NIHR | Applied Research Collaboration East of England

The Implementation-Art Gallery

Implementing health and care research: how we did it in NIHR ARC East of England

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A guide to the structured process adopted in NIHR ARC East of England is in a virtual art gallery, accessible from this web page arc-eoe.nihr.ac.uk/gallery and duplicated in this PDF document.

For a general idea of the process:
look at the first section, 'Introduction to implementation'.

For a detailed understanding of the process:
browse these pages, each of which corresponds to a process stage.

If you are leading implementation or a main participant in an implementation process:
look at all the pages for the process stages, use the Workbook (available from web page arc-eoe.nihr.ac.uk/gallery) and explore the Tips section (in this PDF document).

Contents page

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Section 1: Introduction to Implementation

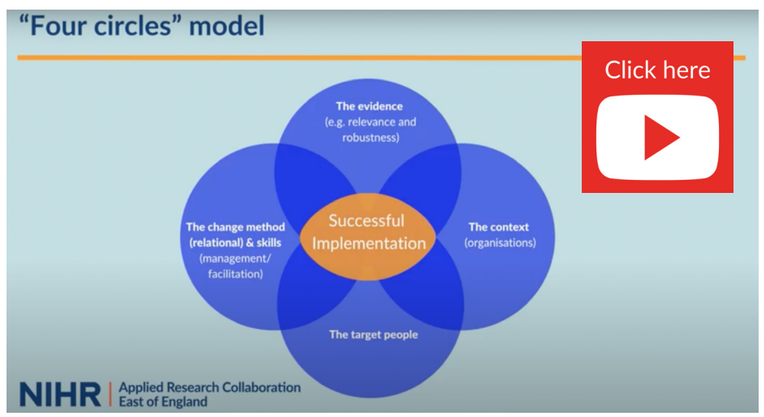
This section introduces the relational approach used in East of England ARC, which is based on careful attention to:

- the research evidence
- the context in which it might be implemented
- the target people who would have to implement it
- the change method used.

The method used in ARC EoE is based on a facilitated Community of Practice - explained in the video 'How research implementation works' and the poster 'The change method' (p. 5).

There are other possible approaches and methods; see p. 5 for details.

Why do you need a plan for how to implement research? Watch the video 'Introducing implementation' to find out.



Watch the video 'How research implementation works'

The ‘Four Circle Model’

Relevance of Research evidence. Check that the research is relevant to the context where it will be implemented and ask key stakeholders if the research findings will be useful to clients, staff and/or systems.

Robustness of research evidence. There is a series of useful check-lists from CASP, the Critical Appraisal Skills Programme in Oxford (casp-uk.net/casp-tools-checklists/).

Readiness of research evidence. Check the researchers’ writings and search for implementation elsewhere.

See 'Tips on appraising evidence'.

Inner context: resources, skills, capacity, local politics, etc.

Outer context: demands on the organisation, wider politics etc.

Related seminar recording: Annette Boaz, ‘The role of context in implementing research evidence’ (arc-eoe.nihr.ac.uk/lectures).

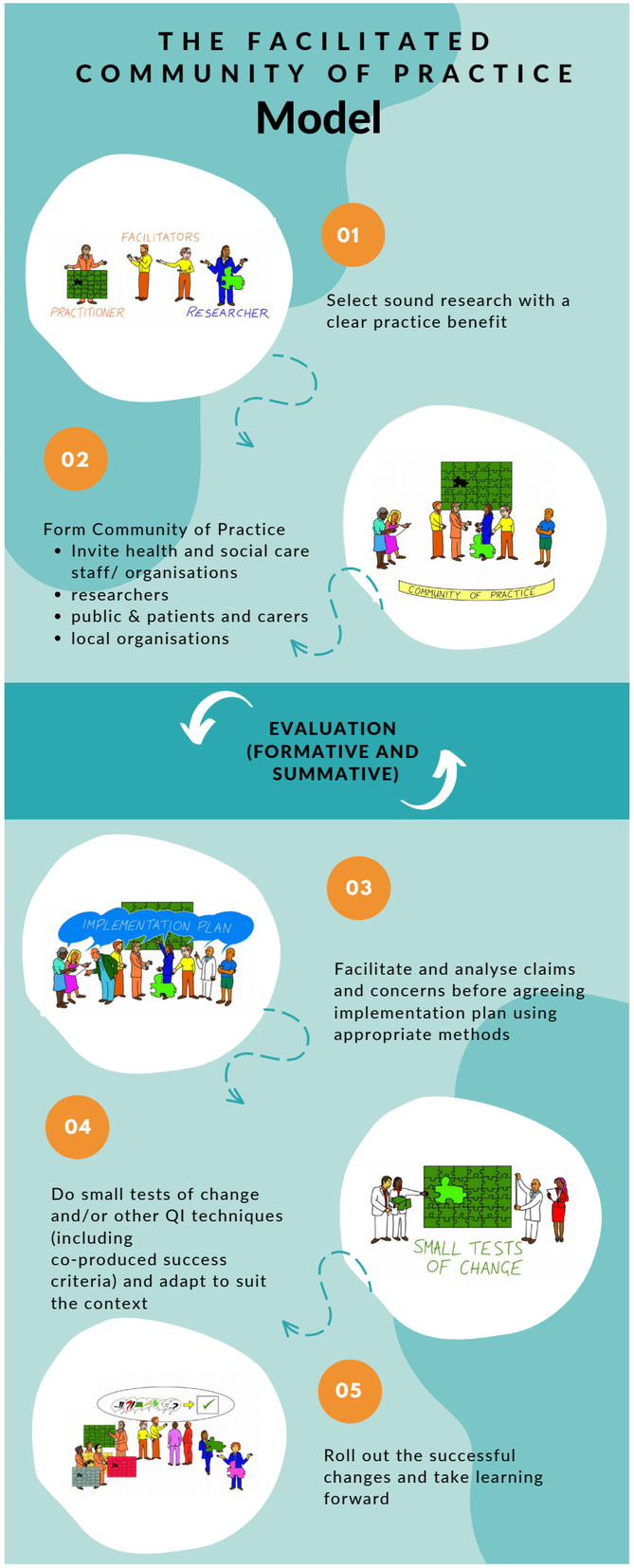
See 'Tips on understanding the context'.

Who are they?
How does the evidence fit what they know already?

See 'Tips on engaging people'.

Method: relational, Communities of Practice.
Required skills: management / facilitation.

Communities of Practice are “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their understanding and knowledge of this area by interacting on an ongoing basis” (Wenger, McDermott and Snyder, 2002: 4/5).



Participants’ perspectives

“How you implement your findings isn’t always easy…”

“Easy to get going, difficult to bring in the wider system”

“Our conclusion: a largely proven approach”

Research implementation: other approaches

Recorded lectures are available: arc-eoe.nihr.ac.uk/lectures

Promoting action on research implement-ation in health services (Ian Graham)

Knowledge to action (Jo Rycroft-Malone)

Developing evidence-enriched policy (Nick Andrews)

Normalisation process theory (Carl May)

Evidence-based co-design (Glenn Roberts)

Knowledge mobilisation (Lesley Wye)

Implementation science (e.g. Consolid-ated Framework for Implementation Research) (Paul Wilson)

Arts-based knowledge mobilisation (Kate Beckett)

Section 2: The Design Group

Gather a small group of people around you to help.

They will:

- bring ideas, help test ideas, spread ideas and get feedback
- bring skills, knowhow and knowledge of the context and people to be involved in the implementation
- bring energy and enthusiasm
- help keep the work on track and reflect on successes and challenges
- share the planning, organising, and administrative load with you.

Setting up the design group

Invite 3-4 key stakeholders to join you as a design group. This group will guide the project from start to finish.

Make sure the design group members you pick:

- know about the context you're targeting
- know about the people you're targeting
- have time to commit to the project
- are respected / have some influence.

If possible, invite

- someone who knows about the research
- someone who will be involved in using it
- someone who will benefit from it.

In your invitation explain what the research evidence is and why you want to implement it.

Suggested agenda

1. Start with a presentation of the research and why you think it should be implemented. Get the group members' initial reactions.

2. Ask if members know anything about the research, if they've heard of it being used elsewhere (follow this up to see if you can get some tips from other implementers).

(continued on next page)

The first design group meeting

- Has the research been used elsewhere?
- Is it ready to implement?
- Funding?
- Will the **context** be receptive?
- Which **people** need to be involved?
- What **skills** are needed?

If you decide to go ahead, you can plan your Community of Practice. Note: sometimes the right decision is NOT to go ahead!

3. Consider if the research EVIDENCE is ready to implement:
   - find out more about the research and how the researcher thought it might be implemented; contact the researcher, ask them to talk to the design group (virtually or in person)
   - find out if the research has been used by other people; Google the topic, ask colleagues
   - think through how you could try it out initially to see if it works (see 'Tips on evaluation').

4. Check if you need funds to get the research implemented. Where might they come from?

5. Gather first thoughts on whether the CONTEXT will be receptive to the research.

6. Identify which PEOPLE need to be involved in the implementation of the research.

7. Explain about Communities of Practice; show 'How research implementation works' (as in Section 1) or the video by Chris Collinson www.youtube.com/watch?v=1Pxd6ixU9kk, using a paella analogy.

If you decide to go ahead, you can plan your Community of Practice.

Note: sometimes the right decision is NOT to go ahead!

About the case study

Each of Sections 2-6 has a case study that you might wish to read before leaving that section. It's a serialised story of an implementation project that will help you think about some of the main points you will have seen in that section. Please note that all the main incidents and characters are drawn from real events, but they have been fictionalised to protect the innocent!

The Badchester chronicles
A case study in implementation

They really need pulmonary rehab, but it's all no, no, no!

Episode 1: Welcome to Badchester, the Luncashire hot spot

People with chronic obstructive pulmonary disease (COPD) experience shortness of breath and coughing even when they are relatively well. They are vulnerable to frequent chest infections ('exacerbations') that not only make those symptoms much worse but are hard to treat effectively. Moreover, each exacerbation increases the lung damage and worsens the long-term prospects.

At Luncaster Medical School, Mo, a Senior Lecturer in Respiratory Medicine, has just had a systematic review published in 'Thorax'. His review shows beyond any further doubt that pulmonary rehabilitation can improve the health of people with COPD, maximising their lung function and minimising the number and severity of exacerbations. It is not only clinically effective but also cost effective.

At the Respiratory Unit's celebration of this academic success, someone mentions a recent audit at South Badchester Hospital (in cen-tral Luncashire) which has shown that too few patients with COPD are being referred by their GPs for pulmonary rehabilitation, resulting in excessive (and expensive) hospital admissions for COPD exacerbations. He arranges to meet the lead of the Badchester community-based team of respiratory nurses, Immy, and they agree to design and lead the implementation of a scheme to improve the referral rates for pulmonary rehab. What is now needed is to persuade the local population and their health professionals of the benefits of early pulmonary rehabilitation.

Immy emails Felicia, an experienced community nurse from her respiratory team, who once did an MBA and has good organisational skills. She invites Mo, not just as the researcher whose work they want to implement, but also in his capacity as the hospital consultant responsible for the Badchester pulmonary rehab services. Finally she asks Jo, a GP known to be interested in this problem. They all agree to help to get this implementation project underway and they set a date for the four of them to meet as a preliminary design group to steer the project.

The week before the meeting, however, Jo sends apologies….

Questions to consider

Imagine you're in Immy's place. Should the meeting go ahead without Jo the GP?

How else would you have convened this group to help design the project? Would you have invited anyone else?

What would be your agenda for that first meeting?

Episode 2: The 'design group' find their MoJo

The first meeting of the design group eventually takes place with Jo there. Mo, the hospital consultant, lays out the research evidence and answers questions from the others.

Bert, a retiree who has COPD, has also now been invited onto the design group, and – having experienced pulmonary rehab – is particularly vocal and enthusiastic. Before the end of the meeting, Felicia introduces some materials from her MBA days that explain how Communities of Practice could help take this forward.

They agree not only to give the method a go, but to try and learn a bit more about the method before the next meeting.

They agree the following.

- It would indeed be a good idea to improve the levels of pulmonary rehabilitation in Badchester.
- They will use Communities of Practice as a way to bring together key stakeholders, and enthuse the change to the service in line with the research evidence.

Questions to consider

What more does the design group still need to do? How would you help them do that?

Does anyone else need to join it?

What might they all do before their next meeting?

Participants' perspectives

"Meeting as a design group"

"It pays dividends to prepare well"

Section 3: Setting up the Community of Practice

The design group has decided that the evidence is relevant, robust and ready to implement in the practice context. You can now set up a Community of Practice.

The design group needs to decide:

- who to invite
- where and how to hold meetings
- whether or not they have the right skills to enable the Community of Practice to work smoothly

… and then compose the invitations.

Your Community of Practice should be representative and inclusive of all the key stakeholders. The membership can alter as the project progresses but should rarely be more than 20.

What are Communities of Practice?

"… groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their understanding and knowledge of this area by interacting …
These people don't necessarily work together on a day-to-day basis, but they get together because they find value in their interactions. As they spend time together, they typically share information, insight, and advice. They solve problems. They help each other."

Wenger, E., McDermott, R. and Snyder, R. 2002. 'Cultivating Communities of Practice: A Guide to Managing Knowledge', Boston, MA, Harvard Business School Press, pp. 4–5.

Communities of Practice have been used in healthcare and social care mainly for:

- developing best practice, and implementing or re-shaping knowledge
- promoting learning and trust by developing and sharing collective mindlines
- problem solving
- speedily moving knowledge and innovation into practice, which is why we have chosen them
- giving members ownership of the changes, so they are more likely to sustain them.

But they can also:

- block the spread of knowledge, because people in the Community don't want to tell others
- perpetuate bad practice as well as good, especially if the community has no mechanism for appraising shared ideas
- perpetuate groupthink in which members reinforce each others' ideas and lose touch with how people think outside the community.

See the RAND Europe evaluation of our use of Communities of Practice in May 2021.

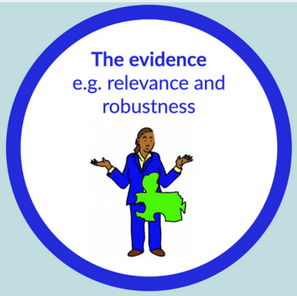
Participants' perspectives

"Do Communities of Practice always work?"

"We built trust into our thinking"

"A 360° look at this topic"

Consider:



Once again: is the evidence relevant? Is it robust? Is it ready to implement?
See 'Tips on appraising evidence'.

You could do a stakeholder analysis and ask which of them to include and why. Consider what influence and what interest they have and what they bring.
See 'Tips on engaging people'.

The design group could watch and discuss these videos together:

- 'How research implementation works' (as in Section 1)
- 'Communities of Practice' by Chris Colinson.

The invitation: written or spoken

- Agree on a 'letter' or a video/audio invitation to Community of Practice members
- Agree the tone and content of the invitation

Remember, you're selling the idea to them...

Suggested contents of the invitation:

- Explain the aim.
- Explain the Community of Practice approach – send a link to information.
- Explain more about the research and why you want them to help implement it.
- Emphasise co-production (and the invitee's importance to the project).
- Draw people in and enthuse them – remember you're selling the idea to them.
- Sketch out what you'll be doing in the first meeting.
- Tell them where your meeting will be (face-to-face, virtual or both) and how much time they need to set aside for the project.
- If you want them to do something before the meeting, let them know.

The Badchester chronicles ... continued

They really need pulmonary rehab, but is it go go go?

Episode 3: Stop? Go? Pause?

By the time of their second meeting, the members of the design group have taken soundings across their various networks and they are getting cold feet: too many hard-pressed / resistant GPs out there, and no sign yet of getting extra funding to run the implementation.

They are on the point of abandoning the project, especially when Jo, the GP, announces that she's emigrating.

But, she adds, she's talked to an influential GP, Sowoomi, who has always appeared very sceptical about primary care spirometry, and to everyone's surprise he has asked to join the design group. This gives them hope so they agree to meet again and invite him along.

The third meeting is a bit stormy, but it eventually becomes clear that the sceptical Sowoomi is in fact quite well disposed to pulmonary rehab. He has always, however, been annoyed at how the service has been run, at the lack of time available for his practice's nurses to identify patients from their (very hard to search) computerised records, and also at the lack of training for them on how to do spirometry. He is also rather intrigued when Mo, the hospital consultant, waxes lyrical about the Community of Practice materials he has finally got round to looking at.

So Sowoomi agrees to join the Community of Practice as long as it aims to sort these problems out.

They agree in principle that part of the task will be to get the message out that it is demonstrably better to improve GP and community nursing care than to wait to treat exacerbations of COPD, which are hard to alleviate and often inflict further lung damage. However, they are floundering a little because they are not sure (a) how best to do that, and (b) what else they might need to do.

Question to consider

How might the design group begin to answer those questions?

Episode 4: A CoP of COPD

At its fourth meeting, the design group – to which they have invited Premila, one of Badchester's leading practice managers, and also Hetty, a health promotion specialist – agree to focus on two aspects of the implementation:

1. devising a better scheme to help the local practices identify their COPD patients, carry out spirometry and any other necessary tests, and then refer them to for pulmonary rehabilitation as appropriate
2. mounting a public campaign to promote the benefits of pulmonary rehabilitation.

Having thought carefully together about the stakeholders, they nominate people to invite onto the Community of Practice (16 names altogether) and Immy agrees to email an invitation to them all.

They set a date for the first meeting and arrange to bring tea and cakes.

What could possibly go wrong?

Questions to consider

Is it the design group's job to make such definitive decisions, or should they have left that for the Community of Practice to decide?

If you were in their shoes, what kinds of people would you invite to the Community of Practice, and why? (What might you expect from the various members and what would be in it for them?)

What should the invitation letter to potential members of the Community of Practice say? Do you agree that a letter should come from the lead for this implementation project, or might there be other ways to approach the potential members?

What other preparations would you make before the first Community of Practice meeting?

Section 4: The first meeting of the Community of Practice

Creating the best environment

- Find out about the participants beforehand.
- Designate a facilitator; if this isn't you, work out the tone and style of facilitation you want.
- Use ice-breakers and creative exercises (matched to context) to help the group work.
- Plan a mix of information giving and exploration, so people stay interested and energised.
- Plan breaks and don't be afraid to have more. If it's face-to-face, get refreshments.
- Set a respectful tone and share ground rules so people feel valued, safe and useful, and able to give and receive critical challenges.
- Encourage collaboration and respectful critical conversations. Give everyone time to be heard.

See 'Tips for the first Community of Practice meeting' and 'Tips on facilitation'. See also 'Setting the right tone', 'Creating engagement in meetings' and 'Facilitation styles and guides' in the Storeroom.

The goals of the first meeting(s): understanding

You need to help everyone to get to know each other, and tell them more about Communities of Practice and the research evidence you wish to implement.

The Community of Practice needs to do three things:
(1) work out what a positive change in practice based on the research evidence would look like
(2) share understanding of the context and the people who will be involved and benefit, the resources, and the culture and local politics, to check that the research will work in that context
(3) identify the strengths and weaknesses (we call these claims and concerns), which will help explore the enablers and barriers (the things that will help or hinder the implementation).

These are not agenda items but goals to be worked towards throughout – and beyond – the first meeting. (It's fine if this all takes more than one meeting.)

See 'Tips on establishing key claims and concerns'.

The goals of the first meeting: planning

If and when the Community of Practice is ready to move forward, then it should also:

- Define what **success** will look like
- Start working on the **implementation plan**
- Draw up an **action plan**
- Plan future meetings

Understanding the context of implementation, the enablers and barriers and people's clams and concerns will help the Community of Practice:

- define what success would look like, how it could be achieved, within what timelines and how it can be measured
- create an implementation plan, bringing together the circles of evidence, people and context to create change and success criteria
- draw up an action plan, which may include inviting others to help or join the Community of Practice
- set a timetable for future meetings, with associated goals and monitoring, and ways of keeping in touch between meetings (updates, emails, newsletters, conversations etc.)

Participants' perspectives

"A shared language and a shared sense of values"

"… a Community of Practice that is entirely citizen-led"

"Just about human communication"

See 'Tips on setting success criteria'.

Lessons learnt from the project should be noted, so start that from the first meeting.

The Badchester chronicles … continued

From 'Help' to 'All Together Now'

Episode 5: A top down dousing

Twelve people have turned up, not all of whom know each other, although they are all involved in community respiratory care. Immy, Mo, Sowoomi, Hetty and Premila, are there, and as well as Felicia there are two further community respiratory nurses. Two patients, Brenda and Bruce, belonging to a local charity called BreatheAble, have joined Bert. Two additional GPs were invited, but only one has turned up. Among others who haven't come are the Director of Public Health and a member of the Luncashire commissioning team.

The Community of Practice members who weren't in the design group aren't quite sure what is expected of them, but they look expectant. Immy tries an icebreaker, but it doesn't quite work and, as the minutes go by, she worries that things are already going wrong. However, when she and Mo make their presentation showing (a) how strong the evidence is for the benefits of pulmonary rehabilitation and (b) how few patients attend in Badchester, the room begins to tune in again. Once Bert, Brenda and Bruce have also had their say, explaining how it benefitted them, everyone seems convinced. Something must be done.

Then half an hour into the meeting, the Director of Public Health, Philomina, arrives late, and Immy quickly brings her up to speed. "Oh good," thinks Philomina, "this could help me hit one of my KPIs." Philomina explains that the Badchester Health Board and her CEO have this problem firmly in their sights, and announces that she would like to use this group to help her set targets to improve respiratory care provision and to advise her on how best to monitor them.

The mood in the room changes. There is a clear feeling of disgruntlement; this was not what they came to hear. Sowoomi is seething.

Questions to consider

How could Immy and her design-group colleagues have avoided this setback?

What they should do now?

Episode 6: Bunfight at the CoP corral

Immy calls a short comfort break and, over the coffee and cakes, Mo and Immy explain to Philomina that the group isn't ready yet to think about targets, and that there is a plan for this and subsequent meetings. Sowoomi joins them and makes a scathing comment about top-down targets and the lack of resources. Felicia has overheard this exchange and whispers to Immy on the way back to the room: "If things aren't going well, let me help."

When they reconvene, Immy begins to explain how the Community of Practice will work. She notices Philomina's not really listening but looking daggers at Sowoomi, who sits with arms folded. Felicia also picks up on the body language and shoots a look towards Immy who pauses. "Felicia …", she says, "you look like you want to say something."

"Yes, thanks," says Felicia, "well spotted! I'm feeling rather confused. You are explaining, Immy, how we are all going to work together to solve the problem of low referrals, but before the break it sounded as though our task will be to agree how to set targets, which I don't really think it's our place to do. Perhaps before we carry on, we should clarify this." Then she adds, "I'd love to hear how Sowoomi feels…"

Sowoomi, reminding everyone that he speaks as a GP whose task it is to make the referrals, calmly but forcefully explains the problems that they have had with the current system. He argues that no amount of top-down pressure will help until those problems are tackled.

Lots of people are nodding and Immy invites the other GP and the nurses to briefly comment. When they have added their support, Immy then asks Philomina to talk them through the Health Board's views on this. Philomina explains the pressure that they are under to meet the Department of Health and Social Care targets. When she's finished, Bert volunteers that it's all very well setting targets, as he knows from when he worked in the steel industry, but that he also knows that there was never any chance of meeting them unless the shopfloor production processes were right.

Questions to consider

It was a big risk to open up a discussion about the main underlying bone of contention. What do you think would have happened, had they not done so?

Immy made use of what she had learned during the design phase about Felicia's facilitation skills and Sowoomi's commitment to what the Community of Practice was trying to do, despite (or maybe because of) his annoyance at the current system. How critical was this awareness? What do you think would have happened, had she not had this knowledge?

Episode 7: Moving on

Sensing that the tension has been released, Immy suggests that before going further the group begin sharing their views about the benefits and drawbacks of having a better pulmonary rehab service.

Within twenty minutes of coloured pens flying across flip charts, it becomes clear that no-one thinks it's a bad idea; they just see a lot of obstacles to helping it to happen. In the course of that discussion, it becomes clear that primary care practices across Luncashire are divided in their support, but that resistance would melt if they were to receive additional funding from the Health Board for their practice nurses to take on the work of identifying patients and undertaking the spirometry.

This could be the necessary incentive for them to get involved.

Before drawing the meeting to a close, Immy asks if there any other stakeholders or influencers who need to join the Community of Practice for next time. Philomina, who has been silently listening to the discussion, says she will make sure that someone from Luncashire Health Board comes along. Sowoomi says he'll also bring a practice nurse. The mood seems good when they agree the date and time for the next meeting, when they will begin by understanding the context better together.

Question to consider

If you were on the design group, what would you plan to do in the next meeting(s)?

Section 5: Subsequent meetings of the Community of Practice

Small tests of change

Try out the implementation in a small way to:
- check how well the research is working in the new context
- identify positive changes as they happen
- identify and remove difficulties.

The key word is SMALL. The tests need to be manageable within a busy working environment. If it works in the small test of change, then you can think about adopting it more widely.

Evaluating the implementation

- Check that the success criteria are still relevant.
- Compare against the implementation plan.
- Keep the respectful, yet critical tone developed in the first meeting, as it's especially important to openly and honestly evaluate how successful the implementation of the evidence is.

See 'Tips on evaluation'.

Monitoring progress

This is important to:
- bring people together
- maintain momentum
- invite others to help and join the Community of Practice (or invite current members to leave!)
- review and adjust the timetable for meetings with associated goals and monitoring
- keep all stakeholders in touch through updates, emails, newsletters, conversations
- note the lessons learnt from the project.

The Badchester chronicles ... continued
'The Long and Winding Road'?

Episode 8: A tricky content to work with

At the second meeting (14 attend) Immy and Felicia are explicitly working together as facilitators. They have agreed to start by getting the Community of Practice to think about the context.

The emerging picture is that COPD is very prevalent but often under-recognised and under treated. This is partly because older people who grew up and worked in Luncashire, which used to be a coal-belt county whose levels of economic deprivation now reflect the defunct mines and heavy industry, see chronic cough as just an inevitable and often stigmatised part of being old (and poor) in Luncashire. Patients and doctors alike have little faith that pulmonary rehabilitation can do much to alleviate it. Most of the elderly patients with COPD have a misplaced faith in antibiotics as "curing" the COPD exacerbations and many local GPs reinforce that view by prescribing them almost on demand.

Meanwhile the Department of Health and Social Care are demanding that Luncashire antibiotic prescribing rates come into line with the much lower national levels, and the Badchester Health Board requires the GP referrals for pulmonary rehab to improve markedly. Badchester is having to make £2m savings across the board, and the hospital is under pressure from lengthening waiting lists. The public health department in the local authority has been mounting a series of "Healthier Luncashire" social marketing campaigns, focussing mainly on diet, exercise and substance abuse and has funds to do more.

The attempts by the community-based respiratory nurses to persuade GP practices to identify patients and carry out spirometry have been demoralising. When they visit practices, they are usually met with scepticism, sometimes even hostility. This has partly been because – in order to try and hit the targets – they are being asked to deal with the worst "offenders" first, whereas their instinct is to "work with the willing". As the nurses tell their sorry tales (one of them, Natia, is close to tears as she speaks), the Health Board Commissioner seems to be listening intently and whispers something to Philomina, who nods. Immy, meanwhile, is feeling quietly embarrassed. As the head of the respiratory nursing team, it's been her determined policy to get her nurses to focus on the poorly-performing GP practices.

Questions to consider

What are the main obstacles and opportunities you foresee?

How would you move ahead, if you were in their shoes?

Episode 9: Agreeing a way forward

Sowoomi then suggests there are two ways to get GPs to change.

1. Rather than sending the respiratory nurses in "cold", they should persuade a few key practices to get involved ("Yes, Natia, you'd finally be working with the willing!"). Then if they can show it works, those GPs are bound to use their influence among their peers, which will open doors for Immy's team.
2. Above all, they should ensure that, once a practice has received the training in searching their database for COPD patients and doing the necessary tests such as spirometry, they receive additional resources to do the task. With that incentive, he says, it might just work. Premila strongly backs him up.

Before the meeting finishes, Immy and Felicia work together to help the group agree the outlines of an implementation plan to move things forward. Within a mere 20 minutes, where they ask everyone to suggest one possible action that the group could take, they have gathered lots of ideas. Using a simple consensus method (Nominal Group Technique) that Felicia learnt in her MBA, the following four priorities emerge:

1. The community respiratory nursing team should stop focussing its efforts on the poorly performing GPs, and should work initially with a small group of enthusiastic practices to design a training programme that they will accept.
2. The Community of Practice needs to work out how to spread the message generally among the primary care professions that it is demonstrably better to improve GP and community nursing care than to wait to treat exacerbations of COPD.
3. One of the next tranche of social-marketing campaigns should be aimed at helping patients and the public recognise the benefits of preventing COPD exacerbations rather than taking antibiotics when they develop.
4. There should be a concerted effort to explore how extra resourcing might be found to support this work.

They collectively agree that the design group will think a bit more about how to take these forward before the next Community of Practice meeting.

As the meeting closes, only five minutes overtime, there is quite a buzz in the room; people stay and chat in small huddles. Immy and Felicia collect all the flipcharts and agree to meet over a take-away pizza to write them up and circulate the conclusions as soon as possible.

Questions to consider

Have they bitten off more than they can chew? (This refers to their prioritised actions, not the pizza.)

What can the design group do to make sure that this initial enthusiasm doesn't evaporate?

Episode 10: How to make it happen

The design group (now just Immy, Felicia, Sowoomi, Hetty, Mo, and Bert) reconvene a week later and collectively gulp at what they seem to have taken on. Although feeling quite energised by what happened at the Community of Practice, there is also a deep sense of "where do we go from here?"

Hetty perks them up them up by telling them that Philomena and the Luncashire Commissioner have already spoken to the relevant people at Badchester Health Board, who have been using a social-marketing company. They have agreed to look into doing a COPD social marketing campaign. Moreover, the advice they have had is that this could also include a series of events aimed at healthcare professionals. So that's Priorities 2 and 3 already possibly taken care of. Smiles all round. They agree to invite Connie, the Badchester Communications Director, to the next meeting of the Community of Practice.

Immy, who of course had been insisting for years that the demoralised community respiratory nurses work with poorly performing practices, somewhat sheepishly admits that she has had a meeting with her team and accepted the suggested shift towards "working with the willing". There's laughter as Sowoomi ribs her with "What took you so long?" He says he can name a handful of GPs who he thinks would be up for this. They set up a small working group comprising Natia, Sowoomi's practice nurse, Premila and the second GP; their role will be to set up the new programme of work with those GPs.

There remains, however, Priority 4: the vexed question of funding. They toss a few ideas around and agree to go away and explore a few avenues including the local Chamber of Commerce and Probus groups; Bert is a committee member on both. Mo looks pensive. "What's up?" asks Felicia. "I was just thinking about a visit we had recently at the Respiratory Unit from a company called Inspirometrics…" he muses. "They want to sell more spirometers. Perhaps we shouldn't have given them such short shrift after all."

Question to consider

Is there anything else that Immy, Felicia, Hetty, Sowoomi, Mo and Bert need to do before the next meeting?

Episode 11: How will we know we've done it?

At the third meeting of the Community of Practice, only three people besides the design group turn up, which seems disappointing given the previous buzz. But the people who were most active at the previous meeting are mostly there, plus Connie the Badchester Communications Director.

Sowoomi updates them on the plans for the GP working group. Then Hetty delivers the good news that Badchester Health Board are minded to run a social-marketing campaign and have committed to mounting a series of events for primary and community care staff. Connie tells them about the @easybreathers social media campaign she is working on.

Felicia stands at the flipchart and asks: how will we know in a year's time whether we have succeeded? Someone quips "We won't! Not unless we get some resources to do all this!"

"Funny you should mention that…" says Mo. He announces that Inspirometrics have agreed to fund a peripatetic spirometry trainer, as it's in their interests to see this scheme succeed.

Philomina then also announces that she is now trying to persuade the Luncashire commissioners to set aside a modest fund to promote pulmonary rehab in the next round of contracts. After all, this should help both to reduce unnecessary hospital admissions and to meet the DHSC targets for reduced antibiotic prescriptions.

Then Bert proudly announces that one of his Probus chums, whose mum has COPD, is President of the local Rotary. A proposal for a fund-raiser is on the agenda at the next Rotary dinner.

The Community of Practice spend the rest of the meeting thrashing out what they think will be good indicators of the success of their work, if they were to assess progress in a year's time. They also agree to use some of these indicators to check progress over the coming months and make any necessary adjustments to the scheme.

Questions to consider

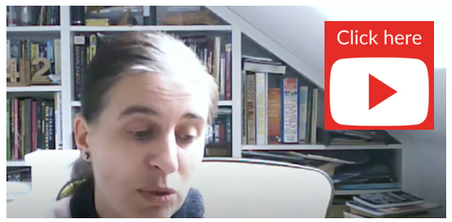
Does it matter that they are only agreeing their success criteria this late in the day?

What blend of quantitative and qualitative indicators would you suggest they use to assess whether the re-invigorated pulmonary rehab scheme is successful?

Which of your suggested indicators would also help them make adjustments if things aren't working out as planned?

Participants' perspectives

"To be that link"



"It enabled me to be evaluative"

Section 6: The final meeting of the Community of Practice

The focus of the final meeting should be on:

- reflection
- celebration
- communication
- dissemination
- and possibly continuation, if there is a continued need for the Community of Practice.

The goals of the final meeting

- **Evaluate** success
- **Reflect** on the implementation process
- **Celebrate** successes and learning
- **Communicate** success
- Make a **dissemination plan**
- Decide if the Community of Practice should keep meeting for some reason

See 'Tips on impact assessment and communication'.

The final meeting is one last occasion to:

- review the success criteria and evaluate the implementation plan
- reflect on the implementation process and record the lessons learnt to use in other implementation projects.

Success should be celebrated! Even if the project didn't work out, you may be able to celebrate your learning.

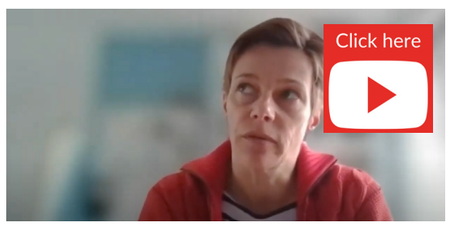
Success should be communicated and disseminated.

- Contact your organisation's Communications Specialist; they'll be able to help tell other people about your work.
- Work out a plan for dissemination / roll-out / scale-up. Who will take this forward, and how?

Is there a reason for the Community of Practice to keep meeting, for example to monitor implementation or start a new project?

Participants' perspectives

"A complete convert to the Community of Practice"



"We re-focused our purpose, we re-designed our thinking"

The Badchester chronicles ... continued

'Here, There and Everywhere', with a little help from their friends

Episode 12: From South Badchester Clinic to all of Luncashire

The design group (now usually just Immy, Felicia and Sowoomi) continue to meet as the new schemes get underway. Six months in, they arrange a Community of Practice meeting to bring people up to date, celebrate achievements and iron out any emerging problems.

Only six people attend. They hear how the social marketing and social media campaigns have taken off nicely, but that it seems the community nurses are struggling a little with helping GP practices to review their databases to identify COPD patients.

Bruce, who is involved with the charity BreatheAble suggests a way forward using the good offices of the IT whizz who runs the database there. They agree that as everyone is busy, they won't hold any more Community of Practice meetings to monitor progress, and that the design group (well, Immy...) will email round a brief quarterly newsletter instead.

A further six months on, the newsletter reports that they have doubled the referral of Badchester patients for pulmonary rehabilitation and significantly reduced the numbers of avoidable hospital admissions. 78% of Badchester GP practices have undergone the patient-identification and spirometry training, and surveys of the patients they have referred for pulmonary rehab show that most patients report the benefit and appreciate its value.

The Luncashire Commissioning Board has decided to upscale South Badchester's success and has agreed to fund a network of six pulmonary rehabilitation units in community health centres across the entire county, to be run by BreatheAble.

Immy and Felicia ask all the original invitees of the Community of Practice to a meeting to (a) celebrate what they have achieved and (b) help pull together a short paper to go to the Luncashire BreatheAble Planning Group, advising them on some of the lessons they have learnt on the way.

Of the original 16 invitees, 12 come to the meeting. Afterwards there is a reception for 80 people to mark the launch of the new Luncashire initiative. The buffet (a lunch launch) is generously hosted by Inspirometrics. There are short speeches from the CEO of Luncashire Commissioning Board (soon to be Luncashire ICS), the Chair of the Badchester Health Board, and the President of Badchester Rotary. Connie uses her contacts to ensure that the Luncaster Echo runs a big splash on page 2, and that interviews with BreatheAble folk are the main feature on the morning phone-in on Luncaster FM ("for all your local Luncashire listening").

Question to consider

What went right?

Case study: rolling out Positive Behaviour Support

Positive Behaviour Support (PBS):

- a multidisciplinary approach to supporting young people with severe learning disabilities
- successfully piloted with eight families, under the leadership of Dr Roland Casson
- rolled out across Cambridgeshire and Peterborough through a facilitated Community of Practice
- now ensuring most young people remain at or near home and part of their community, with more choice and control, improved quality of life, meaningful relationships and activities
- saving a projected £1.7 to £2.5 million annually, in comparison with alternative support costs
- has now secured permanent funding from local authority and NHS.

Costly residential care for young people with severe learning disabilities is often far away from home, which can disrupt families, schooling, and lead to poorer long-term outcomes. Positive Behaviour Support (PBS) is a multidisciplinary approach which helps these young people remain close to their families, schools, and communities.

Dr Roland Casson: "With Fellowship programme support from ARC EoE, I worked with Dr Isabel Clare and Professor Tony Holland to set up a pilot project supported by the local authority, to evaluate how enhanced support might help young people remain at or close to home."

Prof. John Gabbay, Implementation Co-Lead: "The community of practice brought together people from all organisations involved in the care of young people with complex needs; local authority, voluntary sector, health and social care, education, and a local parents' support organisation."

Prof. Andrée le May, Implementation Co-Lead: "We helped them share their differing views, discuss the opportunities and challenges of PBS, and agree an implementation plan that included securing the funding and continually monitoring progress as the new service developed. It's fantastic to see the difference it is now making to young people and their families."

The Design Group arranged for an economic analysis of PBS by Dr Adam Wagner, which projected that the team would achieve annual cost savings of between £1.7 and 2.5 million by their fourth year, in comparison with alternative support costs, across local authority, health and education budgets.The Cambridgeshire and Peterborough PBS team, now an integral part of the system, have secured permanent annual funding of £350,000 from the local authority and NHS.

For more information, see bit.ly/35oZlnD

Tips Section

Tips on appraising evidence

1. You need to appraise the research evidence you have for robustness, relevance and readiness for implementation. You also need to appraise other sorts of evidence that might be merged with the research evidence during implementation.

2. Checklists are available to help you, for example:
- checklists for the rigour and robustness of research studies compiled by the Critical Appraisal Skills Programme in Oxford – they also run workshops to help people use them
- the tool by le May and Gabbay to help you judge the robustness of other sorts of evidence – see the Workbook.

3. Ask the people you're working with about the relevance of these different types of evidence to the implementation context. Only implement RELEVANT evidence. For example, ask a few key people:
- What they want to achieve through implementing this evidence?
- What they think the potential impact could be for clients, staff and/or systems?
- Is there other evidence that could achieve the same goals if implemented?

4. Check if the research is ready to implement by finding out more about it and how the researchers thought it might be implemented – sometimes researchers give hints on this at the end of their papers. It's also worth checking if others have implemented it – so try searching the internet or using social media. Ask other colleagues too.

Tips on facilitation

Facilitation is about helping people work better together and is an essential component of implementation.

Facilitation comprises several essential skills, focussing on:
- the individuals involved
- the group as a whole
- the task(s) being done.

Facilitators often use exercises and games to engage people and help them to be more creative. You can get ideas from the books, podcasts and websites listed in the Storeroom (arc-eoe.nihr.ac.uk/storeroom), and the documents 'Setting the right tone', 'Creating engagement in meetings' and 'Facilitation styles and guides'.

Tips on understanding the context

1. You can learn a lot about it from just asking questions and listening to key people.

2. You can also find out a lot from going to meetings if you're invited and have time.

3. If you want to do things more formally, you can try to map the context. Doing this with other people is useful as they will have access to other sources of information and so widen your understanding.

Two useful techniques for doing this are (a) context mapping and (b) using the Consolidated Framework for Implementation Research (CFIR).

(a) **Context mapping.** This involves thinking about the context as a landscape and making some sort of visual representation of it. This could be a map or a diagram. You can focus on political, social and economic factors as well as those closer to the change such as resources, people and the organisation's objectives. Here's an example of a map you could adapt: mobilisationlab.org/resources/context-map/.

(b) **Using the CFIR guide (https://cfirguide.org/).** The 'Constructs' page suggests some different things to focus on e.g. the internal and external contexts, the people, the intervention and the processes to be used. There's an interview guide on the website that might be useful too.

4. **Listen to Annette Boaz's seminar,** 'The role of context in implementing research evidence' (arc-eoe.nihr.ac.uk/lectures).

Tips for the first Community of Practice meeting

Preparation
- Try to work with a co-facilitator (it's very hard for just one person alone).
- Make sure you have a good note-taker. Maybe record the meeting (with permission!)
- Make sure you practise any technology beforehand and have a back-up plan.

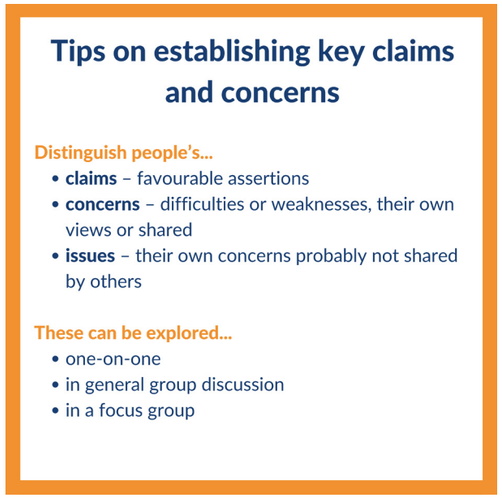
During the meeting
- Use the introductions profitably. Be careful of icebreakers; try to match them to context (see 'Tips on facilitation').
- Get people early on to agree where you're aiming to get to.
- Watch for the energy levels and take breaks.
- Make sure everyone is contributing if they want to.
- Allow disagreements but steer them towards being respectful, honest and constructive.
- Don't try to rush through too much.

- Don't be too directive; this is a collective co-production.
- But don't allow too much anarchy to prevail either! Gently keep people on track.
- Don't be frightened to set homework/allocate tasks.
- Try to get some success criteria established and work out what will enable/challenge the Community of Practice.
- Try to focus on getting some quick wins.
- Always finish on time even if you must defer things to the next meeting or as homework.

After the meeting
- Debrief with design group.
- Review Community of Practice membership and amend if necessary.
- Plan the next meeting.

You can always mix approaches: combining the collaborative Community of Practice with, for example, 'task and finish' groups to move the work forward.

Tips on establishing key claims and concerns



It's helpful to work out what stakeholders think about the context they work in and how the research to be implemented might affect it (and visa versa).

A useful technique, based on key elements of Guba and Lincoln's "fourth generation evaluation" technique (1989), focuses on establishing people's:
- **Claims:** or favourable assertions about the research/context/stakeholder – that is, their contribution to likely or actual success
- **Concerns:** or their own perceptions about difficulties and weaknesses with the introduction of the research, that they feel would also be generally acknowledged by their colleagues
- **Issues:** or perceived concerns that they feel others would probably not share.

People usually share fewer 'issues' so you might like to concentrate on 'claims and concerns'.

You can explore these either in one-to-one conversations or in group discussions or focus groups. You might check out the origins of claims and concerns to get a wider picture of the context and people who are working with, or have to be persuaded to accept, the research evidence.

Use these ideas to help you overcome barriers to change and enable progress.

REFERENCE: Guba, E.G. and Lincoln, Y.S. (1989) 'Fourth Generation Evaluation' (Newbury Park Ca and London: Sage).

Tips on engaging people

1. Really understand who wants you to implement the evidence and why. You can do this through chatting and watching what's going on. At the same time, you can also check how robust and relevant the research evidence seems to be to those who will be expected to implement it; this will play an important part in your subsequent work with them.
2. Remember though, this is all about implementing research so, if possible, try also to involve the researchers in some way.
3. Explore (through chats/observations) the context within which the evidence will be implemented and work out the drivers /barriers to implementation. To do this, you'll need to pick a few key people in the organisation you're focusing on.

Start by finding out:

- what they want to achieve through implementing this evidence
- what they think the potential impact could be
- why they want to achieve this and what might stand in the way of achieving it
- when they want it achieved by
- who they think can help this process (or hinder it) – and should be involved.

Of course you may find they don't want to implement the evidence, or that some do and some don't. If none of them do, it may be time to reconsider! Or you may learn useful things for your campaign to bring them on board, if that still seems appropriate.

4. With the help of some of these key people that you've been getting to know, define a wider group of people who will be involved in or benefit from the implementation project :– the project's stakeholders – and do a stakeholder analysis to work out:

- what they will bring to the implementation process, positive or negative (you'll need to be ready for both!)
- what will motivate (or demotivate) them in your project
- how much attention you need to pay to them.

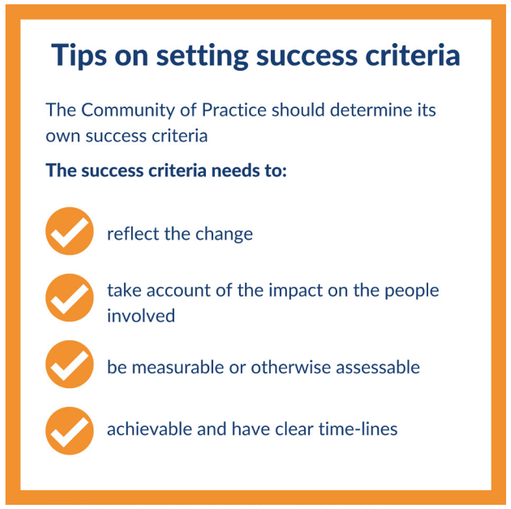
There are many websites that take you through this process: for example www.mindtools.com/pages/article/newPPM_07.htm.

Make sure that by the time you get going you really have engaged all the right stakeholders, and be ready to include more as you go along. Failure to do this may store up trouble for the future; they will come back and bite. You will need to have established a rapport with all the key players, and a routine of working together. Choose carefully WHERE you do that (on whose territory? off site?), which may have symbolic importance. And make sure you make them feel valued (tea and biscuits/cake go a long way!)

5. The key to success is to get the stakeholders to become more and more committed to implementing and sustaining the use of the research. Ensuring ownership through deepening their involvement will also help convince them to evaluate the success (or not) of the implementation. There are many techniques for creating and deepening engagement. Here's a great selection of useful information, checklists and approaches from Health Improvement Scotland: www.hisengage.scot/equipping-professionals/participation-toolkit/

Related seminar recording: Peter Beresford, 'Engaging people and communities in the implementation' (arc-eoe.nihr.ac.uk/lectures).

Tips on setting success criteria



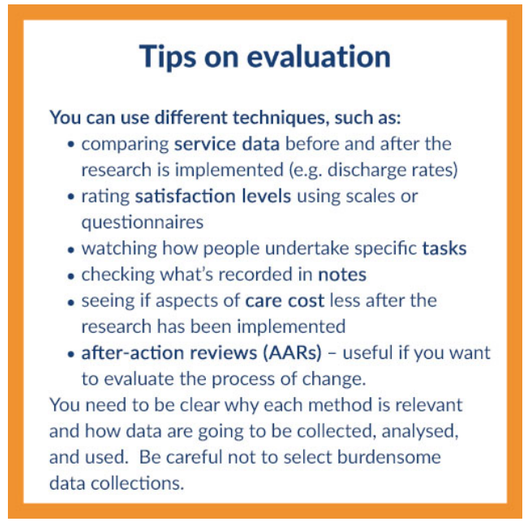
It's important that the Community of Practice determines its own success criteria to:

- agree and manage their expectation
- judge the impact of the research-based change being made
- guide the timing and scope of this change.

The success criteria need to be aligned with the action plan. They will also guide evaluations and reporting to key people.

Success criteria can help assess the impact the change will have on individuals, practice, teams, organisations and even society. The evaluation process (assessment method) linked to each success criterion must be realistic and not overly time-consuming. And, where possible use data that is readily available.

Tips on evaluation



Evaluation is about judging something's impact. Impact can be felt at different levels – by individuals, teams, organisations, and more widely in society – and so evaluation should focus on these levels too. You need to have some idea of where your research-based change will impact and by when.

Evaluations need to match the success criteria you have set. They can be **summative** (at the end of a project to see how well it succeeded) or **formative** (undertaken at key points during the project, to check how you're progressing and make adjustments as the project moves forward).

For example, you could use small tests of change to inform adjustments to the implementation plan so the fit between the research evidence and the context is as accommodating as possible.

It is important to learn from evaluations, so they should not be seen as punitive.

Tips on impact assessement and communication

1. Knowing the impact your work is having, or has had, is critical to successful implementation because it allows you to:
   - judge the progress you are making with your implementation project and make necessary changes
   - decide if the research you're implementing could be applied to a wider context and so spread beyond the boundaries of your work
   - assess the breadth of the impact your project has made on individuals, teams, units, organisations and the wider context or society.

2. Assessing impact can be complex. Measurement/assessment needs to focus on the success criteria determined for the project, including the wider usefulness of the project long after it has ended.

It's helpful to think with others about how the project has impacted on individuals, teams and the organisations involved when you are bringing each implementation project to a close. Kate Beckett and colleagues have devised the Social Impact Framework to help (Beckett et al, 2018). See this paper about its origins; the Framework with some notes on how to use it is in Supplementary File 8 of that paper.

3. Once you know what impact your work has had, you need to tell people! You should discuss how best to do this with the key stakeholders, who may have relevant networks that could be used. Also seek the advice of communications specialists in your organisations – this will be invaluable. Here are some basic ideas!

- Decide the purpose of your communication.
- Decide who you want to tell, what you want to tell them, and how best to convey each message. For example, stories are popular and memorable, but some people prefer just the facts in infographics, so a combination of both might be very effective and efficient at reaching multiple audiences.
- Always use several different media to get to different audiences. For example: Twitter; WhatsApp; email to people individually; a newsletter; a blog or vlog or a YouTube film or a podcast; an article/news item for a practitioner journal or an academic journal.
- Let others take the strain – the communications specialists for instance, or local press. Give them the information and they'll create the messages – but do check the messages before they go live!! They may, for example, send out a press release or a letter to your local paper, or contact your local radio station.
- Collect responses and pick up on any you need to follow-up.
- Use your communications to build networks and take the work further.
- Evaluate your communications – it's important to see if, and how, they influenced the work. Evaluations range from a simple discussion to a more formal after-action review (see www.hisengage.scot/equipping-professionals/participation-toolkit/after-action-reviews/), to formal surveys of stakeholders and influencers.

Implementation skills at a glance

Including all the right people: it's all about them and their relationships

Making sure the research/research findings are robust and relevant

Planning purposeful changes suitable to the context

Learning from the process – and from each other

Encouraging everyone when needed

Managing projects wisely

Evaluating progress formatively and summatively (and honestly!)

Negotiating changes through respectful critical dialogue

Trying out amendments and alterations

Acting on the results

Telling others so they can learn from your experience

Incorporating lessons and refinements

Organising celebrations of successes

Navigating the wider roll-out and sustainability

Feedback

We hope you enjoyed this Implementation resource. Please email feedback to arcoffice@cpft.nhs.uk