HOW TO USE THIS TOOL

1. On the next page choose the purpose you are looking for a methodology to support. For example, if you want to produce something that will support clinical decision making choose “clinical decision making”

2. A pop-up box will show you a list of possible evidence methodologies

3. Click on one of the methods you are interested in

4. You will be taken to a page which gives you more information about the method including what is involved, how it has been used, and key sources of further information

5. Use the “evidence home” link on each method page to return to the beginning and select another purpose or methodology

6. If you need any further assistance please contact jenny.harbour@nhs.net
Evidence

Policy making
- Methods:
  - Rapid review
  - EQIA
  - Horizon scanning

Horizon scanning

Innovative solutions to problems

Topic overview

Measuring quality

Clinical & cost effectiveness

Develop a work programme/project

EVIDENCE HOME
Evidence

Policy making

Clinical decision making

Clinical & cost effectiveness

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Topic overview

Innovative solutions to problems

Horizon scanning

Methods:
- Guideline
- Rapid guideline
- Rapid review
- Systematic review/ HTA
- Standards
- Knowledge assets
Evidence

Policy making

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Topic overview

Measuring quality

Methods:
- Guideline
- Rapid guideline
- Systematic review/HTA
- Rapid review
Evidence

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Horizon scanning

Innovative solutions to problems

Develop a work programme/project

Methods:

- CAAP
- 90 day process
- Systematic review/HTA

Measuring quality

Topic overview
Evidence

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Topic overview

Measuring quality

Methods:
- QPI: quality performance indicator
- Standards
- Guideline
- Knowledge asset
Evidence

Policy making

Clinical decision making

Clinical & cost effectiveness

Innovative solutions to problems

Horizon scanning

Topic overview

Methods:

- **Topic scoping**
- **Rapid review**
- **Guideline**
- **CAAP**
- **Knowledge assets**

Develop a work programme/project

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Methods:
- 90 day process
- Knowledge assets

Topic overview

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EVIDENCE HOME
CAAP: CRITICAL ANALYSIS ASSIMILATION PROCESS

What does this method involve?
The CAAP reviews existing evidence on a topic to identify key issues or gaps in clinical practice. Evidence is collated from both explicit (guidelines, reviews, grey literature etc) and tacit (clinical staff experience) sources. The process can be broken down into four phases:
- project initiation meeting with stakeholders (topic/question identification)
- evidence retrieval
- critical analysis of evidence, and
- project mandate development.

When to use this method
The CAAP is useful for:
- scoping new projects or programmes of work
- identifying gaps in clinical practice, and
- gaining an overview of a particular health topic area, for example nutrition.

Type of evidence retrieved
Guidelines, systematic reviews, economics evaluations, policies, epidemiology data, patient issues and implementation tools. Tacit knowledge from clinical practice via direct clinical staff input as stakeholders.

Output
Project mandate for a project or programme of work.

Healthcare Improvement Scotland examples
1) Identification of the three focus areas of the 18 month “Improving nutritional care programme”.
2) Supporting development of the “Early years, reproductive and maternal health” programme.
90-DAY R&D PROCESS

What does this method involve?
The 90-day process, developed by the Institute for Healthcare Improvement, is a research and development process designed to encourage innovation to address specific problems. The process is broken down into three phases of 30 days each:
- Scan: scanning the literature, conducting interviews and identifying potential solutions
- Focus: testing potential solutions in practice and refining ideas
- Summarise and disseminate

When to use this method
- When innovative solutions to a specific question/problem are needed.
- When you need to balance internal capacity and external expertise.

Type of evidence retrieved
- Explicit knowledge: small sample of secondary literature or key primary papers.
- Tacit knowledge: interviews with key individuals in organisations both within and outside healthcare.
- The focus is on retrieval of tacit knowledge in the form of experiences.

Output
An innovative solution to a particular problem. This can take many formats depending on the question being investigated, for example driver diagrams, strategies or reports. The output should however be implementable within a healthcare setting.

Healthcare Improvement Scotland examples
A slightly modified version of the 90-day process has been used to:
- develop the clinical engagement strategy
- identify interventions to support person-centred care
- streamline the assessment of risk of developing pressure ulcers
What does this method involve?
The QPI process identifies and quantifies specific indicators of quality within a particular clinical area. For cancer QPIs, a multi-stage process is used to collate and define a set of indicators and the evidence to support them:

- development of a structured briefing paper
- initial development group meeting
- indicator development
- engagement with stakeholders
- finalisation of the QPI, and
- ratification and publication.

Non-cancer QPIs are developed using a process based on improvement methods.

When to use this method

- When setting performance indicators for use in a clinical setting to ensure quality of care.
- To collate recommendations on a specific condition from national and international guidelines.
- When you want to check guidelines are being followed, rationalise data collection, ensure value for money, identify priority areas for QI or measure improvements in care.

Type of evidence retrieved
Guidelines from national and international organisations which are appraised using the AGREE II tool before key recommendations are extracted.

Output
A set of quality indicators for a particular condition/clinical setting with each indicator including: indicator title, description, rationale and evidence, specifications, targets.

Healthcare Improvement Scotland examples
Cancer QPIs for NHSScotland in collaboration with the Scottish Cancer Taskforce.
Quality indicators for primary out-of-hours services.
What does this method involve?
Clinical standards use the best available evidence (normally published guidelines) to define a pattern or model of care to be delivered in a given health service or through a given care pathway. Standards are commonly developed alongside an implementation plan and self-evaluation tool so that service performance can be measured against the standards at a later date.

When to use this method
• When you need to define a model or pattern of care for a particular service or care pathway.
• To support service setup, organisation or delivery when no current guidance exists.

Type of evidence retrieved
International clinical guidelines, systematic reviews, policies, clinical summaries and patient views.

Output
Document setting a series of standards for delivery of care in a particular care setting/care pathway. Each standard will include essential criteria for meeting the standard and the rationale for including the specific standard in the document.

Healthcare Improvement Scotland examples
Standards for human immunodeficiency virus (HIV) services
AAA screening standards
GUIDELINES

What does this method involve?
Development of evidence-based clinical guidelines on a specific health topic, for example management of perinatal mood disorders. Guidelines are developed collaboratively by a multidisciplinary group in a five stage process:

- identify guideline development group (GDG) and determine remit of the guideline
- set key questions
- undertake literature searches and appraise quality of evidence
- draft the guideline, and
- circulate for peer review.

When to use this method

- When developing evidence based clinical guidelines for implementation within specific healthcare settings.
- When recommendations on evidence-based clinical practice are required.

Type of evidence retrieved
Guidelines, systematic reviews, health technology assessments and primary research studies.

Output
An evidence-based clinical guideline and quick reference guide for national implementation within healthcare. Patient versions available. Supporting material generated, for example implementation aids for asthma.

Healthcare Improvement Scotland examples
SIGN guidelines for a range of conditions including “Management of perinatal mood disorders” and “Diagnosis and management of colorectal cancer”.

Timescale
28 months approx.

Key documents
SIGN 50 (methodology handbook)
Guideline development in 50 easy steps
SIGN methodology (web materials)

Key people
SIGN Information Team
SIGN Programme Director
Rapid Guidelines

What does this method involve?
Development of consensus based clinical practice guidelines based on a pragmatic assessment of the literature and clinical expertise on best practice in a given clinical area, for example palliative care.

When to use this method
- When a guideline is needed on a specific symptom or small condition population.
- When clinical guidance is required in a short timeframe.
- When a pragmatic approach to guideline development is needed.

Type of evidence retrieved
Guidelines, systematic reviews, clinical summaries, care pathways, primary research articles and drug information.

Output
Brief guidelines on best practice in a specific aspect of care within a clinical area, for example breathlessness in palliative care.

Healthcare Improvement Scotland examples
National palliative care guidelines (2012-2014)
What does this method involve?
Comprehensive identification and appraisal of primary and secondary literature to address a set of specific questions on a topic or intervention, for example the clinical and cost effectiveness of hyperbaric oxygen therapy. Health technology assessments tend include a systematic review, health economic evaluation and aspects of implementation.

When to use this method
When comprehensive, critically appraised clinical and cost effectiveness evidence is required on a condition with multiple potential interventions or on an intervention that can be used in multiple conditions.

Type of evidence retrieved
Reviews, health technology assessments, clinical summaries, guidelines and primary studies (particularly randomised controlled trials). A scoping search is likely to have been completed in the early stages of a systematic review or health technology assessment.

Output
Full systematic review or health technology assessment often containing meta-analyses or cost effectiveness information.

Healthcare Improvement Scotland examples
Systematic review: provision of information to patients with long term conditions
HTA: the clinical and cost effectiveness of hyperbaric oxygen therapy
Rapid reviews summarise the clinical and cost effectiveness of a named intervention for a specific condition, for example radiofrequency ablation for renal cancer. Evidence from rapid reviews is used to inform policy decision-making in healthcare.

When to use this method
- When evidence is needed to inform or support policy decision making.
- When a specific intervention and condition are identified.
- When a review of evidence is needed within a limited timeframe.

Type of evidence retrieved
- Scottish context (for example policy, epidemiology, statistics), systematic reviews, guidelines, health technology assessments, clinical summaries, economic evaluations and primary studies.
- Conference proceedings and ongoing clinical trials may be included.

Output
Short review of the evidence covering clinical effectiveness, cost effectiveness and safety. An SHTG advice statement and policy decision may be produced based on the review.

Healthcare Improvement Scotland examples
Evidence Notes produced by Health Services Research within the Knowledge and Information Team. For example “Radiofrequency ablation for hepatocellular cancer”
What does this method involve?
Horizon scanning is a process used to predict changes or developments in the future that may influence current practice. In healthcare this includes identifying new technologies or medicines, predicting policy changes etc, that may impact on healthcare in the near, medium or distant future. By monitoring key organisations, sources and resources horizon scanning can support forward planning in healthcare settings.

When to use this method
- To provide information on current issues in healthcare and inform projects and work programme development.
- To explore factors and interventions that potentially impact on healthcare provision in the future.
- To monitor the work of organisations with a similar remit in health and social care.
- To identify new methods and interventions before they become common practice.

Type of evidence retrieved
Appropriate evidence for horizon scanning can include parliamentary outputs, policy body publications, journal articles of primary studies (particularly “in press” articles), announcements of new projects, ongoing clinical trials, drug/device patents etc.

Output
A report or summary of new technologies, medicines, policies and external activities.

Healthcare Improvement Scotland examples
Scottish Health Technologies Group Horizon Scanning Report – identifies new health technology assessment projects on a 6-monthly basis.
What does this method involve?

Topic scoping can be used in the early stages of many different projects including rapid review, systematic review and guideline development. This methodology systematically identifies literature on a specific topic or intervention to determine the scope and quantity of relevant literature.

When to use this method

- If it is unclear what research has already been done on a topic; when an intervention or condition is very new; when it is uncertain whether new work on a topic is required.
- To identify major developments relating to existing reviews and guidelines.

Type of evidence retrieved

- Scottish context (e.g. policy, epidemiology, statistics), systematic reviews, guidelines, health technology assessments, clinical summaries, economic evaluations and primary studies.
- Conference proceedings and ongoing clinical trials may be included.

Output

Short report summarising key points from the evidence and implications for advice to the service. The report should give an overview of what information on a topic is available and the quantity of published literature. The purpose of the report is to inform a decision on whether to begin a larger, more comprehensive piece of work e.g. a full systematic review or guideline.

Healthcare Improvement Scotland examples

Scoping report: [What is the clinical and cost effectiveness of microprocessor-controlled artificial knees compared with non-microprocessor-controlled alternatives?](#)

Review report: [SIGN guideline for autistic spectrum disorders](#)
What does this method involve?
Equality impact assessment is required for all policies, projects and programmes undertaken by Healthcare Improvement Scotland that are determined to be relevant to the equality public duty. An EQIA identifies and addresses potential inequalities relating to the condition, intervention, tool etc, of interest. For example, some ethnic minorities are more likely to suffer from cardiovascular disease and this should be addressed within any standards or guidelines issued by the organisation.

When to use this method
All relevant projects and programmes should include an EQIA unless the underpinning methodology has been assessed and accepted as inclusive of all equality groups e.g. SIGN 50.

Type of evidence retrieved
Reports, guidelines and primary studies on the topic, intervention or clinical area of interest that specifically relate to one or more of the equality groups.

Output
Outputs vary but include an EQIA form completed by the organisation, or a section within a publication on equality groups affected.

Healthcare Improvement Scotland examples
Summary of evidence on cardiovascular disease in equality groups for the CHD standards.
**What does this method involve?**
Presentation of results of a literature search or other piece of work in an easy to access format. Aims to ‘add value’ to information by organising and combining different types of knowledge, often in a visual way.

**When to use this method**
- When you have different types of information, for example ‘Know what’, ‘know how’ and ‘know who’.
- When project timescales are short.
- When information is required in an easily accessed format.

**Type of evidence retrieved**
Raw data, improvement programmes, published literature, expertise, personal experiences and learning.

**Output**
Varies depending on type of information being shared and requirements of the project. Should have an element of visual or graphical presentation, for example flash report, Powerpoint graphic, categorised and indexed bibliography.

**Healthcare Improvement Scotland examples**
- VTE improvement programme package
- CLEAR enquiry service flash report
- HIS Puzzle for mapping roles within our organisation (available via intranet)