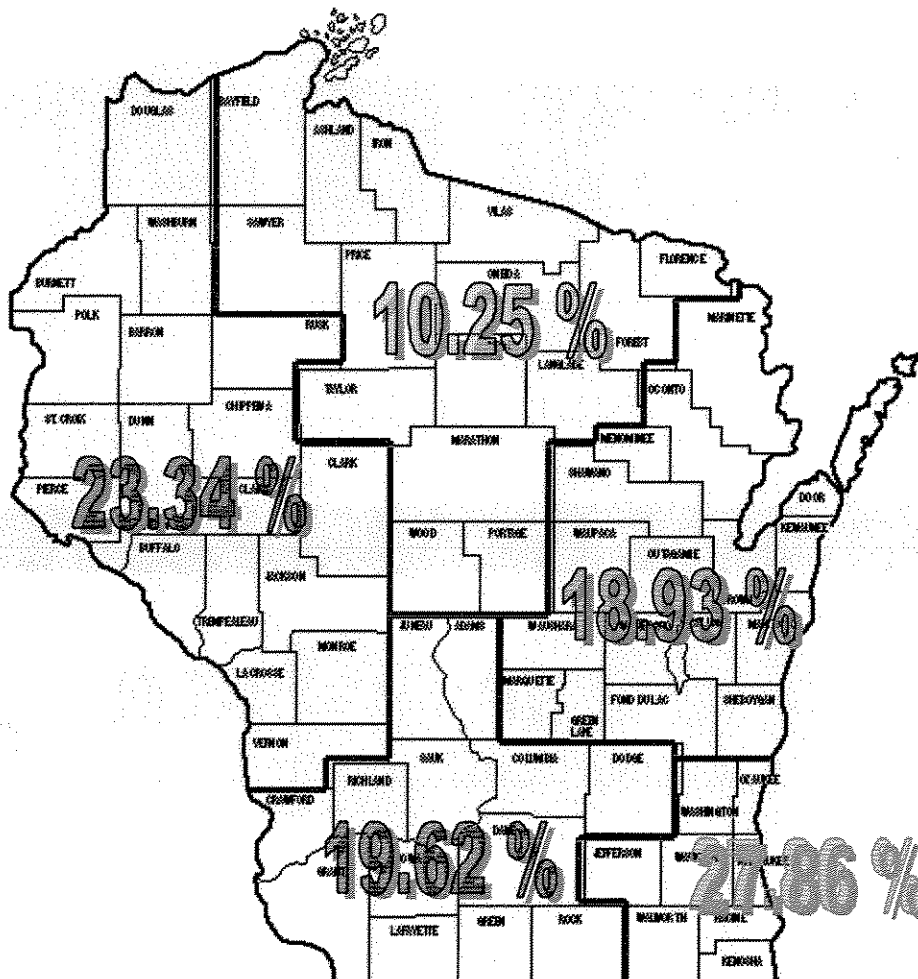
- 1 - Aurora Health Care
- 2 - Beloit Clinic, S.C.
- 3 - Covenant
- 4 - Dean Health System
- 5 - Franciscan Skemp Healthcare
- 6 - Group Health Cooperative of South Central Wisconsin
- 7 - Gundersen Lutheran
- 8 - Luther Midelfort - Mayo Health System
- 9 - Marshfield Clinic
- 10 - Medical College Of Wisconsin
- 11 - Mercy Health System
- 12 - Thedacare Health Systems
- 13 - University of Wisconsin Medical Foundation

Date: 11/08/2003

## Regional Service Analysis

The following map is used to summarize the distribution of the percentage of POV service records reported by regions in reporting period 2003-1.

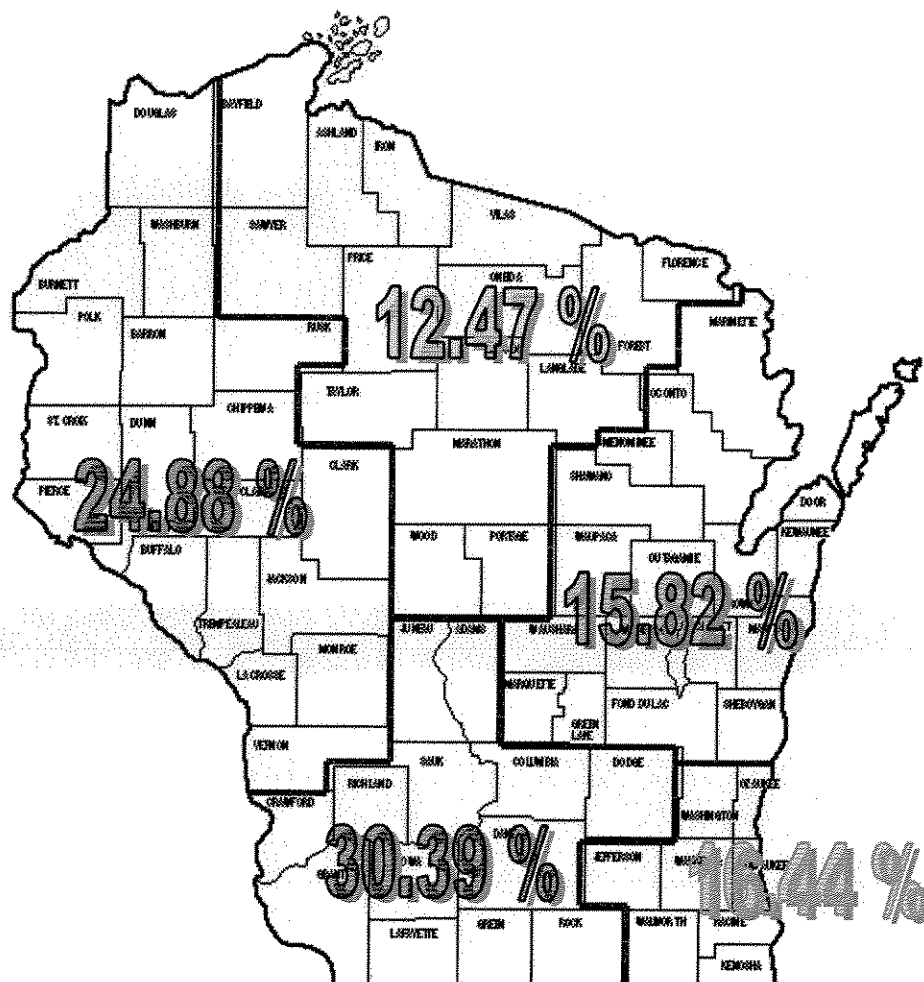
**Figure.** Percentage of POV services reported by regions in 2003-1



Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

The following map is used to summarize the distribution of the percentage of POV service records reported by regions in reporting period 2003-2.

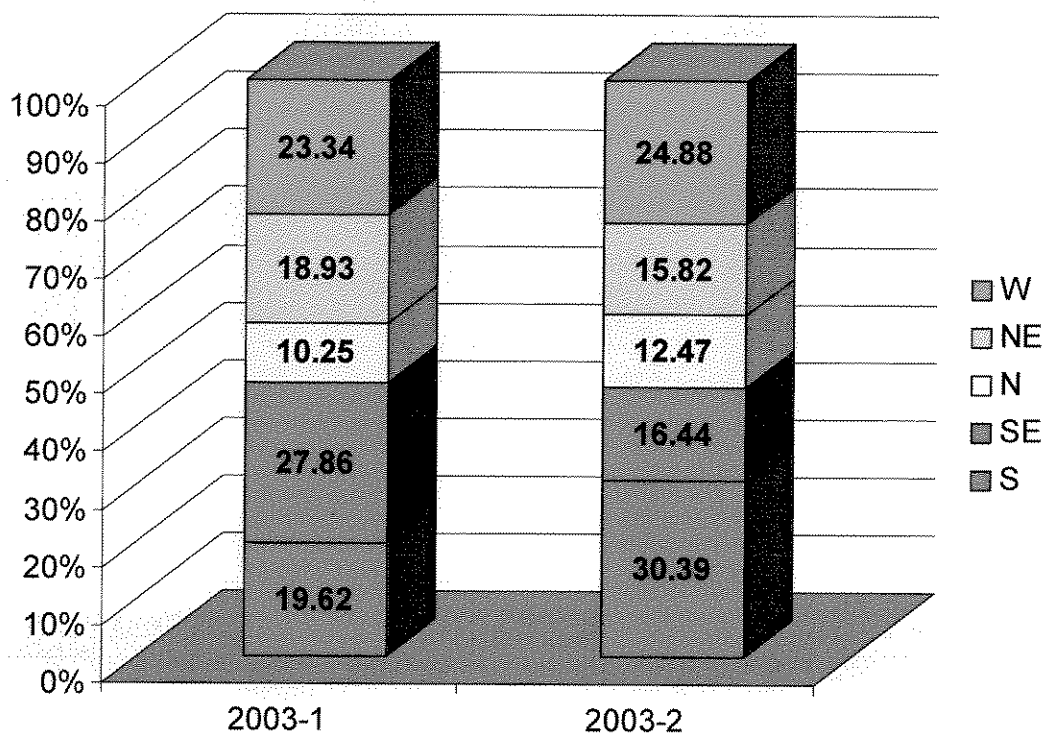
**Figure.** Percentage of POV services reported by regions in 2003-2



Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

The figure below provides a service percentage distribution by regions, for each reporting period.

**Figure.** Service distribution by regions in 2003-1 and 2003-2



S - Southern  
SE - Southeastern  
N - Northern  
NE - Northeastern  
W - Western



## Top Ten (10) Primary Diagnoses

The table below provides a list of the ten most frequent primary diagnosis codes and their description reported in periods 2003-1 and 2003-2. The diagnosis code is constructed based on ICD-9. This table allows readers to observe the pattern of diagnoses issued by reporting or time periods.

For instance, the diagnosis code, V04.8, counted 3.89% of the total diagnosis codes reported in 2003-1. It was also ranked as the most frequent reported primary diagnosis. However, it was not on the top 10 most frequent diagnosis codes reporting in 2003-2.

The diagnosis code, V70.0, counted 2.34% of the total diagnosis codes reported in 2003-1. It was also ranked as the second most frequent reported primary diagnosis. It became the most frequent reported primary diagnosis in 2003-2, with a percentage of 2.56.

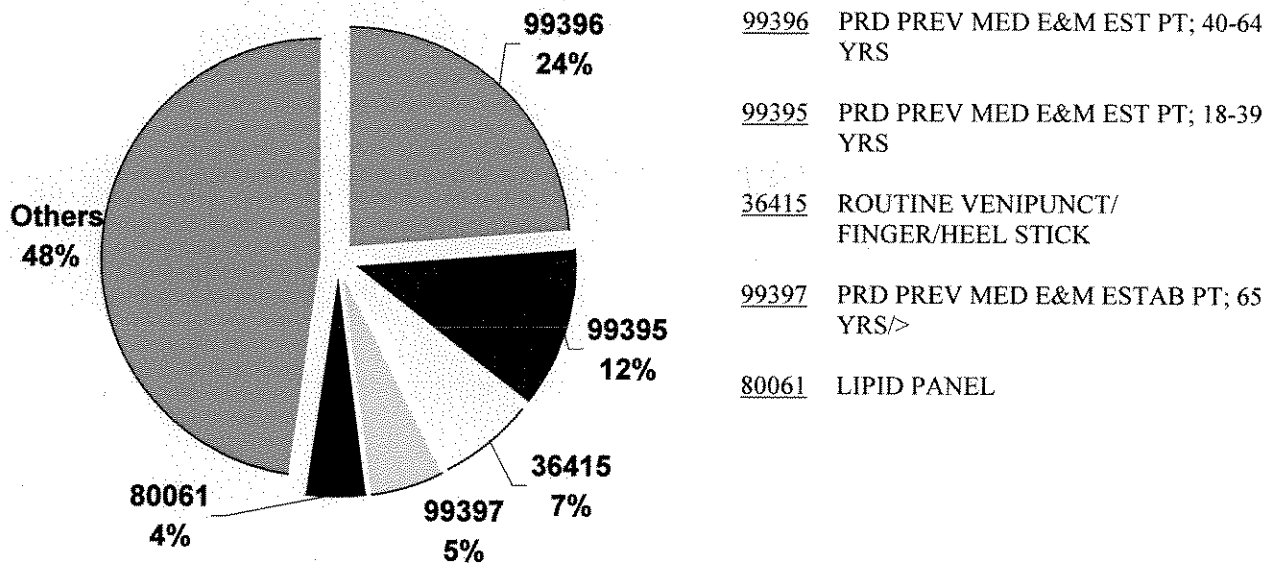
**Table.** Top ten (10) primary diagnoses reported in 2003-1 and 2003-2

Diagnosis Code	Description	(%)	(%)
		Period 1	Period 2
V04.8	Need proph vacc&inoculat agnst flu	3.89 (1)	
V70.0	Routine gen med ex@hlth care facl	2.34 (2)	2.56 (1)
401.1	Essential hypertension, benign	2.12 (3)	1.88 (4)
V20.2	Routine infant/child health check	2.10 (4)	2.24 (2)
250.00	Diabetes uncompl type ii no unctrl	2.04 (5)	1.96 (3)
272.4	Other&unspecified hyperlipidemia	1.68 (6)	1.62 (7)
V58.69	Encounter long-term use oth med	1.56 (7)	1.38 (9)
401.9	Unspecified essential hypertension	1.49 (8)	1.68 (6)
V58.61	Encounter long-term use anticoag	1.47 (9)	1.49 (8)
462	Acute pharyngitis	1.33 (10)	1.80 (5)
465.9	Acute Uris Of Unspecified Site		1.22 (10)

Date: 10/29/2003

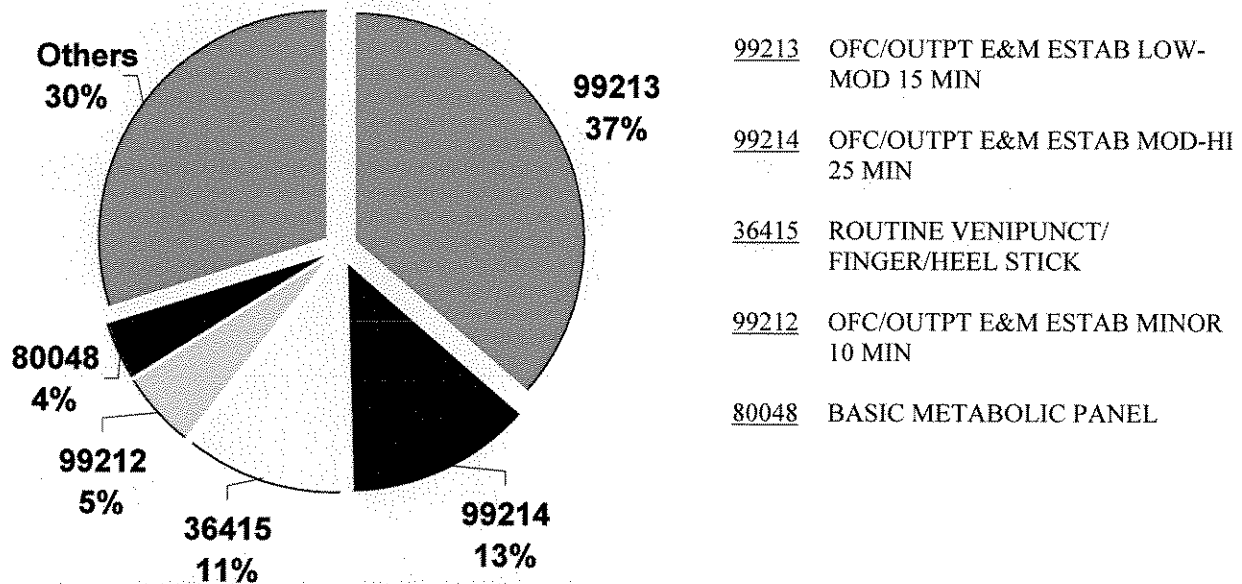
The Pie chart below provides a list of the give most frequent procedures prescribed by physicians based on a diagnosis of V70.0. Apparently, the procedure, "PRD PREV MED E&M EST PT; 40-64 YRS" (CPT: 99396), was most often given to the patient when the syndrome, "Routine gen med ex@hlth care fac1," was diagnosed.

**Figure.** Diagnosis *V70.0* and its prescribed procedure in 2003-1



Similarly, the Pie chart below provides a list of the five most frequent procedures prescribed by physicians based on a diagnosis of 401.1. The procedure, "OFC/OUTPT E&M ESTAB LOW-MOD 15 MIN" (CPT: 99213), became the most often procedure for the patient when the syndrome, "Essential hypertension, benign," was diagnosed.

**Figure.** Diagnosis 401.1 and its prescribed procedure in 2003-1



## Top Ten (10) Medical Procedures

The tables below provide a list of the ten most frequent procedure codes and their description reported in periods 2003-1 and 2003-2. The procedure code is constructed based on CPT-4 and HCPCS. This table allows readers to observe the pattern of various procedures issued by reporting or time periods. The procedure codes are assorted by their percentage observed. An estimate of the average charge of each procedure is also provided.

**Table.** Top ten (10) reported medical procedures in 2003-1

Procedure Code	Description	Percent (%)	Average Charge
99213	Ofc/outpt e&m estab low-mod 15 min	18.06	91.02
36415	Routine venipunct/finger/heel stick	5.71	15.29
99212	Ofc/outpt e&m estab minor 10 min	5.65	65.53
99214	Ofc/outpt e&m estab mod-hi 25 min	4.55	136.38
90658	Flu vir vacc-split 3 yr & > im/jet	2.07	11.28
90471	Immunization admin; 1 vaccine	1.86	16.39
99024	Postop f/u visit incl global srvc	1.70	0.00
80061	Lipid panel	1.35	87.60
71020	Rad ex chst 2 views frntl&lat	1.03	90.67
85025	Bld ct; hg/pllt ct auto/complt wbc	1.00	49.51

Date: 10/28/2003

(Total record size: 3,213,315)

**Table.** Top ten (10) reported medical procedures in 2003-2

Procedure Code	Description	Percent (%)	Average Charge
99213	Ofc/outpt e&m estab low-mod 15 min	19.40	92.64
99212	Ofc/outpt e&m estab minor 10 min	5.58	67.16
36415	Routine venipunct/finger/heel stick	4.98	14.53
99214	Ofc/outpt e&m estab mod-hi 25 min	4.92	139.01
99024	Postop f/u visit incl global srvc	1.77	0.03
90471	Immunization admin; 1 vaccine	1.28	20.34
80061	Lipid panel	1.23	92.43
85025	Bld ct; hg/pllt ct auto/complt wbc	1.23	52.00
G0001	Routine Venipunct Clet Specimen	1.13	20.29
71020	Rad ex chst 2 views frntl&lat	1.09	95.69

Date: 10/29/2003

(Total record size: 3,765,569)

## Primary Payer Category

The table below provides a summary statistics of the primary payer categories and their description reported in reporting period 2003-1. The primary payer codes are assorted by their percentage observed. An estimate of the average charge of each payer category is also provided.

**Table.** Primary Payer Category Distribution in 2003-1

Code	Description	Percent (%)	Average Charge
CI	Commercial Insurance Company	45.13	131.89
MB	Medicare Part B	26.05	130.66
HM	Health Maintenance Organization	9.67	114.10
MC	Medicaid	6.82	124.84
BL	Blue Cross/Blue Shield	4.17	148.91
09	Self-pay	3.97	94.58
ZZ	Mutually Defined; Unknown	2.51	112.16
WC	Worker's Compensation Health Claim	.98	169.77
CH	Tricare/CHAMPUS	.28	125.38
OF	Other Federal Program	.17	205.59
12	Preferred Provider Organization (PPO)	.11	97.06
11	Other Non-Federal Programs	.06	228.06
VA	Veterans Administration Plan	.02	363.97
15	Indemnity Insurance	.01	77.28
LM	Liability Medical	<.01	266.71
16	Health Maintenance Organization (HMO)	<.01	140.01
AM	Automobile Medical	<.01	194.40

Date: 10/29/2003

The table below provides a summary statistics of the primary payer categories and their description reported in reporting period 2003-2. The primary payer codes are assorted by their percentage observed. An estimate of the average charge of each payer category is also provided.

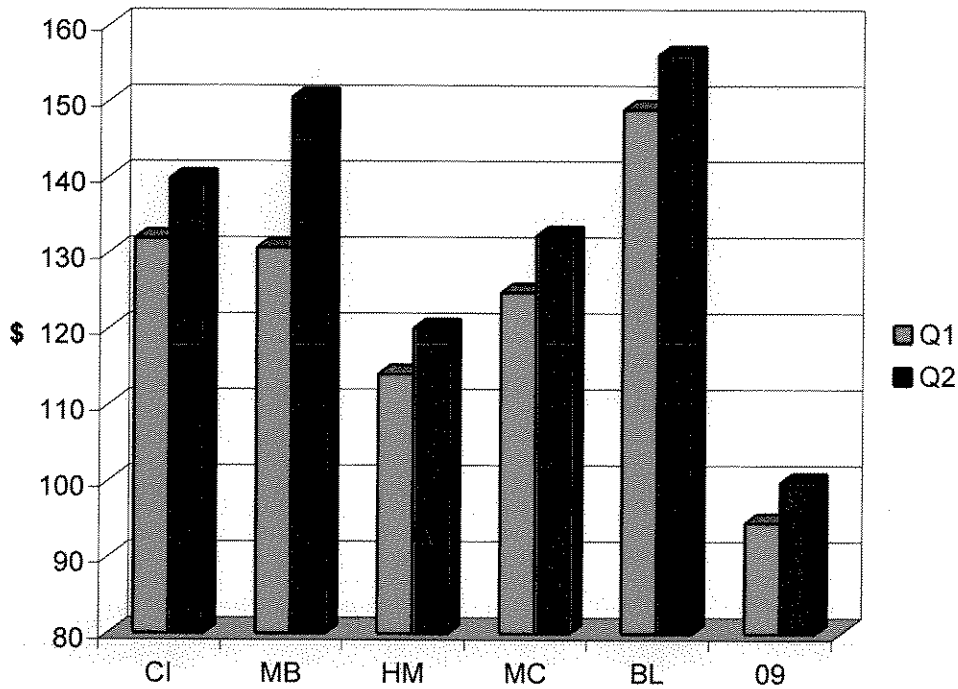
**Table.** Primary Payer Category Distribution in 2003-2

<b>Code</b>	<b>Description</b>	<b>Percent (%)</b>	<b>Average Charge</b>
CI	Commercial Insurance Company	46.29	139.81
MB	Medicare Part B	24.39	150.52
HM	Health Maintenance Organization	9.12	120.15
MC	Medicaid	7.37	132.32
BL	Blue Cross/Blue Shield	4.72	156.14
09	Self-pay	4.18	99.92
ZZ	Mutually Defined; Unknown	2.15	117.20
WC	Worker's Compensation Health Claim	1.12	166.59
CH	Tricare/CHAMPUS	.28	131.88
OF	Other Federal Program	.17	203.25
12	Preferred Provider Organization (PPO)	.10	85.74
11	Other Non-Federal Programs	.08	245.99
VA	Veterans Administration Plan	.01	342.40
15	Indemnity Insurance	.01	77.20
LM	Liability Medical	<.01	119.02
16	Health Maintenance Organization (HMO)	<.01	132.74
AM	Automobile Medical	<.01	81.00

Date: 10/29/2003

The figure gives an example of a bar chart used to display the difference of the average service charge in dollars among selected primary payer categories. It also enables readers to see the change on the service charge amount over different reporting periods.

**Figure.** Average service charge by payer category types in 2003-1 and 2003-2



Date: 10/29/2003

The table below summarizes the service percentage and the average charge of the procedure "Office outpatient visit, new patient, Low Complexity" (CPT: 99213) by primary payer categories in reporting period 2003-1. The result of the analysis allows readers to observe the payer cost on a particular procedure, as well as to compare it with an overall cost from the POV data or other national statistics.

**Table.** Analysis of procedure code 99213 and its primary payer category in 2003-1

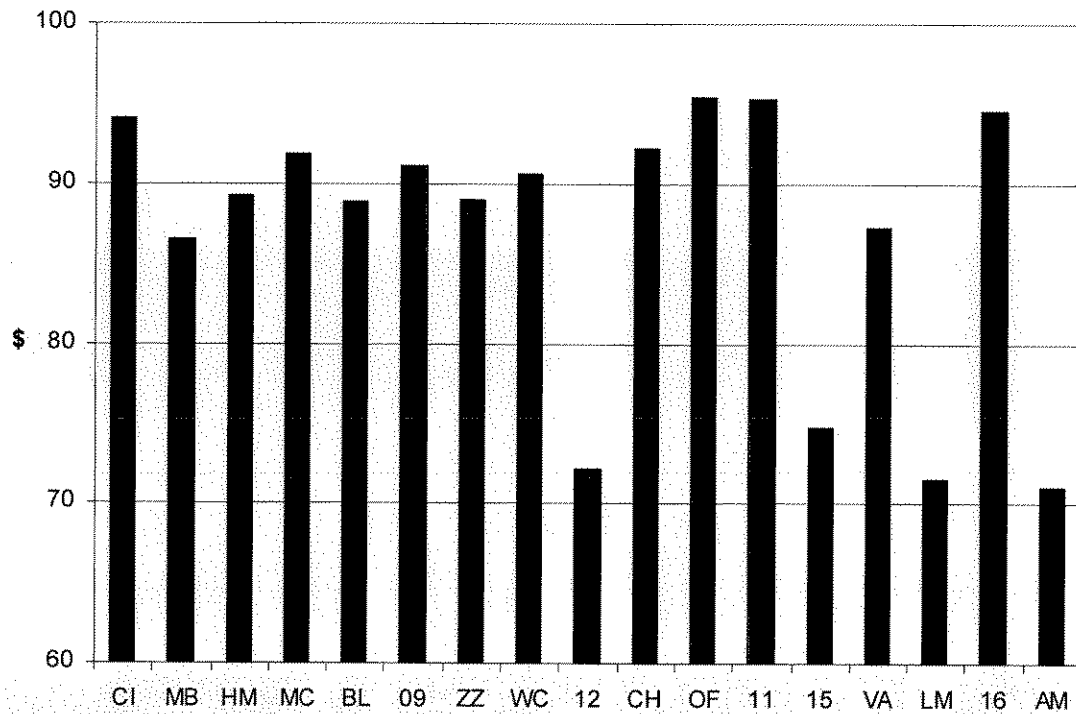
<b>Code</b>	<b>Description</b>	<b>Percent (%)</b>	<b>Average Charge</b>
CI	Commercial Insurance Company	46.71	94.01
MB	Medicare Part B	24.41	86.46
HM	Health Maintenance Organization	10.02	89.22
MC	Medicaid	8.28	91.79
BL	Blue Cross/Blue Shield	3.78	88.83
09	Self-pay	2.69	91.13
ZZ	Mutually Defined; Unknown	1.94	88.99
WC	Worker's Compensation Health Claim	1.34	90.63
12	Preferred Provider Organization (PPO)	.28	72.13
CH	Tricare/CHAMPUS	.27	92.19
OF	Other Federal Program	.18	95.47
11	Other Non-Federal Programs	.06	95.29
15	Indemnity Insurance	.02	74.75
VA	Veterans Administration Plan	<.01	87.24
LM	Liability Medical	<.01	71.56
16	Health Maintenance Organization (HMO)	<.01	94.50
AM	Automobile Medical	<.01	71.00

Date: 10/30/2003



The bar chart below provides a summary distribution of the average service charge for procedure 99213 by each type of primary payer categories in reporting period 2003-1.

**Figure.** Distribution of average service charge by payer category type in 2003-1



## Secondary Payer Category

The table below provides a summary statistics of the secondary payer categories and their description reported in reporting period 2003-1. The secondary payer codes are assorted by their percentage observed. An estimate of the average charge of each payer category is also provided.

**Table.** Secondary Payer Category Distribution in 2003-1

<b>Code</b>	<b>Description</b>	<b>Percent (%)</b>	<b>Average Charge</b>
CI	Commercial Insurance Company	59.29	126.01
HM	Health Maintenance Organization	17.04	113.26
MC	Medicaid	11.09	119.06
BL	Blue Cross/Blue Shield	4.74	166.80
MB	Medicare Part B	3.27	139.85
ZZ	Mutually Defined; Unknown	2.24	134.70
09	Self-pay	1.14	111.05
CH	Tricare/CHAMPUS	.59	141.19
OF	Other Federal Program	.26	238.85
WC	Worker's Compensation Health Claim	.17	354.27
16	Health Maintenance Organization (HMO)	.08	58.56
VA	Veterans Administration Plan	.04	402.39
12	Preferred Provider Organization (PPO)	.04	72.00
15	Indemnity Insurance	<.01	152.56
AM	Automobile Medical	<.01	71.00

Date: 10/29/2003

The table below provides a summary statistics of the secondary payer categories and their description reported in reporting period 2003-2. The secondary payer codes are assorted by their percentage observed. An estimate of the average charge of each payer category is also provided.

**Table.** Secondary Payer Category Distribution in 2003-2

<b>Code</b>	<b>Description</b>	<b>Percent (%)</b>	<b>Average Charge</b>
CI	Commercial Insurance Company	57.84	136.50
HM	Health Maintenance Organization	17.77	116.75
MC	Medicaid	11.60	127.88
BL	Blue Cross/Blue Shield	5.21	179.59
MB	Medicare Part B	3.24	149.40
ZZ	Mutually Defined; Unknown	2.28	154.73
09	Self-pay	1.08	120.55
CH	Tricare/CHAMPUS	.57	153.74
OF	Other Federal Program	.16	236.71
WC	Worker's Compensation Health Claim	.12	325.99
16	Health Maintenance Organization (HMO)	.06	77.38
VA	Veterans Administration Plan	.04	382.10
12	Preferred Provider Organization (PPO)	.03	73.70
15	Indemnity Insurance	<.01	73.25

Date: 10/29/2003

## Case Study (I): Office Visit (CPT Code: 99213)

The medical procedure, “99213: Office outpatient visit, new patient, Low Complexity” (CPT-4: 99213) counted 18% and 19% of the total services rendered in physician office visits in reporting periods 2003-1 and 2003-2, respectively. It was ranked as the most frequent reported procedure.

The table below provides a summary of the total number of services whose CPT-4 code was 99213 by each submitting organization in reporting periods 2003-1 and 2003-2.

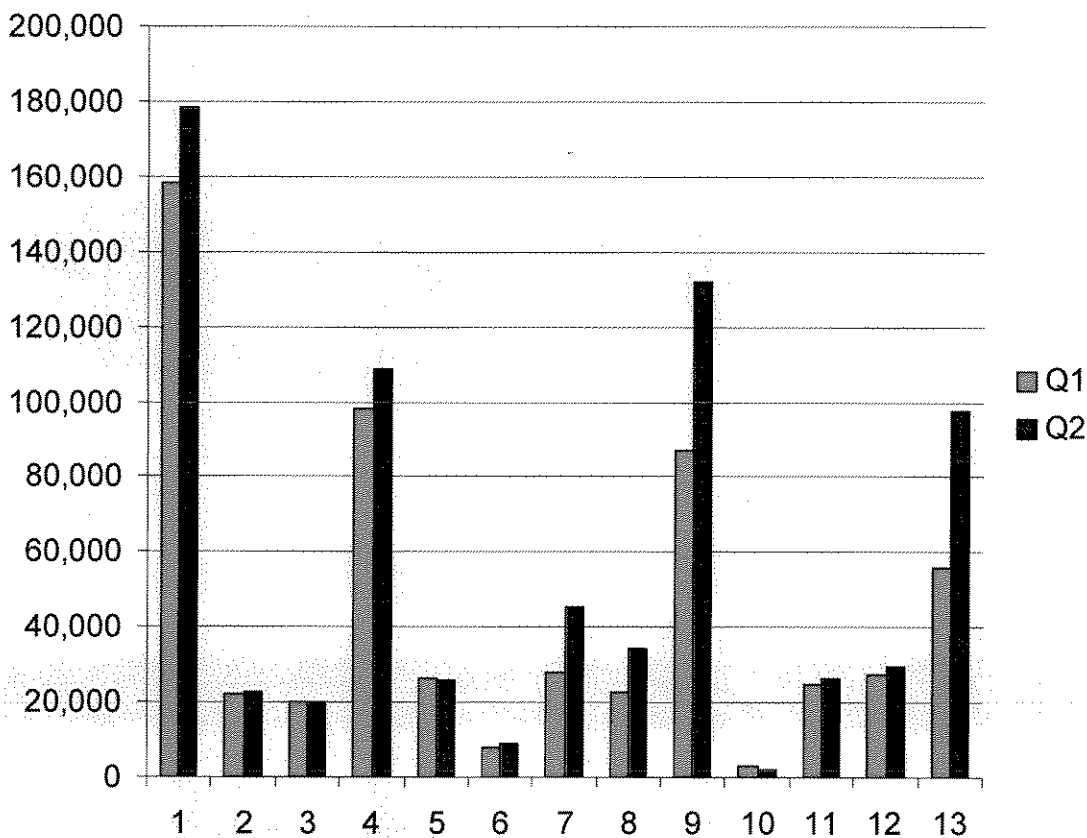
**Table.** Number of office visit (CPT-4: 99213) services in 2003-1 and 2003-2

Submitting Organization	Counts		% of Change
	Period 1	Period 2	
Aurora Health Care	158,189	178,467	
Beloit Clinic, S.C.	21,956	22,743	
Covenant	19,836	20,299	
Dean Health System	98,383	108,551	
Franciscan Skemp Healthcare	26,260	25,906	
Group Health Cooperative of South Central Wisconsin	8,057	8,895	
Gundersen Lutheran	27,946	45,550	
Luther Midelfort - Mayo Health System	22,640	34,072	
Marshfield Clinic	87,005	132,015	
Medical College of Wisconsin	3,265	2,149	
Mercy Health System	24,638	26,279	
Thedacare Health Systems	27,690	29,736	
University of Wisconsin Medical Foundation	56,034	97,773	

Date: 11/03/2003

The bar chart below displays a distribution of the total 99213 services among submitting organizations in reporting periods 2003-1 and 2003-2.

**Figure.** Distribution of office visit (CPT code 99213) counts in 2003-1 and 2003-2



- 1 - Aurora Health Care
- 2 - Beloit Clinic, S.C.
- 3 - Covenant
- 4 - Dean Health System
- 5 - Franciscan Skemp Healthcare
- 6 - Group Health Cooperative of South Central Wisconsin
- 7 - Gundersen Lutheran
- 8 - Luther Midelfort - Mayo Health System
- 9 - Marshfield Clinic
- 10 - Medical College Of Wisconsin
- 11 - Mercy Health System
- 12 - Thedacare Health Systems
- 13 - University of Wisconsin Medical Foundation

The table below shows the average service charge in dollars for CPT-4 code 99213 by each submitting organization in reporting periods 2003-1 and 2003-2. The percentage of change between the two reporting periods is also provided.

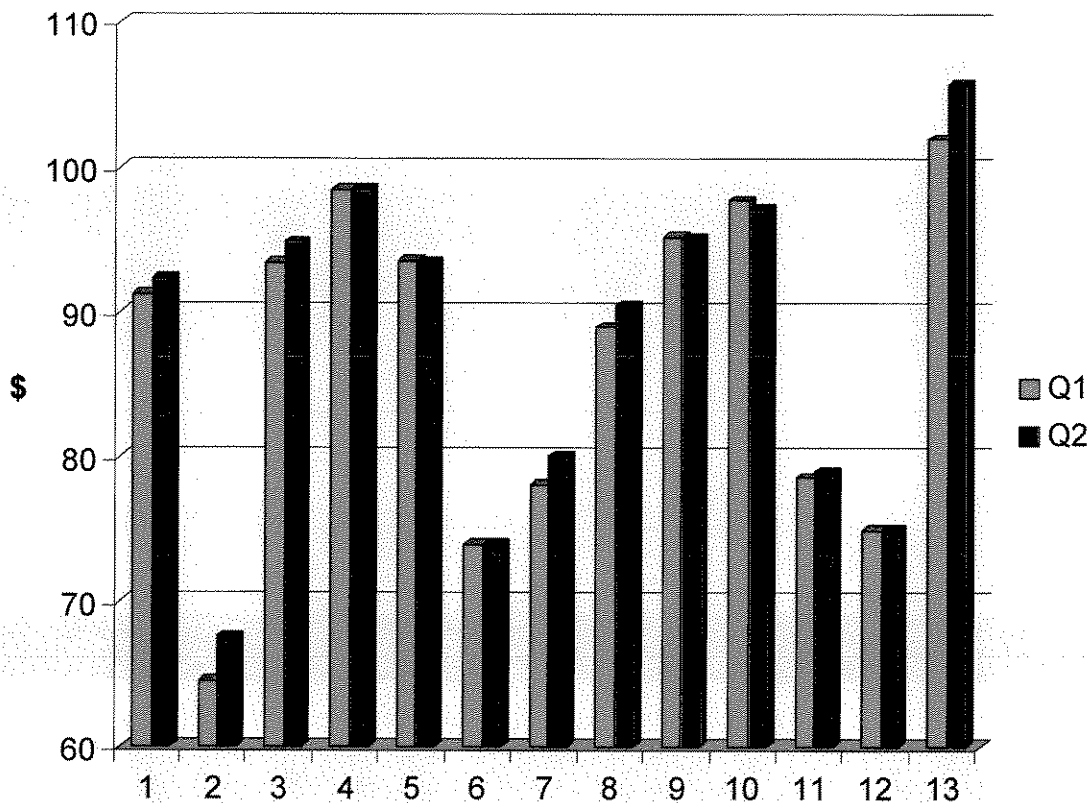
**Table.** Average service charge for CPT-4 code 99213 in 2003-1 and 2003-2

Submitting Organization	Average Charge (\$)		% of Change
	Period 1	Period 2	
Aurora Health Care	91.25	92.32	1.17
Beloit Clinic, S.C.	64.55	67.62	4.76
Covenant	93.40	94.87	1.57
Dean Health System	98.49	98.50	0.01
Franciscan Skemp Healthcare	93.57	93.50	-0.07
Group Health Cooperative of South Central Wisconsin	73.99	73.99	0.00
Gundersen Lutheran	78.11	80.08	2.52
Luther Midelfort - Mayo Health System	88.97	90.50	1.72
Marshfield Clinic	95.18	95.16	-0.02
Medical College of Wisconsin	97.71	97.12	-0.60
Mercy Health System	78.57	78.99	0.53
Thedacare Health Systems	74.91	74.98	0.09
University of Wisconsin Medical Foundation	101.95	105.77	3.75

Date: 11/03/2003

The bar chart below displays the average service charge in dollars for CPT-4 code 99213 by each submitting organization in reporting periods 2003-1 and 2003-2. It enables readers to observe the charge difference among submitting organizations over two reporting periods.

**Figure.** Average service charge submitted for CPT code 99213 in 2003-1 and 2003-2



- 1 - Aurora Health Care
- 2 - Beloit Clinic, S.C.
- 3 - Covenant
- 4 - Dean Health System
- 5 - Franciscan Skemp Healthcare
- 6 - Group Health Cooperative of South Central Wisconsin
- 7 - Gundersen Lutheran
- 8 - Luther Midelfort - Mayo Health System
- 9 - Marshfield Clinic
- 10 - Medical College Of Wisconsin
- 11 - Mercy Health System
- 12 - Thedacare Health Systems
- 13 - University of Wisconsin Medical Foundation

The table below provides the average service charge in dollars for CPT-4 code 99213 in reporting periods 2003-1 and 2003-2, by submitting organizations and their regions.

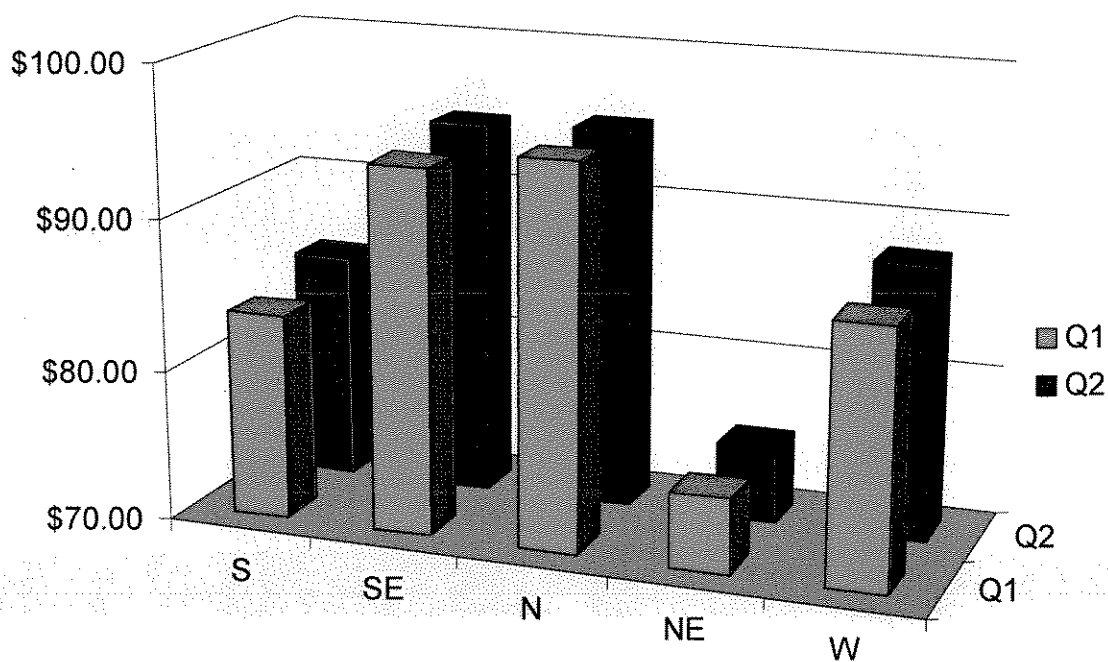
**Table.** Average service charge for CPT code 99213 in 2003-1 and 2003-2 by Region

Submitting Organization	Average Charge (\$)	
	Period 1	Period 2
<b><i>Southern</i></b>	<b>\$ 83.51</b>	<b>\$ 84.97</b>
Beloit Clinic, S.C.	64.55	67.62
Dean Health System	98.49	98.50
Group Health Cooperative of South Central Wisconsin	73.99	73.99
Mercy Health System	78.57	78.99
University of Wisconsin Medical Foundation	101.95	105.77
<b><i>Southeastern</i></b>	<b>\$ 94.00</b>	<b>\$ 94.77</b>
Aurora Health Care	91.25	92.32
Covenant	93.40	94.87
Medical College of Wisconsin	97.71	97.12
<b><i>Northern</i></b>	<b>\$ 95.18</b>	<b>\$ 95.16</b>
Marshfield Clinic	95.18	95.16
<b><i>Northeastern</i></b>	<b>\$ 74.91</b>	<b>\$ 74.98</b>
TheDACare Health Systems	74.91	74.98
<b><i>Western</i></b>	<b>\$ 86.88</b>	<b>\$ 88.02</b>
Franciscan Skemp Healthcare	93.57	93.50
Gundersen Lutheran	78.11	80.08
Luther Midelfort - Mayo Health System	88.97	90.50



The bar chart below presents the average service charge in dollars for CPT-4 code 99213 by each submitting organization in reporting periods 2003-1 and 2003-2. It enables readers to examine the charge difference among regions over two reporting periods.

**Figure.** Average service charge submitted for CPT code 99213 by Region



S - Southern  
SE - Southeastern  
N - Northern  
NE - Northeastern  
W - Western

The table below provides an example of the potential health care management analysis. A set of office/outpatient visit procedures is selected as a service-type base. The table displays the percentage of each type of office visit services rendered by a particular physician. It enables readers to examine the association between a service type and a provider specialty.

**Table.** Percentage of total office/outpatient visits by physician specialty in 2003-1

<i>CPT Codes</i>	<i>Percentage of Office/outpatient Visits</i>						
	<b>Family Practice</b>	<b>Pediatrics</b>	<b>Internal Medicine</b>	<b>General Surgery</b>	<b>Cardiology</b>	<b>Ob/Gyn</b>	<b>Other</b>
99211	18	5	26	3	1	5	42
99212	32	9	12	4	1	6	36
99213	40	12	23	1	1	2	21
99214	34	6	34	0	2	2	22
99215	23	6	47	0	1	2	21

**CPT-4 Code Definitions:**

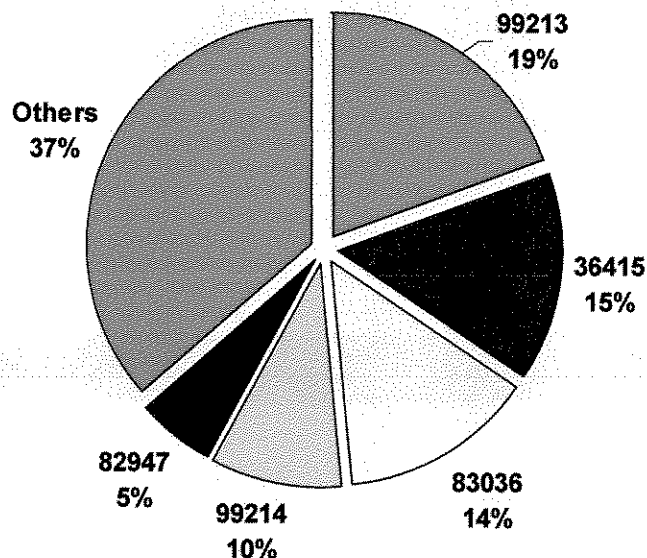
- 99211: Office/outpatient visit, new patient, Minimal
- 99212: Office/outpatient visit, new patient, Straightforward
- 99213: Office/outpatient visit, new patient, Low Complexity
- 99214: Office/outpatient visit, new patient, Moderate Complexity
- 99215: Office/outpatient visit, new patient, High Complexity

## Case Study (II): Diabetes (ICD-9 Code: 250.00)

Type II Diabetes has been researched and studied by the medical professionals in terms of its causes and impact over a decade. The diagnosis "Diabetes uncompl type II no uncontrolled" (i.e., ICD-9: 250.00) were listed as the fifth most frequent reported diagnosis in reporting period 2003-1, and risen to the third most frequent reported diagnosis in reporting period 2003-2.

The figure below shows the top five more frequent procedures rendered by the physicians when the diagnosis, ICD-9: 250.00, was given.

**Figure.** Diagnosis of diabetes (ICD: 250.00) by procedure type



- 99213 OFC/OUTPT E&M ESTAB LOW-MOD 15 MIN
- 36415 ROUTINE VENIPUNCT/ FINGER/HEEL STICK
- 83036 HEMOGLOBIN; GLYCATED
- 99214 OFC/OUTPT E&M ESTAB MOD-HI 25 MIN
- 82947 GLUCOSE; QUANTITATIVE BLOOD

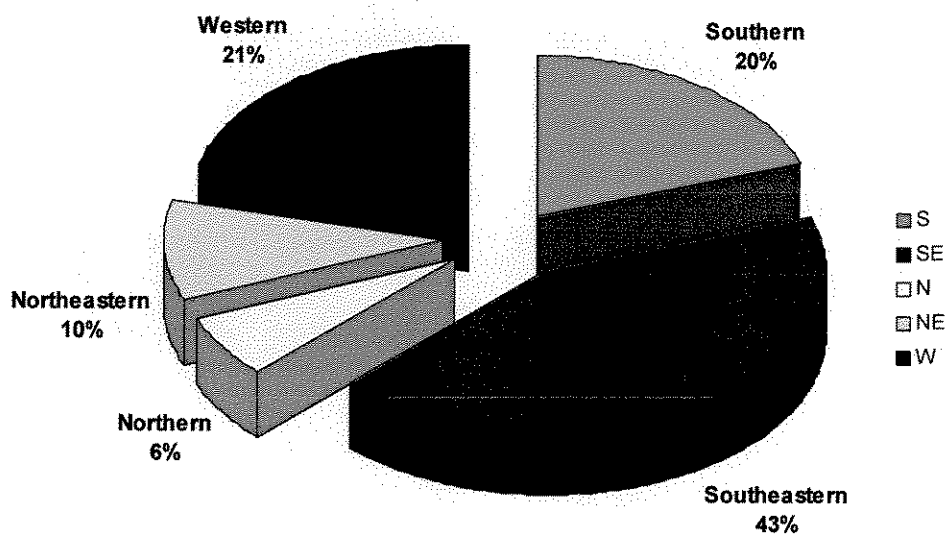
The table below provides the service counts associated with ICD-9 250.00 in reporting periods 2003-1 and 2003-2, by submitting organizations and their regions.

**Table.** Counts of diabetes diagnosis (ICD-9: 250.00) by 2003-1 and 2003-2

<b>Submitting Organization</b>	<b>Counts</b>	
	<b>Period 1</b>	<b>Period 2</b>
<b>Total Counts</b>	<b>65,343</b>	<b>73,258</b>
<b>Southern</b>	<b>12,804</b>	<b>19,265</b>
Beloit Clinic, S.C.	1,154	1,157
Dean Health System	3,218	3,338
Group Health Cooperative of South Central Wisconsin	1,780	1,520
Mercy Health System	2,071	2,678
University of Wisconsin Medical Foundation	4,581	10,572
<b>Southeastern</b>	<b>27,999</b>	<b>24,380</b>
Aurora Health Care	22,077	20,884
Covenant	5,811	3,443
Medical College of Wisconsin	111	53
<b>Northern</b>	<b>4,167</b>	<b>6,104</b>
Marshfield Clinic	4,167	6,104
<b>Northeastern</b>	<b>6,565</b>	<b>7,968</b>
Thedacare Health Systems	6,565	7,968
<b>Western</b>	<b>13,808</b>	<b>15,541</b>
Franciscan Skemp Healthcare	5,974	5,583
Gundersen Lutheran	3,340	4,162
Luther Midelfort - Mayo Health System	4,494	5,796

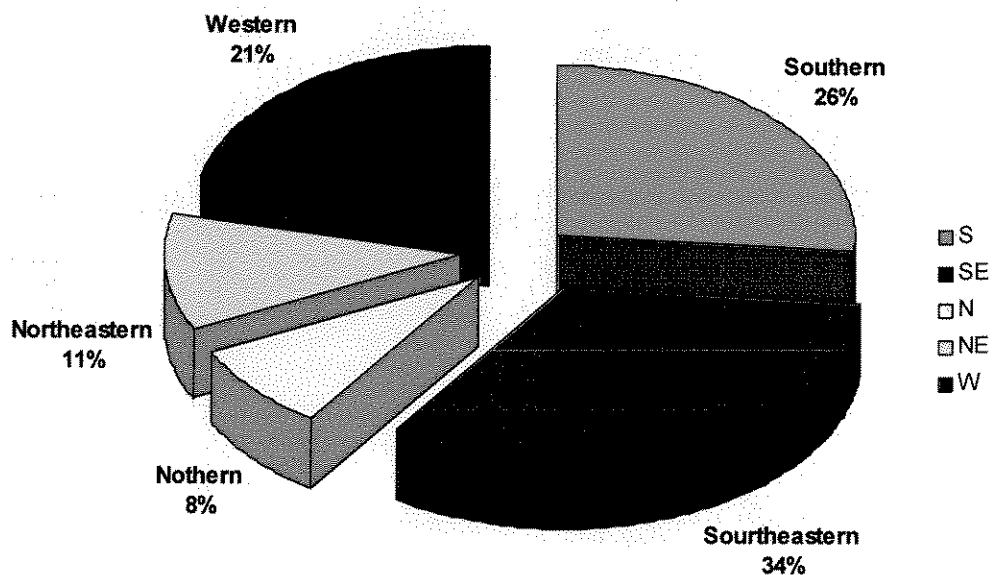
The Pie chart below shows the percentage of diabetes diagnosis (ICD-9 250.00) rendered by regions in reporting periods 2003-1.

**Figure.** Percentage of diabetes diagnosis counts (ICD-9: 250.00) by regions in 2003-1



Similarly, the Pie chart below shows the percentage of diabetes diagnosis (ICD-9: 250.00) rendered by regions in reporting periods 2003-2.

**Figure.** Percentage of diabetes diagnosis counts (ICD-9: 250.00) by regions in 2003-2



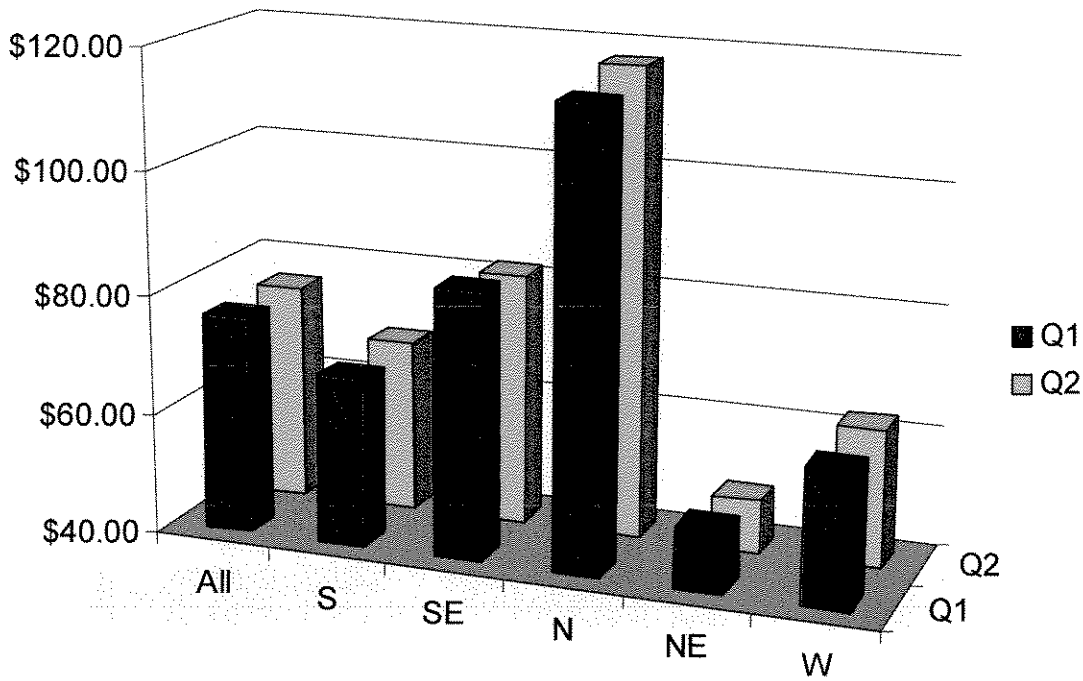
The table below provides the average service charge associated with ICD-9 250.00 in reporting periods 2003-1 and 2003-2, by submitting organizations and their regions.

**Table.** Average charge of diabetes by 2003-1 and 2003-2

<b>Submitting Organization</b>	<b>Average Charge (\$)</b>	
	<b>Period 1</b>	<b>Period 2</b>
<b><i>Average Charge in Dollars</i></b>	<b>75.91</b>	<b>75.91</b>
<b><i>Southern</i></b>	<b>67.90</b>	<b>68.51</b>
Beloit Clinic, S.C.	61.45	64.37
Dean Health System	99.01	105.04
Group Health Cooperative of South Central Wisconsin	38.81	48.90
Mercy Health System	63.34	58.96
University of Wisconsin Medical Foundation	76.88	65.27
<b><i>Southeastern</i></b>	<b>84.16</b>	<b>81.94</b>
Aurora Health Care	52.94	56.32
Covenant	61.17	70.55
Medical College of Wisconsin	138.36	118.94
<b><i>Northern</i></b>	<b>115.15</b>	<b>117.47</b>
Marshfield Clinic	115.15	117.47
<b><i>Northeastern</i></b>	<b>50.15</b>	<b>48.81</b>
Thedacare Health Systems	50.15	48.81
<b><i>Western</i></b>	<b>62.18</b>	<b>62.81</b>
Franciscan Skemp Healthcare	59.78	59.57
Gundersen Lutheran	69.36	69.23
Luther Midelfort - Mayo Health System	57.40	59.64

The figure below presents a bar chart of the average service charge associated with ICD-9 250.00 in reporting periods 2003-1 and 2003-2, by submitting organizations and their regions. The first row with an indication of "All" represents an average of all the regions.

**Figure.** Average service charge for diabetes by regions and reporting periods

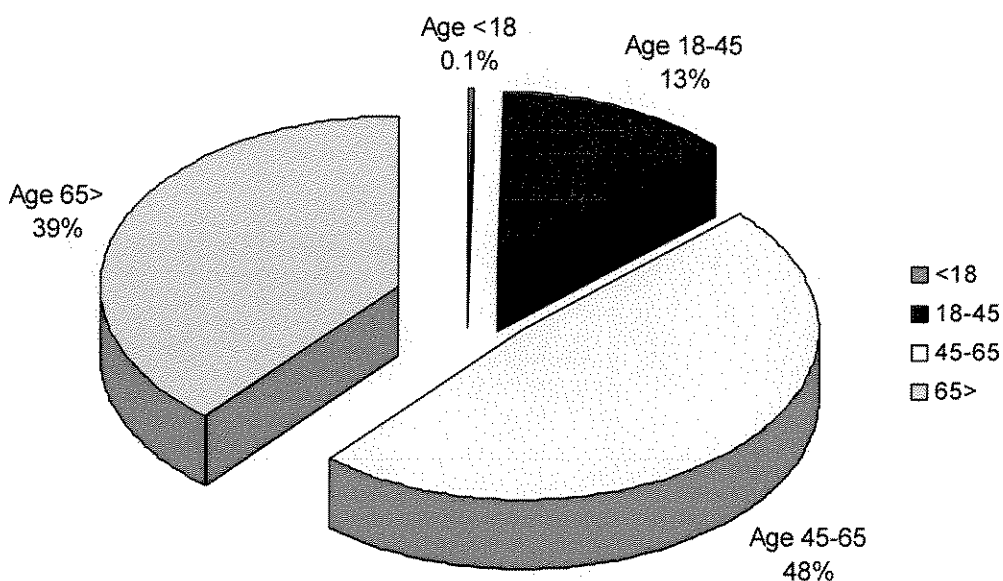


S - Southern  
 SE - Southeastern  
 N - Northern  
 NE - Northeastern  
 W - Western

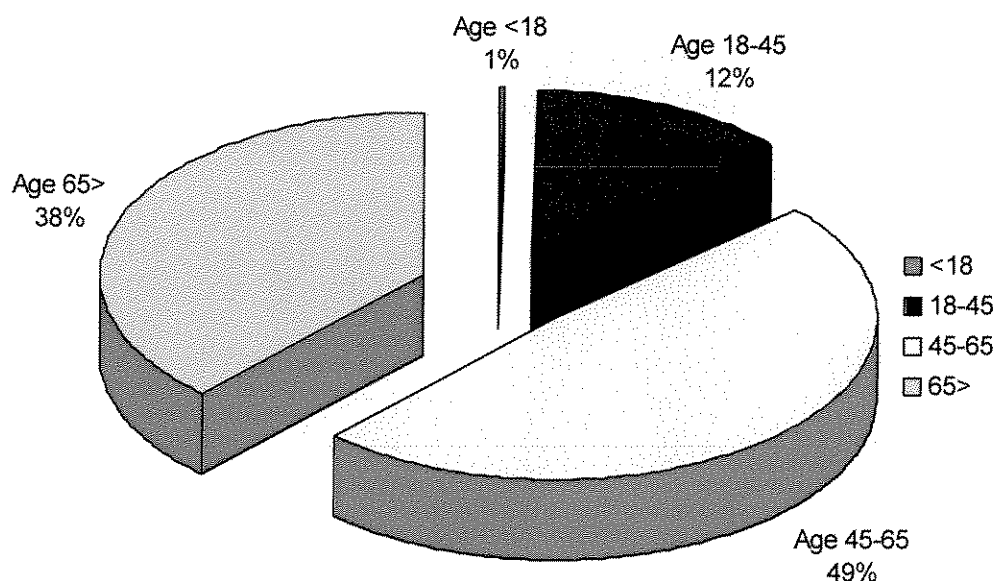


The following Pie charts display the percentage of services associated with ICD-9 250.00 by age groups in reporting periods 2003-1 and 2003-2, respectively.

**Figure.** Percentage of diabetes diagnosis rendered by age groups in 2003-1

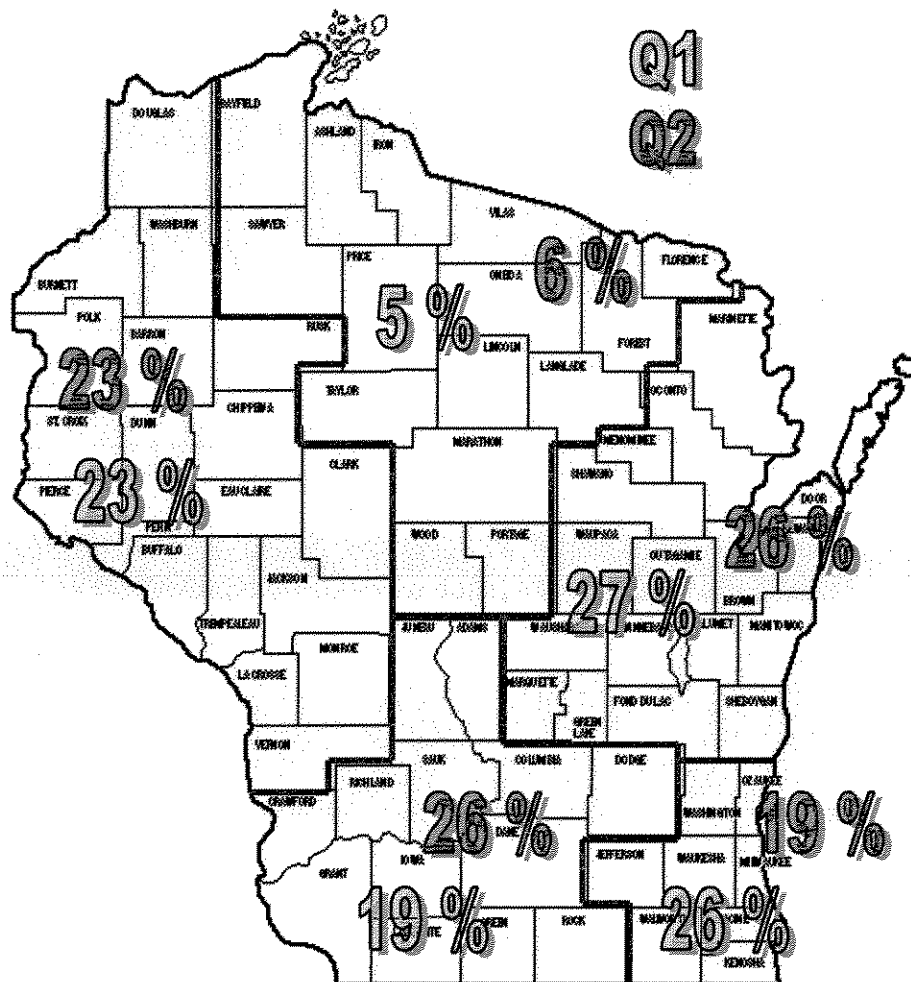


**Figure.** Percentage of diabetes diagnosis rendered by age groups in 2003-2



The following map summarizes the percentage of services associated with ICD-9 250.00 by regions in reporting periods 2003-1 and 2003-2, respectively.

**Figure.** Percentage of visits rendered by regions and reporting periods

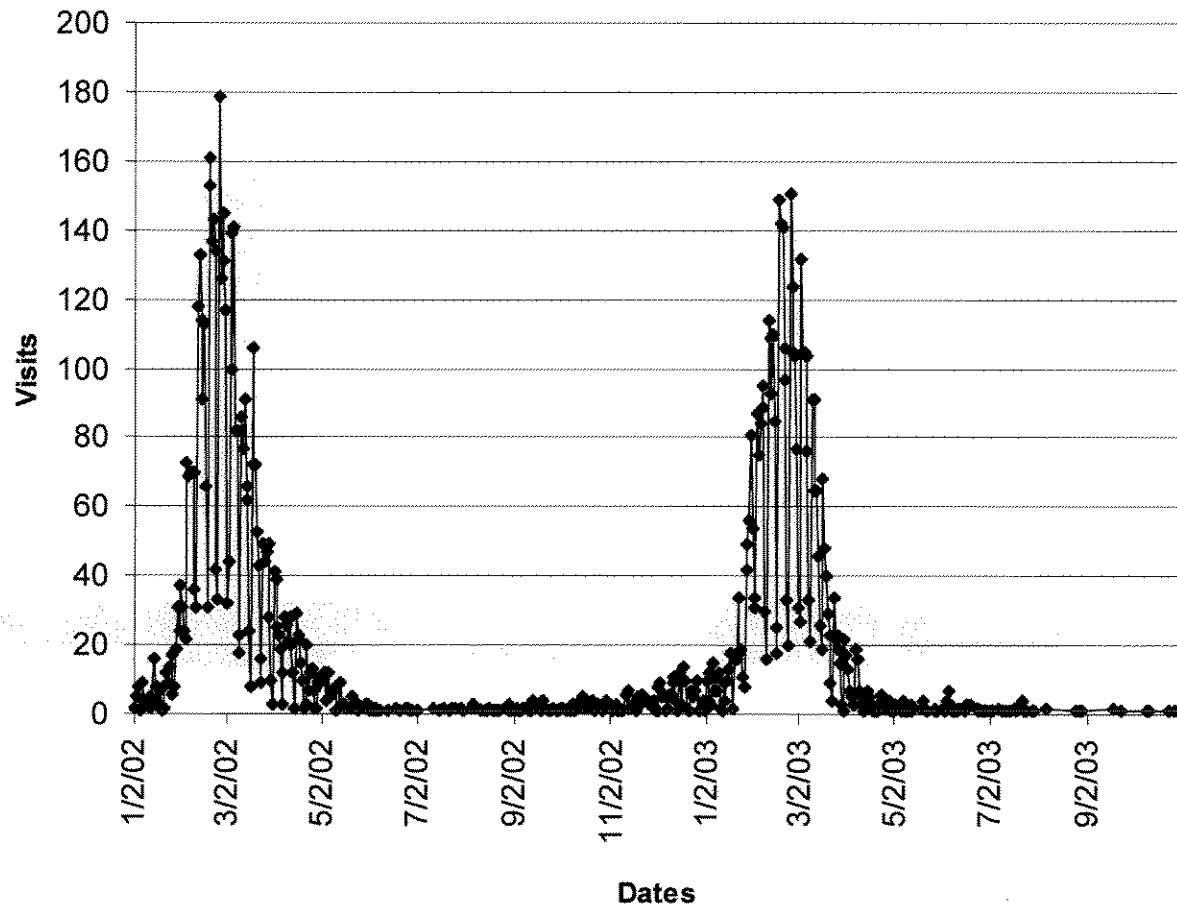


Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

## Case Study (III): Influenza

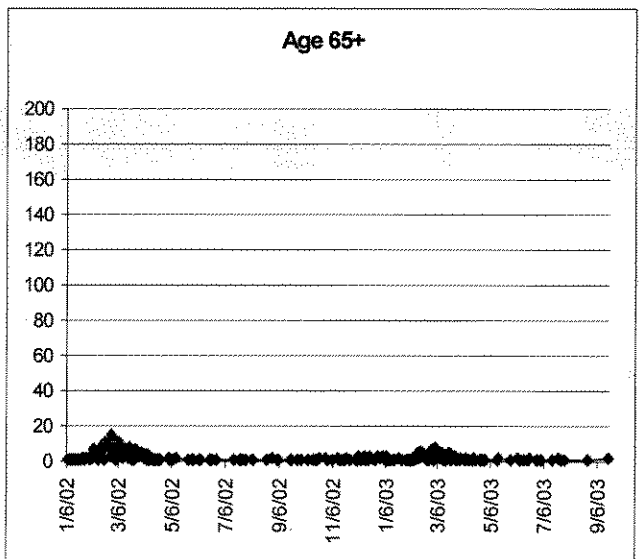
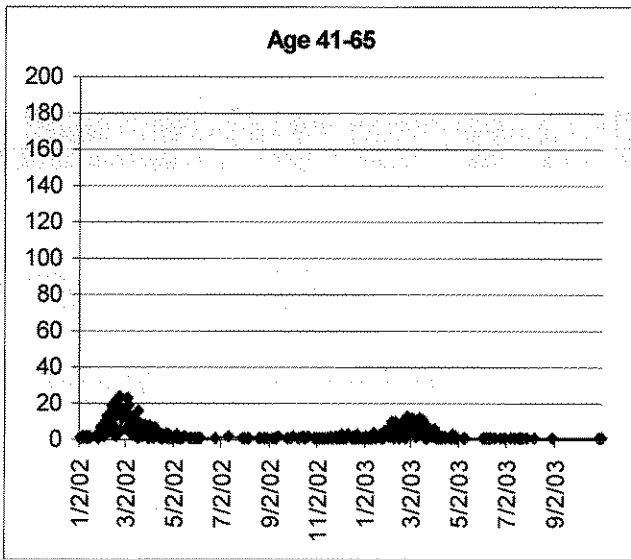
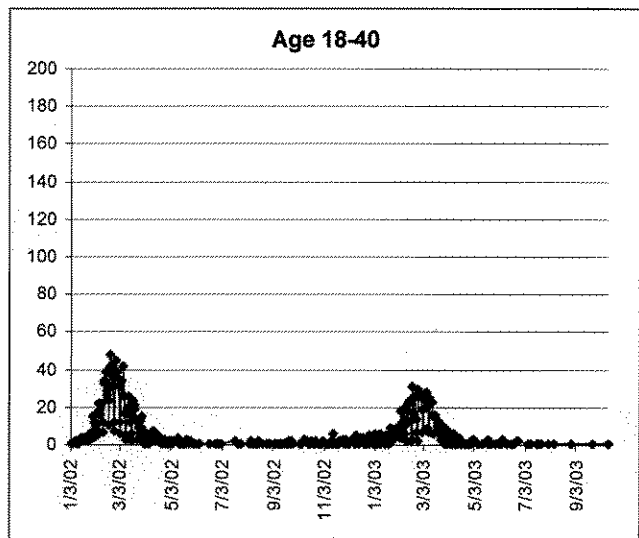
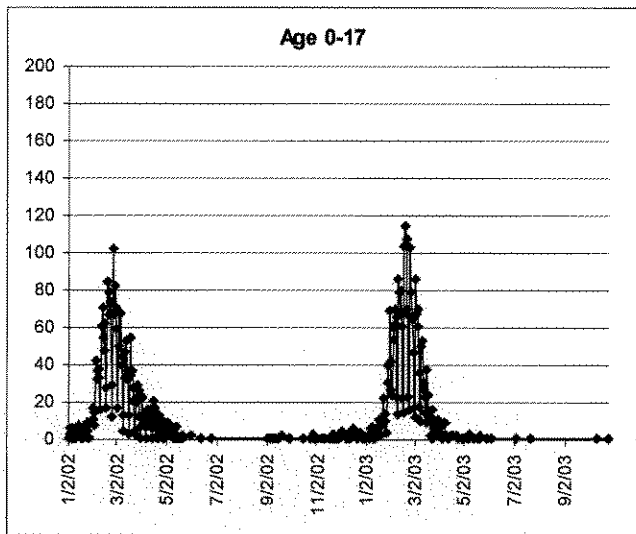
- 4870 INFLUENZA WITH PNEUMONIA
- 4871 FLU W/OTH RESPIRATORY MANIFESTS
- 4878 INFLUENZA WITH OTHER MANIFESTATIONS

**Figure.** Time series: influenza visit counts



Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

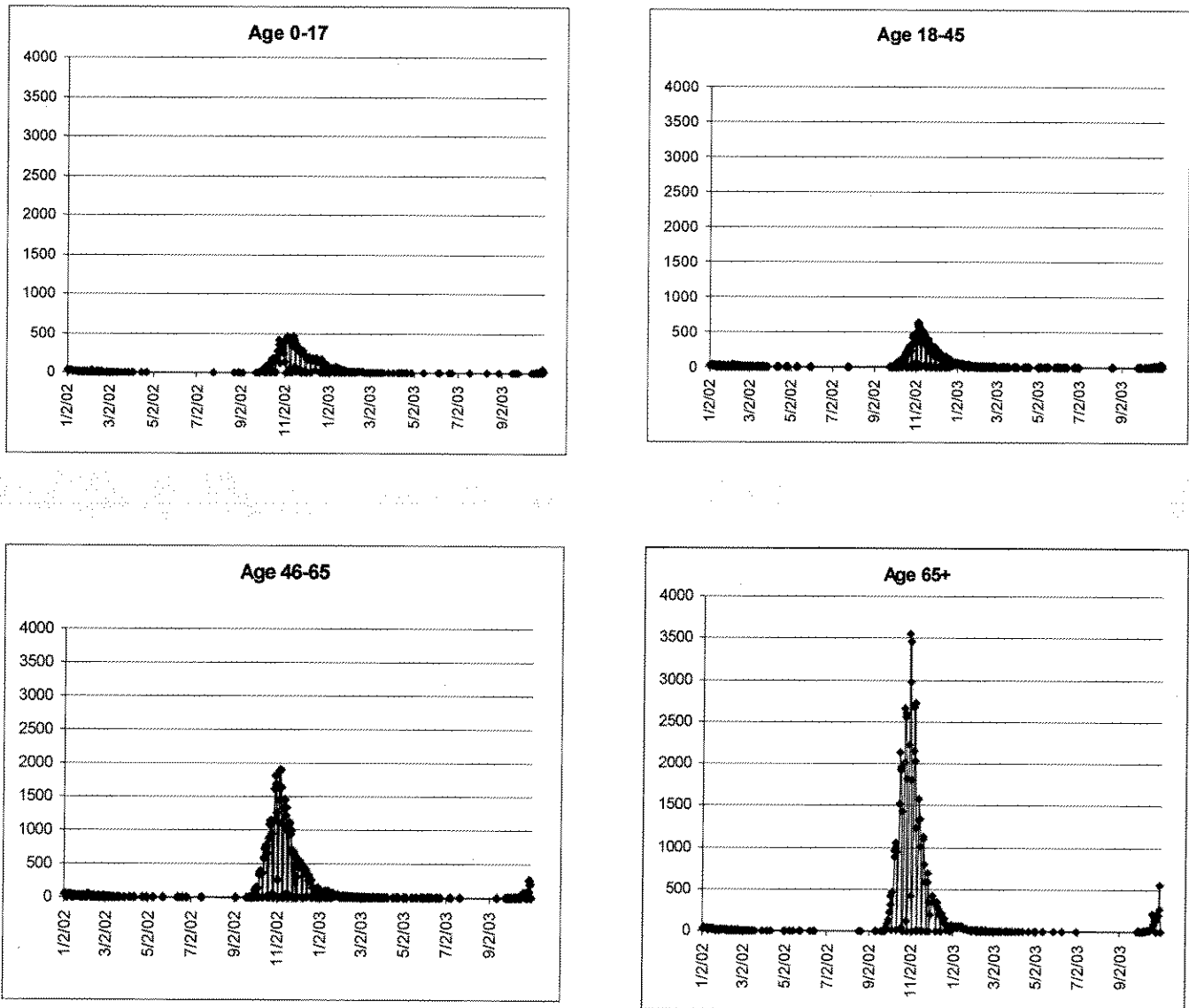
**Figure.** Time series: influenza visit counts by age groups



Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

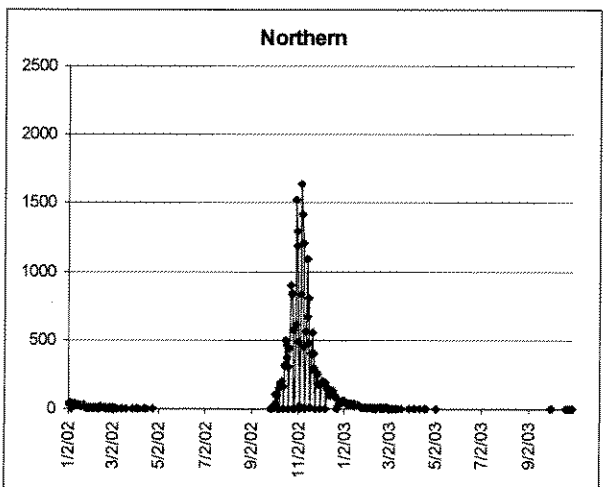
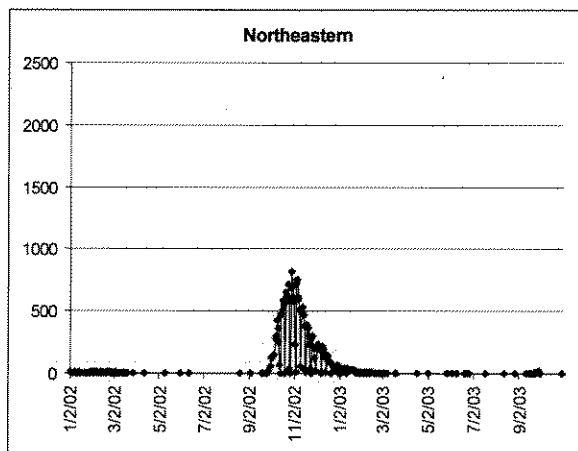
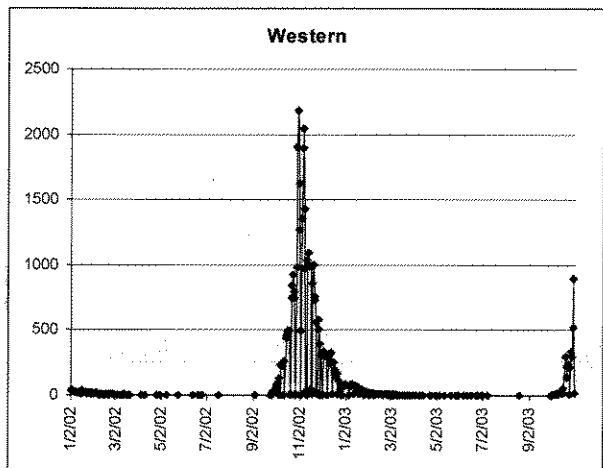
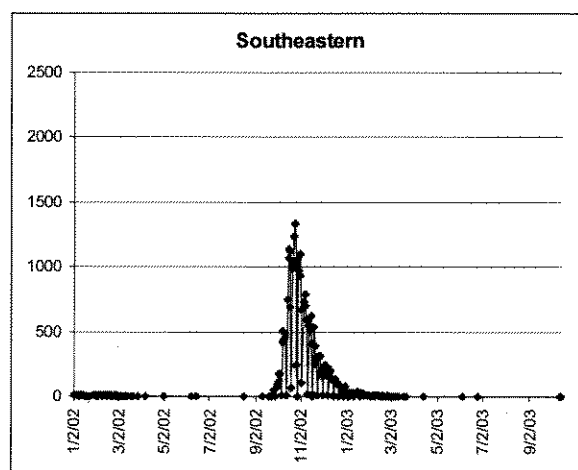
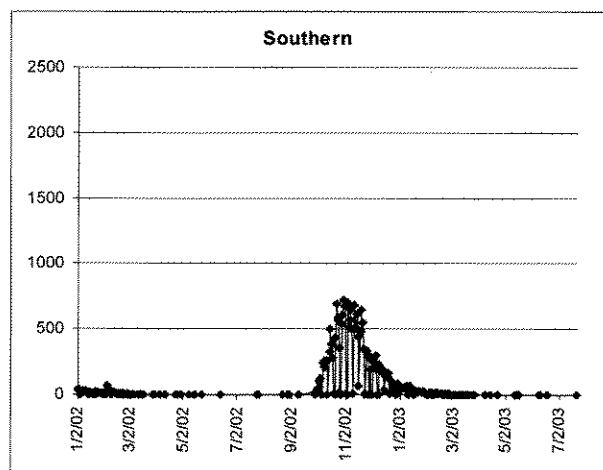
The correct coding for the influenza virus vaccine is CPT Code 90658 (split virus vaccine.) Although the whole virus vaccine (CPT 90659) has not been produced for the 2003 flu season, some providers may bill CPT 90659 for the influenza virus vaccine. Claims submitted with CPT 90659 will be paid the same as CPT 90658. However, CPT 90659 should not be used for billing of the influenza virus vaccine

**Figure.** Pattern of Influenza shots by age group over time



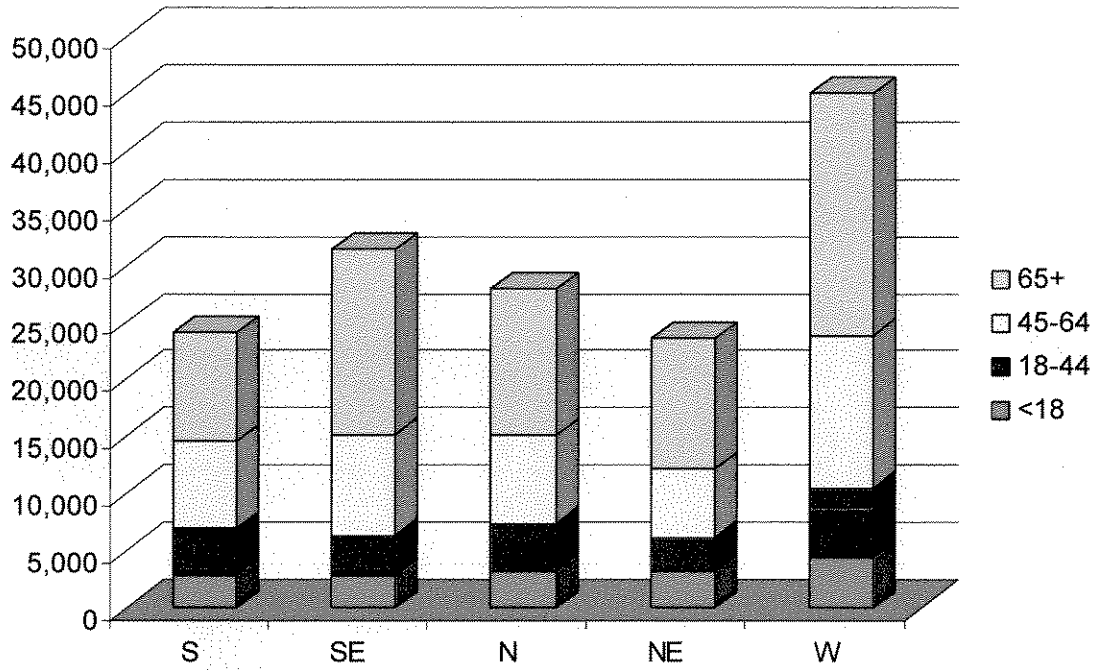
Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

**Figure.** Pattern of Influenza shots by region over time



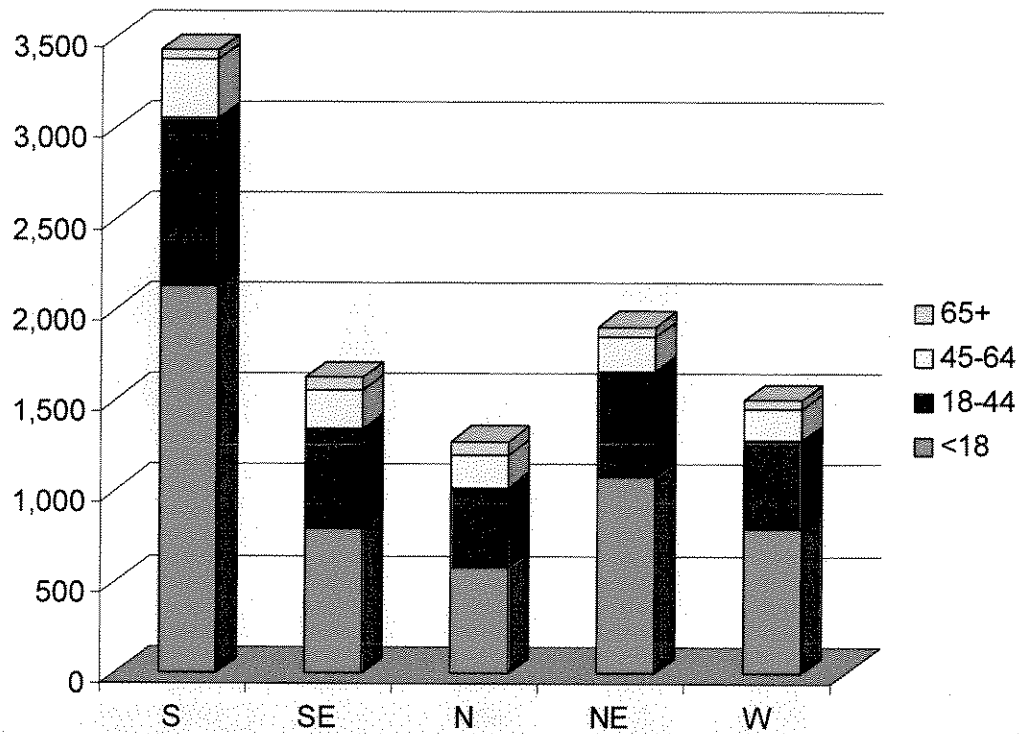
Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

**Figure.** Number of Influenza shots by regions and age groups



S - Southern  
SE - Southeastern  
N - Northern  
NE - Northeastern  
W - Western

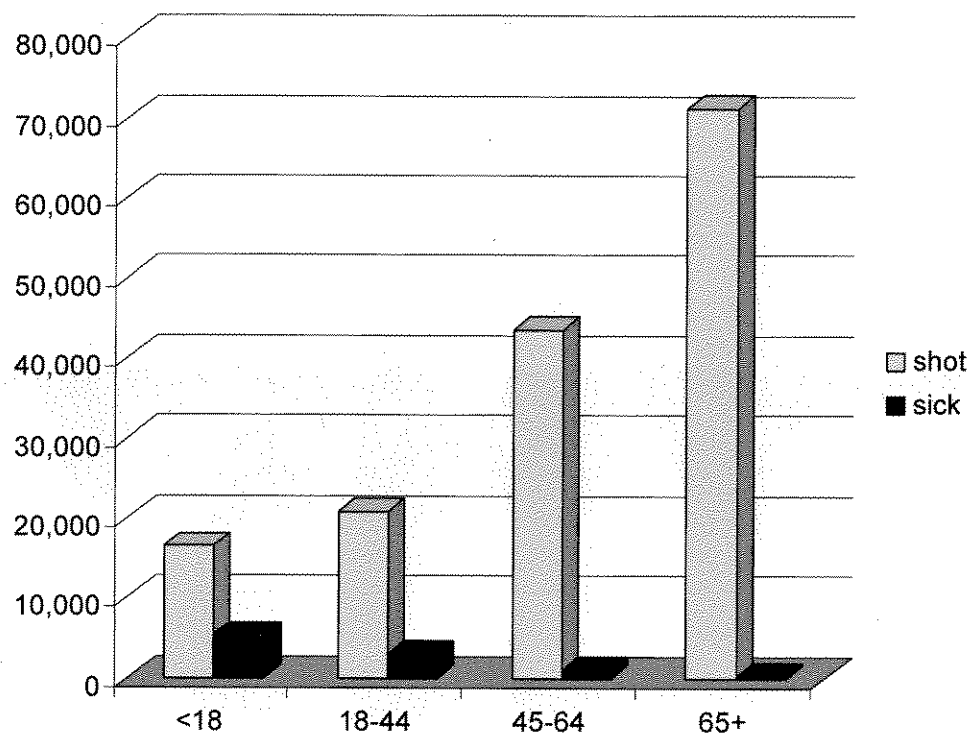
**Figure.** Number of Influenza diagnosed by regions and age groups



Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

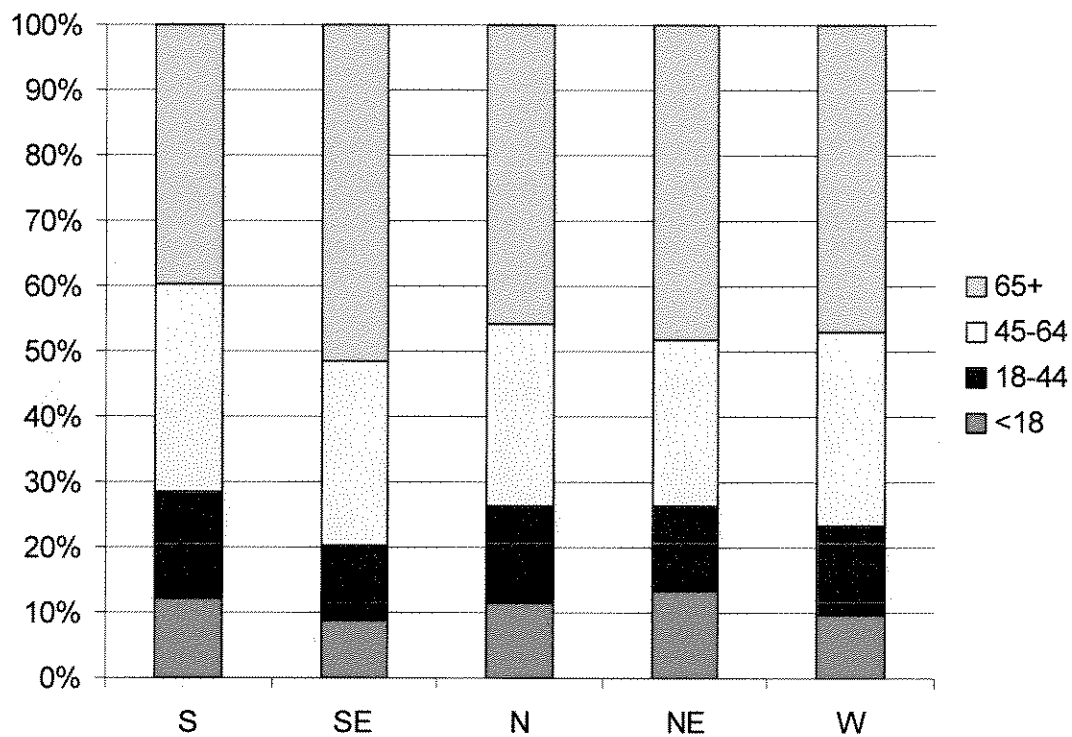


**Figure.** Counts of Influenza diagnosed v.s. Influenza shot by age groups



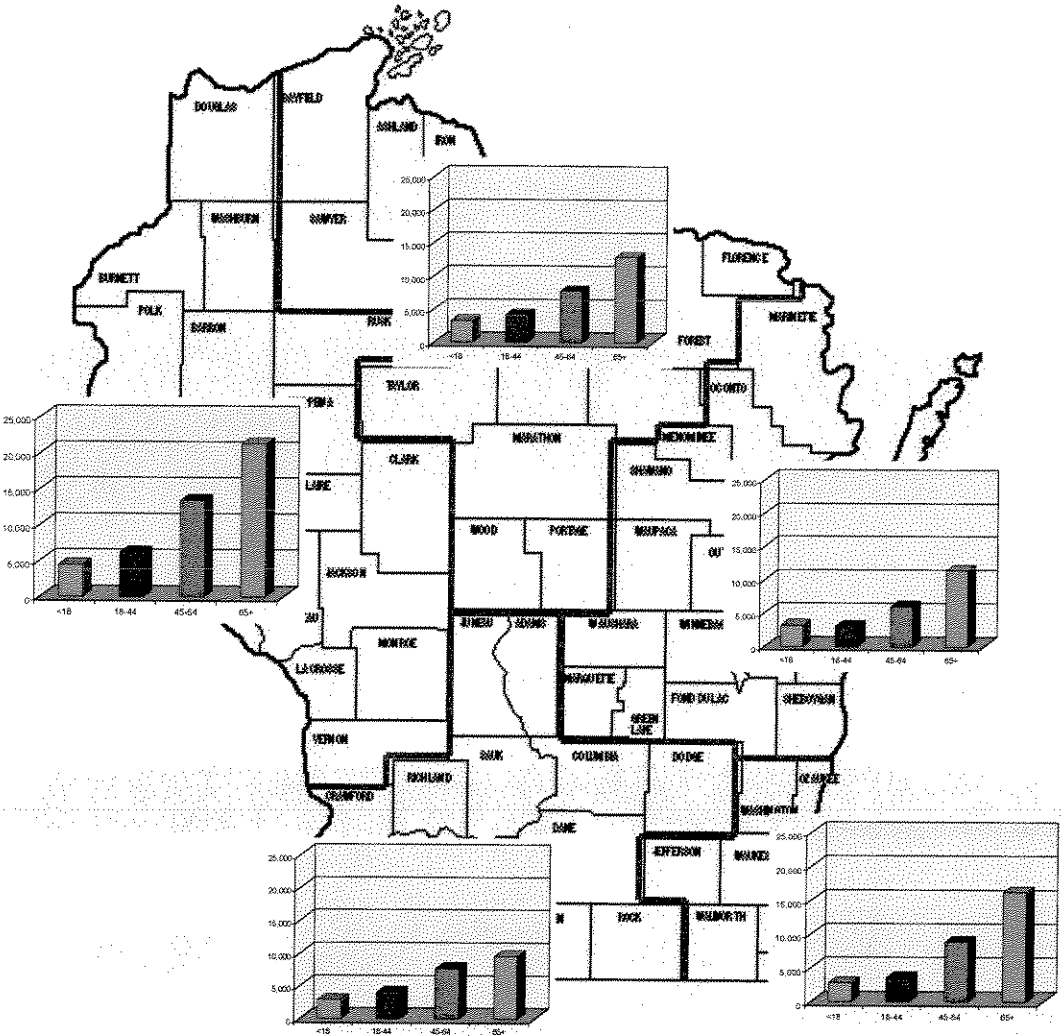
Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2

**Figure.** Percent of Influenza shots by regions and age groups



S - Southern  
SE - Southeastern  
N - Northern  
NE - Northeastern  
W - Western

**Figure.** Pattern of received Influenza shots by age groups in each region



Note: All analyses are based on the POV data collected in reporting year 2003 and periods 1 and 2