Priority Setting for Health Service Quality Improvement

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Executive Summary

Objective

Our objective was to explore how health service organisations prioritise quality improvement work.

Methods

We undertook a high-level scope of the literature, including publications that described how health service's prioritised quality improvement work at an organisation level.

This was not a comprehensive literature review; rather, it sort to set out different approaches to priority setting of quality improvement, change or redesign work in a health care organisation.

Results

Resources which described a number of prioritisation techniques were identified. In summarising the available information, it was evident that these techniques could be categorsied into the following approaches: financial and collaborative (which includes prioritisation matrices).

Financial approaches	
▪ Program Budgeting and Marginal Analysis (PBMA) ▪ Quality Adjusted Life Years (QALY) league tables ▪ Needs assessment, cost of illness and burden of disease	▪ Target setting ▪ Core services ▪ Generalised cost effectiveness
Collaborative approaches	
▪ Pareto Analysis: 80:20 rule ▪ The Hanlon Method ▪ Multi-voting Technique ▪ Strategy Grids ▪ Nominal Group Technique ▪ Multi-criteria decision analysis (MCDA) ▪ Socio-Technical Allocation of Resources (STAR) ▪ Other methods - Decision Trees: NHS RightCare: Prioritisation of improvement projects: Designing and using decision trees	▪ Prioritisation matrices - Prioritisation Matrix - NHS Scotland Quality Improvement Hub - Quality Improvement prioritisation guidelines: Centre for Clinical Effectiveness Loyola University Health System - Toolkit Roadmap - Agency for Healthcare Research and Quality - Prioritisation Worksheet for Performance Improvement Projects - Centers for Medicare & Medicaid Services - Project Prioritisation - Office of Quality Improvement

Conclusion: Implications for Monash Health

From the evidence identified there are a number of techniques to aid decision making around priority setting for quality improvement in a healthcare setting. These techniques have shown to have either a financial or collaborative focus. To determine the best fit for use, consideration of the purpose for prioritisation is required. Resource allocation decisions could include financial approaches such as the PBMA or QALY techniques. Collaborative approaches could include rating quality improvement options (against size of health problem / seriousness of problem / effectiveness of interventions); multi-voting techniques; nominal group techniques; multi-criteria decision analysis or socio-technical allocation of resources.

For Monash Health the focus could be on prioritising quality improvement using collaborative approaches, particularly prioritisation matrices, which offer a structured, comprehensive and inclusive option for setting priorities for quality improvement work.

Detailed Report

Background

Quality improvement in health has been defined as: "…the combined and unceasing efforts of everyone—healthcare professionals, patients and their families, researchers, payers, planners and educators—to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development." [1] Monash Health aims to deliver quality, patient-centered health care and services to our diverse community by focusing on a range of areas [2]. To be able to achieve the vision of excellence of "exceptional care, outstanding outcomes", Monash Health must provide some attention to quality improvement, and not improving quality. However, part of the challenge of quality improvement is identifying and/or prioritising areas of innovation. Generally, decision making around priority setting in many industries can be ah-hoc, unstructured, unsystematic and often influenced by individual biases. Sound decisions on quality improvement hinge on the ability to apply transparent, reliable, and accurate processes.

Objective

Our objective was to explore how organisations prioritise quality improvement work in healthcare.

Methods

We undertook a high-level review of the literature, which included a search of grey literature for publications that included key words in relation to prioritisation of health service quality improvement work at an organisation level. This was not a comprehensive literature review; rather, it sort to set out different approaches to priority setting of quality improvement, change or redesign work in a health care organisation.

Results

Resources described a number of prioritisation techniques, some of which included templates and examples of how the techniques had been used in different settings,

It was clear that there were a number of large pieces of work that had been produced exploring priority setting strategies for quality improvement work in the healthcare environment [3-5]. These strategies had a financial focus, while others displayed a collaborative approach. As a result, we have provided a summary of the findings and categorised them into: Financial approaches; Collaborative approaches; and Prioritisation matrices. These are summarised below.

For step-by-step instructions on how to apply the collaborative approach techniques, see Appendix 1.

PRIORITISATION TECHNIQUES

FINANCIAL APPROACHES

Throughout the literature, it was evident that there were approaches to innovation in quality in healthcare that were hinged purely on financial figures. A report by the Sax Institute [4] reviewed a number of these approaches which are summarised below:

Program Budgeting and Marginal Analysis (PBMA)

Program Budgeting and Marginal Analysis (PBMA) is built around the idea of providing an information framework (the program budget) to allow a picture of where resources are currently going and then looking at whether a movement of resources from program A to program B might increase total benefits (marginal analysis). It can also provide a basis for judging where to allocate new money to get 'the best buy'. The approach is based on the economic notions of opportunity cost – the benefit foregone in the best alternative use of the resources – and the margin – which highlights that priority setting is about change [4]. A report by the Sax Institute recommends this approach as being superior to others [4].

Quality Adjusted Life Years (QALY) league tables

This device assumes that health services are about health only and that such health can be measured by Quality Adjusted Life Years. These 'QALYs' are a measure of health that seeks to combine length of life and quality of life. QALY league tables then seek to establish what the extra cost is per QALY of extending various different programs or services and the ranking these 'marginal costs per QALY' in ascending order. Any additional money would then be

allocated first to the program 'at the top of the league' since that is where the most QALYs can be bought with extra monies. [4]

Needs assessment, cost of illness and burden of disease

These three approaches are lumped together as the target they share is to aim resources at big problems – respectively health need, the overall economic cost of illness and the extent of the problem – the so called 'burden of disease' – that a disease creates. Priorities are determined or as a minimum influenced by the size of the problem – the bigger the problem, the higher the priority. [4]

Target setting

This is largely self-explanatory. This approach sets targets for (usually) reducing disease or increasing coverage (say of immunisation) and then allocates resources in such a way as to try to reduce the disease or improve uptake. It is often linked to needs assessment to provide the levels of the targets. [4]

Core services

The idea of core services is that some health services are in some sense essential and thus must be provided, whereas there is more discretion over 'non-core' services. This can be a mechanism for example for trying to decide which services are available in the public sector ('core services') and which in the private sector ('non-core services'). [4]

Generalised cost effectiveness

With this approach, the costs and health benefits of various interventions are assessed as compared with a situation in which those interventions did not take place. The results are then put in three categories: very cost-effective, cost–ineffective, and somewhere in between. This approach thus deals with interventions and not marginal or incremental change. It looks at the world with and without these interventions. It also adopts a more global or generalised approach rather than a more local approach. [4]

COLLABORATIVE APPROACHES

Commonly reported in the literature were approaches to innovation in quality in healthcare that were underpinned by the process of a collaborative nature involving a wide range of stakeholders. Some processes involve particular decision makers (i.e. executives, patients, etc.); others involve more of a collaborative input to the process (i.e. consensus development). A broad range of approaches that have been implemented in healthcare are summarised below:

Pareto Analysis: 80:20 rule [6]

Pareto Analysis is a simple technique for prioritising possible changes by identifying the problems that will be resolved by making these changes. By using this approach, you can prioritise the individual changes that will most improve the situation. Pareto Analysis not only shows you the most important problem to solve, it also gives you a score showing how severe the problem is.

Pareto Analysis uses the Pareto Principle – also known as the "80/20 Rule" – which is the idea that 20 percent of causes generate 80 percent of results. With this tool, we're trying to find the 20 percent of work that will generate 80 percent of the results that doing all of the work would deliver.

The Hanlon Method [5]

This technique objectively takes into consideration explicitly defined criteria and feasibility factors. Though a complex method, the Hanlon Method is advantageous when the desired outcome is an objective list of health priorities based on baseline data and numerical values.

Multi-voting Technique [5]

The Multi-voting Technique is most useful when there are a large number of possible options and these options must be narrowed down to a small few. This process generally supports options that are not a top priority yet, is favored by all, which then allows this item to rise to the top.

Strategy Grids [5]

Strategy Grids are useful when groups are interested refocusing their efforts by shifting their focus from one area to another (See Appendix 1, Table 1 for example). Strategy grids are often used in groups that have a limited capacity and want to get the biggest return for their efforts as possible. This tool may assist in transitioning from brainstorming with a large number of options to a more focused plan of action.

Nominal Group Technique [5]

The Nominal Group Technique is useful in the early phases of prioritisation where multiple individuals are required to generate a large amount of ideas in a short amount of time. The Nominal Group Technique (NGT) has been widely used in public health as a mechanism for prioritising health problems through group input and information exchange and is often used in conjunction with Multi-voting whereby NGT can be used to brainstorm ideas and create a broad list of possibilities and Multi-voting can be used to narrow down the priorities. One of the advantages of this technique is that it is a democratic process allowing for equal say among all participants.

Multi-criteria decision analysis (MCDA) [7]

Multi-criteria decision analysis (MCDA) establishes preferences between options by reference to an explicit set of objectives that the decision making body has identified, and for which it has established measurable criteria to assess the extent to which the objectives have been achieved. Cost and quality are usually two common criteria. MCDA allows fine details to be kept in the decision making process and removes any political self-interest and decisions influenced by an individual's own objectives. The analysis begins with a performance matrix, then an analysis of the performance matrix to come to a final decision.

Socio-Technical Allocation of Resources (STAR) [3]

The STAR approach combines value for money analysis with stakeholder engagement. STAR 'helps them (stakeholders) to produce, and take into account, epidemiological, clinical and financial information in a coherent framework.' Data is supplied for each option on costs, numbers and types of people benefiting and evidence of health gain. Inevitably there will be gaps in the data therefore; this missing data is generated by experts. This approach to priority-setting enables managers to proactively build continuous and meaningful engagement with the public and patients.

Other methods - Decision Trees

NHS RightCare: Prioritisation of improvement projects: Designing and using decision trees [8]

NHS RightCare describes how to design and use decision trees to prioritise the most important and most effective of improvement ideas within a health system for the population.

Prioritisation Matrices

A prioritisation matrix is one of the more commonly used tools for prioritisation and is ideal when health problems are considered against a large number of criteria or when an agency is restricted to focusing on only one priority health issue. Although decision matrices are more complex than alternative methods, they provide a visual method for prioritising and account for criteria with varying degrees of importance. [5]

Prioritisation Matrix - NHS Scotland Quality Improvement Hub [9]

The Quality Improvement Hub includes two examples of prioritisation matrices. Prioritisation Matrices are useful for applying a systematic approach to weighting/prioritising criteria towards evaluating solutions against the criteria. The use of these matrices helps teams focus and come to a consensus on key items. It can help to decide what improvements to implement first. Use of a matrix should be considered if you can't do all the improvements at once; you are uncertain about the best use of resources or energy; or you are looking towards specific improvement goals.

Quality Improvement prioritisation guidelines - Centre for Clinical Effectiveness Loyola University Health System [10]

The Centre for Clinical Effectiveness at the Loyola University Health System in the US developed some Quality Improvement prioritisation guidelines to assist in the selection of QI projects in healthcare settings. Within their guidelines, they developed a framework or scoring tool, to objectively score and compare projects. It must be noted that they did not provide an explanation as to how they developed the categories or framework. Within each category is a criteria which is scored from 1 to 5 (1= not related, 5 = highly supportive). The categories they defined were:

- Mission/Strategy – The extent to which the project supports the mission statement of the institution and supports the current goals of the strategic plan.
- Outcome – The extent to which the project has a positive impact on a significant outcome in a certain number of people (i.e. medical outcomes, satisfaction, etc.). Those projects that have a large impact on a large number of people are scored highest.
- Process Involvement – The extent to which a project with a positive impact on a significant outcome in a large number of patients is given the maximal score.
- Financial Impact
- Project Feasibility

Following the scoring of each project alongside the framework, the scores are added up and the project with the highest score is the one that meets all criteria best.

Toolkit Roadmap - Agency for Healthcare Research and Quality [11]

The Agency for Healthcare Research and Quality (AHRQ) has developed a Toolkit Roadmap of Quality Indicator (QI) tools used for quality improvement. The toolkit has seven sections; areas for improvement, prevalence, risk, cost, relevance, responsiveness, feasibility, and continuity. The AHRQ Quality Indicators Prioritisation Matrix uses Patient Safety Indicators (PSIs) and Inpatient Quality Indicators (IQIs) to focus resources. This tool should be used to guide the decision making process regarding priorities at an organisation. The tool does not need to be used to make final decisions but should be used in your prioritisation discussion. The four sections highlighted in the template for the matrix include:

- Which quality indicators (QIs) are worse than the benchmark set by an institution
- Cost implication of each QI for an organisation
- Aligning each QI with organisational strategic initiatives, external mandates an organisation must comply with, and public perceptions of care for each indicator
- Likelihood of success of improvement initiatives, based on current barriers.

Prioritisation Worksheet for Performance Improvement Projects - Centers for Medicare & Medicaid Services [12]

The Centers for Medicare and Medicaid Services have a list of resources to help with the implementation of Quality Assurance & Performance Improvement practices. One of these tools includes a worksheet for prioritising performance improvement projects. The tool assists with choosing which potential areas for improvement are the highest priority based on the needs of the residents and the organisation. This process will consider such factors as high-risk, high-volume, or problem-prone areas that affect health outcomes and quality of care.

The criterion outlined in the worksheet includes the following: prevalence, risk, cost, relevance, responsiveness, feasibility and continuity. These criteria are scored from 1 (very low) to 5 (very high) where the potential improvement areas with a higher score indicate a higher priority.

Project Prioritisation - Office of Quality Improvement [13]

The Office of Quality Improvement describes a prioritisation matrix approach to setting priorities when the amount of work that needs to be done surpasses the resources available to accomplish the work. The matrix provides a means for ranking projects based on criteria that are determined to be important. This prioritisation matrix supports structured decision-making by prioritising complex or unclear issues when there are multiple criteria for determining importance**,** providing a quick and easy method for evaluating options**,** removes emotion out of the process, quantifies the decision with numeric rankings**, i**s adaptable for many priority-setting needs, facilitates reaching agreement on priorities and key issues with large groups, establishes a platform for conversations about what is important.

Creating and using the prioritisation matrix involves five simple steps: 1) Determine your criteria and rating scale; 2) Establish criteria weight; 3) Create the matrix; 4) Work in a team to score the project; and 5) Discuss results and prioritise the list.

Prioritisation Examples and Resources

See Appendix 2 for additional examples and resources.

Conclusion: Implications for Monash Health

From the evidence identified there are a number of techniques to aid decision making around priority setting for quality improvement in a healthcare setting. These techniques have shown to either have a financial or collaborative focus. To determine the best fit for use, consideration of the purpose for prioritisation is required. Resource allocation decisions could include financial approaches such as the PBMA or QALY techniques. Collaborative approaches could include rating quality improvement options (against size of health problem / seriousness of problem / effectiveness of interventions); multi-voting techniques; nominal group techniques; multi-criteria decision analysis or socio-technical allocation of resources.

For Monash Health the focus could be on prioritising quality improvement using collaborative approaches, particularly using prioritisation matrices, which offer a structured, comprehensive and inclusive option for setting priorities for quality improvement work.

Appendix 1 – Applying Collaborative Approach Techniques

Pareto Analysis: 80:20 rule

Step-by-Step Instructions:

To use Pareto Analysis, identify and list problems and their causes. Then score each problem and group them together by their cause. Then add up the score for each group. Finally, work on finding a solution to the cause of the problems in the group with the highest score.

The Hanlon Method [5]

Step-by-Step Instructions:

1. Rate against specified criteria – Once a list of health problems has been identified, on a scale from zero through ten, rate each health problem on the following criteria: *size of health problem, magnitude of health problem, and effectiveness of potential interventions* (Table 1). It is important to remember that this step requires the collection of baseline data from the community such as from a community health assessment.

2. Apply the 'PEARL' test - Once health problems have been rated by criteria, use the 'PEARL' Test, to screen out health problems based on the following feasibility factors:

- Propriety – Is a program for the health problem suitable?
- Economics – Does it make economic sense to address the problem? Are there economic consequences if a problem is not carried out?
- Acceptability – Will a community accept the program? Is it wanted?
- Resources – Is funding available or potentially available for a program?
- Legality – Do current laws allow program activities to be implemented?
- Eliminate any health problems which receive an answer of "No" to any of the above factors or proceed with corrective action to ensure that potential health priorities meet all five of the feasibility factors.

3. Calculate priority scores – Based on the three criteria rankings assigned to each health problem in Step 1 of the Hanlon Method, calculate the priority scores using the following formula:

D = [A + (2 x B)] x C
Where: D = Priority Score
A = Size of health problem ranking
B = Seriousness of health problem ranking
C = Effectiveness of intervention ranking
**Note: Seriousness of health problem is multiplied by two because according to the Hanlon technique, it is weighted as being twice as important as size of health problem.*

4. Rank the health problems – Based on the priority scores calculated in Step 3 of the Hanlon Method, assign ranks to the health problems with the highest priority score receiving a rank of '1,' the next high priority score receiving a rank of '2,' and so on.

Table 1. The Hanlon Method Example

The Hanlon Method: Sample Criteria Rating			
Rating	**Size of Health Problem** *(% of population w/health problem)*	**Seriousness of Health Problem**	**Effectiveness of Interventions**
9 or 10	>25% (STDs)	Very serious (e.g. HIV/AIDS)	80% - 100% effective (e.g. vaccination program)
7 or 8	10% - 24.9%	Relatively Serious	60% - 80% effective
5 or 6	1% - 9.9%	Serious	40% - 60% effective
3 or 4	.1% - .9%	Moderately Serious	20% - 40% effective
1 or 2	.01% - .09%	Relatively Not Serious	5% - 20% effective
0	< .01% (Meningococcal Meningitis)	Not Serious (teen acne)	<5% effective (access to care)

Guiding considerations when ranking health problems against the 3 criteria	▪ Size of health problem should be based on baseline data collected from the individual community.	▪ Does it require immediate attention? ▪ Is there public demand? ▪ What is the economic impact? ▪ What is the impact on quality of life? Is there a high hospitalisation rate?	▪ Determine upper and low measures for effectiveness and rate health problems relative to those limits. ▪ For more information on assessing effectiveness of interventions, visit http://www.communityguide.org to view CDC's Guide to *Community Preventive Services.*

*Note: The scales in Table 1 are arbitrary models of how numerical scales are established and are not based on real epidemiological data; LHDs should establish scales that are appropriate for the community being served.

Multi-voting Technique [5]

Step-by-Step Instructions:

1. Round 1 vote – Once a list of health problems has been established, each participant votes for their highest priority items. In this round, participants can vote for as many health problems as desired or, a maximum number of votes per participant can be established.
2. Update list - Health problems with a vote count equivalent to half the number of participants voting remain on the list and all other health problems are eliminated (e.g. if 20 participants are voting, only health problems receiving 10 or more votes remain).
3. Round 2 vote – Each participant votes for their highest priority items of this condensed list. In this round, participants can vote a number of times equivalent to half the number of health problems on the list (e.g. if ten items remain on the list, each participant can cast five votes).
4. Repeat – Step 3 should be repeated until the list is narrowed down to the desired number of health priorities.

Strategy Grids [5]

Step-by-Step Instructions:

1. Select criteria – Choose two broad criteria that are currently most relevant to the agency (e.g. 'importance/urgency,' 'cost/impact,' 'need/feasibility,' etc.). Competing activities, projects or programs will be evaluated against how well this set of criteria is met. The example strategy grid below uses 'Need' and 'Feasibility' as the criteria.
2. Create a grid – Set up a grid with four quadrants and assign one broad criteria to each axis. Create arrows on the axes to indicate 'high' or 'low,' as shown below.
3. Label quadrants – Based on the axes, label each quadrant as either 'High Need/High Feasibility,' 'High Need/Low Impact,' 'Low Need/High Feasibility,' 'Low Need/Low Feasibility.'
4. Categorise & Prioritise - Place competing activities, projects, or programs in the appropriate quadrant based on the quadrant labels. The example below depicts 'Need' and 'Feasibility' as the criteria and items have been prioritised as follows (Figure 1):
    - High Need/High Feasibility – With high demand and high return on investment, these are the highest priority items and should be given sufficient resources to maintain and continuously improve.
    - Low Need/High Feasibility – Often politically important and difficult to eliminate, these items may need to be re-designed to reduce investment while maintaining impact.
    - High Need/Low Feasibility – These are long term projects which have a great deal of potential but will require significant investment. Focusing on too many of these items can overwhelm an agency.
    - Low Need/Low Feasibility – With minimal return on investment, these are the lowest priority items and should be phased out allowing for resources to be reallocated to higher priority items.

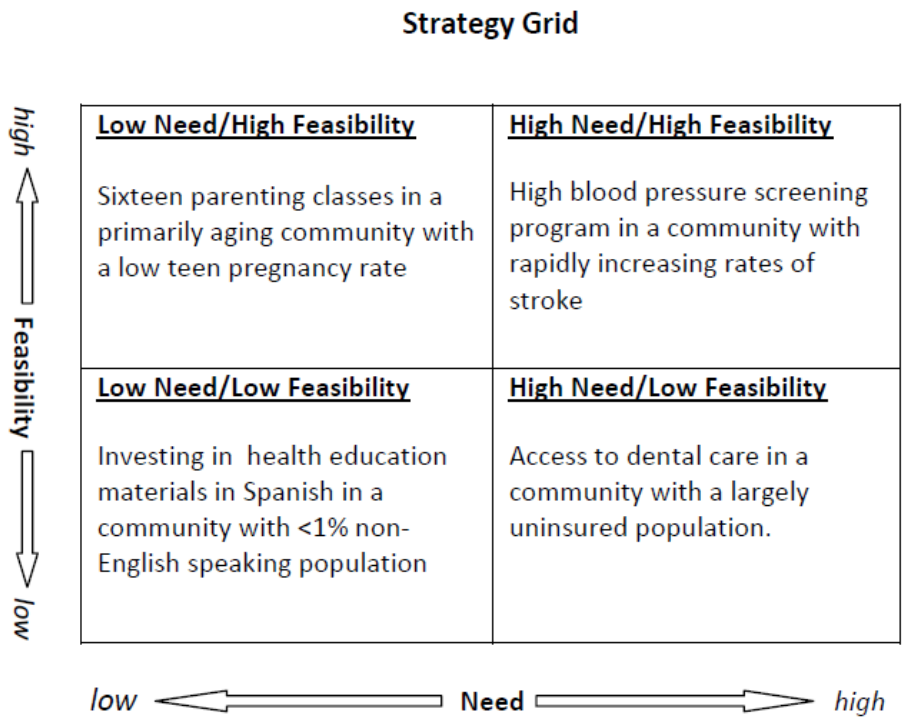

Figure 1. Example Strategy grid [5]

Nominal Group Technique [5]

Step-by-Step Instructions:

1. Establish group structure – Establish a group of, ideally, 6-20 people to participate in the NGT process and designate a moderator to take the lead in implementing the process. The moderator should clarify the objective and the process.
2. Silent brainstorming – The moderator should state the subject of the brainstorming and instruct the group to silently generate ideas and list them on a sheet of paper.
3. Generate list in round-robin fashion – The moderator should solicit one idea from each participant and list them on a flip chart for the group to view. This process should be repeated until all ideas and recommendations are listed.
4. Simplify & clarify –The moderator then reads aloud each item in sequence and the group responds with feedback on how to condense or group items. Participants also provide clarification for any items that others find unclear.
5. Group discussion – The moderator facilitates a group discussion on how well each listed item measures up to the criteria that was determined by the team prior to the NGT process.
6. Anonymous ranking – On a note card, all participants silently rank each listed health problems on a scale from 1 to 10 (can be altered based on needs of agency) and the moderator collects, tallies, and calculates total scores.
7. Repeat if desired – Once the results are displayed, the group can vote to repeat the process if items on the list receive tied scores or if the results need to be narrowed down further.

Multi-criteria decision analysis (MCDA) [7]

Step-by-Step Instructions:

Step 1: The performance matrix - Each row describes an option and each column describes the performance of the options against each criterion. The criteria are the measures of performance by which the options will be judged, and must be carefully selected, to assure completeness, feasibility, and mutual independence, and avoid redundancy and an excessive number of criteria.

Step 2: The qualitative analysis of the performance matrix

Dominance

Inspection of the performance matrix can show if any of the options are dominated by others. Dominance occurs when one option performs at least as well as another on all criteria and strictly better than the other on at least one criterion.

Subjective interpretation

Decision makers may also use the performance matrix to add recorded performance levels across the rows (options) to make some holistic judgment between options about which ones are better.

Step 3: The quantitative analysis of the performance matrix

The key idea is to construct scales representing preferences for the consequences, to weight the scales for their relative importance, and then to calculate weighted averages across the preference scales.

Stage 1: Expected consequences of each option are assigned a numerical score reflecting the strength of preference scale for each option for each criterion.

Stage 2: Numerical weights are assigned to define, for each criterion, the relative valuations of a shift between the top and bottom of the chosen scale.

Stage 3: Mathematical routines then combine these two components to give an overall assessment of each option being appraised.

Socio-Technical Allocation of Resources (STAR)[3]

Step by step instructions:

Step 1: Stakeholder workshops - Bring together a range of stakeholders. Participants identify key issues in each priority area, reviewed progress and identified gaps in services. The aim of the workshops is for the stakeholders to declare where investment was most needed and how best to deploy it, so that they 'own' both problem and solution. ''

Step 2: Priority-Setting Event - The next stage is a priority-setting event, at which the interventions to emerge from the workshops are reviewed by a panel of stakeholders.

Step 3: Defining results - Three scoring aspects:

a. Estimating the number of people who will benefit from the proposed intervention
b. Visualising the "average" beneficiary of an intervention and agreeing a qualitative description of the expected benefit.
c. Identifying the option with the greatest individual health benefit.

To calculate if the benefit from an intervention is value for money, divide its benefit score by the extra funding it needs; the resulting ratio indicates the intervention's value for money.

Step 4: Interpreting value for money scores - Calculations produce the units of benefit achieved for each dollar invested in an intervention. 'Benefit' takes into account length and quality of life added, the number of people who would gain, the contribution to reducing health inequalities and the feasibility of implementing the intervention. This is not, therefore, the same as the more familiar cost per quality-adjusted life year (QALY) calculation often used in gauging health gain.

Other methods - Decision Trees

***NHS RightCare: Prioritisation of improvement projects: Designing and using decision trees* [8]**

Step-by-Step Instructions:

The key steps to designing a decision tree include:

1. Agree on your criteria; for example
    a. Extent of unwarranted variation in the local system
    b. The net impact on quality, outcomes, costs
    c. Attitude to risk regarding return on investment
    d. Population need
2. Categorise criteria in to 'deal-breakers' and 'prioritisers'
    a. "Deal-breakers" must have a YES answer for a proposal to continue through the process, e.g. in an economy facing deficit a deal-breaker might be "does it save money?"

b. “Prioritisers” determine how quickly the reform should progress through the process and how much resource to put into the project to support this. Examples of prioritisers include; the financial rate of return or the extent of the quality impact, particularly where quality is low.

3. Place deal breakers at the front of the decision tree and prioritisers at the end.

Appendix 2 – Prioritisation Examples and Resources

Prioritisation Matrix Examples

Lyola Medicine Centre Quality Improvement Prioritisation – Centre for Clinical Effectiveness, Lyola Medicine

Prioritisation Matrix - Agency for Quality Improvement, University of Wisconsin

Prioritisation Matrix - NHS Scotland Quality Improvement Hub

Prioritization Worksheet for Performance Improvement Projects - Centers for Medicare & Medicaid Services Quality Assurance and Performance Improvement

Quality Indicators™ Toolkit for Hospitals Prioritisation Matrix - Agency for Healthcare Research and Quality (AHRQ)

Prioritisation Resources

Guide to Prioritization Techniques - National Association of County & City Health Officials (NACCHO)

The Health Foundation - Socio-Technical Allocation of Resources (STAR)

Quality Improvement Tool – NHS Scotland

Making Choices: A framework for prioritisation within ACI Clinical Networks, Taskforces and Institutes - New South Wales The Agency for Clinical Innovation

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