Model for Dietetic Outcomes
Appendix B ...................................................................................................................................................................................... 24
Terminology ...................................................................................................................................................................................... 24
  1. Outcomes .................................................................................................................................................................................. 24
  2. Measures .................................................................................................................................................................................... 24
  3. Quality ...................................................................................................................................................................................... 25
References ..................................................................................................................................................................................... 27
Additional reading ............................................................................................................................................................................. 27
Executive Summary

This paper provides an introduction to, and a model for, the development of dietetic outcome measures in care settings. The paper was commissioned by the BDA Professional Practice Board, and its development was taken forward by a task and finish group of dietitians in clinical practice. We owe much to Tina Morley whose original idea provided the basis for the model.

The model is intended to be a dynamic one and it is envisioned that as dietitians use it and give us feedback, it will be amended and refined to reflect this. We ask that dietitians use the model in their practice and share these examples with us to build the model with the ultimate aim of identifying and validating a core set of dietetic outcome measures. To that end, an on-line feedback survey is included at the end of the document.

1.0 Introduction

This paper provides a starting point for developing dietetic outcome measures and introduces a model for determining and measuring dietetic outcomes, which is designed for use in care settings.

Improving the quality of care is a long-term and ongoing priority for each of the UK Countries. They use different approaches, but there is commonality around three key themes of patient experience, safety and effectiveness. The current strategy for the NHS in England is to create an NHS which is more responsive to patients, and achieves better outcomes, with increased autonomy and clear accountability at every level\(^1\). At a local level, limited resources and increased demands for accountability have meant that quality measurement is now a major concern for providers and commissioners of care. Commissioners need to clarify with providers what they mean by quality and what they want providers to achieve.

The core principle that the model is based on is about being explicit about what the dietetic intervention intends to achieve and measuring its effectiveness i.e. what actually happens to the nutritional status of the patient as a direct result of the input of the dietitian (the outcome), and for dietitians to own that outcome. A good outcome can be defined as one where the agreed care plan for optimizing the recipient’s nutritional wellbeing has been achieved.

A section on terminology has been included to provide clarification, and to ensure understanding of the terms used for describing quality.

We need dietitians to try out this innovative approach and evaluate it with the aim of developing a core set of validated key dietetic outcome measures for the profession.
2.0 What is an Outcome?

A health outcome can be described as:

‘Change in the health of an individual, group of people or a population which is attributable to an intervention, or series of interventions’¹

Key to dietetic practice is the provision of safe, effective and good quality care or interventions. Dietitians need to be able to identify and predict what the desired outcome of their intervention will be, and to what extent this has been achieved from the viewpoint of both the dietitian and the recipient. The perspectives are quite different.

- **Clinicians** prioritise what is important to patients and their informal carers, whilst maintaining a critical professional view.
- **Patient** satisfaction is achieved when the patient/client’s view of the quality of care and services that they receive in healthcare setting has been positive, satisfying, and meets their expectations. The concept of satisfaction is multi-factorial and measurement is challenging.

In the care setting, patient satisfaction in itself does not demonstrate a clinical or therapeutic change and by itself cannot measure the effectiveness of an intervention.

2.1 What is an Outcome Measure?

The fundamental principles of a health outcome measure are validity, reliability and responsiveness measured over a specified time period. PROMs (patient reported outcome measures) are measures of a patient’s health status or health-related quality of life and are discussed further in section 2.2.

‘...Health outcome measures can have multiple purposes, are associated with evolving and sometimes confusing terminology....’²

They can be used routinely in face to face contacts by the individual dietitian to answer the question:

*When I see a patient/client am I making a difference?*

In the UK, Allied Health Professionals use a variety of therapy tools, models and systems depending upon their service type and client groups. Dietitians in the UK have tried a variety of models including:

- **Therapy Outcome Measures (TOM’s)**³ based on rating the dimensions of impairment, disability, handicap and well-being.
- **The Care Aims Approach**⁴ - a philosophy of care designed to aid practitioners in demonstrating evidence based practice by encouraging systematic reflection on the care they provide.
None of the therapy models have proved generally applicable, amenable, or transferable, to the work of dietitians as the emphasis needs to be on nutrition and nutritional intake. The identification and development of outcome measures for dietetics has been an ongoing challenge for the profession, and currently there are no UK validated, sensitive and reliable, dietetic outcome measures available for routine use.

In addition, for the NHS, there is a strong political imperative. The need for the profession to develop and use consistent measures of dietetic outcome has never been greater. In a time of increasing financial pressure, dietetic managers are required to demonstrate that they deliver a safe and effective (quality) service in a timely manner with the optimum use of resources. In a competitive environment this is essential information for the dietetic manager for benchmarking their service, to influence commissioning cycles and in the shaping of future service provision.

‘Does the end justify the means?’

Together with patient experience measures, routine outcome measures can be used to demonstrate the quality of a service.

### 2.2 Patient Experience

**Patient Reported Experience Measures (PREMs)** are used to understand the patients’ view of their experience of receiving care. These reflect the process of care delivery, rather than the ultimate outcome.

**Patient Reported Outcome Measures (PROMs)** are measures of a patient’s health status or health-related quality of life. They are typically short questionnaires, completed by the patient, which measure their health status or health related quality of life at specified points including before, during and after the episode of care. The health status information collected from patients by way of PROMs questionnaires before and after an intervention provides an indication of the outcomes or quality of care delivered.

PROMs have been used for several years, there are many of them, but their quality, in terms of their reliability and validity, varies considerably. For the information captured to be meaningful and relevant, patients must be involved in their initial design; this will help you to understand which of the things you are measuring are important to the patient.

The wording of a validated PROM should not be changed, because even relatively small alterations can make a considerable difference to the meaning of the questions and consequently to the measurement properties of a questionnaire.

The routine use of patient-reported outcome measures (PROMs) was introduced into the National Health Service (NHS) in 2009 for four elective surgical procedures: hip replacements, knee replacements, hernia and varicose veins. The questionnaires that patients are asked to complete shortly before and some months after surgery comprise of:
• A disease-specific instrument e.g. the Oxford Knee Score
• A validated generic instrument which asks general questions about a patients’ health e.g. EQ-5D or SF-36
• A series of additional questions about the patient’s health and symptoms.

Detailed discussion of the application of scoring systems to provide an overall assessment of a patient’s health, and to make comparisons (for example, between before and after treatment, or between sub-groups of patients), are beyond the scope of this document, but can be found in the literature.

Further Reading

*Getting the most out of proms Putting health outcomes at the heart of NHS decision-making The King’s Fund 2010* [http://www.kingsfund.org.uk/publications/proms.html](http://www.kingsfund.org.uk/publications/proms.html) (accessed 11.4.11)

*Patient Reported Outcomes Measurement Group. Resources and links* [http://phi.uhce.ox.ac.uk/home.php](http://phi.uhce.ox.ac.uk/home.php) (accessed 11.4.11)

*The Role, use & impact of PROMs on Nursing in the English NHS. RCN Policy Unit Policy Briefing 1/2011*. The paper discusses PROMs within the context of the 2010 NHS reforms and includes a sample EQ-5D health questionnaire [http://www.rcn.org.uk/__data/assets/pdf_file/0009/355248/PROMs_Briefing_-_Revision_2_2.pdf](http://www.rcn.org.uk/__data/assets/pdf_file/0009/355248/PROMs_Briefing_-_Revision_2_2.pdf) (accessed 11.4.11)

*‘Better Together’ is Scotland’s Patient Experience Programme is an improvement programme designed to gather feedback from patients and staff in order to improve NHS services in Scotland gathering the experience of people who have been in hospital; people using GP services and people living with long-term conditions.* [http://www.bettertogetherscotland.com/bettertogetherscotland/26.html](http://www.bettertogetherscotland.com/bettertogetherscotland/26.html) (accessed 11.4.11)


NICE will be developing generic guidance and quality standards on patient experience in the NHS (January 2011) in addition to their development program of condition specific Quality Standards http://www.nice.org.uk/aboutnice/qualitystandards/qualitystandards.jsp (accessed 11.4.11)

2.3 Getting started with outcomes

Outcome measures are a measure of what has been achieved. Outcomes measurement must always take into account context as factors other than the intervention itself may be very important in determining outcomes.5

Before deciding what to measure, a clear decision needs to be made on what the desired nutritional outcome (or goal) is for, and wherever this is possible, in conjunction with, the individual.

Healthcare itself is complex, and a single outcome measure will not be sensitive enough to capture all aspects of an individual dietetic intervention. In addition, health professionals employ clinical reasoning in their practice, and it is unrealistic to expect to be able to measure every aspect of this.

In the NHS Dietitians generally do not work in isolation, more often they work as members of a multi-disciplinary team, working across traditional boundaries and settings. Isolating the particular, specific and unique contribution of the dietitian to the overall patient outcome is sometimes not straightforward.

Measuring the outcome of a single consultation can be challenging, for example a first consultation where test results may not be available. It may be that the individual has received all the information they need at that point in time, or alternatively that they choose not to see the dietitian again because they feel their needs have not been met.

NHS Quality Improvement Scotland (2005) stated that:

“This is a complex area and many confounding factors exist that make it difficult to isolate and clearly identify the impact made ........ modern healthcare should now be firmly multi-professional in nature ....but within this there is a need for each profession to be clear about its responsibility and accountability for its own practice”6

This dilemma is not unique to dietetics. All professions need to be able to describe what they do and the impact for the individual. This paper provides a model for measuring specific aspects of this.
The approach requires some key questions to be answered:

- What aspects of the patient’s nutritional status can the dietitian influence?
- Conversely are there any aspects that the dietitian will be unable to influence?
- What does the patient/client wish to achieve?
- What is the goal of the dietetic intervention?
- To what extent has the goal been met?
- What is the overall impact on the nutritional status of the patient/client?
- What easily and routinely available measures can be used to demonstrate this (dietetic outcome measures)?

This can be a reflection of the overall care delivered by the multi-disciplinary team including the dietitians input, but also can help identify aspects where the dietitian has a more direct influence, e.g. the delivery of structured diabetes education programmes.
3.0 Outcomes and the BDA Nutrition and Dietetic Care Model

The BDA Nutrition and Dietetic Care Model defines the actions, critical thinking and specialist skills that are the components of a dietetic intervention. 


The outcome of a dietetic intervention should be that the patient/clients agreed care plan (goal) is met in order to achieve optimum nutritional wellbeing. Measuring outcomes is a component of the ‘monitoring and evaluation of intervention’ section of the Nutrition and Dietetic Care Model above.

The Model applies equally to:

- an intervention with an individual
- an education or therapeutic group
- providing nutrition and dietetic services for a defined population
• Or public health campaigns with a community.

In all situations, the process is the same; assessing the need, describing this need, planning to meet this need, carrying out the planned intervention and concluding the cycle with monitoring and evaluation. The nutrition and dietetic intervention is a set of actions and activities designed with the intent of changing nutrition related behaviours, risk factors, environmental factors or aspect of health or nutritional status of the individual, group or community.

Measuring the outcome of the intervention is the final stage in the model and is based upon the following principles, that the patient/client:

• Understands their diet.

• Is empowered to change.

• Is following the prescribed diet.

The outcomes are directly linked to the diagnosis and care plan and will include, but are not restricted to:

• Direct nutrition outcomes (knowledge gained, attitude/behaviour change, food or nutrient intake changes, improved nutritional status, physical activity and function e.g. breastfeeding).

• Patient/client-centred outcomes e.g. PROMs (quality of life, satisfaction, self-efficacy, self-management, functional ability).

• Clinical and health status outcomes (laboratory values, weight, blood pressure, risk factor profile changes, signs and symptoms, clinical status, infections, complications).

• Health care utilisation and cost outcomes (medication changes, special procedures, planned/unplanned clinic visits, preventable hospitalisations, length of hospitalisation, facilitation of early discharge from hospital, prevent or delay nursing home admission).
4.0 BDA Model for Measuring Dietetic Outcomes

Decide what the problem is (Nutritional & Dietetic Model-the nutritional diagnosis)

↓

Can you do anything about it? (Nutritional & Dietetic Model-formulate & plan nutritional diagnosis)

↓

What do you want to achieve? -your overall outcome

↓

Set goals for achieving the overall outcome (the goals have to be met to achieve the overall outcome)

↓

Choose what measures you are going to use to show that your goal(s) have been met (dietetic outcome measures)

↓

Looking at the results of the outcome measures describe to what extent the outcome been achieved (e.g. descriptive such as fully, partially, not achieved or a numerical score)

↓

These results can be aggregated to give an overall picture of a service

Steps:

1. Define the overall outcome of the intervention (the **DIETETIC OUTCOME**)

Example of an outcome for an individual patient:

That your advice leads to a reduction in cardiovascular risk factors for each individual referred to your Monday cardiovascular outpatient clinic

**Example of a service outcome:**

That your advice leads to a reduction in cardiovascular risk factors in all individuals referred to your cardiovascular service

2. Select your goals (there may be more than one) –include goal setting for short periods of time and intermediate care 2-6 weeks) -from the suggested domain list below.
You may not be able to set a goal; If you can’t state your purpose, this model can give you the evidence base to decline a referral

**Domain List**

a) Symptom change Patient Reported Measures  
b) Physical  
c) Biochemical  
d) Psychological  
e) Behaviour Change  
f) Patient Focused

The suggested domains (a-d above), and their relationship with each other, are depicted in the outcome model diagram below as a series of overlapping circles and are discussed in more detail below.

3. Choose the dietetic outcome measure(s) that can demonstrate that you have achieved your agreed goal

<table>
<thead>
<tr>
<th>Goal</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Goal - Restoration of appetite</td>
<td>Symptom (a)</td>
</tr>
<tr>
<td>• Goal - Changes in lipid profile</td>
<td>Biochemical (b)</td>
</tr>
<tr>
<td>• Goal - Weight reduction</td>
<td>Physical (c)</td>
</tr>
<tr>
<td>• Goal - Increased enjoyment of physical activity levels</td>
<td>Psychological (d)</td>
</tr>
</tbody>
</table>

4. Each domain has an associated suite of suggested dietetic outcome measures

5. Choose a single *outcome measure* for each of the *goals* selected. These should be generic measurements that are in routine use, e.g.

- Reduction in LDL levels or total cholesterol (blood test)  
- % Weight loss (weighing)  
- Enjoying regular physical activity (discuss with patient, PROMs questionnaire).
6. Looking at the results of these outcome measurements on a 3-point scale do they show that the agreed outcome has been:

ACHIEVED → PARTIALLY ACHIEVED → NOT ACHIEVED

7. Now considering the context within which you work, how do the outcome(s) of your dietetic intervention map across to the outcomes, targets and priorities for:

The Overall Dietetic Service

The Multi-disciplinary Team

The Organisation
5.0 The Dietetic Outcomes Model

The domains above are suggestions only, it may be that not all are used and you pick one or two only. They are not exclusive and can be replaced with any other combinations, but the core is always the patient experience. The next step is for Dietitians to use and work with the dietetic outcome measures, to pilot, audit, adapt and refine them to see what works best for them in a particular situation.
situation. The long term aim is to produce a core set of validated dietetic outcome scores that can be used across the profession.

The measures selected may be amended according to the work setting and client group i.e. the above are suitable for a clinical setting. Well chosen outcome measures enable monitoring and evaluation of progress towards the desired outcome. Interpretation of the changes may require additional explanation by the dietitian e.g. increase in BMI due to increased muscle mass or identification of factors that have hampered progress.

Effective measurement is the means by which clinicians can know that they are doing what they aim to do. It helps to support change in practice by determining ‘what really makes a difference’

6.0 Dietetic Outcome Measures

The measures selected must be SMAART i.e.

- Specific
- Measurable (must be readily observable and measurable).
- Appropriate
- Acceptable to clinician and patient
- Reliable-giving consistent measures across organisations and time
- Targeted-it is clear what the population, conditions, interventions it is focused on (linked to the nutritional intervention)

6.1 Symptom Change Domain

Many validated outcome measurements for symptom change are already in routine clinical use and these should be identified and used wherever possible. i.e.

- Irritable bowel-change in bowel habits
- Skin rash-appearance, distribution, symmetry
- Urticaria
- Hypoglycaemic episodes
- Hyperactivity.
- Vomiting-incidence
- SOB on activity
- Hydration status
- Fatigue
- Bloating
• Lack/loss of appetite
• Pressure sores e.g. Braden, Waterlow scales
• Wound healing (wound score 1-5) Pain score e.g. visual, numeric
• Change in medication

6.2 Physical (Anthropometry/Body) Domain

Outcome measurements which are compared to reference standards that are associated with the Physical (Anthropometry/Body) domain include:

• Height/length (cm).
• Urticaria score
• % Weight change (Kg).
• Weight for age (percentile rank).
• BMI (Kg/M²).
• Triceps skin fold (percentile rank).
• Waist circumference (cm).
• Waist/hip ratio.
• Mid arm circumference (cm).
• Unintentional weight loss of >10% in 6 months.
• Physical summary score (using SF-36)
• Lung function e.g. (FEV1/FVC)

6.3 Biochemical Domain

Outcome measurements associated with the biochemical indicator are evidence based, validated and routinely available. The target ranges may be identified in national or local guidance and pathways and include:

• Tchol (mmol/l)
• Glucose, fasting.
• HgbA1c
• Bilirubin, total.
• LDL:HDL
• Haemoglobin
• Albumin
• Urea
• INR ratio

6.4 Psychological Domain

Many Psychological models are available, some used by dietitians, which include outcome measurements. More work is needed by dietitians to improve the existing validated outcome measures for this indicator.

• Mental Health - Feeling more able to cope e.g. mini mental health score, GHQ-12 or K-10 scales, Patient Health Questionnaire (PHQ-9) Quick Depression scale
• Life satisfaction e.g. Global Quality of Life Assessment, Satisfaction with Life Scale (SWLS)
• Quality of life e.g. WHO-QOL (100 & BREF), CASP-19 for older people
• A generic health-utility measure e.g. EQ-5D or SF-6D

EQ-5D [http://www.euroqol.org/] (accessed 11.4.11) is a standardised instrument for use as a measure of health outcome The EQ-5D consists of 243 distinct health states across five dimensions (mobility, self-care, usual activities, pain/discomfort and anxiety/depression), each with three levels (no problem, moderate problem or severe problem)

The EQ-5D is often administered with a Visual Analogue Scale (VAS) or ‘feeling thermometer’ requiring a direction valuation of the individual’s health on a scale from worst health imaginable to best imaginable

SF-6D [http://www.shef.ac.uk/scharr/sections/heds/mvh/sf-6d] (accessed 11.4.11). The SF-6D is a classification for describing health derived from a selection of SF-36 items. The SF-6D is composed of six multi-level dimensions. Any patient who completes the SF-36 or the SF-12 can be uniquely classified according to the SF-6D

QWB An interviewer-administered general health related quality of life questionnaire measuring symptoms, mobility, physical activity and social activity

HUI2 and HUI3 The Health Utilities Index (HUI) has two versions, HUI2 and HUI3 and defines 24,000 health states using seven attributes (sensation, mobility, emotion, cognition, self-care, pain and fertility) with three to five levels per attribute

• Body image-improved
• Binge eating behavior
• Restrictive eating

6.5 Behaviour change Domain

Beliefs and attitudes, motivation, behavior and adherence

• Restrictive eating
• Increased consumption of fruit and vegetables e.g. ‘5 a day’
• Healthier eating goals achieved
• Increased fluid consumption
• Increased confidence in cooking skills
• Increased consumption of calcium or iron rich foods rich foods
• Initiation and continuation of breastfeeding
• Physical activity
• More effective use of medication

6.6 Patient Focused Measures Domain
• Whatever the individual has identified as of importance to them (as an outcome of the intervention)
• Patient Reported Outcomes (PROMs)
• Validated PROMs s measures
• Negotiated plan of care
• Empowerment to follow the dietary prescription
• Information/advice/explanation
• Acceptability
• Medication changes /better understanding of their medication
• Life satisfaction measures e.g. Global Quality of Life Assessment, Satisfaction with Life Scale
• Quality of life measures e.g. WHO-QOL (100 & BREF), CASP-19 for older people
• A generic health Utility measure e.g. EQ-5D or SF-6D

OR they may be other issues of concern to them e.g.
• Better quality of life
• Returning to work
• Individual questions from the NHS National Patient Survey
• Overall experience
• Length of stay
7.0 Measuring, how, when and where

Validated measures should be used where these are available. The outcome of a dietetic intervention can be measured directly, for example the outcome of a weight reduction programme is a reduction in BMI that can be directly measured and expressed as a single figure e.g. a percentage - a physical measure. This may not always be possible, in which case, consideration needs to be given to using an indirect (proxy) measure, e.g. a reduction of cardiovascular risk factors using biochemical measures.

Collecting information at the end of the intervention/episode of care may be most appropriate. However, the information required may also need be collected at different points, e.g. at the beginning, at certain points or throughout, and/or if the care plan changes. Investigate and make the optimal use of existing and available data sources.

Data collection needs careful planning as once the intervention is underway, or completed, it may be too late to collect the information needed and it would then have to be collected retrospectively. This may not be possible if the information has not been recorded.

'We can only be sure to improve what we can actually measure' Darzi 2008

It is essential to be able to trust the quality of the information collected as reliable data quality is the first step in developing relevant and meaningful outcome measures. The source of the information can be a major issue, and as far as possible it’s best to use what is already collected/ readily available. Where information is not available routinely new systems for collection will need to be set up.

Information must be captured and recorded in a consistent, routine and systematic way. This won’t happen if the team doesn’t understand the purpose, it is too time consuming and/or they don’t see any improvement as a result.

Outcome measurement, as discussed previously, is complex and multi-faceted and direct measurement may therefore not be possible. When this is the case proxy indicators (with their associated measurement scales) may have to be used.
### Example

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Nutritional diagnosis</th>
<th>Desired outcome</th>
</tr>
</thead>
</table>
| - Weight loss  
- BMI<18.5  
- Aspiration  
- Haemoglobin 9g/l  
- Mild depression and confusion | Poor nutritional and hydration status secondary to swallowing difficulty, loss of appetite and mild depression as evidenced by low body weight, intake of energy and protein 50% of assessed needs, confusion, reduced intake of micronutrients and haemoglobin of 9g/l | To achieve the estimated fluid and nutritional intake by providing food and fluids of the necessary texture which will lead to improved mood, increased haemoglobin, increased weight |

<table>
<thead>
<tr>
<th>Dietetic domain</th>
<th>Change in Symptoms</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietetic domain</td>
<td>Biochemical</td>
<td>Outcome Measure</td>
</tr>
<tr>
<td>Dietetic domain</td>
<td>Physical/ Body / Anthropometry</td>
<td>Outcome Measure</td>
</tr>
<tr>
<td>Dietetic domain</td>
<td>Psychological</td>
<td>Outcome Measure</td>
</tr>
<tr>
<td>Dietetic Domain</td>
<td>Behaviour change</td>
<td>Outcome measure</td>
</tr>
<tr>
<td>Patient reported domain</td>
<td>Patient focus Patient perspective and outcome</td>
<td>Outcome Measure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dietetic domain</th>
<th>Dietetic domain</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical</td>
<td>Change in Symptoms</td>
<td>Patient reported appetite</td>
</tr>
</tbody>
</table>
| Physical/ Body /Anthropometry | Biochemical | (i) Haemoglobin  
(ii) Ferritin |
| Psychological   | Biochemical     | (i) Weight  
(ii) MUAC |
| Behaviour change| Biochemical     | Hospital anxiety and depression scale |
| Patient focus   | Biochemical     | Achieving estimated nutritional requirement |

<table>
<thead>
<tr>
<th>Patient reported domain</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyed and were able to eat their food</td>
<td>Felt less depressed</td>
</tr>
</tbody>
</table>
The results from the outcome measurements taken together with the patient perspective guide, the intervention which in the example above should focus on:

- Assessing intake
- The type and quantity of food (and supplements if necessary)
- Working with catering to provide a modified texture diet
- Working with the Multi-disciplinary Team e.g. SLT

The impact of the dietetic intervention can be measured using the appropriate outcome measure(s) and the associated outcome measurements.

An improvement in outcome measurements will demonstrate change by measuring achievement of, or progress towards, achievement of the desired outcome.

Thank you for reading this document

We now need your help to populate the document with examples that show the diversity of dietetic practice.

To help us do this please could you:

- Discuss the model
- Try the model out and share examples of how you have used the model
- Let us know what you think of the model and any suggestions for any improvements.

Please return your comments and examples either via the attached Survey Monkey feedback Survey [http://www.surveymonkey.com/s/KMVDN7F](http://www.surveymonkey.com/s/KMVDN7F) or directly to Ingrid Darnley i.darnley@bda.uk.com

With many thanks to Tina Morley who developed the initial model, the BDA Working Group 2009 and the London Managers Group

Ingrid Darnley, on behalf of the BDA Professional Practice Board, April 2011
Appendix A

UK Drivers for Outcome Measurement

England

- The Government White Paper Equity and Excellence: Liberating the NHS. DH (July 2010) The NHS faces an unprecedented challenge ahead to improve quality and reduce cost. The 2010 Government White Paper Equity and Excellence: Liberating the NHS states that ‘the primary purpose of the NHS is to deliver care that is safe, effective, and provides a better experience for all patients’


- The Care Quality Commission is the independent regulator of health and social care in England. Registration is followed by continuously monitoring compliance with 16 principle essential standards of quality and safety, including meeting nutritional need. http://www.cqc.org.uk/ (accessed 11.4.11)

Northern Ireland


- The Regulation and Quality Improvement Authority (RQIA). The independent body responsible for monitoring and inspecting the availability and quality of health and social care services in Northern Ireland, and encouraging improvements in the quality of those services http://www.rqia.org.uk/home/index.cfm (accessed 11.4.11)

Scotland

- The Healthcare Quality Strategy (2010) NHS Quality Improvement Scotland (NHSQIS). Aims to make measurable improvement in the aspects of quality of care that patients, their families and carers and those providing healthcare services see as really important. http://www.scotland.gov.uk/Publications/2010/05/10102307/0 (accessed 11.4.11)


Wales

Appendix B

Terminology

There are a myriad of terms used for describing measures of quality, and the lack of clear definitions, common understanding and consistent use has the potential to cause confusion.

1. Outcomes

Outcome

The result, or consequence of, an event.

PROMs

Patient reported outcome measures. PROMs employ short, self-completed questionnaires which measure the patient’s health status or health-related quality of life at a single point in time and can be repeated to derive a measure of the impact of health care interventions. A number of validated PROMs already exist, such as the well-known generic tools EQ5D and the longer SF-36. See Patient Reported Outcome Measures (PROMs) [http://phi.uhce.ox.ac.uk/home.php](http://phi.uhce.ox.ac.uk/home.php) (accessed 7.4.11)

2. Measures

Clinical Indicator

A quantitative measure which captures clinical care information.


Current indicators are high level population level, mortality, numbers measured

NHS QIS introduction to clinical governance 2006


e.g. Proportion of people who survive after admission to hospital with a heart attack

Clinical Metric

A measure of clinical quality

e.g. DH 2009 Clinical Metrics NHS information Centre Clinical metrics development programme in partnership with NHS SE Coast-3 areas; stroke, dementia and COPD

Indicator

A way of displaying a measure

e.g. a clinical dashboard or league table

Performance Indicator

A numerical measure showing to what extent an objective is being achieved

Key Performance Indicators (KPIs)

High level performance indicators

e.g. mortality, annual number of hospital acquired infections

Vital Signs

Key performance indicators for NHS Trusts
Quality Metric
A measure of quality

Nutritional Quality Indicators


3. Quality

CQUIN (England)
The CQUIN payment framework in England makes a proportion of providers’ income conditional on quality and innovation

Performance Management
A process for monitoring the commissioning and provision of services uses key statistics, targets and indicators

Quality of Care
Quality in healthcare is a multifaceted concept and is not amenable to a single performance measure or simple metric. In the past decade there has been a concerted international effort to improve measurement and reporting, and a growing consensus about the key domains of quality in healthcare and relevant measures and indicators to populate these domains.


Quality Accounts (England)
A national requirement that will see all providers publishing a formal report setting out their achievements and challenges in terms of quality at each year end. The report will have the same weight as statutory financial accounts. A minimum content for these will be determined nationally through legislation but providers are being encouraged to go beyond that in what they report.

Quality Observatories (England)
A requirement outlined in High Quality Care for All was for each Strategic Health Authority (SHA) to establish a formal Quality Observatory, building on existing analytical arrangements to enable local benchmarking, the development of metrics and to aid the identification of opportunities to help frontline staff innovate and improve
Quality and Outcomes Framework/QOF (England)
As part of the NHS contract GP practices are rewarded for achieving clinical and management quality targets, and for improving services for patients within a Quality and Outcomes Framework.
References


5) The impact of nursing on patient clinical outcomes-developing quality indicators to improve care (NHS QIS 2005)

6) BDA Nutrition and Dietetic Care Process

7) Chartered Society of Physiotherapy: Outcome Measures
   http://www.csp.org.uk/director/members/practice/clinicalresources/outcomemeasures.cfm


9) Development of metrics, Darzi 2008 High Quality Care for all, NHS Next Stage Review

10) Getting the measure of quality opportunities and challenges Veena S Raleigh and Catherine Foot 2010. The Kings Fund

Additional reading

Nurses’ reasoning process taking pressure ulcer prevention as an example- a think aloud study. International Journal of Nursing Studies, 44(7):1109-19 Funkesson KH et al 2007


Evaluating the quality of medical care. Donabedian A. Milbank Memorial Fund Quarterly 1966;44:166-206
   http://www.milbank.org/quarterly/830416donabedian.pdf (accessed 7.4.11)

Christine Baldwin  [www.peng.org.uk/presentations/ChristineBaldwin.ppt](http://www.peng.org.uk/presentations/ChristineBaldwin.ppt) (undated) (accessed 7.4.11)

Getting Your Measures Right in Dietetic Outcomes Research, summary notes and worksheets C.E. Adair, 1998
http://www.cfdr.ca/dloads/CFDR_research_resource_CAdair.pdf (accessed 7.4.11)

Leading Better Care. Report of the Senior Charge Nurse Review and Clinical Quality Indicators Project Section 3 Clinical Indicators Project The Scottish Government 2008

Griffiths et al 2008 State of the art metrics for nursing. National Nursing Research Unit
http://www.kcl.ac.uk/content/1/c6/04/32/19/Metricsfinalreport.pdf (accessed 7.4.11)

Measurement properties of the UK-English version of the Pediatric Quality of Life InventoryTM 4.0(PedsQLTM) generic core scales. Penny Upton et al
http://www.hqlo.com/content/3/1/22 (accessed 7.4.11)

Comparing the SF-12 and SF-36 health status questionnaire in patients with and without obesity Christina C Wee et al. Health and Quality of Life Outcomes 2008, 6:1

Eating Disorders Quality of Life Scale (EDQLS)
http://edqls.com/ (accessed 7.4.11)

Goal attainment (achievement) Scale (GAS) A mathematical technique for quantifying the achievement (or otherwise) in rehabilitation. Lynne Turner-Stokes and Heather Williams. Clinical Rehabilitation 2010; 24:66-73
