

Measuring the impact of Health and Wellbeing Coaches

Introduction to the model and framework approach

Contents

1. The problem of causality	2
Starting with a model	2
A piece of the puzzle	2
2. Modelling Health and Wellbeing Coaching	3
3. From model to framework	4
Using existing tools	4
4. Strengths and weaknesses of the model and framework approach	5
Strengths	5
Weaknesses.....	5
5. Using the framework to capture data	6
Collection and management of data	6
Analysis	6
6. How much data is needed?	7
Adding another variable	7
Digging deeper	8
7. Help and support.....	9

1. The problem of causality

When we want to understand the impact of a treatment, role, or service on people's health and wellbeing, we are not only interested in whether there is a change in outcomes; we also want to know to what extent the intervention under investigation *caused* the change, or whether it would have happened anyway due to other factors.

Confusion arises when the wrong outcomes are measured, and when changes in outcomes are attributed to the wrong variables. For example, it would be wrong to observe the positive correlation between ice cream sales and crime and conclude that ice cream sales *cause* crime, when increases in both are caused (in part) by warm weather.

Starting with a model

To avoid these traps and make sure we are drawing reasonable conclusions from our data, it is helpful to have a model that sets out the outcomes we are interested in and all the possible variables that can influence those outcomes. That way, we can be clear on what we need to measure and how all the different factors influence one another.

Using a model to guide our measurements may not be sufficient to *prove* whether an intervention causes improved health and wellbeing outcomes, because there will always be details and nuances that a model oversimplifies, or that are missing from the model entirely. But by helping us identify and control for at least some of those details, our understanding of the causes of outcomes will be strengthened.

Basing our approach on a model has other benefits besides helping us attribute causality. By identifying variables that have an influence on outcomes, we can start to see how those outcomes might vary for different groups of people, for people with different health conditions, or according to how the intervention was delivered. This can lead to insights into how we can improve our intervention – perhaps it should be delivered in different ways for different groups, or targeted more effectively at those who will see the most benefit, in order to get the best outcomes possible using the available resources.

A piece of the puzzle

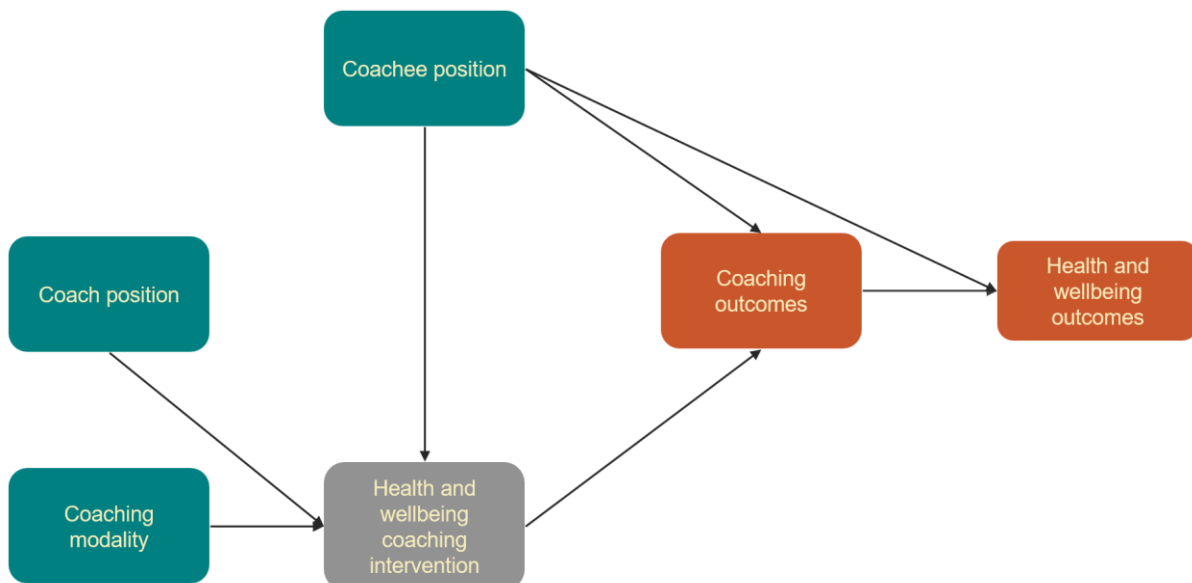
The framework will not provide a complete, definitive picture of all the different impacts of Health and Wellbeing Coaches. It is intended to give one piece of the puzzle, sitting alongside other forms of evidence such as case studies, expert opinion, and randomised controlled studies in a balanced and rounded view.

2. Modelling Health and Wellbeing Coaching

We worked with Health and Wellbeing Coaches to produce a generic model that captures the key variables relevant to most, if not all, health and wellbeing coaching interventions in NHS primary care settings. The model has the following five variables:

Coachee position	Coach position	Coaching modality	Coaching outcomes	Health and Wellbeing Outcomes
Factors related to the person being coached, their demographics, baseline health and wellbeing, etc.	Factors related to the coach, their demographics, level of experience, etc.	How the coaching is delivered, e.g. face-to-face vs. remote, individual vs. group sessions	What changes were observed in the coachee's self-efficacy and motivation?	What changes were observed in the coachee's health and wellbeing?

These five variables are related in the following model:



In this model:

- The coachee position, the coach position, and the coaching modality all shape the health and wellbeing coaching intervention
- The intervention influences coaching outcomes
- Coaching outcomes influence health and wellbeing outcomes

- Coachee position can also influence coaching outcomes and health and wellbeing outcomes independently of the intervention (for example if a coachee's health status changes due to factors unrelated to the intervention)

3. From model to framework

For each of the variables in the model, we have identified a small number of measures to capture data about that variable. These measures sit together in a draft measurement framework.

As is the case with the model, the measures in the framework are designed to be generic and relevant to all health and wellbeing coaching interventions. The base framework can be supplemented by additional measures where necessary, for example to capture outcomes for a specific health condition.

Using existing tools

If you are already using a tool or framework to capture outcomes, such as the Patient Activation Measure® or the Health and Wellbeing Prism, you can continue to use these alongside the model and framework. The data collected for the input variables (coachee position, coach position, and coaching modality) will provide additional context that will help you interpret the results from other tools more effectively, creating stronger evidence and more actionable insights. With enough data, you will also be able to distinguish between the effects of the intervention and those of the coachee position independent of the intervention, which is not possible using a tool or framework that only measures outcomes.

4. Strengths and weaknesses of the model and framework approach

Here is the summary of the strengths and weaknesses of the model and framework approach:

Strengths

- The model is co-produced, tested, and refined with domain experts to ensure that all relevant variables and their relationships are identified
- Basing the measurement framework on an explicitly defined model means that all measures should be relevant to outcomes
- Using a model and framework approach helps us understand how and why we observe the outcomes we observe, bringing us closer to determining causes
- The approach helps us improve and refine interventions by providing insight into what is currently working best and for whom

Weaknesses

- More work may be required to collect, manage, and analyse data compared with an approach that only measures outcomes
- Fully understanding the data collected requires specialist skills
- Controlling for confounders may not be as robust as in randomised controlled trials (at least when total variance and the number of potential confounding variables are small – when they are large then true randomisation becomes difficult to achieve)
- The current framework is very dependent upon coachee-reported measures, which on the one hand keeps the focus on what is important to the coachee, but on the other is vulnerable to various biases and inaccuracies

5. Using the framework to capture data

The framework is designed to be simple to use and relatively light-touch. Only some of the measures require information to be gathered from coachees, and those that do are designed to be naturally woven into the coaching conversation rather than a distraction from it. Other required information can be obtained from electronic patient records or from the coach.

It is important that informed consent is obtained from the coachee for their data to be collected and used for the purpose of understanding the effectiveness of the intervention or service. When doing so, it should be made clear that it is the intervention or service that is being measured, not the coachee, and that their data will only ever be analysed as part of a group (for example, along with all other coachees of their gender, or with everyone who has the same level of confidence in managing their own health and wellbeing). Exemplar text will be provided for this purpose.

Collection and management of data

The framework includes measures related to the demographics, health status, and care outcomes of individual people. Even when names are redacted, identification of individuals may be possible with very little additional information. As such, data collected through the framework is subject to data protection regulations and should be treated in the same way as personal information stored in an electronic patient record system such as EMIS or SystemOne.

A data sharing agreement is required to share data collected through the framework outside of your practice, PCN, or federation.

Analysis

Most PCNs and other employers of Health and Wellbeing Coaches do not have a data scientist or analyst on staff. You will therefore likely require external support with analysing and interpreting the data collected through the framework. This could come from one of several sources:

- Your ICB
- An NHS organisation that can provide analysis services (such as a Commissioning Support Unit)
- A private supplier of analysis services

Whichever option you choose, you will need to have a data sharing agreement in place before you can share data.

6. How much data is needed?

As you begin to collect data using the framework, you may begin to notice the emergence of what look like meaningful patterns. Don't be fooled! The human brain is predisposed to perceiving patterns, even when they are the product of random chance.

Interpreting the data robustly will require both a) a lot of data, and b) sorting the data into groups. For example, you may want to compare the health and wellbeing outcomes for coachees who feel more in control of their own health and wellbeing after coaching with those who feel that their sense of control hasn't changed. At its simplest, this creates four groups:

Improved sense of control, no or negative impact on health and wellbeing	No or negative change in sense of control, no or negative impact on health and wellbeing
Improved sense of control, positive impact on health and wellbeing	No or negative change in sense of control, positive impact on health and wellbeing

The more coachees you have in each of these four groups, the more robust the comparison will be. As a general rule of thumb, an analysis would not be worth attempting until there are at least 10 coachees in the smallest group. Even then, the results may be inconclusive.

Let's say for the sake of example that we find evidence that coachees whose sense of control over their own health and wellbeing improves after coaching were more likely to report a positive impact on their health and wellbeing.

Adding another variable

Now let's say you want to do the same analysis as above, but also consider the effect of whether the coaching was face-to-face or remote. Now you have eight groups:

Improved sense of control, no or negative impact on health and wellbeing, face-to-face	No or negative change in sense of control, no or negative impact on health and wellbeing, face-to-face
Improved sense of control, no or negative impact on health and wellbeing, remote	No or negative change in sense of control, no or negative impact on health and wellbeing, remote
Improved sense of control, positive impact on health and wellbeing, face-to-face	No or negative change in sense of control, positive impact on health and wellbeing, face-to-face

Improved sense of control, positive impact on health and wellbeing, remote	No or negative change in sense of control, positive impact on health and wellbeing, remote
--	--

Each of these groups needs to have at least 10 coachees in them. But now we may gain more insight than we did before – for example, we might find evidence that those who received face-to-face coaching were more likely to report both an increased sense of control over their own health and wellbeing and a positive impact on their health and wellbeing.

In this hypothetical example, we can see how as the amount of data collected increases, the potential insights become richer. We can also see how these insights could be actionable – a PCN receiving these results may want to increase the proportion of their coaching that is delivered face-to-face, or there may be improvements that could be made to the remote coaching to make it more similar to face-to-face delivery.

Digging deeper

Findings may also raise further questions: maybe some population groups benefit more from face-to-face coaching, while others get better results from remote? This cycle of answers generating more questions is a normal part of any process of inquiry. Fortunately, because you used a comprehensive model to guide your data collection, you should already be collecting most or all of the data you need to answer any additional questions that may arise. You may eventually reach such a degree of nuance and complexity that the model is no longer helpful – but by this point you should already have generated a rich vein of insight that helps you improve and demonstrate the impact of your health and wellbeing coaching service.

7. Help and support

Measuring the Impact of Health and Wellbeing Coaches is a project led by NHS Black Country Integrated Care Board, the UK & International Health Coaches Association, and the Institute of Applied Health Studies at the University of Birmingham.

It would not have been possible to get this far without the contributions of countless Health and Wellbeing Coaches from across England, who participated in online workshops and discussions in the FutureNHS Health and Wellbeing Coaches discussion forum.

For more information about the project, please contact:

Nathan Thomas

Primary Care Workforce and
Insights Manager

NHS Black Country Integrated
Care Board

nathan.thomas6@nhs.net

Faye Hall

Director of Professional Standards
& Membership Development

UK & International Health
Coaches Association

faye@ukihca.com