



Mental Health Improvement: Evidence and Practice

Guide 2: Measuring success
evaluation guides

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1.1 What is the purpose of this guide?

This is the second in a series of **Evaluation Guides**, which aim to encourage, support and improve standards in the evaluation of mental health improvement initiatives.

The guides are intended to help colleagues design evaluations that build on what is known about what works to improve mental health and that take account of the challenges of assessing the effectiveness of mental health improvement interventions.

The first four guides in the series are:

- *Guide 1: Evidence-based practice.* How can we use what we currently know to inform the design and delivery of interventions. This guide explores current debates about evidence of effectiveness and why they matter for mental health improvement. It also considers how the evidence base on mental health improvement can be used to inform the design of interventions and their evaluation.
- *Guide 2: Measuring success.* How can we develop indicators to gauge progress and assess the effectiveness of mental health improvement interventions. This guide covers the use of consultation to develop robust, valid and reliable indicators, examines the difference between mental illness indicators and mental health indicators and provides a useful source of indicators.
- *Guide 3: Getting results.* How can we plan and implement an evaluation. This guide gives an overview of the stages involved in planning and implementing an evaluation, and outlines the key issues for consideration. It also indicates sources of further, more detailed information on evaluation.
- *Guide 4: Making an impact.* How do we analyse and interpret the results from an evaluation and communicate the findings to key audiences. This guide discusses how to use the data gathered. It explores how evaluation can be used to inform practice and how the publication of results can add to the evidence base for mental health improvement.

Each guide contains a glossary.¹

¹ Terms in bold also appear in the glossary

The guides have been compiled as part of NHS Health Scotland's work to support evidence and practice in mental health improvement (<http://www.hebs.com/researchcentre/specialist/mhevidprog.cfm>) on behalf of the National Programme for Improving Mental Health and Well-being (www.wellontheweb.net) and complement other resources commissioned by Health Scotland and the Scottish Executive:

- *Mental health, Mental Well-being and Mental Health Improvement: What do they mean? A practical guide to terms and definitions* (Scottish Executive, 2004, www.wellontheweb.net)
- *Mental Health Improvement: Evidence and Practice case studies* (NHS Health Scotland, 2004). A selection of case studies of current mental health improvement practice in Scotland. This resource provides 22 case examples from a range of sectors and settings of work that is evidence-based, follows good practice guidelines and gives indications of effectiveness. The evaluation guides cross-refer to these case study examples, where appropriate, for illustrative purposes. (<http://www.hebs.com/researchcentre/pdf/FinalReport200304RE041.pdf>)
- Mental Health and Well-being Indicators Project (<http://www.phis.org.uk/info/mental.asp?p=bg>). In support of the National Programme for Improving Mental Health and Well-being, NHS Health Scotland is currently developing a set of public mental health indicators for Scotland. The indicators will provide a way of monitoring the state of mental health and well-being in Scotland at a national level. Although the indicators will be designed for use at a national level, some of them may be collected and applicable at a local level and will be helpful for those working locally in mental health improvement.

The guides are designed to strengthen evidence-based practice in mental health improvement and to support evidence from practice.

Strengthening evidence-based practice involves:

- increasing knowledge and awareness of the existing evidence base among practitioners and managers, i.e. what we know about what works in mental health improvement. A summary of some of the literature on evidence of effectiveness is available in *Mental Health Improvement: What Works?* (Scottish Executive, 2003, www.hebs.com/topics/mentalhealth)
- involving practitioners in producing guidance on evidence of effectiveness in the context of local needs and priorities, to ensure local relevance
- disseminating guidance on evidence in ways that are accessible and relevant to practitioners and that acknowledge barriers to implementing evidence-based practice
- building capacity, confidence, knowledge and expertise in working with the evidence base, to ensure that the planning and delivery of interventions are informed by an understanding of what works.



Supporting evidence from practice involves:

- enabling practitioners to evaluate interventions in order to inform their own practice and to guide local service development
- supporting the publication of local evaluations in peer-reviewed journals to add to our collective understanding of effective mental health improvement interventions and strengthen the evidence base
- finding ways to bring together practitioner know-how and expertise drawn from their experience of ‘what works’ with findings from the research literature.

1.2 Who are the guides for?

The guides are intended as a resource for colleagues across all sectors and settings. It is anticipated that they will be relevant to those working in a wide range of disciplines and services, both those with an explicit remit for mental health improvement and those for whom mental health improvement is an integral but implicit aspect of their work. The guides relate to areas of activity that are central to the responsibilities and interests of Community Planning Partnerships, Community Health Partnerships and multi-agency service planning groups for children and young people and for adults of all ages.

They have been developed in response to a clearly identified need among practitioners and service managers and programme managers for information and guidance on the evaluation of mental health improvement interventions. The guides therefore bring together information on evaluation theory and practice and a discussion of current debates and challenges in the field of mental health improvement, as well as pointers for practical application in designing and evaluating interventions. The series is not intended to be an evaluation manual – more detailed advice on evaluation for those who require it can be obtained from the resources listed in Appendix B to this guide and in *Guide 3: Getting results*.

1.3 What does this guide cover?

This guide covers:

- using consultation to develop robust, valid and reliable indicators that include the goals of a wide range of stakeholders, including mental health service users (for example employment, independence, friendships and quality of life)
- a summary of the difference between mental illness and mental health indicators, recognising that a major challenge for mental health improvement is identifying indicators of positive mental health, as opposed to indicators of mental illness
- the emerging literature on indicators that can be used to measure the mental health of both individuals and communities, for example research in the areas of **quality of life** and **social capital**, which provides a useful source of mental well-being indicators
- using research on risk and protective factors to develop robust mental health indicators, to ensure there is a clear relationship between the objectives of the intervention and the indicators selected to measure success. *Guide 1: Evidence-based practice* contains information on designing interventions using evidence of effectiveness.

The Evaluation Process



Making the important measurable

Attaching greater weight to the evaluation of mental health improvement interventions and to the utilisation of the results of evaluations is vital to achieve greater understanding of the contribution that mental health improvement can make to current policy and service goals. Strengthening confidence and expertise in identifying, developing and using mental health indicators is fundamental to improving evaluation standards and enhancing the credibility of mental health improvement.

Identifying relevant indicators to evaluate mental health improvement interventions is an important stage in planning an evaluation. This guide should therefore be read in conjunction with *Guide 3: Getting results* which considers evaluation design and methods to collect data.

Thinking about indicators is also a helpful exercise for those involved in implementing an intervention or project, to consider what constitutes success and how they would know that they were being effective. In relation to evaluation and evidence of effectiveness, the two key questions are: who defines success and what measures are they using? The way in which mental health is defined will affect how it is measured: for example, an absence of mental illness symptoms or the presence of positive elements of mental well-being like self-esteem or hopefulness. It is crucial that the measures used to evaluate mental health improvement are appropriate. *Guide 1: Evidence-based practice* stresses that the core of mental health improvement is to bring about change in how people think and feel and the factors that influence how they think and feel. Indicators therefore need to include measures which are appropriate to the target group and the setting.

What are indicators?

3.1 Indicators of what?

Health indicators are used in a variety of ways:

- to define a **public health** problem: indicators help identify a problem as they are associated with its occurrence, for example:

low self-esteem may be an indicator for health damaging behaviours, such as smoking, risk taking, poor diet, lack of exercise

post-natal depression may be an indicator of poor attachment in early childhood.

- to indicate changes in health over time in individuals or populations, for example:

surveys show an improvement in how people describe their own health, following a programme of interventions in a local community that combined advice on money management and debt, lifestyle advice and support to access training and employment opportunities

- to assess whether the objectives of a programme or interventions are being reached, to indicate the success or failure of an intervention:

increased body satisfaction and a reduction in weight-controlling behaviour among young women might be indicators of the success of a programme to reduce eating disorders

reduced levels of stress and improved self-esteem among members of a local community might be indicators of the success of a project to promote healthy living, as illustrated in Case Study 9 (NHS Health Scotland, 2004) .

Indicators to measure the success of an intervention should be drawn from the research literature on protective and risk factors, so that there is a clear and robust relationship between the indicator (e.g. social networks, exercise, job control, problem-solving skills) and the objective: improving mental health. This is discussed further in *Section 7 Risk and protective factors*.

Developing mental health improvement indicators generally means using **subjective measures**, which are based on judgements made by the target group, patient, family, project worker, etc. about well-being and quality of life. These are distinct from the traditional **objective** clinical indicators which are used to establish a diagnosis (e.g. symptoms which indicate schizophrenia or bipolar disorder) or levels of ill health in a population, e.g. blood pressure or cholesterol levels.

As *Guide 1: Evidence-based practice* discusses, emerging evidence on mental health improvement provides an important challenge to rigid distinctions between soft (i.e. subjective) measures and hard (objective) outcomes because of growing evidence of the link between how people feel and health outcomes. In evaluating mental health improvement, we need to ensure that the methods and indicators chosen are well thought out, in the light of what we know influences how people think and feel. This also means recognising that different types of indicators tell us different things and have their inherent strengths and weaknesses.

3.2 Issues to consider in developing indicators for mental health improvement

There are a wide range of rating scales and tools available that can be used to measure indicators relevant to mental health improvement. It is important to consider how to select the ones most appropriate for your evaluation. Key factors to consider include:

- reliability – the extent to which the measure is consistent, which is usually assessed through testing and retesting a scale or questionnaire
- validity – does the instrument (scale, survey, questionnaire) measure what it is intended to measure? For example, does a set of questions about how much people help and receive help from neighbours measure levels of trust in a neighbourhood?
- sensitivity – whether the instrument is able to identify variation in the feature you are interested in, for example possible differences in the levels of self-esteem in young men and young women.

Subjective measures need to be checked for cultural validity, to identify if they ‘work’ with different population groups. Age, gender and ethnic group have a significant influence on our experiences, ideas and attitudes. It cannot be assumed, therefore, that a set of questions developed to assess self-esteem will be universally applicable with all age groups. Similarly, in non-Western cultures, mental health and ill health may be understood in ways which are fundamentally different to Western ideas and concepts. To use common questions to explore experiences of mental health with an ethnically diverse sample might lead to misleading results. Some scales for measuring quality of life, social capital or well-being may be culturally specific and not relevant or valid for use in other contexts.

In a review of 23 different scales for measuring positive mental health, well-being, quality of life and social functioning, Mauthner and Platt (1998) identified the following criteria for selecting outcome measures for mental health improvement interventions:

- salience – should assess positive and/or negative aspects of mental health; psychiatric diagnostic instruments should be excluded
- applicability – should address issues which are important to the person receiving the intervention and those delivering it

- acceptability – should be brief and user friendly
- ethical – should not cause offence, distress or incorporate discriminatory assumptions
- practicality – should be simple, low cost, not requiring specialist training
- psychometric properties – should be reliable, valid and sensitive to change.

Points for reflection

- In selecting indicators consider the balance between subjective and objective measures, to ensure you have a means to capture the experiences of those receiving or using the intervention.
- Check that the measures you are planning to use are appropriate for the target group.
- Where possible use rating scales or tools that have been tested and validated elsewhere as this can add weight to your results. There are many easy to use sets of questions available (see *Section 5 Mental health or mental illness indicators?*).
- Be aware that some scales and tools involve a cost, to purchase the materials required.

Developing indicators through consultation

There is a growing range of **qualitative research** which provides data on the views and perspectives of different communities and target groups, for example young people, older people, people from different black and minority ethnic groups and people from lesbian, gay, bisexual and transsexual communities. This can provide important information.

EXAMPLE Understanding the perspectives of your target group

Understanding the perspectives of young people

Focus group research was undertaken as part of the work of the Scottish Needs Assessment Programme on the mental health of children and young people.

This research found that concerns about appearance, not succeeding and relationships with friends and family were predominant causes of anxiety and depression among school age young people in Scotland (SNAP, 2003).

Understanding the perspectives of older people

Similar research found that older people distinguish between *loneliness*, often a result of bereavement or distance from family, and *isolation*, which may be due to lack of money to take part in social activities, poor availability of transport or the absence of activities that appealed to older people.

Both individual studies such as these and literature reviews which address feelings, attitudes and experiences are as important as reviews of **effectiveness**.

Local consultation is also essential. Local consultation can assist with:

- defining the problem – what are the concerns and priorities of the target group and other stakeholders?
- deciding on the intervention – what do the target group think would be useful, acceptable, meet their needs?
- strengthening effectiveness – what local factors need to be taken into account in replicating an effective intervention, e.g. parenting skills training, anti-bullying strategies, increasing physical activity?
- identifying measures of success – what outcome measures are important or meaningful for the target group?

However, consultation is often experienced as meaningless by those who are consulted, leading to widespread ‘consultation fatigue’. Those planning an evaluation have a moral obligation to ensure that efforts to engage with a community are followed through, by providing feedback on the results of the evaluation and creating opportunity to consider with that community how the results can be used to bring about change. This is discussed in more detail in *Guide 4: Making an impact*. Taking these steps helps gain the confidence and involvement of the community.



EXAMPLE Including the local community

Case study 4 (see NHS Health Scotland, 2004) uses community development approaches in Possilpark in Glasgow to address issues relating to child poverty, in order to create a hopeful future and to increase respect for children's perspectives in community affairs.

This project uses participatory methods in all its work, to identify 'what it's like to live around here'. Evaluative sessions are an integral part of its activities. The project has found that participatory activity, including involvement in evaluation, needs to be rewarding in itself for people to opt in and stay involved.

Consultation is most likely to yield results if it is used as a basis for drawing on the expertise of a range of different stakeholders and creates opportunity for the active participation in or contribution to the evaluation. Participatory approaches to evaluation are described in Heron and Reason (2001).

EXAMPLE Integrating research and local experience

On the Preston Road Estate in Hull and East Riding, residents expressed a strong interest in addressing stress and low levels of well-being as a central part of a major regeneration programme. Mental health professionals and health promotion specialists worked with neighbourhood and community representatives in order to integrate knowledge of the evidence base on risk and protective factors for mental well-being with residents' lived experience of threats to their mental health. Through this process, a set of indicators was agreed which reflected both the research literature and local priorities in answering the question: 'what would demonstrate that living in Preston Road promoted well-being?'. (Krasner and Copeland, 2004)

Mental health or mental illness indicators?

A big challenge for mental health improvement is identifying indicators of positive mental health, as opposed to indicators of mental illness. Surveys of psychiatric illness (morbidity), for example, measure mental illness, not mental well-being. The content and scoring of common self-completion and other mental health measurement tools, for example the Beck's Depression Inventory, tend to focus on negative symptoms such as sadness, anxiety, irritability or pessimism. Others, such as the General Health Questionnaire (GHQ) ask about both positive and negative symptoms but are usually scored so that those with scores above a certain point are regarded as mentally ill (Stewart-Brown, 2002).

Nevertheless, there are a number of well-validated instruments which include questions designed to identify aspects of positive mental health in individuals (Mauthner and Platt, 1998; Stewart-Brown, 2002). Developing questions to identify and measure specific concepts, such as trust, is complex and needs considerable care. It is therefore usually best to utilise questions which have already been tested and validated. Sources of validated measures of mental health and well-being are listed in Mauthner and Platt (1998) and in Stewart-Brown (2002). The following list gives some examples of protective factors for individuals, which provide the basis for developing indicators.

How people think and feel – cognitive and emotional protective factors:

- feeling loved, trusted, understood and valued
- interest in life
- hopefulness, optimism – what you expect from life
- capacity to learn
- self-acceptance
- agency/locus of control – whether people feel they can influence what is important to them
- autonomy – whether you feel you are able to make choices and decisions
- problem solving/resilience – how people deal with difficulties, their capacity to cope with events and problems they encounter in their lives.



EXAMPLE Indicators can determine the problem and assess impact

Case study 13 (see *Mental Health Improvement: Evidence and Practice case studies*, NHS Health Scotland, 2004) aims to increase the confidence and self-esteem of looked after children in West Lothian, through increased involvement in physical activity.

In a project of this sort, indicators such as hopefulness, self-acceptance or problem solving skills could be used before an intervention, to provide data on the problem:

looked after children have poor self-esteem and limited aspirations for the future

and also to assist in assessing the impact of the intervention:

following participation in an initiative to increase access to leisure opportunities, the young people scored significantly higher for self-acceptance and hope for the future.

6.1 Quality of life indicators

Research in the areas of **quality of life** and **social capital** is also a useful source of mental health and well-being indicators for communities (Chanan and Humm, 2003; Scottish Executive, 2003).

Quality of life is a way of assessing levels of well-being, for individuals and for communities. It includes economic, social and environmental factors, for example employment, housing, quality of the natural environment, cultural and leisure facilities, noise, pollution and safety. Quality of life reflects people's belief that their needs are being satisfied and that they are not being denied opportunities to achieve happiness and fulfilment, whatever their health status or social and economic conditions.

Quality of life indicators are of particular importance to local authorities, because of the *power to advance well-being* provision in the Local Government in Scotland Act 2003.

Quality of life is also of growing importance as an outcome measure for mental health services (Laugharne 1999; Slade and Priebe 2001; Social Exclusion Unit, 2004). This means expanding clinical indicators of successful treatment, e.g. reduction in symptoms, to include outcomes that are important to those who use services, for example employment, independence and friendship. Quality of life is a significant element of the recovery model, which aims to promote the rights of people with serious mental health problems/ mental illness to lead full and satisfying lives, in spite of the limitations imposed by having a diagnosis.

The World Health Organization has conducted a major international study into quality of life (WHOQOL, 1996), which identifies six broad domains:

- physical
- psychological
- level of independence
- social relationships
- environment
- personal beliefs/spirituality.

EXAMPLE Some quality of life indicators

- the percentage of respondents satisfied with their neighbourhood as a place to live
- quality and amount of natural environment
- cultural, recreational and leisure services available
- opportunities to participate in local planning and decision making
- percentage of respondents who consider their neighbourhood is getting worse
- percentage of respondents concerned about noise
- area of parks and green open spaces per 1000 head of population (Audit Commission, 2002).

Quality of life also has relevance for community health development and approaches that aim to promote community mental health and well-being and the quality of personal and community life. There are three core elements to this:

- healthy people – capable, confident and connected
- a strong community – skilled, organised and involved
- the quality of community life – economic, environmental, cultural and political (NHS Health Scotland, 2003).

The Community Development Foundation has been developing guidance to support the collection and interpretation of a set of community involvement indicators for use by local authorities and strategic planning partners. The intention behind this work has been to complement quality of life indicators such as those above, to capture measures of community activity and relationships. The four dimensions recommended are as follows:

- community influence – for example the percentage of adults who feel they can influence decisions in their area
- community cohesion – for example the proportion of people who feel that their area is a place where people from different backgrounds can get on well together
- social capital – percentage of people who have helped or been helped by others (unpaid and not relatives) over the last year (see Section 6.2. *Social capital*)
- condition of the community and voluntary sector: their extent and influence (Chanan, 2004; Chanan and Humm, 2003).

In Scotland, the Scottish Executive is working with the Office for National Statistics (ONS) and the other devolved administrations to create a coherent neighbourhood statistics service. Further information on Scotstat is available through

<http://www.scotland.gov.uk/stats/scotstats/>

The Scottish Neighbourhood statistics website is <http://neighbourhood.statistics.gov.uk>

The Joseph Rowntree Foundation (2003) has developed indicators relating to poverty and social exclusion and has a section on Scotland. This provides a basis for the development of aggregate indicators to measure poverty inequality and social exclusion.

6.2 Social capital indicators

Social capital is the invisible glue that binds communities together, gives them a shared sense of identity and enables them to work together for mutual benefit (Kawachi *et al*, 1997).

Social capital refers to features of social organisation such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit (Putnam, 1995 p.67).

Critics of social capital theory argue that it detracts attention from material deprivation as the primary determinant of health. However, research on social capital suggests that indicators of community cohesion and efficacy – levels of trust, tolerance, reciprocity and participation – are an important influence on health. The erosion of social capital may be one of the pathways through which income inequality impacts on health (Morgan and Swann 2004).

Social capital is an important concept for mental health improvement, because of its focus on psycho-social factors within communities which are of direct relevance to the mental health and well-being of both individuals and communities.

The Scottish Household Survey (SHS) includes a module on social capital and provides a set of questions which cover the five main aspects of social capital:

- civic engagement
- neighbourliness
- social networks
- social support
- perception of the local area.

It may be advisable to consider each indicator separately, for instance neighbourliness captures something different from individual social support.

EXAMPLE Some social capital indicators

Indicators for which data is becoming more common (notably in localities where neighbourhood renewal and community strategies are well developed) include:

- feeling safe
- trusting unfamiliar others
- participation
- influencing local decisions
- believing the local neighbourhood is improving
- access to social support
- social inclusion indicators
- employment and meaningful activity indicators
- support for parents.

For those planning to undertake research on levels of social capital, a user guide is available outlining the standard sets of questions used (Coulthard *et al*, 2001; Walker and Coulthard, 2004).

In analysing data on social capital it is important to distinguish between:

- compositional effects: which arise from variations in the make up of a local area, e.g. higher proportion of older people or low-income families
- contextual effects: what remains, once appropriate allowance has been made for compositional effects, indicating the difference the local area makes to health outcomes (Mohan *et al*, 2004).

In addition it is important to recognise that social capital may take different forms in different communities, and is likely to be influenced by factors such as age, gender, ethnicity and local traditions (Blaxter, 2004).

Points for reflection

- Consider how the choice of indicators can be linked with the work of key local partnerships, for example community health partnerships or local Community Planning. Find an opportunity to discuss how you intend to measure success with your key partners to ensure their perspectives can be taken on board:
 - those who are involved in using or receiving the intervention
 - other agencies or services who may be partners in supporting the same target group or local community
 - planners and decision makers.

They are more likely to pay attention to the results of your evaluation if you have checked out in advance with them what they would regard as success.

Risk and protective factors

The strength of evidence on risk and protective factors varies (see *Guide 1: Evidence-based practice*); however, they provide an important starting point for developing indicators which can be used to assess the impact of a mental health improvement intervention on a specific problem.

7.1 Risk factors

Risk factors tend to be associated with negative mental health outcomes. Generally, the prevention or reduction of the impact of risk factors can be summarised as taking action to achieve the following:

- reduce the incidence or the impact of negative life events and experiences for individuals e.g. supporting people subject to abuse, people experiencing bereavement, people at points of transition such as retirement or relationship breakdown
- decrease social isolation and exclusion, e.g. tackling discrimination
- reduce the impact of deprivation and structural inequalities in health, e.g. through community regeneration strategies.

An understanding of risk factors can be used to design indicators which would provide an assessment of the impact of an intervention.

EXAMPLE Using risk factors to assess impact

Action to address bullying could be expected to lead in time to a reduction in the number of young people presenting with conduct disorders or with depression.

Action to address discrimination and victimisation of young people from lesbian, gay, bisexual and transsexual (LGBT) communities could be expected to reduce experiences of bullying and result in improved levels of confidence and self-esteem.

The table below gives some examples of risk factors and the problems with which evidence suggests they are associated.

Table 7.1 Examples of risk factors

These risk factors	are associated with, or predictive of	Source
Bullying Being bullied	Conduct disorders Crime Alcohol abuse Depression, anxiety and suicidal behaviour	Salmon <i>et al</i> , 1998; Olweus, 1993
Victimisation and discrimination of LGBT people	Social isolation Low self-esteem Poor psychological health Eating disorders Self-harming	Coia <i>et al</i> , 2002; John and Patrick, 1999; Morrison and MacKay, 2000
Experience of racism and discrimination	Fear and isolation Low self-esteem Stress and anger Poor mental health	Chahal and Julienne, 1999; Chakraborty and McKenzie, 2002; Tidyman, 2004
Poor-quality relationships in home, such as lack of care, support and warmth; harsh discipline Experience of abusive domestic relationships Childhood experience of sexual abuse	Poor mental health in adulthood Increased prevalence of mental health problems such as depression Academic under-performance Behavioural problems Self-harm Substance misuse Anxiety, depression and phobias Poor mental health in adulthood	Stewart-Brown and Shaw, 2004 Hegarty <i>et al</i> , 2004 Dohrenwend, 1998; Rutter and Smith, 1995; Nelson, 2001
Being unemployed or economically inactive Poor material circumstances Leaving school before age of 16 Two or more physical disorders Two or more adverse life events	Increased prevalence of common mental health disorders such as anxiety and depression	Melzer <i>et al</i> , 2004; Rogers and Pilgrim, 2003

Table 7.1 *continued*

These risk factors	are associated with, or predictive of	Source
Poor mental health in childhood	Educational achievement Criminal behaviour Employment status Health behaviours	Heijmens Visser <i>et al</i> , 2000; Scott <i>et al</i> , 2001
For individuals, low levels of neighbourhood attachment	Higher risk of common mental disorders; poorer self-reported health	Pevalin, 2004
Neighbourhoods with less participation, less integration, lower levels of trust and tolerance of others	Higher prevalence of poorer self-reported health Much of the association may be explained by material deprivation	Stafford <i>et al</i> , 2004
Lack of job control	Alcohol dependence, poor mental health and poor health function	Stansfeld <i>et al</i> , 2000; Cheng <i>et al</i> , 2000; Niedhammer <i>et al</i> , 1998

EXAMPLE Interventions designed to address known risk factors

Case study 2 (see *Mental Health Improvement: Evidence and Practice case studies* NHS Health Scotland, 2004) is a Healthy Living Initiative which aims to reduce health inequalities and one of its objectives is to improve the financial circumstances of disadvantaged groups. The initiative combines work to address poverty, for example by increasing benefit uptake, with interventions to improve the life chances and choices of those experiencing economic disadvantage. Evaluation of the initiative monitored income gained as well as changes in confidence and access to relevant sources of support among beneficiaries.

Case study 14 (see *Mental Health Improvement: Evidence and Practice case studies* NHS Health Scotland, 2004) works with children who have experienced mental health problems as a result of abusive experiences. The project aims to help children develop coping strategies and to promote resilience and self-esteem, through a range of structured group interventions and more informal activities. Evaluation investigated changes in behaviour and interaction with peers, levels of confidence and participation.



7.2 Protective factors

Protective factors are associated with positive mental health outcomes, although again it must be stressed that the strength of association and level of evidence for causation varies. Generally, action focused on protective factors for mental health and well-being can be summarised as:

- strengthening psycho-social, life and coping skills of individuals, e.g. increasing a sense of self-esteem and autonomy
- increasing social support as a buffer against adverse life events, e.g. self-help groups, someone to talk to
- increasing access to resources and services which protect mental well-being, e.g. increasing benefit uptake and increasing opportunities for physical, creative and learning activities.

Table 7.2 Examples of protective factors

These protective factors...	..are known to have the	Source
Warm affectionate parenting and strong family attachment	A buffer against adversity and a mediator of damage	Fonagy and Higgitt, 2000;
Social support from at least one warm, caring adult	Protective in relation to a wide range of adversities	Wolkow and Ferguson, 2001
Individual social support	Protective of physical and mental health Predictive of lower levels of morbidity and mortality across a very wide range of measures	Berkman <i>et al</i> , 2000; Hemingway and Marmot, 1999; Dalgard and Lund-Haheim, 1998
Higher levels of neighbourhood attachment	Significantly associated with lower chances of reporting common mental disorders	Pevalin, 2004
Physical activity	Associated with: improved mental health; a reduction in symptoms of mild to moderate anxiety and depression	Fox, 2000; Mutrie, 2000
Increased job control	Reduced sickness absence in the workplace	Stansfeld <i>et al</i> , 2000; Cheng <i>et al</i> , 2000; Niedhammer, 1998

EXAMPLE Interventions designed to address known protective factors

Case study 3 (see *Mental Health Improvement: Evidence and Practice case studies* NHS Health Scotland, 2004) is a walking group that aims to promote well-being through physical activity, targeting those who are less likely to be active and who may be socially isolated, within a deprived area.

Case study 5 (see *Mental Health Improvement: Evidence and Practice case studies* NHS Health Scotland, 2004) aims to support families with young children to promote the emotional, cognitive, physical and social development of the child. It includes a wide range of interventions which intervene directly to support positive parenting behaviours.



7.3 Relating indicators to risk and protective factors

In selecting indicators, it is important to link the problem, risk and protective factors, the intervention and the desired outcome, as illustrated in the following example:

EXAMPLE Matching interventions and outcomes to an understanding of the problem

Problem. Elderly residents on a housing estate are isolated; local primary care teams are concerned about high levels of anxiety and depression among people over 70.

Risk factor. Isolation.

Protective factor. Social support.

Intervention. Volunteer transport scheme; luncheon club.

Rationale. To promote social support by addressing barriers which prevent older people socialising. Social support is a known protective factor for depression.

Impact. Numbers of elderly people successfully using the scheme and positively evaluating the luncheon club.

Intermediate outcome. Reduction in the number of elderly residents who have not left the house in the past month; increase in number of elderly residents who say they have friends in the neighbourhood.

Long-term outcome. Reduction in prevalence of depression among elderly people.

Bringing it all together

The table below, taken from Edwards *et al* (2003) provides a simple framework for measuring different elements of a project. It provides some examples of methods that can be used to capture the benefits of a project.

Table 8.1 Framework for measuring different elements of a project

Changes in...	Can be assessed by:
Health awareness	<ul style="list-style-type: none"> • Monitoring changes in demand for health-related services and information. • Analysis of media coverage. • Questionnaires, interviews, discussion, observation involving individuals and groups.
Knowledge or attitude	<ul style="list-style-type: none"> • Observation of behaviour – does this show a change in knowledge and/or attitude? • Question-and-answer based interviews and discussion. • Questionnaires.
Behaviour	<ul style="list-style-type: none"> • Observation. • Recording behaviour, e.g. diaries kept by project participants.
Policy	<ul style="list-style-type: none"> • Policy statements and implementation, such as the introduction of family-friendly policy and working practices by local organisations. • Legislative change. • Changes in the availability of health promoting products, facilities and services such as low-cost recreational facilities or more counselling provision. • Changes in procedures or organisation, such as more time being given to patient education.
Mental health status	<p>Many ‘mental health’ questionnaires are in fact designed to detect mental illness. However, tools are available which aim to measure mental health:</p> <ul style="list-style-type: none"> • Sense of Coherence Scale (Antonovsky, 1987) • Psychological Well-being Scale (Ryff and Keyes, 1995) • Affectometer 2 (Kammann and Flett, 1983) • Affect Balance Scale (Bradburn, 1969) <p>For further information on these questionnaires, see Stewart-Brown (2002).</p>

Adapted from Ewles and Simnett (1999)

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Appendix A Glossary

Effectiveness Whether resources are used to good effect.

Objective measures Measures of observable behaviour, signs or symptoms.

Public health Interventions that are directed towards improvements in the health of the population, rather than towards the treatment of diseases/illnesses of individual patients.

Qualitative research A systematic, subjective approach used to describe life's experiences and give them meaning, conducted to describe and promote understanding of those experiences.

Quality of life A way of assessing levels of well-being that includes economic, social and environmental factors, for example employment, housing, quality of the natural environment, cultural and leisure facilities, noise, pollution and safety.

Quantitative research Systematic collection and analysis of numerical data to describe patterns and trends.

Social capital The ties and bonds that hold a community together, give its members a sense of belonging and identity and enable them to pursue goals of mutual benefit.

Subjective measures Measures of views, perceptions and experiences

Appendix B Other useful resources

NHS Health Scotland's Research and Evaluation Toolbox provides a simple glossary to key research and evaluation terms

www.hebs.com/retoolbox/index.cfm

Scottish Executive: Closing the Opportunity Gap

<http://www.scotland.gov.uk/Topics/People/Social-Inclusion/17415/milestones>

Scottish Executive Effective Interventions Unit

Evaluation Guide 1: Definitions and Common Concepts

http://www.drugmisuse.isdscotland.org/goodpractice/EIU_evaluationg1.pdf

Evaluation Guide 2: Planning an Evaluation

http://www.drugmisuse.isdscotland.org/goodpractice/EIU_evaluationg2.pdf

Scottish Executive: Mainstreaming Equality

<http://www.scotland.gov.uk/mainstreaming/?pageid=403>

Scottish Evaluation Network

Information from http://www.evaluation.org.uk/Events/regional_networks.htm

Scottish Household Survey website

<http://www.scotland.gov.uk/about/SR/CRU-SocInc/00016002/SHShome.aspx>

Scottish Neighbourhood Statistics website

<http://neighbourhood.statistics.gov.uk>

