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Embedding health and wellbeing into clinical practice and education

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Introduction

The promotion of health and wellbeing in clinical education and practice is complex, and yet it is fundamental to generalist forms of healthcare. When done well, it has the potential to address many of the risk factors for common non-communicable diseases driving a more equitable, regenerative and sustainable healthcare system. It is intrinsically participatory as patients must be active partners in addressing their own risk factors for disease and strategies for wellbeing. It requires multiple lenses on complex real-world problems as well as collaborative intersectoral working, and it benefits from longitudinal, relationship-based care.

Much of a healthcare student's early clinical education is likely to centre on learning about how to support people who are unwell. Generalist education, however, also invites learners to engage across a person's life narrative: exploring current and past contextual factors, and imagining and planning for a future centred on what matters to that person.

Chapter 11 articulates how generalists interact with community wellbeing resources such as dementia cafes, park runs, creative arts and community canteens. Chapter 18 discusses the principles of personalised care: working collaboratively with patients and carers to identify and address what matters to them and supporting them in effective self-management. This chapter focuses on how health and wellbeing can be promoted within a clinical encounter, either opportunistically or as part of a personalised care-planning appointment. We also explore some of the educational challenges and strategies for supporting learners in developing the associated capabilities and using them to good effect.

Conceptualising health and wellbeing

There are multiple and sometimes conflicting definitions of health and wellbeing. Although the two concepts overlap, they are not the same. Health has been described variously as (1) an absence of disease or impairment; (2) a state of fitness or an ability to cope with one's activities of daily living; (3) a state of internal and external equilibrium; and (4) a state of complete physical, mental and social wellbeing. Health can be measured both subjectively ('do you consider yourself to be healthy?') and, depending on which definition is used, objectively through metrics such as blood pressure, cholesterol, body mass index or other physiological indicators. Wellbeing, on the other hand, tends to be framed more positively and in more complex ways, encompassing hard-to-measure factors such as happiness, life satisfaction, quality of life and self-esteem. A person in a state of good wellbeing is said to be able to enjoy and contribute to society with a sense of meaning and purpose (5). While health can impact on wellbeing, it is not the only influence. Someone who is objectively unhealthy can also experience a sense of subjective wellbeing which might be influenced by factors such as autonomy, good relationships, a sense of purpose, and social support (6).

In this chapter, wellbeing will be considered through multiple perspectives: those of the patient, the clinician and the learner. Our aim is to demonstrate that wellbeing is relevant to all, yet has a unique meaning to the individual. Worked examples of how wellbeing can be taught and supported in clinical and educational practice are integrated into this chapter to demonstrate the multiple scenarios in which wellbeing can be opportunistically addressed. We will also touch on the role of the healthcare sector in supporting the wellbeing of people with long-term health conditions, as well as the wellbeing of healthcare workers themselves through a culinary medicine educational example.

The consultation: a window of opportunity

The consultation is the ideal setting for healthcare professionals to engage patients in opportunistic or planned discussions about their wellbeing, and ideas, concerns and expectations around this. This is especially the case where relational continuity with people exists, such as in general practice. GPs are therefore in a good position to identify people whose health and wellbeing could be improved with lifestyle changes, optimisation of clinical management and social care, and/or support through any other means, such as community groups or rights and benefits advice (see Chapters 10 and 11). We will explore how the art of generalism can be applied to transform these brief patient encounters into pivotal opportunities to inspire both patients and ourselves as clinicians, and to change our mindset and behaviour to improve wellbeing.

The determinants of health

Health inequalities are unfair, avoidable and systematic differences in health between different groups of people (7). These inequalities can be broadly categorised into intrinsic and extrinsic factors (see Figure 17.1). Intrinsic factors may be considered modifiable determinants of health, as they tend to be behavioural: for example, smoking, diet, alcohol, obesity, taking medicines regularly, exercise and so forth. Rather than being a simple 'personal choice', these 'behaviours' tend to be influenced upstream by extrinsic, wider commercial and socioeconomic determinants. Multiple factors and stakeholders shape possible behavioural 'choices' and opportunities for care. This affects access to (and then quality and experience of) healthcare. Factors include poverty, poor housing, literacy, education, environmental degradation, social isolation and trauma (see also Chapter 11). Treating healthy living merely as a lifestyle choice is therefore likely to meet with limited success. The principles of generalism, however, invite the practitioner to view a patient's health needs through multiple lenses – the biomedical and the behavioural as well as the upstream social, commercial and environmental determinants – and to work collaboratively with people to identify what matters and what might make a difference.

There are, of course, evidence-based guidelines for the management of many of the direct challenges to health such as smoking, alcohol

Figure 17.1 The modifiable determinants of health and disease. © Kay Leedham-Green

dependence, substance misuse, unprotected sex, exercise and dietary inadequacies. There are also wider health-related components to the management guidelines for many long-term conditions such as diabetes and COPD. These guidelines may include specific tests, screening, therapies, referrals and lifestyle advice. Specific health promotion guidelines will change over time and vary between organisations and healthcare systems, and are therefore beyond the scope of this chapter, but they should also inform consultation approaches.

The negative health behaviours in Figure 17.1 can be inverted to become the positive drivers of health and potentially wellbeing: *stopping* smoking, *starting* to exercise, *taking* antihypertensives more regularly, *changing* dietary habits, *stopping* substance misuse, *starting* a hobby, *meeting* up with friends more frequently, *learning* to self-manage and so forth. There is an action verb to each of these positive drivers, suggesting a behavioural lens might be important.

Health and behaviour

So long as the upstream determinants of health are not forgotten, nor a patient's immediate biomedical needs, it can be helpful to explore health and wellbeing through a behaviour change lens. Michie's theoretical domains framework (Figure 17.2), also known as the COM-B model (capability, opportunity, motivation => behaviour change), is a well-established theory that integrates all the potential drivers of a change in behaviour (8). All components of the model can impact on each other, for example, motivation may be increased when a new skill or knowledge is acquired which means the person now has the capability to initiate a behaviour. Importantly, the model includes attending to a person's external social and physical environment (their opportunities), their intrinsic and extrinsic motivations, as well as their physical and psychological ability to undertake the new behaviour. The COM-B model can be used to understand why an intended behaviour, for example stopping smoking, is or is not happening. Perhaps they live with a smoker? Perhaps they are using smoking as a psychological crutch? Perhaps they do not feel the risks are relevant to them? Perhaps they need help managing physical cravings? Perhaps they simply do not want to quit?

The COM-B model can inform a behavioural understanding or diagnosis, which can then be used to personalise an intervention according to its function. Michie's theoretical domains framework also provides a comprehensive taxonomy of intervention functions: education, training,

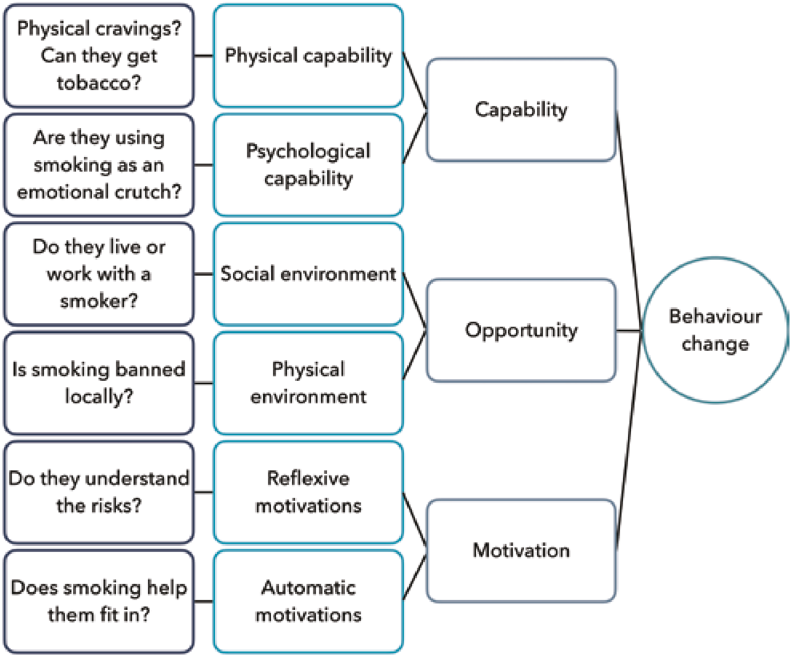

Figure 17.2 Exploring the drivers of a health behaviour (smoking) using the COM-B model. Based on Michie and colleagues' COM-B framework. © Kay Leedham-Green based on Michie et al. 2011 (8)

modelling, environmental restructuring, restriction, enablement, incentivisation, persuasion and coercion. Not all of these are appropriate within a person-centred consultation, but the principle remains: a behavioural diagnosis is needed to inform the intervention function. There is no point in educating someone about the dangers of smoking if they already understand, and are willing to accept the risks; if their main problem is a social trigger rather than physical cravings then nicotine replacement therapy is unlikely to be helpful; if they are using tobacco as an emotional crutch, then that may need to be addressed first.

A complex evidence base

Producing a quantitative evidence base for health and wellbeing interventions within a personalised clinical consultation, as opposed to wider public health and policy, is challenging. Quasi-experimental research might involve randomising patients to one pathway and comparing their outcomes to another. But how feasible is it to randomise consultation approaches? How ethical is it? How can one ensure the control group is effectively controlled? How reproducible is an intervention, particularly if it is based on longitudinal relationship-based care? Instead, the evidence base for health and wellbeing interventions tends to be built on larger cohort studies of clearly defined or system-level interventions, rather than personalised consultation-based approaches. Meta-analyses are also challenging as each study might have a different target population and different outcome measures. Over time, however, it becomes possible to estimate what typical health and wellbeing interventions are achieving, and to make pragmatic adjustments for what might be achievable within a personalised consultation. It is important to remember that the lack of 'hard' quasi-experimental data for health and wellbeing interventions within a clinical consultation reflects the characteristics of personalised care and should not be confused with ineffectiveness: the evidence base is just more complex. Table 17.1 provides example outcomes from health and wellbeing interventions, with contextual notes.

Table 17.1 Example outcomes from health and wellbeing interventions

Intervention	Outcomes	Contextual notes
Smoking cessation	54% of those setting a quit date remain successful 4 weeks later.	National UK statistics[9].
Obesity	46% of those starting a group weight-loss programme lost >5% of their body weight a year later (60% of completers) 23% lost >10% (31% of completers).	Australian, German and UK study exploring free referrals to a commercial weight-loss support group[10].
Alcohol	38% of alcohol abuse-affected individuals and 30% of alcohol dependent individuals who try to quit were successful.	North American data based on a national epidemiological survey[11].
Exercise	A pedometer and 12-week walking diary intervention was associated with significant decreases in both new cardiovascular events and fractures at 4 years. Number needed to treat (NNT) to avoid an event was approximately 60 for a cardiovascular event and 28 for a fracture.	UK-based cohort study[12].

(*continued*)

Table 17.1 (Cont.)

Intervention	Outcomes	Contextual notes
Wellbeing through social prescribing	Of the 136 participants, 62% were depressed, based on the Hospital Anxiety and Depression Scale before the intervention and 45% after. 93% suffered from anxiety before the intervention, 77% after. Also, significant improvements in validated self-efficacy and wellbeing scales.	Social prescribing in Scotland: meditation and creative arts courses[13].

Structuring a conversation about health and wellbeing

Although the COM-B model is a helpful way of conceptualising the drivers of behaviour change, it is not a consultation model. How does one start a conversation about health and wellbeing? How does one ensure a patient's autonomy and preferences are respected, while still inviting conversations about difficult topics such as obesity, alcohol or loneliness? How does one elicit 'change talk', or tap into people's existing strengths, building on previous successes? How does one maintain forward momentum within a time-limited clinical encounter? How does one generate a plan that is sensitive to a patient's needs, context and wishes? How does one negotiate uncertain engagement or outcomes?

There are a variety of consultation models and communication toolkits to choose from with an array of acronyms such as MI (motivational interviewing), SBIRT (screening, brief intervention and referral), StACC (structured agenda-free coaching conversations), T-GROW (topic, goal, reality check, options, way forward), CIC (conversations inviting change), the 2Es (every patient, every visit), the 5As (ask, assess, advise, assist, arrange) and others (14–19). Some frameworks are more directive than others; for example, a very brief intervention might involve simply advising the person to quit a negative behaviour or adopt a positive one. Others involve more psychologically informed approaches: engaging the patient in reflecting on their own needs and context, asking them to articulate an achievable goal that is important to them, a realistic plan for achieving it, and supporting them through problem-solving, resources and follow-up.

Directive versus coaching approaches

Table 17.2 contrasts a relatively directive 6As approach (20) with a more patient-centred 'coaching' approach (described in more detail in Chapter 18). For this example, we have moved away from a health

Table 17.2 The 6 As, comparing a directive and coaching approach. Adapted from Glasgow et al. 5As (14) and Leedham-Green et al. 6As (20)

The 6 As	A directive approach	A coaching approach
Ask	Are you socially isolated?	Would you like to talk about your loneliness? What are your concerns?
Assess	How often do you interact with others?	Can you take me through a typical day? What do you think the issues are? What do you think might help? [barriers and facilitators to change, COM-B diagnosis]
Advise	Social isolation puts you at risk of depression, anxiety, heart disease and dementia	It sounds as though some of the issues are … Some potential resources/evidenced strategies include …
Agree	You should aim to interact with others at least once per day	What is an achievable goal/action that might make a difference to you? What other options are there? Which option sounds best? How and when can you make that happen?
Assist	Here is a diary to track your progress	How confident are you in making that change? What might improve your confidence? Would a [resource/referral] help?
Arrange	I will see you again in 6 weeks to review	Would you find follow-up helpful? When would you like to come back?

behaviour to a more complex wellbeing problem: addressing the needs of an adult experiencing loneliness.

Example 17.1a: Johan needs more than medicine

Johan is a refugee who has presented with clinical depression which he associates with the loneliness of living in a foreign country and the working restrictions placed on him while awaiting his resettlement papers. After attending to local guidelines on depression, his GP broaches his loneliness through a health coaching approach (see Table 17.2).

Johan says that he is keen to socialise with other refugees as he feels they would understand him. He also misses meaningful work, which he thinks would provide him with opportunities to meet people. Unfortunately, while he waits for his resettlement papers, paid work is unavailable to him. They agree on a referral to their local social prescribing link worker who is familiar with local opportunities.

To be continued …

The stages of a coaching consultation, from information-sharing to goal-setting, action-planning, problem-solving and follow-up, are reasonably generic across consultation models, as are the core communicative strategies articulated by Miller and Rollnick: open questions, affirmations, reflections and summaries, expressing empathy, rolling with resistance, developing discrepancies and supporting self-efficacy (17). Learning to find the right words at the right time, however, takes time and practice to perfect. Most health coaching courses, for example, take a couple of days to complete, followed by supervised practice; this chapter is intended as an introduction rather than as a replacement for a course.

Promoting change one step at a time

Truly transformative change may need to address deeply ingrained beliefs, motivations, behaviours and contextual barriers. Although practitioners can initiate and stimulate conversations inviting change, the real work of change is done by the patient with the support of their social network outside the consulting room in their own time. One of the features of generalism is the focus on longitudinal approaches to patient needs through relationship-based care, which can be used to advantage in the promotion of health and wellbeing. Follow-up is, after all, a driver *in itself* of sustained behaviour change (21).

The transtheoretical model (Figure 17.3), also known as the stages of change model, articulates the phases that a person might go through, from realising that change is necessary, to planning and initiating change, through to sustaining change and managing relapses (22). This framework allows the practitioner to identify where a person is on their change journey. It can also be used to ‘chunk’ health-promoting conversations into smaller achievable steps. Focusing on one stage at a time may feel more achievable within a time-constrained consultation. A single consultation might, for example, help to move someone from pre-contemplation to contemplation with the words ‘Have you thought of (health or wellbeing topic)? When you last (did x), what worked? How would (change) make you feel?’ and inviting them back to discuss it another day. Aiming for a single step at a time allows the patient time to process each step, to do their own research, to discuss with others, and even to attempt change before returning for follow-up. It is key that follow-up is supportive and encouraging rather than directive or admonishing. The latter approach is likely to elicit defensive behaviour and there are always reasons (capability, opportunity, motivation or competing interests) why a behaviour did not occur.

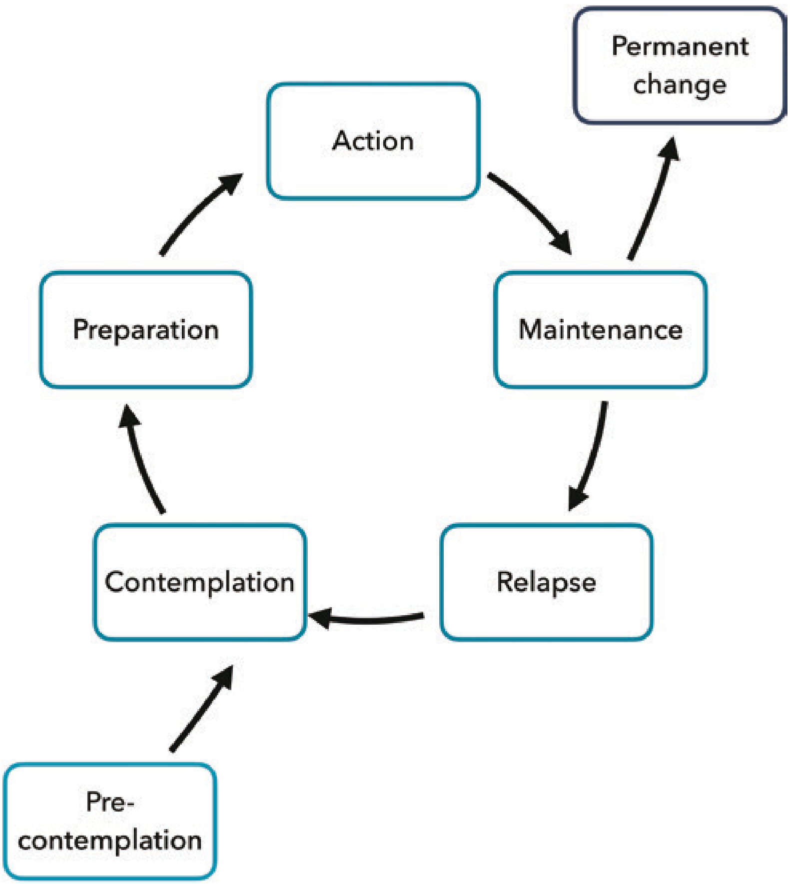

Figure 17.3 Stages of change (transtheoretical) model. © Kay Leedham-Green based on Prochaska et al. 1992 (22)

Broaching complex or sensitive topics

One of our chapter authors ran a training day for 60 general practitioners and practice nurses on person-centred approaches for addressing obesity within a clinical consultation. Their pre-course survey asked participants what they were struggling with, and their post-course survey asked what they found most helpful. The pre-course survey highlighted the level of complexity that these generalists were encountering. Specifically, the association of morbid obesity with factors such as complex childhood trauma, poverty, mobility impairment, binge eating disorder, or ongoing abuse. A large observational study in California found that two-thirds of respondents with morbid obesity were survivors of complex childhood trauma (23). The pre-course survey also highlighted concerns about causing offence or further trauma by raising sensitive issues. The post-training survey identified learning to broach sensitive topics in person-centred ways as the most helpful learning point of the day; the second being how to use coaching rather than directive approaches.

These practitioners expressed differing views on how and when conversations about weight should be brought up within a consultation. Is it ethical to only raise the issue of obesity after pathology such as hypertension, arthritis or diabetes has set in? Is it ethical to raise the issue proactively if it has the potential to offend? Is it ethical to ignore it, given the strong association with eating disorders and abuse? We asked our invited patient advocates and course participants with lived experience of obesity for their views. Can the topic be raised proactively without causing offence? One participant said that they did not like being told they were overweight ('You're not breaking bad news, I do know!'), but that it was a relief to be invited to talk about their concerns as they themselves sometimes found it difficult to start the conversation. Their consensus was that it was appropriate to offer the conversation proactively, but not to impose it: effectively 'asking to ask'. Table 17.3 summarises workshop comments on some of the approaches commonly used to broach obesity.

Working collaboratively

Another feature of generalism is the emphasis on collaborative working. Generalists approach all types of health problems at all stages in life, not because they know everything, but because they work collaboratively and know when (and when not) to draw on evidence-based guidelines

Table 17.3 Critiquing strategies for broaching obesity in a consultation

Strategy	Comments from patient advocates	Impression given by strategy
While you're here, would you mind stepping on to the scales … I'm sorry to tell you that you have an unhealthy BMI (body mass index) …	Sounds like 'breaking bad news'.	Practitioner's agenda.
We need to have a conversation about your weight …	Sounds like a 'telling off'.	Practitioner's agenda.
Can I ask you about your weight? Is this something you would like to talk about today? What are your concerns?	Offering, not imposing, the conversation. Asking to ask. Focusing first on the patient's agenda.	Patient-centred. Mutually engaged.

(see also Chapter 5). This way of working creates a form of dynamic, distributed expertise: patients have a single point of contact, but access to a much wider network of information and healthcare professionals who may be experts in exercise, diet, self-management and other health-related issues.

Example 17.1b: Mukta and Joe work together

Mukta is a busy practice nurse who runs a weekly personalised care-planning clinic for patients with multimorbidities. Each patient gets two appointments, the first is for tests such as mental health screening, blood pressure, blood tests, foot checks, BMI and inhaler checks. After the results have been shared with her patients, they come back for their second appointment, which is where the conversation about what would make a difference happens. Mukta used to avoid asking about wider social issues, even though she knew how important they were, because she didn't know how to help. That was until she met Joe, their local social prescribing link worker.

Joe is an experienced health coach and met Mukta on a course he was running. Mukta is now happy to invite conversations about anything including housing, poverty, heating, nutrition, social care and loneliness. If Mukta can't help her patients resolve something that is affecting their health and wellbeing within her care-planning consultation, if appropriate, she offers a referral to Joe. Joe doesn't solve his patients' problems for them. Instead, he supports them to look together at what it is possible to solve, supported through his knowledge of local and online resources. Joe explains how, if he can't find a resource to suggest, he will offer to link patients with someone who might be able to help. He describes a repair and recycle club for refugees that was set up by Johan (see Example 17.1a) at his local community centre, with the help of a social enterprise grant they applied for together.

To be continued …

Evaluating health and wellbeing interventions

Although evaluative data can be used in research, the purpose of evaluation is to understand, monitor, or improve a contextualised intervention rather than produce transferable knowledge (24). A very simple outcomes evaluation might ask whether an intervention achieved its stated goals. A more complex 'realist' evaluation might look at who the intervention worked for, to what extent, in which contexts, and why. An economic evaluation might look at the social, financial and environmental inputs in relation to outcomes to determine what value was created for different stakeholders. A participatory action research model might invite patients and carers to work with those delivering the intervention to evaluate its processes and improve it. Evaluation plans should ideally be built into the intervention from the start, involve stakeholders, specifically patients and communities, and follow legal and ethical guidelines for consent, confidentiality, data protection and minimisation of harms. Formal ethical oversight may be required if the results are to be disseminated, for example through publication or conference presentation.

Direct measures of evaluation can be relatively straightforward. For example, frequency of use of a weight-loss or smoking cessation app. However, exploring how, why and when a wellbeing intervention is used (or not) may be more complex. For simple health-related interventions, it may be possible to track physiological markers of morbidity over time such as blood pressure, cholesterol, glycemic control or BMI, or to use self-reported behavioural outcomes such as smoking cessation rates, exercise diaries or medication adherence. Many wellbeing interventions, however, tend to have harder-to-measure outcomes, such as reducing loneliness, increasing someone's sense of purpose, or reducing feelings of overwhelm. An understanding of how an intervention is supposed to achieve the desired wellbeing outcomes (its theory of change) may allow proxy interim measures to be usefully proposed.

Example 17.1c: Johan and Joe evaluate their work

Joe recognises the importance of evaluating the wellbeing interventions he recommends, both at an individual and collective level. He encourages providers of local community groups to do their own evaluation, but he also asks his patients to complete the WHO-5 wellbeing index before and after the intervention (25), with a few qualitative questions before (What are you hoping to achieve? Do you need any special adjustments to help you engage?) and afterwards (What difference did this intervention make to you? What was most helpful about it? How could it be improved for others?). With consent, Joe shares anonymised quarterly data with both the referrer and provider. This, he says, encourages the referrers to refer again, and the providers to continually improve and develop. The quantitative evaluation helps Joe to compare interventions and he combines this with demographic data to monitor inclusion.

Johan designed the evaluation of his repair and recycle club for refugees with his club members, supported by Joe. Many refugees arrived with language barriers. Some were suspicious of authority. Many, like Johan, were looking for friendship, a shared sense of purpose and belonging, as well as new skills. They agreed on a visual record of all the repaired items that have been returned to their community, and an informal attendance register, with a record of why people left the club (relocation, employment, or other).

In this case, the physical outputs of the repair and recycling project are a proxy interim measure for one of their intended wellbeing outcomes: a sense of purpose. Their attendance register is another useful interim measure as social participation in the group is likely to be a precursor of reduced loneliness. Seeing whether people have moved on to employment might also be an indicator of language and skills development, and can be compared with local benchmarks.

Interim proxy measures are useful as they can often be charted over time with minimal burden on participants. There are also a variety of validated questionnaires that can be used to measure complex constructs such as quality of life, happiness and wellbeing; for example, the WHO-5 wellbeing index (26) or the Warwick-Edinburgh Mental Wellbeing Scale (27). Validated questionnaires can often be used as 'before and after' measures to see whether the intervention had an impact, and combined with demographic and qualitative data to understand for whom it worked, and why. Many validated questionnaires also have benchmark data so that practitioners can compare their intervention population with a population mean. This enables providers to check, for example, that the intervention is being used by the people that need it. As a note of caution, validated measures are only as useful and relevant as their underlying constructs. A quality of life index that is based on physical constructs such as chronic pain and mobility is unlikely to pick up changes in social or psychological wellbeing. Evaluation measures should be chosen carefully and collaboratively.

Developing health promotion competencies

The cognitive apprenticeship model (Figure 17.4) is a useful framework for describing the tacit steps from novice to expert in the acquisition of complex skills such as coaching for health and wellbeing (28). Learners typically start by learning *about* the practice including its theoretical and evidential grounding, for example through pre-reading, a presentation or e-learning. Next, they might observe application of theory, modelled by an expert, then try it themselves under direct observation in a safe environment, for example through simulation, expert patients, or role play, and receive personalised feedback. Next, they apply their newly acquired skills with clinical patients, aided by prompts, guidelines and

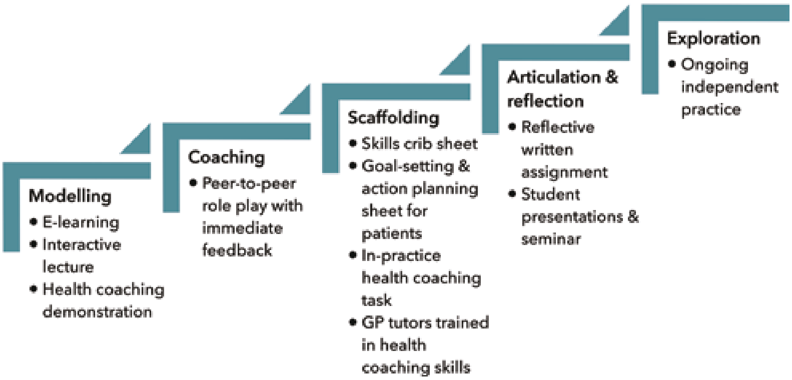

Figure 17.4 Developing health promotion competencies through a cognitive apprenticeship. Derived from Wylie & Leedham-Green (29)

other scaffolding support, ideally with near-hand debrief support from an expert. Support is gradually withdrawn as the learner gains confidence. Finally, once the learner can articulate what excellence looks like, and critique and reflect on their performance in relation to others, they develop as experts who can independently innovate, improve and educate. Figure 17.4 illustrates how these steps were integrated into an undergraduate health promotion course component at King's College London (29).

There are additional factors that may need to be addressed if a learner is going to integrate discussions around health and wellbeing into their evolving clinical practice. It may not be enough for them to simply develop the right professional competencies, for example, by completing a health coaching course. They also need time and the appropriate environment in which to engage their patients in discussion; to believe that health promotion is an effective use of that time and in their patients' best interests; and that wellbeing and health promotion are part of their professional identity. Mukta's example, above, also illustrates that learners are more likely to act if they are familiar with any available resources, such as link workers, self-help apps and referral options. These requirements for effective clinical practice have been described as role competency, role legitimacy and resource adequacy (20). These are illustrated in Table 17.4, alongside potential educational interventions.

Table 17.4 Challenges and strategies for health promotion in clinical practice

Facilitator	Challenges	Strategies
Role legitimacy • Seeing health promotion as part of their professional identity • Believing health promotion is in their patients' interests	Lack of senior role modelling Judgemental attitudes Fear of offence Despondency	Training seniors in parallel with juniors to enhance role modelling Expert patients who are willing to share their story Learning patient-centred approaches Exploring positive evaluations
Role competency • Knowledge of the evidence base • Ability to use clinical guidelines effectively • Health coaching skills	Knowing what to do Knowing how to do it Knowledge of resources Knowing how to work interprofessionally	E-learning and pre-reading Practical skills workshops Opportunities for practice with feedback Scaffolding tools (see above) Assignments and assessments Interprofessional projects & seminars
Resource adequacy • Opportunities, resources, support • Ease of access to resources	Finding time and headspace Local referral options and protocols Effective therapies	Appointments with protected time for forward planning Chunking: one change-step per consultation Health navigators / link workers Responsive commissioning of local services

Educational example: Integrating culinary medicine education into the core undergraduate medical curriculum at UCL

Culinary medicine at UCL (30), which was introduced into the core undergraduate medical curriculum in September 2019, is a worked example of supporting learners in applying knowledge to clinical practice using elements of the cognitive apprenticeship model (29).

> Let food be thy medicine and medicine be thy food.
>
> Hippocrates

It is well-known that food can be used to navigate the interface between wellbeing and health or illness by preventing, informing, mitigating or supporting management of diseases. This involves healthcare professionals working with patients in partnership to embrace this element of their life as relevant to discuss during a clinical encounter; and to be curious about the patient's story to focus and negotiate areas for potential change. However, healthcare professionals may find it challenging to discuss, or even raise, the subject, given that food can be a sensitive topic. Healthy eating has marketised associations with physical appearance, mental health and self-esteem; it has significance in diverse cultural practices, which may be poorly understood; and there are complex associations with food poverty, insecurity and eating disorders.

Culinary medicine is the art of teaching healthcare professionals about evidence-based scientific principles of nutrition and its application to clinical practice. A bespoke course developed with UCL medical school was designed to focus on general practice-based conversations with patients and is delivered by a multidisciplinary team of healthcare professionals (GPs, dietitians, chefs and patients). The course is delivered to penultimate-year medical students and aims to provide clinically relevant nutrition training on dietary management of chronic disease, such as type two diabetes mellitus (31). Students are encouraged to draw upon experiences of patient encounters during their clinical GP placements to help maximise the relevance and potential connections between theory and practice. The course teaches the role of food and dietary conversations in disease prevention and management, and the interplay of cultural and socioeconomic factors in food availability and diet. Students first complete a session of e-learning before attending a hands-on day of consultation workshops (motivational interviewing, role play and active learning through speaking to expert patients), case-based group discussions and practical culinary skills training in a teaching kitchen. Students are then encouraged to apply their newly acquired knowledge and skills to future patient encounters in general practice, by identifying a patient during their general practice placement, with whom they can talk about food and diet (e.g. a young woman with polycystic ovarian syndrome). The intended learning outcomes are to equip students with the skills to provide holistic, patient-centred care to empower patients to embrace healthier eating. Iterative adaptations to the course were made to address changing clinical need: for example, the SARS-CoV-2 pandemic of 2019 and food insecurities exacerbated by the cost of living. This topic was introduced into the course to highlight the challenges of accessing affordable, healthy and nutritious meals for a greater number of people and the available support services.

This worked example demonstrates the role that generalists play in discussing food with patients, working with patients on a personal level at the interface between the individual and wider society. In the UK, despite the evidence base for improving health and wellbeing through a healthy diet, and the public's support for public health initiatives, the national food strategy has yet to be translated into policy, for example the sugar tax and banning advertising of junk food.

It is also important to note that teaching medical students these skills does not serve to replace the work of dietitians, who are trained professionals. Instead, the aim is to emphasise that recognising ill health as a result of poor nutrition and co-negotiating simple, appropriate dietary strategies is in the scope of practice for all healthcare professionals, and a competency required of UK medical school graduates whatever their chosen career (32). The ability to notice a relevant opportunity for a conversation with a patient about food is a crucial element of the way in which clinicians problem-set. This involves attending not only to issues explicitly brought by a patient, but also related opportunities for health promotion or management of chronic conditions (see also Chapter 1). Equipping healthcare professionals with these skills can only strengthen collaboration between the different members of the multidisciplinary team, with further increased shared understanding and goal setting for improving patient health and wellbeing through dietary changes.

A further reason to support clinically relevant nutrition training for healthcare trainees is the evidence base for health benefits for medical students who learn about healthy eating themselves (30, 33–36). Many students report a positive impact on their own food preparation and use. Thus, through learning how to help patients lead healthier lives, there are mutual benefits for learners.

Conclusion

In summary, embedding wellbeing into education and clinical practice requires fostering a collaborative working relationship between the patient, clinician and learner to establish and achieve mutually agreed goals for improving and/or maintaining a good state of wellbeing. Goal setting should take place in a supportive environment, with access to the wider multidisciplinary team and services as necessary. In this chapter, we have explored examples of how wellbeing can be taught, how collaboration can be supported through various frameworks, and how clinical consultations can be structured using models to inspire change. Ultimately, each individual will bring their own interpretations and values about what good wellbeing looks like. It is the responsibility of the clinician working with that patient to acknowledge and explore this further, and to offer them appropriate and personalised support.

References

1. Engel GL. The need for a new medical model: a challenge for biomedicine. *Science* (American Association for the Advancement of Science). 1977;196(4286):129–36.
2. Huber M, Knottnerus JA, Green L et al. How should we define health? *BMJ*. 2011;343(7817): d4163–237.
3. Sartorius N. The meanings of health and its promotion. *Croatian Medical Journal*. 2006;47(4):662–4.
4. World Health Organization. Constitution of the World Health Organization. 1948. Available from: www.who.int/about/governance/constitution (accessed 10 April 2023).
5. World Health Organization. Health Promotion Glossary of Terms. 2021. Available from: www.who.int/publications/i/item/9789240038349 (accessed 10 April 2023).
6. Ibrahim AF, Tan MP, Teoh GK et al. Health benefits of social participation interventions among community-dwelling older persons: a review article. *Experimental Aging Research*. 2022;48(3):234–60.
7. Williams E, Buck D, Babalola G, Maguire D. What are health inequalities? The King's Fund; 2022. Available from: www.kingsfund.org.uk/publications/what-are-health-inequalities#what (accessed 16 April 2023).
8. Michie S, Ashford S, Sniehotta FK et al. A refined taxonomy of behaviour change techniques to help people change their physical activity and healthy eating behaviours: the CALO-RE taxonomy. *Psychology & Health*. 2011;26(11):1479–98.
9. NHS Digital. Statistics on NHS Stop Smoking Services in England – April 2022 to September 2022. 2022. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-nhs-stop-smoking-services-in-england/april-2022-to-september-2022 (accessed 10 April 2023).
10. Jebb SA, Ahern AL, Olson AD et al. Primary care referral to a commercial provider for weight loss treatment versus standard care: a randomised controlled trial. *The Lancet*. 2011;378(9801):1485–92.
11. Chiappetta V, García-Rodríguez O, Jin CJ et al. Predictors of quit attempts and successful quit attempts among individuals with alcohol use disorders in a nationally representative sample. *Drug and Alcohol Dependence*. 2014;141:138–44.
12. Harris T, Limb ES, Hosking F et al. Effect of pedometer-based walking interventions on long-term health outcomes: prospective 4-year follow-up of two randomised controlled trials using routine primary care data. *PLoS Medicine*. 2019;16(6):e1002836.

13. Morton L, Ferguson M, Baty F. Improving wellbeing and self-efficacy by social prescription. *Public Health (London)*. 2015;129(3):286–9.
14. Glasgow RE, Emont S, Miller DC. Assessing delivery of the five 'A's for patient-centered counseling. *Health Promotion International*. 2006;21(3):245–55.
15. Henry K. Structured Agenda-free Coaching Conversation ('StACC') Model. Know Your Own Health; 2022. Available from: https://kyoh.org/StACC-model (accessed 4 January 2023).
16. Launer J. *Narrative-Based Practice in Health and Social Care: Conversations inviting change*. 2nd edn. Routledge; 2018.
17. Miller WR, Rollnick S. *Motivational Interviewing: Helping people change*. 3rd edn. Guilford Publications; 2012.
18. Rogers J, Maini A. *Coaching for Health: Why it works and how to do it*. McGraw-Hill Education/ Open University Press; 2016.
19. Vendetti J, Gmyrek A, Damon D et al. Screening, brief intervention and referral to treatment (SBIRT): implementation barriers, facilitators and model migration. *Addiction*. 2017;112(Supp.2):23–33.
20. Leedham-Green KE, Pound R, Wylie A. Enabling tomorrow's doctors to address obesity in a GP consultation: an action research project. *Education for Primary Care*. 2016;27(6):455–61.
21. Kwasnicka D, Dombrowski SU, White M, Sniehotta F. Theoretical explanations for maintenance of behaviour change: a systematic review of behaviour theories. *Health Psychology Review*. 2016;10(3):277–96.
22. Prochaska JO, Di Clemente CC, Norcross JC. In search of how people change. Applications to addictive behaviors. *Am Psychol*. 1992;47(9):1102–14.
23. Williamson DF, Thompson TJ, Anda RF et al. Body weight and obesity in adults and self-reported abuse in childhood. *International Journal of Obesity*. 2002;26(8):1075–82.
24. Twycross A, Shorten A. Service evaluation, audit and research: what is the difference? *Evidence-based Nursing*. 2014;17(3):65–6.
25. Topp CW, Østergaard SD, Søndergaard S, Bech P. The WHO-5 Well-Being Index: a systematic review of the literature. *Psychotherapy & Psychosomatics*. 2015;84(3):167–76.
26. World Health Organization. Wellbeing Measures in Primary Health Care/ The Depcare Project. WHO Regional Office for Europe; 1998.
27. Tennant R, Hiller L, Fishwick R et al. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. *Health Qual Life Outcomes*. 2007;5:63.
28. Stalmeijer RE, Dolmans DHJM, Snellen-Balendong HAM, van Santen-Hoeufft M et al. Clinical teaching based on principles of cognitive apprenticeship: views of experienced clinical teachers. *Academic Medicine*. 2013;88(6):861–5.
29. Wylie A, Leedham-Green K. Health promotion in medical education: lessons from a major undergraduate curriculum implementation. *Education for Primary Care*. 2017;28(6):325–33.
30. Xie JY-Y, Poduval S, Vickerstaff V, Park S. Cross-sectional questionnaire study to gather the teaching preferences and expectations of UK undergraduate medical students for culinary medicine learning. *BMJ Open*. 2020;10(10):e036410.
31. Unwin D, Khalid AA, Unwin J, Crocombe D et al. Insights from a general practice service evaluation supporting a lower carbohydrate diet in patients with type 2 diabetes mellitus and prediabetes: a secondary analysis of routine clinic data including HbA1c, weight and prescribing over 6 years. *BMJ Nutrition, Prevention & Health*. 2020;3(2):285–94.
32. General Medical Council. Outcomes for graduates. 2020. Available from: www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/outcomes-for-graduates/outcomes-for-graduates (accessed 16 April 2023).
33. Conroy MB, Delichatsios HK, Hafler JP, Rigotti NA. Impact of a preventive medicine and nutrition curriculum for medical students. *Am J Prev Med*. 2004;27(1):77–80.
34. Pang B, Memel Z, Diamant C et al. Culinary medicine and community partnership: hands-on culinary skills training to empower medical students to provide patient-centered nutrition education. *Med Educ Online*. 2019;24(1):1630238.
35. Ring M, Cheung E, Mahadevan R, Folkens S et al. Cooking up health: a novel culinary medicine and service learning elective for health professional students. *J Altern Complement Med*. 2019;25(1):61–72.
36. Schlair S, Hanley K, Gillespie C et al. How medical students' behaviors and attitudes affect the impact of a brief curriculum on nutrition counseling. *J Nutr Educ Behav*. 2012;44(6):653–7.