Health Behaviour Change Competency Framework:

Competences to deliver interventions to change lifestyle behaviours that affect health

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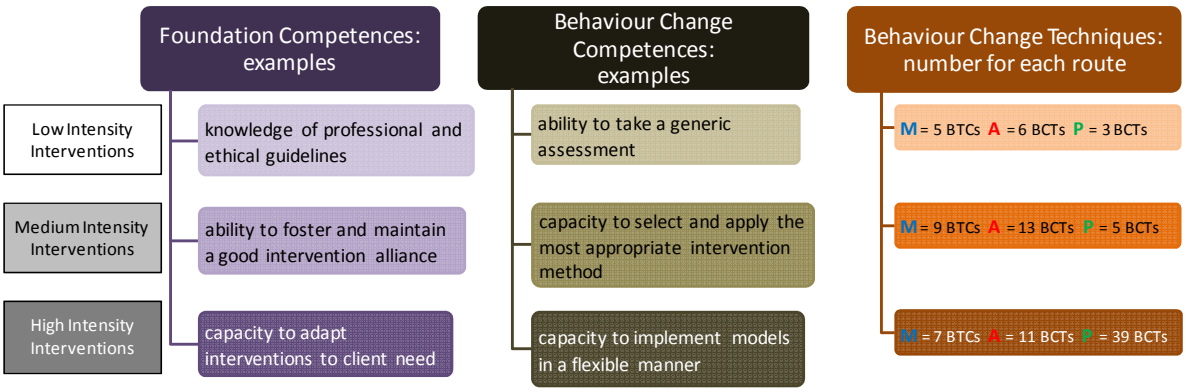
Diane Dixon and Marie Johnston



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Executive Summary

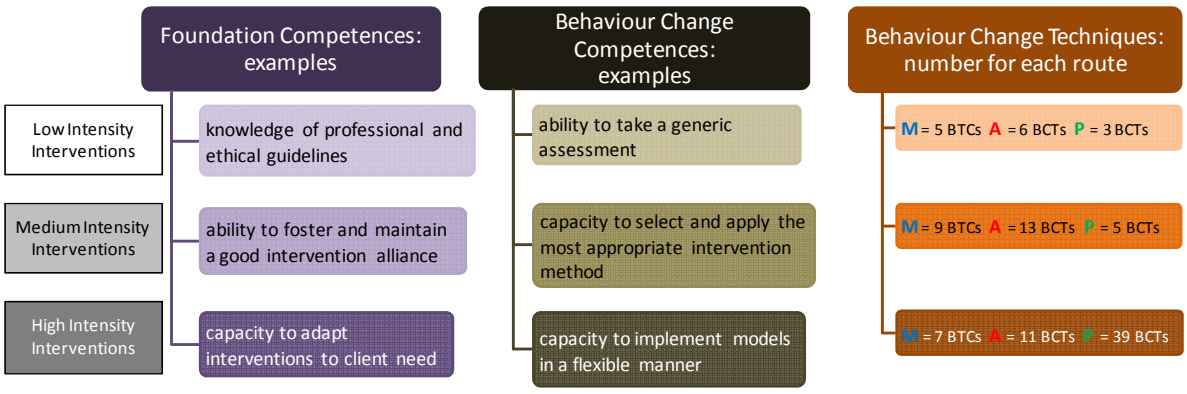
This report builds on earlier work described in the document *Generic Health Behaviour Change: a Comprehensive Competency Framework (GHBC-CF)*. The *GHBC-CF* described a comprehensive list of competences required by workers delivering health behaviour change across different health behaviours and to different clients and client groups. This report orders those competences into a hierarchical framework: **The Health Behaviour Change Competency Framework (HBCC)**, designed to support a tiered approach to interventions for health behaviour change.

The competency framework describes three competency domains:

- **Foundation Competences**
- **Behaviour Change Competences**
- **Behaviour Change Techniques**

Competences within the three domains are organised into three levels characterised by the intensity of the health behaviour change intervention being delivered:

1. **Low intensity interventions**
   Interventions delivered per protocol (i.e. following an agreed 'script') with restricted flexibility for change by the practitioner. Interventions will primarily be brief and will include opportunistic delivery. Clients may present with few or mild (but not moderate or severe) physical co-morbidities (i.e. few of those additional illnesses which often occur together).
2. **Medium intensity**
   Interventions for which there is a manual but which offer the practitioner some flexibility in delivery. Interventions might be of longer duration, either in the form of a longer single session or multiple sessions. Interventions could be delivered opportunistically or via self-referral or referral from other services. Clients may present with mild to moderate (but not severe) physical co-morbidities.
3. **High intensity**
   Flexible interventions delivered to match the assessed needs of the client. Typically interventions will be of longer duration on referral from other services. Clients may present with moderate or complex physical co-morbidities and may present with moderate mental health co-morbidities.



How has the HBCC been Used?

The competences described in the **Health Behaviour Change Competency Framework (HBCC)** have been mapped to the competences described in the Knowledge and Skills Framework (KSF). In addition, competences described in NHS Health Scotland's training manual for alcohol brief interventions (2009) have been mapped to the competences described in the HBCC.

Background

The shift from an acute to a chronic model of health puts human health behaviour at the centre of health policy and health care delivery. Health behaviours such as smoking, alcohol consumption, diet and physical activity make a significant contribution to the health status of individuals, communities and populations. Social patterning of these key health behaviours also contributes to health inequalities. The Scottish Government has expressed a commitment to improving the health and wellbeing of the population as a whole and to reducing Scotland's health inequalities in particular. Government recognises that changing the health behaviours of a population will require interventions delivered at individual, household, community and population levels[1]. These interventions will vary in scope, design and the behaviour change techniques employed, but all will benefit from the application of the science of behaviour change. This science employs theoretical models of behaviour and behaviour change that have been subjected to rigorous testing and extensive evaluation.

A model of health that recognises the central role of behaviour and behaviour change has significant implications for the training of health professionals and other workers responsible for delivering behaviour change. The **Health Behaviour Change Competency Framework (HBCC)** described here orders the competences described in the document *Generic Health Behaviour Change: A Comprehensive Competency Framework* into a hierarchy, to be used to develop training programs for health and other professionals. The competency hierarchy enables a cumulative approach to training in health behaviour change. A wide range of staff could receive the basic training required to deliver low intensity interventions, but this basic training can be built upon to enable staff to acquire the competences required to deliver more intensive interventions to clients with more complex needs.

The competency hierarchy has been developed to describe the competences required to deliver interventions of differing intensity. Three levels of intervention intensity are described: low, medium and high intensity interventions. The competences required to deliver each level of intervention have been mapped to the Knowledge and Skills Framework (KSF). This will enable the HBCC-training framework to be integrated into current competency frameworks used in the NHS.

The HBCC will be of use to:

- **Educators:** to develop training programmes to skill the workforce to deliver interventions at different levels of intensity.
- **Employers of frontline staff:** to describe competences required for advertised posts and to assess the competences of applicants.
- **Frontline workers:** to identify their current skill level within the HBCC training framework.
- **Policy workers:** to analyse current training provision.

[1] National Institute for Health and Clinical Excellence (2007). Public Health Guidance 6: Behaviour change at population, community and individual levels. Available at: www.nice.org.uk/PH6

Development of the HBCC Framework

The competences within the HBCC were identified by examining the published evidence base. Several sources of information were consulted[2].

- Relevant professional competency frameworks
- Systematic reviews of interventions for behaviour change
- Manuals for behaviour change interventions
- NHS and Health Scotland Skills for Health and competency frameworks for alcohol brief interventions

Competencies identified in the published evidence base were ordered into three competency domains: **foundation**, **behaviour change** and **behaviour change techniques**. Then, competencies within each domain were ordered into the three level hierarchy; competencies relevant to the delivery of low, medium or high intensity interventions. The ordering of competencies was carried out independently[3] by the authors of this report, who were aided by their collaborative network of research active and practicing health and clinical psychologists.

Developed to be Consistent with Behaviour Change Models

In addition, the HBCC was developed to take account of the latest work on models of behaviour and behaviour change. Numerous modals of human behaviour are available. The question therefore arose as to which model was most suitable for a competency framework for the delivery of health behaviour change. Unfortunately, there is little evidence available to determine the use of one model in preference to any other. Indeed, the National Institute for Health and Clinical Excellence, in its review, Behaviour Change at Population, Community and Individual Levels indicates that the evidence does not support any one model in particular[4]. Rather, NICE suggests that training programmes should be based on competencies and skills, rather than focussed on specific models. The HBCC, therefore, does not employ any one model of behaviour change; rather, it describes a route MAP to behaviour change, which includes many of the concepts identified by NICE to be used to structure and inform interventions.

The route MAP is a useful tool to summarise the central tenets of multiple models of behaviour change. The MAP describes three routes to behaviour: MOTIVATION development; ACTION on motivation and PROMPTED or cued routes. Within the HBCC behaviour change is initiated and maintained through the development of strategies to increase and maintain motivation and to improve and broaden skills that enable that motivation to be translated into action. In addition, the HBCC includes a third route, the prompted or cued route, and this route supports behaviour change without the need for the constant cognitive effort required by the other routes. The effectiveness of the prompted

[2] See Appendix 3 for full details of information sources used in the development of the HBCC

[3] Colleagues ordered the competencies independently. This enabled the level of agreement between colleagues to be calculated. The level of agreement was above 0.7 in both cases (ordering competencies into domains and ordering into the hierarchy), which is the accepted level for reliability in judgement tasks such as this. This means the HBCC is not simply a consensus document.

[4] Behaviour Change at Population, Community and Individual Levels (2007) National Institute for Health and Clinical Excellence, Public Health Guidance 6.

route is strongly supported by the evidence base. The current fashion for '**nudging**' behaviour change would largely be accounted for by the prompted route.

Developed to be Useful to a Variety of Audiences

The HBCC identifies the competencies required to deliver behaviour change interventions generically, i.e. across different behaviours and via each of the three routes. In addition, it also identifies behaviour change techniques that promote change via each of the three routes. As a consequence, the HBCC was developed to provide a tool for:

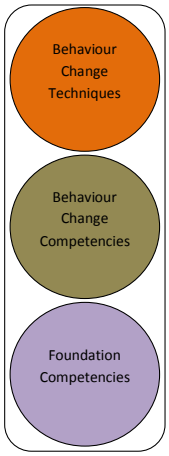
- **Practitioners** to structure their work to ensure their clients receive interventions that target the route(s) most appropriate for them. The HBCC is also consistent with the model of behaviour change that currently has greatest currency with practitioners, namely the Stages of Change model. This consistency will ensure the HBCC has face validity for practitioners.
- **Educators** to plan training programmes to skill workers to deliver interventions that exploit all three routes.
- **Managers** to specify and describe the competences required for particular roles.
- **Policy workers** to develop policy that employs all routes to promote behaviour change and to avoid over reliance on any one particular route.

Developed to be Consistent with an Asset Based Approach to Health

The HBCC is consistent with an asset based approach to health. The HBCC describes three competency domains, each of which are designed to deliver the professional skills required for a collaborative model of health and health behaviour change. **Foundation** competences describe communication skills that enable the practitioner to learn from their clients. This collaborative approach enables a client to speak about the issues that are of greatest concern to them and what they want to change (as opposed to what the professional thinks should be of concern and should be changed). The **behaviour change** competences and the **behaviour change techniques** employ and build on these collaborative communication skills to develop an understanding of a client's existing skills and abilities and the environment in which they live their daily life. They build on these existing skills to enable the client to develop behaviour change strategies suitable for their needs in their environment. For example, clients identify those skills they already possess which can be garnered to support their behaviour change activity and the professional and client work together to explore ways in which any barriers might realistically be overcome. The HBCC is an asset based approach to health behaviour change.

The Health Behaviour Change Competency Framework (HBCC)

General Structure of the HBCC Framework



The HBCC is organised into three competency domains: **foundation**, **behaviour change** and behaviour change techniques (**BCTs**). The foundation and behaviour change competency domains are organised into twelve competency topics. The BCTs are organised into a MAP of behaviour change, which is composed of three routes to behaviour change: motivation development, action on motivation and prompted behaviour.
The competences in each domain are organised into a three level hierarchy. This hierarchy describes the competences relevant to the delivery of low, medium and high intensity interventions. The hierarchy is cumulative, in that competency to work at any given level assumes possession of the competences described at all lower levels.

Foundation competences

The foundation competency domain is described by twelve competency topics. At its core are the communication skills required to develop an effective intervention alliance. Additional topics cover the professional and ethical guidelines required for effective practice with different clients and client groups.

Behaviour change competences

The behaviour change competency domain is composed of twelve topics. These topics cover knowledge of the relationship between behaviour and health status. This domain requires knowledge of models and theories of behaviour and how these have been used to develop behaviour change interventions. It describes the general assessment and core intervention skills required to implement theory based interventions for behaviour change in practice.

Behaviour Change Techniques

This domain delivers the full breadth of behaviour change techniques to the HBC framework. The 89 techniques relevant to health behaviour change identified in the literature have been organised into three routes to behaviour and behaviour change: Motivation development (e.g. motivational interviewing, recording the consequences of behaviour); Action on motivation (e.g. setting behavioural goals, providing feedback on performance) and Prompted or cued behaviour (e.g. change the environment to facilitate the target behaviour, provide rewards contingent on target behaviour being performed). This MAP of behaviour change can be used to ensure that interventions and training programmes exploit each route to behaviour change.

The organisation of the HBCC, including the hierarchy of competences, is shown in Figure 1 overleaf and used in simplified form on the cover.

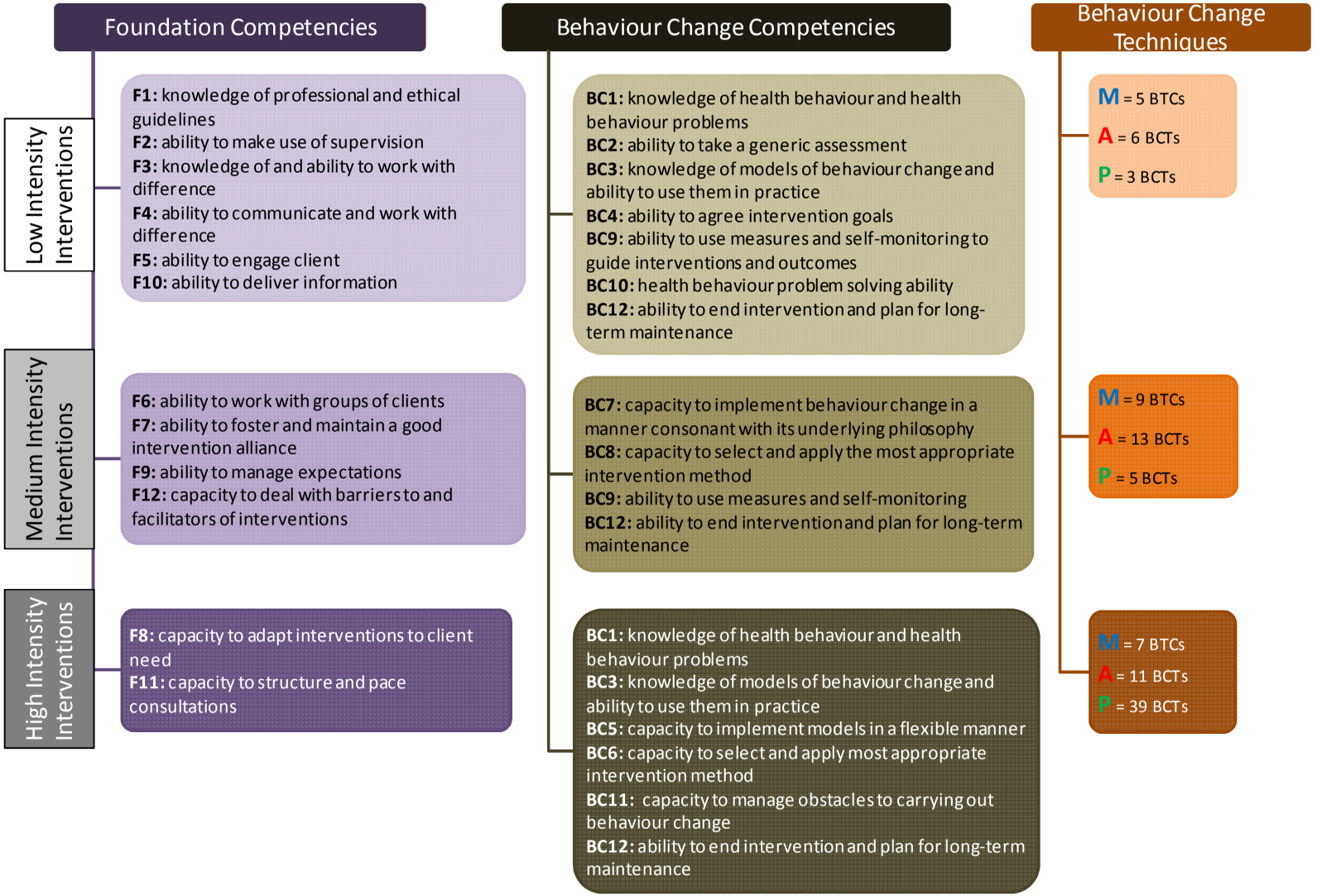


Figure 1: Hierarchical Structure of the HBCC Framework

NB: This is a summary structure. Competency domains have been assigned to a particular level of intervention based on a substantive proportion of competences within that domain being relevant to a single intensity level. **In most cases competency domains contain specific competences relevant to more than one intensity level.** For a fuller description of the specific competences relevant to each level of intensity please see below and Appendix 1.

Delivering Behaviour Change

Competences within the HBCC are organised into a 3 level hierarchy. This hierarchy describes the competences relevant to the delivery of low, medium and high intensity interventions. This 3 level hierarchy should be considered a developing rather than definitive structure for the promotion of health behaviour change.

NHS Scotland recognises that all NHS sectors have a contribution to make to health improvement. The concept of a health promoting health service, which aims to support the development of a health promoting culture will require input from the whole workforce. A change of culture will only be achieved if all staff feel they have a role to play in the promotion of health. Staff need not necessarily be trained to deliver behaviour change interventions to make a significant contribution, rather, all staff should have the ability to identify opportunities to promote health behaviour change, for example through a general awareness of the role of behaviour in health and an ability to signpost people to suitable services.

Low Intensity Interventions[5]

The health promoting health service views every healthcare contact as a health improvement opportunity. Low intensity interventions represent a skill set that will enable frontline staff to identify opportunities for brief interventions and to deliver those interventions as each opportunity for health improvement presents itself.

The term 'low intensity' is used to describe interventions that are delivered as described in an intervention manual, with little or no flexibility to deviate from the described protocol. Clients receiving low intensity interventions are likely to have few physical co-morbidities that could be problematic in relation to behaviour change interventions. Low intensity interventions are exemplified by alcohol brief interventions. The competences required for delivery of low level interventions can be considered as a core set of competences for generic health behaviour change. These competences are required by everyone delivering interventions to change health behaviours.

Competences for Delivery of Low Intensity Interventions

***Foundation*:** Competences from nine of the twelve foundation competency topics are required for the delivery of low intensity interventions (F1, F2, F3, F4, F5, F7, F9, F10, F12). In five of the nine topics the majority of individual competences described are required for delivery of low level interventions.

- F1: knowledge of professional and ethical guidelines.
- F2: ability to make use of supervision.
- F3: knowledge of and ability to work with difference.
- F5: ability to engage client.
- F10: ability to deliver information.

[5] Full details of the individual competences within each topic and each domain required for delivery of low level interventions are provided in Appendix 1

***Behaviour Change*:** Competences from nine of the twelve behaviour change competency topics are required for the delivery of low intensity interventions (BC1, BC2, BC3, BC4, BC7, BC8, BC9, BC10, BC12). In five of the nine a large proportion of the individual competences are required for delivery of low level interventions.

- BC1: knowledge of health behaviour and health behaviour problems.
- BC2: ability to undertake a generic assessment.
- BC3: knowledge of a model of behaviour change and the ability to employ the model in practice.
- BC4: ability to agree goals for the intervention.
- BC10: health behaviour problem solving ability.

Behaviour Change Techniques: Competency to deliver 13 behaviour change techniques is required for the delivery of low intensity interventions. These 13 BCTs represent each of the three routes to change as follows.

- 5 BCTs via **M**otivation development.
- 6 BCTs via **A**ction on motivation.
- 3 BCTs via **P**rompted or cued route to behaviour.

Medium Intensity Interventions[6]

Medium intensity interventions will primarily be delivered to clients referred from other services or clients who self-refer. Practitioners at this level will be skilled to deliver interventions to clients with more complex needs, for example the presence of multiple physical co-morbidities and/or mild mental health morbidity. Medium intensity interventions may involve some flexibility in the delivery of an intervention manual. This flexibility might typically take the form of the practitioner identifying, from a range of BCTs, those that are best suited to the assessed needs of an individual client. Medium intensity interventions will generally be of longer duration, and might involve multiple sessions. These competences are in addition to those required to deliver low intensity interventions.

Competences for Delivery of Medium Intensity Interventions

Foundation: Competences from ten of the twelve foundation topics are required for delivery of medium level interventions (F1, F2, F3, F4, F5, F6, F7, F9, F10, F12). Delivery of medium level interventions requires the majority of individual competences in six competency topics. In addition to the five topics listed above for low intensity interventions, the majority of competences in topic G6 are also required for delivery of medium level interventions.

- F6: ability to work with groups of clients.

Behaviour Change: Competences from nine of the twelve behaviour change competency topics are required for the delivery of medium intensity interventions (BC1, BC2, BC3, BC4, BC7, BC8, BC9, BC10, BC12). In all nine a large proportion of the individual competences are required for delivery of medium level interventions. In addition, to the five topics listed above for low intensity interventions, a large proportion of the individual

[6] Full details of the individual competences within each topic and each domain required for delivery of medium level interventions are provided in Appendix 1

competences within the following topics are required for delivery of medium level interventions:

- BC7: capacity to implement behaviour change in a manner that is consonant with its underlying philosophy.
- BC8: ability to structure consultations.
- BC9: ability to use measures and self-monitoring to guide interventions and to monitor outcome.
- BC12: ability to end the intervention in a planned manner and to plan for long-term maintenance of gains.

***Behaviour Change Techniques*:** An additional 27 BCTs have been identified as relevant to the delivery of medium intensity interventions. These additional BCTs operate primarily through the Motivation development and Action on motivation routes, although BCTs that operate via the Prompted or cued route are also included.

- 9 BCTs via **M**otivation development.
- 13 BCTs via **A**ction on motivation.
- 5 BCTs via **P**rompted or cued route to behaviour.

High Intensity Interventions[7]

High intensity interventions are typically flexible interventions that can be tailored to address the assessed needs of the client. Typically interventions will be of longer duration and will include multiple sessions. High intensity interventions will be delivered on referral from other services. Clients might present with moderate or complex physical co-morbidities and may present with moderate mental health co-morbidities.

These competences are in addition to the competences required to deliver low and medium intensity interventions.

Competences for Delivery of High Intensity Interventions

***Foundation*:** The delivery of high intensity interventions requires additional competences in five of the foundation competency topics, already required for delivery of low and medium intensity interventions (F2, F3, F4, F5, F7). In addition, two competency topics are unique to the delivery of high intensity interventions, namely:

- F8: capacity to adapt interventions in response to client feedback.
- F11: capacity to structure consultations and maintain appropriate pacing.

***Behaviour Change*:** Additional competences are required in four behaviour change competency topics, which also include competences required for delivery of lower intensity interventions (BC1, BC3, BC7, BC9). In addition, three competency topics are unique to the delivery of interventions at the high intensity level:

- BC5: capacity to implement behaviour change models in a flexible but coherent manner.
- BC6: capacity to select and skilfully apply the most appropriate behaviour change intervention method.

[7] Full details of the individual competences within each topic and each domain required for delivery of high level interventions are provided in Appendix 1

- BC11: capacity to manage obstacles to carry out behaviour change.

***Behaviour Change Techniques*:** An additional 57 BCTs have been identified as relevant to the delivery of high intensity interventions. These additional BCTs operate primarily through the Prompted or cued route, but BCTs that operate via the Motivation development and Action on motivation routes are also included.

- 7 BCTs via **M**otivation development.
- 11 BCTs via **A**ction on motivation.
- 39 BCTs via **P**rompted or cued route to behaviour.

Mapping the HBCC Framework to the Knowledge and Skills Framework (KSF)[8]

The KSF consists of five competency dimensions: Core, Health & Wellbeing, Estates & Facilities, Information & Knowledge and General, each of which is composed of sub-dimensions. The HBCC competences are described by three KSF dimensions:

- Core
- Health & Wellbeing
- Information & Knowledge

KSF Core Dimension

The *Core* dimension is composed of 6 sub-dimensions; five are relevant to the HBCC:

- Communication
- Personal & people development
- Service improvement
- Quality
- Equality & diversity

KSF Health and Wellbeing Dimension

Health and Wellbeing is largest KSF dimension being composed of 10 sub-dimensions, four of which are relevant to the HBCC:

- Protection of health & wellbeing
- Enablement to address health & wellbeing needs
- Assessment & treatment planning
- Interventions & treatments

KSF Information & Knowledge Dimension

Two of the three sub-dimensions within the *Information and Knowledge* dimension are relevant to the HBCC:

- Information collection & analysis
- Knowledge & information resources

Each KSF sub-dimension is described at four levels of competency, level 1 to level 4. Higher levels represent more advanced competency within that sub-dimension. The HBCC competences were also matched to KSF competency levels within the relevant sub-dimension. For example, the HBCC foundation competency F1.1 describes the *national and local codes of practice which apply to all staff involved in the delivery of healthcare*, this competency matches to KSF Core Communication dimension at competency level 1. The HBCC as a whole contains competences up to KSF level 3.

[8] The complete mapping of each HBCC competency to the KSF is described in Appendix 1.

Competences Described in the Training Manual for Alcohol Brief Interventions[9]

The competency hierarchy at the core of the HBCC has been developed, in part, to facilitate the development and assessment of training programmes to skill the workforce to deliver interventions of differing levels of intensity and complexity across all health behaviours. In addition, the HBCC can be used to identify which competences are being delivered in existing training programmes for health behaviour change. Currently, health behaviour change training tends to be delivered within topic silos. However, the competences described in the HBCC are those required for the delivery of generic health behaviour change, therefore the HBCC can also be used to identify the competences within training programmes for particular health behaviours.

The HBCC has been used to analyse the content of the training manual for alcohol brief interventions (ABIs) used by NHS Health Scotland to train the workforce to deliver ABI's[10]. The ABI training programme is a 10 unit programme designed to be delivered over an 11 hour period, either as a two-day course or via four shorter sessions.

Table 1 below provides a brief summary of the competency domains delivered in each ABI training unit. A detailed description of the competences delivered in each unit can be found in Appendix 2.

Table 1: Competences being delivered in each Alcohol Brief Intervention training unit

ABI Training Unit	HBCC Competency Domain Delivered In Each Training Unit				
	Foundation	Behaviour Change	BCTs[a] (& route MAP)		
			M	A	P
1. Brief interventions: what and why		✓			
2. Attitudes to alcohol	✓	✓			
3. Barriers and concerns	✓	✓			
4. Brief intervention observation	✓	✓	✓	✓	
5. Units and drinking limits		✓			
6. Raising the issue of alcohol	✓	✓			
7. Screening and feedback	✓	✓	✓	✓	
8. Referral: when, where and how?	✓	✓			
9. Brief interventions delivery: key skills	✓	✓	✓	✓	✓
10. Brief interventions delivery: putting it all together	competences not described in detail				

[a]BCTs = Behaviour Change Techniques and the route to change targeted by the techniques delivered in a particular training unit

Table 1 suggests a focus on foundation and behaviour change competences. As the workforce is likely to be trained in the majority of foundation competences already, it may be possible to increase training in behaviour change techniques within the current ABI training timetable.

[9] Alcohol Brief Interventions: Training Manual. NHS Health Scotland, 2009
[10] The content analysis is described in full in Appendix 2

Future Directions

Developing the Evidence Base

Currently we do not have a complete understanding of the effective and necessary components of behaviour change interventions. That said this evidence base is rapidly progressing. Two recent meta-analyses[11] of interventions to change eating and physical activity have highlighted the following:

- Less might be more
  - the use of a larger number of BCTs in interventions is not necessarily related to better outcomes
- Use of theory based BCTs is associated with more successful outcomes
  - ***self-monitoring*** as a key behaviour change technique
  - ***self-monitoring plus*** one other behaviour change technique relevant to self-regulation is additionally effective

To date this work has established the effectiveness of a small number of techniques. However, that is not to say only a few techniques are effective; at present we lack the research evidence concerning whether other techniques are or are not effective. Therefore, there is a need for evidence that can establish the effectiveness or not of a much wider range of BCTs.

This work focuses on identifying the behaviour change techniques to be included in interventions. It could usefully be combined with evidence and experience from other sources that addresses how best complex interventions can be implemented effectively. Integrating evidence from multiple sources should facilitate the development of interventions that contain behaviour change techniques of known effectiveness and that are designed to ensure they can be delivered to clients effectively and efficiently by workers with the relevant competences.

Using the HBCC

In its current form the HBCC is a very comprehensive description of the competences relevant to the delivery of behaviour change across a wide range of client need. This introduces a level of complexity into the HBCC that, in its current form, makes it most suitable for use by policy makers and educators. However, the HBCC could be developed further.

Development of a Self-Assessment Tool

The HBCC provides a platform for the development of a self-assessment tool for use by managers and the frontline workforce. Any review of current training provision or assessment of future training needs would benefit from an understanding of the knowledge and skills already possessed by the workforce. It is likely that health professionals already have the majority of the Foundation Competences and may also be

[11] Michie, S., C. Abraham, et al. (2009). Effective Techniques in Healthy Eating and Physical Activity Interventions: A Meta-Regression. *Health Psychology* **28**(6): 690-701. Dombrowski, S., F. F. Sniehotta, et al. (in press). Identifying active ingredients in complex behavioural interventions for obese adults with obesity-related comorbidities or additional risk factors for co-morbidities: A systematic review. *Health Psychology Review.*

using other the competences described by the HBCC. The HBCC may be used to develop a simple online self-assessment tool to enable individual workers and managers to identify:

- the competences currently employed in practice and the level of those competences
- the competences addressed in training already delivered
- additional competences that require training
- new or additional training to increase the level of competence

Development of Competency Based Training Programmes
Competency based training programmes would improve training efficiency because staff could identify the competences they already possess and seek additional training only in those competences they currently lack. The Foundation Competences and Behaviour Change Techniques Competences are largely generic, i.e. they apply equally across different health behaviours. However, staff could only move between health behaviours if they also had the competences that are specific to those particular health behaviours. For example, competency to identify and use appropriate measures of behaviour is behaviour specific; the measures used to assess alcohol consumption are specific to alcohol and different from those used to measure smoking. These behaviour specific competences are primarily described by competences within the Behaviour Change Competency domain. For example, staff trained in the generic competences (foundation, behaviour change and behaviour change techniques) at low intensity and low intensity alcohol specific behaviour change competences could transfer to also deliver low intensity smoking interventions if they acquired training in low intensity smoking specific behaviour change competences. A competency focussed approach to training, therefore, enables training to be delivered very efficiently. It also simplifies the landscape, which should make learning and delivering health behaviour change easier.

Acknowledgements

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Appendix 1

Hierarchy of health behaviour change competences and KSF mapping[12]

The tables below describe the individual competences within each competency topic, within each competency domain (foundation, behaviour change and behaviour change techniques). Each competency is colour coded for its place in the hierarchy. The colour indicates the level of intervention intensity appropriate for that competency.

Competences relevant to:

- **Low intensity** interventions have no colour
- **Medium intensity** interventions are coloured pale grey
- **High intensity** interventions are coloured dark grey

KSF Mapping

The KSF dimension, sub-dimension and level of competency are listed for each HBCC competency. The KSF mapping is described in the following sequence:

dimension code; sub-dimension number; level of competency

For example HWB4L3 denotes KSF Health and Wellbeing Dimension (HWB), sub-dimension 4 (*enablement to address health and wellbeing needs*), level of competence 3.

The KSF dimensions are coded in the tables as follows:

- C = Core dimension;
- HWB = Health and Wellbeing dimension;
- IK = Information and Knowledge dimension.

[12]Intraclass correlation coefficient was used as a measure of reliability (agreement between judges performing the level of intensity mapping task). ICC= 0.71, ICC values of 0.7 or above indicate an acceptable level of agreement

Foundation Competency Domain

F1. Professional and ethical guidelines

	KSF
1. Knowledge of national and local codes of practice which apply to all staff involved in the delivery of healthcare, as well as any codes of practice which apply to the health professional as a member of a specific profession	C5L1
2. Knowledge of legislation relevant to areas of professional practice in which the health professional is engaged (specifically including the Human Rights Act, Data Protection Act)	C5L1
3. Knowledge of relevant codes of professional and ethical conduct and practice in order to apply the general principles embodied in these codes to each piece of work being undertaken, in the areas of:	C5L1
3.1. obtaining informed consent for interventions from clients	C1L3 C5L1
3.2. maintaining confidentiality, and knowing the conditions under which confidentiality can be breached	C1L1 C5L1
3.3. keeping accurate records	C1L1 C5L1 IK2L1
3.4. safeguarding the client's interests when co-working with other professionals as part of a team, including good practice regarding interworker/inter-professional communication	C1L3 C5L1
3.5. competence to practice, and maintaining competent practice through appropriate training/professional development	C2L3 C5L1
3.6. recognition of the limits of competence and taking action to enhance practice through appropriate training/professional development	C2L1 C5L1
3.7. protecting clients from actual or potential harm from professional malpractice by colleagues by instituting action in accordance with national and professional guidance	C5L3 HWB3L1
4. Maintaining appropriate standards of personal conduct for self:	C5L1
4.1. a capacity to recognise any potential problems in relation to power and "dual relationships" with clients, and to desist absolutely from any abuses in these areas	C5L1
4.2. recognising when personal impairment could influence fitness to practice, and taking appropriate action (e.g. seeking personal and professional support and/or desisting from practice)	C5L1
5. Knowledge of and appropriate referral to other agencies when required	C5L1
6. Identifying problems or opportunities for improving any aspect of service (including from client feedback)	C4L1
7. Reporting appropriately problems or opportunities for improving any aspect of service	C4L1

F2. Supervision

	KSF
1. Knowledge that the primary purpose of supervision and learning is to enhance the quality of the intervention clients receive	C2L1
2. An ability to work collaboratively with the supervisor	C1L2 C2L2
2.1. An ability to work with the supervisor in order to generate an explicit agreement about the parameters of supervision (e.g. setting an agenda, being clear about the respective roles of supervisor and supervisee, the goals of supervision and any contracts which specify these factors)	C1L2 C2L2
2.2. An ability to help the supervisor be aware of your current state of competence and your training needs	C1L2 C2L2
2.3. An ability to present an honest and open account of client work undertaken	C1L2 C2L2
2.4. An ability to discuss client work with the supervisor as an active and engaged participant, without becoming passive or avoidant, or defensive or aggressive	C1L2 C2L2
3. A capacity for active learning	C2L2
3.1. An ability to act on suggestions regarding relevant reading made by the supervisor, and to incorporate this material into work with clients	C2L2
3.2. An ability to take the initiative in relation to learning, by identifying relevant papers, books, or web-based resources based on (but independent of) supervisor suggestions, and to incorporate this material into work with clients	C2L2 IK3L1
4. An ability to reflect on the quality of supervision as a whole, and (in accordance with national and professional guidelines) to seek advice from others where:	C1L3 C2L3
4.1. there is concern that supervision is below an acceptable standard	C1L3 C2L3
4.2. where the supervisor's recommendations deviate from acceptable practice	C1L3 C2L3
4.3. where the supervisor's actions breach national and professional guidance (e.g. abuses of power and/or attempts to create dual (sexual) relationships)	C1L3 C2L3

F3. Knowledge of and ability to work with difference

	KSF
1. Knowledge of the potential significance for practice of social and cultural difference, across a range of domains, including:	C1L2 C6L2
1.1. ethnicity	C1L2 C6L2
1.2. culture	C1L2 C6L2
1.3. education	C1L2 C6L2

1.4. deprivation level/SES	C1L2 C6L2
1.5. religion	C1L2 C6L2
1.6. gender	C1L2 C6L2
1.7. age	C1L2 C6L2
1.8. disability	C1L2 C6L2
1.9. sexual orientation	C1L2 C6L2
2. Knowledge of the relevance and potential impact of social and cultural difference on the **effectiveness** and *acceptability* of an intervention for all clients	*C6L2* **C6L3** HWB7L2
3. Ability to make appropriate adjustments to the intervention, with the aim of maximising its potential benefit to the client where social and cultural difference impacts on the accessibility of intervention	HWB7L3

F4. Ability to communicate and work with different individuals, groups and communities

	KSF
1. Ability to work and communicate effectively with:	C1L2
1.1. individuals	C1L2
1.2. groups	C1L2
1.3. significant others (including: spouses, partners, relative, families, other social groups)	C1L2
1.4. people in own and other agencies	C1L2

F5. Ability to engage client

	KSF
1. Ability to initiate a discussion about potential health behaviour problems	C1L3
1.1. ability to create an environment suitable for frank, confidential discussion	C1L2
1.2. ability to explain why the client's health behaviour is of interest	C1L3
1.3. ability to initiate discussions about risky health behaviour and respond to clients who express concerns about their health behaviour	C1L3
2. While maintaining professional boundaries, an ability to show appropriate levels of warmth, concern, confidence and genuineness, matched to client need	C1L3
3. An ability to engender trust	C1L2
4. An ability to develop rapport	C1L2
5. An ability to adapt personal style so that it meshes with that of the client	C1L3
6. An ability to adjust the level and structure of the session to the client's needs	C1L3

7. An ability to convey an appropriate level of confidence and competence	C1L2
8. An ability to avoid negative interpersonal behaviours (such as impatience, aloofness, or insincerity)	C1L2

F6. Ability to work with groups of clients

	KSF
1. Knowledge of and ability to draw on this knowledge in practice of professional and ethical factors in relation to working with groups	C1L3
2. Ability to apply professional and ethical standards when working with groups	C1L3
3. Ability to ensure the group adopts appropriate ethical standards, e.g. confidentiality and respect	C1L3
4. Ability to engage the group (see ability to engage client above)	C1L3
5. Ability to report on missing members	C1L3
6. Ability to encourage group discussions/didactic presentations	C1L3
7. Ability to communicate rules governing the group	C1L3
8. Ability to emphasis that each individual has a responsibility to the group	C1L3
9. Ability to establish a closed group	C1L3
10. Ability to communicate group member identities	C1L3
11. Ability to **communicate** and maintain rules of group behaviour	**C1L3**

F7. Ability to foster and maintain a good intervention alliance, and to grasp the client's perspective*

Knowledge of the concept of the intervention alliance

	KSF
1. Knowledge that the therapeutic alliance is usually seen as having three components:	HWB7L3
1.1. the relationship or bond between health professional and client	HWB7L3
1.2. consensus between the health professional and client regarding the goals of intervention	HWB7L3
1.3. consensus between the health professional and client regarding the techniques/methods employed in the intervention	HWB7L3
1.4. An ability to draw on knowledge that all three components contribute to the maintenance of the alliance	HWB7L3

Capacity to develop and maintain the alliance

	KSF
2. An ability to listen to the client's concerns in a manner which is nonjudgmental, supportive and sensitive, and which conveys a comfortable attitude when the client describes their behaviour and experience	C1L3
3. An ability to ensure that the client is clear about the rationale for the intervention being offered	C1L3 HWB7L3
4. An ability to gauge whether the client: a) understands the rationale for the intervention, b) has questions about it, or c) is skeptical about the rationale, and to respond to these concerns openly and non-defensively	C1L3 HWB7L3
5. An ability to help the client express any concerns or doubts they have about the intervention and/or the health professional, especially where this relates to mistrust or skepticism	C1L3 HWB7L3
6. An ability to respond appropriately to interventions in response to disagreements about tasks and goals:	C1L3 HWB7L3

6.1. An ability to check that the client is clear about the rationale for the intervention and to review this with them and/or clarify any misunderstandings	C1L3 HWB7L3
6.2. An ability to help clients understand the rationale for the intervention through using/drawing attention to concrete examples	C1L3 HWB7L3
7. An ability to use humour judiciously, understanding how it can be used as an aid to help clients (e.g. to normalise the client's experience or to reduce tension), but also recognising its risks (e.g. of invalidating the client's feelings, acting as a distraction to/ avoidance of feelings, or creating "boundary violations")	C1L3
8. An ability to respond to client's humour in a manner that is congruent with its intent, and responsive to any implied meanings	C1L3

F8. Capacity to adapt interventions in response to client feedback

	KSF
1. An ability to accommodate issues the client raises explicitly or implicitly, or which become apparent as part of the process of the intervention:	HWB4L3 HWB7L3
2. An ability to respond to, and openly to discuss, explicit feedback from the client which expresses concerns about important aspects of the intervention	C1L3 HWB4L3
3. An ability to detect and respond to implicit feedback which indicates that the client has concerns about important aspects of the intervention (e.g. as indicated by non-verbal behaviour, verbal comments or significant shifts in responsiveness)	HWB7L1

F9. Ability to Manage Expectations of the Intervention

	KSF
1. Ability to communicate the frequency and duration of consultations	C1L3 HWB7L3
2. Ability to communicate what is expected of client between consultations	C1L3 HWB7L3
3. Ability to manage endings	C1L3 HWB7L3
3.3. An ability to signal the ending of the intervention at appropriate points during the intervention (e.g. when agreeing the intervention contract, and especially as the intervention draws to close) in a way which acknowledges the potential importance of this transition for the client	C1L3 HWB7L3
3.4. An ability to review the work undertaken together	C1L3 HWB7L3
3.5. An ability to say goodbye	C1L3 HWB7L3

F10. Ability to deliver information

	KSF
1. An ability to deliver information in a manner that can be understood by the client	C1L3
2. An ability to give instruction in a manner client can follow	C1L3
3. Ability to give advice in a manner that enables client to chose whether or not to take advice	C1L3
4. Ability to give advice about additional resources (including medication) and support relevant to the health behaviour problem	C1L3 HWB7L3

F11. Capacity to structure consultations and maintain appropriate pacing

	KSF
1. An ability to maintain adherence to an agreed agenda and to 'pace' the consultation in a manner which ensures that all agreed items can be given appropriate attention (i.e. ensuring that significant issues are not rushed)	HWB7L3
2. An ability to balance the need to maintain adherence and pacing while being appropriately responsive to client need:	HWB7L3
2.1. An ability to structure the session in a manner which is congruent with specific issues (e.g. the client's capacity to concentrate)	HWB7L3
3. An ability to balance the need to maintain an appropriate pace v following up important issues raised by the client:	HWB7L3
3.1. An ability to use professional judgment to decide when issues needs to be pursued and when they could act to divert attention from the primary (and agreed) focus of the intervention	HWB7L3

F12. Ability to recognise barriers to and facilitators of implementing interventions

	KSF
1. Ability to recognize barriers to and facilitators of implementing interventions at the level of:	C4L3
1.1. Organisational barriers and facilitators:	C4L3
1.1.1. availability of time and resources to enable implementation of interventions	C4L3
1.1.2. organizational attitudes	C4L3
1.1.3. provision of supervision and ongoing support to practice	C4L3
1.2. Individual health professional barriers and facilitators:	C5L3
1.2.1. own beliefs and attitudes to health behavior and behaviour change	C5L3
1.2.2. competences required to implement interventions	C5L3
1.2.3. adequate post in which to deliver interventions	C4L3 C5L3
1.3. Client barriers and facilitators:	HWB6L3
1.3.1. beliefs, attitudes, health condition	HWB6L3
1.3.2. social and physical environment	HWB6L3

Behaviour Change Competency Domain

BC1. Knowledge of Health behaviour and health behaviour problems

	KSF
Knowledge of:	
1. Common health behaviour problems during assessment and when carrying out interventions, including knowledge of national guidelines for health behaviours, e.g. alcohol consumption limits, recommended physical activity levels etc	HWB6L3 HWB7L3
2. Factors associated with the development and maintenance of health behaviours	HWB7L3
3. The usual patterns of health behaviour problems	HWB7L3
4. The ways in which health behaviour problems can impact on health and functioning	HWB7L3
5. The usual knowledge and misinformation that people may have about health behaviour problems	HWB7L3
6. Main terms and concepts used in epidemiology and the basis of calculations related to these terms	HWB7L3
7. Different models, principles and approaches to managing risk	HWB7L3
8. Different models, principles and approaches to preventing risk and threats to population health	HWB7L3
9. Different models, principles and approaches to improving the health of individuals	HWB7L3

BC2. Ability to undertake a generic assessment

	KSF
1. An ability to obtain a general idea of the nature of the client's problem	C1L3 HWB6L3
2. An ability to elicit information regarding health behaviour problems and diagnosis	C1L3 HWB6L3
3. Ability to elicit information about past history and present life situation	C1L3 HWB6L3
4. Ability to elicit information about behavioural and other risk factors for disease	C1L3 HWB6L3
5. Ability screen client for suitability for group based support where appropriate	C1L3 HWB6L3
6. Ability to screen client for suitability for behaviour change or referral to specialist help	C1L3 HWB6L3
7. An ability to gauge the client's motivation for a behaviour change intervention	C1L3 HWB6L3

BC3. Knowledge of a model of behaviour change and the ability to understand and employ the model in practice

	KSF
1. Knowledge of the factors common to all behaviour change models and methods:	HWB6L3
1.1. Support factors:	HWB6L3
1.1.1. a positive working relationship between health professional and client characterised by warmth, respect, acceptance and empathy, and trust	HWB6L3
1.1.2. the active participation of the client	HWB6L3
1.1.3. health professional expertise	HWB6L3
1.1.4. opportunities for the client to discuss matters of concern	HWB6L3
1.2. Learning factors:	HWB6L3
1.1.1. information	HWB6L3
1.1.2. advice	HWB6L3
1.1.3. feedback	HWB6L3
1.1.4. changing expectations of personal effectiveness	HWB6L3
1.1.5. assimilation of problematic experiences	HWB6L3
1.3. Action factors:	HWB6L3
1.3.1. behavioural regulation	HWB6L3
1.3.2. cognitive mastery	HWB6L3
1.3.3. experience of successful coping	HWB6L3
2. Knowledge of the principles which underlie the intervention being applied, using this to inform the application of the specific techniques which characterise the model	HWB6L3
3. Knowledge of the principles of the behaviour change model in order to implement the intervention in a manner which is flexible and responsive to client need, but which also ensures that all relevant components are included	HWB6L3
4. Knowledge of the evidence base for the effectiveness of behaviour change models	HWB6L3

BC4. Ability to agree goals for the intervention

1. An ability to help the client generate their own goals for the intervention, and to reach a shared agreement about these, by helping them:	HWB4L3 HWB7L3
1.1. to translate vague/abstract goals into specific and concrete goals	HWB4L3
1.2. to identify goals which will be subjectively and objectively observable and potentially measurable (i.e. to ensure that if change takes place it will be noticeable to the client and to others)	HWB4L3
2. An ability to work with the client to ensure that goals are realistic, attainable and timely	HWB4L3

BC5. Capacity to implement behaviour change models in a flexible but coherent manner

	KSF
1. An ability to implement a model of behaviour change in a manner which is flexible and which is responsive to the issues the client raises, but which also ensures that all relevant components of the model are included	HWB7L3
2. An ability to maintain adherence to a model without inappropriate switching between modalities in response to minor difficulties (i.e. difficulties which can be readily accommodated by the model being applied)	HWB6L3

BC6. Capacity to select and skillfully to apply the most appropriate behaviour change intervention method

1. An ability draw on knowledge of behaviour change models and methods and on professional experience in order to select from the complete range of behaviour change techniques, and skillfully apply them in a manner which is:	HWB7L3 HWB6L3
1.1. matched to the needs and capacities of the client	HWB7L3 HWB6L3
1.2. applied at the appropriate level of progression in the process of behaviour change	HWB7L3 HWB6L3

BC7. Capacity to implement behaviour change in a manner consonant with its underlying philosophy

Basic orientation

1. An ability to base all health professional/client contact and conduct on a perspective which sees the world, including interactions with the health professional, from the perspective of the client's beliefs and abilities	C1L3 HWB7L3

Capacity to form and maintain a collaborative stance

2. A capacity to form a collaborative relationship with the client, based on an active stance which focuses on enabling the client and the health professional to work as a team	HWB4L3 HWB7L3
3. An ability to balance the need to structure consultations as against the need to allow the client to make choices and take responsibility	HWB7L3
4. An ability to avoid implementing behaviour change in a manner which becomes didactic, directive, intellectual or controlling	HWB4L3 HWB7L3

Maintaining a problem solving perspective

5. An ability to avoid seeing the client themselves as a problem, but to maintain a problem-solving approach to the client's health behaviour problems	HWB4L3 HWB7L3
6. An ability to maintain a problem-solving attitude in the face of difficulties and frustrations	HWB4L3 HWB7L3

BC8. Ability to structure consultations

	KSF
1. An ability to structure consultations	HWB7L3
2. An ability to share responsibility for consultation structure & content	HWB7L3
2.1. An ability to be appropriately structured (especially in the initial stages of the intervention), but also to avoid becoming inappropriately didactic	HWB7L3
3. An ability to agree and adhere to an agreed agenda	HWB7L3
3.1. An ability to work collaboratively with the client to set a mutually agreed agenda at the start of each consultation	HWB7L3
3.2. An ability to set an agenda that is:	HWB7L3
3.2.1. appropriate to the client's health behaviour problem	HWB7L3
3.2.2. appropriate for the level of progression in the process of behaviour change	HWB7L3
3.2.3. consistent with the shared understanding of the client's problem	HWB7L3
3.2.4. an ability to prioritise agenda items, and set an agenda which fits with the time available	HWB7L3
3.2.5. an ability to adhere to the agenda	HWB7L3
3.3. An ability to pace the consultation and use time efficiently	HWB7L3
3.3.1. an ability to 'time manage' the consultation in relation to the agenda	HWB7L3
3.3.2. an ability to pace the consultation in relation to the client's needs and learning speed	HWB7L3
4. An ability to make and review action plans	HWB4L3
4.1. Ability to plan action plans	HWB4L3
4.1.1. an ability to work with the client to agree appropriate and manageable action plans	HWB4L3
4.1.2. an ability to work with client to identify strategies which will help ensure that action plans are carried out	HWB4L3
4.2. Ability to review action plans	HWB6L3
4.2.1. an ability to ensure that action plans that the client has undertaken are carefully discussed and reviewed with them in the next session, with the aim of helping them identify what they have learned	HWB6L3
4.2.2. An ability to help clients appraise the outcomes of action plans:	HWB6L3
4.2.2.1. when outcomes are in line with the prior expectations of the health professional and client	HWB6L3
4.2.2.2. when there is a different outcome from that which has been predicted	HWB6L3
4.2.3. an ability to integrate learning from action plans into the session, and to build on this learning in identifying further action plans	HWB4L3 HWB6L3
5. An ability to use summaries and feedback to structure the consultation	HWB4L3
5.1. An ability to structure the consultation by regularly giving feedback to the client, and by eliciting regular feedback from the client	HWB6L3
5.2. An ability to elicit and respond both to verbal and non-verbal feedback from the client throughout the consultation (i.e. to take into account explicit statements made by the client and their emotional reactions)	HWB6L3
5.3. An ability to give verbal feedback to the client throughout the session, by offering 'capsule' summaries and by 'chunking' important (salient) information and/or topics	HWB4L3 HWB6L3

5.4. An ability to invite summaries from the client (to check that the health professional understands the client's health behaviour problems and that the client understands what the health professional is saying)	C1L3 HBW4L3
5.5. An ability to offer summaries at the start of consultations (e.g. **a review of prior work**) and at the end of the session (*covering the main points of the consultation*)	*HWB4L3* **HWB6L3**

BC9. Ability to use measures and self-monitoring to guide behaviour change interventions and to monitor outcome

	KSF
1. Knowledge of commonly used questionnaires and rating scales	HWB6L3
2. Ability to select and interpret measures:	HWB6L3
2.1. Ability to select measures relevant to the client's health behaviour problem	HWB6L3
2.2. An ability to interpret measures:	HWB6L3
2.2.1. An ability to interpret scores on standard measures relevant to client's health behaviour problem	HWB6L3
2.2.2. An ability to draw on knowledge regarding the interpretation of measures (e.g. basic principles of test construction, norms and clinical cut-offs, reliability, validity, factors which could influence (and potentially invalidate) test results)	HWB6L3
2.2.3. An ability to be aware of the ways in which the reactivity of measures and self-monitoring procedures can bias client report	HWB6L3
3. Knowledge of self-monitoring:	HWB6L3
3.1. An ability to draw on knowledge of self-monitoring forms developed for use in specific interventions (as published in articles, textbooks, manuals or web-based resources)	HWB6L3
3.2. Knowledge of the advantages of using self-monitoring (to gain a more accurate concurrent description of behaviours (rather than relying on recall), to help adapt the intervention in relation to client progress, and to provide the client with feedback about their progress)	HWB6L3
3.3. Knowledge of the role of self-monitoring in behaviour change (a means of helping the client to become an active, collaborative participant in their own behaviour change by identifying and appraising how they react to events (in terms of their own physiological reactions, behaviours, feelings and cognitions))	HWB6L3
3.4. An ability to draw on knowledge of measurement to ensure that procedures for self-monitoring are relevant (i.e. related to the question being asked), valid (measuring what is intended to be measured) and reliable (i.e. reasonably consistent with how things actually are)	HWB6L3
4. Ability to integrate measures into the intervention:	HWB6L3
4.1. An ability to use and to interpret relevant measures at appropriate points throughout the intervention, with the aim of establishing both a baseline and indications of progress	HWB6L3
4.2. An ability to share information gleaned from measures with the client, with the aim of giving them feedback about progress	HWB6L3
4.3. An ability to establish an appropriate schedule for the administration of measures, avoiding over-testing, but also aiming to collect data at more than one time point	HWB6L3
5. Ability to help clients use self-monitoring procedures:	HWB6L3
5.1. An ability to construct individualised self-monitoring forms, or to adapt 'standard' self-monitoring forms, in order to ensure that monitoring is relevant to the client	HWB6L3

5.2. An ability to work with the client to ensure that measures of the targeted problem are meaningful to the client (i.e. are chosen to reflect the client's perceptions of the problem or issue)	HWB6L3
5.3. An ability to ensure that self-monitoring includes targets which are clearly defined and detailed, in order that they can be monitored/recorded reliably	HWB6L3
5.4. An ability to ensure that the client understands how to use self-monitoring forms (usually by going through a worked example during the consultation)	HWB6L3
6. Ability to integrate self-monitoring into the intervention	HWB6L3
6.1. An ability to ensure that self-monitoring is integrated into the intervention, both in the consultation and as part of action plans, ensuring that the agenda for the consultation includes regular and consistent review of self-monitoring forms	HWB6L3
6.2. An ability to guide and to adapt the intervention in the light of information from self-monitoring	HWB6L3

BC10. Ability to carry out health behaviour problem solving

	KSF
1. An ability to identify health behaviour problems facing the client, which may be appropriate for a problem solving approach	HWB4L3
2. An ability to explain the rationale for problem-solving to the client	C1L3 HWB7L3
3. An ability to help the client to select problems, usually on the basis that problems are relevant for the client and are ones for which achievable goals can be set	HWB4L3
4. An ability to help the client specify the problem(s), and to break down larger problems into smaller (more manageable) parts	HWB4L3
5. An ability to identify achievable goals with the client, bearing in mind the client's resources and likely obstacles	HWB4L3
6. An ability to help the client generate ("brainstorm") possible solutions	HWB4L3
7. An ability to help the client select a preferred solution	HWB4L3
8. An ability to help the client plan and implement preferred solutions	HWB4L3
9. An ability to help the client evaluate the outcome of implementation, whether positive or negative	HWB6L3

BC11. Capacity to manage obstacles to carrying out behaviour change

	KSF
1. An ability to work collaboratively with client behaviours that are potentially counter-productive – for example, clients who:	C1L3
1.1. find it difficult to talk	HWB6L3
1.2. tend to talk too much and/or find it hard to stay focused	HWB6L3
1.3. invent or distort material	HWB6L3
1.4. are persistently late	HWB6L3

BC12. Ability to end the intervention in a planned manner and to plan for long-term maintenance of gains after intervention ends

	KSF
1. An ability to terminate the intervention in a manner which is planned, and to signal plans for termination at appropriate points throughout the intervention	HWB7L3
2. An ability to plan for maintenance of behaviour change after the end of the intervention:	HWB7L3
2.1. An ability to help clients identify and elaborate their concerns about termination (e.g. worry that that they need support to manage on their own, or that they will relapse)	HWB7L3
2.2. ability to help clients identify other resources that might help them maintain their behaviour change (e.g. weightwatchers, websites, gym membership)	HWB7L3

Behaviour Change Techniques

BCT code[a]	Name of BCT	Behaviour Change Technique Description	KSF
	Techniques for Motivation Development		
	Low Intensity Interventions		
M20	Reassurance	Encourage client to believe in herself/himself and the possibilities of improvement (e.g. by non-specific supportive comments e.g. 'you'll do fine')	C1L3
M17	General information	Provide general information about the behaviour and behaviour change	HWB4L3
M12	Social support (emotional)	Provide &/or id potential sources of empathy and give generalised positive feedback	HWB4L3
M10	Information about the behaviour	Provide information about antecedents or consequences of the behaviour, or connections between them, or behaviour change techniques	HWB4L3
M11	Verbal persuasion / persuasive communication	Presentation of arguments in favour of the behaviour by a credible source (NB: there must be evidence of presentation of arguments; general pro-behaviour communication does not count)	HWB4L3
	Medium Level Interventions		
M1 (also A4)	Antecedents & consequences	Record antecedents and consequences of behaviour (e.g. social and environmental situations and events, emotions, cognitions)	HWB4L3
M8	Behavioural experiments	Identify and test hypotheses about the behaviour, its causes and consequences, by collecting and interpreting data	HWB4L3 HWB6L3
M13	Decision-making	Generate alternative courses of action, and pros and cons of each, and weigh them up	HWB4L3
M15	Motivational interviewing	Elicit self-motivating statements & evaluation of own behaviour to reduce resistance to change	HWB4L3
M21	Reframing	Encourage client to adopt a different perspective on behaviour in order to change attitude (e.g. by asking how partner would see the behaviour or how they might see it when they were ill or older)	HWB4L3
M5 (also A7)	Contract	Generate a contract of agreed performance of target behaviour with at least one other, written and signed or verbal	HWB4L3

M2 (also A6)	Comparison	Provide comparative data (cf standard behaviour, person's own past behaviour, others' behaviour)	HWB4L3
M3	Social comparison	Provide opportunities for social comparison, i.e. comparison between self and other people (e.g. contests and group learning)	HWB4L3
M16 (also A21)	Social Support (non-specific)	Provide and/or identify sources of non-specific social support	HWB4L3
	High Intensity Interventions		
M4	Discrepancy assessment:	Highlight nature of discrepancy (direction and amount) between standard, own or others' behaviour (goes beyond simple self-monitoring)	HWB4L3
M6	Fear arousal	Induce negative (aversive) emotional state associated with the behaviour	HWB4L3
M7	Anticipated regret	Induce expectations of future regret about non-performance of behaviour	HWB4L3
M9	Cognitive restructuring	Change cognitions about causes and consequences of behaviour	HWB4L3
M19	Paradoxical Instructions	Instruct the client to do precisely the opposite of what common sense would dictate in order to show the absurdity or self-defeating nature of the client's original intention (e.g. smoking many more cigarettes than the client would normally)	HWB4L3
M14	Coping strategies	Identify behaviours to be undertaken to avoid or reduce stressors	HWB4L3
M18	Assertion Training	A combination of techniques used to teach client interpersonal communication to help them express emotions, opinions, and preferences (positive and negative) clearly, directly, and in an appropriate manner (e.g. for a client who eats or smokes following interpersonal conflict)	HWB4L3
	Techniques for Action on Motivation		
	Low Intensity Interventions		
A3	Self-Monitoring of behaviour	Record the specified behaviour (person has access to recorded data of behavioural performance, e.g. from diary)	HWB4L3
A1	Goal setting	Identify and set a behavioural goal	HWB4L3
A12	Instruction	Teach new behaviour required for performance of target behaviour (not as part of graded hierarchy or as part of modelling) (e.g. give clear instructions)	HWB4L3
A9	Coping planning	Identify and plan ways of overcoming barriers (note, this must include identification of specific barriers e.g. "problem solving how to fit into weekly schedule" would not count)	HWB4L3

A8	Action Planning	Make a detailed plan of what the client will do including, as a minimum, when, and where to act	HWB4L3
A10	Goal review	Assess extent to which the goal/target behaviour is achieved, identify the factors influencing this and amend goal if appropriate	HWB4L3
	Medium Intensity Interventions		
A4 (also M1)	Antecedents and consequences	Record antecedents and consequences of behaviour (e.g. social and environmental situations and events, emotions, cognitions)	HWB4L3
A2	Standard	Decide on the target standard of behaviour (specified and observable)	HWB4L3
A5	Feedback	Provide feedback of monitored (inc. self-monitored) behaviour	HWB6L3
A6 (also M5)	Comparison	Provide comparative data (cf standard behaviour, person's own past behaviour, others' behaviour)	HWB4L3
A7 (also M5)	Contract	Generate a contract of agreed performance of target behaviour with at least one other, written and signed or verbal	HWB4L3
A15	Self talk	Make planned self-statements (aloud or silent) to implement behaviour change techniques	HWB4L3
A18	Relaxation	Provide systematic instruction in physical and cognitive strategies to reduce sympathetic arousal, and to increase muscle relaxation and a feeling of calm	HWB4L3
A19	Time management	Apply action planning to the perceived problem of shortage of time	HWB4L3
A20	Homework	Set homework tasks that repeat or build on work done with client e.g. perform mental rehearsal or other BCTs	HWB4L3
A21 (also M16)	Social Support (non-specific)	Provide and/or identify sources of non-specific social support	HWB4L3
A22	General problem-solving	Engage client in general problem-solving	HWB4L3
A24	Avoidance	Identify and advise client to avoid those particular situations, activities, environments, individuals, things, or subjects of thought or conversation that have anticipated negative consequences	HWB4L3
A11 (also P8)	Graded tasks	Set easy tasks to perform, making them increasingly difficult until target behaviour is performed	HWB4L3
	High Intensity Interventions		
A13 (also P11)	Behavioural rehearsal	Provide or identify opportunities for client to perform behaviour (repeatedly)	HWB4L3
A14 (also P14)	Role play	Provide opportunities for client to perform behaviour in simulated situations	HWB4L3

A16 (also P17)	Imagery	Use planned images (visual, motor, sensory) to implement BCTs (inc. mental rehearsal)	HWB4L3
A17	Relapse prevention	Identify situations that increase the likelihood of the behaviour not being performed and apply coping strategies to those situations	HWB4L3
A23	Biofeedback	Use an external monitoring device to provide an individual with information regarding his or her physiological state, which many enable voluntary control over autonomic body functions e.g. heart rate feedback in increasing physical activity	HWB6L3
A25	Distraction	Identify alternative focus for client's attention to avoid attention to triggers for problematic behaviour and instruct on using in problematic situations.	HWB4L3
A26	Rational Emotive Therapy	Teach the client, using a variety of cognitive, emotive and behavioural techniques, to modify and replace self-defeating thoughts to achieve new and more effective ways of feeling and behaving.	HWB4L3
A27	Social Skills Training	Teach effective social interaction in specific situations (e.g. job interviews,), may include techniques such as: behaviour rehearsal, cognitive rehearsal, and assertiveness training	HWB4L3
A28 (also P37)	Stress Inoculation Program	For clients experiencing stress consider using Stress-Inoculation Training (SIT): A four-phase training program for stress management often used in cognitive behaviour therapy.	HWB4L3
A29 (also P37)	Anger Control Training	A combination of techniques that are used to enable the client to control anger	HWB4L3
A30 (also M18)	Assertion Training	A combination of techniques used to teach client interpersonal communication to help them express emotions, opinions, and preferences – positive and negative – clearly, directly, and in an appropriate manner	HWB4L3
	Prompted or cued route		
	Low Intensity Interventions		
P15	Modelling	Prompt observation of the behaviour of others	HWB4L3
P18	Social support (instrumental)	Provide or arrange for others to perform component tasks of behaviour or tasks that would compete with behaviour (e.g. offering childcare)	HWB4L3
P2	Prompt	Identify a stimulus that elicits behaviour (inc. telephone calls or postal reminders designed to prompt the behaviour)	HWB7L3
	Medium Intensity Interventions		
P3	Contingent Reward	Identify and provide a contingent valued consequence of the target behaviour if and only if the target behaviour is performed (rewards can include social approval)	HWB7L3

P8 (also A11)	Graded tasks	Set easy tasks to perform, making them increasingly difficult until target behaviour is performed	HWB7L3
P16	Vicarious reinforcement	Prompt observation of the consequences of others' behaviour	HWB4L3
P21	Environmental change	Change the environment in order to facilitate the target behaviour (other than prompts, rewards and punishments, e.g. choice of food provided)	HWB4L3
P39	Time Out	Move the client away from the area that is reinforcing the behaviour, e.g. instruct client not to go into the local shop from which they buy their cigarettes	HWB4L3
	High Intensity Interventions		
P1	Discriminative (learned) cue	Identify an environmental stimulus that has been repeatedly associated with contingent reward for specified behaviour	HWB7L3
P4	Punishment	Identify and provide a contingent aversive consequence, if and only if the behaviour is not performed	HWB7L3
P5	Omission	Identify and remove a contingent valued consequence, if and only if the behaviour is not performed	HWB7L3
P6	Negative reinforcement	Identify and remove an aversive consequence of the behaviour, if and only if the behaviour is performed	HWB7L3
P7	Threat	Offer future punishment or removal of reward contingent on performance	HWB7L3
P9	Shaping	Build up behaviour by initially reinforcing behaviour closest to required behaviour and systematically altering behaviour required to achieve contingent reinforcement	HWB7L3
P10	Chaining	Build up behaviour by starting with final component; gradually add components earlier in sequence	HWB7L3
P11 (also A13)	Behavioural rehearsal	Provide or identify opportunities for client to perform behaviour repeatedly	HWB7L3
P12	Mental rehearsal	Provide opportunities for client to imagine performing the behaviour repeatedly	HWB7L3
P13	Habit formation	Provide or identify opportunities for client to perform same behaviour in the same context repeatedly	HWB7L3
P14 (also A14)	Role play	Provide opportunities for client to perform behaviour in simulated situation	HWB7L3
P17 (also A16)	Imagery	Use planned images (visual, motor, sensory) to implement behaviour change techniques (incl. mental rehearsal)	HWB4L3

P19	Desensitisation	Identify and provide exposure to threatening experiences	HWB7L3
P20	Systematic desensitisation	Provide graded exposure to increasingly threatening experiences	HWB7L3
P22	Differential Reinforcement	Arrange for reinforcement of only selected behaviour (e.g. provide reward of consumption of low fat foods but not consumption of high fat foods)	HWB7L3
P23	Escape Learning	Arrange for the termination of an aversive stimulus The principle is identical to that of negative reinforcement	HWB7L3
P24	Extinction	Discontinue reinforcement of target behaviour e.g. reduce amount of social attention to smoking behaviours	HWB7L3
P25	Flooding	Expose client directly to a maximum-intensity anxiety-provoking situation or stimulus, either in the imagination or in reality. Flooding techniques aim to reduce anxiety that is interfering with desired behaviour e.g. taking client to a gym to overcome anxiety about engaging in physical activity	HWB7L3
P27	Counter-conditioning	Reward client for responding to a stimulus in a manner that is incompatible with their previous response to that stimulus, (e.g. reward client for ordering a soft drink when they first go to the bar rather than an alcoholic drink)	HWB7L3
P28	Exposure	Provide systematic confrontation with a feared stimulus, e.g. a period of withdrawal from nicotine for a client who wants to stop smoking, either live or in the imagination (may encompass any of a number of behavioural interventions, including systematic desensitization, flooding, implosive therapy and extinction-based techniques)	HWB7L3
P29	Fading	Provide a gradual changing of one stimulus to another (often used to transfer stimulus control). Stimuli can be faded out or faded in, e.g. gradually increasing the range of foods offered to a client who is trying to choose healthy foods	HWB7L3
P30	Thinning	Provide a gradual increase in the intermittency of reinforcement, (e.g. gradually increase the time between rewards)	HWB7L3
P31	Habit reversal	Provide opportunities for repeated rehearsal of a new correct response to a stimulus and stop responding to a previously learned cue, (e.g. client responds to a morning coffee break by eating a piece of fruit instead of a piece of chocolate)	HWB7L3
P32	Negative punishment	Remove a reward as a consequence of a response. (e.g., subtract money from a prepaid refundable deposit when client smokes a cigarette.	HWB7L3

P33	Noncontingent reinforcement	Provide a reward independently of any particular target behaviour.	HWB7L3
P34	Overcorrection	When a client exhibits inappropriate behaviour ask the client to repeat the behaviour in an appropriate but exaggerated way	HWB7L3
P36	Response cost	Withdraw a valued commodity from the client as a result of their performing an unwanted behaviour, e.g. loss of access to desired activity e.g 1hr of TV viewing for each inappropriate behaviour	HWB7L3
P47	Stimulus Generalization	Guide client to spread of effects of learning a behaviour in one situation to other similar situations e.g. exercises learned in gym repeated when wearing informal clothes	HWB7L3
P37	Satiation	Expose the client to repeated exposure to a reinforcer e.g. chocolate, in order to reduce its effectiveness of a reinforce	HWB7L3
P40	Token Economy	Reinforce the desired behaviour by offering tokens that can be exchanged for special foods, television time, passes, or other rewards	HWB7L3
P42	Classical Conditioning	Present a neutral stimulus jointly with a stimulus that already elicits a response repeatedly until the neutral stimulus elicits that response (Pavlovian Conditioning) e.g. repeatedly pairing fatty foods with a disliked flavoured sauce	HWB7L3
P43	Covert Conditioning	Provide opportunities for client to imagine performing a desired behaviour in a problematic real-life situation, and to reward himself or herself for mentally engaging in the behaviour. Also called covert behavioural reinforcement	HWB7L3
P44	Covert Sensitization	Provide opportunities for client to imagine performing the undesired behaviour (e.g. overeating) and then imagine an unpleasant consequence (e.g. vomiting)	HWB7L3
P45	Discrimination Training	Reward the behaviour in one situation but not in another (e.g. reward for eating sweet foods at mealtimes but not between meals	HWB7L3
P46	Emetic Therapy	Provide client with drugs that produce aversive side effects when combined with problem e.g. the use of Antabuse in reducing alcoholism	HWB7L3
P38 (also A28)	Stress Inoculation Program	For clients experiencing stress consider using Stress-Inoculation Training (SIT)	HWB4L3
P41 (also A29)	Anger Control Training	A combination of techniques that are used to enable the client to control anger (e.g. a client who uses alcohol in response to anger might be trained to control anger in order to reduce alcohol consumption.)	HWB4L3

P26	Implosive Therapy	Repeatedly encourage client to imagine an anxiety-arousing situation, and to experience anxiety as intensely as possible while doing so. Since there is no actual danger in the situation, the anxiety response is not reinforced and therefore is gradually extinguished	HWB7L3
P35	Rational Emotive Therapy	Teach the client, using a variety of cognitive, emotive and behavioural techniques, to modify and replace self-defeating thoughts to achieve new and more effective ways of feeling and behaving. In the process the irrational beliefs and feelings are first unmasked then altered by	HWB4L3

[a]code number for BCT taken from the *Generic Health Behaviour Change Competency Framework*. M=motivation development route; A=action on motivation route; P=prompted or cued route

KSF notation as follows: C=core dimension; HWB=health and wellbeing dimension; IK=information and knowledge dimension. The first number refers to the sub-dimension within that dimension. L=level of competence. The second number refers to the level of competence. For example: HWB4L3 denotes KSF Health and Wellbeing Dimension, sub-dimension 4 (enablement to address health and wellbeing needs), level of competence 3.

Summary of the HBCC Competency Topics Matched to KSF Competency Dimensions

KSF Dimension (sub-dimension)	**HBCC Competency Topics**		
	Foundation	**Behaviour Change**	**BCT Route**
Core Dimension			
Communication	F1- F10	BC2, BC7, BC8, BC10, BC11	na
Personal & people development	F2	na	na
Service improvement	F1, F2	na	na
Quality	F1	na	na
Equality & diversity	F3	na	na
Health & Wellbeing Dimension			
Protection of health & wellbeing	F1	na	na
Enablement to address health & wellbeing needs	F8	BC4, BC7, BC8, BC10	**M**, **A**, **P**
Assessment & treatment planning	F12	BC1-BC3, BC5, BC6, BC8- BC11	**M**, **A**
Interventions & treatments	F3, F7- F11	BC1, BC4, BC5, BC6- BC10, BC12	**P**
Information & Knowledge Dimension			
Information collection & analysis	F1	na	na
Knowledge & information resources	F2	na	na

na= KSF sub-dimension not applicable to this HBCC competency domain. **M**= BCT to develop motivation for change, **A**= BCT to enable action on motivation, **P**= BCT to prompt or cue behaviour

Appendix 2

Competences described in Alcohol Brief Interventions: Training Manual
NHS Health Scotland, 2009

The table below lists the HBCC competency topics described in NHS Health Scotland's training manual for ABIs. The behaviour change techniques (BCTs) described in the training manual are listed according to the route(s) to behaviour change targeted by each BCT (**Motivation** development route; **Action** on motivation route, **Prompted** or cued route to change). The content of each ABI training unit is described in detail on the pages that follow the table below.

Training Unit	HBCC competency used in each ABI training unit[a]				
	Foundation Topics	Behaviour Change Topics	behaviour change technique (route to behaviour change)		
			M	A	P
1. Brief interventions: what and why		BC1; BC3			
2. Attitudes to alcohol	F3; F12	BC1			
3. Barriers and concerns	F1; F5; F12	BC3			
4. Brief intervention observation	F5; F7; F10	BC2; BC3; BC4; BC6; BC7; BC8; BC9; BC12	M1; M2; M10; M12; M13; M14; M15; M16; M17	A5; A6; A9, A17; A21; A22	
5. Units and drinking limits		BC1; BC9			
6. Raising the issue of alcohol	F5	BC1; BC9			
7. Screening and feedback	F3; F5; F10	BC1; BC2; BC7; BC8; BC9	M5	A6	
8. Referral: when, where and how?	F1; F10	BC2; BC9			
9. Brief interventions delivery: key skills	F5; F7; F10	BC2; BC6; BC7; BC8; BC9; BC10; BC12	M1; M2; M10; M11; M12; M14; M16; M15; M17; M18; M20	A1; A3; A4; A5; A6; A8; A9; A10; A13; A17; A21; A25; A28	P3; P15; P21
10. Brief interventions delivery: putting it all together	competences not described in detail in the training manual				

[a]for foundation and behaviour change domains, competences are matched at the level of competency topic, it is not necessarily the case that all individual competences within a topic are described in a training unit

Competences described in Alcohol Brief Interventions: Training Manual NHS Health Scotland, 2009

Unit 1: Brief Interventions: what and why (20mins)
This unit is an information giving session. Data pertaining to alcohol as a public health problem are presented and the nature of and evidence base for ABIs are detailed. This unit delivers information relevant to two behaviour change competency topics: BC1 (*health behaviour and health behaviour problems*) and BC3 (*knowledge of a model of behaviour change and the ability to understand and employ the model in practice*).

Unit 2: Attitudes to alcohol (45mins)
This unit delivers information and employs a practical session to enable trainees to elicit and understand their own attitudes to alcohol consumption and a debrief session to reinforce the practical session. The unit is primarily focussed on the attitudes of the trainees to alcohol but the unit does suggest this is an opportunity to discuss misinformation about alcohol, stereotypes associated with alcohol and population subgroups, including different cultures. As a consequence, this unit is an important training opportunity in relation to foundation competency F3 (*knowledge of and ability to work with difference*), which underpins the ability to deliver interventions equitably to different types of clients, e.g. gender, religion, age, deprivation, ethnicity and sexuality. Competency topic F12 (*barriers to and facilitators of implementing interventions*) is also an important component of this unit, as is behaviour change topic BC1 (*health behaviour and health behaviour problems*).

Potential for development of Unit 2: this unit could include information about alcohol and different sections of the community as a core component to ensure the use of alcohol in relation to different groups, e.g. gender, religion, age, deprivation, ethnicity, sexuality, is always covered by the training.

Unit 3: Barriers and concerns (40mins)
This unit enables trainees to express and discuss their concerns about and identify possible barriers to delivering ABIs as part of their routine practice. The aim appears to be to promote and generate positive beliefs towards ABIs within the trainees. The unit elicits four types of beliefs: beliefs about role legitimacy, role adequacy, role support and the trainee's motivation to deliver ABIs. As such it potentially covers all competences within competency topic F12 (*barriers to and facilitators of implementing interventions*). In addition, it addresses professional issues such as confidentiality within practice and knowledge of referral to other services, both of which are covered by competences within foundation competency topic F1 (*professional and ethical guidelines*).

Unit 4: Brief intervention observation (40mins +)
Video clips are used to illustrate three important skills required for the delivery of an ABI: establishing rapport and an empathic approach, emphasising personal responsibility, and listening for readiness to change. These competences are described in foundation competency topics F5 (*ability to engage client*) and F7

(*ability to foster and maintain a good intervention alliance, and to grasp the client's perspective*). This unit also introduces and discusses the theoretical framework used by the training programme, namely the Stages of Change or trans-theoretical model. As such this unit addresses behaviour change competency topic BC3 (*knowledge of a model of behaviour change and the ability to understand and employ the model in practice*).

Potential for development of Unit 4: **Knowledge of Behaviour Change Theory**
The Stages of Change Model provides the theoretical model of behaviour change. The training model describes the Model in full. There are two potential problems with this approach: i). the Stages of Change model does not reflect current models of behaviour change; ii). the Stages of Change Model, as described in the training manual, presents information to trainees that they will not use in their practice. As a consequence, there is an opportunity to improve the presentation of behaviour theory within ABI training. *First*, behaviour theory now highlights two pathways to behaviour. One is a conscious path that generates behaviour through the development of motivation and enabling action on motivation. The other path is more automatic and recognises a role for the environment, both physical and social, and a role for emotional factors in the generation of behaviour. These two pathways are encompassed by the MAP of behaviour change used in the HBCC. Therefore, the MAP provides a simplified, but more comprehensive, model of behaviour for training for brief interventions. *Second*, the MAP is a closer match to the practical delivery of ABIs. It is likely that MAP would provide trainees with a theory based structure to guide their practice. Further, the MAP might give trainees a better understanding of the prompted or cued route to behaviour change.

Unit 5: **Units and drinking limits** (40mins)
This unit focuses on measurement of alcohol consumption and national guidance on alcohol limits for different groups. It addresses the behaviour change competency topics BC9 (*ability to use measures and self-monitoring to guide behaviour change interventions and to monitor outcome*) and BC1 (*health behaviour and health behaviour problems*)

Unit 6: **Raising the issue of alcohol** (30mins)
Competences described in foundation competence topic F5 (*ability to engage client*) are core to this unit. In addition, competences in relation to understanding issues and illnesses associated with alcohol consumption are also delivered in this unit. These competences are described in behaviour change competency topic BC1 (*health behaviour and health behaviour problems*).

Unit 7: **Screening and feedback** (60mins)
This unit delivers information and uses role play to enable trainees to experience the screening for an ABI from the perspective of the practitioner and the client. It involves skills in relation to client assessment and the measurement of their alcohol consumption, which are addresses by behaviour competency topics BC2 (*ability to undertake a generic assessment*) and BC9 (*ability to use measures and self-monitoring to guide behaviour change interventions and to monitor outcome*). In addition, this unit describes competences in relation to the ability to engage a client, including the ability to work with different populations and to deliver

information effectively. These competences are contained within three foundation topics F3 (*knowledge of and ability to work with difference*), F5 (*ability to engage client*) and F10 (*ability to deliver information*).

Unit 8: Referral: when, where and how? (15mins)
This unit focuses on how to identify and respond to clients with possible alcohol dependence. As such it describes competences required for screening in relation to dependence and suitability for an ABI. These competences are described in behaviour change topics BC2 (*ability to undertake a generic assessment*) and BC9 (*ability to use measures and self-monitoring to guide behaviour change interventions and to monitor outcome*). These assessment and measurement competences are complemented by knowledge about local referral pathways and additional resources available for clients, which are described in foundation competences F1 (*professional and ethical guidelines*) and F10 (*ability to deliver information*).

Unit 9: Brief intervention delivery: key skills (150mins)
This unit identifies key components of ABIs and how practitioners can identify the most appropriate brief intervention approach for each client. It brings together the information gained from units 5, 6 and 7 and builds on these units to identify behaviour change techniques relevant to the client's stage of change. The focus is on generic communication skills, provision of information following measurement of client alcohol consumption, enhancing motivation and building confidence in ability to change. As a consequence this unit described multiple competences from the HBCC. The foundation competency topics F7 (*ability to foster and maintain a good intervention alliance, and to grasp the client's perspective*) and F10 (*ability to deliver information*) are central to this unit. Multiple behaviour change competency topics are described in this unit, including BC2 (*ability to undertake a generic assessment*), BC6 (*capacity to select and skillfully apply the most appropriate behaviour change intervention method*), BC8 (*ability to structure consultations*), BC9 (*ability to use measures and self-monitoring to guide behaviour change interventions and to monitor outcome*), BC10 (*health behaviour problem solving*) and BC12 (*ability to end the intervention in a planned manner and to plan for long-term maintenance of gains after intervention ends*). This unit is the first to describe behaviour change techniques (BCTs) in any detail. Multiple BCTs are described, the majority of which are aimed at the **motivation** development and **action** on motivation routes to behaviour change. Client motivation to change is developed using techniques from motivational interviewing (BCT M15: *motivational interviewing*), including listing positive and negative aspects of alcohol consumption (BCT M1 and A4: *record antecedents and consequences of behaviour*). Motivated clients are helped to translate that motivation into action primarily through action (BCT A1: *identify and set a behavioural goal*) and coping planning (BCT A9: *identify and plan ways of overcoming barriers*).

Potential for development of Unit 9: **Using Behaviour Change Theory to Support Practice**
Unit 9 describes numerous BCTs. Trainees' practice might benefit from an understanding of how these techniques influence behaviour. For example, the

BCT of Action Planning is underpinned by a general principle that plans are more effective if the plan details **when**, **where** and **what** behaviour will be performed. For example, a client who wants to reduce their alcohol consumption might make the following action plan: I will **drink a soft drink between alcoholic drinks**, when I am **out with my friends in the pub** on **Saturday night**. The current training manual tends to describe lots of behaviours that, if enacted, would reduce alcohol consumption, e.g. drink soft drinks, avoid rounds, put my glass down between sips. However, these behaviours are more likely to be performed if they are part of an action plan, i.e. part of a plan that details when and where the behaviour will be performed. Providing trainees with an understanding of these theory-based, general principles of behaviour change is likely to result in improved outcomes.

Unit 10: Brief interventions delivery: putting it all together (135mins)

This unit provides trainees with an opportunity to practice delivering an ABI based on their own case studies. As a consequence the training manual does not describe any specific competences within Unit 10. However, it can be anticipated that trainees will employ the majority of competences delivered in the earlier units. Precisely which competences are used by trainees in this Unit will depend on the nature of the case studies described by the trainees to be used to practice delivering ABIs. Unit 10 also includes a reflective practice log in which each trainee records details of occasions on which they delivered an ABI and what components of the ABI were delivered. This reflective practice log is likely to be very useful. Feedback from practitioners and trainers in response to the *GHBC-CF* highlighted the need to ensure that trainees were supported to implement their training within their usual practice. A reflective practice log might work to support the implementation of the ABI training.

Appendix 3

How the Framework was Developed

The HBCC is based on the *Generic Health Behaviour Change: A Comprehensive Competency Framework (GHBC-CF)*. The competences within the *GHBC-CF* were identified by examining the published evidence base.

Several sources of information were consulted.

- Relevant professional competency frameworks
- Systematic reviews of interventions for behaviour change
- Manuals for behaviour change interventions
- NHS and Health Scotland Skills for Health and competency frameworks for alcohol brief interventions

The competency framework for the delivery of cognitive behaviour therapy[13] was identified as the professional competency framework of most relevance for the delivery of health behaviour change as; a) it describes competencies for delivery of personal change interventions and, b) it is a clear, well-developed framework. This framework was adapted to provide a framework for generic health behaviour change. An iterative process of adaptation was employed. Other relevant documentation (detailed below) was analysed in relation to the existing competency framework. These analyses enabled the framework to be modified to exclude irrelevant competencies and to include health behaviour change specific competencies.

Of particular importance was the need to identify specific behaviour change techniques to be included in the *GHBC* competency framework as these did not form any part of the competency framework for cognitive behavioural therapy. The most comprehensive review of specific behaviour change techniques was included in the analyses[14]. The *GHBC-CF* identified 89 behaviour change techniques, from that review, which were of potential relevance to health behaviour change. In order to make such a large number of techniques usable by and useful for policy makers, managers and frontline staff, we mapped each technique to one or more of three identified routes to behaviour change, namely, motivation development, action on motivation, prompted or cued behaviour.

Feedback on the GHBC-CF

The *GHBC-CF* was presented to representatives from:

- Health Improvement Strategy Division
- NHS Health Scotland
- NHS Education Scotland

and at meetings:

- British Psychological Society, Division of Health Psychology-Scotland, annual research meeting

[13] Roth AD, Pilling S. The competencies required to deliver effective cognitive behavioural therapy for people with depression and anxiety disorders. *Improving Access to Psychological Therapies (IAPT) Programme*. London: Department of Health, 2007.

[14] Michie M, Johnston M, Francis J, Hardeman W, Eccles M. From theory to intervention: mapping theoretically derived behavioural determinants to behaviour change techniques. *Applied Psychology: An International Review* 2008;57(4):660-80.

- Health Scotland: Helping People Change launch event for this new web-based resource

Feedback was very positive but three issues were highlighted:

1. The *GHBC-CF* contained language that was considered too technical and a request was made to revise the *GHBC-CF* using non-technical language throughout
2. Feedback requested we order the competences into a hierarchy, which would identify the competences required at different levels of working
3. Colleagues suggested that it would be useful to map the *GHBC-CF* to the competences described in relevant dimensions of the Knowledge and Skills Framework.

Use of Non-technical language

We have attempted to use lay language wherever possible. Whilst this report has been written in lay language it has been necessary to retain some technical terminology in the descriptions of the behaviour change techniques. However, an understanding of this terminology is not required to understand this report and each technical term used to label a behaviour change technique is accompanied by a description in the vernacular.

Establishing a Competency Hierarchy

The request to develop a hierarchy within the GHBC-CF was addressed by our collegiate network. Colleagues, who were all chartered psychologists (health and/or clinical), identified competences required to deliver low, medium, and high intensity health behaviour change interventions. The hierarchy within the HBCC framework is based on intensity of intervention[15] rather than on the nine career framework levels described in Skills for Health. The Skills for Health career framework was not adopted as we could not reliably identify the job titles currently tasked with delivering health behaviour change nor is there an established career structure for health behaviour change. As a consequence we adopted a level of intervention approach and described the competences required to deliver interventions at each level.

Mapping the HBCC Framework to the Knowledge and Skills Framework (KSF)

Each competency described in the HBCC was compared to the indicators and descriptors of each competency dimension described in the KSF. This process identified the competency dimension(s) and level of competency within a KSF dimension that was the best match to each HBCC competency.

Identifying Competences in Current Training Programmes for Health Behaviour Change

In addition, we have used the HBCC to identify the competences described in NHS Health Scotland's training manual for the delivery of alcohol brief interventions in Scotland. A standard method[16] of identifying competences for behaviour change was applied to NHS Health Scotland's Alcohol Brief Interventions: Training Manual (2009). Competences identified within the Training Manual were mapped to competency topics and behaviour change techniques within the HBCC.

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[15] The levels of intervention were informed by *The matrix: a guide to delivering evidence based psychological therapies in Scotland*, December 2008.

[16] Abraham, C. and S. Michie (2008). A Taxonomy of Behavior Change Techniques Used in Interventions. *Health Psychology* 27(3): 379-387. Michie, S., S. Churchill, et al. (in press). Identifying evidence-based competences required to deliver individual and group-based behavioural support for smoking cessation. *Annals of Behavioral Medicine*.