Assessing and Enhancing Reach and Representativeness

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COPRH Con

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ACCORDS UNIVERSITY OF COLORADO CHILDREN'S HOSPITAL COLORADO

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- REACH is the absolute number, proportion, and representativeness of individuals who participate in a given program (RE-AIM).
- REACH refers to the ability of a program to engage its ultimate target audience, both in terms of quantity (number/percent of participants) and quality (representativeness) -Rabin & Brownson et al 2018.

• REPRESENTATIVENESS refers to whether participants have characteristics that reflect the target population's characteristics. (RE-AIM)

• WHY are reach and representativeness important?



- What is your 'denominator' (to calculate percent participation)?
 - Those you approach/invite
 - The larger (local) population who might benefit
- Transparency who is excluded; who and how do you recruit? Does this change over time?
- What barriers may prevent some people from participating (distance, cost, lack of representation among delivery staff, historical or ongoing racial/ethnic discrimination, social exclusion, work/family commitments, language, documentation status, etc.)?
- Are there other socio-ecologic levels important for your program adoption or participation at levels such as staff, local setting(s), larger multi-site organization, neighborhood, community, region, etc.
 - Same principles and issues apply but at these levels rather than the individual



Representativeness

- What participant characteristics and factors are most important for your program to produce maximum (population or public health) impact?
 - Consider *health equity and social determinants* factors
 - Consider factors most likely to be strongly related to program outcomes
- What data sources are available to assess these factors?
 - o Data you collect
 - Data from 'local' administrative or data sources (e.g. EHR data)
 - Data available from national or geospatial data (e.g. census data)



Reach (Preliminary Data)

	Total	Control	Intervention
Sex			
-Male	444 (28.03%)	228 (28.97%)	216 (27.1%)
-Female	1140 (71.97%)	559 (71.03%)	581 (72.9%)
Age (years)	68.8 (±11.7)	62.6 (±11.7)	63 (±11.6)
Employed	419 (26.52%)	198 (25.19%)	221 (27.83%)
Mayan ethnicity	678 (42.91%)	354 (45.04%)	324 (40.81%)
Primarily speaks Spanish	917 (58%)	478 (60.81%)	439 (55.22%)
Working (yes)	419 (26.52%)	198 (25.19%)	221 (27.83%)
Literacy	663 (42.04%)	329 (41.91%)	334 (42.17%)



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Adapted from annual study meeting report, prepared by IECS

	Total for the study (Source: study records)	Population comparison (Source: census)
Female	72%	53.2%
Marital status (married)	70.2%	76.9%
Age (years)	68.8 (±11.7)	55.9 (±12.4)
Race/ethnicity (Mayan)	42.9%	52.8%
Employed	26.5%	43.9%
Literate (able to read and write)	42%	50.7%



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Observations and Questions

Population in the study

- Majority female
- Older
- Fewer identifying as Mayan
- Fewer employed
- Lower literacy

Questions to enhance reach and representativeness:

- How can the intervention engage more men?
- How can people who self-identify as Mayan be engaged equitably?
- How can people who are employed be reached?



How to Enhance Reach and Representativeness

- Build relationships with your community and target population. *Ongoing and in-depth* stakeholder engagement and CBPR.
- **Consider barriers** that may prevent some people from participating and how the intervention can address those barriers or adapt the intervention/implementation strategies to enhance reach and representativeness.
- In your assessments, be sure to include both current users of your services and non-users. Recruitment will be more effective if you rely on potential users to guide you. Ask them what is most likely to motivate people like them and what information sources they consider valuable and credible. You will likely *need to iterate.*
- Determine what recruitment materials are *feasible and best* for your program. Your target audience will be extremely helpful in developing promotional content and identifying appropriate reading levels for recruitment materials.
- Go to where the target population is and don't make them come to you for recruitment materials. There are many community settings that you can and should use as recruitment locations.
- Communicate in the language(s) that the population you aim to include in your study is most comfortable using.



Complexities and Challenges

• When you do not know or cannot easily define your denominator

• When attempts to maximize reach adversely impact other outcomes (e.g. effectiveness, costs, or sustainability)

• Changes over time in either reach or representativeness

• Other



Questions and Comments

• See references and resources on page 2 of handout

• Be transparent; engage research partners; and 'try, try again'

• YOUR QUESTIONS



Ratings on RE-AIM Dimensions

