

# Addressing Tobacco Use in Korean and Vietnamese Smoking Patients in Community Health Primary Care Settings

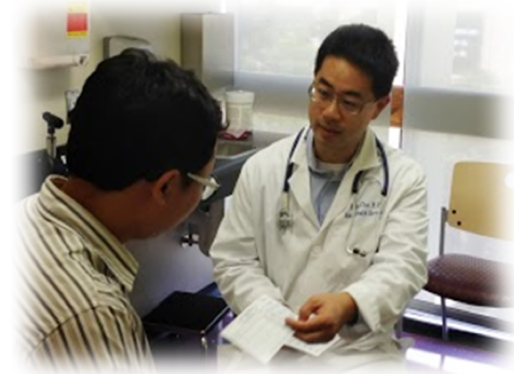
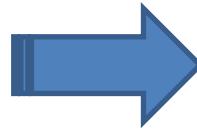
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Asian American Research Center on Health (ARCH)  
Quarterly Meeting, San Francisco, CA  
May 18, 2017

# Objective

- Examine the efficacy of an interactive “Mobile Doctor” intervention (iMD) that aims to enhance patient-provider discussion and ultimately to promote smoking cessation in **Korean-** and **Vietnamese-**speaking patients



# Setting

## Asian Health Services



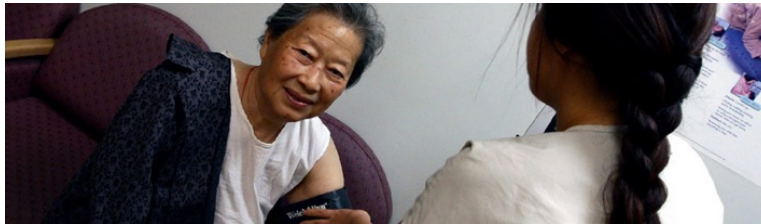
- A community health center in Oakland Chinatown of California



# Setting Asian Health Services



- Provides comprehensive medical, dental, and behavioral health services in English and 12 Asian languages to over 28,000 medically underserved patients, including low-income Asian American immigrants

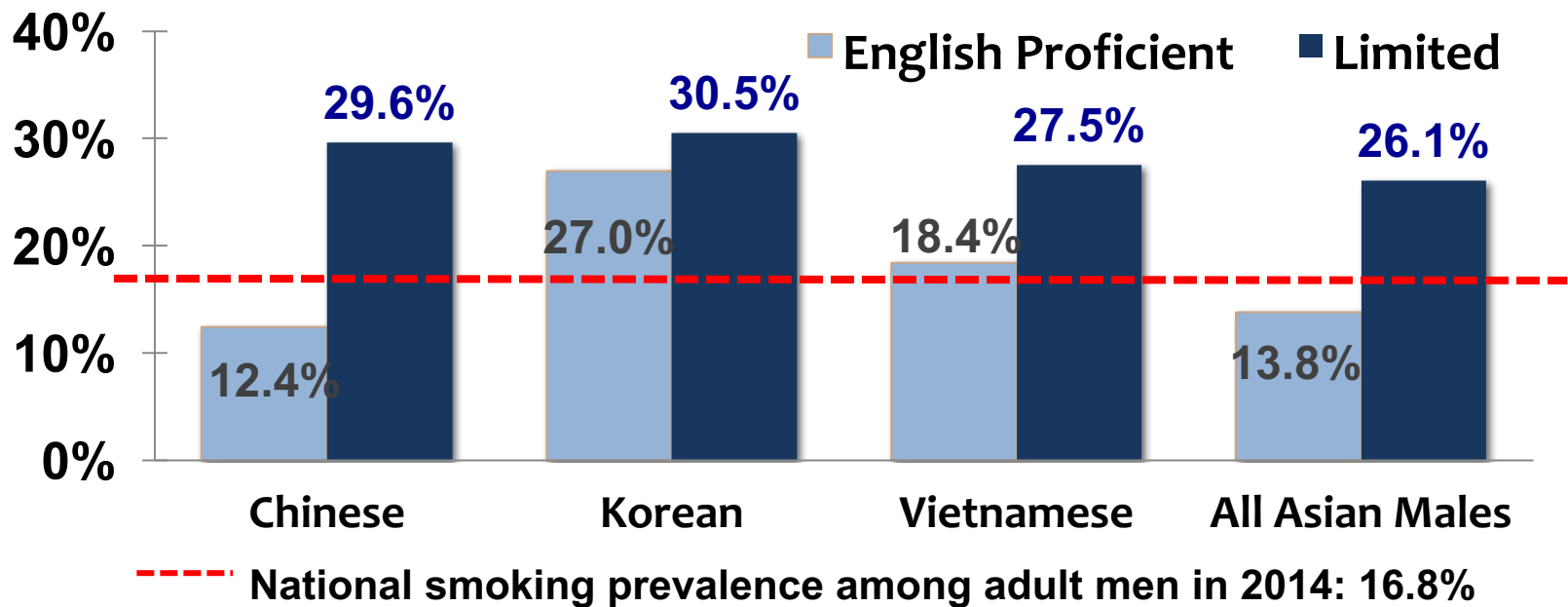


## Background

- Asian Americans are the fastest growing minority group in the United States
- Smoking prevalence remains disproportionately high among some Asian American groups, such as Korean and Vietnamese men



## Tobacco use prevalence remains high in Asian American men, especially those with limited English proficiency



Sources: 2012-15 California Health Interview Survey;  
2014 National Health Interview Survey

## Background (continued)

- Primary care settings provide a unique opportunity to address tobacco use among Asian Americans
- Fewer Asian American smokers, when compared to the general population, reported receiving physicians' advice to quit (41% Asians vs 51% general population; 2011-13NHIS)
- Referrals from healthcare providers to the Asian-language Quitline services were significantly lower among Chinese (4.1%), Korean (1.6%) and Vietnamese (8.4%) when compared to the English-service referrals among Asians (17%) and Whites (28%)



## Feasibility Pilot Trial



- With a community-based participatory research approach, we created the iMD that delivers tailored in-language video messages via a mobile tablet to Korean and Vietnamese male smokers right before their clinic visit with a provider
- Conducted a single-group feasibility trial to test user experience and evaluate potential impacts of iMD on patient-provider discussion and smoking cessation outcomes



# Interactive Mobile Doctor (iMD)

iMD delivers the “5 As” to patients right before seeing their physicians



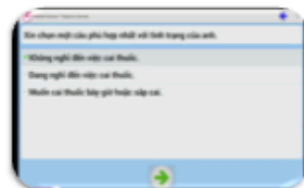
**ASK** about  
smoking status



**ADVISE**  
patient to quit



**ASSESS**  
readiness to quit



**ASSIST** via  
tailored videos



**ARRANGE** follow-up  
with a bilingual printout



# iMD

## Bilingual Printout (English-Korean)

Patient's name/ID/Label

Date / 날짜:  
2014-07-23 15:19:31

Doctor: Please check the appropriate box below to indicate your recommendations for this patient

### My Doctor Recommends that I Should / 의사 선생님의 추천:

☐ Stop smoking  
금연

☐ Call the toll-free California Smokers Helpline  
한인금연센터문의  
1-800-778-8440 (Korean / 한국어) 1-800-662-8887 (English / 한국어)

☐ Talk to AHS staff for smoking cessation counseling  
동양인건강진료소직원과의금연 상담.

☐ Use NRT / 니코틴대체요법사용:  
☐ patch / 니코틴 패치  
☐ gum / 니코틴 껌  
☐ lozenge / 니코틴 정제 (니코틴 캔디)  
☐ other RXs / 다른 처방: \_\_\_\_\_

☐ Schedule the next visit with my doctor in \_\_\_\_\_ weeks  
\_\_\_\_\_ 주 후에 의사와의 다음 진료 예약

☐ Other RXs / 다른 추천 방법: \_\_\_\_\_

### My Smoking History:

Number of cigarettes smoked daily: 7  
Number of years smoked: More than 20 years

### My Plan:

Not thinking about quitting

### My Concerns:

I have too much stress to quit.

### 나의 흡연 역사:

하루에피우는 담배 개수: 7  
흡연기간 (년): 20년 이상

### 나의 계획:

금연을 할 생각이 없다

### 나의 우려:

금연을 하기에는 스트레스가 너무 많다.

# iMD

## Bilingual Printout (English- Vietnamese)

Patient's name/ID/Label

Date / Ngày:  
2014-03-21 13:00:42

Doctor: Please check the appropriate box below to indicate your recommendations for this patient.

### My Doctor Recommends that I Should / Bác Sĩ Của Tôi Khuyên Tôi Nên:

- ☐ Stop smoking  
*Bỏ hút thuốc lá*
- ☐ Call the toll-free California Smokers Helpline  
*Gọi điện thoại miễn phí đến Trung Tâm Cai Thuốc Lá*  
1-800-778-8440 (Vietnamese / Tiếng Việt) 1-800-662-8887 (English / Tiếng Anh)
- ☐ Talk to AHS staff for smoking cessation counseling  
*Nói chuyện với nhân viên của AHS để được cố vấn cai thuốc lá.*
- ☐ Use NRT / *Dùng thuốc giúp cai hút thuốc:*  
☐ patch / *miếng dán nicotine*  
☐ gum / *kẹo gum nicotine*  
☐ lozenge / *kẹo ngậm nicotine*  
☐ other RXs / *thuốc có toa:* \_\_\_\_\_
- ☐ Schedule the next visit with my doctor in \_\_\_\_\_ weeks  
*Làm hẹn gặp lại bác sĩ trong \_\_\_\_\_ tuần.*
- ☐ Other / *Điều khác:* \_\_\_\_\_

### My Smoking History:

Number of cigarettes smoked daily: 4  
Number of years smoked: More than 20  
years

### My Plan:

Thinking about quitting

### My Concerns:

I tried but can't quit.

### Tình Trạng Hút Thuốc Của Tôi:

Số thuốc hút hàng ngày: 4  
Số năm đã hút thuốc: Hơn 20 năm

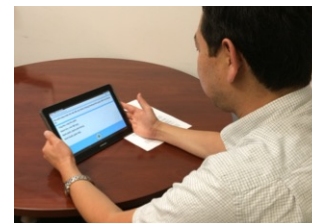
### Kế Hoạch Cai Thuốc Của Tôi:

Đang nghĩ đến việc cai thuốc.

### Điều Quan Tâm Của Tôi:

Tôi đã thử bỏ rồi nhưng không thể cai  
được.

## Feasibility Pilot -- Methods



### ■ **Participants:**

- Korean- and Vietnamese-speaking patients
- Current smokers identified on medical records + smoked daily
- recruited by telephone prior to the scheduled primary care visit or in-person at their clinic visit

### ■ **Data collection:** pre-intervention, immediately after clinic visit, 3-month

### ■ **Primary outcomes:**

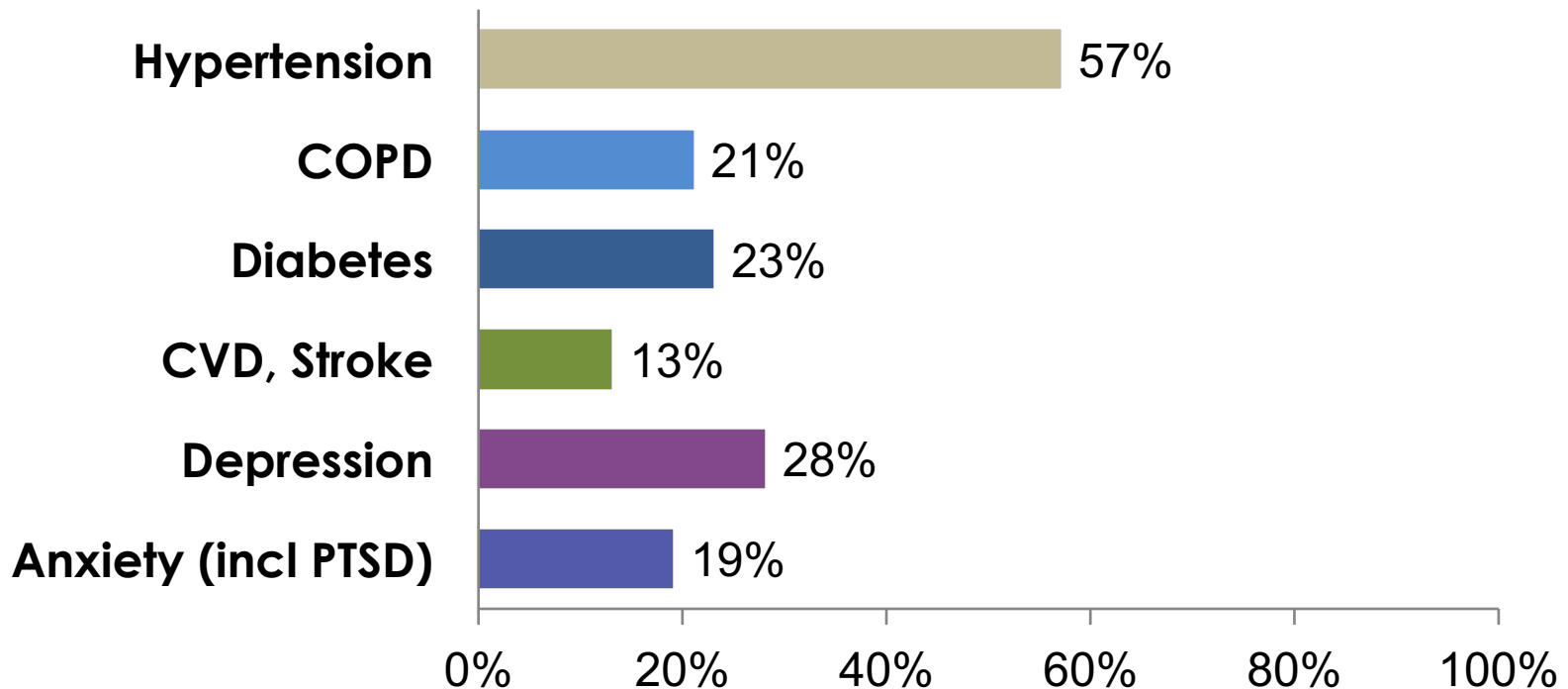
- patient-provider discussion on tobacco (self-report and EHR);
- self-reported quit attempts and 7-day smoking abstinence at 3 months post iMD visit

## Participant Characteristics (N=47)

### Demographics

Age M(SD)	56.4 (9.9); range: 28-71 years old
Lived in the U.S. < 15 years	34%
< High school graduate	45%
Self-rated health as “poor” or “fair”	72%
Cigarettes smoked per day	9.3 (4.5)
Time to first cigarette: <30 mins	70%
Precontemplation	53%
Never tried quitting	32%

## Participant Characteristics (N=47)



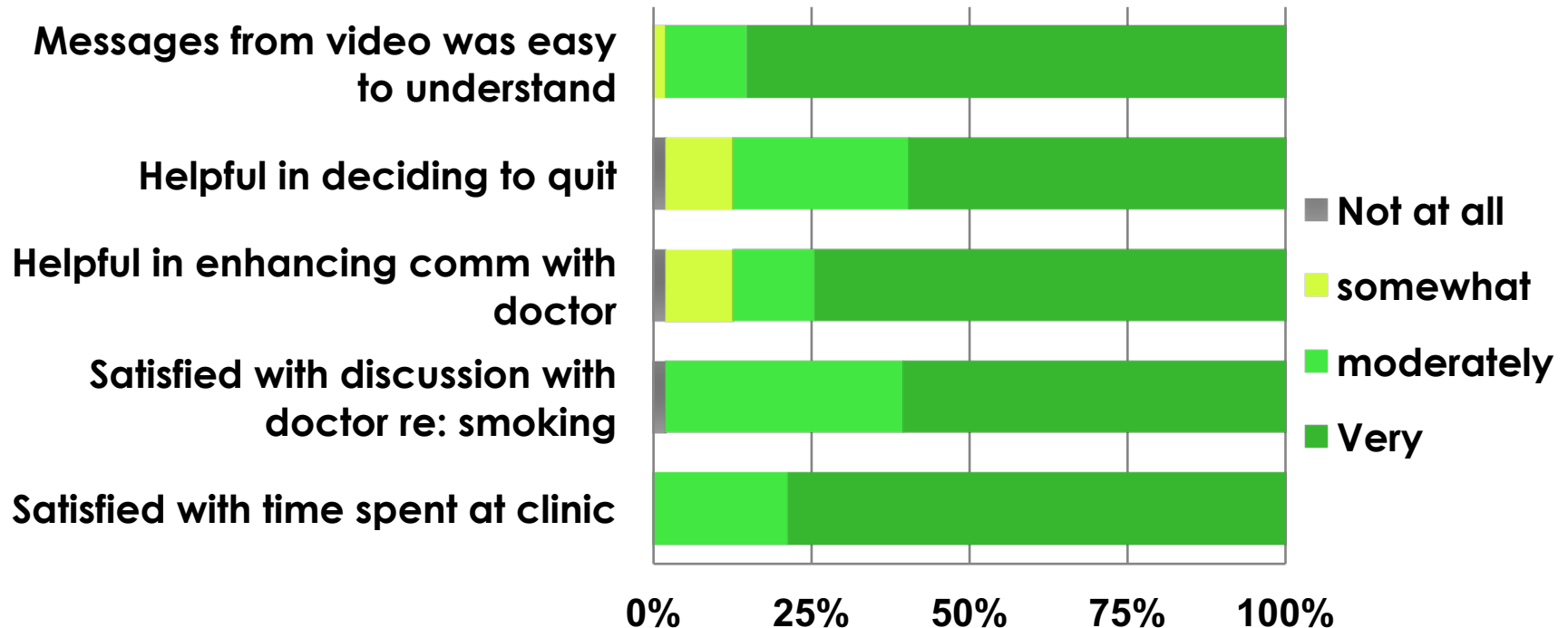
## Results

## User Experience

Duration of iMD session (mean): 12.9 mins (range: 10-25 mins)



### How did you like iMD? (N=47)

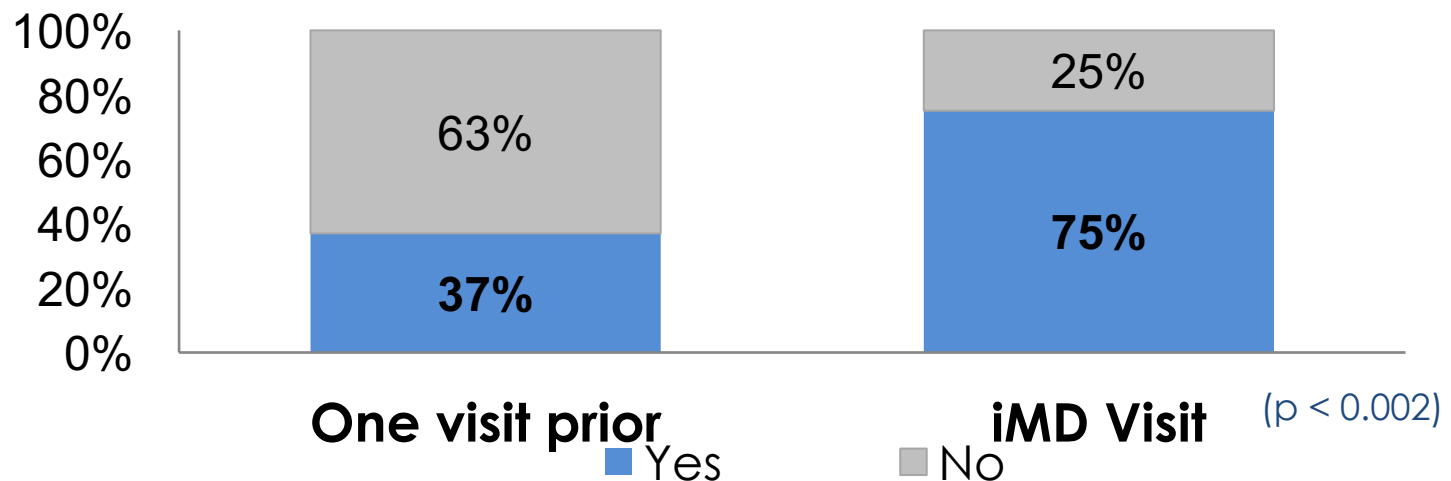




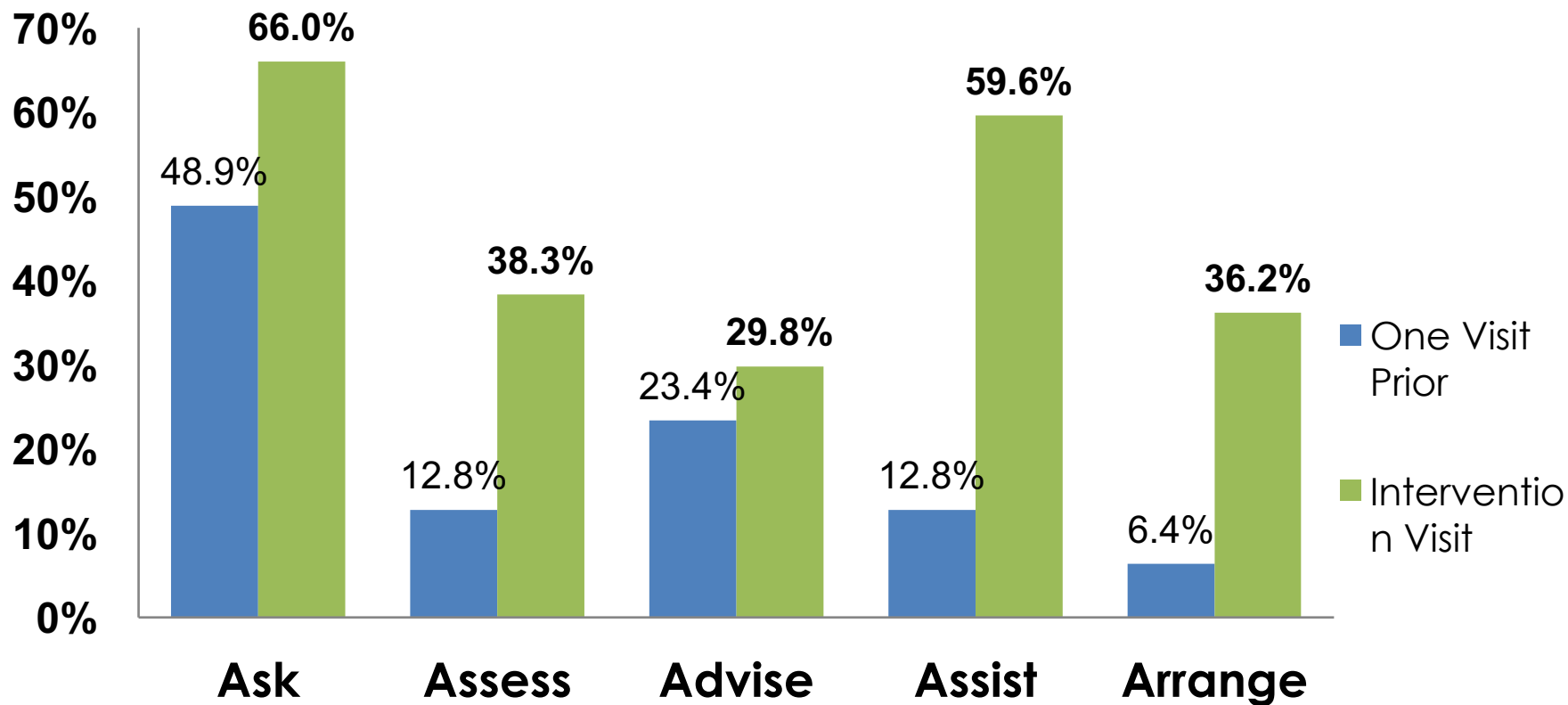
## Results

### Patient-Provider Discussion on Tobacco Use

- **Participant self-report** **100%**
- **From EHR** (documented “Advise,” “Assess,” “Assist,” or “Arrange” with participant re: smoking)



## Delivery of 5As from EHR Progress Notes at One Visit Prior and Intervention Visit (N=47)



# Examples of EHR Progress Notes at One Visit Prior and Intervention Visit

## One Visit Prior

No smoking-related notes



## iMD Intervention Visit

- **TB use: Refer to Korean smoking cessation project, contemplative. Think about stopping smoking. Try to reduce number of cpd. Call 800-NO-BUTTS if ready to quit.**

## Examples of EHR Progress Notes at One Visit Prior and Intervention Visit

### One Visit Prior

- 61 yo Mc HTN, ^lipid, tobacco abuse



### iMD Intervention Visit

- 1/2ppd. interested in nicotine patch. rx 21mg patch x6 weeks. f/u in 1mo - will rx 14mg patch x 2 weeks, then 7mg patch x 2 weeks

## Examples of EHR Progress Notes at One Visit Prior and Intervention Visit

### One Visit Prior

- Tobacco 10 cig/day; Tobacco use disorder (305.1); encouraged cessation, esp given heart disease



### iMD Intervention Visit

- Tobacco abuse (305.1). Provider Plan 12 cig/day. action. rx wellbutrin 150mg daily x 3 days, then 150mg bid. stop smoking in 1week after starts wellbutrin. f/u in 1mo.

## Results

### 3-Month Smoking Cessation Outcomes

- 24-hour quit attempt: 51%
- 7-day abstinence: 19% (intention-to-treat); 21% (observed)
- 30-day abstinence: 10% (intention-to-treat); 12% (observed)

## Conclusions and Next Step



- iMD is feasible in a primary care setting
- iMD was highly acceptable to Korean and Vietnamese smoking patients including those who were unmotivated to quit smoking
- iMD is promising in increasing patient-provider discussion on tobacco use among Asian American immigrants
- Team is currently conducting a RCT with iMD expansion to 4 languages (Chinese, Korean, Vietnamese and English)





## Acknowledgment

- Ky Vo, Alisha Tran, Jinyoung Chun, Terrence Park, Susan Yoon, Jen Lee
- AHS Patient Leadership Council members
- Drs. Mychi Nguyen, Suzy Lim, Ricky Choi, and Arthur Chen
- Tobacco-Related Disease Research Program Grants 21BT-0056, 24AT-1300 & 24AT-1301