

1 **Manuscript**

2

3 **Abstract**

4 **The importance of evaluation to demonstrate the effectiveness of policies, programmes**
5 **and interventions is widely recognised. Evaluation in the context of public health and**
6 **healthcare is viewed as a complicated exercise, particularly when dealing with complex**
7 **interventions involving multiple partners, multiple components and multiple outcomes.**
8 **Eliciting the programme theory is an important starting point of an evaluation process**
9 **to enable the link between theory and action to be articulated. This paper gives a**
10 **pragmatic account of the practicalities of working with stakeholders as they embark on**
11 **a formative evaluation of a complex public health initiative, using a using a theory**
12 **based approach. Drawing on the principles of Leeuw's strategic assessment. We**
13 **planned a workshop to reflect the four stages of this approach - group formation,**
14 **assumption surfacing, dialectical debate and synthesis. Stakeholders took part in four**
15 **activities - Free Listing, Sphere of Influence, Beattie's Theoretical Framework and**
16 **Programme Concept Mapping. We found that our elicitation approach was particularly**
17 **suited to reconstructing the programme theory in a non-threatening and playful**
18 **environment, bringing about an alignment of programme theories by consensus and**
19 **reducing anxiety.**

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21 **Key words:** Theory driven evaluation, eliciting programme theory, logframe matrix

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23 **Title-:** Eliciting and reconstructing programme theory: an exercise in translating theory into
24 practice.

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2 **Introduction**

3 The importance of evaluation to demonstrate the effectiveness of policies, programmes and
4 interventions is widely recognised. Moreover, evaluation is now seen as an aid to
5 organisational learning, development and supporting the implementation of interventions to
6 improve quality of care and patient safety ((Benn et al 2009, Morello et al 2013, De Silva et al
7 2014). In practice however, evaluation in the context of public health and healthcare is a
8 complicated exercise, particularly when dealing with complex interventions involving multiple
9 partners, multiple components and multiple outcomes (De Silva et al 2014). The use of theory-
10 based approaches is growing in popularity within public health and healthcare practice, as
11 there is growing acknowledgement of the benefits of these approaches in enabling a better
12 understanding of programme processes and activities; implementation process and
13 applicability in practice (Kelly, et al. 2007, De Silva et al 2014, Breuer et al 2016).

14 Theory-driven evaluation, for example, focuses on making the links between theory and
15 actions more explicit, importantly allowing for an exploration of the process of change in
16 meeting the specified outcomes (Weiss 1995, Leeuw 2015). The 'theory' in these situations is
17 the set of beliefs and assumptions that underpin the programme activities (Weiss 2000).
18 Leeuw (2003) points out that many evaluations focus on how a programme should work and
19 very rarely on articulating and examining the theory underpinning the interventions and their
20 anticipated impact. According to Leeuw (2003) the reconstruction of the programme theory is
21 necessary part of the evaluation process for the following reasons: to make sense of the
22 changes produced by the programme, to establish if activities will produce the desired
23 changes, and to make the processes of delivery more transparent.

24 How this is accomplished in practice is open to debate, as there appears to be many
25 approaches for practitioners to draw on to engage stakeholders either prior to or during the

1 programme, or as part of an evaluation (Christie 2003; Leeuw 2003; Rosas 2005). The aim of
2 this paper is not to review or debate the pros and cons of the different approaches of eliciting
3 programme theory, as there is a body of supporting literature on this. Instead, it aims to give
4 a pragmatic account of the practicalities of working with stakeholders as they embark on a
5 formative evaluation of a complex public health initiative that they are in the process of
6 implementing, in order to demonstrate the value of eliciting programme theory as part of the
7 evaluation process.

8 This paper describes our experience as evaluators of using a combination of approaches
9 which draws on aspects of Leeuw's (2003) methodologies to elicit a programme theory. Leeuw
10 (2003) proposed that these methodologies - policy scientific, strategic assessment and
11 elicitation with their roots in organisational psychology and management can be adapted to
12 assess the underlying assumptions of complex public health initiatives. The policy scientific
13 approach is best suited to ex-post evaluations and uses a combination of document analysis
14 and interviews. The strategic assessment and elicitation methodologies provide more
15 dialectical approach to the process and facilitates double loop learning for organisations
16 (Leeuw 2003). We decided to draw on aspects of Leeuw's (2003) strategic assessment
17 approach to inform our evaluation workshop designed to work with programme stakeholders
18 to reconstruct their programme theory.

19

20 **The evaluation context**

21 As this is an account of our experience and reflections of working with stakeholders to elicit
22 and reconstruct their programme theory, we do not go into much details about the intervention
23 itself. Briefly, we were commissioned by a public health team (the internal stakeholders) from
24 a regional health office in the UK to conduct a formative evaluation of an initiative they were
25 introducing to reduce obesity in the local area. The primary aim of the initiative was to invite

1 partners (the external stakeholders) from the public, private and third sectors organisations to
2 make a commitment or a promise to make changes within their organisations and introduce
3 an intervention or initiative to reduce obesity and increase physical inactivity.

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5 **Eliciting the programme theory**

6 It was agreed with members of the public health team that a theory-driven approach would
7 help shape and inform the implementation and subsequent evaluation of the initiative. We, the
8 evaluators, started by creating a logframe matrix as described by Green and South (2006) to
9 illustrate our understanding and interpretation of the programme theory and underlying
10 assumptions gained from interviews with internal stakeholders. Programme documents,
11 including the marketing strategy and various briefing documents were reviewed used to inform
12 the logframe matrix. However, when we presented the stakeholders with the logframe matrix,
13 they pointed out that we had misrepresented their programme theory. We realised we had
14 been working on the assumption that there was agreement around the theoretical
15 underpinnings of the programme among the various stakeholders. We also assumed that our
16 representation of the linkages across programme's aims, objectives and activities were
17 correct. Importantly, what we had presented was based on our assumptions, knowledge and
18 expertise. We had taken it upon ourselves to decide what the underlying theory of the
19 programme should be. In effect, we had presented our logical representation of their
20 programme.

21 The challenge for us now was to align the various programme theories that were brought to
22 our attention by the stakeholders and to get some agreement on 'whose programme theory'.
23 It became clear that we needed to take a more active role in working with the stakeholders to
24 help them to re-conceptualise and re-articulate their programme theory. We also recognised
25 that a consensus view of the programme needed to be achieved for things to progress. **To do**

1 this we decided to hold a participatory workshop drawing on the principles of Leeuw's (2003)
2 strategic assessment approach. We planned the activities of our workshop to reflect the four
3 stages of this approach - group formation, assumption surfacing, dialectical debate and
4 synthesis. Stakeholder we asked to take part in four activities - Free Listing, Sphere of
5 Influence, Beattie's (1991), Theoretical Framework and Programme Concept Mapping (Figure
6 1)

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1 Box 1- Workshop activities

The workshop activities- the four approaches:

1. **Free listing (Group formation and assumption surfacing)** – Stakeholders were individually asked to list what they felt were the goals, outcomes and expectations of the programme and then put these in order of importance. We asked to share what they had written with the rest of the group.
2. **Sphere of influence – (Dialectical debate)** has four concentric circles each depicting the stakeholders' level of control over the actions and activities. Stakeholders were asked to work together in pairs to put down the programme related activities they felt or knew they had influence/control over in the centre sphere. They were positioned activities in the outermost spheres according the degree of influence they felt they had from medium to little. They also had the option of placing activities they felt they no control over completely outside the spheres.
3. **Beattie's theoretical framework (Dialectical debate)** – the framework has four quadrants; health persuasion, legislative action, personal counselling and community development, with two axes, the vertical axis representing the continuum between authoritative and negotiated actions, and the horizontal representing the continuum of individual and collective actions (Beattie 1991). The framework is a structural map to help to explore the logical possibilities the different elements of an intervention (Beattie 2002). Stakeholders were asked to place activities in the quadrant that best represented the mode and focus on the intervention from their perspective.
4. **Programme concept map – (Synthesis)** - The concept map represented the programme goal (reducing obesity) and actions required to achieve that goal based on the Foresight report (Butland, Jebb et al. 2007). We added unlinked 'floating' concepts to represent the steering group and its activities, as well as potential pitfalls (assumptions) in the programme theory. The participants were asked to validate or amend the various 'concepts' and then draw the linkages

1 *Insert figure 1*

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3 **Evaluators' reflections**

4 Our initial failure to reconstruct a programme theory that provided an accurate representation
5 of the programme stakeholders made us reflect on our role as evaluators. How much direction
6 do we as evaluators provide when this becomes apparent? Should we reconstruct the theory
7 for the programme stakeholders as we perceive it, or should we focus on using methods that
8 will facilitate a process that will enable stakeholders to do so themselves? The issue of
9 contamination was a major concern and we wished to remain objective, as we were aware
10 that misrepresentation was a possibility. There was also an underlying sense that, as technical
11 experts, we were expected to present all the answers and help to validate the direction of the
12 intervention they had started to implement. It was these questions and reflections that made
13 us decide to find a way remove misrepresentation and be assured that the process of
14 reconstructing the programme theory was both transparent and representative of
15 stakeholders' collective logic.

16 The participatory workshop gave us an opportunity to engage with the participants in a manner
17 that would not have been possible if we had carried on developing the theory ourselves based
18 on the available information. The exercise also gave the participants the confidence to
19 articulate their assumptions and their theories of change. The approaches we used - combined
20 with attentive facilitation - had created a safe environment in which a range of underlying
21 assumptions were surfaced and a shared common understanding of what the programme's
22 main stakeholders were aiming to achieve was established. By the end of the workshop,
23 stakeholders were collectively making theoretical connections between the proposed activities
24 and anticipated outcomes.

1 The participants found aspects of the process of reconstructing the programme theory
2 challenging. Completing Beattie's framework was the one exercise that required participants
3 to think more critically about the theoretical underpinning certain elements of the programme
4 they wanted to include. Participants struggled with this exercise the most, as it was when they
5 were required to debate and examine the theoretical merits and logical links of their actions
6 with the outcomes they were hoping their programme would achieve. As group, they
7 encountered difficulties in agreeing what the modality and focus of their intervention should
8 be when placed in the context of Beattie's framework. It was also the exercise in which the
9 different theoretical understandings amongst the group started to emerge, provoking a deeper
10 discussion about the purpose and relevance of certain activities and components of the
11 programme they were planning to put in place. This exercise required the most focussed
12 facilitation. In contrast, stakeholders found the sphere of influence exercise illuminating,
13 almost cathartic, openly discussing and exploring the nature of their control over key activities
14 of the programme. As a group, this gave them a better idea of what they could realistically
15 achieve and what they could set as measures of success.

16 Initially, we were met with resistance from senior members of the team who had commissioned
17 the evaluation. When we first suggested we wished to run a workshop to involve all the internal
18 stakeholders in the process of eliciting the programme theory, they were not sure this was
19 necessary. They did not see the value of full team involvement in exploring or identifying the
20 theoretical underpinnings of the programme or gaining their perspectives on its
21 implementation. We got the sense that some members felt we were subjecting the logic of
22 what they had planned to scrutiny, opening the possibilities of their efforts being criticised by
23 us and the rest of the team. Eventually, they acquiesced, and it was agreed that we could run
24 a half day workshop, all internal stakeholders were invited and did join in. During the workshop
25 itself, the initial resistance was expressed more strongly in the form of animosity from some
26 senior members of the team. It was what we can only describe as an expression of "evaluation

1 anxiety". To alleviate this, we continually reassured and clarified what we were aiming to do,
2 which was to assist them to opening discuss the purpose and role of eliciting their programme
3 theory. We were careful to maintain a "playful" atmosphere to allow underlying assumptions
4 to surface and for participants to became more active in the facilitation of the discussions to
5 reduce their anxiety.

6 **Discussion**

7 Reconstructing the programme theory is a significant stage in theory driven evaluations.
8 Leeuw (2003, 2015) and Weiss (2000) consider this an essential step in the process which
9 the activities and assumptions of the programme are made explicit and mapped out. Weiss
10 views this as "paying attention to the intervening steps in the process of change" (Weiss 2000
11 pg.103) and creating a shared understanding of the 'theory of change'. We certainly found
12 this to be an essential step in the evaluation process and one which can easily be dismissed.

13 We found that the process of eliciting and reconstructing the programme theory required more
14 intense engagement with stakeholders than originally planned. In this scenario, although the
15 programme's goal was clear (reducing obesity at a regional level), it was challenging for the
16 stakeholders to document the programme activities and make the logical links between what
17 they were planning and how it would lead to change. One of the reasons for this inability to
18 populate the programme's logframe matrix was the nature of the programme itself, which had
19 initially been conceptualised as a loose network of multi-sectoral partners. No attempt had
20 been made by the internal stakeholders to map out the relationships among programme
21 activities, inputs or outputs of the various initiatives that each partner was proposing or links
22 between assumptions being made.

23 The resistance we experienced at different stages of the evaluation process was an illustration
24 of how analytical processes designed to challenge assumptions can lead to a feeling of anxiety
25 amongst stakeholders. **Donaldson et al (2002) highlighted "evaluation anxiety" as a real**

1 **issue which tends to be expressed in five common ways; conflict, withdrawal,**
2 **resistance, shame and anger. Donaldson et al (2002) points out that the process of**
3 **eliciting the programme theory can be perceived as external criticism of the programme**
4 **team’s efforts and thinking, leading to stakeholders feeling vulnerable or exposed. They**
5 **propose a number strategies that evaluators should consider using to counteract signs**
6 **of evaluation of anxiety early on in the process, such as determining the programme**
7 **psychologic, using multiple strategies and allow stakeholders to discuss and effect the**
8 **evaluation (Donaldson et al 2012)**

9 **The participatory workshop illustrated that key aspects of Leeuw’s strategic**
10 **assessment approach can be applied in practice. The evaluation did bring to the fore**
11 **the difficulties of using a theory driven approach in the context of complex**
12 **programming in identifying appropriate approaches and strategies to support the**
13 **process of eliciting the programme theory.** Drawing on Leeuw’s (2003) strategic
14 assessment approach allowed us to create a dialectical tension by encouraging individuals to
15 take a global perspective of the programme and taking them out of their confined remit and
16 roles. We felt that were we able to illustrate, as they became more engaged in the dialectic
17 the dynamics of the group started change. The participants who were most resistant at the
18 beginning eventually engaged with the process, actively listened and took the perspectives of
19 others into account. It also allowed us, as evaluators to depart from a more formal evaluation
20 approach in which the evaluators drive the process and present their interpretation of the
21 programme theory. We managed to create a “playful” atmosphere, that allowed them to bring
22 their own individual programme theories to the table (Van der Heijden and Eden 1998). In
23 doing so, we gave stakeholders an opportunity to voice their perceptions and understandings
24 of the programme, as well as to uncover areas of potential mis-alignment of programme
25 theories amongst themselves. **These activities we used not only helped in eliciting the**
26 **programme theory but shared many similarities with the strategies that Donaldson**

1 **suggest evaluators should consider including in evaluation approach to reduce**
2 **evaluation anxiety.**

3 **Conclusion**

4 In this paper, we have presented practical approaches to eliciting programme theory in the
5 case of a complex intervention with multiple stakeholders. Our elicitation approach was
6 particularly suited to reconstructing the programme theory and in bringing about an alignment
7 of programme theories by consensus in a non-threatening and “playful” environment. The
8 outcome of our evaluation workshop was the articulation of a programme theory that better
9 reflected stakeholders’ shared understanding of the potential changes their programme could
10 achieve in the context in which they were operating.

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30 **Figure 1:** Theoretical Framework and Programme Concept Map

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