

Centers for Disease Control and Prevention

Diabetes/Flu Campaign

**Exploratory Discussion Group Findings
Focus Group Report
(DRAFT)**

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Executive Summary

Introduction

On behalf of the Centers for Disease Control and Prevention (CDC), Prospect Associates conducted four focus groups to assess knowledge, attitudes, and behaviors among health professional audiences about the need for people with diabetes to have flu and pneumococcal shots. In addition, the groups explored existing barriers to immunizations among patients and professionals, and sought to determine the best communication strategies and messages for overcoming these barriers. The target audience was health professionals. The focus groups took place in Baltimore, Maryland.

Two groups were conducted with physicians (endocrinologists, internists, primary care physicians, and clinic physicians) and two with diabetes educators (certified diabetes educators, nurse practitioners, and nurse educators). The groups were also segmented by patient population. Two groups (one with physicians and one with educators) were conducted with individuals who see primarily Caucasian patients and two groups were conducted with those who see primarily minority patients.

A total of 40 individuals participated in the study. Each group was facilitated by a professional moderator and lasted approximately two hours.

KEY FINDINGS

- There was strong consensus across all four groups that the flu vaccine should be recommended for all people with diabetes, with the exception of those patients who are allergic to the vaccine, severely immunocompromised, or pregnant. Participants were far less knowledgeable about the guidelines for administering the pneumococcal vaccine, with most participants suggesting the shot should be given only to the elderly or to those who are prone to upper respiratory infection. Participants were also unclear about the guidelines for the pneumococcal revaccination.
- Participants indicated there are many places people can go to for flu shots, including the physician's offices, grocery stores, pharmacies, hospitals, and other public settings.
- Participants did not consider standing orders to be a useful method for increasing the rate of immunization among people with diabetes because they feel that decisions to provide shots should be made on an individual basis based on a patient's medical history.

According to physicians and diabetes educators, major patient barriers to receiving flu and pneumococcal vaccinations include:

- *Fear of side effects or actually getting the flu.* Past experience and myths cause some people to worry that the vaccines will produce severe side effects or give them the illness they are meant to prevent. This is true especially in the case of the flu shot; fewer patients have direct experience with the pneumococcal shot.
- *Access and cost.* Patients, in general, are often concerned about the cost of the vaccines and whether they will be covered by insurance. Elderly patients and those who are homebound may find it particularly difficult to get their vaccinations. These patients often face transportation and mobility problems that make it difficult to get to a physician's office. In addition, Medicare apparently does not cover the cost of immunizations administered at home. Patients must receive immunization in the physicians office.
- *Cultural barriers.* Participants explained that some minority patients will not get vaccinations because they lack trust in the medical establishment or simply because receiving inoculations is not part of their culture.
- *Avoidance and denial.* Patients also resist shots because it is "simple human nature" to avoid unpleasant situations – particularly a flu shot that has to be repeated on a yearly basis. This is especially so if a patient has not accepted their diabetes.
- Participants suggested that better patient information would help raise public awareness and, in turn, help raise immunization rates among people with diabetes. Suggested strategies include:
 - *Direct marketing.* Advertising on television and in newspapers as flu season approaches would remind patients to see a physician for their flu shot. Since people are less familiar with the pneumococcal vaccine, advertising could also be used to increase awareness about its importance. It was also suggested that pharmacies might include public education inserts inside prescription bags, with the message: "Ask your doctor about getting your flu and pneumococcal shots."
 - *Office-based patient education.* Across the focus groups, participants agreed that brochures and easily reproducible fact sheets should be placed in patient waiting rooms. Although physicians had mixed reactions to the use of posters, diabetes educators were greatly in favor of placing posters around physician's offices and clinics to inform people with diabetes of the need for flu and pneumococcal immunization. Some physicians introduced the idea of using a ticket method, either a ticket the patient could tear off a poster (if one was in the office) or one the nurse could hand the patient to turn in to the doctor for their shot(s).

- *Giveaways.* Diabetes educators, especially those treating primarily minority patients in urban settings, stressed the value of giveaways and incentives when disseminating messages about immunization. Possible giveaways might include pens, refrigerator magnets, pillboxes, diabetes logbooks, testing strips, and tissue packs.
- *Events.* Diabetes educators suggested that physicians could hold “open houses” or health fairs to draw patients into the office where they can offer free immunizations and other screenings. These events could be advertised in advance or invitations could be mailed to patients with diabetes.
- *Wallet cards.* Participants widely recommended that a wallet size immunization card or passport be given to patients so that they can keep a record of their immunizations the way parents do for children.
- Professional barriers to providing flu and pneumococcal vaccines include:
 - *Lack of knowledge about guidelines.* The guidelines for the pneumococcal vaccine are unclear to professionals. Participants were not sure if such guidelines exist and were unclear about which patients should receive the vaccine and how often a booster shot should be administered.
 - *Reimbursement/Healthcare System/HMOs.* Many participants said they find it difficult to obtain reimbursement for immunizations. Uncertainty about how to code and bill for immunization contributes to low physician compliance. Physicians who contract with managed care organizations on a capitation basis have even less incentive to administer immunizations. In the managed care environment, physicians also find it difficult to take the time to talk with patients about the need for immunizations.
 - *Timing.* Timing is a challenge for both flu and pneumococcal shots. The flu shot is seasonal, so that patients who do not visit the physician’s office during flu season miss their opportunity to be immunized. Tracking the last time a patient had his pneumococcal shot can be difficult since many patients switch primary care providers.
 - *Gap between knowledge and practice.* Although most physicians are aware they need to provide primarily flu and pneumococcal shots, they are not always doing so. There are so many things to check when they see their patients with diabetes, such as glucose levels and blood pressure, that many times immunization does not get covered.
- Participants agreed that better professional education would help increase immunization rates among people with diabetes. Suggested strategies include:
 - *Clearer guidelines.* It was evident from the groups that the guidelines for administering the pneumococcal vaccine are not well known. Guidelines need to be better defined and more effectively disseminated.

- *Mailings.* Mailings are likely to be an effective strategy for professional education. Most participants said they review their mail closely. Mailings should ideally be short and simple because of time constraints. Physicians said they especially pay attention to journals, article reprints they receive from drug representatives, and mail from health agencies such as the National Institutes of Health and the Centers for Disease Control and Prevention.
- *Professional meetings.* Diabetes educators requested information sessions at professional meetings to educate them about immunization guidelines and strategies for raising patient awareness and immunization rates.
- *Statistics.* Participants suggested that the use of statistics to illustrate flu- and pneumonia-related deaths would help shock patients (and professionals) into greater immunization compliance. Auditing patient charts to show office's actual immunization rates could also be useful in increasing compliance.
- *Office-based tools.* One suggested office-based tool is a "To Do" checklist, listing various preventive measures including the flu and pneumococcal shots, which could be handed to and discussed with the patient. Other helpful tools for physicians and office staff might include pre-printed pens, immunization order stamps, and reminder postcards.

Methodology

Research Objectives

The main objectives of the study were to assess the knowledge, attitudes and behaviors among health professional audiences about flu and pneumococcal immunization for people with diabetes, and to determine the best information for health professional audiences that can overcome any barriers that may exist among them and/or their patients. Thus, through understanding the philosophy of health professionals and their patients with regards to adult immunization for flu and pneumococcal pneumonia, materials or tools can be developed to assist in increasing the rate of adult immunization.

Prospect Associates conducted four focus groups in Baltimore, Maryland from May 26-27, 1999. A focus group facility was used to conduct the focus groups. The groups were conducted by trained moderators.

Focus Group Recruitment Criteria

Two groups were conducted with physicians (endocrinologists, internists, primary care physicians, and clinic physicians) and two groups with diabetes educators (certified diabetes educators, nurse practitioners, and nurse educators). The groups are defined in Table A below:

Table A: Group Definitions

Physicians	Educators
Primarily Caucasian Patients	Primarily Caucasian Patients
Primarily Minority Patients	Primarily Minority Patients

Participants were recruited by a focus group facility using a screener designed by Prospect Associates. An example of the screener questionnaire can be found in Appendix A.

Participants were recruited based on their specialty, the percentage of patients they treat with diabetes, and the racial/ethnic background of their patients. In addition, there was an attempt to recruit participants from a variety of racial/ethnic backgrounds.

Participant Demographics

The demographic characteristics of the focus group participants and their patient base are displayed in Table B.

Table B: Demographic Characteristics of the Focus Group Participants and Their Patients

	Group 1 MDs	Group 2 MDs	Group 3 Educators	Group 4 Educators
Number of Participants	10	10	10	10
Male	7	7	0	0
Female	3	3	10	10
Participant's Racial/Ethnic Background				
Caucasian	7	3	9	7
African American	2	6	1	3
Asian	1	1	0	0
Indian	0	0	0	0
Specialty				
Endocrinologist	1	0	0	0
Primary Care Physician	7	5	0	0
Internist	2	4	0	0
Clinic Physician	0	1	0	0
Diabetes Educator	0	0	8	7
Nurse Educator	0	0	2	1
Nurse Practitioner	0	0	0	2
Percent of Patients With Diabetes				
<20	6	1	0	0
20-39	3	7	0	1
40-59	0	1	0	0
60-79	1	1	1	0
80-100	0	0	9	9
Percent of Patients Ethnic Background				
Caucasian				
<20	0	3	0	4
20-39	0	6	0	4
40-59	0	1	0	2
60-79	9	0	7	0
80-100	1	0	3	0
African American				
<20	1	0	3	0
20-39	9	0	6	0
40-59	0	1	1	2
60-79	0	4	0	4
80-100	0	5	0	4
Hispanic				
<20	10	10	10	10
20-39	0	0	0	0
40-59	0	0	0	0
60-79	0	0	0	0
80-100	0	0	0	0
Other (Asian or Indian)				
<20	10	10	10	10
20-39	0	0	0	0
40-59	0	0	0	0
60-79	0	0	0	0
80-100	0	0	0	0

Moderator's Guide

The moderator's guide focused on attitudes about recommending flu and pneumococcal shots for patients with diabetes, health professional and patient barriers to vaccine administration, and tools to increase the rate of immunization. The guide was tailored slightly to be appropriate for each of the professional audiences. A copy of the guide can be found in Appendix B.

Focus Group Process

The focus groups lasted between one and two hours each. At the beginning of each group, participants were greeted and provided with some background about the procedures for the group. Next, the moderator led a discussion about adult immunization for flu and pneumococcal pneumonia for patients with diabetes using the guide. At the end of the discussion, participants were given the opportunity to contribute any additional thoughts.

Limitations

The ideas presented in this report are based on the opinions expressed in the focus groups. Care is taken in presenting the results to give an accurate depiction of the degree to which opinions were shared both within and across the groups. However, the findings are not quantitative in nature, and a word of caution regarding interpretation is in order. The findings are based on a relatively small sample of participants and thus do not provide a statistically representative picture of the audiences examined. Therefore, while the findings presented in this report accurately reflect the opinions expressed in the groups, they should be interpreted as suggestive and directional rather than definitive.

Detailed Findings – Physicians

[Note: Indented paragraphs below represent participant quotes. Quotes have been lightly edited for grammar and syntax.]

A. Knowledge, Attitudes, and Practices for All Patients

1. Immunization Guidelines

- Participants generally agreed that adult immunization is important and should be done. A few acknowledged that although immunization is a “good thing,” it is not provided widely enough to adults.

“I immunize everybody . . . [I’m] pretty aggressive.” (MD-6 p.m.)

“[Immunizations are] something which we don’t provide enough of, are not aggressive enough in chasing . . . [We’re] trying to improve that . . . [It’s] just not high on the interventional agenda.” (MD-6 p.m.)

“We have seen a move to educate and train internists and make us more aware of the need for immunizations . . . More of us are doing more.” (MD-8 p.m.)

- Participants agreed that flu and pneumococcal vaccines (pneumovax) are important, “beneficial,” and prevent disease, especially with the elderly population. However, according to one individual, the American Medical Association (AMA) guidelines now recommend the pneumococcal vaccine for younger people. One participant voiced his concern about recommending the pneumococcal vaccine because he thinks it does not always protect against pneumonia.

“I do a lot of pneumococcal vaccination . . . [I’ve] read in the literature that pneumococcal and especially flu vaccinations have much more impact.” (MD-6 p.m.)

“Most of my patient population is elderly, so flu shots are real big and I try to emphasize the pneumovax. I don’t think the public is quite as aware of the importance of the pneumovax vaccine, but everybody understands the flu shot.” (MD-8 p.m.)

“I’m very big on the pneumovax and the flu vax for people at risk.” (MD-8 p.m.)

“Did you get the new AMA guidelines . . .? They’re recommending the [pneumococcal vaccine] actually to younger people now.” (MD-6 p.m.)

“[About] pneumococcal . . . From what I’ve read, I have my doubts. My understanding is that it doesn’t really always protect you against pneumococcal pneumonia, but probably protects you against sepsis . . . And some studies show that some people do worse who have had the vaccine . . . [I] recommend it to COPDers [Chronic Obstructive Pulmonary Disorders], people with chronic diseases, and people over 65, but I’m not sure the literature entirely supports the pneumococcal vaccine.” (MD-6 p.m.)

2. Patients’ Attitudes Regarding Immunization

- The groups offered some different thoughts about their patients’ attitudes regarding flu and pneumococcal vaccinations.

-- Some physicians indicated that older patients are receptive to receiving flu and pneumococcal vaccines, but cost does play a role. In general, their patients are getting their shots and participants think marketing is the driving force for some immunization. While some of the physicians make referrals to places such as grocery stores that are cheaper, a few indicated that their patients would still rather go to the doctors office because they do not trust the other places if something goes wrong. It is important to note that many of these physicians practiced in suburban environments.

“[It] depends whether it’s paid for [and] how expensive it is. As with most things in health care, if they have to pay for it they don’t want to get it.” (MD-6 p.m.)

“It’s hard to meet some of the prices for the flu vaccine... They can go to Rite Aid and get it for five dollars. Our office can’t beat that, so we refer them to the pharmacy.” (MD-6 p.m.)

“A lot of my patients come [into the office] even though they can get it cheaper [elsewhere] -- because they don’t like going to a place where if something goes wrong they don’t have any recourse to call anybody and talk to them.” (MD-6 p.m.)

-- Some other physicians indicated that some patients, especially asthmatics and smokers are willing to take their shots because they know they get sick a lot. Other patients resist the shots either because they feel they are in good health, or because they believe the vaccine will make them sick, or because they do not believe the shots really work. Some physicians admitted they do not get flu shots themselves. These physicians practiced in primarily urban environments.

B. Knowledge, Attitudes, and Practices for Patients with Diabetes

1. Immunization Guidelines

- Physicians generally agreed that they recommend flu shots to patients who are immunocompromised, patients with diabetes, over age 65, and/or suffering from chronic pulmonary diseases. Some participants offer the shot to everybody and document refusals. A few noted that the concern for patients with diabetes is that the flu shot will cause the diabetes to go out of control. Participants were generally in agreement about not recommending flu shots to patients with diabetes who suffer from “egg allergies,” have experienced “adverse reactions” in the past, have exhibited a sensitivity to the vaccine, or have been infected at the site of injection. There was some debate about whether to recommend flu shots for pregnant women with diabetes; most agreed it depends on how far along in the pregnancy the patient is.

“[I recommend them to] every diabetic... I recommend it to whoever comes in, no matter what age, to get [a] flu shot and pneumovax.” (MD- 8 p.m.)

- While some physicians recommend the pneumococcal vaccine to all people with diabetes, others said they only recommend the pneumococcal shot to patients with more complicated diabetes. There was some confusion about whether the pneumococcal vaccine should be recommended to all people with diabetes and whether this is a professional guideline. Participants said they wouldn’t recommend pneumococcal shots for some of the same reasons they would not recommend flu shots such as “past reactions” and “egg allergies.” However, some also said they would not recommend the shot to immunocompromised people because of the concern of more side effects. There was also some controversy in the one of the groups about whether the pneumococcal vaccine is effective. In addition, it was discussed by the participants that the recommendations for the booster for the pneumococcal shot are unclear.

2. Immunization Settings

- Participants were generally in agreement that standing orders in a physician’s office to provide flu and pneumococcal shots would not work because making recommendations must be an individual decision based on each patient’s condition. However, some have it set up so their nurses offer the shot to the patient when they are checking vital signs, and then the patient can talk to the physician during the visit if they have any questions.

“[It would be helpful] if the HMOs would send information to the patients to call their doctor.” (MD-6 p.m.)

“If you’re going to have standing orders, you’re going to have to have an R.N. and most doctor’s offices don’t.” (MD-8 p.m.)

“In the fall, I tell my nurses to offer the flu shot while [they’re] getting vital signs. And just give them the flu shot . . . [If they] have questions or they don’t want to do it, then she won’t give it to them. . . [I offer the flu shot] to all patients.”
(MD-8 p.m.)

- A licensed individual, such as a licensed nurse, can administer the shot to the patient, but the physician is usually the one to order the shot. The participants did not seem to feel that changes such as standing orders could be made in the health care system, however it was suggested to have HMO’s send a reminder notice to patients to see their physician for a flu and pneumococcal shot similar to notices sent for reminders of mammograms.
- Another reason standing orders are not necessary is because many patients self-refer to less expensive venues to get their shots such as grocery stores, and pharmacies, or to free flu shot programs at area hospitals and other settings. Some participants were disturbed by the fact that patients go elsewhere to get their shots because they feel these places are taking their business away.

“I feel that the hospital isn’t even my ally anymore; they’re my competition.”
(MD-6 p.m.)

- Many participants indicated that being reimbursed for flu and pneumococcal shots is somewhat of an issue for them. HMOs are not reimbursing regularly for vaccines even though they have contracts with physicians to do so. If the participants associate with HMOs then they are paid based on a capitation rate (a tax or fee of so much per head) so they run into issues of not being paid for items billed above the capitation rate. Some of the issues with billing also revolve around how to code the documentation properly so that they do get reimbursed.

“Doctors spend so much time figuring out the right codes, they can’t treat the patients.” (MD-8 p.m.)

“If it doesn’t fit into a code, they [insurance company] don’t know what to do with it.” (MD-8 p.m.)

“And then the patient gets angry with you [physician] because they got the bill.”
(MD-8 p.m.)

3. Patient Counseling

- Generally participants were in agreement about what they say to patients when counseling them on why they should have flu and pneumococcal vaccines. They feel their patients would follow their advice. They generally tell their patients that they are at greater risk for complications and people die from getting the flu.

“If they’re at higher risk for complications . . . it would be a good idea to get the shot to reduce that risk.” (MD-6 p.m.)

“Flu is not always a benign illness; it can be quite traumatic. I think most people think of [the] flu as an inconvenience -- and it can be much more than that.” (MD-6 p.m.)

“[To] my patients who are working, active, and with families, I tell them the flu lasts for about a week, but then you’re fatigued for about a month . . . and [that it is] during the Christmas season . . . [They] don’t want to be tired, so [they] might want to get the shot.” (MD-6 p.m.)

“It might make you a little bit sick, but getting the flu will make you a lot sicker.” (MD-8 p.m.)

“People still die from the flu . . . There is some possibility that some people do get symptoms from the flu [shot]. It won’t keep you from getting it, but it will keep it from getting as bad as it would be without the shot.” (MD-8 p.m.)

- One physician uses an analogy to explain to his patients that the flu shot is important – even if it has minor side effects.

“I will ask [patients]: ‘If I saw a safe falling off a building, and it was going to hit you on the head, would you want me to push you out of the way -- even if it meant that you hit your head and scraped your arm when I knocked you to the ground?’ And the answer of course is always ‘Push me out of the way.’” (MD-8 p.m.)

- Some participants said that patients act as their own advocates and request to have a flu shot. Many patients are educated outside of the doctor’s office by the media.

“[Patients] pretty much request [the shot]. I would say more than 30 percent of the time the patient is the advocate of the immunization, and the rest of the time it’s rare that they don’t follow doctor’s advice.” (MD-6 p.m.)

- According to participants, many patients are aware of the flu vaccine, but express concerns about getting the shot.

-- *Side effects*: Patients are worried they will get sick or get the flu from the shot. The participants said they are battling history with some patients who remember serious problems that have occurred with flu vaccines in the past, such as the swine flu and Guillain-Barré.

“[Patients say] I got that shot once and I got the flu from it.” (MD-6 p.m.)

“I always get [the] reminder of the swine flu.” (MD-6 p.m.)

“History [is a problem], more than anything else, not so much the injection or the price.” (MD-6 p.m.)

- *Cost*: Some patients were concerned whether their insurance would cover the cost of the shot. Some participants said cost was not an issue so much for the flu shot, but was for other vaccines.
- The participants with mostly minority patients indicated that in some cases it was easier to get patients to take the pneumococcal shot because patients do not know as much about it. They also think it is an easier sell because it is a one time shot.

C. Overcoming Barriers

1. Reactions to Actual Immunization Rates

- Participants generally were not surprised by the statistic that people with diabetes are three times more likely to die from complications of flu and pneumonia. Participants agreed this could be a useful statistic to place in information for patients and to use as a reminder before the flu season starts. However, they agreed that there are some patients that this statistic would not influence because they are in denial about having diabetes in the first place. It was also suggested that it could be placed in ads in journals to remind physicians.

“I think we need to be reminded of that before the flu season starts . . . [Reminded] in some way – maybe ads in journals.” (MD-6 p.m.)

“There are patients I wouldn’t tell . . . They aren’t accepting the disease now.” (MD-8 p.m.)

2. Possible Reasons for Low Immunization Rates

- Participants with mostly Caucasian patients said that in order to ensure that physicians are giving vaccines, they need to be made aware of their actual immunization practices. For instance, they may think they immunize a lot of their patients, but a chart audit may reveal this is not the case and that many patients are not receiving the vaccines.

“I think sometimes there’s a big gap between what we know and what we do. To be honest, all of us know that all of our diabetics need flu vaccines. But I think if we knew that a lot of our diabetics weren’t getting flu vaccines, it might encourage us to do that . . . [There are] so many guidelines . . . [We’re] so strapped for time . . . [We’re] probably missing a lot of people . . . [I] suspect that is why we are here -- because a lot of people aren’t getting flu vaccines.” (MD-6 p.m.)

“The way to get [the message] across [to physicians is to] shame people into doing it . . . X percent of physicians give their patients flu vaccines . . . I’m going to be a better physician than the other guy . . . I’m going to get to 70 percent.” (MD-6 p.m.)

3. Importance of Better Professional Education

- Participants suggested a few items that they as health professionals could make use of in reminding patients with diabetes to get their flu and pneumococcal shots, but it would be dependent on the patient being in the office at the right time. These items were a checklist that they could give to the patient or something attached to the chart that they would see when they were closing it as a last minute reminder. The checklist could have all the things the patient needs to remember to do that year, not just a reminder about flu and pneumococcal shots.
- Generally participants were in agreement that chart stickers would not be useful because there are already so many stickers on the charts. They also agreed that it would not be practical to flag patients electronically because a pretty sophisticated computer system and additional staff would be needed to handle such a project.
- A few participants suggested that a “Things To Do” list or a checklist they could provide to their patients might be useful. Then physicians can say they made an attempt at getting their patients to get immunized and also put some of the responsibility on the patient to make sure they get their shots. Another suggestion was having durable cards like a “Diabetic Passport” for the nurses to provide to the patients that say “ask me about a flu vaccine.” The card could be similar to the immunizations cards for children.

- Participants said the best way to disseminate new scientific information to them is through mailings, scientific journals, newsletters, and other scientific publications. Both groups were in agreement that they spend several hours a week reviewing the mail they receive. The participants primarily rely on journals, *The Medical Letter*, drug representatives, and newspapers. The journals include:

AAFP [American Academy of Family Physicians]
JAMA [Journal of the American Medical Association]
New England Journal [New England Journal of Medicine]
Journal Watch
Annals [Annals of Internal Medicine]
Clinical Diabetes.

- Participants said the drug representatives often provide them with article reprints of new therapies. There was some debate over the reliability of newspapers. Some participants felt they provided good sources for the information they provided such as in the *New York Times*, and others said it was difficult to check the sources in the articles.
- Participants said they did not use the Internet as a primary source because it is time consuming and anyone can put information on the Internet. Some said they use the Internet to find additional information on something they may have seen elsewhere.
- The participants said they also receive unsolicited information in the mail such as meeting summaries, throw away journals (unsolicited), direct mail, and the National Institutes of Health (NIH). Participants said they read the information they receive from NIH which most often contains requests for patients for clinical trials. They did not recall receiving health promotion information from NIH or other government agencies.

“Something from NIH or a consensus review . . . They’re guidelines that you can’t ignore . . . They’re at the top of the list [to read].” (MD-6 p.m.)

- Of the many items participants receive in the mail, they said they are more likely to read the journals, items from NIH, and items marked “product recall” or “alert.” They also read the “PI’s” that are enclosed with drug product information because it is information that the Food and Drug Administration allows them to publish. Some participants said you need to at least open all the envelopes to see what the items are, but that they do not read everything. There were some participants that said they do not open their mail and that the “girls” in the front office open and sort the mail for them.
- The participants in the group that treat mostly minority patients agreed that with all the mail they receive, they do not usually read the HMO newsletters.

- Participants generally agreed that they read mailings they receive from NIH and the Centers for Disease Control and Prevention. They also agreed that to ensure they read an item it should be brief. Several participants in one of the groups agreed that a publications order form would be a good tool. They are more likely to read materials that are simple.

“If it’s short, give it to me straight, quickly.” (MD-8 p.m.)

4. Importance of Better Patient Education

- Participants were generally in agreement that providing brochures or educational materials in the waiting rooms for patients would be advantageous. Patients are concerned about getting sick from the vaccine so they need to be made aware of how many people really get symptoms from shots and that the chances of getting sick are very slim. Information about the pneumococcal vaccine is especially needed because patients are not as aware of this shot. Some suggested providing statistics about the number of people with diabetes that die from the flu because there seems to be an overall unawareness that the flu can kill. It was suggested however, that there not be too many statistics because the patients will not read the material if it is too complicated. Participants in one of the groups also suggested the information be kept as simple as possible.

“If you leave educational information around, most [patients] will read it.”
(MD-6 p.m.)

“You don’t get the flu-viral illness from getting the flu vaccine; or [the] chances of getting it are very, very slim” (MD-6 p.m.)

“X percent of diabetics that get the flu will die every year.” (MD-6 p.m.)

“List the possible complications, but keep that small.” (MD-6 p.m.)

“[Describe] what the flu is . . . The vaccine does not cure you of all illnesses.”
(MD-6 p.m.)

“Something you can leave in the waiting room, particularly [about] pneumovax because they don’t know about it.” (MD-8 p.m.)

“[Indicate] how many people really get symptoms from the shot.” (MD-8 p.m.)

- Other tools that would be useful in educating and counseling patients included fact sheets or an information card they can keep in their wallet. Similar to the fact sheets, tear off sheets with information about the flu vaccine like the one provided by the Health Department or in the Resident’s Staff Physician were suggested because they are simple and easily reproducible.

- Posters received mixed reactions from participants as a tool for reminding patients to get their flu and pneumococcal shots. Some thought it would be good and others said they had enough posters around the office or that patients might think it was for children. If a poster was used, it was mentioned that some sort of a tear off or ticket asking for a flu and pneumococcal shot could be attached to the poster that the patient could tear off and hand to the physician.
- Direct marketing to the public such as commercials on television and advertisements in newspapers were suggestions for reaching many people to remind them of the flu season and to get their shots.

“I think the best way to increase flu shots, is to increase public demand for flu shots because otherwise it’s not going to increase . . . direct marketing to the public . . . If they ask for it, they’ll get it. If they don’t ask for it, then they’re not going to get it.” (MD-8 p.m.)

- Some participants were in agreement about using pharmacies as a resource to provide reminders to diabetes patients. They felt a reminder slip could be put in the prescription bags. One participant suggested putting a reminder slip in with Social Security checks because patients will definitely be opening those envelopes.

Detailed Findings – Diabetes Educators

[Note: Indented paragraphs below represent participant quotes. Quotes have been lightly edited for grammar and syntax.]

A. Knowledge, Attitudes, and Practices

1. Immunization Guidelines

- All of the participants said they follow the American Diabetes Association (ADA) standards of care and counsel patients with diabetes to have an annual *flu* shot. The only exceptions to this rule are those patients who are allergic to the vaccine, those who are severely immunocompromised, and those women with gestational diabetes.

“There are standards of care we follow by ADA that are part of the preventive health maintenance practice . . . [Immunizations are] part of the counseling grouped under preventive maintenance, along with foot care, eye care, dental care.” (DE-8 p.m.)

- Knowledge, attitudes, and practices were much less standardized with respect to the *pneumococcal* vaccine. Moreover, major differences were noted between diabetes educators treating primarily minority patients versus those treating primarily Caucasian patients.
- Diabetes educators treating mostly Caucasian patients said they believe the pneumococcal vaccine should be given only to elderly patients and others who are especially vulnerable to upper respiratory infections. There was some confusion over whether the recommended immunization interval is every five or 10 years. These educators said they rarely, if ever, discuss the pneumovax with their patients one-on-one, because they do not feel qualified to determine whether or not the shot is necessary. Rather, they assume their patients are under the care of a primary care physician, who will know the full medical history and will administer the shot, if needed.

“Aren’t there a lot more criteria for recommending [the pneumovax]? It’s not like the flu shot where you can say they recommend it every year.” (DE-6 p.m.)

“A lot of that falls under the realm of the primary physician because they have a better understanding of the patient’s health history.” (DE-6 p.m.)

“I feel more comfortable saying the flu shot is something you should do. For the other [pneumovax], I’d say, this is something you should talk to your doctor about.” (DE-6 p.m.)

- Diabetes educators with treating mostly minority patients, on average, seemed to be more familiar with the pneumococcal vaccine and more comfortable recommending it to their patients. Participants said that in the clinic setting, they promote both the flu and pneumococcal vaccines aggressively because it is their one chance to reach a segment of the population who cannot afford private medical care and typically only seek care when they are very sick. In the hospital setting, educators treating both Caucasian and minority patients said they often give immunizations shorter shrift because there is so much material to cover in a limited time – and because they assume the patient’s primary care physician will order the shots.

“I work in two settings. In the suburban setting, the population is healthier and [the pneumovax] is not promoted as strongly as it is in the inner city clinic I work at, where patients are not as healthy and usually have asthma or other upper respiratory illnesses.”
(DE-8 p.m.)

“In a wealthier setting patients go to their physicians and they’re covered. The clinic is more acquainted with people who don’t have funds to go to a private setting – and, so, you mention [the shots].” (DE-8 p.m.)

“In clinic we push for everyone to have the shots. They’re right there. The nurses are raring to go to give them.” (DE-8 p.m.)

“In a clinic, I’m doing more there than when I see patients in my office as inpatients. I’d be more likely to talk about it in clinic. Outside of the clinic I assume they’ve already had these vaccines. It’s not part of my general assessment.” (DE-8 p.m.)

2. Immunization Settings

- Participants said that patients may receive the flu and pneumovax shots through a primary care physician, an endocrinologist, or a public health clinic. In any of these cases, the shot must be ordered by a physician. Participants were not particularly familiar with the use of standing orders to order these shots. Diabetes educators pointed out that patients also self-refer for flu shots at grocery stores, pharmacies, public schools, senior centers and other public settings. One participant noted that she had offered it to members of her diabetes support group.

“We recommended it in our support group . . . If they were interested, we had them fill out the paperwork, and the next meeting they could get the shots. But there weren’t that many who go them because most of them had primary physicians and got them there. But at least they knew we were recommending them.”
(DE-6 p.m.)

- One group which is particularly difficult to immunize are patients on home care. Medicare apparently will not pay for shots administered at home; and homebound patients often find it difficult to transport themselves to a physician's office or to a site where the immunizations are free.

“A lot of people who are homebound do not get out to physicians. Medicare does not pay for flu shots administered outside a doctor's office . . . The people who need them most can't get out to get them.” (DE-8 p.m.)

3. Patient Counseling

- Diabetes educators were asked to role-play the dialogue they typically have with their patients with diabetes regarding the need for flu and pneumonia immunizations. Across both groups, participants said they emphasize the importance of prevention to avoid elevated blood sugar levels and serious side effects. A few participants noted that they have used CDC materials as part of their “pitch” to patients.

“I say, ‘It's fall time again. We're ready for indoor activities. Have you gotten your flu shot this year? It's a good thing for diabetics every year to have a flu shot. You're more susceptible to the side effects of the flu – and we can't treat it – and it certainly will affect your blood sugar and make you feel sicker for a long period of time.’” (DE-6 p.m.)

“I emphasize prevention. ‘We're trying to help you manage your diabetes over a lifetime. As part of your yearly protocol, this is something that's recommended.’ I show them the brochure with the little life preserver lady that CDC put out. I'll refer to the radio ads and the weather, and I'll say, ‘In terms of promoting a healthy lifestyle, this is something that's recommended.’” (DE-6 p.m.)

“Our setting is very prevention oriented in general. We address immunization, along with seat belts, fire alarms in the house, etc.” (DE-8 p.m.)

“I say, ‘Your health is compromised by virtue of the fact you now have a chronic ailment. As a result of that, you have to be on the offensive to prevent your health from breaking down. Part of that is getting vaccines. The flu vaccine is given at this point in time. You want to be sure you get it soon enough that you have antibodies. Same about pneumonia – and pneumonia will kill.’” (DE-8 p.m.)

- According to diabetes educators, most patients are familiar with the flu vaccine either from personal experience or from the media. However, patients often express questions and concerns about the following issues:

- *Side effects:* Many patients are worried that the vaccine will produce severe side effects of flu. Participants said that the CDC campaign did a lot to dispel this myth. However, many are still fearful about having the shot. One participant said she addresses these fears head-on by telling patients that they *will* experience side effects.

“There’s still a lot of people who think they’re going to get sick from the vaccine.” (DE-6 p.m.)

“CDC’s campaign really educated you that colds run at the same time as the flu vaccine. Sometimes it’s just coincidence [that you get sick].” (DE-6 p.m.)

“I say, ‘Should you take the flu shot? You have blood sugars running 200, 300. You need it. You will have some symptoms of the flu because your immune system isn’t healthy. Take lots of fluids, stay hydrated, take vitamin C.’ You’ve got to bring it down to them simple so that they can picture it.” (DE-8 p.m.)

- *Cost:* Many patients are worried about the expense of the shot. They ask if the shot is covered by insurance and, if not, where it can be obtained for free.
- *Timing and effect on diabetes:* Patients wonder whether their blood sugar has to be under control in order to get the vaccine – and whether it will rise as a result of the shot.
- *Cultural issues:* According to participants, minority patients often have concerns about receiving immunizations either because they do not trust the medical establishment or because it simply it is not part of their culture to receive vaccinations.

“You have to look at the history and among African Americans. They’re reluctant to take vaccinations and participate in research. It dates back to the Tuskegee experiment.” (DE-8 p.m.)

“Also, Spanish speaking or Asian patients are not very accepting of vaccinations. It’s not something they’ve had in their own countries; they don’t trust the health system that much.” (DE-8 p.m.)

- *Avoidance:* Participants chalk it up to “simple human nature” that many patients avoid the flu shot – especially since it is something they have to repeat every year.

- Diabetes educators suggested that patients are likely to be more compliant when it comes to getting the pneumococcal shot, compared to the flu shot. Most people recognize that pneumonia is serious, so that when a physician recommends the pneumovax, patients are likely to take it. Also, since the vaccine is needed only every five years, it is easier for patients to justify. Finally, since the pneumovax is less common than the flu, there is not as much mythology built up around it, so patients are less likely to be familiar with side effects.

B. OVERCOMING BARRIERS

1. Reactions to Actual Immunization Rates

- Participants treating a primarily minority patient population were not surprised by the <50% flu vaccination rate among people with diabetes, although participants treating primarily Caucasian patients guessed it to be higher. On the other hand, participants treating mostly Caucasian patients were not surprised by the 21% pneumococcal immunization rate, while participants treating mostly minority patients expected it to be higher.
- Both groups noted that patients who see a diabetes educator are more likely to be immunized than the average patient with diabetes. Plus patients in a large metropolitan areas like Baltimore were expected to be better immunized than average because of better access to health facilities.

2. Possible Reasons for Low Immunization Rates

- Participants attributed low flu and pneumococcal immunization rates, in part, to the U.S. medical system focus on curing over prevention. Physicians are trained to deal with the daily medical complications stemming from diabetes rather than preventing disease. Prevention is not necessarily something they know much about.

“There’s a lack of knowledge by the primary care physicians – that’s hopefully why they send them to diabetes educators. They’re trying to deal with the day to day issues and all the complications that can happen. The preventive issue goes off to the side.” (DE-6 p.m.)

“Among physicians, many still have a *laissez-faire* attitude about diabetes: ‘We’ll keep an eye on your blood sugar. It’s not too bad right now.’ If there’s not an intensive management of their diabetes, why would you expect intensive preventive effort?” (DE-6 p.m.)

- Participants suggested that immunization rates are probably low also because of the patient fears and concerns cited above. Health concerns, cost concerns, cultural reservations, normal procrastination and avoidance – all of these factors keep people from having regular immunizations. In addition, like physicians, many patients are not particularly prevention-oriented. Many are in denial about their diabetes and do not want to face it until there is a specific problem.

“A lot of it is human nature. If you ask how many healthcare workers get a flu shot, the percentage is probably low. The mentality is, if I feel all right, I probably don’t need it.” (DE-8 p.m.)

“Many of the elderly don’t get yearly exams. There isn’t so much awareness about prevention. They think, You only go to the doctor when you’re sick; you only go the hospital when you’re dying.” (DE-6 p.m.)

“It might be the mentality that you don’t address it until it’s a problem.” (DE-8 p.m.)

- Participants also pointed out that, in various ways, the current managed care environment is a deterrent to higher immunization rates. Physicians are pressured to increase their volume, and are consequently able to spend less time with each individual patient. Moreover, prevention is generally not considered a reimbursable service. Patients are forced to switch primary care providers when their insurance changes, making it difficult to track one’s immunizations. Finally, insurance plans often restrict when and where immunizations may be administered. As noted above, with these restrictions, homebound patients with diabetes have a particularly difficult time getting their shots.

“People move from PCP [primary care provider] to PCP. You lose track. [Patients] are in doctor limbo all the time. They actually have no health care provider.” (DE-8 p.m.)

- Timing presents a significant and distinct challenge for both the flu and pneumococcal shots. In the case of the flu shot, the problem is the brief “open season.” If a patient does not present at the doctor’s office during the flu immunization period, he or she misses the opportunity to have the shot. In the case of the pneumovax, tracking is the problem. It is becoming less and less common for a patient to retain the same primary care physician over a five- or ten-year period.

“A lot of our patients disappear. Diabetics notoriously don’t come in in the summertime.” (DE-8 p.m.)

“Office tracking forms are only good if the patient is in the office during flu season. If they miss it, it’s too late.” (DE-8 p.m.)

- In the case of the pneumococcal shot, participants believe that lack of knowledge largely accounts for the low immunization rate – along with the fact that not all patients with diabetes need to be immunized.

“Here you have a group of diabetes educators, and most of us haven’t researched that area ourselves. How can we counsel our patients if we don’t know about it?” (DE-6 p.m.)

“There are media blitzes about the flu shot, but I don’t see anything about pneumonia. It’s not top of mind.” (DE-6 p.m.)

“I don’t think the research is clear for the pneumonia shot.” (DE-6 p.m.)

3. Importance of Better Professional Education

- Participants generally agreed that one important way to raise flu and pneumococcal immunization rates is through increased *professional* education.
- According to diabetes educators, primary care physicians and medical residents would benefit from stronger training in diabetes prevention “so that diabetes educators are not the only ones urging it.” Most importantly, physicians and diabetes educators alike need clearer guidelines regarding the pneumococcal vaccine.

“If professionals don’t know, they can’t recommend it.” (DE-6 p.m.)

“What is the recommendation? I don’t even know what it is.” (DE 6 p.m.)

“If there were some in-services for CDEs – with statistics. We all have differences as to when you give the pneumococcal vaccine. We need general information.” (DE-8 p.m.)

- Participants said that the best way to disseminate new scientific information to diabetes educators is through mailings, scientific journals, newsletters, and other scientific publications, professional meetings (American Association of Diabetes Educators and the American Diabetes Association are the two major organizations), e-mail, and scientific Web-sites. Diabetes educators said they spend approximately five hours a week, on average, reviewing the scientific literature. Important publications include:

The Diabetes Educator
Spectrum
Diabetes Self-Management

Diabetes Advisor
Diabetes Forecast
Countdown

Diabetes Care
Diabetes Interview
National Federation of the
Blind publication

4. Importance of Better Patient Education

- Participants universally agreed that better *patient* education would also help generate greater awareness of the special immunization needs of patients with diabetes and, in turn, help raise immunization rates. As one participant noted, patient education has a valuable ripple effect because “when you educate one patient, there are at least three or four other diabetics in that family.”
- Participants advocated stronger mass media messages in the form of TV, radio, newspaper, and magazine advertising and public relations.

“When something new comes out in the newspaper, you’re inundated with questions. A media blitz would certainly promote questions, if nothing else.” (DE-6 p.m.)

“There should be a big [media] push for people with chronic diseases. The population’s getting older. If they pushed this on TV like they push everything else . . .” (DE-8 p.m.)

- Educators treating mostly minority patients encouraged public health authorities to post health advisories in places where inner city residents are most likely to see them, such as public transit vehicles and shelters, fast food restaurants (bag stuffers), convenience stores, and pharmacies.

“Put information in McDonald’s. That’s where people go. If you put it there, they will read it. They won’t read it if *we* give it to them.” (DE-8 p.m.)

“Put a pamphlet in Giant, in grocery stores, in McDonald’s. Sounds crazy, but have them stuff it in the bag with their burger.” (DE-8 p.m.)

- Diabetes educators said they also appreciate support materials that can be used in the office setting, such as posters, brochures, and small giveaway items. Unprompted, participants in both focus groups mentioned the CDC immunization campaign and one group specifically identified the life preserver graphic. They said that it had had a positive impact on their practices because: 1) It reminded medical staff to talk with their patients about immunizations; and 2) It prompted patients to raise the question with their doctor.

“They’re getting so much information from us – how to use their meter, reinforcing their diet. Anything written that we can give them is very helpful.” (DE-6 p.m.)

“What made a big impact in our clinic last year and made us more consistent in recommending it and discussing it were the CDC materials that just appeared. You put the poster up on the wall and you set the brochures out – and it was a reminder. And it was very helpful. If it’s there, you’re going to do a better job.” (DE-6 p.m.)

“They sent out a poster last year. It had a lifesaver on it. I had it in my office with the brochures. It was a great idea. The picture drew peoples’ attention. People asked me about it.” (DE-8 p.m.)

“I liked the brochure because it hit a lot of myths that people have. . . . It was nice-looking, professional looking, and you didn’t have to get it printed – you know, all the barriers to education. When patients left, you could say, ‘Here’s the brochure.’” (DE-6 p.m.)

C. Recommended Interventions

Working creatively in small teams, participants identified a number of interventions that could be used to help raise awareness of the need for flu and pneumococcal immunization among patients with diabetes. Some of these interventions were designed for professional use; others were aimed at patients. Most teams came up with a variety of ideas (rather than one single intervention) – and many of the suggestions overlapped. In developing interventions, participants offered two overarching pieces of wisdom: 1) It is important to involve many parties – not just physicians, but also patients, nurses, educators, case managers, and office staff; and 2) No single method will reach everyone; it is important to develop a “grab bag” of complementary materials and message formats.

Participants’ ideas are presented below under the categories: “Events,” “Office-Based Patient Education,” “Giveaways,” and “Tools for Office Staff.”

1. Events

- Participants suggested that physicians sponsor diabetes “open houses,” which might include: free immunizations, foot screenings, eye checks, and blood pressure screenings. As an incentive, there could also be coupons and drawings for free prizes sponsored by local pharmacies and other businesses.
- Patients with diabetes should receive advance invitations by mail. The open houses could also be publicized in local newspapers, through church groups, etc.

2. Office-Based Patient Education

- There was a great deal of interest in placing posters around the physician's office or clinic to inform people with diabetes (and remind professionals) of the need for flu and pneumococcal immunization. It was suggested that posters be placed in high visibility locations, such as the waiting room, exam rooms, bathroom, and (in the VA hospitals) by the coffee machine.
 - One suggested poster concept is to show two patients – one who is very sick in a hospital bed, with a doctor listening to his lungs; the other walking down the street, whistling a tune. The headline might read: "You have the choice: Don't forget your flu and pneumonia shots!"
 - A related poster suggestion was to feature two sick puppy dogs instead of people, along with the slogan "Why be sick as a dog?"
 - A third group suggested an Uncle Sam-type character pointing out of the poster, under the headline: "Have you thought about the flu vaccine?"
- One group of educators, those treating primarily minority patients and practicing in a primarily urban setting, recommended that patient education materials feature a statistic that highlights the danger of flu and pneumonia (e.g., the number of patients with diabetes who are hospitalized or the number who die from these diseases). Participants said that a frightening statistic would be an effective way to communicate the risks to low literacy patients.

"They need to know that pneumococcal pneumonia kills people. . .
A lot of these people are worried about where they're going to get
their next meal. You need to make this threat real." (DE-8 p.m.)

- Other ideas for office-based education included a waiting room videotape (both in English and Spanish), messages on the patient sign-in sheet, and printed messages on coffee cups (for use in VA hospitals, where the coffee pot is a favorite patient meeting place).

3. Giveaways

- Educators treating mostly minority patients, in particular, stressed the value of patient giveaways and incentives in disseminating the immunization message.

"Giveaways are important. That's what draws people. People love
those things. If you put them up front, they'll take them."
(DE 8 p.m.)

- There was significant interest in giving patients a small adult immunization record, sized to fit in their wallet.

- Participants suggested that a variety of small, giveaway items could be pre-printed with an immunization message including: ink pens, tissue packs, lollipops, glucose tablets, refrigerator magnets, sewing kits, pillboxes, magnets, and diabetes logbooks.
- Participants also suggested that the pharmaceutical and medical device companies that serve the diabetes market be asked to promote the importance of flu and pneumococcal immunization. This might include messages on electronic blood sugar meters, blood testing strips, etc.

4. Tools for Office Staff

- Some participants expressed interest in receiving pre-printed immunization reminder postcards, which could be mailed out to patients with diabetes at the end of the summer – perhaps with some type of incentive to come in for the shots. Others said their practices are overwhelmed and could not do any more mailings.
- There were various suggestions for interventions that could be used by physicians, nurses, and staff. These included: pre-printed pens, chart stickers, immunization order stamps, pin-on buttons, and T-shirts.
- Participants said it would be helpful if vaccines could be distributed in pre-drawn syringes, making them easier to administer in a high-volume clinic setting.
- Finally, participants said they would like a pre-printed order form for easy ordering of additional patient and professional materials.