

# Tackling multiple unhealthy risk factors

Emerging lessons from practice

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# Contents

<b>1</b>	<b>Introduction</b>	<b>4</b>
<b>2</b>	<b>Tackling multiple unhealthy risk factors</b>	<b>6</b>
	Why do multiple unhealthy risk factors matter?	6
	What does the academic evidence offer to those designing services to address multiple unhealthy risk factors?	9
	Conclusion	12
<b>3</b>	<b>Selection and characteristics of case studies</b>	<b>13</b>
<b>4</b>	<b>Large, rural counties looking to do things differently</b>	<b>18</b>
	The drivers and underpinnings of service development	18
	LiveWell Dorset	21
	Devon: OneSmallStep	22
	Kent: One You	24
	The models in practice: innovation and challenges	26
	Conclusion	30
<b>5</b>	<b>Urban areas tackling the wider determinants of health</b>	<b>31</b>
	The drivers and underpinnings of service development	31
	Blackburn with Darwen	32
	Luton	34



	The models in practice: innovation and challenges	34
	The use of data and contracting to tackle the wider determinants of health	38
	Conclusion	39
<b>6</b>	<b>Hospitals promoting health and supporting behaviour change</b>	<b>40</b>
	The drivers and underpinnings of service development	40
	The Royal Free: 'Well at the Free'	41
	Bolton	43
	The models in practice: innovation and challenges	44
	Conclusion	50
<b>7</b>	<b>Local collaboration to tackle unhealthy behaviours</b>	<b>52</b>
	The drivers and underpinnings of service development	52
	The models in practice: innovation and challenges	55
	Conclusion	59
<b>8</b>	<b>Connections to wider health policy</b>	<b>60</b>
<b>9</b>	<b>Themes from our case studies and recommendations for practice</b>	<b>64</b>
	Key themes across our case studies	64
	Recommendations to local areas	68



References	71
About the authors	77
Acknowledgements	78



# 1 Introduction

This research builds on a previous King's Fund report, *Clustering of unhealthy behaviours over time: implications for policy and practice* (Buck and Frosini 2012). We showed that there is significant co-occurrence of smoking, drinking, physical inactivity and poor diet among individuals in England. In other words, these behaviours rarely happen in isolation from each other. Yet services and policies designed to help people change their behaviours tend to take a siloed approach, addressing these behaviours in isolation, and not recognising that many people experience more than one behaviour simultaneously. This matters because we know that this co-occurrence makes a big difference in terms of life expectancy. This is also synergistic: an individual's risk factors contribute more than the sum of their parts to an individual's overall risk of ill health (Ding *et al* 2015).

Since the 2012 King's Fund report on this issue, the responsibility for many public health services in England, including behaviour change, has been transferred to local authorities as part of the Health and Social Care Act 2012. This has given local authorities an opportunity to reassess behaviour change in the light of their population needs, taking into account The King's Fund's work and other research. At the same time, many services have seen their budgets shrink in the face of recent squeezes on public health spending (Buck 2017), and this has motivated public health teams to think differently about how to deliver their services.

This paper sets out the experience, learning and practice of eight areas (six local authority services and two NHS services) that are designing services to support their populations to change behaviours. They have all embarked on this in the context of a deep understanding of the co-occurrence of multiple unhealthy risk factors in their populations, which has informed their decisions and services. We set out the learning based on the service provider's local context – that is: services from three large rural counties; services in highly urbanised areas; hospital-based services; and a rural service run by a local authority in partnership with a hospital.

The paper describes the journey that each area has undertaken, their similarities and differences. We describe how the services have developed, the care pathways they offer, and reflect on the barriers they have faced and overcome. We also



reflect on the importance of local leadership, innovation and the role that evidence and theoretical models of behaviour change have played. However, it is clear that better behaviour change services will not be sufficient on their own to tackle people's unhealthy behaviours; we therefore also give our views on how wider policy and practice needs to change to complement and strengthen the role of behaviour change services. Finally, we provide recommendations to help health and wellbeing services improve further by offering services and interventions that reflect the nature of people's experience of multiple behaviours.

The rest of this report is structured as follows. The next section sets out more detail on what we mean by 'multiple unhealthy risk factors', why they matter for health and the evidence for intervention. Section 3 describes the case studies and their characteristics, while sections 4–7 discuss the case studies in depth. Section 8 explores the link to wider policies and section 9 reflects on learning, with recommendations to inform practice and next steps.

This report is based on research commissioned by the Department of Health and Social Care to explore how local areas are attempting to tackle multiple unhealthy risk factors. All views are those of the authors alone and the Department has had no editorial role in this report.



## 2 Tackling multiple unhealthy risk factors

Our paper in 2012 ([Buck and Frosini 2012](#)) analysed the prevalence of combinations of risk factors for health in the adult English population. The box below explains what we mean by the term ‘multiple unhealthy risk factors’.

### What are multiple unhealthy risk factors?

In this report, the term ‘multiple unhealthy risk factors’ refers to a simultaneous combination of risk factors (primarily behavioural) that impact on individuals (or communities) and which pose a risk to health. There are four common risk factors: smoking tobacco; not following government guidelines on alcohol consumption; limited physical activity; and poor diet.

Most studies on unhealthy risk factors examine the factors in isolation, but some look at combinations of risks – for example, obesity (a risk factor for health and an outcome of the balance of food consumption and physical activity) and sleep deprivation. Some studies include mental health, though this is often viewed as a health outcome rather than a risk factor.

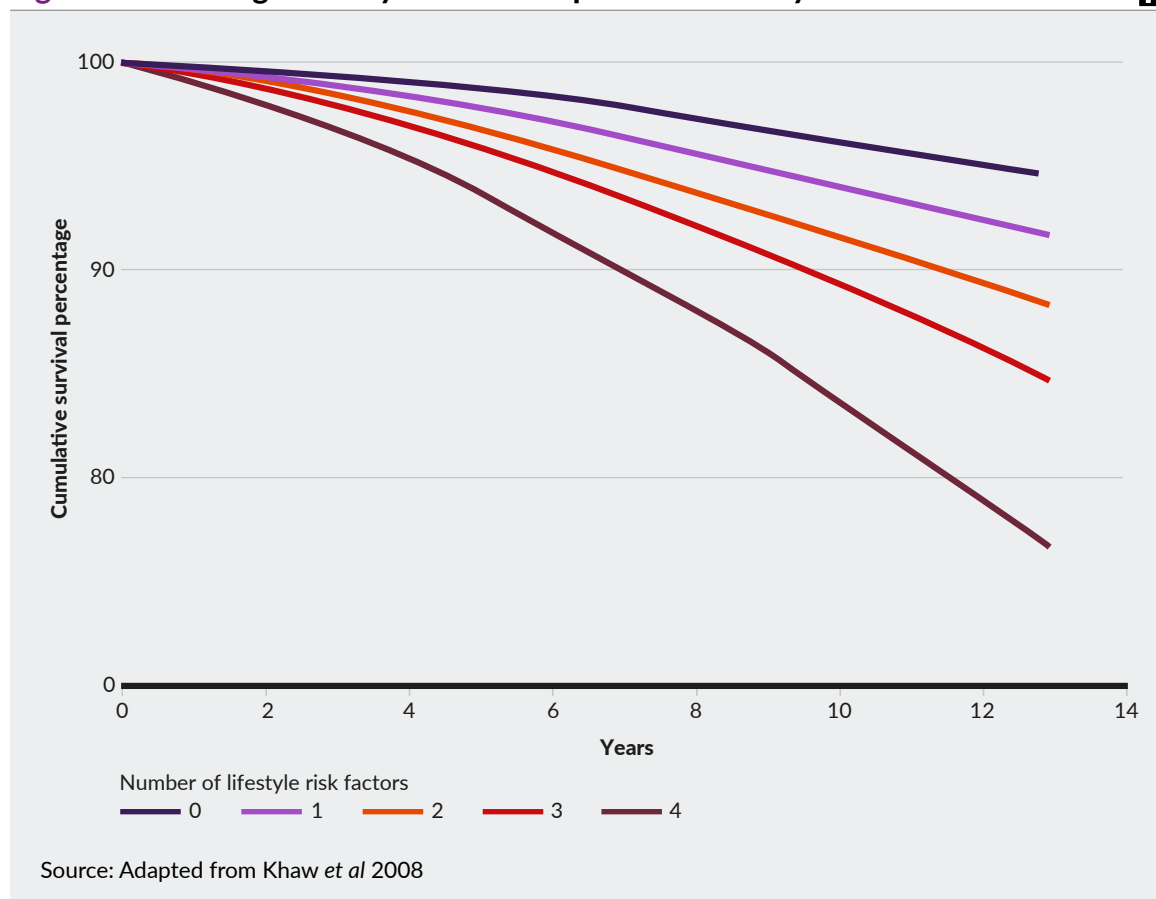
### Why do multiple unhealthy risk factors matter?

The Global Burden of Disease study identified that around 40 per cent of the UK’s disability-adjusted life years lost are attributable to factors that include the use of tobacco or alcohol, as well as hypertension, being overweight or being physically inactive (Newton *et al* 2015). The EPIC-Norfolk cohort study found that the higher the number of risk factors an individual engages in, the greater the risk to their health (Khaw *et al* 2008). An adult in mid-life who smokes, drinks to excess, is inactive and eats unhealthily is four times more likely to die in the next 10 years than someone who does none of these things. The relationship between the number of risk factors and the impact on mortality is set out below (Figure 1).



**Figure 1 Clustering of lifestyles and its impact on mortality**

**K**



The EPIC-Norfolk study findings have been corroborated by a meta-analysis (Loef and Walach 2012) and an Australian study looking at all-cause mortality in middle-aged adults (Ding *et al* 2015). Other studies have shown that multiple risk factors may also impact on morbidity and quality of life (Fransen *et al* 2014; Myint *et al* 2011). These also show that individuals may underestimate the impacts of these behaviours on their health and/or they may be asymptomatic. This strengthens the case for action as those who are at risk may not *feel* at risk and could therefore be less likely to seek out services promoting behaviour change.

Research also shows that multiple unhealthy risk factors are a widespread problem in England, where there is significant co-occurrence of smoking, drinking, inactivity and poor diet (Buck and Frosini 2012). In their study, 5 per cent of people have all four risk factors and just 6 per cent of individuals engage in none of these





behaviours; but 70 per cent of adults were not adhering to government guidelines on two or more of these behaviours. This is therefore an issue for the majority of adults in England.

Buck and Frosini (2012) updated and extended the earlier work of Poortinga (2007). He highlighted a theme raised in other research that working patterns are linked to some combinations of these unhealthy risk factors. For example, night work-load for Norwegian nurses was found to have a positive association with body mass index in one study (Buchvold *et al* 2015), while Meader *et al* (2016) found that the UK literature has consistently shown that all non-professional occupations are more likely to engage in two, three and four risk behaviours. Buck and Frosini (2012) found that between 2003 and 2008, prevalence of these risk factors had declined among adults in England, but that these reductions were much more likely to be coming from higher socio-economic groups. For example, the relative risk of having three or four simultaneous behavioural risks was three times greater for a working-class male compared to a professional male in 2003. By 2008, the relative risk had risen to five times greater. The link here between multiple unhealthy risk factors and health inequalities is important and should be a key consideration for all those concerned with reducing health inequalities.

Watts *et al* (2015) found that people who report being unable to work are more than three times more likely to report a higher number of risk behaviours than those in full-time paid employment. Two-thirds of those who were either unable to work, ill or disabled reported at least three risk behaviours. The research project looked at risk factors in 40 disadvantaged neighbourhoods of London. This included the four risk factors already mentioned, with the addition of sedentary behaviour, which captures the number of hours in a day spent sitting. While the overall prevalence of multiple unhealthy risk factors was similar to that in the general population, there were some important differences. Rates of reported physical activity were much lower, and being a member of a non-white ethnic group was associated with a lower number of risk behaviours. Much of this effect may be driven by lower smoking and alcohol consumption rates among non-white ethnic groups, reflecting differences in cultural attitudes to tobacco and alcohol. Other studies have looked at trajectories over the life course (Falkstedt *et al* 2016) and at local level.

The message from all these findings is that as local authorities develop an offer for risk factors, they need to tailor their services to the needs of their population.



As Watts *et al* (2015) expressed,

*We agree with the King's Fund, that if we want to improve the health of London's poorest fastest, we need to understand and target behaviour change strategies and implement them in a way that populations actually experience them, rather than relying solely on blanket single behaviours approaches, one by one. There is little sign that this is happening yet.*

This report is primarily about the experience of and learning generated by those services where there are signs of this happening. But first, does the evidence offer much help to those seeking to do just that?

### **What does the academic evidence offer to those designing services to address multiple unhealthy risk factors?**

This section summarises insights and evidence from the academic literature on tackling multiple unhealthy risk factors, which has focused primarily on single risk factors to date. The evidence that exists is restricted to:

- co-action (how changing one behaviour changes the chances of changing another)
- ordering (how the order of attempting to change behaviours in the presence of others affects success)
- the role of certain types of support staff in tackling these risk factors, particularly health trainers and coaches.

Paiva *et al* (2012) and Johnson *et al* (2014) are among the few studies that have looked specifically at the effects of co-action. The latter looked at three tailored interventions, showing that using a multiple-behaviour change approach made individuals 1.4 to 5 times more likely to make progress on a second behaviour. Changes remained significant at follow-up after 12 and 24 months. Some studies have also picked up the unintended impact that changing behaviour can have on secondary behaviours. For example, analysis of the US Lung Health Study (Ukert 2015) documented the effects of a smoking cessation programme on study participants' alcohol consumption. The initial act of quitting smoking lowered alcohol consumption in the short term and decreased it by more than a quarter for



those that had still quit by 12 months; it also increased the probability of becoming abstinent by almost a third. These findings remained at five-year follow-up.

So, there is some – albeit very limited – evidence that success in changing one behaviour may be related to success in changing another. But what about how multiple behaviours should be addressed? Is it better to attempt change simultaneously or sequentially, and if the latter, in which order? These questions were posed by Buck and Frosini (2012) and Spring *et al* (2012), but there is still no clear message on this from the academic literature. A recent systematic review (James *et al* 2016) that specifically looked at simultaneous versus sequential multiple-behaviour change interventions was only able to identify six studies that fit this description. While the interventions were generally found to be effective, the evidence on whether simultaneous or sequential approaches work best was inconclusive.

Smoking cessation services capture the complexities of behaviour change ordering. A recent meta-analysis concluded that changing smoking behaviours simultaneously with other behaviours is less effective than targeting smoking in sequence with other behaviours (Meader *et al* 2017). Recent Public Health England guidance on stop smoking services agrees with this analysis. It states that:

*Whilst there is some evidence for addressing risky behaviours such as poor diet and physical inactivity concurrently, multiple behaviour change interventions involving smoking are **not** found to be effective in successfully supporting smokers to stop.*

(Public Health England 2017, pp 11–2)

Public Health England guidance indicates that to achieve the best results, smoking services should maintain a focus on this risk factor when trying to change behaviour. Its guidance supports setting a dedicated smoking cessation service within a wider wellbeing service, but not as part of a multi-behaviour change intervention. All the case studies in this report provide dedicated smoking cessation services, even when other behaviours are addressed through a general adviser.

In our view, more research is needed to understand whether smoking can be part of a sequential multiple-behaviour change intervention. For example, a meta-analysis has demonstrated that smoking cessation is associated with a 4–5kg increase



in body weight after 12 months of quitting (Aubin *et al* 2012), with most of the weight gain occurring in the first three months. There may be opportunities here to provide ongoing weight management support following abstinence from smoking. While the evidence suggests that smoking should be tackled in isolation, this only reinforces the case for an integrated overview of a person's behaviours, to ensure that interventions they receive are ordered appropriately and in line with evidence.

Our case study sites make considerable use of health trainers and health coaches to deliver behaviour change support. Health coaches help people set goals and identify actions they can take to improve their health and lifestyle. Due to the co-dependent nature of some of the unhealthy behaviours and the potential of co-action, health coaching has been identified as an opportunity for enabling multiple-behaviour change. A rapid evidence review conducted by Health Education East of England ([Health Education England and the Evidence Centre 2014](#)) concluded that there is some evidence of health coaching improving self-management and enabling people to adopt healthy behaviours. However, the review also found mixed evidence of the impact of health coaching on physical outcomes, and insufficient evidence on service use and cost.

The Health Trainers programme was set up by the Department of Health to support behaviour change. After funding was withdrawn in 2010, the programme was transferred to the Royal Society for Public Health and some Health Trainer services are now commissioned on a local basis. Health trainers are specifically trained in behaviour change practices and they continue to provide general behaviour change support in the areas where they are commissioned. Some of the case studies have incorporated a legacy health trainer service. Evaluations of the Health Trainers programme reached different conclusions, with one being somewhat negative ([Mathers and Parry undated](#)), and the other more positive ([Shircore and Davison 2013](#)), though neither explicitly assessed their impact on multiple unhealthy risk factors.

In this report, we refer to behaviour change 'advisers', recognising the interrelatedness of 'health coaches', 'health trainers' and other terms. Occasionally we refer to Health Trainers where this is explicitly linked with the national programme of the same name.



## Conclusion

Although there is some evidence that success in changing one behaviour may be linked to success in changing other behaviours, there is limited evidence in the literature to inform those developing services to tackle multiple unhealthy risk factors. The questions that Buck and Frosini (2012) and Spring *et al* (2012) posed more than five years ago remain substantially unanswered – something that the National Institute for Health and Care Excellence (NICE) has recognised (National Institute for Clinical Excellence 2014).

Despite this gap in the published evidence, there are case studies that have used theoretical models of behaviour change to develop services. In the rest of this report, we describe some of the great opportunities these case studies offer for contributing to the evidence base for tackling multiple unhealthy risk factors.



## 3 Selection and characteristics of case studies

Our purpose was to understand four things: how local services supporting behaviour change are helping people with multiple unhealthy risk factors; how that has informed their service development; the barriers they have faced; and what they have learnt.

We identified around 40 possible case studies and looked at eight in depth. Our long list was developed from triangulating various sources, including: following up services that presented at The King's Fund conference that presented the work of Buck and Frosini (2012); our review of the intervention literature; local intelligence on merging practice from Public Health England centres; and conversations with experts in this area. After initial contacts and brief interviews with a shortened list we identified our eight case study sites, based on those that had designed their services with multiple unhealthy risk factors in mind.

We held semi-structured interviews during mid-2017 with people that had designed (or were in the process of designing) interventions to address multiple risk factors. Within each case study we spoke with a service commissioner and sometimes other decision-makers and suppliers or service designers, and asked for relevant materials. We also interviewed a range of policy-makers involved in setting national policy around preventable risk factors and attended and presented at several Public Health England and Department of Health and Social Care meetings.

Six of the case studies were integrated health and wellbeing services (IHWSs). These are services which deliver co-ordinated support for different lifestyles and risk factors. As in our case studies, IHWSs are usually commissioned by local authorities, with involvement from other organisations in the area.

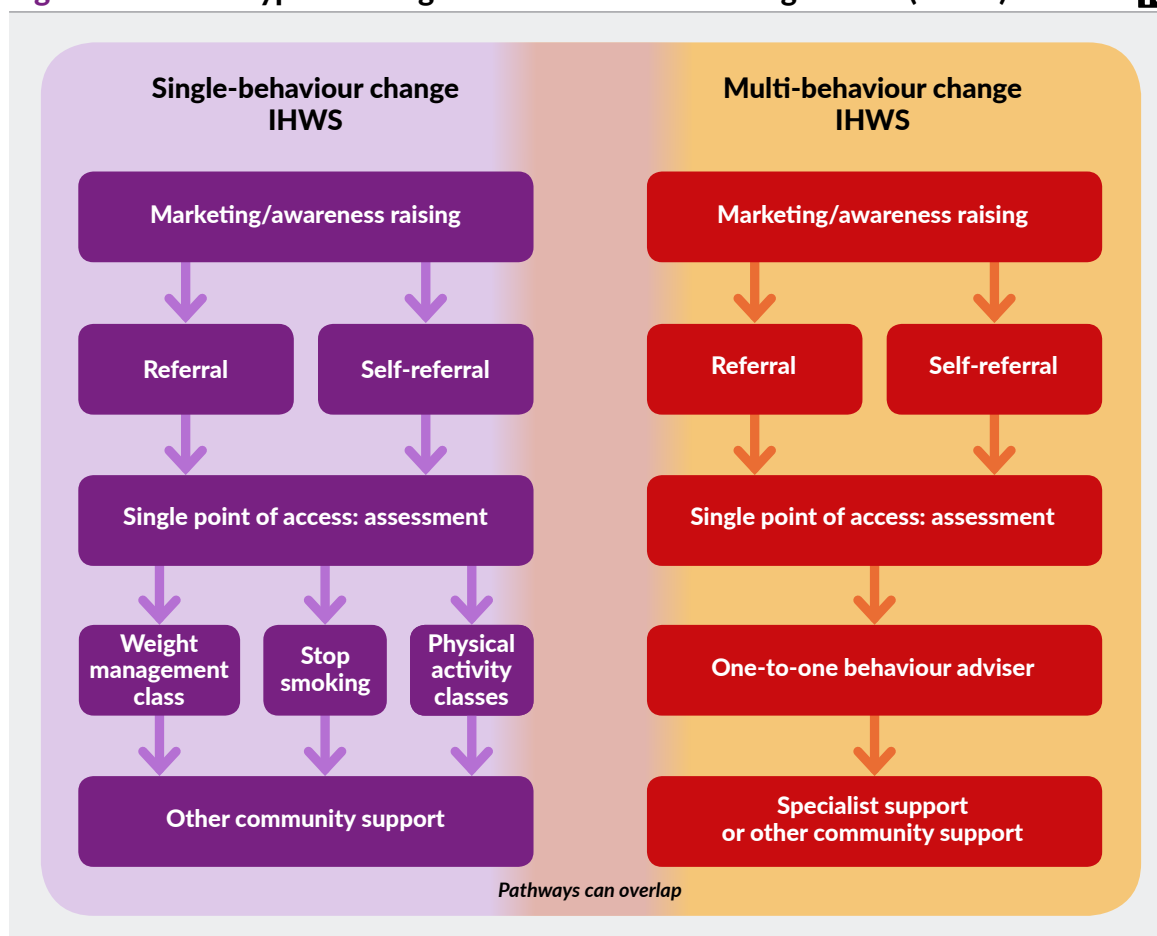
While IHWSs provide a single point of access for people who need support to change their behaviours, the way in which these services are delivered varies. Evidence about IHWSs is slim, though a qualitative study of IHWSs in the



north-east of England provides learning about how some early services have been set up (Cheetham *et al* 2017). There are two main types of IHWS (see Figure 2) (Public Health England 2017):

- ‘single-behaviour change IHWSs’: services where single-behaviour change interventions were commissioned at the same time, a single service with an integrating element (like a single point of access)
- ‘multi-behaviour change IHWSs’: services with a single point of access, with lifestyle change services being led by a single adviser across different behaviours. In our case studies, this is supplemented by separately commissioned services for more intensive interventions.

**Figure 2** The two types of integrated health and wellbeing service (IHWS)





In practice, there is some overlap between these two types of IHWS. Some multiple intervention IHWSs provide some single-behaviour change elements, particularly for smoking cessation; and single-behaviour change IHWSs sometimes provide a separate multiple-behaviour change intervention for clients deemed to have complex needs. Our IHWS case studies form two natural groups based on their local context: those operating in large rural counties; and those operating in highly urbanised areas. This affects how they approach the design of their services, as we shall see.

A recent report into smoking cessation services in England also reflected these nuances in IHWSs ([Action on Smoking and Health and Cancer Research UK 2018](#)), finding that:

- 9.4 per cent of local authorities had a lifestyle service with specialist advisers – a ‘single-behaviour IHWS’
- 7.7 per cent of local authorities had a fully integrated lifestyle service – a ‘multi-behaviour IHWS’
- some of the areas with a specialist service also provided separate smoking cessation services.

Services differ in how they approach marketing (for example, social media vs leaflets in GP surgeries) and whether they are delivered face-to-face or over the phone, one-to-one or in groups. As the case studies show, the specific ‘pathway’ for patients from referral to exit is unique to each service. However, most clients are referred via their GP, although other referrals come from community groups, secondary care, schools and the NHS Health Check service. Self-referrals are usually assessed by an adviser, often a health trainer or health coach. Advisers identify each client’s needs and discuss the most relevant ‘pathway’ through the service with them. From that point, our case studies vary, with more or less emphasis on certain aspects: streaming to individual behaviour change interventions; health trainers to support more complex change, with one-to-one support (for example); or a focus on wider determinants of health such as housing or debt *before* any attempt is made to support behaviour change.

Two of our case studies are hospital based. Unhealthy risk factors and behaviours can reduce the effectiveness of treatments and contribute to poor medicines





adherence. Both sites understand that reducing risk factors in a population fits into hospital strategies for promoting prevention, better self-care, and taking a population health approach.

One of the hospitals provides tiered levels of behaviour change support (brief, medium and high-intensity intervention) to patients who have been screened and referred from other health professionals within the hospital; the other is a less formal programme of brief behaviour advice, supplemented by a holistic health promotion form that prompts staff to ask patients about multiple behaviours.

The last of our case studies is a local authority-based IHWS that also demonstrates a high level of integration with its local hospital – a particularly good example of a place-based approach.

With regard to multiple unhealthy risk factors, the case studies had a lot in common. There was often a focus on weight management and smoking cessation, alongside different approaches to mental wellbeing and the wider determinants of health. Alcohol consumption – a key risk factor – was not always included in these services, however. We explore this omission further in section 9.

A summary of our case studies is set out in Table 1. Tackling unhealthy risk factors was **not** the sole purpose of any of these services; it was an important consideration for all these services, yet they all had wider aims, including reducing health inequalities, prevention, empowerment and confidence building, and supporting individuals with (often multiple) social needs. All services also had to consider how best to deliver at scale for their own populations. Each area was at a different point in its journey, as Table 1 shows. Two of the areas we spoke to were in the process of designing their specification for an IHWS, while one hospital service was no longer operational.

In section 4 we describe the three case studies from larger rural counties, followed by the urban IHWSs in section 5 and the hospital-based services in section 6. The final case study, of a service that crosses the local authority and hospital boundary, is discussed in section 7.

**Table 1 Summary of case study sites**

Characteristics	Case study	Name of service	Intervention type	When commissioned
Large, rural counties	Dorset County Council	LiveWell	IHWS – multi-behaviour	2015 ongoing
	Devon County Council	OneSmallStep		2016 ongoing
	Kent County Council	One You Kent		Planned 2018
Urban authorities	Blackburn with Darwen Borough Council	Wellbeing Service	IHWS – single-behaviour	2014 ongoing
	Luton Borough Council	N/A		Planned 2018
Hospitals	Royal Free London NHS Foundation Trust	Well at the Free	A wellbeing service in a hospital setting	2013–15
	Royal Bolton Hospital/ Bolton Council	N/A	Brief intervention and holistic assessment form	2012 ongoing
Local authority–hospitals	Suffolk County Council	OneLife Suffolk	IHWS – single-behaviour	2016 ongoing



## 4 Large, rural counties looking to do things differently

This section describes IHWSs in three large, rural counties. All three are at different stages in developing an IHWS to provide behaviour change services for alcohol, diet and physical activity (among others) and each has developed its own IHWS. They are all primarily multi-behaviour change services (to use Public Health England's terminology). However, each also provides some specialist support for smoking cessation and weight management, alongside more generic offers.

In each area, service development has drawn on underpinning theories of behaviour change, but all three areas are aware of the weaknesses in the academic evidence and have tailored their services towards their residents' needs and circumstances. Many of our case studies (whether urban, rural, hospital or local authority based) have found the COM-B theory of behaviour change (see box) particularly useful.

### The drivers and underpinnings of service development

Although each of these services is different, their stories are all characterised by a *clear motivation for change, consistent leadership, connections to other goals* and a *clear desire to improve services and outcomes* for clients. This was underpinned in each case by extensive *market research*.

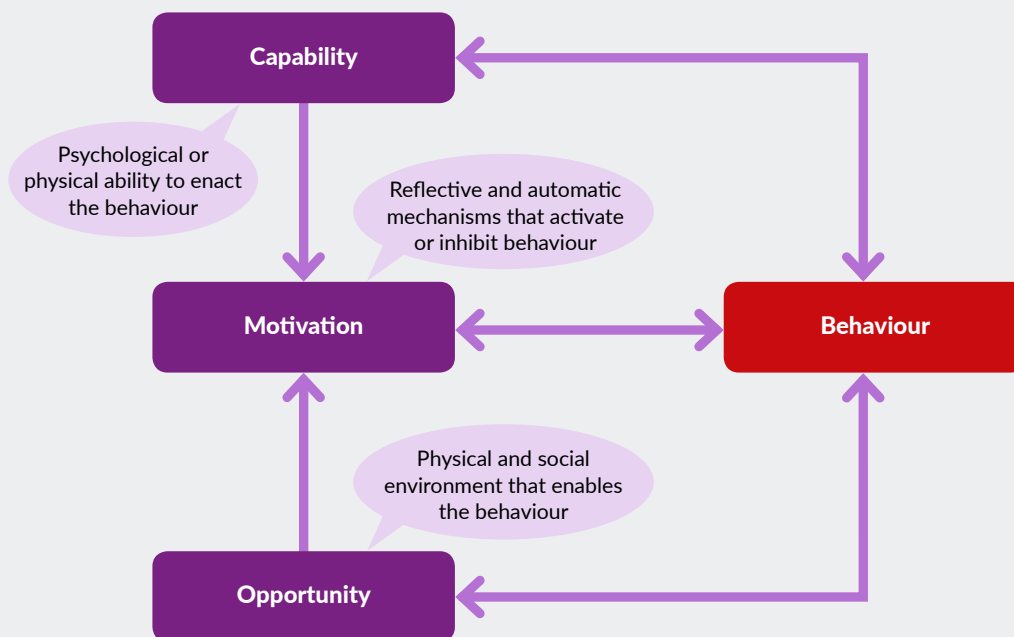
In Devon and Dorset, the stimulus for change was the end of existing contracts and the goal of providing integrated and consistent services across rural counties. Kent's monitoring data showed the need to reach more people and low awareness among the general public of what was being offered.



### The COM-B model

Many case studies used COM-B as their starting point for developing their approach to behaviour change and service design. This was developed after a systematic review of the evidence of behaviour change and existing frameworks for intervention. COM-B recognises that any behaviour requires three aspects: *capability*, *opportunity* and *motivation*. COM-B is a dual-process model, which means that it recognises that our choices flow from both automatic and reflective decision-making processes. It also recognises that personal and social factors can feed into decisions. A behaviour change model that uses COM-B will work through barriers and facilitators to these three aspects.

#### The COM-B model\*



\* The COM-B system: behaviour occurs as an interaction between three necessary conditions

Advisers will then help clients plan goals to increase their capability, opportunity and motivation to make healthier choices. Different interventions are available to do this and many case studies draw on the behaviour change wheel to identify possible interventions that will support a client’s behaviour change.

Source: Adapted from Michie *et al* 2011



For each case study, the primary actors were the council's public health team, which designed the specification and commissioned the IHWS. Connecting the desire to tackle unhealthy behaviours with other strategic objectives was important in making the case and in gaining support from within the council and more broadly. In particular, all the case studies focus on how services can target residents from more deprived neighbourhoods.

Kent has stable political support from its county and district councils, the latter of which deliver elements of the lifestyle offer. In Dorset, the LiveWell service is explicitly mentioned in the local sustainability and transformation plan (STP) document as the central arm of primary prevention strategy ([Dorset STP 2017](#)).

These three sites invested significant time in understanding their residents' needs and views on how existing services were working (or not working). This was backed up and triangulated with literature around behaviour change and multiple risk factors. For example, Dorset found that many people did not engage with the service as they felt it was judgemental. This prompted the council to consider how it could make its services more accessible and approachable for clients, while maintaining delivery of a systematic behaviour change approach.

Devon undertook a scoping exercise that included an evidence review as well as primary research, including focus groups and a survey. As part of the review, it characterised the target audience into different personas: 'inform me's' who needed a bit more information about how to change behaviour; 'enable me's' who sought help with motivation to carry through behaviour change and maintain the change; and 'support me's' who needed more intensive and ongoing support for behaviour change. Kent commissioned research with its residents, both users and potential users, and also reviewed how other areas were addressing behaviour change. It has also trialled some physical one-stop shops in town centres to understand who would use these and whether they were fit for purpose.

Finally, while funding reductions were not a prime impetus for changes for any of these services, they have clearly influenced thinking around how to provide quality services within a smaller funding envelope. Consolidation of previous behaviour change services has led to efficiency gains. In Dorset, for instance, the budget has decreased slightly, but the service is dealing with 50 per cent more activity than under the previous contract.

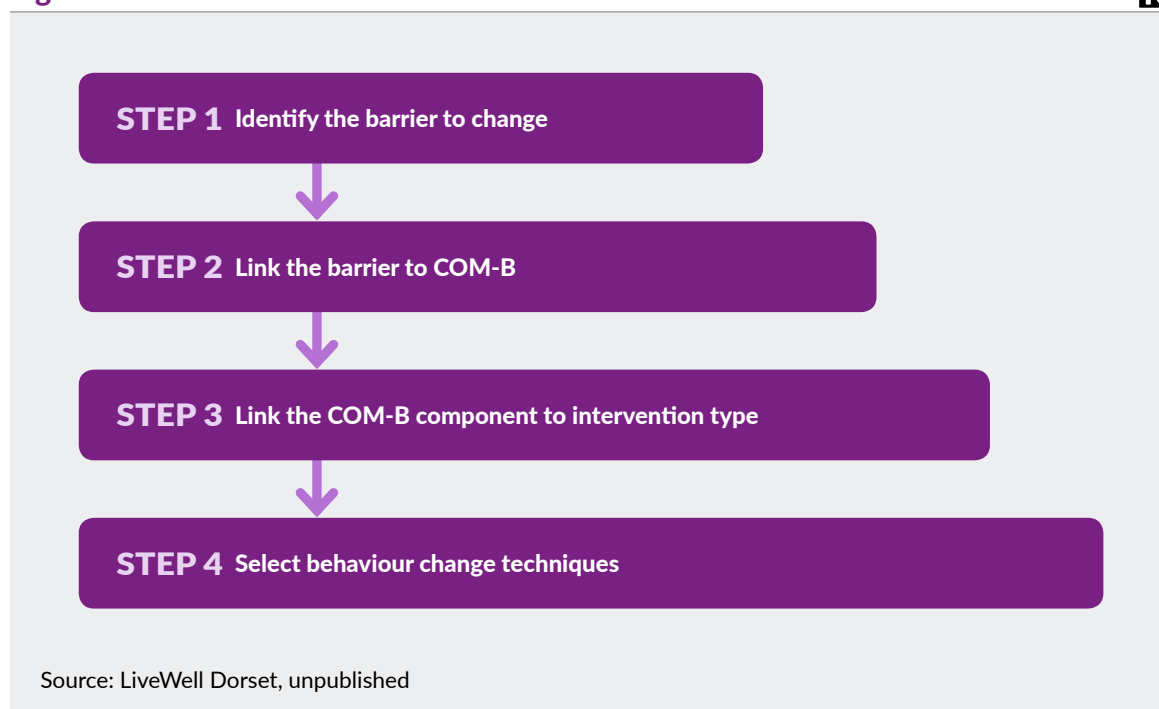


## LiveWell Dorset

### Theory of change

For Dorset, the underpinning theoretical principle is that the best way to support someone is to identify their barriers to change and select the change techniques that are most likely to have an impact for that person (see Figure 3). The model of behaviour change draws heavily on the COM-B model, working through individuals' capability, opportunity and motivations to change (Michie *et al* 2011). The focus is on how specific behaviour change techniques tackle the barriers in clients' lives that are preventing them from taking positive action to live healthily, rather than on any individual behaviour.

**Figure 3** Dorset's COM-B model



### The care pathway

Clients usually access the LiveWell service by telephone and receive an initial assessment and brief intervention. Clients who need further support then receive around six one-to-one sessions. Support is provided across different unhealthy behaviours and can be supplemented with specific behaviour services where



the individual needs more intensive support. For example, GPs and pharmacies provide smoking cessation support, while separate provision exists for weight management.

The LiveWell service is accessible to all residents, though referrals predominantly come through GPs. If a GP makes a referral, the client is directed to contact the services themselves, usually starting with a phone call with a health coach. Individuals can also self-refer by calling a telephone number advertised primarily through the council's website. Self-referred clients then receive a 30-minute assessment with an adviser who takes calls directly, before organising further calls to support the client.

## Devon: OneSmallStep

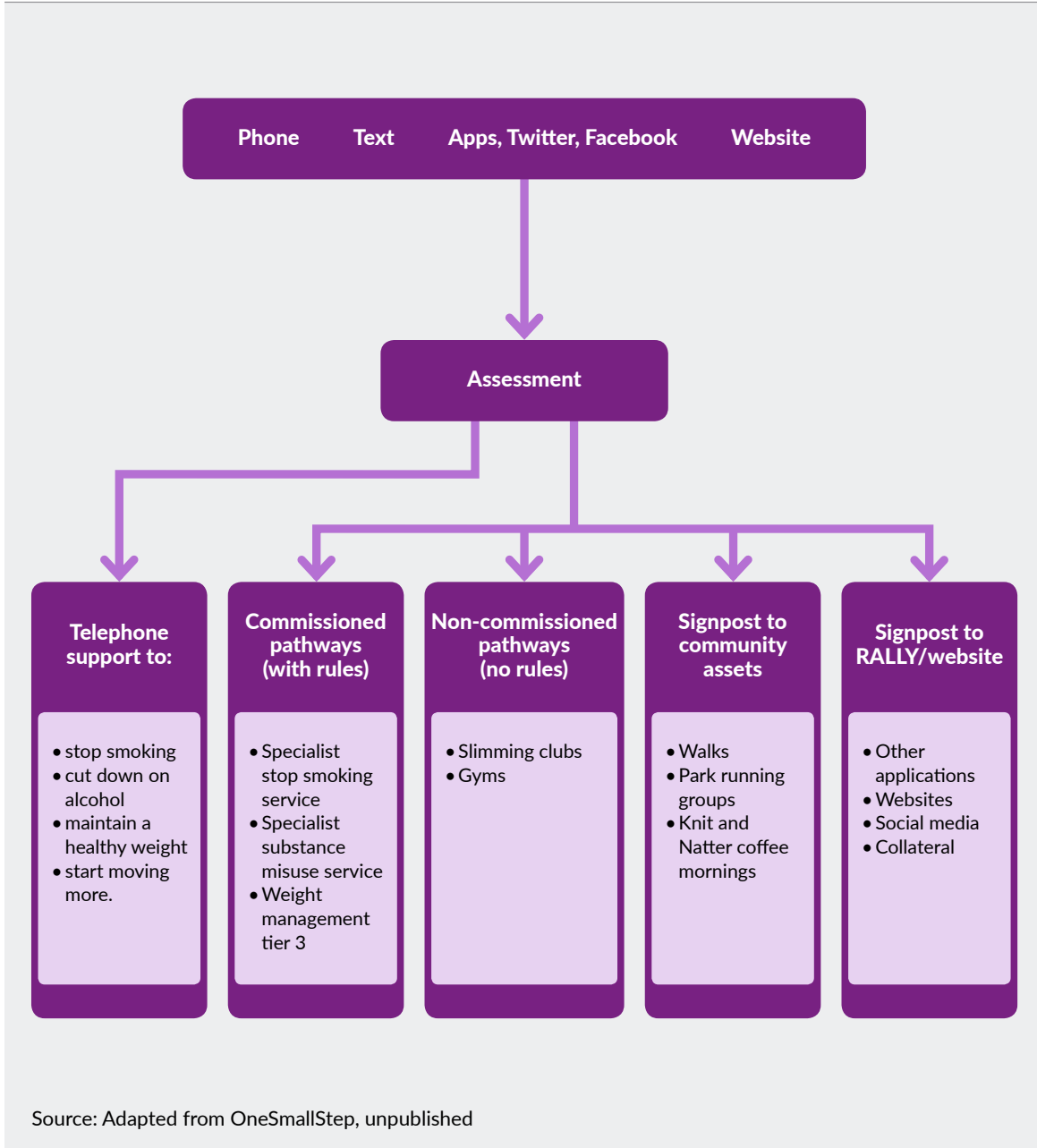
### Theory of change

The central principle for Devon's OneSmallStep is that the healthy choice should be the default choice. This represents a focus on living healthily, as opposed to avoiding unhealthy behaviours per se. This is based on theory, but also Devon's market research with residents, which showed they had a range of needs, and so the model provides a stepped offer of intervention to match needs and improve engagement.

### The care pathway

OneSmallStep focuses on supporting people with motivational barriers to making healthy choices. As mentioned, it has adopted a stepped approach, with light-touch digital interventions alongside telephone coaching for those with more complex challenges. The service aims to join the existing healthy lifestyles conversations happening on digital channels such as Facebook and Twitter. Residents can access the coaching service directly via telephone and may also be referred through their GP or a community service (see Figure 4).

**Figure 4** The OneSmallStep client journey







## Kent: One You

### Theory of change

Kent's offer is still in the development stage, and its thinking has also been influenced by COM-B. The One You offer will have three stages.

1. An adviser carries out an assessment to identify the client's motivation and readiness to change. This identifies whether the person is already in the right state of mind to start changing their behaviour, if there are barriers to change, or whether more work is required to help the client reach this point.
2. An appropriate intervention is delivered based on the needs identified at assessment stage.
3. Supporting maintenance of the change over time to halt 'the revolving door' of clients coming back in after failed attempts to sustain change.

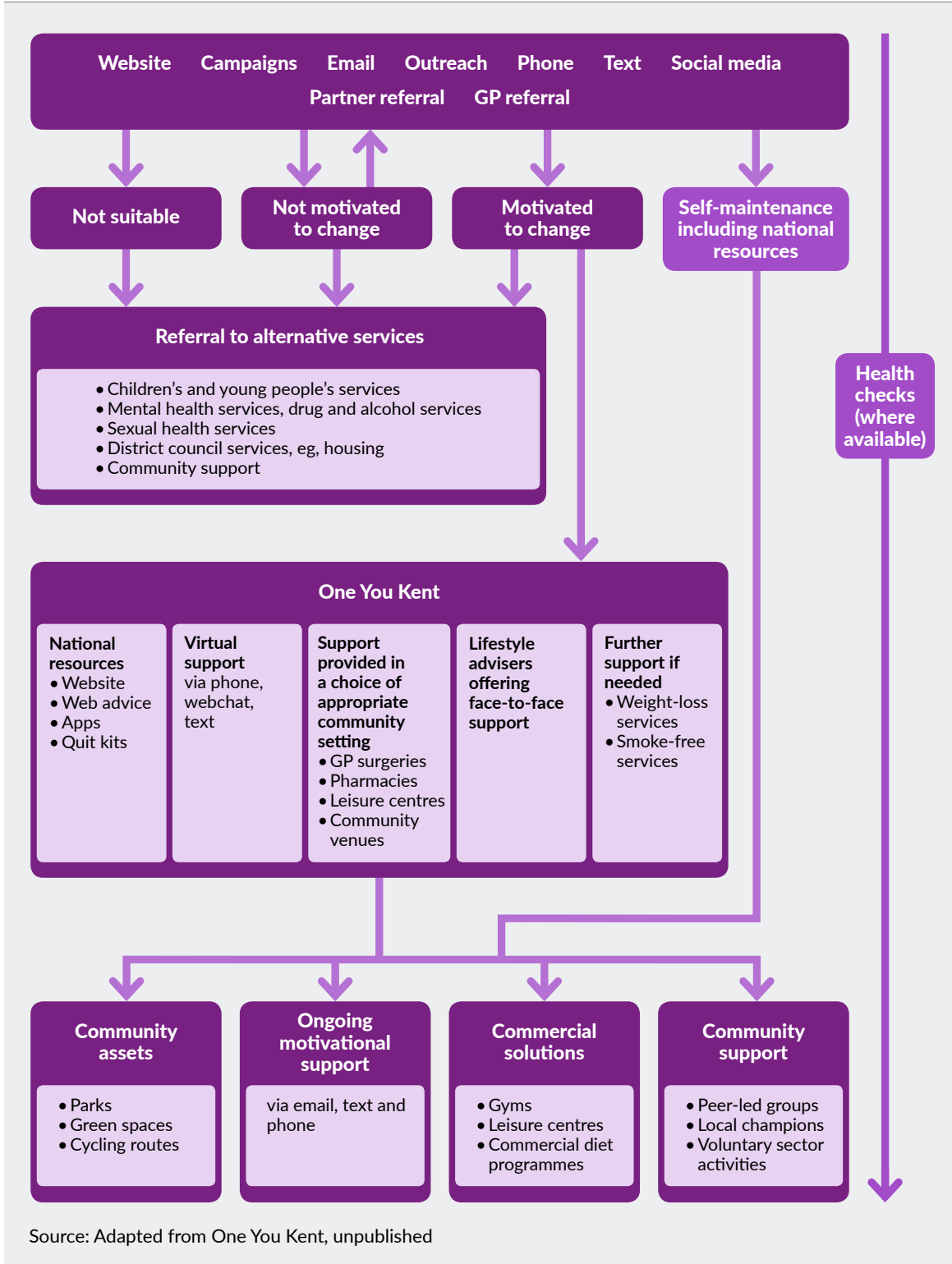
The theory behind the service is underpinned by an understanding of wider factors that may prevent healthy lifestyle, such as debt, housing or employment. The aim is to support the individual to address these wider issues as a way of supporting lifestyle change in the longer term.

### The care pathway

Kent's service (see Figure 5) will take a similar approach to Dorset and Devon, but with some face-to-face provision. Additional specialist support will be available for some behaviours, such as smoking cessation and weight management.



Figure 5 Kent's One You service



Source: Adapted from One You Kent, unpublished



## The models in practice: innovation and challenges

Although each of these three case studies is primarily a multi-behaviour change IHWS, each has developed slightly different service models. The main differences are in how clients flow through the care pathway and in the component parts of the behaviour change models.

Each IHWS has five core components: how residents and clients are made aware of the service and, where appropriate, how they can be supported with light-touch information provision; how clients are recruited and enter the care pathway; how triage and assessment works; how core interventions are delivered; and how specialist support is delivered outside the IHWS. Beyond this, the services have introduced innovations in data collection and contracting.

Each of our rural case study areas has a unique story about their particular offer and the learning generated from the challenges they encountered. We highlight a selection of these below.

### Awareness-raising and information provision

Devon has reviewed its information provision, particularly for the ‘inform me’s’ – those people who were only looking for low-level services or were seeking a more intensive and costly intervention than their behavioural requirements demanded. To provide an offer for the ‘inform me’s’, Devon developed a digital strategy that led to the OneSmallStep website sitting at the centre of its offer ([www.onesmallstep.org.uk](http://www.onesmallstep.org.uk)). This provides information as an initial light-touch intervention and gives site visitors a number to call for the behaviour change service. The website has information on how to give up smoking, reduce alcohol consumption, maintain a healthy weight and take up physical activity. However, there is also a section on motivation, which brings some of these behaviours together and gives more general advice on how people can make healthy choices.

### Recruitment and entry into the pathway

The main route into an IHWS is a referral from a GP. Dorset and Devon have both worked with their local GPs to raise awareness and make referral to the service straightforward. In Dorset, primary care patients are directed towards the IHWS in a ‘facilitated referral’, where a health professional will give a brief intervention and



then point the client towards the IHWS. Alternatively, they may self-refer from the website, by calling an adviser. In Devon, a similar system is in place, but there is also an emphasis on recruitment through the service's website.

Services in Devon and Dorset also work with other groups to advertise the service, including community groups, which direct potential clients to the website. As well as this, there is outreach to the NHS Health Check service, which is provided separately, to ensure that the Health Check is referring to LiveWell and OneSmallStep. Pharmacies are another source of referrals. In both counties, the service has individuals who engage different groups to try to raise awareness of the offer among the public health workforce. Dorset has funded a programme to develop the public health skills of voluntary organisations and to improve their links with LiveWell.

Under Kent's proposed model, GP referral would be one point of entry, as in the other two areas. The model would also offer a route for clients through the council's One You website, linked to the national Public Health England programme, and provider phone lines. Kent has a visible presence in community venues and primary care, offering drop-in options for those who prefer that.

### **Triage and assessment**

Once a client has made contact, the three services take similar approaches to assessing clients' needs. There is an initial consultation to identify what the client needs, both in terms of what behaviours they want to change and what support they need to achieve that change.

In Dorset, coaches undertake an initial 30-minute consultation to understand more about the level of support clients need. Clients are taken through different validated assessment tools to understand their risks. Advisers also deliver brief interventions where relevant when an individual makes initial contact with the service.

In Devon, callers receive an initial conversation with some brief advice. Advisers want to understand whether the client is in 'a place to change' – that is, whether they are in a situation where they have the necessary motivation and capability to make healthier choices. Clients who need a more specialised offer, such as smoking cessation, are redirected to the appropriate service.



## Delivery of the service

All three areas primarily provide one-to-one consultation and triage over the phone. Commissioners regard this as necessary due to low population densities. In Devon, providing face-to-face behaviour change would have required too many settings to ensure full coverage across a sparse, rural county with poor transport links. Dorset wanted to provide comprehensive geographic coverage for the service, keeping it accessible for clients. Telephone delivery and online presence were regarded as the best way to do this. Kent currently provides group-based face-to-face support, predominantly available in some of its larger towns. Some phone-based services are also available. Existing services will be integrated into One You Kent when it is created.

All three areas are investing in digital offerings. One of the most innovative is Devon's RALLY. This is intended to aid behaviour change by using motivational cues, such as 'gamification', replicating a game scenario to encourage motivation, and potential reward systems.

The number of intervention sessions clients receive varies across the services, though no areas put an upper restriction on the number of sessions any one client may have. Dorset recommends three to five sessions, while Devon recommends six; Kent is pursuing a tailored approach, which would be based on client need but normally not exceed 12 weeks. These sessions would vary depending on the intensity required, the client's motivation and their capacity to change. For some clients, this may mean a 12-week course to manage smoking cessation and maintain this behaviour. Other clients could be offered online groups every other week.

Transitioning from previous services has been a challenge. For example, it took over a year for Dorset to fully transfer to a COM-B approach. Health coaches from the previous service had used a more flexible, client-led approach, and COM-B guidance felt more prescriptive to them. Eventually, the health coaches were convinced by the benefits of a more structured system, which could provide them with richer data about the barriers facing people with different behaviours. The commissioner found that providing evidence that clients were attending more sessions under the new model convinced advisers of its usefulness.



Kent's public health team reviewed a series of different behaviour change models, including COM-B and other related techniques. The resulting behaviour change model is evidence-informed and involves giving people the tools they need to make positive changes. It is a technique that recognises that the context of an individual's life may impact their ability to change their behaviours. In Kent, feedback from stakeholders has highlighted the need to balance the expertise of specialist smoking and weight management advisers in more general lifestyle adviser roles.

### **Specialist and other support outside the IHWS**

The issue of generic versus specialist skills and roles and the need to complement generic support with specialist intervention is an important one, which all commissioners recognised. Smoking cessation was mentioned as the type of service that ought to be delivered in a more specialist way. The evidence suggests that giving up smoking at the same time as trying to change other behaviours can have a negative impact on the smoking cessation attempt (Meader *et al* 2017; [Shahab 2016](#)). Commissioners in local areas were aware of the evidence around this and thus mindful of the need to treat smoking slightly differently from other behaviours. At a minimum, case study areas commissioned smoking cessation as a separate service.

Finally, in Kent, the intention is also to link with a broad range of services under the One You campaign banner, such as walking groups and leisure centres. Dorset is also tying in with One You services. This includes green spaces programmes and other services in the community to facilitate healthier choices.

### **The use of data and contracting**

Tracking clients through their system was a priority for Dorset, using software like customer relationship management (CRM) systems to understand how clients move through. This was a learning process, with the CRM system taking time to be fully implemented.

Data collected includes basic information about clients and measures outcomes at the end of the pathway as well as at follow-up. Data is also collected on the specific barriers to behaviour change that clients are experiencing. Re-entry into



the system – a sign of recidivism or success for clients, depending on the reason for return – is a particular indicator that the services are still hoping to capture.

All areas appreciated that the IHWS model is a new way of working for previously siloed behaviour change services. Commissioners in Dorset built in some flexibility to the first few months of the contract to allow for any changes that needed to be made to the service. Areas adopted contracts that gave providers a guaranteed three years, with the potential to extend. This gives a contingent longevity to the contract while building in the option to end the contract if needed.

Commissioners were aware that IHWSs could entrench health inequalities if they did not reach out to groups that were in more difficult circumstances. Dorset built this in to the contracting process by using outcome-based tendering to encourage the supplier to target the most deprived communities. A proportion of the contract payment is dependent on engaging individuals from the most deprived quintile. On average, 30 per cent of the LiveWell client caseload comes from the 20 per cent most deprived areas of the county.

## Conclusion

To sum up, the three case studies described in this section are taking a multiple-behaviour approach as it allows them to deliver services to clients across large counties, often within restricted budgets. But this is not the prime motivation; each case study has taken considerable time and care to understand the needs of their residents, and service design has been informed by theories of behaviour change and an understanding that most people experience behavioural risks concurrently.

Advisers in the case study areas are flexible in delivering the behavioural support clients need. Advisers help clients with a number of different behaviours and this means they can work across multiple behaviours at the same time. The commissioners of these services have also been supported by consistent leadership and they have been innovative in the design of their services, while facing challenges along the way. They are now starting to collect data that will allow them to assess how successful their efforts to tackle multiple unhealthy risk factors have been.



## 5 Urban areas tackling the wider determinants of health

This section describes IHWSs in two urban local authorities: Blackburn with Darwen and Luton. Unlike the services in our rural county case studies (section 4), these more closely resemble single-behaviour change IHWSs: services where single-behaviour change interventions are commissioned at the same time, with some integrating element such as a single point of access. Both case studies also have multi-behaviour offerings, such as health trainers.

These two urban areas are similar in population size, with denser and more deprived populations than average, and both are among the bottom third of local authorities for male and female healthy life expectancy. The two areas have a strong focus on how their IHWSs can address the wider determinants of health, such as poor housing and poverty.

### The drivers and underpinnings of service development

Although the case studies differ, both are characterised by a clear motivation for change, consistent leadership, connections to other goals and a desire to improve services and outcomes for clients. Both areas have strong partnerships between the local authority and the clinical commissioning group (CCG) and their IHWS has evolved from previous services.

Both Blackburn with Darwen and Luton wanted to consolidate their existing, siloed lifestyle services to benefit clients and those making referrals. In the former, clients fed back that they did not always understand what the service offer was, while GPs were confused by the array of separate services they could refer to. In Luton, it was recognised that many clients using the current lifestyle services had undetected mental health, social and financial needs and, without those being addressed, were struggling to make positive behavioural changes.





While Blackburn with Darwen has one of the most long-established IHWSs, Luton is currently designing its service, which will launch in April 2018. In Blackburn with Darwen, the transfer of the public health team, which moved from the primary care trust (PCT) to the local authority in 2013, led to a review of what health improvement services and programmes were available to residents. In Luton, the case for change has been backed up through partnership with the CCG, which has helped highlight that public health and NHS organisations both have a mutual interest in tackling unhealthy risk factors.

Luton articulated its case for change by linking with wider goals such as screening for related conditions, like type 2 diabetes. A partnership board has been established, jointly chaired by the CCG and Luton public health team. The CCG leads the commissioning process with support from the local authority. Blackburn with Darwen also has good relationships with the local CCG. Some council public health projects are funded by the CCG and the council also delivers some condition-management programmes for the CCG – for example, chronic obstructive pulmonary disease (COPD) rehabilitation.

In both areas, the IHWS has evolved from previous behaviour change offerings. In Blackburn with Darwen, this was re:refresh, which initially provided information on and access to local exercise interventions, although it now covers many wellbeing and social clubs and services. The success and profile of re:refresh led the council to maintain the brand and use it to redirect people to the IHWS. This means that council and council-affiliated lifestyle services are all accessible through the same access points. The service in Luton has evolved from the smoking cessation service, which began to incorporate adult and child weight management through the previous health trainer service. The new service will incorporate mental health services and social prescription as well.

## Blackburn with Darwen

### Theory of change

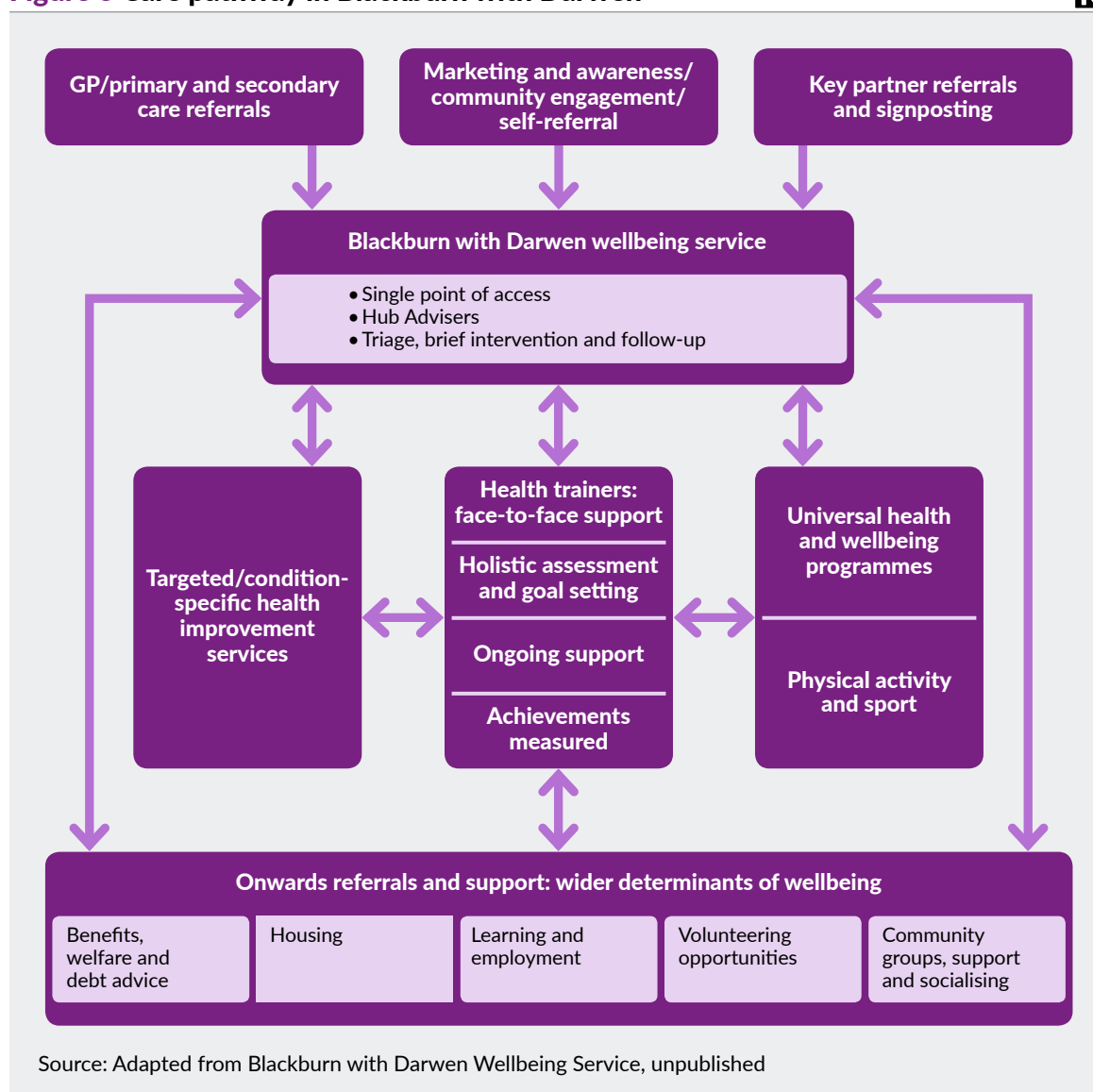
Both areas reported that research into multiple risk factors had influenced their thinking, but often this was as part of a broader approach to inequalities and the wider determinants of health. In Blackburn with Darwen, commissioners considered multiple risk factors indirectly in the service design, as part of a wider holistic consideration of the individual's environment and context.



### The care pathway

Blackburn with Darwen’s service has developed from a health trainer service, and centres around the delivery of behaviour change, with referral to other specific behaviour services. The health trainer service is delivered face-to-face, with the number of sessions varying depending on each client’s needs. It has a strong focus of referral to services that can address the wider determinants of health, such as debt advice and social prescribing. The care pathway is set out in Figure 6.

**Figure 6** Care pathway in Blackburn with Darwen





## Luton

### Theory of change

The theory of change was very similar to that in Blackburn with Darwen (*see above*).

### The care pathway

Luton's service is being developed along a similar structure to Blackburn with Darwen. Luton is going through a process of integrating the lifestyle service with their improving access to psychological therapies (IAPT) service to create a single integrated service. This will potentially incorporate other areas, like housing advice, with a focus on providing an IHWS that addresses the wider determinants of health.

In December 2017, Luton Borough Council and Luton CCG announced that they had commissioned Turning Point to be lead provider for their IHWS, with the new service to commence in April 2018 ([Brennan 2017](#)).

### The models in practice: innovation and challenges

Blackburn with Darwen's service is well-established, while Luton's is still in development. They have a largely similar service model, and so the innovation and challenges below describe what is currently happening in the former, highlighting any differences with what is being planned in Luton.

#### Awareness-raising and information provision

The service is engaged in marketing and awareness-raising programmes and uses Public Health England branding in the hope that it will help gain residents' confidence.

Luton Borough Council carried out a public consultation to raise awareness in the community and gather insights from residents on the current lifestyle services. This information has shaped the design of the new integrated service.

#### Recruitment and entry into the pathway

Clients can be recruited through different routes. GPs and other health professionals account for around half of referrals. A health professional referral can



be direct or indirect. GPs have leaflets to give to patients when a direct referral is not appropriate or the patient is not yet ready for change.

### **Triage and assessment**

If a GP refers the client, they are then sent a letter asking them to call the service to make an appointment. Some contacts are lost at this point as people do not take up the referral. If clients self-refer or come through other routes, then they speak with one of two 'hub advisers' who assess clients for the most appropriate intervention.

Clients can be referred straight to a specialist service, such as physical activity programmes, if there are no motivational barriers. In many cases, the client will be referred for behavioural support with health trainers to provide additional motivational support.

One planned innovation in Luton is that the triage process will incorporate the patient activation measure (see box). This measure will be used to stream clients

#### **The patient activation measure**

The PAM is a validated tool that asks people to complete a short survey, after which they are segmented into one of four levels of activation ([NHS England undated](#)). The PAM is administered to understand the knowledge, skills and confidence a person has to look after their own health.

Research has shown that segmenting users on activation level improves outcomes and lowers health care utilisation and costs (Greene *et al* 2015). Other research finds that people with low activation levels are less likely to engage in healthy behaviours ([Hibbard and Gilbert 2014](#)). One study also found that changes in PAM level were associated with changes in a risk factor score, potentially indicating that PAM level is linked to multiple risk factors (Harvey *et al* 2012).

The PAM has been used in health contexts to tailor a pathway to individuals with long-term conditions. People with lower activation levels receive more intensive consultations. PAM pilot sites are currently being tested in areas such as smoking cessation and obesity management.



into different pathways depending on their level of activation ([Hibbard and Gilbert 2014](#)). This is intended to more effectively segment and triage clients to the level of support that is most appropriate for their ability to support behaviour change.

### Delivery of the service

In Blackburn with Darwen, the health trainer support involves face-to-face consultations (lasting 45 minutes) to support changing behaviours. There is a rough guide of six health trainer sessions, though the precise number is agreed with the client. Following the health trainer sessions there are follow-ups after 3, 6 and 12 months to understand how behaviours might have changed over time. Health trainer sessions can be face-to-face or telephone consultations.

Blackburn with Darwen's health trainers and single point of access are in the wellbeing hub. The advisers can offer brief advice to clients over the phone. The face-to-face consultations use motivational interviewing (*see box*) to understand how ready the client is to change behaviours. Health trainers are led by the clients as to how behaviours can be changed and in what order. Goal-setting techniques are used to encourage adherence to healthy activities.

#### Motivational interviewing

Motivational interviewing is a way of discussing behaviour change that is constructive and aims to enhance motivation to change by reducing ambivalence towards change ([Apodaca and Longabaugh 2009](#)). It is characterised by a 'guiding style', which takes a less authoritative stance with clients and promotes building confidence in their own decision-making ([Rollnick \*et al\* 2010](#)). It focuses on realistic goal setting – meeting the client where they currently are.

A meta-analysis found that motivational interviewing can lead to significant improvements across a range of bio-markers, including those linked with obesity ([Rubak \*et al\* 2005](#)). It also found improvements on alcohol consumption, but improvements for smoking were not significant. Motivational interviewing was often mentioned by case studies as one of the main behaviour change models they consider when designing their own interventions.



Where a client has multiple risk factors, prioritisation is based on the motivation to change. The motivational interviewing model also takes into consideration barriers to motivation.

### **Specialist and other support outside the IHWS**

These case studies differ from the rural counties due to their greater emphasis on, and connections with, the wider determinants of health and explicit psychosocial support.

Barriers to change are often social. In Blackburn with Darwen, the interconnectedness of clients' health and social environments has encouraged close working between the health trainers and other services, such as physical activity programmes. Health trainers also refer onwards to community and other social services to try to provide holistic support tailored to clients' circumstances.

Luton is designing a model similar to this. The public health team are bringing a wider range of services into the IHWS. This would merge the lifestyle service with other services that support individuals in their social environments. As an example, this will involve incorporating IAPT services, NHS Health Check and a social prescribing service (see box), which will provide support for those with wider social and emotional needs. Luton will incorporate community navigators to co-ordinate and signpost services for clients in need of support.

Luton's approach reflects a recognition that social determinants are linked to unhealthy lifestyles. The public health team are taking a psychosocial approach to the design of the IHWS. Commissioners in Luton want social and psychological support to be a first step in making healthier choices. Counselling will be accessible through the service in recognition of the role that mental capabilities play in healthy lifestyles. Luton's consideration of providing a psychological offer for clients would make it distinct from some of the other case studies in this report.



## Social prescribing and community navigators

Social prescribing is a wide-ranging term that covers a number of options for clinical staff to refer to non-clinical, community-led services ([The King's Fund 2017](#)). This reflects the fact that many sources of health problems are social in nature, or can be alleviated by social solutions rather than just medical ones.

Social prescribing involves a variety of activities typically provided by voluntary and community sector organisations. Examples include volunteering, arts, and healthy cookery classes. Social prescribing is designed to support people with a wide range of social, emotional or practical needs, and many schemes focus on improving mental health and physical wellbeing. Social prescribing schemes can benefit a wide range of people, including those who are socially isolated and those who frequently use health or care services.

There are many different models for social prescribing, but most involve a link worker or navigator who works with people to access local sources of support. Community navigators support individuals to play more of a role in the community. They work with their clients to plan involvement in local activities over a number of sessions. A community navigation pilot in Brighton and Hove worked with individuals who experienced social isolation, low mood, stress, and housing and finance issues. An evaluation found that outcomes and corresponding financial savings for primary care were promising ([Farenden \*et al\* 2015](#)).

## The use of data and contracting to tackle the wider determinants of health

Blackburn with Darwen wanted to make sure that the service was meeting objectives of reducing health inequalities and tackling the wider determinants of health. As part of this, the service is contracted to record and deliver targets on: clients who access services from the top 20 per cent of the most deprived wards; clients from the top 20 per cent of most deprived wards to achieve planned goals in three months; and clients demonstrating an improvement in mental wellbeing.

In addition, both areas have legacy health trainer approaches that they are incorporating into their new integrated service. Blackburn with Darwen uses a standard data collection and reporting service (DCRS). This provides standardised measurements for outcomes in the health trainer system, which could be used to



understand how the services are tackling multiple unhealthy risk factors and how these efforts are affecting health inequalities. Additional streams of data from other parts of the services may enhance the evaluation and feedback provided by the DCRS. Within the DCRS, mental wellbeing is monitored for all clients to assess the impact that behaviour services are having on wellbeing.

Finally, Blackburn with Darwen is looking at how to provide feedback to GPs directly through regular reports. They hope this will aid engagement and encourage GPs to make greater use of the service.

## Conclusion

To sum up, our two urban case study areas are developing IHWSs that are adapted to their populations. This means an increased focus on the wider determinants of health and greater flexibility to provide face-to-face offers. While a single point of access and multiple-behaviour change service is on offer, many clients are referred to single-behaviour services.

The behaviour change models in these areas are heavily focused on psychosocial support and the wider determinants of health. Multiple behaviours are primarily addressed through this holistic vision of an individual's behaviour and circumstances. This provides an opportunity to address multiple risk factors, though often indirectly through focusing on psychological and social barriers to healthy choices.





## 6 Hospitals promoting health and supporting behaviour change

The case studies in this section are delivered in secondary care settings: the Royal Free Hospital (London) and Bolton. Their experience reflects the fact that unhealthy behaviours can contribute to ineffectiveness of treatments and lack of adherence to medications. Both sites understand that reducing risk factors fits well with hospital strategies for promoting prevention, better self-care, and taking a population health approach. Health professionals have many opportunities in their day-to-day work to help patients make healthier choices. The two areas went about this task very differently; one was based on a highly structured and evaluated approach, while the other has been much more opportunistic and practice-led.

More so than the previous case studies, there is as much learning generated by the process of setting up and maintaining these services in secondary care as there is from delivering the behaviour change models.

### The drivers and underpinnings of service development

The active support and drive of leadership was particularly important in both cases, although the source differed. At the Royal Free, the Medical Director noted that opportunities to intervene with existing patients before risk factors became a health condition were being missed, and there were additional opportunities to intervene with visiting family members, concluding that the hospital should do more to take advantage of the 'teachable moment' that being in hospital represents for patients.

In Bolton, there was collaboration between different organisations. In 2007, the PCT began identifying ways of working with the Royal Bolton Hospital (in Bolton NHS Foundation Trust) to promote consideration of multiple unhealthy



risk factors in health care. In 2010 the public health team began implementing the intervention.

The role of the Royal Free Charity cannot be underestimated. It provided the funds for the intervention, 'Well at the Free', and its evaluation.

### The Royal Free: 'Well at the Free'

The Well at the Free programme provided a behaviour change service within the Royal Free London NHS Foundation Trust. It was a tiered intervention: 'hub' advisers trained hospital staff to identify patients with risk factors and deliver brief interventions; while hospital staff delivered tier one brief interventions they could also refer patients on to tier two single-issue services, like smoking cessation.

Tier three adopted a multidisciplinary team approach to working with patients with more complex behavioural needs. They worked with departments to embed lifestyle and wellbeing questionnaires throughout the hospital, as did Bolton, to increase the reach of the service. The questionnaire provided context for the patient's condition to ensure that behaviour change could be part of the treatment plan.

Well at the Free's health psychologist developed an evidence-based behaviour change model for more than one risk factor. Psychological and social support, including IAPT and Citizens Advice, were provided as a core part of the hub. The Well at the Free service was evaluated with contributions from independent academics.

After the end of the funding from the charity, the hub part of the service was not recommissioned. This was not due to ineffectiveness or dissatisfaction with it on the part of commissioners, but rather because it was not clear whose remit the hub should sit within.

### Theory of change

The concept of the 'teachable moment' – ie, that a visit or series of visits to the hospital can lead to a greater recall of health behaviour advice – is the context for the intervention (Flocke *et al* 2014). The model itself was designed to specifically address multiple unhealthy risk factors in individuals. The content of the



intervention was developed using NICE guidance on behaviour change (National Institute for Health and Care Excellence undated) and the taxonomy of behaviour change linked to the COM-B model.

Acceptance and commitment therapy (ACT) was used to develop the intervention, specifically the cognitive behavioural therapy (CBT) used to support patients to adapt to changes in their life as a result of their condition. The taxonomy of behaviour change was then used to support people to implement changes. An example of this would be exploring anticipated consequences of change with clients and troubleshooting these to try to overcome ambivalence towards their goals (Gate *et al* 2016).

### **The care pathway**

Well at the Free provides different tiers of intervention, from brief interventions to psychological and social support. The third tier of the intervention was designed explicitly to support patients with more than one risk factor. The intervention was designed and delivered by a Royal Free health psychologist, supported by a health adviser.

The service was provided in 'the hub', a specially designed space in the hospital where patients were referred from relevant specialties. Once referred, they were assessed and supported primarily through tailored interventions delivered by the hub team as part of a four-week behaviour change programme.

The hub offered three tiers of support based on assessment. The lowest, tier 1, comprised brief motivational support and onward referral to community behaviour change services. The highest, tier 3, was reserved for smaller numbers of patients with complex needs – eg, diabetic retinopathy patients who required intensive support to improve blood sugar control, thus reducing risk of sight loss. Onward referral was also made to other services where appropriate.

Clients were given a schedule of telephone calls: a call after one week to review progress with an adviser and consider the client's further needs; a 20-minute consultation in week two; and a final follow-up consultation in week four, which could be telephone or face-to-face. There was a final telephone call at three months to monitor progress.



## Bolton

The public health team in Bolton Council and Royal Bolton Hospital have developed a health promotion assessment form for patients.

### Theory of change

Bolton's health promotion form is a simple opportunistic intervention. It is designed to capitalise on the important role hospitals have in making contact with patients when they are potentially susceptible to lifestyle advice. Like the Royal Free, this form and brief intervention aim to capitalise on a 'teachable moment'.

### The care pathway

The health promotion form is administered by staff (mostly nursing staff) upon patient entry, and asks patients about their risk factors. The form acts as a prompt for health professionals to provide brief interventions, signposting or referrals to other services.

The public health team delivers brief intervention training and support to staff, as well as encouraging them to refer to the local health trainer service (funded by the CCG). They are also provided with further patient materials.

The form asks about current behaviours including weight, smoking, diet, and alcohol habits, as well as general mental health and wellbeing. It also includes advice to patients to seek sexual health screening if they think they may have been exposed to infection. After completion, staff can give brief advice as needed or refer on to the local health trainer project.

The form has several objectives, including creating formalised prompts for staff when patients attend to ask them about risk factors; it also aims to seek information holistically, to reduce singling out patients for visible risk factors; and to help facilitate brief interventions or onward referral to reduce missed opportunities for discussing more than a single presenting lifestyle problem.



## The models in practice: innovation and challenges

Both approaches have experienced challenges in implementation. Bolton is still using its health promotion form, and while the tier one and two components of Well at the Free were maintained, tier three was not recommissioned.

### Awareness-raising and information provision

Unlike the IHWSs in the other case studies, the focus here was on referral from clinical specialties, not GPs or self-referral. The Royal Free took time to explore the specialties that would react positively to identifying patients for potential behaviour change interventions. This led to an initial focus on those specialties where behavioural risk factors were most important for the development of the condition. For example, musculoskeletal (MSK) clinicians work closely with people whose recovery can be aided with diet and physical activity interventions.

Hospital staff in Bolton were given training in how to deliver brief interventions and raise lifestyle choices with patients. This training is linked to the Making Every Contact Count training advocated by NHS England ([Public Health England and Health Education England 2016](#)), which enables staff to administer the form and use it as a prompt for brief intervention (see box). The training was well-liked by staff and it made them consider their own health behaviours. However, Bolton public health

### Making Every Contact Count (MECC)

The Making Every Contact Count approach draws on COM-B theory to support behaviour change by helping to increase an individual's psychological capability to undertake behaviour change. MECC is a national initiative to promote brief interventions to utilise the day-to-day interactions that health and social care staff have with people to support them to make changes to their physical and mental health and wellbeing ([Public Health England and Health Education England 2016](#)).

MECC training equips workforces with the knowledge and skills to undertake 'healthy conversations' or brief interventions in smoking cessation, alcohol use, physical activity, healthy diet and weight, and mental wellbeing. MECC-style brief interventions operate by increasing an individual's understanding of the risks of certain behaviours, or can help increase their motivation to change.



team recognised that brief intervention by itself was insufficient, and that referral to specialist behavioural support services was important to help patients take action.

A similar approach was adopted by Well at the Free, which also screened patients for risk factors and trained clinicians to use brief interventions.

### **Recruitment and entry into the pathway**

In Bolton, all patients who come into contact with nursing staff who have been trained are offered the form and onward triage and assessment.

The Royal Free's approach has been more structured, targeting some particularly relevant clinical specialties first. It was then extended to any patients for whom their clinician had identified a need for behavioural change support.

Similar questionnaires were also distributed to patients to try to identify as many individuals with risk factors as possible. The first questionnaire is administered to patients and asks academically validated questions on: physical activity; alcohol consumption; smoking status; diet; sleep quality; measures of social adjustment and self-efficacy; and measures of wellbeing and overall physical and mental health. The first questionnaire acts as a screening tool, as well as a baseline for the evaluation. The questionnaire is re-administered throughout a client's pathway, forming the basis for the evaluation.

### **Triage and assessment**

At the Royal Free, assessment is based on clients discussing what they look for in life. Clients then develop a plan for their behaviours and set goals for themselves. In this intervention, goals are not limited to lifestyle behaviours, but include goals to overcome challenges in their physical and social environment. In turn, patients can set goals around health management, coping strategies, and social and environmental objectives. Well at the Free's behaviour change model was centred around support for psychological and social factors, recognising that many barriers to capability and opportunity can be found in an individual's wider context. In Bolton, the assessment is simpler and quicker and based on staff responses to the development and use of the assessment form.



### **Delivery of the service**

As noted, Well at the Free was delivered in a hospital clinic setting by a health psychologist supported by a health adviser (see Table 2). The initial face-to-face consultation, which included baseline health measures, led to a personalised plan and pathway. The intensity and duration of the intervention was flexible and varied depending on patient need.

In Bolton, the delivery of the service is less structured and based on staff assessment of whether brief advice (according to MECC principles) is appropriate or onward referral to health trainer services. The Bolton teams recognised that the ultimate aim was to embed a standardised health promotion assessment process across all hospital departments.

### **Specialist and other support outside the IHWS**

The Well at the Free programme was co-located with an IAPT service and Citizens Advice, the latter having been contracted to deliver a morning session each month on site. The hub also promoted onward referral to community navigators and other services as core elements of the service offer. There was also a condition-specific partnership with a diabetes psychologist and a vascular psychologist to support those who had been diagnosed with these conditions.

Co-locating these services with Well at the Free was designed to make them easy to access for clients. Clients could also access them in a space that was familiar to them. The intention behind including these services within the hub was to ensure that it could address any barriers to change. Well at the Free anticipated building more formal structures with health navigators and volunteers in primary care to enable follow-up support for clients. This had been planned for the next stage of the programme before it was decided not to recommission it (see below).

In Bolton, the link to the health trainers services outside the hospital was a key part of the intervention itself. However, the health reforms meant that responsibility for the health trainer service moved to the CCG after 2012. This fragmented its delivery and other efforts in the hospital to maintain the relationship with behaviour change services.

**Table 2 Structure and content of Well at the Free intervention**

Session	Timing	Duration	Type of consultation	Purpose	Example content
1	Baseline	40 mins to 1 hour	Face-to-face	Assessment, goal-setting and initiating onward referrals	<ul style="list-style-type: none"> <li>Personalised assessment</li> <li>Completion of various validated scales</li> <li>Referral to community services</li> <li>Referral to mindfulness/acceptance and commitment therapy</li> </ul>
2	1 week	10 mins	Telephone	Motivation support	<ul style="list-style-type: none"> <li>Assessment of perceived control and intention</li> <li>Exploring discrepancies with target goals</li> <li>Promotion of self-efficacy, eg, through feedback on behaviour and outcomes, self-monitoring, review of behavioural goals and action planning</li> </ul>
3	2 weeks	20 mins	Face-to-face	Motivation support	<ul style="list-style-type: none"> <li>Assessment of perceived control and intention</li> <li>Exploring barriers to change</li> <li>Promotion of self-efficacy (described above)</li> <li>Monitoring uptake of community services</li> </ul>
4	4 weeks	10 mins	Telephone or face-to-face	Motivation support and outcome monitoring	<ul style="list-style-type: none"> <li>Assessment of standard of health, wellbeing, resilience, self-efficacy, perceived control and intention</li> <li>Further exploring discrepancies/barriers</li> <li>Promotion of self-efficacy (described above)</li> <li>Monitor uptake of community services</li> <li>Monitor achievement of goals</li> </ul>
5	3 months	5–10 mins	Telephone	Outcomes monitoring	<ul style="list-style-type: none"> <li>Monitor achievement of goals</li> <li>Promotion of self-efficacy (described above)</li> </ul>

Source: Gate *et al* 2016





## The use of data – evaluation

The Royal Free stands out among our case studies due to the evaluation that ran alongside implementation – indeed, some of its results have been reported in an academic journal (Gate *et al* 2016). This was made possible by the commitment of and funding from the Royal Free Charity, and we are grateful to them for allowing the first reporting of some of its findings below.

Well at the Free was successful in addressing risk factors. After the programme, 63 per cent of lifestyle goals and 89 per cent of health management goals were achieved by patients. The evaluation also showed that a large proportion (58 per cent) of referrals to other behaviour change services were accepted by clients offered them. Other services referred to, such as Citizens Advice, also had high referral acceptance rates (79 per cent) (Gate *et al* 2016).

The service was also able to reach groups with additional needs. Over half of its clients were from the two most deprived quintiles. The evaluation also found that those in the most deprived groups were those whose wellbeing improved most as a result of the intervention. Ensuring that inequalities were not exacerbated, and were addressed, was a core objective of the service, and one that was achieved.

As well as demonstrating that Well at the Free was reaching deprived and minority groups, the evaluation was also informative about patient pathways. In maternity, for instance, 21 per cent of patients were being offered behaviour change support, compared with just 4 per cent of patients being screened for alcohol use before the intervention. Similarly, before the programme's inception, physiotherapists were not referring patients to a behaviour change service. After the service had been set up, all physiotherapists at the hospital were identifying suitable patients for intervention.

An independent health economist applied a model to evaluate the programme's value for money, finding an estimated cost of £1,901.46 per quality-adjusted life year (QALY). The evaluation went on to say that the cost saving per year for the service could be £48,200 if sustained.



However, despite the service being designed to support people with multiple risk factors, the evaluation focused on single behaviours. It did not directly address the impact of Well at the Free on the prevalence of concurrent risk factors among clients.

### **Sustainability over time – the challenge of working in secondary care and a lack of integration**

The hospital-based services faced challenges that the local authority case studies did not due to the added complexity of the hospital environment and culture. In addition, these case studies faced structural issues, being hosted between CCGs, hospitals and local authorities. Both case study areas had to be very resilient and persevere over time. They succeeded in overcoming some challenges but not others.

Initially, the Bolton public health team found it challenging to navigate the structures of the hospital. They operated largely autonomously with mutually agreed work they wanted to develop, such as training frontline staff, which often avoided some of the bureaucratic processes in the hospital. The public health team found that spending time in the hospital engaging with management and staff was the best way to build the networks needed for implementing their goals. However, because of this reliance on networks and goodwill, the use of the form is still discretionary and its use is patchy, despite being well-liked.

Clinical staff who were not used to raising behavioural issues with patients were either unconfident or unsure about doing so. Sometimes staff felt it was 'not their place' to be giving lifestyle advice to patients who were in hospital for a non-related reason. This is one reason why in Bolton all patients should be asked about all risk factors to avoid picking out patients for visible behaviours. This attempts to overcome stigma about raising an individual's lifestyle. It is also the reason why Well at the Free prioritised engaging with staff. The team consulted with staff to understand and address concerns, including surveys on satisfaction with the intervention, and an independent psychologist also conducted in-depth interviews with staff.



Both sites also faced structural issues at the boundary between the hospital, CCG and local authority. For Bolton, this came about due to a shift in responsibility for health trainers services after the 2012 reforms, which weakened the feedback loop between hospital staff and health trainers about the progress or otherwise of clients. For the Royal Free, structural issues were more serious. Once the pilot came to an end, the funding did too; and despite the positive evaluation and the programme being perceived a success, there was a lack of agreement on how a service inside a hospital but with strong links to services beyond its walls would be located in future and how its costs would be shared. In the end, the ‘hub’ element of the service was not recommissioned, although as already noted, the first two tiers of the intervention are still being delivered.

Therefore, in some ways, these two case studies are mirror opposites in terms of their approach. Well at the Free, though well-supported and well-funded as a pilot, and with a strong formal evaluation, was not fully recommissioned as it did not fall into one commissioner’s remit. The complexity of focusing on health conditions and behaviours instead prompted commissioners to consider how long-term condition management, psychological wellbeing and behaviour services fit within the broader system. Bolton, on the other hand, had few resources to draw upon and often needed to rely on informal networks to move the project along. While this has meant challenges in securing consistent uptake from staff, the assessment form is still in partial use in Royal Bolton Hospital.

## Conclusion

To sum up, both case studies involving hospitals demonstrate how screening and brief intervention can reduce missed opportunities to tackle unhealthy behaviours. Well at the Free shows how this can be further supported by referral to a high-quality third-tier intervention inside the hospital.

However, the case studies also highlight the added complexities of attempting to support behaviour change in the culture of hospital environments and in the context of shifting commissioning and funding responsibilities in the wider system. In these two cases, their goals, emphasis on understanding the context and the wider determinants, and psychosocial and mental wellbeing of individuals, are similar to the IHWS case studies. But they have faced additional complexities and challenges and approached them in different ways.



Well at the Free was positively received by staff and patients and the outcomes showed significant benefits to behaviour and wellbeing. Yet the original model has not survived, for reasons that are not related to its effectiveness but to wider issues in the local health economy, and the lack of a clear organisational 'home' for the intervention after the end of the pilot.

The Bolton model, while much less formal, has evolved and developed and been flexible to adapt to circumstances. It has worked around local decision-making rather than being dependent on it. But this means it is harder to evaluate its success and its adoption has not been universal.



## 7 Local collaboration to tackle unhealthy behaviours

We have seen the role that NHS organisations and local authorities have both played in supporting individuals with multiple unhealthy risk factors. This final case study describes the experience of one area in trying to cope with the complexity of integrating services for people with unhealthy behaviours across a large rural county and an NHS foundation trust.

The IHWS in Suffolk is primarily a 'single-behaviour IHWS', where clients have a single point of access and are assessed before being directed to specific behavioural programmes within the integrated service. The service also provides additional support for patients with complex needs across all the programmes.

While offering further insights into models of behaviour change, this case study is particularly noteworthy for its focus on working collaboratively with potential suppliers and the integration and close partnership between the community service and the NHS foundation trust.

### The drivers and underpinnings of service development

Suffolk PCT commissioned a limited IHWS for East and West Suffolk in 2010. Its contract ended in 2014 and Suffolk County Council, which had taken over responsibility for behaviour change and lifestyle as a result of the 2012 health reforms, wanted a service with a stronger theoretical base and a greater focus on outcomes that would be offered across the whole county. The new service launched in April 2016.

Leadership, partnership and co-dependence have all underpinned the service. It is at the heart of the local health and wellbeing strategy, which shaped parts of its specification ([Health and Wellbeing Suffolk 2015](#)). Being championed by the health and wellbeing board was important in securing engagement with local CCGs, NHS organisations and the wider system. There is also organisational support from the



council. Directors of public health and political leadership in the council have shown support for the prevention agenda. OneLife is a key component of the health and wellbeing board prevention strategy ([Health and Wellbeing Suffolk 2015](#)).

Before the tender was released, there was a period of intense market engagement. This involved more than 100 organisations, including potential bidders, communities, residents and the voluntary sector. The tender process itself was used as *part of the iterative design* of the service, using ‘competitive dialogue’ (Burnett 2009), which included three rounds of tendering, feedback and revisions. The commissioner and successful provider extolled the benefits of the process, as it allowed them to resolve any teething problems and signalled a commitment to partnership on both sides. The end result was a five-year contract with a lead supplier (and potential to extend for an additional four years), which implemented some services (including the integration element) and subcontracted others.

### Theory of change

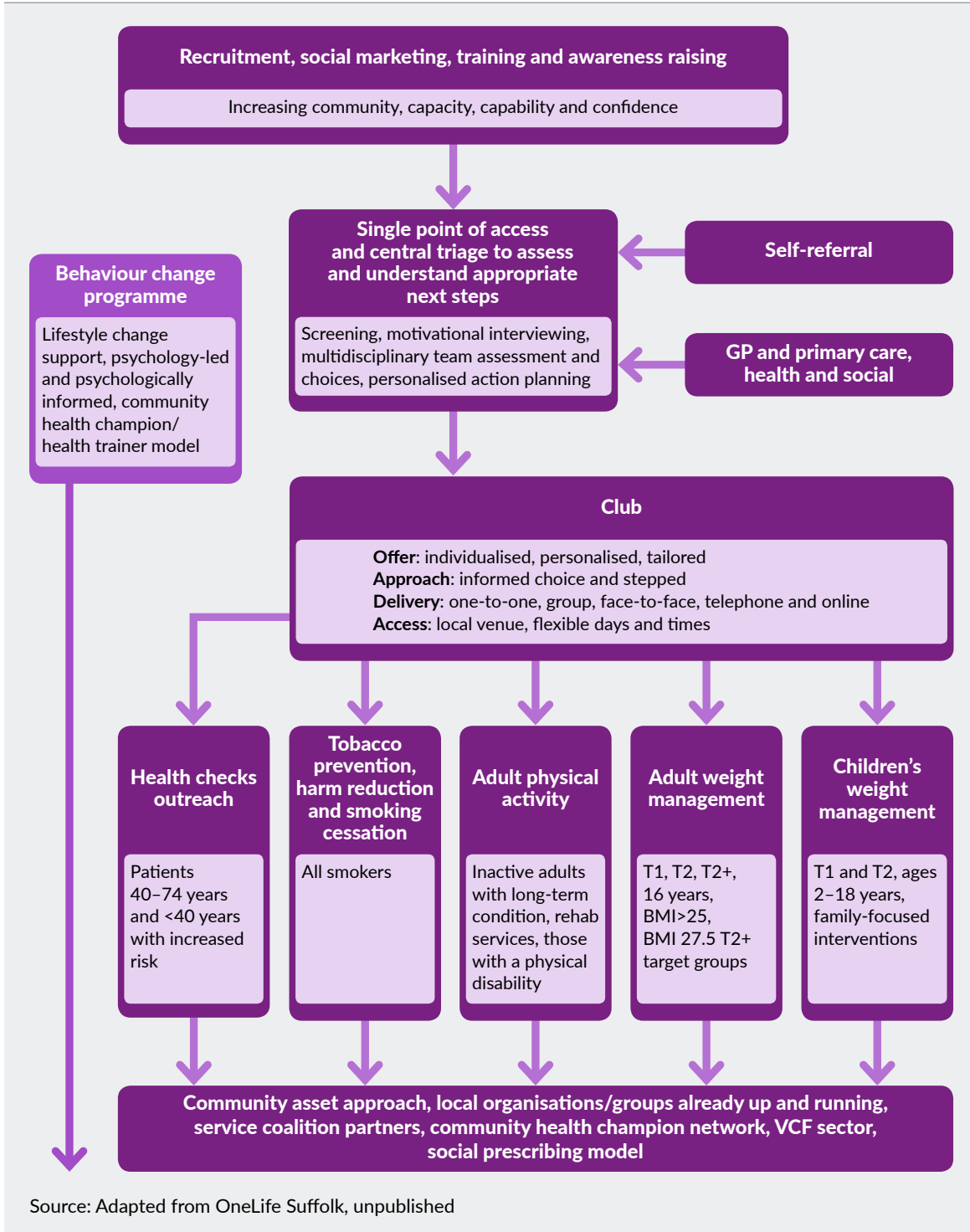
While not a theory of change per se, the service has been guided by an overarching public health goal of ‘proportionate universalism’, as referred to in the Marmot Review ([Marmot et al 2010](#)). This holds that services should be available to all, but that the intensity of interventions should be greater for those in greater need. This feeds through into practice, where some services are targeted at specific groups in greater need; it is also reflected in the tiered system of interventions, where different offers are available for those needing different levels of support.

### The care pathway

The care pathway of the IHWS in Suffolk is set out in Figure 7, and is integrated by one provider. The service has several components, including: a child weight management service; an adult weight management service; a physical activity service; smoking cessation; NHS Health Check outreach and screening (for patients who are not supported through general practice); and a multiple behaviour change service, to provide support for individuals with complex needs. The service also provides MECC training for GPs and other health professionals so that they can conduct brief interventions. This makes OneLife Suffolk broader in scope than some of the other IHWS case studies.



**Figure 7** Suffolk health and wellbeing care pathway





## The models in practice: innovation and challenges

### Awareness-raising and information provision

The OneLife Suffolk service recruits clients from different parts of the county. Local delivery teams and engagement practitioners work with local organisations, including from the voluntary and community sector, to tap into networks of potential referrals; they also work with local schools in relation to child weight management and to provide MECC training for school staff; and they work with local employers. There are local hubs to provide outreach across the entire county, which is important in rural areas.

Engagement leads within the service have responsibility for contact with around 10 GP practices. They inform GPs and other health professionals about the service to encourage referrals. They close the feedback loop by giving GPs information about the outcomes of the patients they refer.

### Recruitment and entry into the pathway

In practice, most clients self-refer, often after a conversation in their GP practice or following awareness through social media marketing. In its first year, 15,000 residents accessed health interventions through OneLife Suffolk.

Secondary care services also refer patients directly to OneLife Suffolk. A unique relationship exists with West Suffolk NHS Foundation Trust (explored in more detail below). The trust refers patients to OneLife and information on their progress will be fed back regularly to clinicians. The intention is to close the feedback loop and help ensure buy-in and ownership of the referral pathway, to encourage ongoing service uptake.

### Triage and assessment

Clients who self-refer are triaged to assess their needs. In the case of weight management, the assessment will allocate them to an intensity of treatment: tier one, tier two or tier two-plus. Tier one is the lowest intensity; many clients enter the service in tier one and then get the confidence or motivation to access the tier two service. Tier two is a greater time commitment for clients and offers more





intensive weight management support. Tier two-plus offers additional psychological and behaviour change support for weight management.

Triage can provide a useful co-ordination for clients, keeping them engaged in the different services if they would like to access more than one. It also enables a family and life-stage approach to support – with different family members accessing the service for different needs. An individual may access child weight management and return as an adult. The life-stage approach reinforces a message consistently when a client is in a better stage of their life to enact change.

### **Delivery of the service**

If a patient is referred by a professional, they will enter one of the specific behaviour group services: the physical activity programme; smoking cessation; or adult and child weight management. There is also a multi-behaviour change service for people who need additional support with modifying negative lifestyle behaviours. Individuals who require support with alcohol go to the separate integrated drug and alcohol treatment service. There is no specific service for alcohol within the IHWS, except the delivery of brief intervention for individuals whose alcohol consumption is above recommended levels but whose needs are judged as not severe enough for onward referral.

The model in Suffolk differs from other case studies in that it is not a health trainer model. Each behaviour change service, from physical activity to smoking cessation, retains its own specialism. This was a conscious decision by both commissioner and provider to support clients through focused behaviour services. However, there is much effort to ensure that clients are cross-referred where appropriate. The triage service provides an overview of all the services, and practitioners have active involvement with the other behaviour change services on offer. Across the service, advisers also hold multidisciplinary team meetings to discuss clients. In this sense, this could be described as a multiple-behaviour approach to *service delivery*, if not to the actual behaviour change *intervention*.



## Specialist and other support outside the IHWS: the wider determinants of health and partnership with West Suffolk NHS Foundation Trust

OneLife Suffolk is unique among our case studies because of the range and depth of its wider partnerships, both ‘upstream’ on the wider determinants, and ‘downstream’ with West Suffolk NHS Foundation Trust.

For example, OneLife refers clients to the separate Wellbeing Service in Suffolk, which provides IAPT services, commissioned by the CCG, and vice versa. More broadly, health inequalities are a key priority in Suffolk’s public health strategy and OneLife Suffolk targets people in the 40 per cent most deprived neighbourhoods, as well as those with complex needs. The public health team monitors access from these neighbourhoods, targets marketing, and holds community events to encourage self-referrals. Reducing health inequalities is also one of the objectives for the child weight management service.

While OneLife Suffolk engages with all the secondary care organisations in Suffolk, its relationship with the foundation trust is an advanced example of how a local authority can support and be supported by NHS secondary care services.

West Suffolk NHS Foundation Trust has its own public health strategy, which includes a commitment to prevention: ‘We are your national health service, not just a national illness service’ ([West Suffolk NHS Foundation Trust 2017](#)). Senior leadership, including the chief executive, have a strong emphasis on prevention and the trust has hired a dedicated public health consultant, whose time and expertise has been a key enabler in moving the prevention strategy forward.

The trust views OneLife Suffolk as an innovative and high-quality service and considers partnership working more achievable than building its own lifestyle service. Key specialties were prioritised, including women’s and children’s services, pre-elective surgery, and specialties focusing on long-term conditions. OneLife Suffolk delivers MECC training for staff members; as the previous section found, persuading clinicians that their remit includes supporting patients to address unhealthy behaviours can be challenging.



The trust and OneLife Suffolk drafted a partnership plan to formalise arrangements between the organisations, which recognises the reciprocal relationship. A large part of the agreement relies on the MECC training that OneLife provides to staff at the trust. The plan ensures that the training is regular and that refresher training is available too. Referrals are an important part of the partnership plan. Referral data highlights those service lines where risk factors are most relevant, helping clinicians to identify clients that need extra support and providing lifestyle services to hospital staff.

### **The use of data: monitoring and evaluation**

Data is used widely and in many ways, from monitoring access from more deprived populations, to closing referral feedback loops and recording how clients are cross-referred within OneLife and use different aspects of the service. Leeds Beckett University will be providing additional academic support and expertise to inform service evaluation and development. Planned areas for evaluation include the benefits of the integrated service, the demographic profile and outcomes achieved for clients, how clients access more than one part of the service, and ongoing maintenance and sustained behaviour change over the long term. Researchers conduct short-term monitoring to inform service improvement, as well as longer-term evaluation projects.

The partnership plan with the foundation trust is also underpinned by data and a number of measures will be reported on a regular basis to the trust board. These include indicators on the proportion of staff who have up-to-date training and the numbers of referrals from the trust to OneLife Suffolk.

An annual report was published in March 2017, which reported on outcomes in the first year of the service ([OneLife Suffolk 2017](#)). It reported that 15,000 residents had accessed health interventions, with nearly 1,800 clients successfully quitting smoking through the stop smoking service. It also reported that 4,000 people were screened for blood pressure risks. More than 50 per cent of clients were from the more deprived areas of the county.

The service is collecting more demographic data, key health data and data on outcomes of the behaviour change interventions, though this has not been fully analysed as yet.



## Conclusion

To sum up, OneLife Suffolk delivers an IHWS while maintaining much of the integrity of single-behaviour change services. However, with a single point of access for clients and consistency across the service, this can still be considered an integrated form of delivery with potential to support individuals with multiple unhealthy risk factors.

The partnership with West Suffolk NHS Foundation Trust is particularly advanced. The links between prevention and health are self-evident and it is promising to see such a commitment from an NHS organisation to working with an IHWS. This section has shown how hospitals can work with services in the community to make the most of these opportunities, with the support of public health commissioners.



## 8 Connections to wider health policy

As part of this research we were fortunate to speak to a wide range of national policy-makers and leads about how other policy initiatives and levers could help tackle multiple unhealthy risk factors. Without exception, the conversation with policy leads was positive; they could see the connection between their work area and concerns and how this related to tackling unhealthy behaviours, and wanted to pursue this further.

Our broad view is that there is much that can be achieved by tackling unhealthy behaviours through the provision of lifestyle and related services, but it is a fallacy to think that they will solve the problem on their own. If policy-makers are serious about tackling these behaviours, then policy needs to be joined up more broadly to do so.

Key policy areas where more connections need to be made include the following.

- *The role of health literacy.* This can have impacts on adherence to treatment, self-management and general wellbeing. Health literacy is also linked to a number of risk factors, including physical inactivity, obesity and smoking (Geboers *et al* 2016; Jayasinghe *et al* 2016). But little is known about how health literacy is linked to tackling multiple as opposed to single unhealthy behaviours.
- *Making Every Contact Count (MECC).* This is the national programme supported by Public Health England and Health Education England to make better use of the millions of everyday contacts health professionals have with people to support them to make healthier lifestyle decisions (Public Health England and Health Education England 2016). Brief interventions such as this have been shown to be effective for single behaviours (Aveyard *et al* 2016; Vijay *et al* 2015). There is potential for multiple unhealthy risk factors to be considered as part of Making Every Contact Count interventions. Case study sites told us that currently, brief intervention training is delivered for single-behaviour



change, with no component on multiple risk factors or the sequencing of changes.

- *Inequalities in health policy.* Many of the case studies had placed health inequalities and the wider determinants of health at the centre of their service design. We know that in the recent past, inequalities in the prevalence of multiple unhealthy risk factors has been rising (Buck and Frosini 2012), so this focus is welcome. But current inequality strategy does not consider multiple risk factors at the national level – a gap that needs to be addressed.
- *The role of workplaces in tackling unhealthy behaviours.* Public Health England recently reported that 17 million working days are lost annually through alcohol-related absences and smokers take more sick days than non-smokers (Public Health England 2016). In our evidence review, we found that different kinds of working patterns could be related to the accrual of unhealthy risk factors. Some of our case studies considered the relevance of support for those between jobs, but there was not always a plan for having conversations with employers about tackling multiple behaviours. Employers – including the NHS – and services should come together to identify strategies to intervene earlier with employees around unhealthy risk factors. NHS England’s Healthy Workforce Programme could be one focus. It could learn from the Champions for Health programme in NHS Wales, which provided tailored communications to staff to help them change two behaviours from a choice of five: drink safely, take regular physical exercise, eat five or more fruit and vegetables a day, stop smoking, or lose weight (1000 Lives undated).
- *Preventing ill health (CQUIN).* A new Commissioning for Quality and Innovation (CQUIN) incentive payment for NHS providers focuses on alcohol consumption and smoking (NHS England 2017). A more advanced CQUIN could reward trusts that consistently screen for multiple risk factors and take action accordingly. However, the preventing ill health incentive payment is a welcome step towards a more detailed dataset for multiple risk factor interventions in hospitals.
- *New care models.* The vanguards programme was launched to support the new care models articulated as the future for care delivery in the NHS five year forward view (NHS England et al 2014), and many areas are now developing integrated care systems. The purpose of both of these is to rethink health and care, including a greater emphasis on prevention. In south Somerset,



the Symphony Vanguard Programme used health coaches in GP practices to support patient care ([Better Conversation 2017](#)). Models like Symphony could be reoriented to provide additional training for health coaches on multiple unhealthy risk factors.

- *Tax policy on alcohol and tobacco, and beyond.* There is significant research on the impact of alcohol and smoking taxes on consumption and overall harm (Bader *et al* 2011; [Home Office 2011](#)). Changing the price of alcohol affects the consumption of tobacco and vice versa. In general, these effects complement each other; an increase in cigarette prices reduces the consumption of alcohol as well as tobacco, and vice versa. While the details of this are complex, it is clear that tax policy is, de facto, healthy behaviours policy, but is not recognised as such by government. As the sugar levy is introduced too and minimum unit pricing for alcohol becomes more likely, there needs to be more focus on how these various changes can be used to greatest effect to tackle unhealthy behaviours together, rather than tackling each behaviour or issue in isolation.

### Key steps for Public Health England and the Department of Health and Social Care

Given our findings, there are five steps that Public Health England and the Department of Health and Social Care should take, as follows.

1. Invite our case study sites – and others offering similar services – to join a network (this could be linked to Public Health England’s existing IHWS network) and support them to:
  - a. share their learning to inform wider practice and policy
  - b. build on local authority successes to identify NHS organisations that can be involved in developing IHWSs
  - c. better assess the impact of their actions on unhealthy behaviours in their populations. This should be funded in order to help address key gaps in our knowledge about what works in tackling these behaviours. In our view, this would be a highly cost-effective use of funds.
2. Create a policy network to consider how unhealthy behaviours are relevant to other linked policy areas (starting with those areas outlined above). Again, link this with Public Health England’s IHWS network.



3. Fund research into interventions to tackle multiple unhealthy risk factors. While the problem is now well-established and known, there is little robust evidence on how to intervene.
4. Promote the life expectancy risks of multiple unhealthy behaviours in government health campaigns such as One You.
5. Develop a strategy for tackling multiple unhealthy risk factors within the population. This should include service delivery, existing public health initiatives and national policy levers (starting with the areas outlined above).





# 9 Themes from our case studies and recommendations for practice

This section draws together key themes across our case studies. Based on these and our wider findings, it sets out recommendations for practice.

## Key themes across our case studies

### The importance of local context

Existing knowledge about tackling multiple unhealthy behaviours, including The King's Fund's work on the prevalence of clustering of health behaviours, was an important factor in all of our case studies. But, with the possible exception of Well at the Free, these services were designed first and foremost in the context of the local situation.

Also, while tackling multiple risk factors was an important factor for all services, it was not the sole driver. Other priorities often dictated the way that services were discussed locally. The commissioners and leaders of the services therefore (understandably) looked to align the services to support wider local priorities.

Dorset's IHWS is explicitly mentioned in the STP document as the central arm of its primary prevention strategy ([Dorset STP 2017](#)). Luton has articulated the prevention case for its new service by linking with screening for related conditions, like type 2 diabetes. Suffolk, for instance, put the IHWS at the heart of the health and wellbeing board's prevention strategy ([Health and Wellbeing Suffolk 2015](#)). The strategy details where there are evidenced links between modifiable risk factors and high-impact preventable diseases.

As we have seen, many of our case studies had a strong desire to tackle health inequalities and the wider determinants of health, and this has been an important



part of both the marketing of services, the monitoring of uptake, and contract negotiations and payments, as well as in the delivery of care and connection to other local services.

### The evidence on multiple unhealthy risk factors

As we have reviewed, even if the main driver for our case studies was tackling unhealthy behaviours, the academic evidence remains patchy and weak. It is only very recently that academics have devoted any attention to how lifestyle risks manifest themselves in combinations or clusters among the population, and very few studies have looked at what this means for intervention.

There is some (albeit very limited) evidence that success in changing one behaviour may be related to success in changing another. Yet there is a dearth of evidence on how to go about behaviour change, with many unanswered questions. For example, is it better to attempt behaviour change simultaneously or sequentially? And, if the latter, in which order should unhealthy behaviours be tackled? These were questions posed by Buck and Frosini (2012) and Spring *et al* (2012), yet there is still no clear message on this from the academic literature.

The only area where there is now firmer knowledge is on smoking cessation, with a recent meta-analysis concluding that changing smoking behaviour simultaneously with other behaviours is less effective than targeting smoking in sequence with other behaviours (Meader *et al* 2017).

Public Health England guidance (2017) indicates that for the best results, smoking services should maintain a focus on this risk factor when trying to support people to change their behaviour. It recommends setting a dedicated smoking cessation service within a wider wellbeing service, but not as part of a multiple-behaviour change intervention. This highlights the importance of maintaining high-quality, evidence-based smoking cessation support, even within an integrated offer. All the case studies in this report provide dedicated smoking cessation services, even when other lifestyles are addressed through a general adviser.

Ukert (2015) showed a potential positive impact on alcohol behaviours when quitting smoking, demonstrating the potential value of including smoking cessation in an approach to tackle multiple behaviours. He also reiterates the importance of



focusing on alcohol as part of addressing multiple unhealthy behaviours. However, alcohol consumption as a risk factor was sometimes overlooked by services. In some of our case studies, alcohol abuse is dealt with separately by the drug and alcohol treatment service, though these services are designed to address significant levels of alcohol abuse. The literature on multiple unhealthy risk factors finds harm at more moderate levels of alcohol consumption, such as those with habitual drinking patterns.

This may be an important distinction between single-behaviour and multi-behaviour change IHWSs, as the costs of providing support for moderate alcohol habits in a multi-behaviour change IHWS are lower than providing an entirely new offer within a single-behaviour change service.

### **Drawing on models of behaviour change**

Given that services are tackling multiple unhealthy risk factors in the context of broader local needs and contexts, and that the evidence for intervention remains weak, all our case studies drew on wider models of behaviour change to help them develop their services. In particular, both Kent and Well at the Free spend considerable time and effort exploring and drawing on the literature to help them design their interventions.

Many of the case studies drew inspiration from the COM-B model (see page 19), which focuses on working through individuals' *capability*, *opportunity* and *motivation* to change (Michie *et al* 2011). COM-B is a useful framework since it helps connect behaviour change to the wider determinants of health (eg, sorting out debt and anxiety, or the cause of an alcohol problem, are likely to be important to long-term success). Services in Blackburn with Darwen and in Luton, which focus on addressing the wider determinants of health, have evolved from observations that determinants are often key barriers to change. COM-B also connects to the importance of individual self-esteem, empowerment and mental health in a coherent way. Well at the Free's behaviour change model was centred around support for psychological and social factors, recognising that many barriers to capability and opportunity can be found in an individual's wider environment. COM-B also enables interventions to be led by the client and their goals. All our case studies adopted a client-led approach. Advisers ask questions like 'What do you enjoy doing?', and sessions are led by which behaviours the client is motivated to change.



### Are these services really tackling multiple risk factors?

On one level, all these case studies are operating at the limits of what is known about tackling multiple unhealthy risk factors through behaviour support. They are using insights from the very limited evidence that exists, drawing sensibly and coherently on wider behaviour change theories and tackling multiple unhealthy behaviours as part of broader local goals. They are good, innovative services seeking to make a difference.

In that sense, it does not matter whether these are ‘true’ multiple risk factor services or not. However, we currently do not know how successful (or otherwise) they are in actually helping clients to *change multiple behaviours*.

We also do not know which approaches are more effective than others. Should other areas looking to tackle these behaviours via IHWSs go for single-behaviour or multi-behaviour interventions? Our case study sites are only in the early stages of independent evaluation (where an evaluation has been planned). Outcomes tend to be measured for single behaviours, such as numbers of clients quitting smoking. There are also different outcome measures being collected, with no clarity on what outcomes are clinically significant.

An approach that tackled multiple unhealthy risk factors would measure how many people have experienced change (eg, among those who smoked, drank more than the recommended limits, and had poor diet and physical activity, what percentage managed to make progress on two or more of these behaviours?).

Across these case studies, there has been no complete attempt to understand clients with multiple risk factors, or how these factors have changed over time. This is an opportunity for the future, with case study sites often collecting relevant data with which to answer these questions. Future evaluations that we are aware of, planned as part of the IHWSs in north-east England, provide opportunities to plug practical gaps in the knowledge base. Work already done as part of this evaluation has highlighted the importance of the different services in the north-east identifying shared performance indicators to enable partnership working (Cheetham *et al* 2017).



In the next section we set out the opportunities to use this local data to help fill evidence gaps on tackling multiple unhealthy risk factors, wider opportunities for development, and where we think wider policy can help.

## Recommendations to local areas

### Improve targeting of those with multiple risk factors

The community-based case studies have all taken different approaches to targeting, whether that be outreach to GPs or schools, marketing to the public, experimenting with one-stop shops or focusing on areas with high deprivation.

But in our view, more focused targeting of individuals with multiple risk factors would be beneficial. Commissioners could use existing national research such as Buck and Frosini (2012) or local studies (eg, Watts *et al* 2015) to provide some evidence on which population groups to focus on. Data from public health teams could draw on other data, such as local lifestyle surveys (an obvious place to start), as well as NHS Health Check and primary care data. Services could also identify where clusters of individuals with multiple risk factors are more likely to be located. For example, workplaces with irregular working patterns might be one area to target, as we know that this can lead to healthier habits (Buchvold *et al* 2015) as well as areas with high economic inactivity (Watts *et al* 2015).

For hospital services such as Bolton and Well at the Free, the issue of targeting is different. Bolton has used nursing staff to reach large numbers of patients and the Royal Free targeted specialties where behaviour change is important for long-term outcomes. Both approaches are valid given the aims: a brief MECC-style intervention in the first instance followed by more in-depth support where necessary.

### Address capability, opportunity and motivation to change

The COM-B model of behaviour change states that for behaviour to change, barriers to capability, opportunity and motivation all need to be addressed. We believe that services which actively provide support for all three components are more likely to be effective in tackling unhealthy risk factors, whatever their specific care pathway.



Approaches that address social issues and the wider determinants of health – such as community navigators and housing support – are trying to remove barriers to a client’s capability and opportunity to make changes, and tackle the root cause of unhealthy behaviours. Similarly, some case studies also recognised the importance of mental wellbeing as a facilitator or barrier to change. Well at the Free, for example, provided IAPT services to aid clients for whom mental wellbeing constituted one of their risk factors. Luton is taking a similar psychosocial approach to its IHWS, planning to provide access to IAPT. The NHS also needs to consider holistic behavioural factors, and how a person’s environment can impact on their health behaviours, adherence and self-care.

### **Build stronger connections between interventions and organisations**

Single-behaviour change IHWSs – those that have a single access point but then triage to single-behaviour support – should consider how these services can be best integrated. Although single-behaviour change interventions have a greater weight of evidence behind them than multiple-behaviour change interventions, it remains important for these services to dovetail for the benefit of clients with multiple unhealthy risk factors, which is likely to be around 70 per cent of the population. The IHWS in Suffolk does this by ensuring that a clinical psychologist has an overview of all the interventions across the service, and encouraging advisers to attend sessions run by other advisers and to cross-refer.

Cheetham *et al* (2017) also found that focusing on local relationships is key. They draw out the learning from comparing two separate evaluations in north-east England, highlighting the importance of dovetailing performance indicators and expectations locally to enable better co-ordinated services.

More generally, we have been impressed by the connections that all our case studies have made with other organisations in their local areas, be that in terms of entry into the services or exit and onward referral. This creates a much more integrated offer for the client and is likely to lead to better outcomes over time. But it is hard to prove that at present because the analysis does not exist.



## Collect data and use it to learn what works, as well as for monitoring and feedback

There are lots of innovative examples in our case studies of how data is being used to monitor activities and give feedback, but it must be used for more than that.

Our case studies, and others, are in a good position to provide the *real-time information and analysis* that will yield insights into what is likely to work in addressing multiple unhealthy risk factors, and what is not. Our case studies took a very innovative approach to collecting data to monitor services and contracts, but none of them were, as yet, using the data to understand or evaluate their impact on multiple unhealthy risk factors.

While some evaluations are being undertaken to understand improvements in risk factors, these have focused on each risk factor in turn. Given the paucity of academic evidence on tackling multiple behaviours, it is imperative that our case studies and others urgently plug that gap to help understand their own effectiveness and provide evidence for others.

Given the data collected across our case study services, possible research questions might include the following.

- How many clients present with more than one risk factor (even if they are not referred for more than one, or not currently seeking help for more than one)?
- Do clients who present with more than one risk factor make any progress on more than one of these factors while attending the service?
- Do clients choose to deal with multiple risk factors simultaneously or in sequence, and does that make a difference to their success?
- How does success in tackling multiple unhealthy risk factors differ between single-behaviour and multi-behaviour change IHWSs?
- Do services that connect with other organisations locally have better outcomes for tackling multiple unhealthy risk factors than those that do not?



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Unhealthy behaviours cluster in the UK population – around seven in ten adults engage in two or more of smoking, excessive alcohol consumption, poor diet and physical inactivity – yet most behaviour change services address these risk factors separately, not reflecting the reality of people's lives. In the light of limited academic evidence, what can we learn from innovating behaviour change services?

*Tackling multiple unhealthy risk factors: emerging lessons from practice* draws on interviews and information from eight case studies in local authorities and the NHS and updates the evidence base on tackling multiple unhealthy risk factors. Each of the case studies seeks to support behaviour change within the wider context of people's lives, addressing issues such as debt or housing, or psychological support.

The report suggests that areas looking to set up similar services should:

- make efforts to target individuals who may have a particular risk of multiple risk factors
- ensure that approaches to behaviour change take into account the social factors behind accruing multiple risk factors
- contribute to the lacking evidence base on multiple behaviour change by evaluating their impact on individuals with more than one risk factor.

The report makes recommendations on how services can focus their efforts on the problem of multiple unhealthy risk factors, and how the Department of Health and Social Care and Public Health England can support further innovation in such services and help ensure that innovation generates useful evidence for the improvement of practice.

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