Recruitment of Young Adult Smokers via the Internet: Lessons Learned (Amy K. Sporer, MS)

Reaching Young Adults for Research and Intervention: Young adulthood is a transitional stage in life; many leave their childhood homes to get married, start a new job, continue with school making it difficult to reach and recruit a representative sample of young adults.

- 95% of young adults (aged 18 – 29 years) reported using the Internet (Pew Research 2011). In December 2008, 72% of this age group reported searching for health information online.

Recruitment Aim: Recruit a sample of young adult smokers across the US to complete an online survey with exposure to and evaluation of messages geared to mobilize smokers to seek online cessation treatment.

Online Recruitment Methods: Prospective participants were recruited through ads and invitations that briefly described the study and directed those interested to a study website for more information about how to participate; the following placement strategies were used:

- Posting classified ads to: Cragislist.com (Jobs and Volunteers sections), Backpage.com, Oodle.com

- Facebook.com: Events invitations via a study specific "page" (i.e., account profile), Purchased ads, targeting 18 to 24 year olds across the US, Marketplace (via Oodle.com)

- Direct email: Invitations sent to a cohort with prior consent from another study

During a 6-month period (3/7/11 – 8/31/11), the recruitment ran intermittently due to programming interruptions.

Study Website: After obtaining consent, a 7-item eligibility screener and baseline survey were presented. All participants received $10 iTunes credit via email immediately after survey completion.

- Manual enrollment: While eligibility and duplicate checks were included in the initial protocol and programming, additional quality control checks were needed, due to problems encountered: "Scamming," single users with multiple aliases; Racing through the survey.

March 7 – May 17, 2011	N (%)	June 20 – Aug. 31, 2011
Recruitment pre- and post-revised system programming, implementation of manual enrollment protocol		
1681	**ARRIVED AT THE STUDY SITE**	1327
1342 (80%)	CONSENTED	850 (64%)
1085 (81%)	**COMPLETED SCREENER**	**660 (78%)**
185 (17%)	DUPLICATES	100 (15%)
323 (30%)	INELIGIBLE	264 (40%)
577 (53%)	**ELIGIBLE**	**296 (45%)**
16 (3%)	INCOMPLETE	60 (20%)[3]
--	NOT ENROLLED[1]	20 (7%)
561 (97%)	COMPLETE	216 (73%)
245 (44%)	EXCLUDED[2]	21 (10%)
316 (56% of Complete)	**LEGITIMATE CASES**	**195 (71% of Complete)**

1. Not Enrolled: upon manual review, the respondents appeared suspicious, probable scammers, based on checks for legitimacy (e.g., US IP address).
2. Excluded: upon manual review, the respondents appeared suspicious, probably scammers, based on "time to complete" the baseline, and inconsistent responses (e.g., reporting different birthdates at two time points).
3. Likely due to the waiting period necessary for manual enrollment and selection notification.

Results: Of the 873 respondents screened as eligible, 511 (59%) unique, legitimate participants completed the baseline survey; among them (N=511): there was a mean age of 21.9 years; 49% were Female; 58.3% were non-Hispanic white with 16.8% Latino, 11.4% non-Hispanic Black and 13.5% Other/multiple race; and 21% had a 4 year college degree or more education.

Online Classified Advertising: Initial recruitment efforts focused solely on classified ads placed on Craigslist.com, a protocol developed and successfully implemented in 2008 to recruit young adults in preliminary studies.

- Over a nine week period (3/7 – 5/17/2011), recruitment ads were placed on the local sites for 24 MSAs across the US (e.g., Chicago, Los Angeles, Atlanta), multiple times for some city sites.
- As the weeks progressed, we began experiencing a variety of problems:
  - some ads were flagged for removal and removed after a couple of days, which was attributed to user monitoring at the time; and
  - some ads were posted and remained active according to Craigslist, although they couldn't be found in the daily postings – a phenomenon referred to as "ghosting."
- After revisiting the Craigslist Terms of Use, we refined the protocol to ensure compliance; however, these problems eventually resulted in study accounts being places on hold, so alternative modes were used.

The other online classifieds appeared to have a limited audience and all resulted in a very low yield.

Social Networking: Facebook events and purchased ads, also resulted in a very low yield; however, the period of implementation was relatively brief for this social networking strategy.

- Ad performance, during a 1-week period, included 775, 941 impressions resulting in:
  - 171 clicks, linking through to the study page, and
  - 38 people becoming fans by "liking" the page, with a total of 35,005 friends.
- Page performance, during a 1-week period:
  - Total reach: 475,163 people, who saw any content associate with the study Page.

Lessons Learned: While the initial protocol for this online recruitment had been successfully implemented in prior work, there were many new lessons learned from the current study:
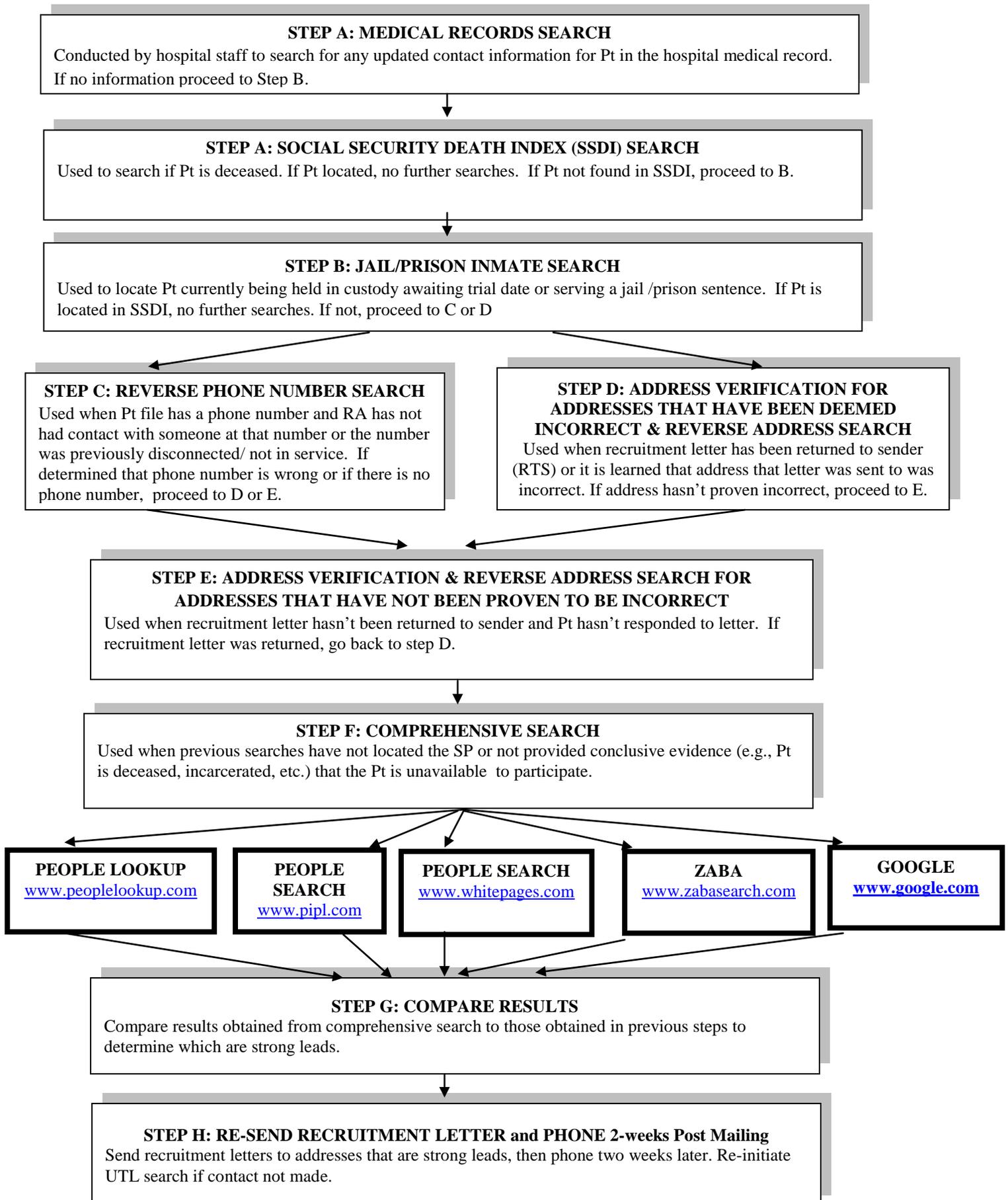
- Online recruitment strategies remain a viable option for reaching the young adult population.
- Flexibility is essential for successful implementation of any online strategy, as Internet technology and individual Web sites are continuously changing in function and user guidelines (e.g., Craigslist).
- While the Internet offers broad reach to diverse populations, it also attracts deviant respondents aiming to collect multiple incentives, of whom:
  - Many appear to be drawn by the incentive and possible spurred further by the perceived anonymity online.
  - Other tech-savvy types may simply be motivated by the challenge of getting around quality control checks.
- Programming allows for automated, seamless participation with immediate "real-time" incentives distribution; however, manual review, quality checks coupled with a delayed enrollment process can significantly increase the validity of outcomes.

Future recommendations:

- Build in a delay either in the enrollment process or incentive distribution
- Continually monitor recruitment to identify unique patterns of deception, and the need for increasing quality control checks in general.
- Specific to Craigslist:
  - Review the Terms of Use periodically to improve understanding and ensure compliance;
  - Craigslist's premise is to maintain independent city sites to offer a venue for posting only "local" classified ads; a mass posting to several cities is unacceptable at this time.
- Specific to Facebook:
  - As with any "word-of-mouth" strategy, the more people who are spreading the word the further it will reach; it is important to enlisting several ambassadors with different networks to "share," "like," and "invite" friends to view the study page and recruitment details.
  - With a brief implementation period, Facebook warrants further investigation as a recruitment strategy.

CHICAGO HEALTHY LIVING STUDY (Melinda Stolley, PhD, Claudia Arroyo, MPH, Margarita Mendoza)

"Web-Based Search Flow Chart for 'Unable to Locate' Study Candidates"

STEP A: MEDICAL RECORDS SEARCH

Conducted by hospital staff to search for any updated contact information for Pt in the hospital medical record. If no information proceed to Step B.

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STEP A: SOCIAL SECURITY DEATH INDEX (SSDI) SEARCH

Used to search if Pt is deceased. If Pt located, no further searches. If Pt not found in SSDI, proceed to B.

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STEP B: JAIL/PRISON INMATE SEARCH

Used to locate Pt currently being held in custody awaiting trial date or serving a jail /prison sentence. If Pt is located in SSDI, no further searches. If not, proceed to C or D

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STEP C: REVERSE PHONE NUMBER SEARCH

Used when Pt file has a phone number and RA has not had contact with someone at that number or the number was previously disconnected/ not in service. If determined that phone number is wrong or if there is no phone number, proceed to D or E.

STEP D: ADDRESS VERIFICATION FOR ADDRESSES THAT HAVE BEEN DEEMED INCORRECT & REVERSE ADDRESS SEARCH

Used when recruitment letter has been returned to sender (RTS) or it is learned that address that letter was sent to was incorrect. If address hasn't proven incorrect, proceed to E.

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STEP E: ADDRESS VERIFICATION & REVERSE ADDRESS SEARCH FOR ADDRESSES THAT HAVE NOT BEEN PROVEN TO BE INCORRECT

Used when recruitment letter hasn't been returned to sender and Pt hasn't responded to letter. If recruitment letter was returned, go back to step D.

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STEP F: COMPREHENSIVE SEARCH

Used when previous searches have not located the SP or not provided conclusive evidence (e.g., Pt is deceased, incarcerated, etc.) that the Pt is unavailable to participate.

| **PEOPLE LOOKUP** www.peoplelookup.com | **PEOPLE SEARCH** www.pipl.com | **PEOPLE SEARCH** www.whitepages.com | **ZABA** www.zabasearch.com | **GOOGLE** www.google.com |

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STEP G: COMPARE RESULTS

Compare results obtained from comprehensive search to those obtained in previous steps to determine which are strong leads.

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STEP H: RE-SEND RECRUITMENT LETTER and PHONE 2-weeks Post Mailing

Send recruitment letters to addresses that are strong leads, then phone two weeks later. Re-initiate UTL search if contact not made.

Recruitment Strategies we learned:

Flexibility. Be as flexible as possible in terms of interview scheduling, administration and location.

Assumptions.   Don't assume that no response means a negative response.   Passive refusals may need more time to ponder on participation. Wait a bit and send another letter or call one more time. Develop a relationship over time.

Connections.   Use them! In our study the treating MD was an important name to have on the recruitment letters. Even though it had been years since our potential participants had seen their oncologist, they had a close connection with them and their connection to our study facilitated participation.

Fair Incentive. IRBs worry about coercion, but in our study it was important to provide enough of an incentive to reflect our appreciation for survivor's time and energy.

Advisory Committee. Create an advisory committee composed of members of the target population. This was extremely helpful to us in creating recruitment materials, setting our incentive amount and considering various modes of contact (i.e., facebook).

SOCIAL-EMOTIONAL CONTEXTS OF ADOLESCENT AND YOUNG ADULT SMOKING PATTERNS

Primary aim: provide an in-depth, multi-method, multi-level study of the patterns and predictors of smoking patterns from experimentation onward that emerge from adolescence through young adulthood.

Relevant Study Details: Recruitment and data collection took place in Chicago area high schools. Adolescents needed their parent's permission to participate. Adolescent and parent agreed to potentially participate in a combination of five self-report questionnaires and interviews (over a 3-year period), ecological momentary assessments, psychophysiological assessments, and direct observations of parent-adolescent discussions. Parents also needed to agree to complete a questionnaire.

After participants turned 18, we extended the study to include four additional self-report questionnaires and interviews, a new round of ecological momentary assessments, a new round of psychophysiological assessments in the lab, and the collection of a saliva sample for genetic analyses.

Retention work begins at study design and recruitment:

We developed a study name (Piece by Piece: Making Health Connections) and logo used on all project documents and small gifts so it would easily be recognized by participants.

Incentives increase over time to encourage and reward continued participation.

Adolescents want assurance that their smoking status (and other data) will be kept private and confidential. Will parents or school officials assume they smoke if they participate? Printed study materials (recruitment, consent, etc.) stressed that the study involved teens who had never smoked, teens who smoked once or twice, as well as teens who smoke more frequently. Non-smokers were recruited for each sub-project to ensure that it did not appear all participants were smokers. All study related tasks handled by research staff, never school personnel. Research staff were young and racially/ethnically diverse.

Project phone staffed 9 am – 8 pm, 7 days a week during the busiest of data collection times; during retention only we are open 9 am – 7 pm, 6 days a week.

Critical to anticipate and address the practical concerns of participants (in this case parents too). Example: Location and scheduling of data collection visits, reimbursing transportation and parking, can participants bring children, etc. We accommodate their needs – do everything we can to allow them to continue participating.

Maintain excellent relationship with schools and school personnel. Beyond any honorarium, small things can have a huge payoff. We all knew that this project was the LEAST important thing the school was doing. Honest and open about what you need from a community partner – and keep your word. All research staff made things as easy as possible, friendly, and agreeable. Provide an abundance of thanks and some thoughtful small gifts.

We worked to build a relationship with participants and engage them in the study. GOAL: make every interaction a positive one.

RETENTION:

Always try to "recapture" participants who do not complete an assessment.

Overall, the majority of the sample has participated in every assessment wave with 70% of participants completing all seven waves (baseline through 5-year) and 91% of the sample completing 5 of the 7 assessments.

To date, only 60 (4.8%) participants have ended participation in the study.

Retention Over Time		
Measurement Wave	N	(%)
BSL	1263	(100)
6-Month	1162	(92.0)
15-Month	1128	(89.3)
24-Month	1147	(90.8)
33-Month	1142	(90.4)
4-Year	1092	(86.7)
5-Year	1027	(81.5)

Panel Maintenance Activities: goal is to increase positive feelings about the research project AND when mailed provide a check of mailing address. We mailed birthday cards, high school graduation cards, holiday cards with a thank you gift (CD holder, cups, mugs, pens, calculators, sticky notes, etc.). Project newsletters.

Tracking Participants. Gather as much contact information as possible as often as possible: name, mailing addresses (sometimes multiple addresses – divorced parents, college addresses, etc.); phone numbers – landline, cell phone, work phone); email addresses; social networking sites used; birthdate. With minors maintain similar database with parent information.

At each contact point (phone or in-person), we collect extensive information about participants' future plans and back-up contact options, including updated parent addresses, plans for marriage including possible surname change, contact information for up to 3 family members who do not live with the participant, education and employment plans, phone numbers (landline and cell), and email addresses.

Tailor messaging. Some participants respond solely to incentive. With others we may emphasize the ability to make a contribution to researchers' understanding of the health issues or the importance of staying in a longitudinal study. Proactively address potential concerns.

Maintaining Positive Relationships with Participants. Participants often reported that contact with familiar study personnel was one of the best aspects of their involvement. They enjoyed the cards and small gifts that were sent and felt appreciated for participating. Use contacts as opportunities to remind participants that they are contributing to the success of the study and thank them for their contributions. Solicit feedback from participants about the study; this helps staff identify and address concerns and questions as well as correct any misperceptions or misinformation.

Frequent Contacts/Ease of Contact. We made "check-in" calls during times of likely change – summer calls for several post-high school years. The check-ins verify all contact information and plans for upcoming months.

We have a project email address using UIC's RT system – all staff can see these email communications along with previous staff responses so that all communications are smooth and coordinated, regardless of who is responding.

Project cell phone – some participants are most responsive through texts – but have to chunk questions and info into manageable texts AND have confidence that the number is still theirs.

Tracking "Missing" Participants. At any point when a piece of contact information is incorrect, we use other forms of contact to reach the participant. We exhaust the participant's information and will move onto their identified "contact person." Parents were active participants and many have been willing to help us contact their children for the study.

We have a Facebook account – use to send messages behind the system, nothing posts to their wall. This has been invaluable in tracking and contacting participants whose contact information has changed.

For participants who cannot be contacted using the information in our records, we turn to online searches – google searches are most effective. We use online phone directories and Internet searches (both free and paid) to find updated contact information. College/university email address listings.

Find study staff who have the persistence, creativity, and interpersonal skills to successfully search for missing participants and secure their continued participation in the project.

Presented by Kathi Diviak, PhD, principal investigator of the recruitment and retention core