

# Reach of a community-based, whole family-inclusive intensive health behavior and lifestyle intervention in rural adolescents

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## INTRODUCTION

- Type 2 diabetes (**T2D**) is a serious chronic disease with rising incidence in adolescents
- Rural populations** are more affected by risk factors for T2D like obesity than urban populations
- Standard-of-care for T2D prevention is intensive health behavior & lifestyle treatment (**IHBLT**), but IHBLT is hard to access in rural areas
- IHBLT tailored for rural populations is critically needed

## STUDY OBJECTIVE

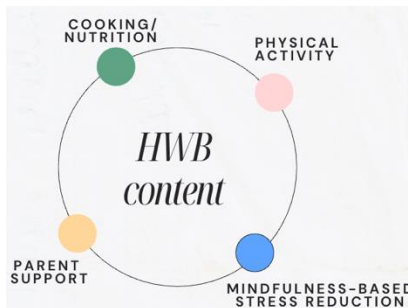
Characterize recruitment methods & participant reach during the initial implementation phase of Health Without Barriers (**HWB**), an IHBLT tailored for rural Colorado, to:

- Identify which sources are more vs. less successful
- Assess reach to target population: rural adolescents (11-19 yrs) at-risk for preventable chronic diseases like T2D

## PROCEDURES

- Through **partnership** (2020- ) of Extension (Land-grant public service arm of CSU), CSU/CU SOM clinician-scientists, & community partners, **engagement & pre-implementation planning** conducted to create HWB, tailored from Healthy Living Program (Haemer et al.):

- Whole family participates in the program with group activities and breakout sessions by age
- 26+ total hrs; 2 sessions per week for 6-weeks
- Delivered at local rec centers by bilingual health educators

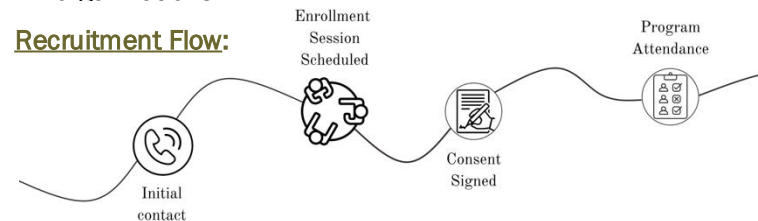


## RECRUITMENT METHODS & TRACKING

### Recruitment Methods:

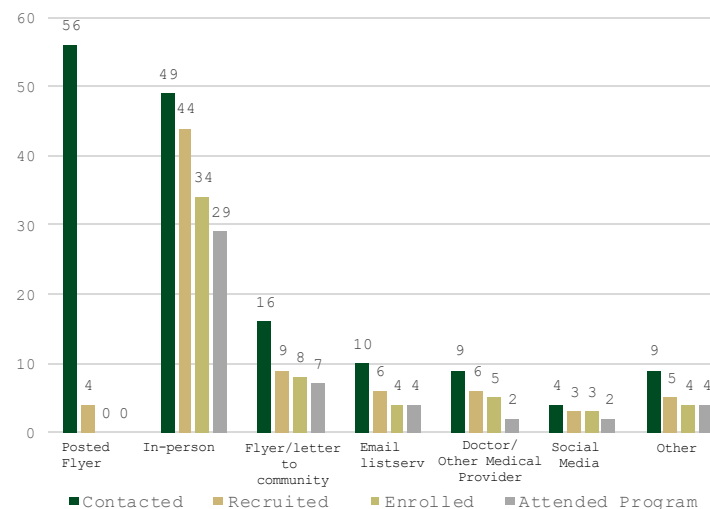
- area flyers
- in-person outreach
- mailings to schools/community organizations
- email listservs
- healthcare referrals
- social media

### Recruitment Flow:



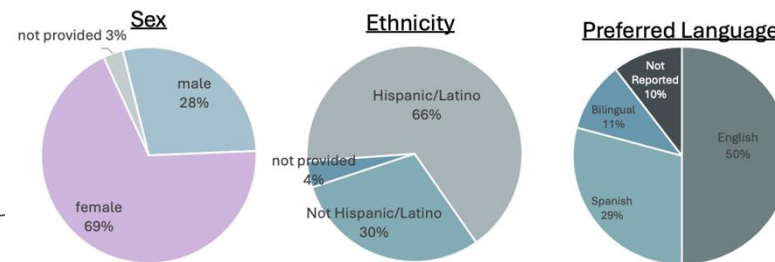
Note: Recruitment outreach was through Extension HWB coordinators

## RECRUITMENT METHODS



## RESULTS

### Demographics of HWB adolescent attendees



### N=48 enrolled adolescents:

- Average age 13 years old  $\pm$  2 years
- 42% BMI  $\geq$  85<sup>th</sup> %
- 54% family history of T2D
- 23%  $\geq$ 1 elevation in lipids, A1c, or BP

## DISCUSSION

- Flyers** reached largest volume of rural families, but with unsuccessful translation to IHBLT attendance
- In-person outreach** resulted in the highest rate (30%) of those contacted who attended IHBLT
- Despite low volume, a sizable percentage (6%) of healthcare referrals attended HWB
- Characteristics of enrolled adolescents suggest success of strategies, as a whole, in **reaching intended rural population in need of chronic disease prevention**

## TAKEAWAYS & NEXT STEPS

- ✓ In-person outreach through Extension HWB coordinators is strong recruitment method in rural Colorado
- ❖ Rural healthcare referrals+partnership with Extension is area for optimization, given medical home critical to rural chronic disease prevention