

SEAchieve

Guide to a pragmatic evidence-based approach
to Sustainable, Effective and Appropriate
change in health services

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About this guide

Context

Large complex healthcare projects are usually well resourced and have project teams with the appropriate range of skills to achieve change. However health services always have multiple smaller projects underway. Staff undertaking these projects are often chosen because their clinical acumen, sense of responsibility and willingness to take on new challenges sets them apart from their colleagues. However, although they may be excellent clinicians and managers, they often lack knowledge and skills in how to plan and deliver change initiatives.

There are many reasons why these small projects often do not meet their objectives, or meet them temporarily only to fail once the project supports are removed. Lack of a systematic approach to development, implementation and evaluation is one of them.

The SEACHange model was developed in 2005 by the Centre for Clinical Effectiveness (CCE), an Evidence Based Practice Hospital Support Unit at Monash Health, a large healthcare network in Melbourne, Australia. It has been used in all CCE projects in the past decade and taught at workshops on evidence-based change.

Audience

This approach can be used by health service staff who have no training in health service improvement methods; those starting out who want to take an evidence-based approach from the beginning; those who have been involved in projects that have been unsuccessful and want to try a new approach; and those who are experienced at managing change successfully but are interested in a different viewpoint.

What this guide does

This guide outlines a model for evidence-based change based on a few simple rules that anyone can apply.

- Be aware of each of the four steps in the change process. Consciously separate your decisions and actions for each step.
- Apply the three principles of Evidence Based Practice at each step.
- Address the systems issues at each step.
- Capture and use what you learn as you progress through each step.

For those with expertise in improvement methods, it provides a scaffold on which to apply existing knowledge and skills. For example

- The four steps can be used to underpin decisions in Lean thinking, Clinical Practice Improvement, Six Sigma, etc
- Theories of change and existing methods and tools can be applied in the relevant steps eg process mapping, pareto charts, root cause, problem analysis, templates, checklists, program theory, program logic, barrier analysis and methods of data collection and analysis

What this guide doesn't do

This approach does not replace project management and governance. Aims, objectives, timelines, budgets, deliverables, roles, responsibilities, accountability and reporting structures, and processes for risk analysis must be developed and delivered.

Making change

In-house health service projects often follow a similar pattern.....

Someone

- identifies a problem
- thinks of a way to fix it
- with enthusiasm and the best of intentions, sets out to change things in a way that makes sense to them

This is fine if

- they are the only one who has to change their behaviour
- no one else is affected by the change
- there are no costs or other resource implications
- no one else needs to be convinced that it worked (or didn't)

But this is not likely to be sustainable, effective or appropriate if

- the objective is to change systems or processes where many will have to modify their behaviour
- the changes will impact upon others
- costs and other resources are required
- transparency and accountability necessitate evaluation of what happened

Unfortunately this simplistic approach still underpins many locally-initiated projects in health services.

However many try to do the right thing.

- Some seek to learn from others and do a literature review to identify what is already known to 'work', or perhaps more importantly 'not work', so they can build on the successes and avoid the mistakes of others
- Sources of routinely-collected data or local audits are sometimes used to inform the process of change
- Project teams may consult with relevant stakeholders such as health service staff affected by the change
- Sometimes patients and their families are included
- Assessment of the barriers and enablers to achieving change might be conducted
- A communication or education plan is often used to inform those affected about the change

Combinations of these activities may be undertaken in individual health service projects implementing change. However they are rarely all considered.

These factors may help to explain why many health service initiatives are unsuccessful in achieving their objectives or are unsustainable after the conclusion of the project.

Making Sustainable, Effective and Appropriate change

“Truly successful decision making relies on a balance between deliberate and instinctive thinking”

Malcolm Gladwell, ‘Blink’ 2005

‘Instinctive’ comes naturally.

‘Deliberate’ needs attention and action.

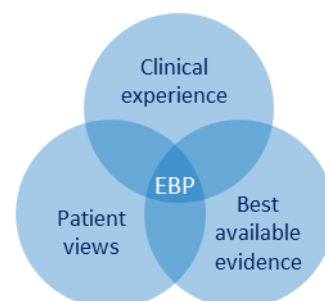
The pragmatic approach proposed in this guide aims to facilitate ‘deliberate’ thinking through

- Evidence-based decision-making to identify effective and appropriate solutions
- Consideration of factors for sustainable systems change

An evidence-based approach

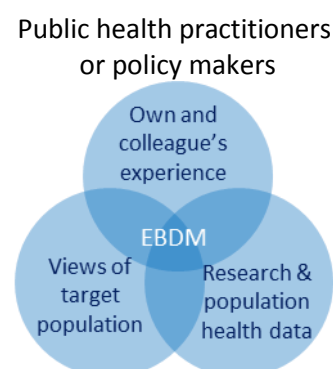
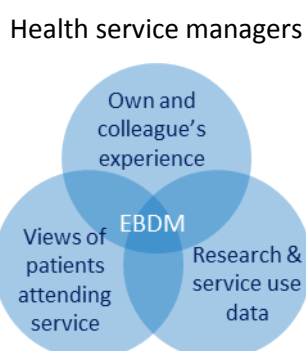
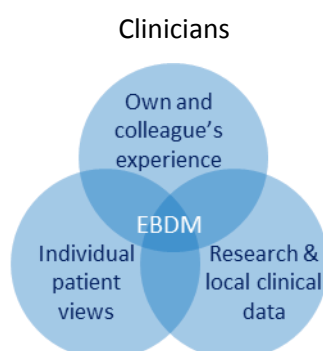
Evidence-based practice (EBP)

Evidence-based practice is a familiar approach to decision-making in the clinical setting. Guided by their expertise, and in consultation with patients and their families, clinicians use the best available evidence to choose the most appropriate care for each patient. Evidence can come from a range of sources including scientific journals and other publications, population health statistics and locally collected data.



Evidence-based decision-making (EBDM)

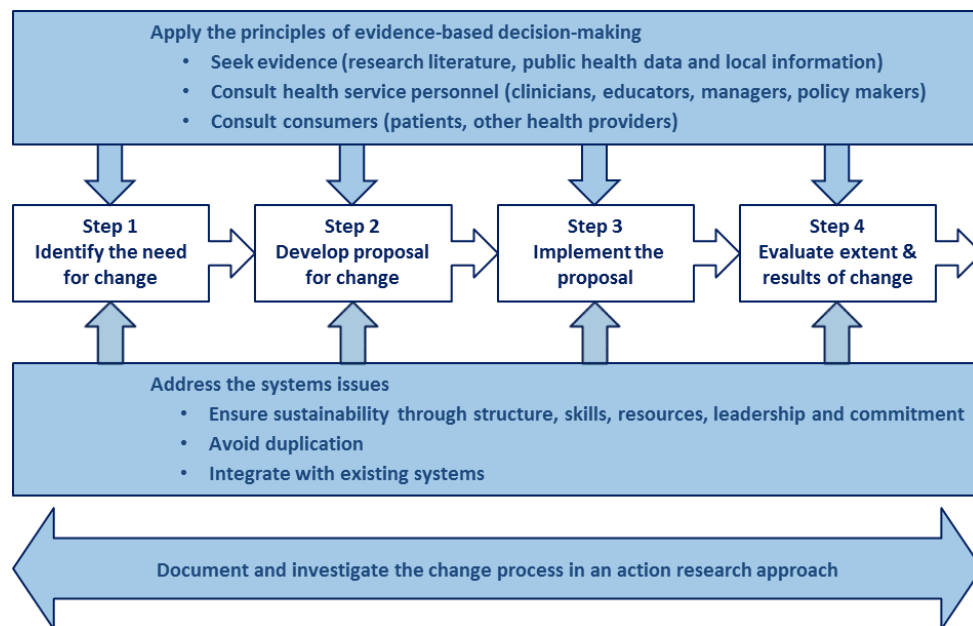
It is easy to see that the principles of EBP are equally applicable in organisational decisions about service planning and delivery and government decisions about population health strategies. The same 3-part model can be used. An evidence-based decision will take into account the best available evidence, the expertise of the relevant professional groups and the values and perspectives of the population that will be affected by the outcome.



Evidence-based change process

The same three principles can be applied to the decisions made at each step in the process of change.

An evidence-based change process



This model for evidence-based change is based on a few simple rules that anyone can apply.

- Be aware of each of the four steps in the change process. Consciously separate your decisions and actions for each step.
- Apply the three principles of Evidence Based Practice at each step.
- Address the systems issues at each step.
- Capture and use what you learn as you progress through each step.

Those with more experience in change projects can apply their knowledge and skills of improvement methodologies, theories of change, and other methods and tools in the relevant steps.

This process is more likely to lead to

- **Sustainable** change because it specifically addresses factors for sustainability
- **Effective** change because the proposed solution and implementation plans are based on the best available evidence
- **Appropriate** change because the views of all stakeholders are considered

Factors for sustainability

Sustainability is more likely if there is appropriate availability and adequate provision of key elements.

- Structure
- Skills
- Resources
- Commitment
- Leadership

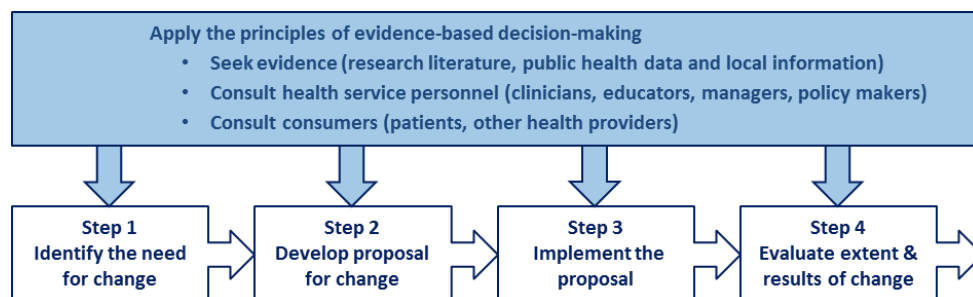
An evidence-based change process 'in theory'

1. Think of the change process as four main steps



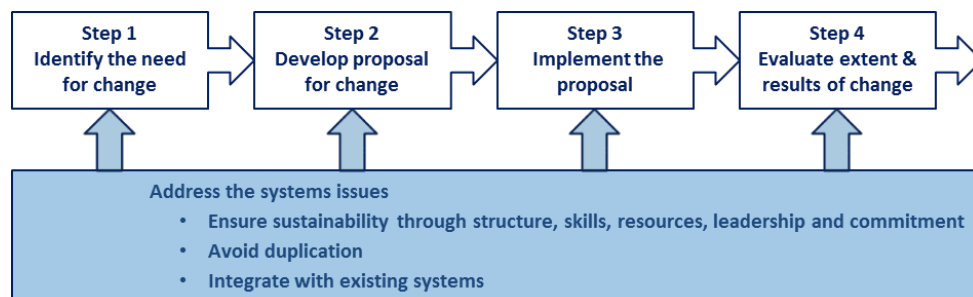
This is an over-simplification as each step has many steps within it. However these are four separate phases that all projects go through. Each step requires different information and different types of activities.

2. Apply the principles of EBDM at each step



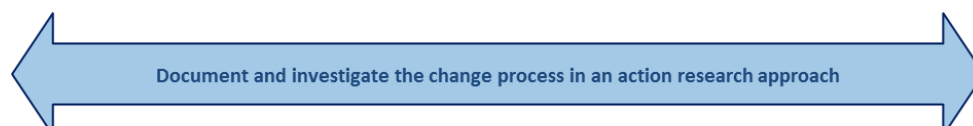
Seek out the best available information to answer your questions. Use the knowledge and experience of those familiar with the clinical topic, the location, and the 'way things work around here'. Consider the values and perspectives of those impacted by the change.

3. Address the systems issues at each step



Consider the sustainability factors. Avoid creating new versions of things that already exist or could be adapted. Use existing infrastructure wherever possible. If new processes are required, integrate them within the existing systems to reduce costs, retain familiarity and increase likelihood of successful implementation.

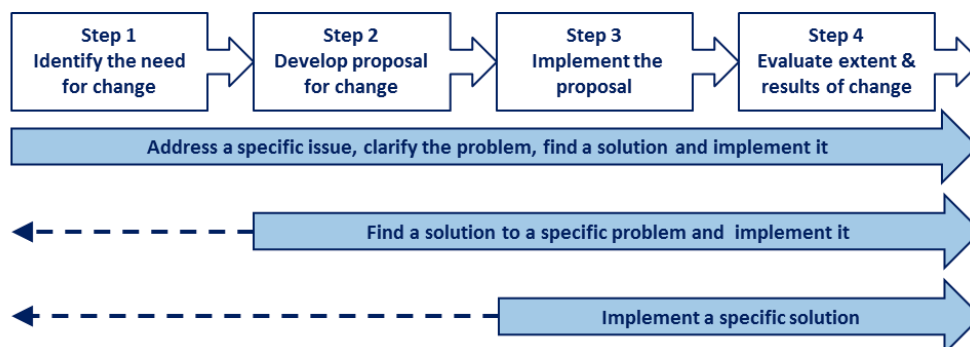
4. Take an action research approach



Capture and use what you learn along the way to improve this project and future projects. Action research considers the 'researcher as facilitator for change'. You can do this as a researcher by taking on a role in the change process; or as a facilitator for change who takes on a research role by documenting and investigating the change process as you experience it and making iterative changes to the proposal and the implementation and evaluation strategies as you learn what works and what doesn't.

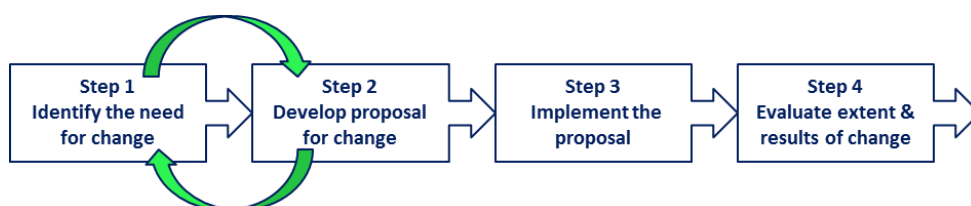
An evidence-based change process ‘in practice’

1. You don’t always get to do four steps

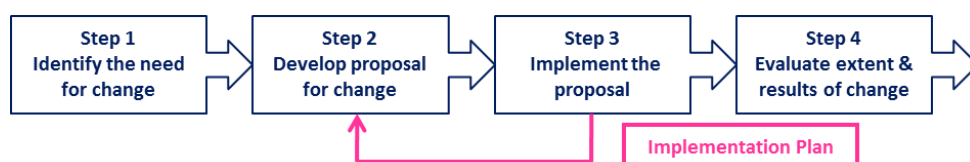


You may not always be asked to address the whole issue, clarify the problem, find a solution and implement it. Quite often you will be asked to find a solution to a problem identified by someone else (maybe ‘the government’, your organisation’s Quality Unit or your boss) or even implement a proposal determined by someone else. In these situations, you might find it helpful to go back to the earlier steps and clarify for yourself what the need for change is, in particular how it was measured and what baseline data are available to you; and that the proposal is likely to be sustainable, effective and appropriate, because it’s not really worth pursuing if these outcomes are not achievable.

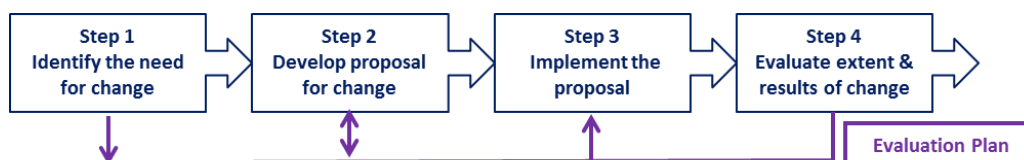
2. It’s not always linear



Sometimes Steps 1 and 2 can be conducted together. You can talk to people and search for evidence about the problem and the solution at the same time – just don’t get them confused in your mind.



When developing the implementation plan it is not uncommon to realise that the original proposal won’t work in its current form and requires modification to be implemented effectively.



Your evaluation plan is linked to Step 1 because you need to measure the extent of the problem at the beginning so that you know you have fixed it when you measure the same things at the end. It is often helpful to develop a program logic model. This informs the development of the proposal in Step 2 and determines the outcomes. The pilot stage in Step 3 is also an opportunity to pilot your evaluation methods.

What? Who?

Here are some examples of sources of information; there may be many others.

Evidence

Evidence can come from a range of sources and include quantitative and qualitative information from:

- Published literature
 - Research: systematic reviews, health technology assessments (HTAs), evidence-based guidelines, primary studies
 - Other documents: policy documents, reports
- Public health data
 - State, national, international
- Routinely-collected local data
 - Patient outcomes data
 - Health service utilisation data
- Other sources of local data
 - Surveys, clinical audit, project/evaluation findings
 - Organisational documents, charts, directories

Professional expertise

- Clinicians
 - All relevant professional groups, at all levels of seniority, representing each clinical area and campus
- Educators
- Managers
- Policy-makers
- Support services
 - Diagnostic services, Medical records, Data services
 - Administration, Human Resources, Finance, Business Management
- Other relevant groups
 - Internal: special interest groups
 - External: general practitioners, maternal and child health nurses, community nurses, community pharmacists, professional associations, recognised experts, etc

Consumers/those impacted by the change

- Actual and potential service users
 - Patients, clients, consumers, local community
 - Families, carers, consumer advocates
- Other groups if they are the target of the change
 - Health professionals (eg new referral process for GPs), students (eg new education programs), staff members (eg new internal documentation)

How?

Here are some suggestions on how you might approach finding the information you need.

- Seek out examples where others have addressed your problem, implemented your proposed solution and evaluated the outcomes. Look for those that were successful so that you can build on this information. Look for those that were unsuccessful so that you can avoid known problems and pitfalls.
- There are sources of high quality synthesised research evidence that provide a trustworthy summary of all the available evidence on a particular topic. It's worth looking at these first to see if someone else with the appropriate skills and expertise has already answered your question, and you can avoid doing it yourself. The Cochrane Library and national HTA and guideline websites are good places to start.
- Always look for existing data before collecting your own. You may find exactly what you were looking for and avoid the need to collect it. If not, you may find advice on where and how to collect it, saving you time and resources in developing and piloting data collection methods and tools.
- Organisations routinely collect lots of data. Check with the custodians of routinely-collected data in your organisation about what is available and be advised by those who know how to search, analyse and interpret data.
- There are many ways of collecting data for specific purposes such as surveys, interviews, focus groups, nominal group technique, etc. Information applicable to questions in your project may have been collected by others in earlier projects and may be available in reports or other documents. If not, be advised by those who know how to design and administer appropriate data collection methods and analyse and interpret the results.
- There is plenty of guidance on how to engage stakeholders, particularly health service consumers. First check if your organisation has a consumer engagement plan and follow this. If not, then look for local or national guidance or, if appropriate, condition or setting specific information such as patients with mental illness, children with cancer or refugees.
- You can get ongoing input from stakeholders by
 - including them in your processes eg project steering committees or guideline development groups
 - attending their regular meetings, teaching sessions, in-services or handovers
 - engaging 'clinical champions'

Step 1: Identify the need for change

Need for change

What is the problem? (what, why, who, where, how big)

- Description of problem, reason for it
 - What is the problem?
 - Is it a real or perceived problem?
 - Is there a
 - gap (not being done at all)?
 - mismatch (need to change current practice)?
- Scope
 - Who does it involve (patients, clinicians, others)?
 - Where are they (unit, department, site, organisation-wide)?
 - How many does it involve?
 - Other parameters (setting, condition, professional groups, etc)?
- Size, extent
 - How can it be measured?
 - How big is it?

Sustainability of the status quo

- What are the structures, skills and resources used in maintaining the current situation?
- What leadership and commitment is exhibited?

Existing systems and processes

- What existing systems and processes used in maintaining the current situation?

Action research (applies to each step)

- Identify and document what worked and what didn't
- Develop action plans based on this information for the next steps in this project and for future projects
- Some things you might like to think about
 - Where you had easy access to information
 - Who to talk to
 - What to ask
 - What you might do differently next time

At the end of Step 1

- You will be able to
 - clearly state the aim of your project (depends on nature and size of project) and the reason for it
 - define the scope of the project
 - establish baseline data
- You will have
 - some information about the time, skills and resources required
 - learnings that will inform the subsequent steps

Step 2: Develop a proposal for change

Effective and appropriate proposal

What is the solution to your problem?

- What is known about best practice in this area?
- What are the options? Positive factors? Negative factors?
- What is known about successful change?
 - For this specific problem?
 - For related problems?
 - For any change processes?

Characteristics of success

A proposal for change is more likely to be successful if

- it is based on sound evidence or expert consensus → make it clear where the information in your procedure comes from and how decisions were reached
- it is presented by a credible organisation → use documents from reputable sources eg adapt existing evidence-based guidelines from professional colleges, guideline groups, etc
- it can be tested and adapted → pilot the new procedure, make it clear that you will act on feedback received, and then keep your word!
- the relative advantage is evident → explain why there are changes to current practice and, if possible, let the target audience know 'what's in it for them'
- it is of low complexity → keep the procedure as simple as possible
- it is compatible with the status quo → keep it as close to existing as possible. Change may be more successful in small steps eg if you need to change the content of a document considerably, perhaps keep the format close to the original
- it is presented in an attractive and accessible format → be mindful of presentation

Sustainable change

- What will this look like after the project is over?
- What structures, skills, resources, leadership and commitment are required?
- Are they available? If not, how can they be obtained?
- Is there capacity for this proposal?

Existing systems

- What existing systems can be utilised?
- How can the new processes be embedded in the organisation?

Develop a program logic model

- Engage stakeholders in this process
- Consider the activities, outputs and outcomes required to achieve your objectives

At the end of Step 2

- You will be able to
 - clearly state the proposed change
 - implement it in a sustainable model
 - integrate the proposed change within existing systems, avoiding duplication and building on current strengths
 - develop a realistic budget, timelines and deliverable
- You will have
 - additional learnings that will inform the subsequent steps

Step 3: Implement the proposed change

Effective and appropriate implementation

How will you get it into practice?

- Identify what and who has to change
 - What are the key changes?
 - Which individuals or groups might influence implementation of your proposal?
- Identify potential barriers and enablers
 - What are the potential barriers that may prevent or hinder change being implemented successfully?
 - What enablers are available to assist implementation?
 - What are the deal breakers; barriers that must be overcome for successful implementation?
- Tailor strategies to identified barriers and enablers
 - Use logical and/or theoretical approach to select appropriate strategies for individual barriers and enablers
 - What strategies are appropriate to overcome or minimise the impact of the identified barriers?
 - What strategies will build on enablers?

Characteristics of success

Implementation plans are more likely to be effective if they

- include effective strategies designed on barriers and enablers
- integrate change into normal activities
- take a risk management approach
- include a pilot phase

Sustainable implementation

- Do you have the appropriate structure, skills, resources, leadership and commitment for implementation?
- Which components
 - are required now?
 - will be ongoing (eg staff turnover)?

Existing systems

- Which local systems and processes can you link into to facilitate implementation?
- How can you embed ongoing implementation into existing routines?

At the end of Step 3

At the end of this step you will have

- Identified barriers and enablers
- Developed implementation strategies based on barriers and enablers
- Piloted the proposed change, the implementation strategy and the evaluation methods
- Revised the proposed change and implementation strategy based on learnings captured
- Implemented the proposed change
- Further learnings that will inform Step 4

Step 4: Evaluate the change

Effective and appropriate evaluation

You need to know whether

- you have implemented the solution as you planned (process)
- this achieved a change in practice (impact)
- the practice change fixed the original problem (outcome)

Use measures, sources and methods suggested by and relevant to

- Research and local data
- Clinicians and other health service staff
- Consumers or those who are impacted by the change

Develop a program logic model

- Ideally this should be done in Step 2 so that it informs the proposal, implementation and evaluation
- Engage stakeholders in this process
- Consider short, medium, long term outcomes
 - What are the key evaluation questions?
 - What measures/indicators will you use?
 - What are the sources of this data?
 - What data collection methods will you use?

Sustainable evaluation

- Are these measures sustainable?
- Do you have the appropriate structure, skills, resources, leadership and commitment to complete the evaluation?

Existing systems

Are you making the best use of existing systems?

- Routinely-collected datasets
- Results of previous projects conducted within your organisation
- Methods and tools known to work well within your organisation and elsewhere

At the end of Step 4

At the end of this step you will know whether your

- implementation strategies were delivered as planned
- implementation strategies changed practice
- your proposed change fixed the original problem

Your learnings will explain

- why your project was successful or not
- what works or doesn't work in this setting in your organisation
- what to do the same or differently next time

Sustainability and maintenance

- Implement in 'permanent' rather than 'project' mode
- Confirm the benefit: feed back evaluation data to those involved
- Embed in the organisation: 'This is what we do here'
- Integrate into fixed routines: make new things part of existing roles, processes or systems

Messages from our earlier projects

- Build learning into your workplan
- Start small – resist implementation at multiple sites, pilot first and then roll out
- Don't make assumptions about what others will think – always find out first hand
- Re-think your timelines for activities beyond your control – they always take longer than you think
- Seek help – clinicians, managers, administration staff and consumers can all guide you in the best ways to work with them
- Remember to thank people
- Acknowledge feedback, use it transparently
- Be prepared for the worst, don't let it surprise you!

SEChange

- Implement effective strategies to achieve change
- At each stage in the change process:
 - Include input from
 - Research and local data
 - Clinicians
 - Consumers
 - Consider sustainability
 - Work with existing systems
- Maintain the changes achieved

Resources

You may find the following resources helpful.

Guide to successful health service improvement projects: Things people should (but frequently don't) think about. Centre for Clinical Effectiveness. Southern Health. 2012. <http://arrow.monash.edu.au/hdl/1959.1/1225373>

Guide to implementation of health service protocols, procedures and guidelines. Centre for Clinical Effectiveness. Southern Health. 2010. <http://arrow.monash.edu.au/hdl/1959.1/1225381>

Good luck!