



Evaluation of Email Communication with Vaccines For Children (VFC) Providers

**Maryland Department of Health and Mental Hygiene
Prevention and Health Promotion Administration**

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Mission And Vision

MISSION

- The mission of the Prevention and Health Promotion Administration is to protect, promote and improve the health and well-being of all Marylanders and their families through provision of public health leadership and through community-based public health efforts in partnership with local health departments, providers, community based organizations, and public and private sector agencies, giving special attention to at-risk and vulnerable populations.

VISION

- The Prevention and Health Promotion Administration envisions a future in which all Marylanders and their families enjoy optimal health and well-being.

Objectives

- Describe the history of VFC provider communications in Maryland.
- Describe our evaluation of email communication with VFC providers.
- Describe the changes made to our email communications as a result of our evaluation.
- Provide some lessons learned from the evaluation.

Vaccine for Children in Maryland

- Maryland enrolls 850 VFC providers annually.
- VFC providers serve ~33% of Maryland's children from birth through 18 years of age.
- The VFC program receives approximately 400 faxed vaccine orders each month.
- The VFC program distributes more than 1 million doses of vaccine annually.



VFC Provider Communication

- Historically, the Maryland Department of Health and Mental Hygiene (DHMH) has communicated with VFC providers through postal mail and fax.
 - Communications included quarterly newsletters, surveys, holiday cards, and program/VFC updates.
- DHMH decided to move to all electronic communications (majority email and some fax) to become more “green” and to save on mailing costs.



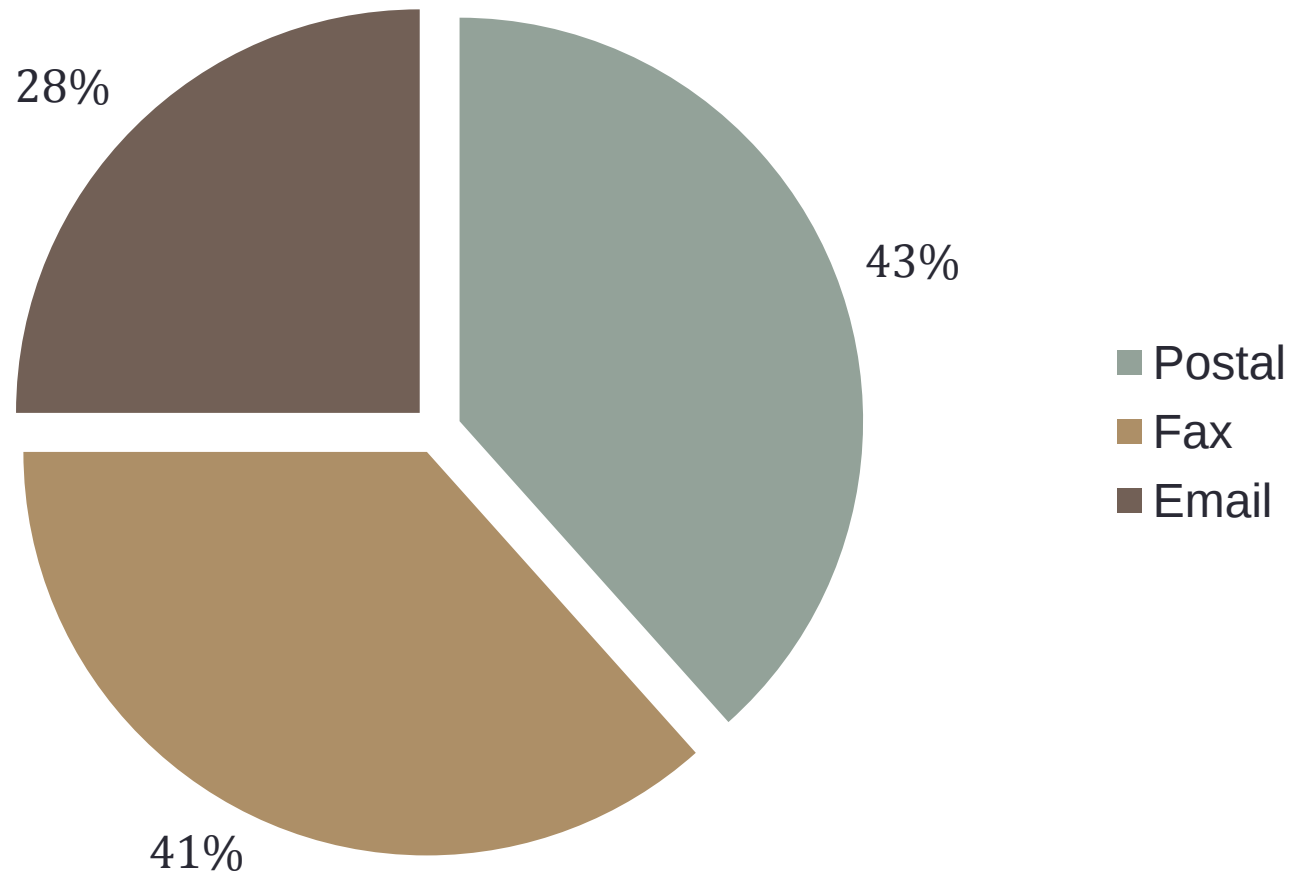
How would the VFC
providers respond to
this change?

2010 Survey

- In 2010 DHMH conducted a survey of VFC providers to assess the preferred method of communication for VFC providers.
- VFC providers were asked to choose between fax, email, and postal mail as their preferred method of communication (providers were allowed to choose more than one method).

2010 VFC Provider Survey

Preferred Method of Communication by VFC Providers, Maryland, 2010



Email Communications

- DHMH contracted with an email marketing communications (EMC) company to disseminate VFC emails to providers.
- Using the EMC, we were able to track the number of emails sent, opened, and bounced back (e.g. invalid email, full mailbox).



AAP Influenza Recommendations September 13, 2012

In a online article published September 10, 2012, the American Academy of Pediatrics released updated recommendations for routine use of trivalent seasonal influenza vaccine and antiviral medications for the prevention and treatment of influenza in children.

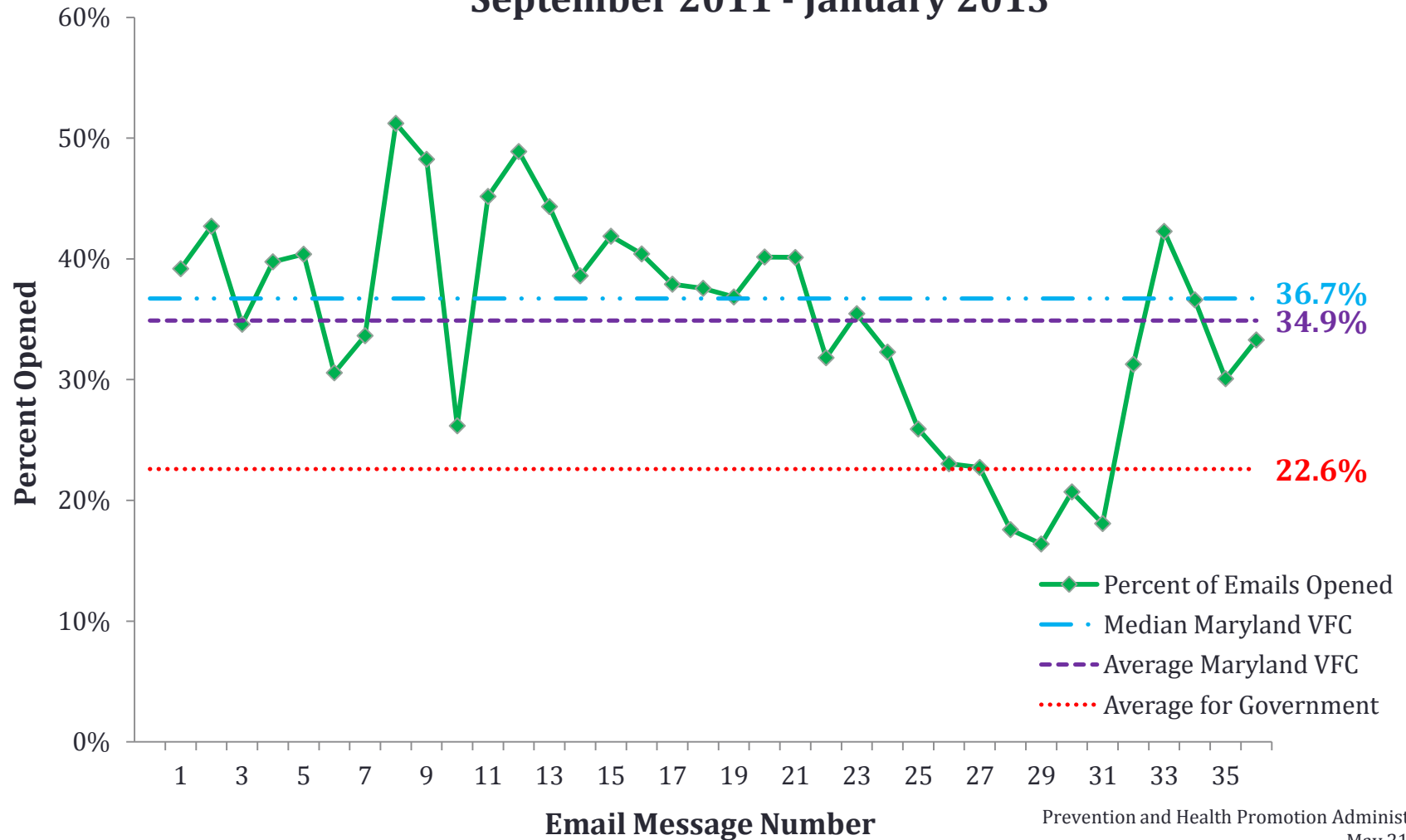


Email Communication Evaluation

- Determine the initial open rate from our first EMC sent on September 13, 2011.
- Provide a number of interventions to alert VFC providers of the change to electronic communications.
 - Three quarterly VFC newsletters (postal mail)
 - Phone conversations with providers
 - Education from DHMH VFC site reviewers during site visit
- Determine effectiveness of interventions by analyzing the open rate post-intervention.

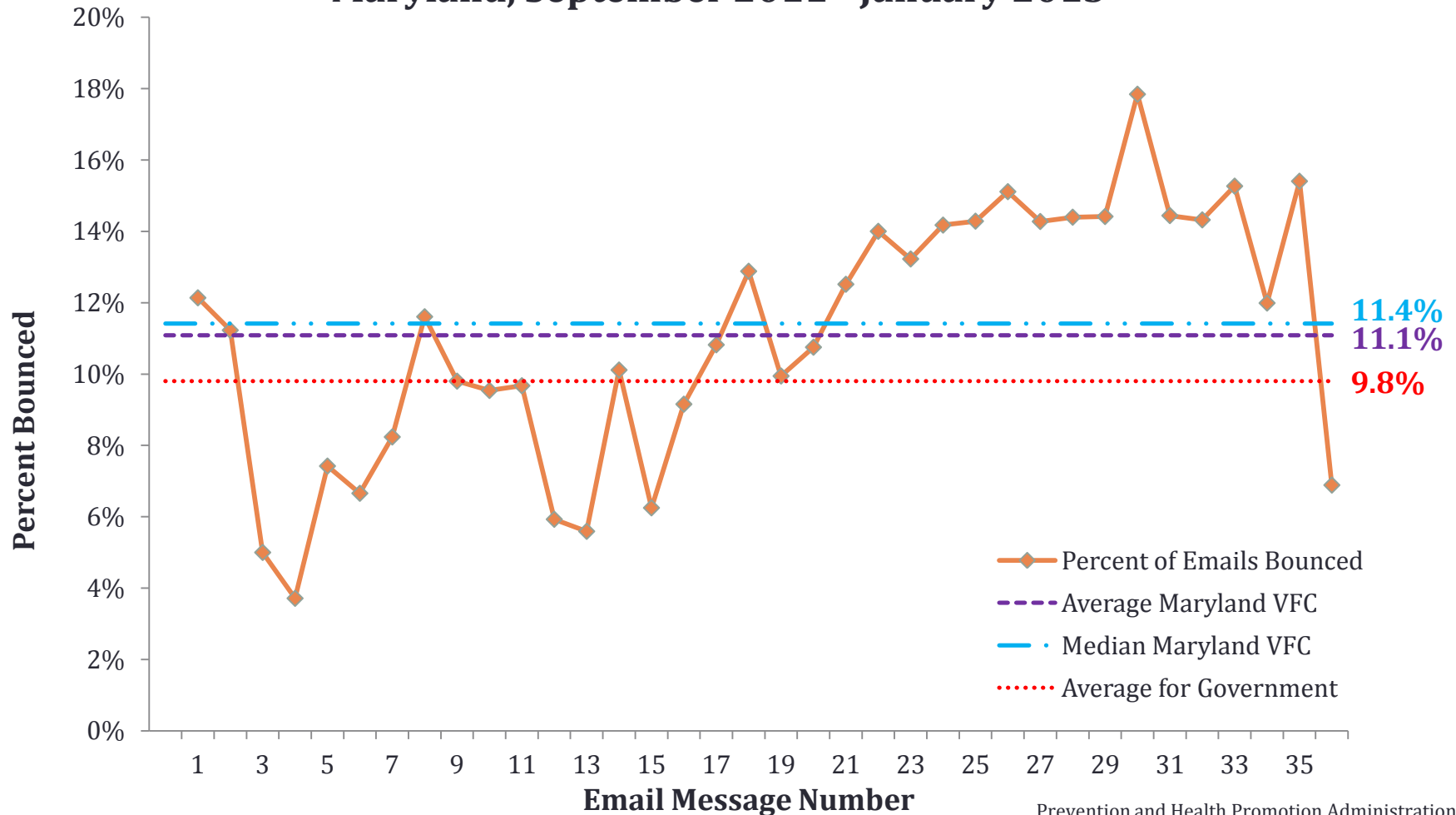
Open Email Results

**Percent of Email Messages Opened by VFC Providers, Maryland,
September 2011 - January 2013**



Bounced Email Results

**Percent of Email Messages Bounced by VFC Providers,
Maryland, September 2011 - January 2013**

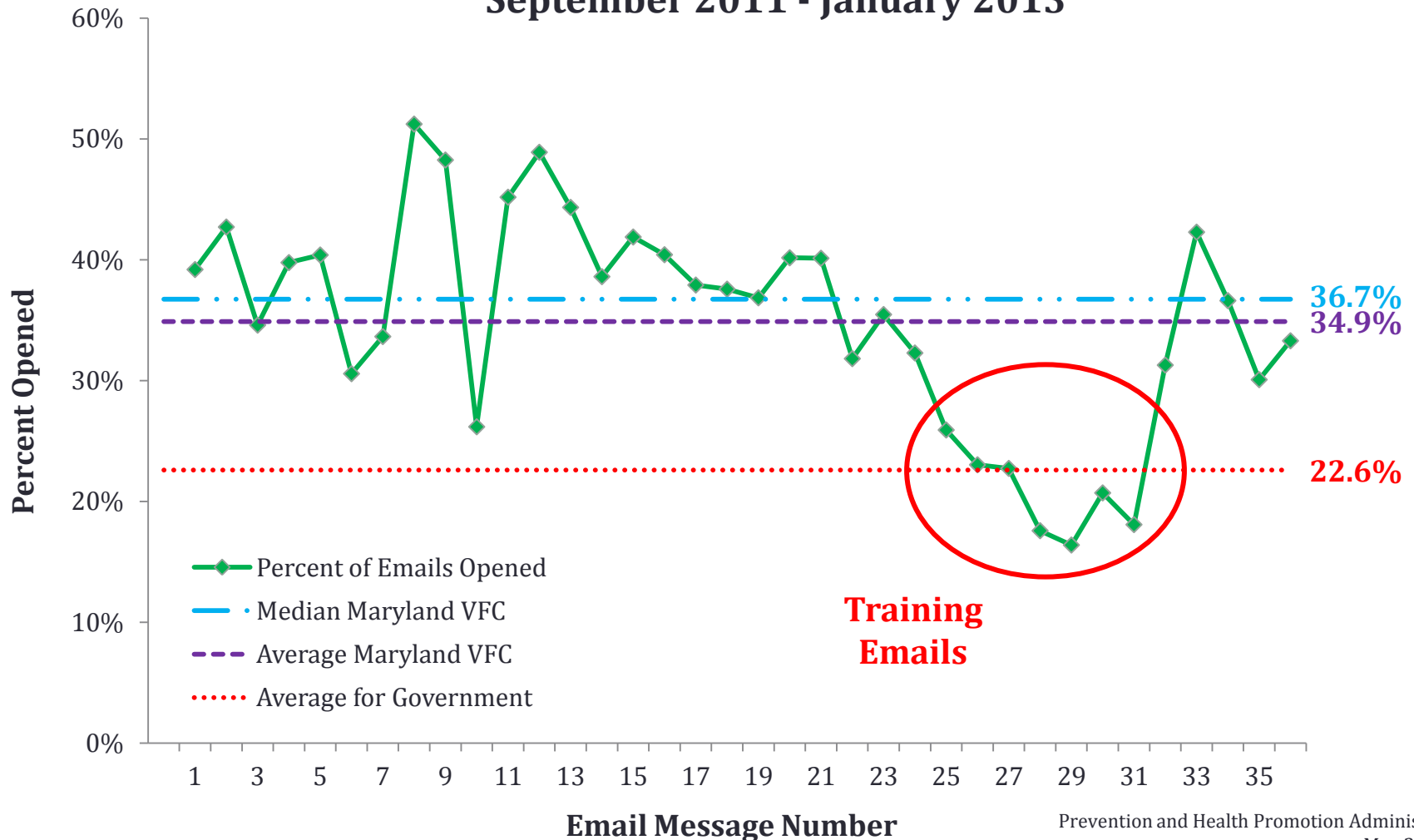


Impact of Subject Line

- Email subject line content seems to have some impact on whether or not an email is opened.
 - Higher open rate:
 - “Flu” or “influenza” as subject – 37.2% open rate
 - “VFC reenrollment” as subject – 38.4% open rate
 - Lower open rate:
 - “Training” as subject – 20.6% open rate

Impact of Subject Line

**Percent of Email Messages Opened by VFC Providers, Maryland,
September 2011 - January 2013**



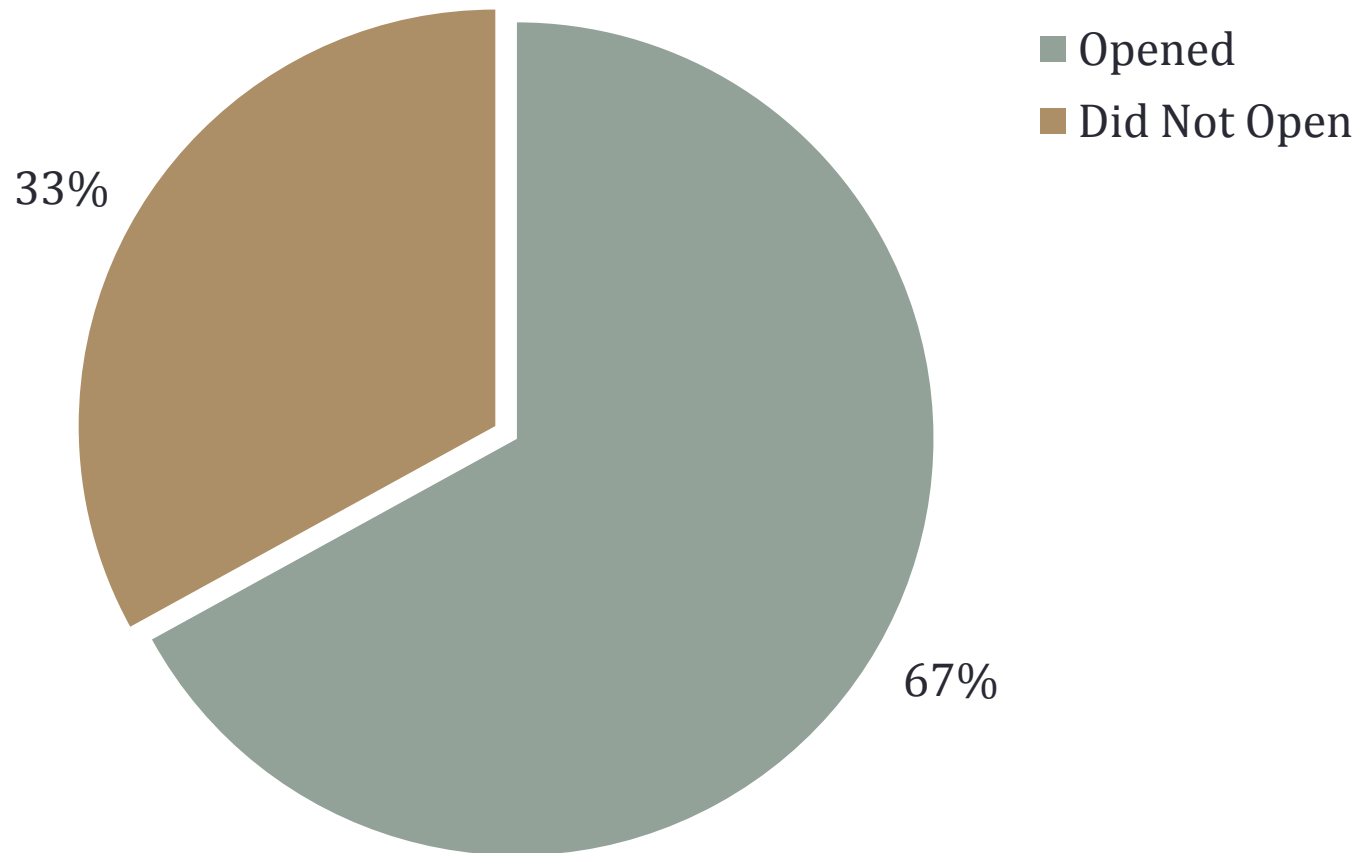


Were the Interventions Effective?

- We evaluated the number of VFC providers that reenrolled in the VFC program to determine if the interventions were effective.
- Three reenrollment emails were sent to VFC providers
 - December 7, 2012
 - December 27, 2012
 - January 7, 2013

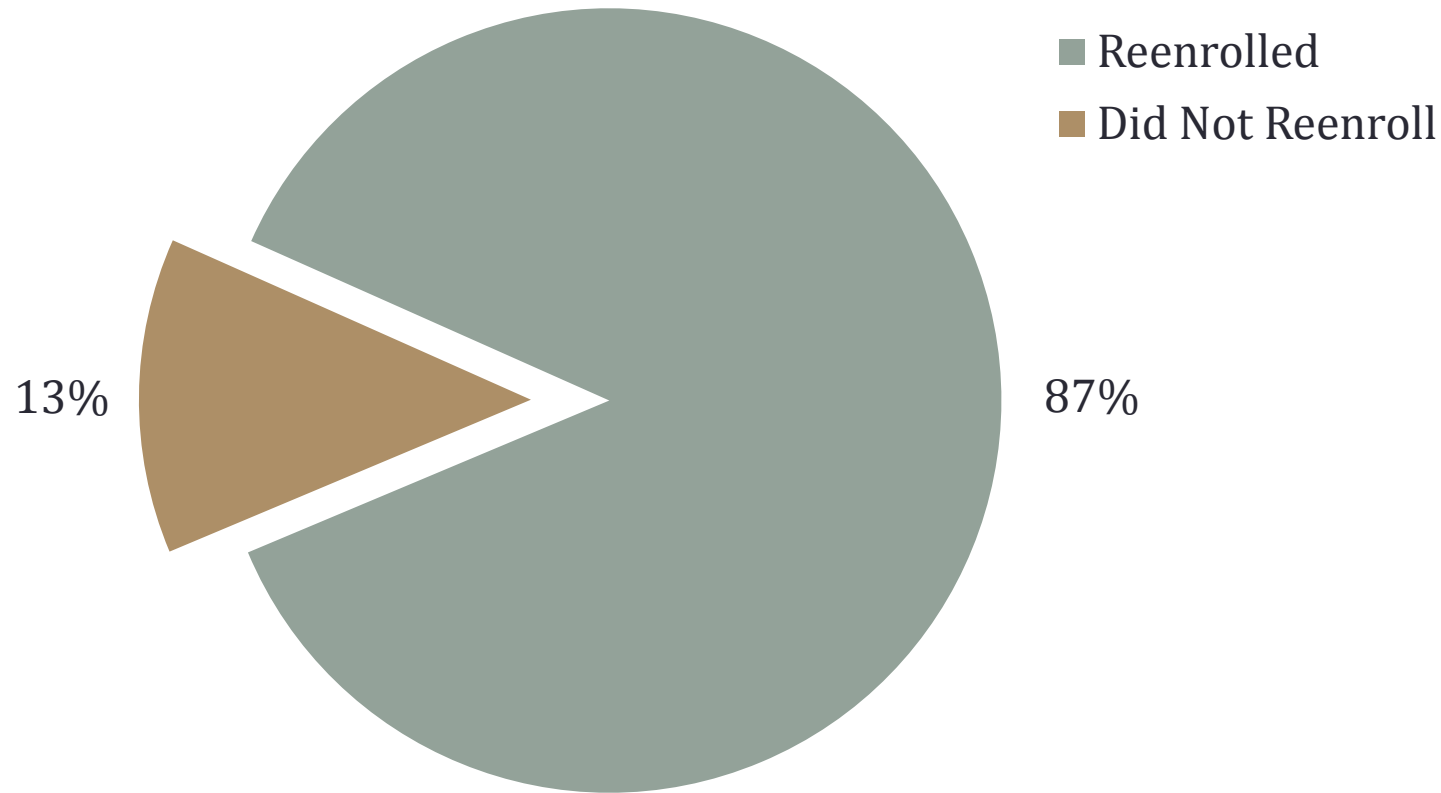
Intervention Results

Percent of VFC Providers That Opened At Least 1
Reenrollment Email



Intervention Results

Percent of VFC Providers That Responded to Email By
Reenrolling in the VFC Program



Limitations

- Many offices did not have a designated office email.
- High office staff turnover rate.
- Offices creating Hotmail, AOL, Gmail accounts just for VFC that are not regularly checked.
- Only one contact email provided for the office.
 - What happens if that person is on vacation, sick, or leaves the office?



Changes Made Based on Evaluation

- Subject lines of the emails have been changed to make them more “flashy”
 - “Info Sessions (and Lunch!) to Learn About Free IZ Educational Materials”
- Upon reenrollments, VFC providers are now required to provide at least 2 emails (Responsible Medical Provider and VFC contact) for each office
- Important VFC communications are also faxed to VFC providers



Results Since the Evaluation

- From Feb 1, 2013 to Dec 31, 2013, the Maryland VFC program sent out 39 email messages.

– Average Open Rate	34.1% (Median 33.6%)	↓
– Average Bounced Rate	10.0% (Median 10.1%)	↓

- Emails with “Training” and “HPV” subject lines continue to be opened less frequently.

Lessons Learned

- Change does not come easily or quickly
- Encourage offices to have a designated office email that will be checked and opened in the office on a regular basis.
- Practices are busy. Subject line of email must be relevant and interesting to the providers so that they take the time to open and read the email.

Lessons Learned

- Do not flood email mailboxes with unnecessary emails
- Follow-up important messages with a fax to the office



Thank you!

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