



Chinese Community eHealth Day as a venue to introduce in-language health information and technology trends among the older (50+) Chinese immigrant population

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BACKGROUND & RATIONALE

- Chinese Americans constitute the largest Asian American ethnic group¹:
 - 61.0% are immigrants
 - 75.3% speak a language other than English
 - 41.1% endorsed low English proficiency
- Although Asian Americans have high rates of Internet access (82%) among all US ethnic groups², access does not translate to usage among Chinese immigrants 50 years and older.
- Limited data is available on Chinese immigrants' awareness of text message technology and its usage.

OBJECTIVES

- Raise awareness of national technology trends** of health information acquisition and dissemination, such as eHealth and mHealth
- Empower non-Internet users** to gain skills in web navigation and utilization of the vast online health resources
- Encourage mobile phone users**, who have limited English proficiency, to utilize mobile phones for managing health-related issues. (i.e. receiving health-related reminder calls, transmitting and receiving health-related text messages)
- Bridge the generation gap between youth and adults aged 50 and above** through youth volunteers teaching basic computer and Internet skills and mobile phone text message usage

MATERIALS & METHODS



eHealth Day Flyer

- Three 60-minute **Educational Seminars** covered basic technology skills, eHealth / mHealth trends, accessing credible online health information
- One-on-One computer and mobile phone text message instruction** to encourage learning and bridge the generation gap; Skills were assessed through returned demonstrations
- Free Health Screenings** (blood pressure, blood glucose, bone density, cholesterol, Hepatitis B, and "Ask the Doctor") as incentives to draw participants

RESULTS

Descriptive data was collected via a survey questionnaire. Survey instruments were pilot-tested with focus groups for cultural and linguistic competency. Please note that the percentages are reflective of the total number of responses for the specific topic. Percentages may not sum to 100% due to rounding.

Demographic Characteristics (N=600; survey return rate = 69% (414/600))

Ethnic Background: Chinese: 94%; Vietnamese: 4%; Other Asian: 2%
Gender: Female: 55% ; Male: 36% ; Refuse to Answer: 1%; No Response: 8%
Age: <50: 12.33%; 51-60: 15.22%; 61-70: 22.95%; 71-80: 16.18%; 81-90: 3.14%; No Response: 30.19%
Attendees Living in San Francisco: Yes: 84%; No: 11%; Refuse to Answer: 1%; No Response: 4%
Annual Household Income: No income: 7%; <\$10,000: 23%; \$10,001-\$20,000: 20%; \$20,001-35,000: 13%; \$35,001-50,000: 8%; >\$50,001: 4%; Refuse to Answer: 17%; No Response: 8%
Health Insurance Status: Insured: 79%; Uninsured: 16%; Refuse to Answer: 1%; No Response: 5%
Language Preferred for Health Information: Chinese: 87.9%; English: 11.1%; Other: 0.7%; Refuse to Answer: 1.2%

Baseline Participant Characteristics before eHealth Day

Computer Ownership and Access: Yes: 62.1%; No: 34.3%; Refuse to Answer: 1.2%; No Response: 2.4%
Cell Phone Ownership: Yes: 77.5%; No: 17.6%; Refuse to Answer: 2.2%; No Response: 2.7%
Internet Usage: Everyday: 28.0%; At Least Weekly: 16.7%; At Least Monthly: 4.1%; Use the Internet, but not regularly: 13.5%; No Usage: 29.7%; Refuse to Answer: 2.9%; No Response: 5.1%
Importance of Accessing Online Health Resource: Very Important: 10.1%; Important: 46.4%; Unsure: 17.1%; Not important: 1.9%; Not important at all: 2.7%; Refuse to Answer: 2.9%; No Response: 18.9%
Knowledge of sending and receiving text messages: Have knowledge: 14.5%; Have no knowledge: 72.0%; Refuse to answer: 5.3%; No Response: 8.2%

eHealth Day Activities

One-On-One Text Message Station (n=278)



One-On-One Computer Station (n=278)



Educational Seminar (n=300)



Total Number of Youth Volunteers: 60

RESULTS (Cont'd)

Skills and Knowledge Improvement after eHealth Day

- Improvement in Computer & Internet Skills**
- 75.2% participants rated a "Great, Moderate, Slight improvement" in their computer skills
 - 78.3% participants rated a "Great, Moderate, Slight improvement" in their Internet skills
- Receptiveness to receiving health information through eHealth/mHealth methods**
- 31.4% participants were receptive to receiving health information via eHealth/mHealth technology (computer, Internet, cell phone, smart phone, etc)
- Improvement in Awareness and Knowledge of Credible Online Health Information & Text Message Skills (See Table 1)**
- Data indicated:
 - 35.1% increase in awareness of credible online, in-language health information
 - 17.6% increase in knowledge of accessible, credible, and in-language online health information
 - 23.7% increase in mobile text messaging skills

Table 1: Awareness & Knowledge of Health Information & Text Message Skills

	Scale	Before eHealth Day (% of Attendees)	After eHealth Day (% of Attendees)	% Change
Awareness of Credible Online Health Information	Yes	18.8	53.9	35.1
	No	68.4	25.4	43
	Refuse to Answer	6.5	8	1.5
	No Response	6.3	12.7	6.4
Knowledge of Accessing Credible Online Health Information	Very Much	2.7	4.8	2.1
	Moderately	26.3	29.7	3.4
	A Little	28.7	40.8	12.1
	Not At All	32.9	10.4	22.5
	Refuse to Answer	4.3	5.1	0.8
Knowledge of Sending/Receiving Text Message	No Response	5.1	9.2	4.1
	Yes	14.5	38.2	23.7
	No	72	37.2	34.8
	Refuse to Answer	5.3	8.7	3.4
	No Response	8.2	15.9	7.7

CONCLUSION & IMPLICATIONS

- A tailored educational strategy can be effective in helping the immigrant community to more technology literate
- Involving youth in technology related educational programs can foster youth empowerment as well as facilitate the learning process for adults
- Promoting health through technology can be a venue to bridge the digital gap among older (50+) Chinese immigrants and adapted for other ethnic groups

REFERENCES & ACKNOWLEDGMENT

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 Acknowledgment: Chinese Hospital Health System