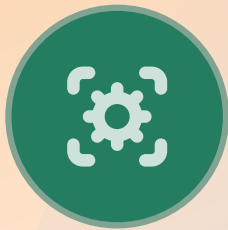




An tSeirbhís Náisiúnta Scagthástála
National Screening Service

Population-based screening Interventions toolkit for communities



This toolkit aims to offer an evidence based good practice guide to those working in communities who want to support people to participate in screening. It is a practical guide outlining the interventions that are proven to work in communities to support participation in screening.

Written by Dr Alice Le Bonniec and Lynn Swinburne

Public Health Department, National Screening Service HSE 2023

Contents

Introduction	1
Step 1 – Your community	6
Step 2 – Who needs support to participate in screening?	8
Step 3 – Barriers to screening	9
Step 4 – Involving members of the community in your intervention	13
Step 5 – Planning your intervention	14
Step 6 – Developing and implementing your intervention	20
Step 7 – Evaluating your intervention	28
Conclusion	31
References	32

Introduction

What is population-based screening?

The National Screening Service (NSS), part of the Health Service Executive (HSE), is committed to ensuring that all eligible people can access our services. Through our work and through collaboration with our partners, we work to make this happen. We provide a national service, delivering free, evidence-based population screening in hospital and community settings across the country. We deliver 4 national population-based screening programmes:



The purpose of population-based screening is to identify healthy people who may have an increased risk of a disease or condition in a certain population. Screening programmes aim to reduce illness and mortality (death) in the population through prevention and/or early recognition of disease and treatment, both of which can greatly improve health outcomes.

Screening gives an opportunity to prevent diseases by treating pre-disease changes and picking them up at an earlier stage before symptoms start. If a disease is picked up early, more treatment options may be available, treatment can be easier, and the chance of better outcomes is greater.⁽¹⁾

Although we deliver screening to everyone eligible in the country, we aim to put the person first by adopting a person-centred approach that focuses on care, compassion, trust and learning. Below we give you more detailed information on the four programmes we operate. Eligibility for each programme is based on age, gender, and health condition.

Screening Programmes

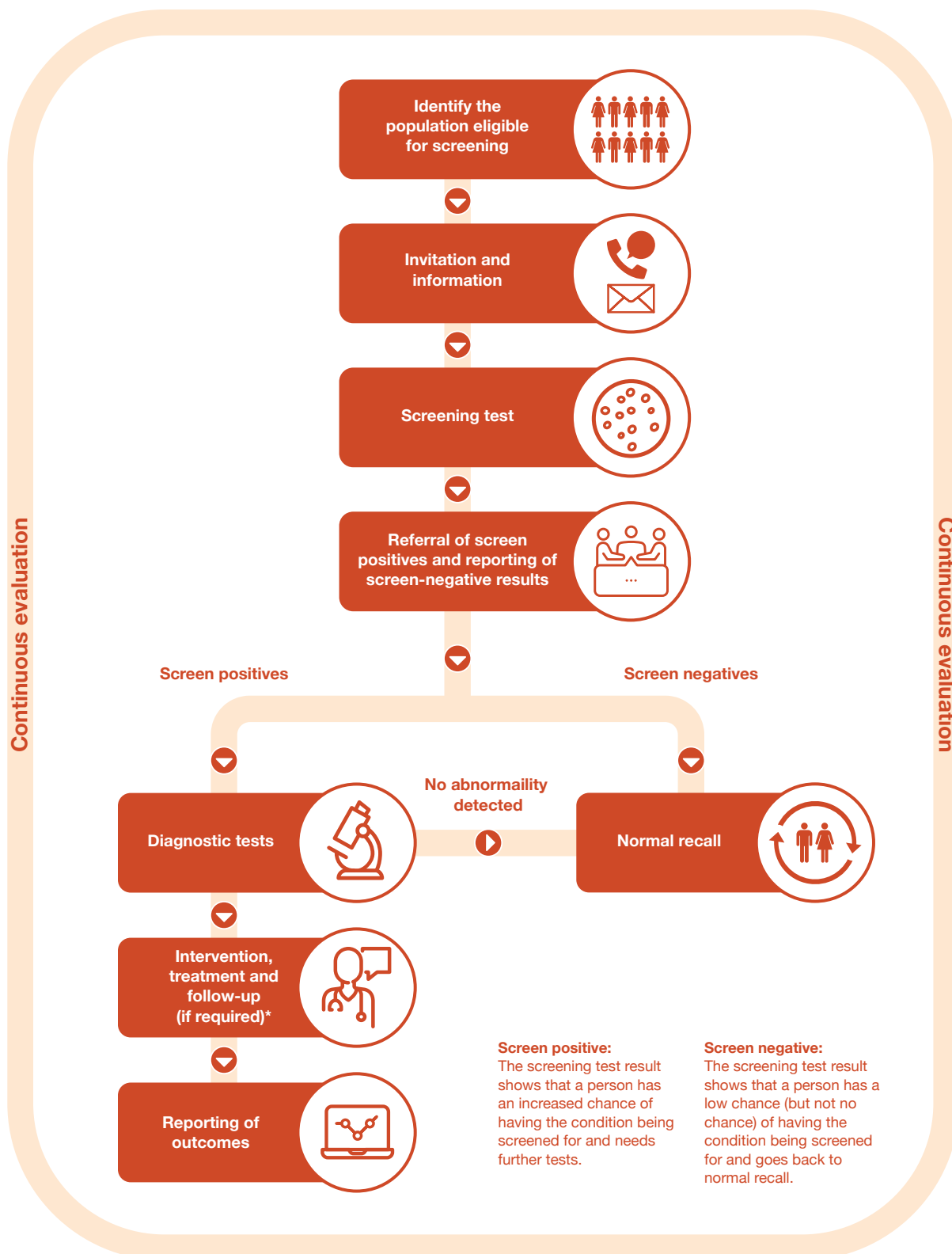


	Age	Test	Frequency
	Women aged 50-69 years	Breast x-ray (mammogram)	Every 2 years
	Women and people with a cervix 25-65 years	HPV (Human papillomavirus) cervical screening test	Every 3 years 25-29 years Every 5 years 30-65 years
	Men and women 59-69 years	Faecal Immunochemical Test (home test)	Every 2 years
	All people with Type 1 and Type 2 diabetes over 12 years of age	Eye screening (specialised digital photography)	Every 1 or 2 years depending on previous results

Taken from: The National Screening Service. (Content correct as of Dec 2023).

The Screening Pathway

Screening is the process of identifying healthy people who may have an increased chance of a disease or condition. Screening is a pathway that starts with identifying the population eligible for screening and ends with treatment of those who have the screened condition. For most people the pathway operates as a cycle, with people who have a normal screening test being invited back in an agreed time to be screened again. For example breast screening is offered to women aged 50-69 years every 2 years.



* Not everyone who screens positive will need intervention and treatment. Some will have a negative diagnostic test and go to normal recall

Reference: This image was developed using content from: Screening Programmes – A Short Guide. Increase effectiveness, maximize benefits and minimize harm. World Health Organisation 2020 <https://apps.who.int/iris/bitstream/handle/10665/330829/9789289054782-eng.pdf>

Taken from: The National Screening Service

Purpose of Toolkit

This toolkit aims to offer an evidence based good practice guide to those working in communities who want to support people to participate in screening. It is a practical guide to outline the interventions that are proven to work in communities to support participation in screening. In this toolkit, an intervention is defined as any activity undertaken with the objective of improving screening awareness, access, or participation.

We hope to create a network of screening champions who use their role in the community to:

- Provide practical information about screening into their community.
- Support understanding of what screening is/is not.
- Reduce misinformation about screening.
- Signpost to screening resources.
- Identify barriers/enablers to screening.
- Support overall participation in screening while respecting informed choice.
- Be a community advocate for screening.
- Plan and implement interventions to increase participation in screening.
- Encourage people to help seek for symptoms.
- Be culturally sensitive to the needs of communities.
- Be aware of literacy and information needs of communities.
- Provide outreach in their communities on screening.

The WHO (World Health Organization) has defined community engagement as “a process of developing relationships that enable stakeholders to work together to address health-related issues and promote well-being to achieve positive health impact and outcomes”. There are numerous benefits to engaging communities in promoting health and wellbeing. At its core, community engagement enables changes in behaviour, environments, policies, programmes and practices within communities.⁽²⁾

Equity in Screening

Health equity is when everyone has the opportunity to be as healthy as possible. Health inequities are differences in health status between population groups that are socially produced, systematic in their unequal distribution across the population, avoidable and unfair.

We know that health is influenced by a range of factors including education, employment, income level, gender and ethnicity. People that experience disadvantage (such as poverty) are more likely to experience poorer health. People in lower socio-economic groups, who would benefit most from screening, are often the least likely to participate. There are several reasons for this such as fear of the test and the outcome of the test, lack of transport to participate, misunderstanding of what screening is and so on. Please see our table on barriers to screening on page 10.

Health inequities exist across our screening programmes, and these inequities are unfair and avoidable. We must provide different communities tailored support based on their specific barriers. We must listen and understand their lived experience of accessing screening and respond accordingly.

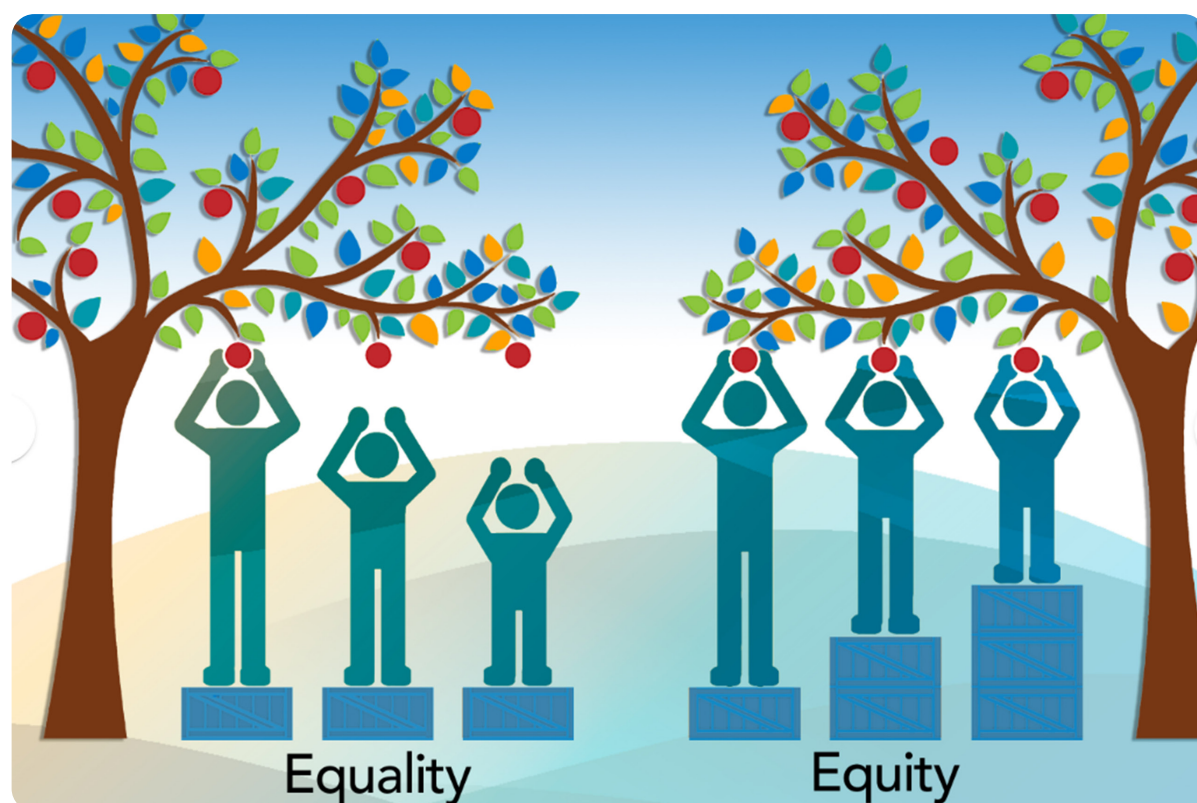


Image used with permission of Saskatchewan Health Authority

Structure of the toolkit to help you plan your intervention

Step	Task	Community Champion Role
Step 1 Your community	<ul style="list-style-type: none"> • Understand your role as a screening champion. • Involve your colleagues. • Involve the community. • Have an understanding of the community you are working with. 	<ul style="list-style-type: none"> • It starts with you and the community you are working with. • What community knowledge do you already have? e.g. community profiles, needs assessments, understanding from research, from your work etc.
Step 2 Who needs support to participate in screening?	<ul style="list-style-type: none"> • Pick which group you are going to work with in your community (one group at a time will work best). 	<ul style="list-style-type: none"> • What group are you going to work with? • Why this group?
Step 3 Background information on your group, barriers and enablers (solutions)	<ul style="list-style-type: none"> • What do you know about this group? • Use evidence that might be available to you. • Optional – use a behavioural science approach in your thinking. 	<ul style="list-style-type: none"> • What might be the barriers to screening for this group? • What might be the solutions?
Step 4 Involving members of the community	<ul style="list-style-type: none"> • Think about involving members of the group you want to work with in your project team, planning and development of your intervention. 	<ul style="list-style-type: none"> • What level of community engagement do you want to have in your intervention?
Step 5 Planning your intervention	<ul style="list-style-type: none"> • Plan your intervention. • Optional - use a behavioural science approach. 	<ul style="list-style-type: none"> • What interventions might work with this group? • Plan out each step in your intervention. • What resources do you have available to you?
Step 6 Developing and implementing your intervention	<ul style="list-style-type: none"> • Develop your intervention. • Implement your intervention. 	<ul style="list-style-type: none"> • What will your intervention look like? • What outcomes are you hoping to see? • Over what period of time? • Who will be involved?
Step 7 Evaluating your intervention	<ul style="list-style-type: none"> • Evaluate your intervention. 	<ul style="list-style-type: none"> • What worked well? • What didn't work well? • What elements of your intervention worked best? • What outcome did you have?

Step 1

Your Community



The role of community-based health workers

Community-based health workers provide culturally appropriate outreach and services. They can play an important role in improving health and enhancing health equity in underserved or minority communities. They serve as a bridge between communities and healthcare systems and are often from or have a close understanding of the communities they serve. Crucially, they are well placed to act as screening advocates in their work, providing invaluable reach into their communities, delivering information and education.

The Community Guide outlines the role of the Community Health Worker⁽³⁾

- Cultural mediation among individuals, communities, and health and social services systems.
- Providing culturally appropriate health education and information.
- Care coordination, case management, and system navigation.
- Providing coaching and social support.
- Advocating for individuals and communities.
- Building individual and community capacity.
- Providing direct service.
- Implementing individual and community assessments.
- Conducting outreach.
- Participating in evaluation and research.

Why use a Behavioural Science Approach?

Behavioural science is defined as “*the scientific study of behaviour – what enables it, what prevents it, and how best to elicit and maintain it*”⁽⁴⁾. Consequently, behaviour science can help us to understand why people participate in screening and why they don't.

We know from behavioural science that key factors have an influence on people's behaviour. Those factors can be related to our individual characteristics (e.g. our personal beliefs). But we are also influenced by our culture, by other people around us, and more generally by the society in which we live.

Adopting a behavioural science approach can help us to explore screening participation challenges such as:

- While educating people about screening programmes is essential, it is not sufficient to change behaviour. Knowing the benefits of screening does not always lead to participation.
- People are more likely to participate in screening if they know that other people in their community take part (e.g. friends, family).
- People are unlikely to participate in screening if the process looks too complicated and they don't feel they have the skills to participate.

Insights from behavioural science can help when designing interventions to improve screening participation. Overcoming economic, structural, socio-cultural and psychological barriers is likely to be key to supporting under-screened and never-screened population groups.

KEY MESSAGES

Community health workers are in a unique position in understanding what their community needs and how we can help them. They provide an insight and outreach into those communities that is invaluable. They are well placed to be screening champions and develop local interventions.

Step 2



Who needs support to participate in screening?

There is evidence that some population groups with higher incidence of disease are less likely to participate in screening, for example:

- People living in communities with high deprivation have a higher incidence of bowel cancer, are less likely to participate in BowelScreen.⁽⁵⁾
- Lower participation in the BreastCheck screening programme could also contribute to later stage at presentation for breast cancer among those in the most deprived areas.⁽⁶⁾
- Lower participation in the CervicalCheck screening programme could also be one of the factors behind the increased incidence of cervical cancer in communities with high deprivation, but we don't yet have the data to know for certain.

There is further evidence that screening participation is lower amongst the following groups, however there are other groups also that are underscreened or never screened.

Examples of Groups with Lower Screening Participation

- People living in areas of high deprivation.
- People with physical or intellectual disabilities.
- People with severe mental illness.
- Migrants and ethnic minorities.
- Lesbian and bisexual women, trans men and non-binary people born females are less likely to participate in cervical screening.
- Roma and Travellers.⁽⁷⁾
- Those with literacy difficulties.

KEY MESSAGES

Those who would benefit most from screening are often the least likely to participate. Take some time looking at the profile of the people in your community:

Who may have difficulty participating in screening services and why?

How can you support them to participate in screening should they want to?

Step 3



Barriers to Screening

There are many reasons why people don't participate in screening. People can face barriers at different stages of the screening pathway. For example, some people might decide not to take part because of personal beliefs or because they are not aware of the benefits of screening. Other people might have some intention to participate in a screening programme, but they can face structural barriers such as lack of transportation or lack of childcare.

Many people experience psychological barriers when invited for screening such as: the fear of finding out something is wrong, fear of undergoing the screening test, fear of a diagnosis. Barriers are complex and very often individual to the person or group in the community. However, some barriers are easily addressed, and the right support can overcome them.

Below you will see the findings of evidence on the barriers to participation in population screening programmes. These barriers can help to explain why some population groups have lower participation in screening.⁽¹⁾

Some of these barriers are widely found in the general population (e.g. fear and anxiety), while other barriers are typically faced by under-screened people. For example, a lack of access to screening services, a lack of understanding about screening or language barriers are often found in under-screened populations.⁽⁸⁾

● BreastCheck ● BowelScreen ● DiabeticRetina Screen ● CervicalCheck

Psychological Barriers				
Barrier	Programme			
Trust and confidence in the service	●	●	●	
Attitudes & behaviours (shame, guilt, embarrassment, violation & disgust)	●	●	●	●
Fear & anxiety of the test or results	●	●	●	●
Fatalism		●		●
Fear of burdening family		●		●
Lack of coping skills	●			●
Painful procedure	●	●	●	●
Not a priority			●	●
Self-esteem/self-confidence	●			
Forgetting appointments/lack of reminders		●		
Privacy		●		●
Belief that screening test is not accurate		●	●	●
Cognitive Barriers				
Not knowing how to conduct the test		●		
Knowledge, awareness and understanding	●	●	●	●
Perception of risk	●	●	●	●
Health/cancer literacy	●	●	●	●
Language			●	●
Structural Barriers				
Transport		●	●	●
Availability of appointments/opening hours			●	●
Waiting times/lists			●	●
Locations		●	●	●
Availability/consistent Healthcare Professional (HCP)		●	●	●
Lack of pathology services				●
Male physicians/HCP	●		●	●
Insufficient medical advice/lack of physician recommendation		●	●	●
Social/cultural Barriers				
Age		●		●
Relationships – spousal, family, friends, mother, HCP		●	●	●
Social acceptability				●
Discrimination/stigma			●	●
Religious beliefs	●	●		●
Education level	●	●		●
Employment status	●			●
Low income	●	●		●
Financial Barriers				
Transport			●	●
Loss of income			●	
Cost of childcare			●	●

Taken from: National Screening Service (2023). Improving equity in screening. A Strategic Framework 2023-2027

Use of a behavioural approach to help you to identify the barriers to screening in your community

It is important to take into account the individual factors that can influence participation in screening such as people's motivation, but also the factors that are related to the context such as the healthcare facilities people have access to.

Context is key and understanding the experiences of, and barriers faced by, different groups is important when designing interventions to improve uptake. Based on the behavioural science approach, key questions are presented in the table below to help you to identify the barriers to screening participation in your community.

Key Questions to Identify Barriers to Screening in your Community

Key questions adapted from West et al, 2019 ⁽⁹⁾	Examples	Your notes	Tick when done
<ul style="list-style-type: none"> Does the targeted population have the time, financial or material resources to participate in screening? 	Lack of time, or inability to find transportation/childcare to attend a breast, cervical or retina screening.		<input type="checkbox"/>
<ul style="list-style-type: none"> Do they have the social support (e.g. family and friends, community networks) required to participate in screening? Is screening seen as normal in their social environment? 	It can be taboo to speak about poo and bowel problems. This can prevent participation in bowel screening.		<input type="checkbox"/>
<ul style="list-style-type: none"> Is the targeted population motivated to participate in screening? What are the barriers to and facilitators of their participation? Is screening a priority for them? 	<p>Some people might think it is not necessary to participate in screening if they don't have symptoms.</p> <p>Different groups can have varying barriers to screening.</p> <p>Do they have other priorities?</p>		<input type="checkbox"/>
<ul style="list-style-type: none"> Is screening an established part of their routine? 	Women who already participate in cervical and breast screening might be more willing to participate in bowel screening.		<input type="checkbox"/>
<ul style="list-style-type: none"> Are they physically capable of attending screening? Do they have the ability to participate in screening from start to finish (e.g. literacy skills)? 	Some people might have physical disabilities that can make the screening procedure complicated.		<input type="checkbox"/>
<ul style="list-style-type: none"> Do they know what screening is? Do they understand why it is important for them to get screened and how to do it? 	Some people might not be aware that they are eligible to participate in one or more organised screening programmes. If they do, they might not know why they should attend.		<input type="checkbox"/>

Adapted from West et al, 2019⁽⁹⁾ and Michie et al, 2014⁽¹⁰⁾. Learn more here: <http://www.behaviourchangewheel.com/> and [here](#).

KEY MESSAGES

Take some time to consult with the community you are working with to understand their barriers to participating in screening. These can be general barriers that are logistical in nature and can be easier to address.

Other barriers may be cultural or structural and can be more challenging to address. Working with your community over time and offering support in different ways can help address certain barriers and encourage behavioural change (or encourage behavioural change to address certain barriers).

We want to ensure that people make informed decisions about participating in screening and respect when they have made their decision based on good information.

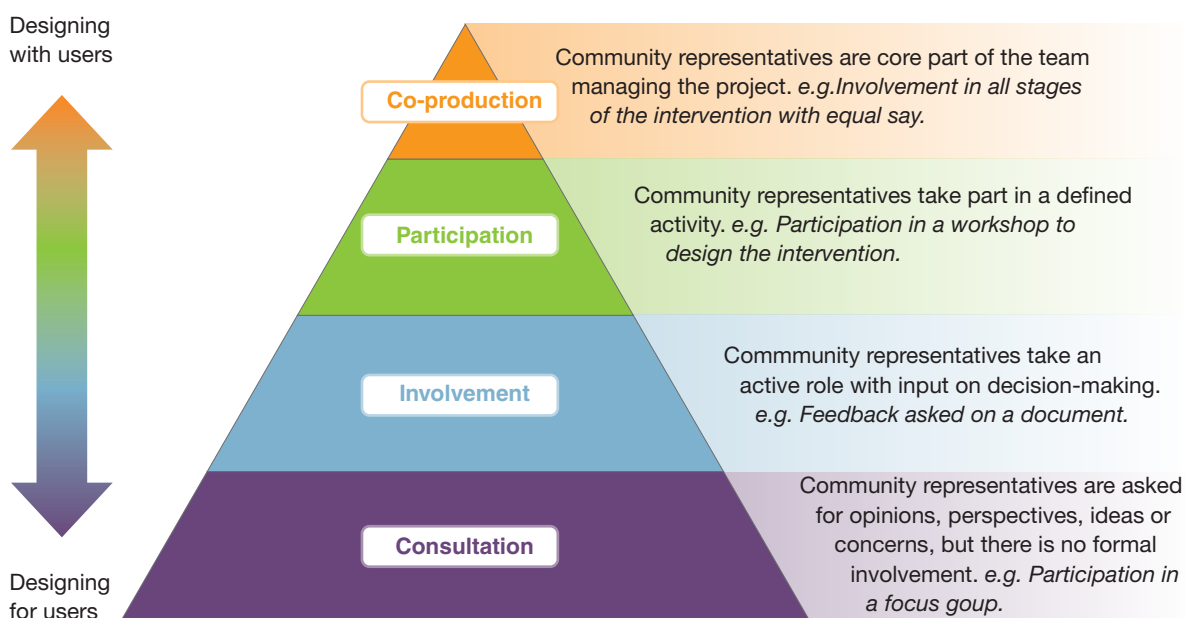
Step 4



Involving members of the community in your intervention

Depending on the time and resources available, several ways of involving members of the community can be explored. Adopting a person-centred approach is key to make sure your intervention is based on the views and actions of the people who will use it.⁽¹¹⁾ Culturally adapted interventions have proven effective to increase participation in cancer screening.⁽¹²⁾

The figure below illustrates the different options, from consultation (collecting the views of the target population) to co-production (the maximum level of users engagement).

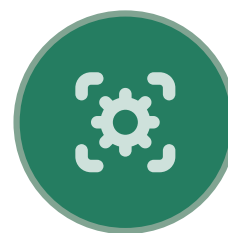


Adapted from: https://www.inclusivedesigntoolkit.com/tools_codesign/#nogo and from Stark et al, 2021.⁽¹³⁾

KEY MESSAGES

It is important to give some time to think about the level of community engagement you would like to achieve in the development of your intervention. This decision is dependent on the time and resources available to you. The minimum level of community engagement is consultation and is a good way of applying best practice. Including community member inputs in your project will increase the chances that your intervention is acceptable by the community.

Step 5



Planning your intervention

Cancer screening interventions

The Community Preventive Services Task Force (CPSTF)⁽¹⁴⁾ has explored the literature to identify what works in public health to increase screening participation.

The top-three intervention types that showed evidence are the following:

Intervention name	Purpose
Patient Navigation Services Patient navigation services are delivered by community health workers, patient navigators, healthcare professionals, nurses, social workers, or others. They are often designed to be culturally- and language-appropriate.	<ul style="list-style-type: none">• Services are often offered to populations experiencing greater inequities in cancer screening, including people from historically disadvantaged racial and ethnic populations and people with lower incomes.
Community Health Workers Community health workers (including community health representatives, community health advisors, patient navigators, and others) are frontline, culturally sensitive, public health workers who serve as a bridge between underserved communities and healthcare systems. They are from, or have a close understanding of, the community served.	<ul style="list-style-type: none">• Increase demand for screening services.• Improve access to screening services.
Multicomponent Interventions Often recommended to increase efficacy. That means that several strategies can be used in one intervention.	<ul style="list-style-type: none">• Combine two or more intervention approaches or two or more interventions to reduce structural barriers.

Learn more [here](#).

You can use the list below to identify strategies that could be used in your community. These interventions are recommended because they have been found to be effective in the literature. You can decide on which of these strategies are relevant depending on the population you want to target and the resources available to you.

Taken and adapted from: <https://www.thecommunityguide.org/news/multicomponent-interventions-recommended-increase-cancer-screening.html>

Increase Community Demand

Intervention	Definition (from the community guide - Community Preventive Service Task Force (CPSTF))	Example
Group education	<p>Conveys information on the benefits of screening and ways to overcome barriers to screening with the goal of informing, encouraging, and motivating participants to seek recommended screening.</p> <p>Group education can be given to a variety of groups, in different settings, and by different types of educators with different backgrounds and styles. These sessions should be literacy and culturally sensitive. User involvement is preferable in the design of these sessions.</p>	<ul style="list-style-type: none"> • Interactive workshops designed to overcome misconceptions about screening. • Use of visuals. • Support for registration. • Demonstrating of tests/kits. • Literacy friendly. • Culturally sensitive. • Identification of barriers. • Problem solving.
One-on-one education	<p>One-on-one education delivers information to individuals about the benefits of screening and ways to overcome barriers to cancer screening with the goal of informing, encouraging, and motivating them to seek recommended screening.</p> <p>These messages can be tailored with the intent to reach one specific person, based on characteristics unique to that person, related to the outcome of interest, and derived from an individual assessment.</p> <p>One-on-one education is often accompanied by supporting materials delivered via small media (e.g., brochures), and may also involve client reminders.</p>	<ul style="list-style-type: none"> • Interactive counselling to understand and potentially overcome barriers to screening. • Linked to information for the service user. • Follow up offered e.g. phone call.
Clients reminders	<p>Written (letter, postcard, email) or telephone messages (including automated messages) advising people that they are due for screening.</p>	<ul style="list-style-type: none"> • Follow-up printed or telephone reminders. • Additional text or discussion with information about, benefits of screening and ways to overcome barriers to screening.
Small media	<p>Materials can be used to inform and motivate people to be screened for cancer.</p> <p>They can provide information tailored to specific individuals or targeted to general audiences.</p>	<ul style="list-style-type: none"> • Videos. • Printed materials such as letters, brochures, and newsletters.

Increase Community Access

Intervention	Definition (from the community guide - CPSTF)	Example
Reducing client out-of-pocket costs	<p>Interventions to reduce client out-of-pocket costs attempt to minimize or remove economic barriers that make it difficult for clients to access cancer screening services.</p> <p>Efforts to reduce client costs may be combined with measures to provide client education, information about programme availability, or measures to reduce structural barriers.</p>	<ul style="list-style-type: none"> • Provision of support for transport and childcare/dependent care. • Support for scheduling screening around employment commitments.
Reducing structural barriers	<p>Structural barriers are non-economic burdens or obstacles that make it difficult for people to access cancer screening.</p>	<ul style="list-style-type: none"> • Assisting with appointment scheduling. • Setting up alternative screening sites. • Requesting additional screening appointment time. • Transport support. • Limiting the number of clinic visits. • Providing childcare/dependent care. • Providing translation support. • Peer support before, during or after screening. • Support for attendance at appointments. • Asking for reasonable adjustments.
Reducing administration barriers	<p>Eliminating or simplifying administrative procedures and other obstacles.</p>	<ul style="list-style-type: none"> • Support for registration. • Help with reading and understanding letters. • Help with making appointments. • Help with rescheduling appointments. • Liaising with screening services.

Learn more [here](#).

KEY MESSAGES

Based on the evidence the educational interventions that are more likely to have some impact meet the following conditions:

- **The interventions are based on models of behaviour change (frameworks).**
- **The content is culturally specific and sensitive.**
- **They address some of the structural barriers to screening and are designed to empower people through knowledge and skills.**
- **The educational intervention is not delivered in isolation but in combination with another initiative, such as practical assistance from a lay health advisor or distribution of kits for bowel screening.**

Diabetic RetinaScreen (DRS) Interventions

There is currently no evidence-based guidance on how to improve diabetic retina screening in a community setting. However, generic interventions have proven to work.⁽¹⁵⁾

Evidence identified four key recommendations to increase participation in diabetic care:⁽¹⁶⁾

- reduce inconvenience to people with diabetes for example through provision of local screening facilities;
- increase awareness of the importance of screening among both patients and healthcare workers;
- increase patients' sense of comfort and support; and
- improve message content, for example, some people with diabetes did not think they needed retina screening if they had no symptoms or their diabetes was under control or if they were getting routine eye tests.

The interventions previously presented for cancer screening are worth considering also when supporting people to participate in diabetic retina screening. Examples of strategies that can be used by community health workers are presented in the table below.

Diabetic retina screening pathway	Strategies to help people to participate in diabetic retina screening
Awareness	Inform people living with diabetes and parents of those with diabetes, that the screening programme is available
Registration status	Check if people have registered
Registration	Help people to register (e.g. print out form, help in getting form signed by the GP)
Scheduling screening appointment	Help to schedule appointment
Attending screening appointment	Help to arrange transport to attend screening appointment
Understanding screening results	Help to understand the screening results and importance of attending follow-up appointments if necessary

Use of a behavioural science approach

You can use the NEAR framework presented below to reflect on the characteristics of the interventions that will make it more likely to be effective.⁽⁹⁾ The framework states that to get people to change behaviour, we should make them: Normal, Easy, Attractive and/or Routine.

NEAR framework	Your notes
Normal: We are more likely to do things that we see being done by people with whom we identify.	
Easy: We are more likely to do things if they are simple, within our capabilities and require little by way of resources, time or effort.	
Attractive: We are more likely to do things if we think they will be enjoyable, serve a purpose or avoid something bad happening.	
Routine: We are more likely to do things if they are part of our routine so we don't have to think about them. Make screening important to the community.	

KEY MESSAGES

There are lots of interventions that combined can support people to participate in screening.

We know that education alone does not change behaviour, however using multicomponent interventions including education can.

Pick the interventions that suit your community, resources, and objectives.

Step 6



Developing and implementing your intervention

Steps in intervention development	Key questions	Example (adapted from the Community Guide in Action)	Your notes	Tick when done
1. Understanding and engaging	<p>How did you identify the barriers to screening in your community?</p> <p>How was the problem expressed by the population?</p>	<p>The AMIGAS program is a bilingual, educational outreach intervention designed to help community health workers (called <i>promotoras</i>), increase cervical cancer screening among Hispanic women.</p> <p>In the United States, Hispanic women are less likely to be screened for cervical cancer and more likely to die from the disease than non-Hispanic white women.</p> <p>Results from research highlighted knowledge, cultural, language, and structural barriers to cervical cancer screening.</p>		<input type="checkbox"/>
2. Assessing needs	<p>What factors can be changed to encourage participation in screening?</p> <p>What do the community members need to help them/assist them to participate in screening?</p>	<p>The AMIGAS team, which included multidisciplinary researchers, healthcare administrators, and <i>promotoras</i>, looked to The Community Guide for evidence-based recommendations to help them address these barriers and increase cervical cancer screening.</p>		<input type="checkbox"/>

Steps in intervention development	Key questions	Example (adapted from the Community Guide in Action)	Your notes	Tick when done
3. Setting goals and objectives	<p>How can you bring this change?</p> <p>Who will be involved?</p> <p>How long will the intervention last?</p>	<p>They determined that one-on-one education and small media interventions delivered by promotoras would be appropriate strategies to increase cervical cancer screening among Hispanic women.</p>		<input type="checkbox"/>
4. Developing an intervention	<p>What is the best setting to address the barriers to screening?</p>	<p>The team created materials in English and Spanish.</p> <p>Materials included a flip chart, a video, handouts, an instruction guide for promotoras, a guide for promotora administrators, and a “Promise to Myself” or “Mi Promesa” worksheet.</p> <p>These materials were developed using behavioural theories and community-based participatory research principles.</p> <p>A community advisory group was engaged at every step in material development and provided important guidance about the content, messages, and appearance of the intervention materials.</p>		<input type="checkbox"/>
5. Implementing the intervention	<p>How can the intervention be implemented?</p>	<p>During one-on-one sessions, <i>promotoras</i> met with clients and shared bilingual programme materials to explain the importance of cancer screening for early detection.</p> <p>Clients were encouraged to use a set of message cards to share their concerns with the <i>promotoras</i> and ask questions without fear of being misunderstood or embarrassed.</p>		<input type="checkbox"/>

Steps in intervention development	Key questions	Example (adapted from the Community Guide in Action)	Your notes	Tick when done
6. Evaluating the results	<p>Was the intervention effective?</p> <p>Could this type of intervention be organised regularly?</p> <p>Was it worthwhile?</p> <p><i>See Step 7 of this toolkit for more guidance.</i></p>	<p>Cervical cancer screening rates were significantly higher among women who participated in the AMIGAS programme when compared to women who did not participate in the programme.</p>		<input type="checkbox"/>

Learn more about the AMIGAS programme [here](#).

KEY MESSAGES

Before implementing your intervention, it is important to take the time to understand the barriers to screening faced by the members of your community, and to assess their needs. The goals and objectives of the intervention need to be clear and specific in order to facilitate its evaluation.

The choice of intervention type depends on the resources available and should be discussed with stakeholders involved in your project. It is important to include community representatives in the development and implementation of your intervention.

Examples of successful interventions

Intervention's name: [Cervical Screening LGBT+ Research Project](#)

Location: Ireland

Intervention's type: Multi-component

Intervention's strategies: Reducing structural barriers, mass media; provider assessment and feedback, provider reminder and recall systems.

Level of community members engagement: Research outcomes, co-production

Population targeted: LGBT+ community and sample takers

Objective: To examine potential strategies for improving cervical screening participation and experience for LGBT+ people

Intervention's design: Implementation of multiple service improvement interventions across the cervical screening programme to ensure inclusivity of the LGBT+ community.

Intervention's implementation: In order to make cervical screening more inclusive for the LGBT+ community we undertook a number of interventions targeting the community and sample takers.

For sample takers we co-developed all of the below resources with the LGBT+ community/ advocacy groups -

- A quick reference guide for sample takers working with the LGBT+ community
- LGBT+ awareness training for our CervicalCheck staff
- Webinars for sample takers on LGBT+ inclusion in cervical screening and good practice in supporting the trans community
- Gender neutral guide
- Support for making their practice inclusive

For the LGBT+ community we implemented -

- A dedicated point of contact for the LGBT+ community in CervicalCheck.
- [Identifying as] Males can now register with the programme.
- Website updated to include information for the LGBT+ community.
- Peer support encouraged through the community.
- The LGBT+ community should see themselves reflected in the NSS media campaigns.

Results: Feedback from the community has showed sample takers efforts to be more inclusive in their practice and better communication with the LGBT+ community. Evaluation from training showed sample taker trainers were more informed and prepared to add inclusive practices to their work. As a result of this project, cervical screening information is better understood and supported in the LGBT+ community.

Intervention's name: BreastCheck Bra Project

Location: Cork, Ireland

Intervention's type: Multi-component

Intervention's strategies: Reducing structural barriers, group education, arts for health.

Level of community members engagement: Participation

Population targeted: Women living in an area of deprivation.

Objective: To promote breast screening and breast awareness to women in a group setting using an arts for health methodology.

Intervention's design: Implementation of a group education and arts for health intervention in an under screened population.

Intervention's implementation: Community group education sessions (8 sessions) with an established women's group in an area of deprivation. Two of these sessions were delivered by health promotion personnel and women were given the opportunity to talk freely about their views on breast screening and breast awareness. Subsequently the group (6 sessions) all created individually designed and handcrafted bras using a variety of materials – from flowers, feathers and sequins to plastic toy jungle animals. The Bra artworks were titled and aimed to bring a fun aspect to an important health issue. Women were also supported with appointment scheduling and attendance at screening such as group appointments.

Results: The Bras were exhibited in the local breast screening unit in Cork. A total of 13 postcards were made featuring the bras and included a breast health awareness message on the reverse. The bras were installed in a series of boxes and became a mobile art exhibition designed to raise public awareness of breast health and the importance of breast screening. This project was replicated by other communities and elements were adopted for cervical screening promotion.



Intervention's name: Easy Read Materials BowelScreen

Location: Ireland

Intervention's type: Small media, reducing barriers

Intervention's strategies: Resource development, visual content, photo stories, videos

Level of community members engagement: Co-production

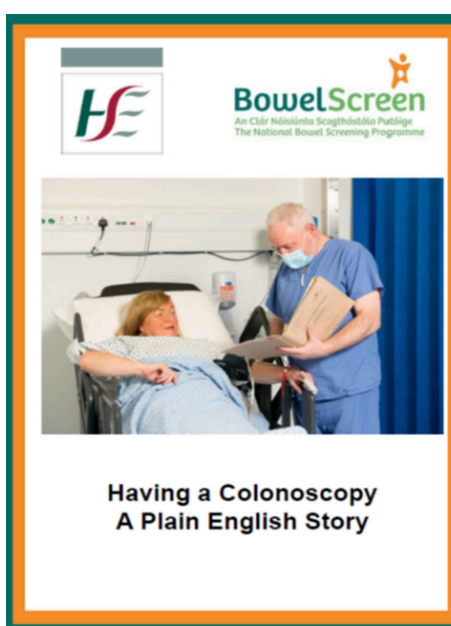
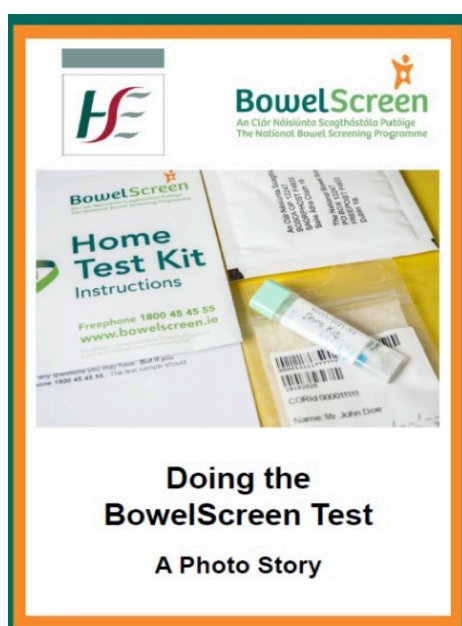
Population targeted: Disabled people, people with literacy difficulties, people who prefer picture-based information.

Objective: To develop easy read materials for bowel screening

Intervention's design: Development of a co-design process to develop a suite of easy read resources for bowel screening.

Intervention's implementation: This project was overseen by a project partnership made up of a communication expert in easy-read, representatives from the disability sector and NSS staff from multidisciplinary backgrounds including project management, endoscopy staff, bowel screening nurses and access officers. Recruitment for a panel of people with lived experience of bowel screening was undertaken. These people came from our partners in the disability sector. This panel of people were responsible for the content creation over a series of meetings. This panel of people with lived experience were facilitated to participate in these meetings by providing transport to and from the meetings, providing support people, providing support to communicate. Meetings packs were issued in easy read formats in advance of meetings. Editorial and content agreement was retained within the group.

Results: This project co-produced a suite of resources in plain English, easy read, video and photo story format for people to participate in bowel screening. The photography was captured using real life photos at the request of the group and the resources depict the screening pathway in a step-by-step way. People in the community are now better prepared coming for screening and people who use picture-based information can see the exact screening process.



Intervention's name: Diabetic RetinaScreen Education Input into a Type 2 Structured Education Programme

Location: Ireland

Intervention's type: Multi-component

Intervention's strategies: Group education, reducing structural barriers, reduce administrative barriers, small media

Level of community members engagement: Consultation

Population targeted: Newly diagnosed Type 2 diabetics.

Objective: To register newly diagnosed diabetics for retina screening.

Intervention's design: Register newly diagnosed diabetics, provide education on how the Diabetic RetinaScreen programme works, provide sign posting to resources and distribute materials.

Intervention's implementation: The health promotion team in NSS liaised with HSE dieticians delivering a structured patient education programme for Type 2 diabetics. Education content was designed, and a number of programmes were identified that staff could attend to deliver this input. Groups were identified in the community and attended locally for the programme. At each programme participants were invited to register for Diabetic RetinaScreen, check the register, offered support for scheduling appointments, offered sign posting to the programme and its resources and given an education input.

Results: A number of diabetics were registered for the programme over the course of this intervention. Participants were supported with appointment scheduling and their knowledge and understanding of the Diabetic RetinaScreen programme increased. They were more familiar with the programme specifics.

Intervention's name: Targeted Screening Initiatives with Pavee Point Traveller & Roma Centre Primary Health Care for Travellers Project (A National Screening Service (NSS), National Cancer Control Programme (NCCP) and Pavee Point Traveller & Roma Centre partnership)

Location: Dublin, Ireland

Intervention's type: Multi-component

Intervention's strategies: Peer health worker training using co-design materials and content, patient navigation, reducing structural barriers, reduce administrative barriers, outreach, cultural and literacy sensitive, small media.

Level of community members engagement:
Co-production

Population targeted: Traveller men and women.

Objective: To provide cancer prevention, early detection and screening information to the Traveller population in Finglas and Blanchardstown areas of Dublin. To assess barriers to the uptake of these services by working with the Traveller Primary Health Care Workers (PHCWs) and provide access to services for those who wanted to participate.

Intervention's design: Training of community health workers, outreach into communities, registering people of eligible screening age, providing education, patient navigation services.

Intervention's implementation: The education sessions were tailored for those with unmet literacy needs and mostly visual, while being culturally sensitive. These sessions were co-designed by traveller health workers in advance of training commencing. They conducted fieldwork into their own communities by providing support, information and resources on prevention, early detection and screening. Post field work focus groups were held with PHCWs to elicit how they delivered the information, barriers they came across and how confident they were with the information.

Results: Primary healthcare workers reported good outreach into communities and use of the information with multiple people. A number of people participated in bowel, breast and cervical screening as a result of the intervention. A number of barriers were addressed including, literacy issues, postal difficulties and fear of the screening process.



Step 7

Evaluating your intervention



Evaluating your intervention is a way of applying good practice to determine its outcome. It will also help to inform you of future initiatives you might want to undertake.

There are three main ways you can evaluate your intervention:

- 1) evaluating the impact on the community,
- 2) evaluating the impact on participants,
- 3) and evaluating the impact on you.

Collecting participants' feedback is an essential part to many of the interventions outlined above. It will show your target group that you value their input, show where there is room for improvement and highlight any updates you need to make to your intervention.

You can collect feedback using:

- informal discussions at the end of the intervention, or in a
- more formal way using questionnaires or interviews/focus groups.

It is essential to document the elements of your intervention as you progress, what is working, what is not, what is the feedback from stakeholders and the community. This will help inform your evaluation and reflection at the end of an intervention.

Based on the recommendations provided by the Community ToolBox,⁽¹⁷⁾ the table below outlines several categories of evaluation questions to help you to reflect on your intervention.

Impact on the community		
Categories	Key questions	Your notes
Planning and implementation: How well was the intervention planned out?	Who participated? Was there diversity among participants? Did those most in need of help receive services? Are community members satisfied that the intervention met local needs?	
Assessing attainment of objectives: Did the intervention meet its stated objectives?	How many people participated? How were participants involved?	
Impact on the community: How much and what kind of a difference has the intervention made on the community as a whole?	What were the results of the intervention? Were there any negative results from the intervention? Do the benefits of the intervention outweigh the costs?	

Impact on participants		
Categories	Key questions	Your notes
Impact on participants: How much and what kind of a difference has the intervention made for its participants?	How has behaviour changed as a result of participation in the intervention? Are participants satisfied with the experience? Were there any negative results from participation in the intervention?	

Impact on you		
Categories	Key questions	Your notes
Impact on intervention developer: How did you manage the development and implementation of the intervention?	How did the intervention impact your work? Is it feasible for you/your team to keep running this intervention?	

Learn more about the Community ToolBox here: <https://ctb.ku.edu/en>

Reflection

The last step in the evaluation process is to reflect on how you could improve your intervention, based on the evaluation you conducted.

The following questions can help you (adapted from the Scottish Government guidance)¹⁸:

- Can you address any issues that were identified (e.g. issues with resources)?
- Should you extend activities which appear to have been successful?
- Is it best to stop or redesign activities which were deemed unsuccessful?
- Can you improve the intervention to target groups who did not engage in the intervention?
- Can you do anything to address external factors which have negatively impacted the intervention (e.g. provide transport)?

Learn more [here](#).

KEY MESSAGES

There are different ways to evaluate your intervention. You can consider:

- (1) the impact on the community,**
- (2) the impact on the participants, and**
- (3) the impact on you, as intervention developer.**

These three kinds of evaluation will give you a complete picture of the effect of your intervention. At the end of the intervention, it is important to reflect on the issues you faced in implementation, improvements you could apply, and to identify which activities are worth keeping on a longer term.

Conclusion

We hope that the practical guidance in this toolkit will help you develop screening interventions locally. This toolkit is to provide you with information, methodologies, and ideas to develop your interventions. The aim is to use your local knowledge and match it to a framework or intervention design based on community need. Barriers to screening are varied and complex and the solutions are very often found within the community itself. Communities have assets which can support people to participate in screening. Collectively we can ensure that everyone who wants to, has an opportunity to participate in these services.

Please contact the health promotion team on health.promotion@screeningservice.ie

References

1. National Screening Service. Improving equity in screening. A Strategic Framework 2023-2027. 2023
2. WHO. Community Engagement, A health promotion guide for universal health coverage in the hands of the people. 2020. <https://www.who.int/publications/i/item/9789240010529> [Accessed on 20/10/2023].
3. The Community Guide: Community Health Workers. 2016. <https://www.thecommunityguide.org/pages/community-health-workers.html>. [Accessed on 20/10/2023].
4. West, R., Gould, A. Improving health and wellbeing: A guide to using behavioural science in policy and practice. 2022. https://phwwhocc.co.uk/wp-content/uploads/2022/11/A-Guide-to-Using-Behavioural-Science_ENGLISH.pdf [Accessed on 20/10/2023].
5. Clarke N, McNamara D, Kearney PM, O'Morain CA, Shearer N, Sharp L. The role of area-level deprivation and gender in participation in population-based faecal immunochemical test (FIT) colorectal cancer screening. *Prev Med*. 2016 ;93:198-203.
6. Bambury N, Brennan A, McDevitt J, Walsh PM. Cancer inequalities in Ireland by deprivation, 2004-2018: a National Cancer Registry report. Cork, Ireland: NCRI, 2023
7. Mulcahy Symmons S, Leavy P, Heavey L, Mason Mohan C, Drury A, De Brún A. How is equity captured for colorectal, breast and cervical cancer incidence and screening in the Republic of Ireland: A review. *Prev Med Rep*. 2023; 17;36:102405.
8. Access Consensus Group. Turning the tide: recommendations to increase cervical cancer screening among women who are under-screened. 2023. <https://accesscg.org/> [Accessed on 20/10/2023].
9. West, R., Michie, S., Atkins, L., Chadwick, P., Lorencatto, F. Achieving behaviour change: A guide for local government and partners. 2019. https://assets.publishing.service.gov.uk/media/5e7b4e85d3bf7f133c923435/PHEBI_Achieving_Behaviour_Change_Local_Government.pdf [Accessed on 20/10/2023].
10. Michie a, S., Atkins, L., & West, R. The behaviour change wheel: A guide to designing interventions. London, UK: Silverback Publishing. 2014
11. O'Cathain A, Croot L, Duncan E, Rousseau N, Sworn K, Turner KM, Yardley L, Hoddinott P. Guidance on how to develop complex interventions to improve health and healthcare. *BMJ Open*. 2019; 15;9(8):e029954

12. Escribà-Agüir V, Rodríguez-Gómez M, Ruiz-Pérez I. Effectiveness of patient-targeted interventions to promote cancer screening among ethnic minorities: A systematic review. *Cancer Epidemiol.* 2016; 44:22-39.
13. Stark E, Ali D, Ayre A, Schneider N, Parveen S, Marais K, Holmes N, Pender R. Coproduction with Autistic Adults: Reflections from the Authentic Research Collective. *Autism Adulthood.* 2021 ; 1;3(2):195-203.
14. The Community Preventive Task Force. <https://www.thecommunityguide.org/news/multicomponent-interventions-recommended-increase-cancer-screening.html> [Accessed on 20/10/2023].
15. Lawrenson JG, Graham-Rowe E, Lorencatto F, Burr J, Bunce C, Francis JJ, Aluko P, Rice S, Vale L, Peto T, Presseau J, Ivers N, Grimshaw JM. Interventions to increase attendance for diabetic retinopathy screening. *Cochrane Database Syst Rev.* 2018; 15;1(1):CD012054.
16. Lawrenson JG, Graham-Rowe E, Lorencatto F, Rice S, Bunce C, Francis JJ, Burr JM, Aluko P, Vale L, Peto T, Presseau J, Ivers NM, Grimshaw JM. What works to increase attendance for diabetic retinopathy screening? An evidence synthesis and economic analysis. *Health Technol Assess.* 2018 ;22(29):1-160.
17. The Community ToolBox. <https://ctb.ku.edu/en> [Accessed on 20/10/2023].
18. The Scottish Government. Designing and Evaluating Behaviour Change Interventions. 2018. <https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2015/03/designing-evaluating-behaviour-change-interventions/documents/00472843-pdf/00472843-pdf/govscot%3Adocument/00472843.pdf> [Accessed on 20/10/2023].



An tSeirbhís Náisiúnta Scagthástála
National Screening Service

National Screening Service
King's Inns House,
200 Parnell Street, Dublin 1, D01 A3Y8.
Tel: 01 865 9300
Email: info@screeningservice.ie
Website: www.screeningservice.ie