## Community-based Strategies for Engaging Older (Minority) Adults in Clinical Research

The Los Angeles Barbershop Blood Pressure Study: A Case Study

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#### **Clinical Trial Diversity**

- Minorities underrepresented in most clinical trials
- Even legislative action (i.e. NIH's Revitalization Act of 1993) has failed to have lasting impact on minority accrual
- Imbalance especially troubling when it comes to trials for diseases that disproportionally affect marginalized racial and ethnic groups
- Barriers to engagement include:
  - Approachability (i.e. awareness, knowledge of disease stage and its associated risks)
  - Acceptability (i.e. mistrust of medical establishment, lack of cultural competence)
  - Accessibility (i.e. geography, transportation, time, financial)





#### Community-Based Strategies for Engagement

- Community-based initiatives uniquely positioned to directly address the "3 A's"
  - Secular venues that routinely draw sizeable, diverse crowds
    - Increased <u>awareness</u> among community, not just those the research targets
  - Community-based = "meet people where they are"
    - Increased <u>accessibility</u> and convenience
  - Community members (trusted individuals) can be called upon to deliver interventions
    - Increased <u>approachability</u>
- Traditional venues have included churches, community/senior centers and fairs



#### The Barbershop – An Opportune Venue for Reaching Black Men



- Barber <---> Medicine connection dates back to Middle Ages with history of barber-surgeons
- Barbers are trusted individuals who have long-lasting relationships with clients
- Frequent Patronage
  - Weekly/Bi-weekly visits
- Laid-back, social environment, a place for information exchange and relaying of shared experiences
- Barbershop-based health outreach and promotion in U.S. since 1980's



#### The Los Angeles Barbershop Blood Pressure Study (LABBPS)

- Community-based, pharmacist-led hypertension (HTN) trial that sought to address racial disparities in HTN treatment/control
  - Prevalence ~55% among black men
  - Highest rates of HTN-related disability/death of all racial/ethnic groups in U.S.
- Aim: to develop an effective and convenient intervention for black men which links health promotion by barbers to drug therapy by pharmacists
- Evaluate both the efficacy (at 6 months) and sustainability (at 12 months) of the intervention
- Primary Endpoint =  $\Delta$  systolic BP





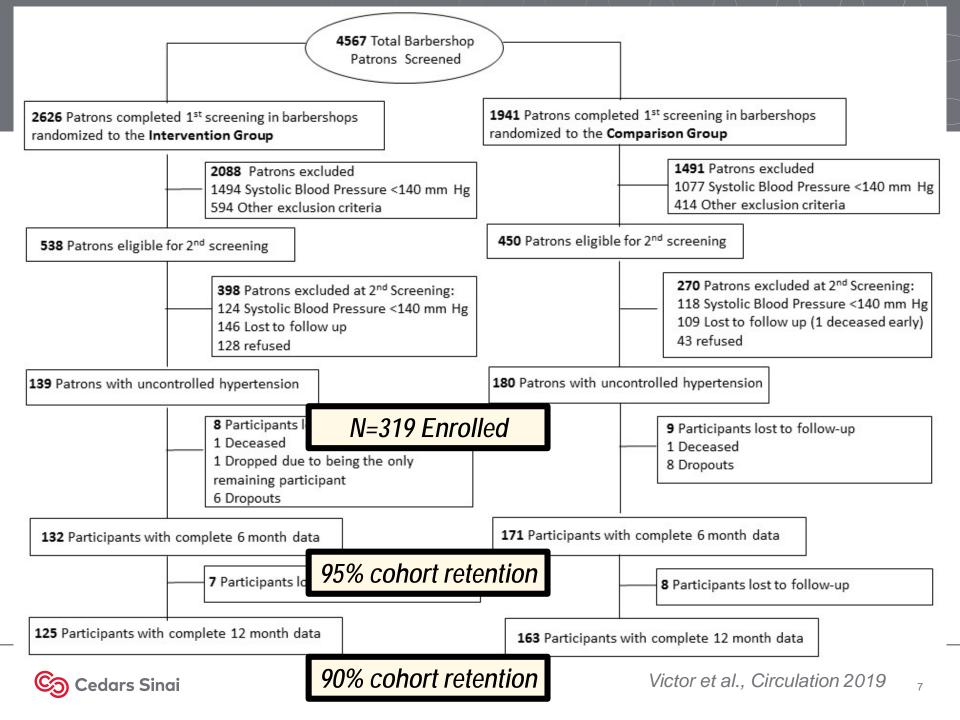
#### LABBPS Screening/Enrollment

- Men aged 35-79 were recruited from black-owned barbershops in Los Angeles County over the course of ~2 years
  - Inclusion Criteria
    - Non-Hispanic black men
    - Systolic BP >140 on 2 separate days
    - Regular patron
- Research assistants staffed barbershops all hours/days of operation and offered free blood pressure screening to all patrons regardless of eligibility
- Research Registry established for future studies, all encouraged to join
  - Already tapped for spin-off study involving use of telemedicine (remote follow-up)









#### **Baseline Characteristics of LABBPS Participants**

	Intervention Group	Control Group
BARBERSHOPS (no.)	28	24
Years in Business	17.3 ± 14.2	18.1 ± 8.3
PARTICIPANTS (no.)	132	171
Duration of Patronage, years	$10.2 \pm 9.6$	$11.5 \pm 9.0$
Frequency, visits per month	20+0.9	2.1 + 1.1
Mean Age, years	54.4	54.6
Married, %	47%	50%
Bachelors+ Degree, % 18% of cohort > 65 years old		
Household Income <25k, %	41%	30%
Regular Medical Provider, %	77%	79%



# Taking time away from working on cars to work on my blood pressure

My name is and I am 72 years old. I've been a customer at Long Beach Finest for over 15 years. I thought I had my blood pressure under control because I've been taking my medication faithfully for a long time now. I was surprised to find out it was still high when I got it checked at the shop. My barber encouraged me to work with the pharmacist to figure out the right regimen for me. I was only taking 1 medication when we started. Now I take 2 medications and my pressure is right where I want it to be. I had a stroke 10 years ago so I'm going to do whatever it takes to make sure it doesn't happen again.





### The Barbershop Encouraged Me to Get My Blood Pressure Under Control

My name is I'm 77 and I've been coming to Gaines barbershop for three years. I found out had high blood pressure four years ago. At the time I really didn't feel anything and had never had any trouble from it. They just told me I had high blood pressure so I accepted it. My doctor put me on blood pressure medication, but I eventually stopped taking it. I thought everything was fine until one day I got my blood pressure checked at the barbershop and it was running high again. I learned that good pressure is important if you want to live a long life and that people (like me) often don't know they have it because they don't feel differently. Now I come to the shop regularly to get my haircut, my blood pressure checked and under control.





#### **Lessons Learned & Translation to Other Groups**

- Barbershops can be convenient and effective hubs for the recruitment/retainment of black men in a clinical research
- Community-based interventions that are designed to directly address common barriers to engagement can increase minority participation
  - LABBPS was an accessible model that "met people where they were" -- for older adults, who are often less mobile, this particularly important
  - Barber endorsement helped to overcome issues of mistrust of medical community
  - Frequent patronage helped facilitate frequent follow-up
- Tailoring interventions to specific underrepresented groups can improve engagement in clinical research
  - LABBPS tailor-made for black men
  - Similar venue for black women? Hispanic men/women? Asian men/women?



#### References

Victor RG, Lynch K, Li N, Blyler C, Muhammad E, Handler J et al. A Cluster-Randomized Trial of Blood-Pressure Reduction in Black Barbershops. N Engl J Med. 2018;378(14):1291-301.

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