

Provider Attitudes and Practices Regarding Herpes Zoster Vaccine and Perceived Barriers



Children's Outcomes
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Disclosures



The investigators have
no relevant financial relationships
with any commercial interests

No reference will be made to the use of
medications in manners not licensed by
the Food and Drug Administration.

Background



- First vaccine reimbursed through Medicare Part D
- Most expensive vaccine recommended for older adults (≥ 60)
- Requires freezer storage at an average temperature of $\leq 5^{\circ}\text{F}$ ($\leq -15^{\circ}\text{C}$)
- National Immunization Survey 2007 found low uptake (1.9%)* 6 months after recommendations but data preceded MMWR publication

*Lu et al. *Vaccine* 2009 (in press)

Study Objectives



To assess, in a nationally representative sample of family medicine physicians (FM) and general internists (GIM) regarding HZ vaccine:

- Current vaccination practices
- Barriers to vaccination
- Knowledge and practice regarding reimbursement for vaccine
- Characteristics associated with stocking and administering HZ vaccine

Methods: Study Population



- Conducted in existing sentinel physician network
 - Recruited from random samples of AAFP and ACP
 - Quota sampling done to ensure networks similar to overall AAFP and ACP memberships
- Previous study* demonstrated this method produced comparable results to most commonly used method of randomly sampling the AMA membership with respect to:
 - Physician demographics
 - Practice characteristics
 - Responses on surveys regarding vaccine-related issues

*Crane LA, *Eval & Health Prof*, 2008

Methods: Survey Administration



- Survey period: July – September 2008
 - 26 months post licensure
 - 21 months post provisional recommendations
 - 1 month post MMWR publication

- Providers surveyed by internet or mail based on preference
 - Internet group received pre-letter and up to 8 e-mails with links to survey
 - Mail group received pre-letter and up to 3 surveys

Methods: Analysis



- FM and GIM results presented together with any differences highlighted
- Separate multivariate models predicting routinely stocking and administering zoster vaccine for each specialty

Results: Survey Response



- 72% response rate
 - FM: 72% (301/417)
 - GIM: 72% (297/411)
- Respondents not significantly different from non-respondents with respect to region, practice location and practice setting

Most Common Delivery Methods



	GIM/FM combined* (n=598)
Physician stocks and administers vaccine in office	51%
Refer pts to pharmacy to purchase vaccine and vaccine administered in office (“brown bagging”)	39%
Refer pts to pharmacy to purchase vaccine and vaccine administered at the pharmacy	33%
Refer pts to Public Health Dept. to purchase vaccine and vaccine administered at the Public Health Dept.	23%
Refer pts to another clinic or office to purchase vaccine and the vaccine is administered at that clinic or office	9%

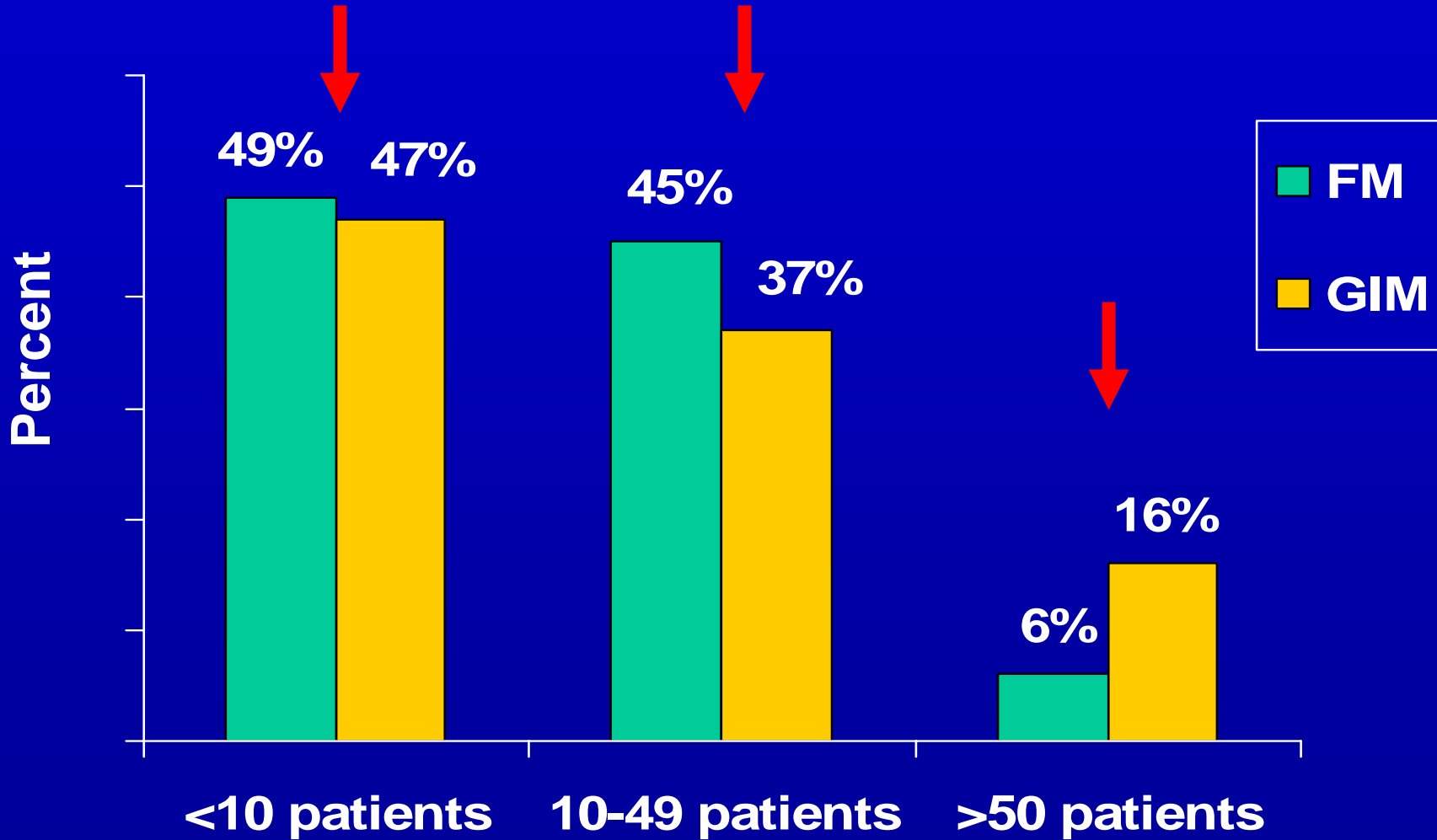
*Responses not mutually exclusive

Current Delivery Methods

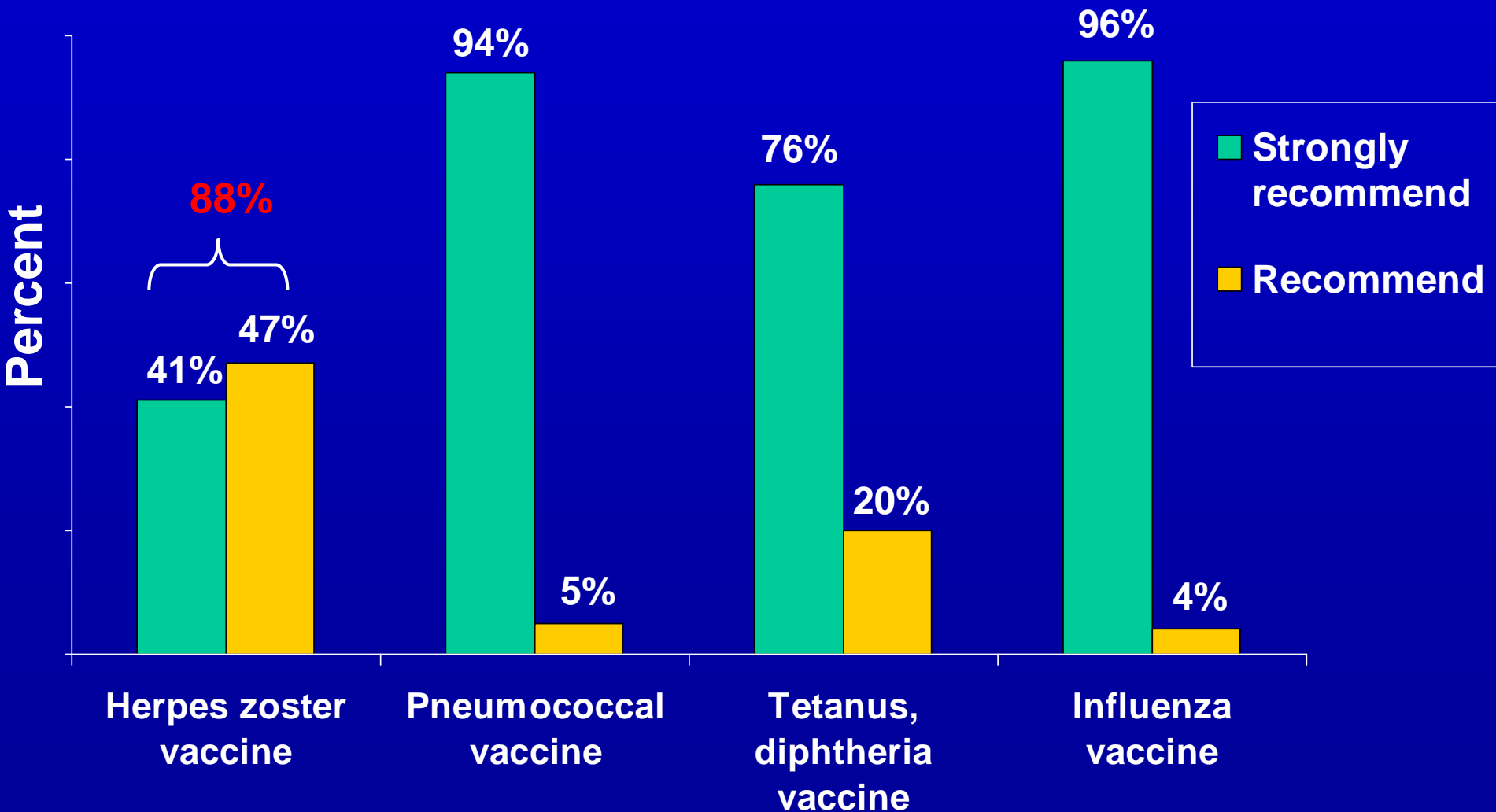


- 93% reported using at least one delivery method
- Of these:
 - 62% used 1 delivery method
 - 38% used 2 or more delivery methods

Estimated Number of Patients Administered HZ Vaccine in Past Year



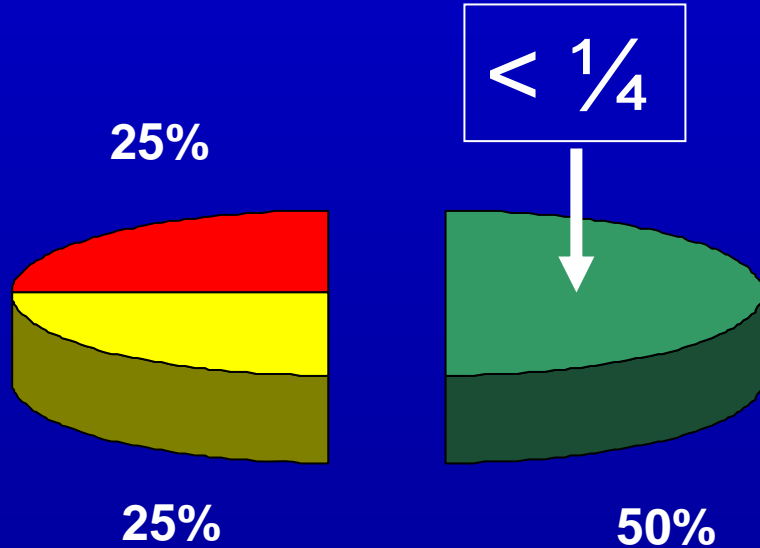
Strength of Recommendation for HZ Compared with Other Vaccines



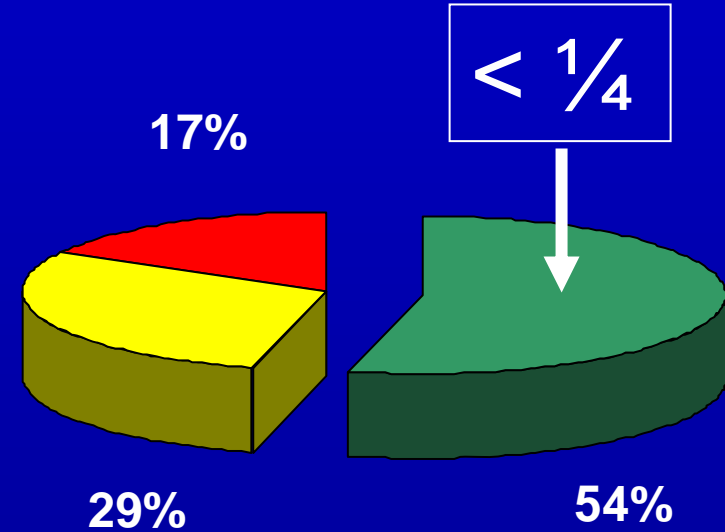
Proportion of the Time Patients Decline HZ Vaccine after Provider Recommendation



FM



GIM

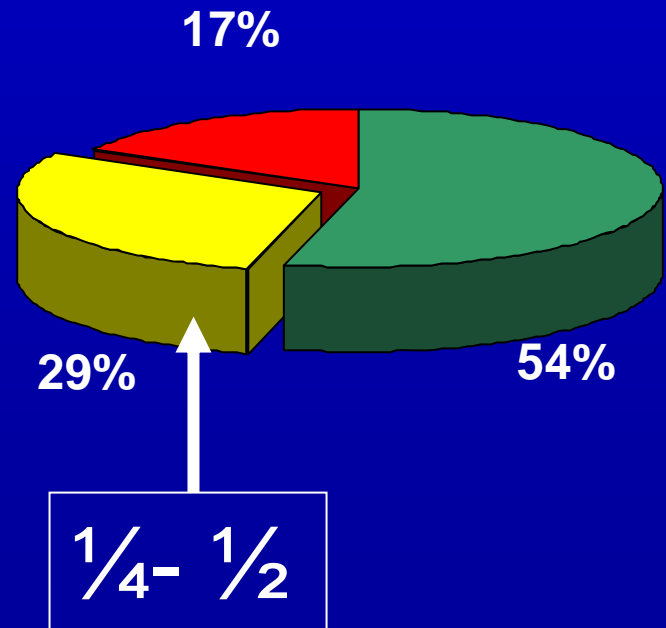
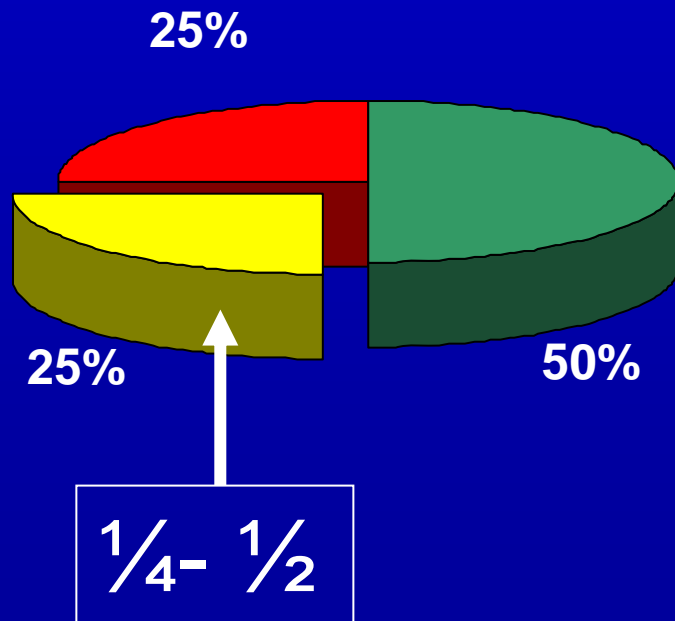


Proportion of the Time Patients Decline HZ Vaccine after Provider Recommendation



FM

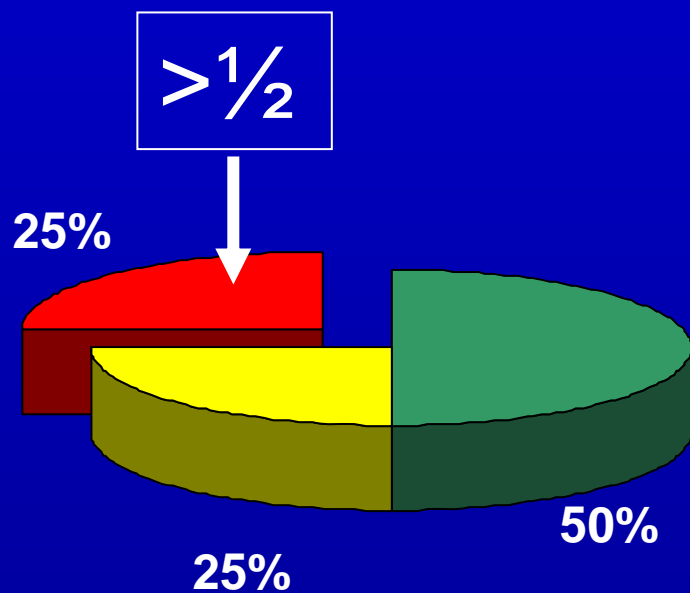
GIM



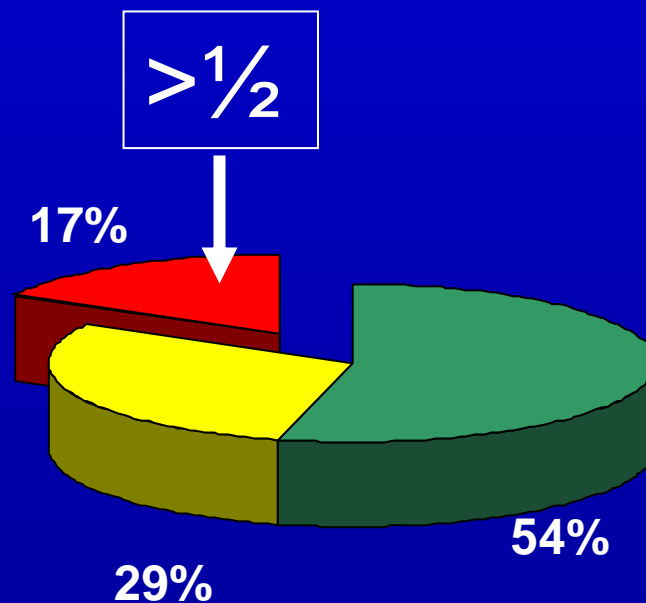
Proportion of the Time Patients Decline HZ Vaccine after Provider Recommendation



FM



GIM



Perceived Barriers to Delivery of HZ Vaccine



Barrier	Combined GIM / FM (n= 598)
Cost concerns for patients	
A major barrier	53%
Somewhat a barrier	30%
Reimbursement problems for physicians' practice	
A major barrier	52%
Somewhat a barrier	25%
“Up-front” costs to purchase vaccine	
A major barrier	43%
Somewhat a barrier	30%

Perceived Barriers to Delivery of HZ Vaccine



Barrier	Combined GIM / FM (n=598)
The need to pick up zoster vaccine at a pharmacy	
A major barrier	23%
Somewhat a barrier	25%
Need to store vaccine in freezer	
A major barrier	16%
Somewhat a barrier	20%
More pressing medical issues taking precedence	
A major barrier	12%
Somewhat a barrier	23%
Difficulty obtaining the vaccine	
A major barrier	12%
Somewhat a barrier	14%

Reported as Major Barriers < 10% of the Time



- Provider/patient concerns about safety of the vaccine
- Provider/patient concerns about effectiveness of the vaccine
- Low incidence of HZ and post-herpetic neuralgia (PHN)
- Lack of serious sequelae of HZ and PHN
- Provider/patients feeling the vaccine is not important
- Provider discomfort with administering vaccine that patient brought back from pharmacy
- Provider concern that he/she will inadvertently administer vaccine to an immunocompromised patient

Knowledge of HZ Vaccine Reimbursement



Combined FM/GIM
(n=598)

Vaccine cost is reimbursed by...

Medicare Part D (Correct)

45%

Medicare Part B

3%

HZ vaccine is not covered by Medicare

13%

Don't know / Not sure

39%

Knowledge of HZ Vaccine Administration Reimbursement



Vaccine administration is reimbursed
by...

Combined FM/GIM
(n=598)

Medicare Part D (Correct)

13%

Medicare Part B

31%

HZ vaccine administration is not covered by
Medicare

9%

Don't know / Not sure

48%

Welcome to eDispense 4.0

Registered Users please login

Login

Password

Note: Passwords are case-sensitive

SUBMIT

If you are not currently a eDispense user, click here for more information.

MORE INFO

eDispense™ has combined today's most current Electronic Prescribing Technology and modified it to DSI's proprietary Dispensing Platforms, creating a dispensing control tool that allows a physician to actually generate profits rather than an added operating expense.

Click the button below for demo

DEMO

Exit eDispense

- eDispense™ Vaccine Manager
 - Web portal through which physicians can electronically submit claims for reimbursement for Zoster Vaccine (launched 8/2007)
 - Only 7% of respondents were aware of eDispense
 - Only 1% reported being members

Strategies to Evaluate Coverage for HZ Vaccine



	Medicare Part D, %	Private Insurance, %
Ask patient to check with plan regarding coverage*	57	69
Ask patient to pay for vaccine and patient pursues reimbursement	33	27
Office staff contacts the patient's plan to identify coverage	20	24
Administer the vaccine and if patient's plan does not reimburse, I bill the patient	18	19
I assume the vaccine will be reimbursed by the patient's plan	20	15

Responses were not mutually exclusive

* Statistically significant difference

Major Reimbursement Barriers for Medicare Part D vs. Private Insurance



	% Major Reimbursement Barrier	
	Medicare Part D	Private Insurance
Level of complexity in the reimbursement process through this type of insurance*	43	33
The time and effort required to assess insurance coverage	44	39
Lack of/inadequate reimbursement for purchasing vaccine	40	37
Lack of/inadequate reimbursement for administering vaccine	24	23

*Statistically significant difference

Multivariate Associations with not Stocking and Administering HZ Vaccine



	FM	GIM
Up-front cost of vaccine is major barrier	5.0 (2.7-9.1)	13.7 (6.5-28.9)
Freezer storage is major barrier	4.3 (1.4-13.7)	49.1 (10.2-236.5)
Reimbursement is major barrier	2.1(1.1-3.7)	NS
<25% patients with private insurance	NS	3.2 (1.5-6.9)
Rural location of practice	NS	4.9 (1.7-14.6)

Also tested and not significant: physician demographics (age, gender, graduation year) practice characteristics (region, type, urbanicity), % patients eligible, knowledge, and all barriers.

Multivariate Association with Stocking and Administering HZ Vaccine



FM

GIM

Knowledge of claim submission and reimbursement process

1.9 (1.1-3.5) 2.1 (1.1-4.2)

Also tested and not significant: physician demographics (age, gender, graduation year) practice characteristics (region, type, urbanicity), % patients eligible, knowledge, and all barriers.

Likelihood that Physicians Would Provide HZ Vaccine if Covered Under Medicare Part B



**FM/GIM Combined
(n= 598)**

Would be <u>much</u> more likely to provide	49%
Would be <u>somewhat</u> more likely to provide	27%
Would not change physician's practice	24%

Strengths & Limitations



■ Strengths

- First survey to assess physician perceptions of the HZ vaccine post-licensure
- High response rate

■ Limitations

- Respondents may have differed from non-respondents
- Sentinel physicians may differ from physicians overall
- Analytic associations do not imply causality
- Survey results represent reported practice; actual practice not observed

Summary of Findings



- Current Vaccination Practice for HZ
 - Although roughly 1/2 of physicians reported stocking and administering the vaccine, the number of patients to whom they administer was generally small
 - Multiple delivery methods being used, some that may jeopardize the integrity of the vaccine and compromise vaccine delivery in the medical home
 - Although most feel vaccine is safe, effective and important, reported strength of recommendation compared to other routine adult vaccines was low

Summary of Findings



- Knowledge and practice regarding reimbursement
 - Less than half of providers knew that HZ vaccine is reimbursed through Medicare Part D
 - Providers turning to their patients to determine coverage
 - Providers reported reimbursement process for Medicare Part D is more complicated than for private insurance

Summary of findings



- **Barriers to Vaccine Delivery**
 - Most frequently reported barriers to vaccination were financial
 - In multivariate analyses controlling for physician and practice characteristics, those who identified the need for freezer storage and the 'up-front costs' of the vaccine as major barriers were less likely to stock and administer the vaccine

Conclusions



- Barriers to optimal adoption of Herpes Zoster vaccine may include:
 - Lack of uniform support from physicians
 - Lack of knowledge regarding reimbursement
 - Perception that reimbursement process through Medicare Part D is complicated
 - Reliance on patients to determine coverage
 - Physicians' concerns regarding upfront cost, reimbursement problems and freezer storage

Implications



Approaches to optimizing HZ vaccine delivery should include:

- Education regarding appropriate delivery methods
- Solutions to financial and billing problems
 - Inclusion of HZ vaccine coverage under Medicare Part B
 - Promotion of provider use of eDispense™ and simplification of claims process under Medicare Part D
 - Increased reimbursement for vaccine and administration

Vaccine Policy Collaborative Initiative



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Thank You