

# Applying the RE-AIM Model to Asset-Based Community Health Interventions: A Multiple Case Study in Tower Hamlets, London, UK

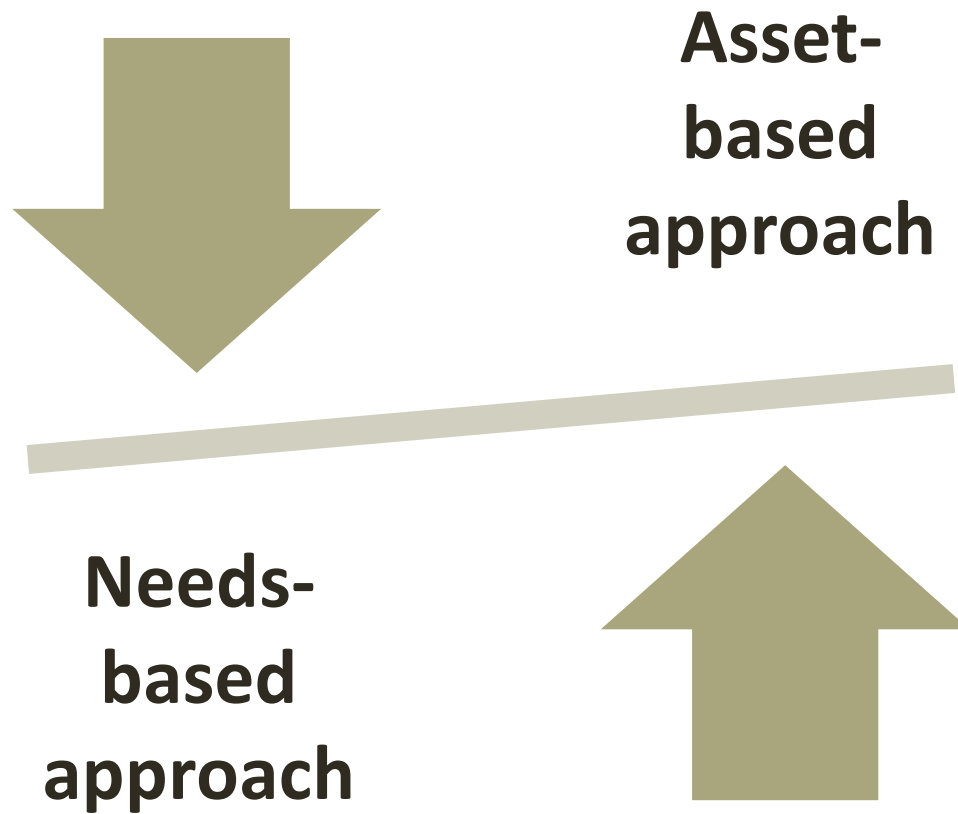
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Lane, and Prof Tracey O'Sullivan

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# Overview

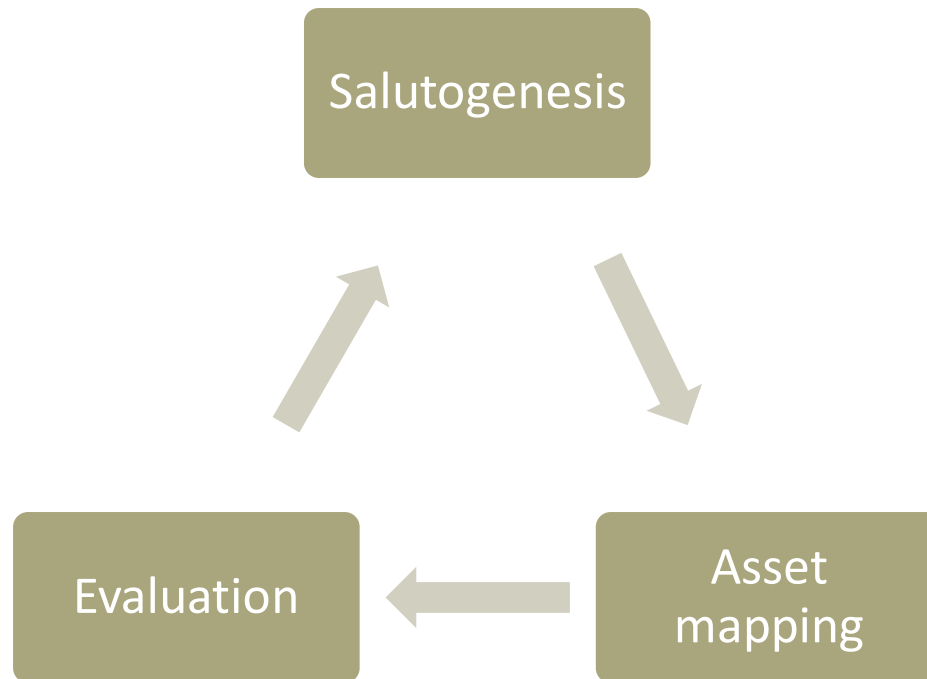
- Background
- Purpose
- Research Questions
- Literature Review
- Research Question 1: Methodology and Preliminary Results
- Research Question 2: Methodology and Preliminary Results
- Next Steps

# Background



# Background

- The Asset Model (Morgan and Ziglio, 2007)



# Background

- Evaluation Theory:
  - The RE-AIM model (Glasgow et al., 1999)

## The RE-AIM model

Reach

Effectiveness

Adoption

Implementation

Maintenance

# Purpose

To *explore* the *applicability* of the *RE-AIM evaluation model* on a *series* of *asset-based community health interventions*

# Research Questions

1. Which **key indicators** related to the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) can be applied across different types of asset-based interventions?
2. How have the **dimensions of the RE-AIM model** been applied to the evaluation of selected asset-based community health interventions?
3. How can asset-based health interventions evaluation methodologies be **systematized** for community public health?

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# Methodology: Design

- Multiple Case Study (Herriott and Firestone, 1983; Yin, 1994)
  - Comparative analysis
- Qualitative research methods (Creswell, 2013)
  - One-on-one semi-structured interviews
  - Textual data collection

# Methodology: Community Application

- Borough of Tower Hamlets, London, UK



# Methodology: Case Selection

Case Name	Description
<b>Healthy Early Years Project</b>	Focused on implementing activities within Nursery Schools, Children's Centres, and Early Year Settings to help attain Healthy Early Years Accreditation (C4EO, 2015).
<b>Tower Hamlets Local Links Project</b>	Asset mapping project aimed at identifying available & tangible community assets so they can be presented in an online asset search tool (Tower Hamlets Local Links, 2015).

# Research Question 1

*Which **key indicators** related to the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) can be applied across different types of asset-based interventions?*

1. A list of asset-based indicators to inform questionnaire

# RQ1 Methodology

- Step 1: Finding articles
  - Search Terms: “RE-AIM” and “Health”
- Step 2: Extracting literature data
  - Descriptive data:
    - Title, year, qualitative/quantitative, system level, etc.
  - RE-AIM data:
    - Definitions and measurements for all 5 RE-AIM dimensions
- Step 3: Sorting and consolidating
  - Qualitative only
  - Consolidating all definitions

REACH			
<b>Keyword(s)</b>	Participation and non-participation of individuals		
<b>System level</b>	Individual level measure		
<b>General description</b>	This dimension is interested in reporting how many people the intervention reaches, who they are, and how well the intervention retains their participation, as well as how many people the intervention does not reach, who they are, and reasons for their non-participation.		
<b>Elements</b>	Definition	Specific questions	Examples
<b>Dimension specific elements</b>	<ol style="list-style-type: none"> <li>1. Defining the target population</li> <li>2. The absolute number, proportion, and/or percentage of the target population participating in intervention</li> <li>3. Characteristics of participants</li> <li>4. If possible, absolute number, proportion, and/or percentage of target population who does not participate in intervention</li> <li>5. If possible, reasons for non-participation</li> </ol>	<ol style="list-style-type: none"> <li>1. Who is the program intended for?</li> <li>2. Who is willing to participate? Who is eligible to participate? Who inquires about program? Who actually participates?</li> <li>3. Demographic details such as age, gender, ethnicity, and risk factors</li> <li>4. Who is willing to participate, eligible to participate, and/or inquiring about intervention, but does not?</li> <li>5. Why do non-participants not participate in intervention?</li> </ol>	
<b>Appropriateness</b>	<ol style="list-style-type: none"> <li>1. Appropriateness of participants versus target population</li> </ol>	<ol style="list-style-type: none"> <li>1. Are the people reached the ones that need to be reached? Are the people targeted appropriate for the objectives of intervention?</li> </ol>	
<b>Enabling factors and barriers</b>		<ol style="list-style-type: none"> <li>1. What features of intervention encourage individuals to participate?</li> <li>2. What features of intervention discourage individuals from participating?</li> </ol>	Participants' previous awareness, or knowledge of program, convenience and ease of access of intervention to participants
<b>Requirements</b>	What elements of intervention need to occur for successful recruitment?		
<b>Methods</b>	How this qualitative data to be collected (i.e., interviews, surveys, questionnaires?)		

# Research Question 2

*How have the **dimensions of the RE-AIM model** been applied to the evaluation of selected asset-based community health interventions within the East London borough of Tower Hamlets?*

2. A list of RE-AIM related themes demonstrating utility of framework in asset-based community health interventions

# RQ2: Design

- Data Sources:
  - Qualitative semi-structured interviews
  - Documentary evidence/artefacts
- Data collection:
  - Interview data: Purposeful sampling
  - Textual data: publically available
- Interview participants:
  - Target:
    - 12 participants
  - Inclusion criteria:
    - People involved in implementation
    - Direct programme participants

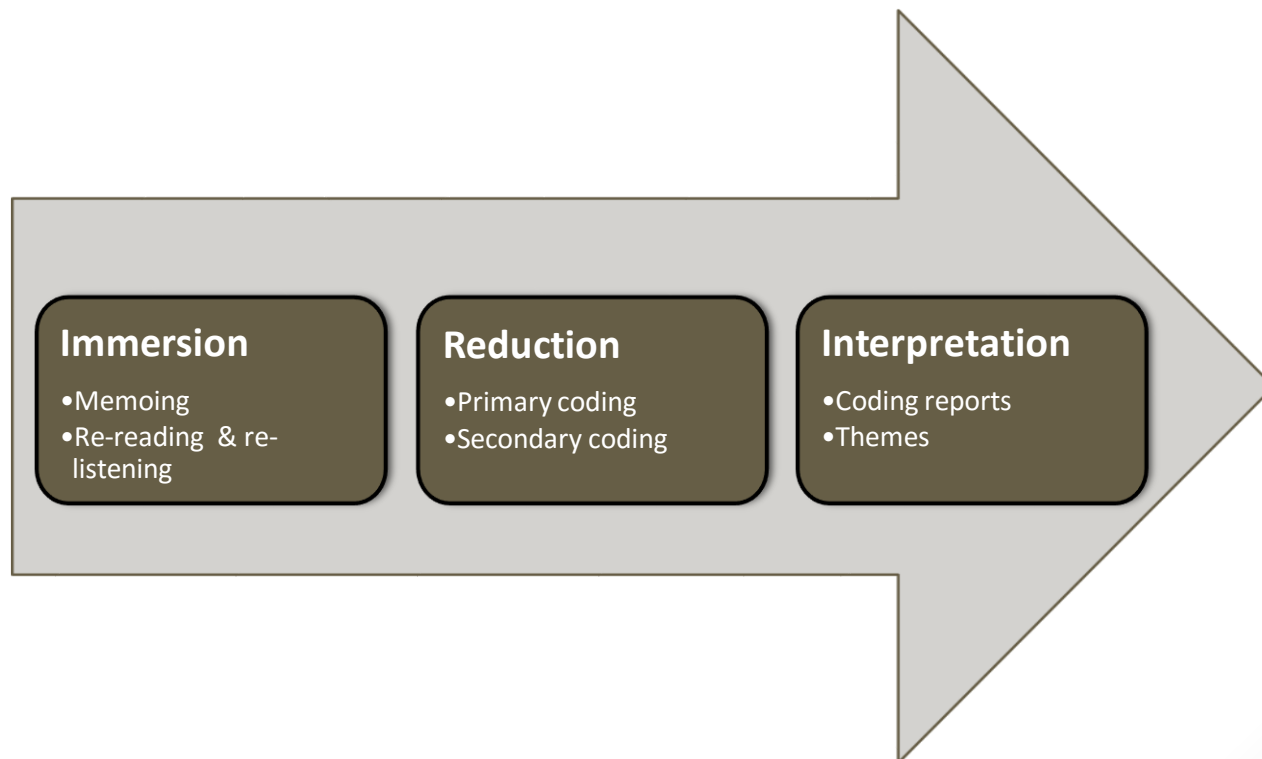


# RQ2: Participant sample

Participant	Healthy Early Years	Local Links
Administration	1	2
Community professional	1	5
Community members	0	0

# RQ2: Data Analysis

- Directed content analysis (Forman and Damschroder, 2007)



# RQ2: Preliminary Results: Examples from Interview Data P1

RE-AIM Dimension	Codes	Example of quote
Reach	<ul style="list-style-type: none"><li>• Target group/representativeness</li></ul>	"For recruitment of the community researchers, obviously we wanted a cohort that was roughly representative or sort of compared to the demographics of the locality"
	<ul style="list-style-type: none"><li>• Reason for non-participation</li></ul>	"Potentially we lost that cohort [women in children's centre] because there was no one actively communicating to them and encouraging them to turn up to the training and take part in the asset mapping"
Effectiveness	<ul style="list-style-type: none"><li>• Main goals</li></ul>	"..It was to begin to start to map the assets, begin to look at a different approach to community development which is the asset-based approach, give tools to the local community, train them up as local community researchers, but also to enhance their local knowledge of what's out there in terms of their assets in their community."

# RQ2: Preliminary Results: Examples from Interview Data P1

RE-AIM Dimension	Codes	Example of quote
Adoption	<ul style="list-style-type: none"><li>Facilitator to setting adoption</li></ul>	“So using that methodology was sort of quite a key strength for the program cause the community researchers sort of instantly warmed up to the ethos, to the methodology, to the tools, the simplicity, the inclusiveness...”
Implementation	<ul style="list-style-type: none"><li>Individualized methodology</li></ul>	“[The locality managers] had a brief of, sort of, running this project...our localities in the way that we thought was more suitable for that particular locality.”
Maintenance	<ul style="list-style-type: none"><li>Project evolution</li></ul>	“This was meant to be only for the northeast locality, but then sort of the other locality managers also decided that this would be a good format, and so then the local links actually developed from that...”

# Next Steps:

- Research Question 2:
  - Completing coding analysis for P1-P9
  - Finding RE-AIM themes
- Research Question 3:
  - Discussing how the RE-AIM dimensions fit within a larger systems context
  - Discussing the mechanisms that led to certain outcomes
  - Discussing how the RE-AIM model can be standardized for asset-based approaches

# Thank you!

Questions?

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Table 1: Preliminary inventory of health assets at various levels within the health system and their context as adapted from Morgan and Ziglio (2007).

P. 14

<u>Health System Level</u>	<u>Inventory of Health Assets</u>	<u>Context</u>
<b>Individual</b>	Social competence, resistance skills, commitment to	Includes prevention activities for youth that focus on protective factors to build resilience and inhibit high-risk behaviours such as substance abuse, violence, and dropping out of school
<b>Community</b>	Family and friendship (supportive) networks, intergenerational solidarity, community cohesion, affinity groups (e.g. mutual aid), religious tolerance and harmony	Includes cohesiveness of a community measured by a set of strong and positive interlocking networks. The asset has the potential to be health promoting irrespective of the levels of disadvantage in that community.
<b>Organizational or Institutional</b>	Environmental resources necessary for promoting physical, mental and social health, employment security and opportunities for voluntary service, safe and pleasant housing, political democracy	Health systems across Europe are under-utilized instruments for social and economic development. In an asset model, planners would ask how health services can use their resources (and maximize their assets) to help reduce health inequities by impacting on the wider determinants of health, to build stronger local economies, safeguard the environment and to develop more cohesive communities.

# The RE-AIM model dimensions (Glasgow et al., 1999) include:

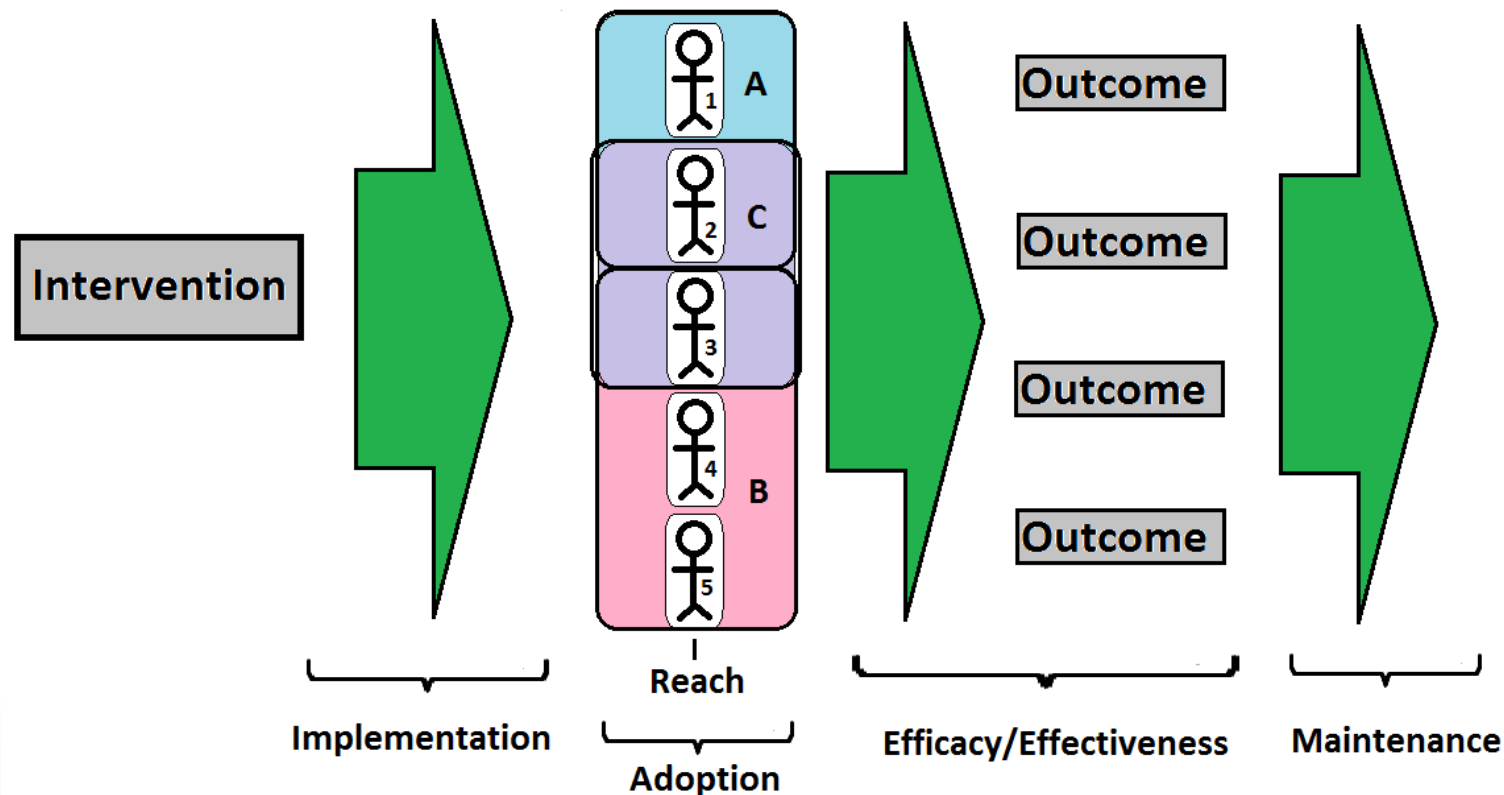
p. 24-25

Dimension	Definition
<u>REACH</u>	defines the individual level of participation, i.e., the quantity of participants as well as their defining qualities such as age, gender, and ethnicity. Reach is most often displayed as a numeric percentage and demographics are used to describe what subgroups of people participated within the intervention/program (Brace et al., 2015; Gaglio and Glasgow, 2012). This dimension also reveals the involvement of hard-to-reach populations.
<u>EFFECTIVENESS</u>	is an individual level measure which focuses on the impact of the intervention on primary outcomes, quality of life, unanticipated outcomes and subgroups (Brace et al., 2015; Gaglio and Glasgow, 2012). These particular outcomes include biological, psychological, behavioural, and even social consequences that can be positive or negative as well as qualitatively or quantitatively based (Glasgow et al., 1999). This dimension not only describes the goals of the intervention, but also how they were measured. The name of this dimension in the original model was Efficacy, which oriented towards goals attained in controlled settings (called explanatory trials). Further development of RE-AIM research developed the term Effectiveness, which focuses on goals attained in a “real-world” setting (called pragmatic trials), and which is more appropriate in this research (Gartlehner, Hansen, Nissman, Lohr, and Carey, 2006).
<u>ADOPTION</u>	Just like Reach, this dimension concerns the characteristics of populations, and looks at how well the intervention extended into various types of settings. In other words, it looks at the “proportion or representativeness of settings like work sites, health departments, or communities” (Brace et al, 2015; Glasgow et al., 1999). It is an organization-level indicator where the types of questions that pertain to Adoption could ask about enablers and barriers within populations and settings to the adoption of the intervention or program (Glasgow et al.).
<u>IMPLEMENTATION</u>	looks at whether the intervention was delivered as intended (Glasgow et al., 1999). This indicator is also organization-level and considers the success of an intervention in following the appropriate methodologies, consistency across program-element implementation, and whether costs allowed maximization in intervention effectiveness (Gaglio and Glasgow, 2012; Glasgow et al.).
<u>MAINTENANCE</u>	may be a program or individual level indicator that looks at the long-term effects of the given intervention. This dimension reports on the sustainability in participation of the program, and whether particular factors enhance or disable the sustainability of the intervention (Brace et al., 2015; Gaglio and Glasgow, 2012).

Table 2: Summary of information found in online search for seven asset-based community health intervention cases in Tower Hamlets p. 34

<u>Project Title</u>	<u>Project type</u>	<u>Hosting organization type</u>	<u>Intervention setting</u>	<u>Intervention Change</u>	<u>Complete/ Ongoing</u>
BME Stop Tobacco Project	Smoking cessation program	Academic Institution	Borough-wide (Ethnicity-based)	Changing individual behaviour	Continual service
The Goodgym	Physical Fitness/ Civic Engagement	Grassroots community organization	Borough-wide (runner-based)	Changing individual behaviour	Continual service
Bike it – U Can 2	Cycling program	Large charity organization	One school (gender-based)	Changing individual behaviour	Complete
Ocean's 11	Cycling program	Large charity organization	One small region (gender-based)	Changing individual behaviour	Complete
Healthy Early Years Project	Health Accreditation project	Local government	Borough-wide (school type-based)	Changing population behaviour (location-based)	Complete
My Weigh	Weight loss program	Community development organization	Borough-wide (BMI-based)	Changing individual behaviour	Continual service
Locallinks	Asset mapping project	Local government	Borough-wide	Asset mapping	Preliminary stage complete

Figure 1: The RE-AIM model visualized. Figure shows where in an intervention each RE-AIM dimension lies. p. 42





## Appendix A: Seven Asset-based community health interventions Cases in Tower Hamlets found in online search p. 58

<u>Project Title</u>	<u>Type of Asset-based activity</u>	<u>Organization name</u>	<u>Description</u>	<u>Level of intervention</u>	<u>Target of intervention</u>	<u>Outcome of intervention</u>	<u>Intervention completed?</u>	<u>Potential Contribution to case study research</u>	<u>Limitations of contribution to case study research</u>
BME Stop Tobacco Project	Community-based health behaviour intervention	King's College London - Dental Institute	This project is part of the change4life campaign; it is a service that supports Bangladeshi and South Asian individuals in Tower Hamlets in stopping smoking or smokeless tobacco	Academic institution level	Borough-wide : Bangladeshi and South Asian Tower Hamlets residents who wish to stop smoking	Individual behaviour change leading to overall population decrease of rates of smoking	Continual service	Provide insight into borough-wide ethnically sensitive tobacco cessation program	No contacts yet
The GoodGym	Community-based health behaviour intervention	The GoodGym	This is a community-based organization composed of runners and coaches who motivate each other to improve/sustain their physical activity while performing different community errands and volunteer work. Slogan is ""get fit, do good, connect""	Community organization/ grassroots level	Residents who wish to run and sign up for this gym - anyone can sign up except that office is located in Tower Hamlets (and a few other wards)	Individual behaviour change in physical fitness for members and community volunteer work leading to overall population increase of physical health and civic engagement	Continual service	Provide insight into grassroots organization that tries to mix physical exercise with civic engagement	No contacts yet and information on website is unclear (i.e structure of organization, types of people involved in organization)

## Appendix A: Seven Asset-based community health interventions Cases in Tower Hamlets found in online search p. 58 (cont'd.)

<u>Project Title</u>	<u>Type of Asset-based activity</u>	<u>Organization name</u>	<u>Description</u>	<u>Level of intervention</u>	<u>Target of intervention</u>	<u>Outcome of intervention</u>	<u>Intervention completed?</u>	<u>Potential Contribution to case study research</u>	<u>Limitations of contribution to case study research</u>
Bike it – U Can 2	Community-based health behaviour intervention	Sustrans Charity Organization	Part of the Tower Hamlets Healthy Borough Programme and the Bike it Project; taught mothers at particular Bike it schools how to cycle; 8 week programme in 2009 that provided lessons and tools for riding, safety, and maintenance	Community organization Level	Mothers who want to learn how to bike of kids at Cubitt Town Primary School	Individual behaviour change leading to overall population increase of cycling rates	Complete	Provide insight into community cycling programs implemented by large charity organization	No contacts yet and unclear cross-over between the Bike it and the Bike it- U can 2 Project; project is not as recent
Ocean's 11	Community-based health behaviour intervention	Sustrans Charity Organization	Part of the "Get up, Get active" programme in Tower Hamlets; eleven women in the Ocean estate who had not cycled before learned how to bike in three months in 2010-2011	Community organization Level	Eleven women in the Ocean Estate	Individual behaviour change leading to overall population increase of cycling rates	Complete	Provide insight into community cycling program implemented by large charity organization; relatively more recent	No contacts; project is not as recent

## Appendix A: Seven Asset-based community health interventions Cases in Tower Hamlets found in online search p. 58 (cont'd.)

<u>Project Title</u>	<u>Type of Asset-based activity</u>	<u>Organization name</u>	<u>Description</u>	<u>Level of intervention</u>	<u>Target of intervention</u>	<u>Outcome of intervention</u>	<u>Intervention completed?</u>	<u>Potential Contribution to case study research</u>	<u>Limitations of contribution to case study research</u>
Healthy Early Years Project	Community-based health institution and behaviour intervention	Tower Hamlets Local Authority - Tower Hamlets Early Years Service	Part of the Tower Hamlets Healthy Borough Programme; started in 2010; tried to get multiple nursery and targets nursery schools, childrens centres, and early year settings to attain healthy early years accreditation	Political Institution level	Early Year schools in Tower Hamlets	Health Promotion activities aimed at changing individual behaviour with ultimate goal of attaining Healthy Early Years Accreditation	Complete	Provide insight into completed government-led project that tried to increase health assets in children's schools to get them to qualify for a particular level of health	No contacts
MyWeigh	Community-based health behaviour intervention	Social Action for Health (Tower Hamlets)	free-one year programme in partnership with bromley-by-bow meant to help people lose weight	Community organization Level	Overweight/O bese adult residents in Tower Hamlets who wish to lose weight	Individual behaviour change leading to overall population decrease in obesity rates	Continual Service	Provide insight into ongoing community organization-led weight loss programme in Tower Hamlets; contacts with this organization already established; Lots of information online available	



## Appendix A: Seven Asset-based community health interventions Cases in Tower Hamlets found in online search p. 58 (cont'd.)

<u>Project Title</u>	<u>Type of Asset-based activity</u>	<u>Organization name</u>	<u>Description</u>	<u>Level of intervention</u>	<u>Target of intervention</u>	<u>Outcome of intervention</u>	<u>Intervention completed?</u>	<u>Potential Contribution to case study research</u>	<u>Limitations of contribution to case study research</u>
LocalLinks	Community-based asset-mapping intervention	Tower Hamlets Public Health Council	Asset-mapping project that received community input and was put online as a tool Project supported by local designer and Council to map community assets	Political Institution Level	Tower Hamlets Borough-wide	Asset-mapping exercise and community assets visual online tool	Preliminary mapping complete and ongoing maintenance	Provide insight into government-led asset-mapping project; contacts with this project group already established	No structure of evaluation created thus far

# Appendix B

## Interview Participant Consent Form p. 60



### Consent form – Research conducted as part of Graduate Thesis for Masters in Health Systems

**Name of student researcher:** Karolina Kaminska (MSc in Health Systems)

**Coordinates:** email: [kkami094@uottawa.ca](mailto:kkami094@uottawa.ca)

**Name of supervisors and research mentor:** Dr. Tracey O'Sullivan (PhD), Dr. Daniel Lane (PhD), and Dr. Antony Morgan (PhD)

**Affiliation:** Telfer School of Management, University of Ottawa and Glasgow Caledonian University – London Campus

**Coordinates:** Telephone: +44 (0) 7541 464 139

**Invitation to participate:** I am invited to participate in the thesis research study entitled Applying the RE-AIM model to asset-based community health interventions: The English experience, conducted by Karolina Kaminska for the Masters in Health Systems program.

**Purpose of the study:** I understand that the purpose of the study is to examine the applicability of the RE-AIM model to multiple cases of asset-based community health interventions in the Borough of Tower Hamlets, London, UK.

**Participation:** My participation will consist of taking part in an individual interview lasting about one hour, during which I will be asked to answer a set of open-ended questions relating to the purpose of the thesis project.

**Benefits:** My participation in this study will allow the student to gain experience in research, and evidence in preparation for data analysis. The results will provide insight into the applicability of the RE-AIM model to asset-based community health interventions in East London.

**Confidentiality and anonymity:** I have received assurance from the researcher that the information I will share will remain strictly confidential. The contents will be used only for this thesis research project. I have been assured that in written reports, my name (and position) will be disguised.

**Conservation of data:** The data collected (digital recording of interview) will be kept in a secure manner. It will be stored on a computer with secure password. Only the student researcher and the supervising professors (Dr. Tracey O'Sullivan, Dr. Dan Lane, and Dr.

M.Sc. Health Systems

Thesis Proposal

Kaminska

Antony Morgan) will have access to the interview data. The data will be conserved for 10 years.

**Compensation:** No monetary compensation will be provided.

**Voluntary participation:** I am under no obligation to participate and if I choose to participate, I may withdraw from the study at any time and/or refuse to answer any questions.

Acceptance: I, \_\_\_\_\_, agree to participate in the above research study conducted by Karolina Kaminska of the Telfer School of Management, whose research is under the supervision of Dr. Tracey O'Sullivan, Dr. Daniel Lane, and Dr. Antony Morgan. I understand that by accepting to participate I am in no way waiving my right to withdraw from the study.

If I have any questions about the study, I may contact the student and/or the supervisors/research mentors at the numbers mentioned above.

If I have any ethical concerns regarding my participation in this study, I may contact the Protocol Officer for Ethics in Research, University of Ottawa, 550 Cumberland Street, Room 154, (613) 562-5387 or [ethics@uottawa.ca](mailto:ethics@uottawa.ca).

There are two copies of the consent form, one of which is mine to keep.

Participant's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Researcher's signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Appendix C

## Revised Semi-Structured Interview Questionnaire p. 62

1. Please describe who your intervention was intended to reach in the community.
  1. How many people did the intervention reach?
  2. What was their demographic?
2. Please describe the methods used to reach the participants in the intervention.
3. Who was not reached within the intervention?
  1. Why do you believe these people were not reached in the intervention?
  2. What factors do you believe could be changed to improve the reach?
4. Who would you have liked to see participate in the intervention in the past?
5. Who would you like to see participate in the intervention in the future?
6. What were the intended outcomes of the intervention?
7. What were the real outcomes of the intervention?
8. How was the short-term impact of the intervention tracked?
9. What other impacts were you hoping to see in the future?
10. Did the intervention have any adverse or unanticipated affects?
11. Please describe the setting of the intervention.
  1. In what ways did the setting influence participation, either positively or negatively?
12. Please describe the qualities and skillsets of the individuals involved in implementing the intervention.
  1. Were there any qualities and/or skillsets that individuals possessed that interfered with implementation of the intervention?
  2. Were there any qualities and/or skillsets that individuals possessed that helped them implement the intervention better?
13. Describe in what ways the protocol delivered as intended.
14. Describe in what ways the protocol was not delivered as intended.
15. What changes to the intervention would make it more successful?
  1. What changes to the organizational structure make it more successful?
16. What changes to the design of the intervention would make it more successful?
17. Which factors kept people coming to this program?
18. Which factors presented barriers to people continuing the program?
19. How will this program be sustained in the future?

# Table 3: Examples of RE-AIM model health indicators

RE-AIM Dimensions		Effectiveness	
		Definition	Measure
Codes	Type of evaluation	Impact and long-term evaluation	
	System level	Individual level measure	
	Description	Impact of program on relevant, important, and specified primary and multiple outcomes; Positive (benefits) and negative (drawbacks) outcomes; Outcomes: Behavioural, physiological, economic, quality of life, patient satisfaction; Long-term/short-term	Did program achieve outcomes?; Outcomes: Process and program outcomes, Lifestyle and health behaviour changes, symptom management, health care utilization, clinical outcomes, quality of life, economic; Did program produce adverse/unanticipated outcomes? (Need for project revision)
	Enabling Factors/Barriers		Enabling factors/Barriers to achieving outcomes: Convenience, privacy, decreased anxiety; Engagement of target audience, Health disparities, Communication inequalities, Quality of information, Location of delivery, Time of professional, Educational environment, Effect of evaluation on outcomes
	Requirements		
	Appropriateness		Appropriateness of outcomes on target population for organizations? Whose perspective are results coming from?
	Methods		Standardized evaluation tools, midterm evaluation, overall evaluation program, consent process, surveys, interviews, questionnaires, methods to better achieve outcomes
	Examples	Percentage of people who use intervention; Who benefit; Professionals who completed questionnaire, cared for pregnant women; Attitudes and competency of staff by end of program; Participants' perception of what it could and what program did achieve	PA participation by church mentors, Percentage of church members who participated in program, Healthy eating index; blood pressure change

# Table 3: Examples of RE-AIM model health indicators

RE-AIM Dimensions		Adoption	
		Definition	Measure
Codes	Type of evaluation	Impact evaluation	
	System level	Setting and/or organizational	
	Description	Absolute #, proportion, and % of intervention agents (people who deliver program) and settings willing to initiate program, who implement, to adopt steps, perceived barriers and solutions; In other words, extent to which program was adopted by key intermediaries, participation rate of settings, saturation or penetration of program into settings; Representativeness of providers, organizations, settings (type, characteristics)	#, proportion of service providers and consumers who have access to program, who adopt, who are available to deliver; Representativeness: type; Adoption rate; reasons for non-participation; How adoption affects outcomes?
	Enabling Factors/Barriers	How similar different program is from organizations procedures, Organizational capacity, Partnership support	Barriers and plans to overcome; Use of resources; Costs; Fidelity to program protocol; Knowledge, awareness, peer pressure, religious constraints
	Requirements	costs, resources	Program implementation correctly; Training; Electronic support
	Appropriateness		Appropriateness of organization/setting selection: Settings with most contact with target audience; Who should administer? Is program consistent with values and priorities of organization?
	Methods	Lifestyle promotion, practice among staff	Review teams' pilot proposals, self-assessments; Staff questionnaire; Interviews
	Examples		awareness of early testing, knowledge about difference between HIV and AIDS

# Table 3: Examples of RE-AIM model health indicators

RE-AIM Dimensions		Implementation	
		Definition	Measure
Codes	Type of evaluation	Process evaluation	
	System level	Organizational level measure (setting/individual)	
	Description	Extent to which program is delivered as intended; Extent to which program is delivered as intended; Consistency; Fidelity (Adherence to essential elements) Quality of intervention's delivery; How program was delivered; Frequency, duration; Resources used (client's use of intervention); Intervention integrity	How program should be delivered (Intervention protocol): How messages should be conveyed, delivery, staff training, support, clear intervention protocol, monitor, provide feedback, recognition, mentorship; How it is delivered: Recruitment process, sharing coordination, How many materials distributed, how many staff members, different levels of staff departments, program components; Consistency between execution and research protocol; Extent to which resources became part of routine
	Enabling Factors/Barriers		More specific information; Communication between organizations and communities; Encouragement; Missing data; Repeated tailoring; Costs
	Requirements	time, technical support, \$	type of technical support needed; Training for providers, trainers
	Appropriateness		Appropriateness of intervention agents, methods, organization/people
	Methods	Survey	monitoring, fidelity checklists, interviews, consent process, recommendations for sustainability
	Examples	Production of education resources/distribution; Total packages; HP who completed/withdrew from program	

Table 3: Examples of RE-AIM model health indicators

RE-AIM Dimensions		Maintenance	
		Definition	Measure
Codes	Type of evaluation	Process and long term evaluation	
	System level	Individual and organizational	
	Description	Likelihood of long-term sustainability of program (degree to which programs becomes routine (everyday culture and norms) intervention's effectiveness at achieving desired outcomes for an extended time (usually 6 months of 1 year)); Individual: How well behaviour change efforts hold up in long-term, maintained self-management/adherence; Organizational: Extent to which program becomes institutionalized, part of organizational practices and policies, sustained delivery in settings	Individual: Did program produce lasting effects at individual level; Organizational: Did organization sustain program? Details of maintained components: Still ongoing activities no longer offered, which components were never delivered; Degree of sustainability: Level of lasting social networks, Health policy decisions embedded in policy plans, renewed, adjusted, updated annually; Evolution: How should interventions be incorporated so that it is delivered over long-term?, incorporate natural environmental and community support
	Enabling Factors/Barriers	Enabling factors/barriers: Did resources assist in changing practice? Intent of HP to improve practice; # of professionals who already changed practice	Challenges, Budget/costs
	Requirements		Improved accessibility and integrity as regards to service delivery and policies; Providing evidence of value of program; Coordination of care; Continue to track evaluative data
	Appropriateness		Did those that sustain include those in most need? Inclusion of appropriate follow-up contacts
	Methods		
	Examples		