



## RESEARCH ARTICLE

# Co-producing health care - pragmatic principles and an illustration [version 1; peer review: awaiting peer review]

Axel Kaehne <sup>1</sup>, Lucy Bray<sup>2</sup>, Edmund Horowicz<sup>1</sup><sup>1</sup>Medical School, Edge Hill University, Ormskirk, L39 4QP, UK<sup>2</sup>School of Nursing, Edge Hill University, Ormskirk, L39 4QP, UK**v1** First published: 26 Mar 2020, 2:10 (<https://doi.org/10.35241/emeraldopenres.13475.1>)Latest published: 26 Mar 2020, 2:10 (<https://doi.org/10.35241/emeraldopenres.13475.1>)**Open Peer Review****Reviewer Status** AWAITING PEER REVIEW

Any reports and responses or comments on the article can be found at the end of the article.

**Abstract**

Co-production has received increasing attention from managers and researchers in public services. In the health care sector, co-production has become a by-word for the meaningful engagement of patients yet there is still a lack of knowledge around what works when co-producing services. The paper sets out a set of pragmatic principles which may guide anyone embarking on co-producing health care services, and provides an illustration of a co-produced Young People's Health Research Group in England. We conclude by outlining some learning points which are useful when establishing co-production projects.

**Keywords**

co-production, health care, health research, public services, public engagement, participation

This article is included in the [Healthy Lives gateway](#).**Corresponding author:** Axel Kaehne ([axel.kaehne@edgehill.ac.uk](mailto:axel.kaehne@edgehill.ac.uk))**Author roles:** **Kaehne A:** Conceptualization, Methodology, Project Administration, Supervision, Writing – Original Draft Preparation, Writing – Review & Editing; **Bray L:** Writing – Original Draft Preparation, Writing – Review & Editing; **Horowicz E:** Writing – Original Draft Preparation, Writing – Review & Editing**Competing interests:** No competing interests were disclosed.**Grant information:** The author(s) declared that no grants were involved in supporting this work.**Copyright:** © 2020 Kaehne A *et al.* This is an open access article distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.**How to cite this article:** Kaehne A, Bray L and Horowicz E. **Co-producing health care - pragmatic principles and an illustration [version 1; peer review: awaiting peer review]** Emerald Open Research 2020, 2:10 (<https://doi.org/10.35241/emeraldopenres.13475.1>)**First published:** 26 Mar 2020, 2:10 (<https://doi.org/10.35241/emeraldopenres.13475.1>)

## Background

The need to co-produce health care services has been debated for decades (Batalden *et al.*, 2016; Bovaird, 2007; Oliver *et al.*, 2019). The most recent NHS Five Year Forward states that health organisations ‘need to engage with communities and citizens in new ways, involving them directly in decisions about the future of health and care services.’ (Public Health England - Trust Development Authority. NHS England Care Quality Commission Health Education England Monitor, 2014, p.13).

Despite the increased attention on co-production in health care, there is little consensus on how to meaningfully engage patients and service users effectively when re-designing local and national services. Methods and practices vary and are often based on local expertise and initiatives. Observers note that the field of co-production is populated with aspirational statements and tokenistic actions (Hudson, 2014; Kaehne & Taylor, 2016; Oliver *et al.*, 2019).

Our paper will draw on the existing literature to give an overview of the current understanding of co-production in health care. We will set out a pragmatic set of principles that should guide organisations when co-producing their services. To support these principles we will provide an illustration of co-producing health care research in the North West of England.

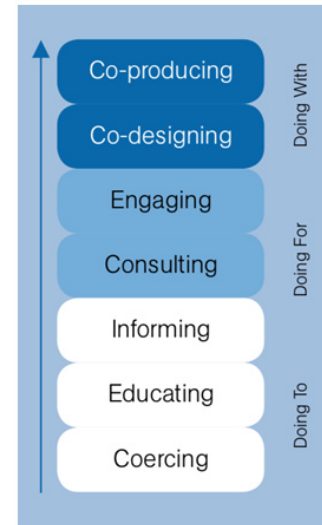
## What is co-production?

Co-production has been practiced under different guises for many years, with some practices being better than others. The Health Foundation provides a working definition of co-production as an engagement that requires users to be experts in their own circumstances and capable of making decisions, while professionals move from being fixers to facilitators. The authors emphasise that, to be truly transformative, co-production requires a relocation of power towards service users (Realpe & Wallace, 2010).

In the literature, there is often a distinction made between various ways of working representing different levels of engagement, ranging from activities aimed *at* users, activities aimed *for* users, to activities that are aimed *to meaningfully include* users. Arnstein’s ladder of participation is the original conceptualisation in this field, setting out varying categories of engaging recipients of services (Arnstein, 1969; Gibson *et al.*, 2012; Hudson, 2014). There are various adaptations of her framework which, in its most sophisticated form, may include 7 different types of participation, within 3 broader domains (Figure 1) (Slay & Stephens, 2013).

The need for a shift in co-production of health services from the lower rungs of the participation ladder has been recognised by key organisations e.g. the World Health Organisation (WHO) in 2016 who stated that a fundamental paradigm shift was needed to put people and communities at the centre of designing and shaping health care services

Most health care organisations consult with patients and service users about their needs, often in the form of patient



**Figure 1. Ladder of Participation.** Reproduced from Slay & Stephens (2013) under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported (CC BY-NC-ND 3.0).

satisfaction surveys. Whilst consulting patients allows health care organisations to obtain data on patient views and patient needs, consultations do not claim to involve patients in service design (Horrocks *et al.*, 2010; Tuffrey-Wijne & Butler, 2010; Van Damme & Brans, 2012) and often allow patients and service users only to comment or rate according to pre-defined criteria.

If patient consultation is located on the lower steps of Arnstein’s ladder of participation, patient engagement represents one of the higher rungs of the ladder. Ocloo and Matthews chart the path of progression from tokenistic to genuine engagement of patients (Ocloo & Matthews, 2016). Engaging with, and involving, patients can take many forms and may include ad hoc conversations with patients or more systematic attempts to draw service users into discussions about re-structuring or re-designing services (Boxall & Ralph, 2011; Hudson, 2014; Purvis *et al.*, 2012; Walmsley & Johnson, 2003). A key difference to patient consultation is the ambition to involve patients to allow them to take part in service meetings and fora at which decisions are taken relevant to them. Access to, and involvement in these discussions and decisions are often controlled and organised by those working for health care organisations, begging the question of how deep and meaningful this involvement is. Co-production is seen as being the ultimate step in patient participation in the re-design of services. Research has identified specific conditions which make for effective co-production whilst pointing to the largely tokenistic nature of some patient involvement in the NHS (Batalden *et al.*, 2016).

## Challenges of creating meaningful co-production

There are several issues that compound the difficulties of implementing genuine co-production of services. The first challenge for co-producing services is that health care organisations operate and institute two different logics of service delivery,

one for patients and service users and one for the organisation and staff (Kaehne & Catherall, 2013). All organisations serving the public are structured by management principles prioritising effectiveness, efficiency and outcomes. Whilst this is to the benefit of patients and service users overall, patients approach and articulate their demands towards health care often through the lens of individual needs, which are conventionally perceived as underpinning principles of patient centred care and holistic service delivery (Lwembe *et al.*, 2017).

The epistemic link between the activity of co-producing services with patients and service users and service outcomes for the broader service population is often not clear, which is a result of the different logics of care and approaches to 'need' that come to be applied by patients and organisations. With some notable exceptions, patients may frequently express individual needs, whereas organisations have obligations towards all potential users of their services. This aspect is often couched in terms of representativeness of patient involvement, yet the literature also clearly articulates the epistemic boundaries of individual patient experiences (Kaehne *et al.*, 2018; Kaehne & Catherall, 2013). Whilst it is important that individual voices are heard, extrapolating from these voices to wider population needs may be perceived as problematic when patient needs are framed by the concept of person centred care.

The second challenge for co-production emerges from the disparities between intent and practice. Ambitious statements about co-producing services vie for attention with some guidance on how to do this effectively such as the one formulated by the [Coalition for Collaborative Care](#). There is little robust evidence at present of what constitutes good and effective co-production and how to measure its impact (Batalden *et al.*, 2016). For genuine collaboration to flourish, services need to come to terms with the idea of co-production as a non-linear, emergent, transparent and dynamic process (Daviter, 2017; Kaehne, 2016), which needs an investment in time. This runs counter to well established management tenets of control and direction by professional expertise. There are many reports of successful co-production, but fewer accounts of when collaborations have not flourished and engagement has been constrained by rigid services, organisations and processes.

In light of these challenges, service managers may resign themselves to conducting activities more aligned to consultation and engagement, leaving them in control of the collection and interpretation of patient views. Creating genuinely co-produced services, however, is possible when health care organisations are aware of a basic set of principles that circumscribe and underpin meaningful co-production, develop a flexible framework for implementing co-production practices and assess and review frequently their impact.

### **A set of pragmatic principles for co-production**

We have articulated previously some key principles that should guide managers when planning co-production activities (Kaehne *et al.*, 2018; Kaehne & Taylor, 2016). These principles reflect basic assumptions articulated in the

management literature about health care services which can help us understand the impetus and direction of travel of co-production.

Firstly, managers should reflect on the nature of their service as a public service with an attendant set of values. Conceptualising their work as something contributing to a wider public good may focus their attention on the active role of patient and service users in contrast to the conventionally passive role of patients and service users as recipients of a service. Once user preferences are seen as an intrinsic component of effective service delivery, active participation of patients and service users can be perceived as an integral part of service design. Whilst this point may appear plausible to us and reverberates through most policy documents, Lipsky and others have long argued that there are powerful restraints on staff being able to act in this logical manner (Keulemans & Van de Walle, 2020; Lipsky, 1980). As they point out, in the context of a universally funded public sector, staff are obligated to organisations in terms of accountability, not to the users of services. Meaningful co-production may thus require a seismic attitudinal shift amongst staff and managers in order for them to privilege, and be sensitive to, patient perspectives.

Secondly, involving patients in a meaningful way entails creativity, an open-endedness, and should be seen as an iterative, dialogical practice of engaging individuals of different status, experience and epistemic boundaries, rather than a linear, ad hoc, delimited process with peers.

This leads to the third principle defining co-production. Patients and service users bring expertise to the table that is bounded, individualised and specific to their health care needs. Managers drawing on their participation for the purpose of re-designing care services need to be aware that they are engaging in an exercise of sense making, interpreting individual patient and service user contributions to co-design services from individual perspectives. This may easily lead to a de-legitimisation of patient voices, when managers associate their preferences with wider population needs.

These three general principles only demarcate some basic assumptions that underpin the meaningful co-production of patients and service users in service re-design. They *underdetermine* the actual practice of co-production but set parameters for patient and service user engagement.

There are various tools and frameworks in the public domain which may be helpful when implementing co-production. From the plethora of frameworks available we found that the NHS England [5 Values and 7 Steps model](#) works well in most contexts. It meets the requirements of organisational commitment, sensitivity to patient and service user support needs when participating in co-production, and iteration through regular review of progress. What it cannot give however is to reflect the level of fine tuning necessary in particular circumstances for any given co-production project. Just like any large scale improvement programme in health care, co-producing

services remains an endeavor calling for craft rather than science (Dickinson, 2014; Ferlie *et al.*, 2016), and learning may best be done through illustration. We share in the next section our experiences of a co-production project enabling young people to develop skills to challenge and guide researchers to improve their understanding of the needs of this population within health care.

### **An Illustration: Establishing a Young Peoples' Health Research Group**

In this section we document our own experiences of having established a young peoples' health research group. In doing so we highlight that meaningful involvement with young people can best be facilitated by a long-term commitment to establishing positive authentic relationships underpinned by mutual learning. In using the term authentic we mean that a genuine and shared mutual aim to generate knowledge develops through an understanding of each other's different perspectives.

As health researchers we have, on many occasions, consulted with established children and young peoples' health forums within hospital services in order to shape our research designs and approaches. However, whilst these groups offer a vital contribution to children and young peoples' health research, one consideration is that these established groups can often be mostly constituted by children who have a long-term relationship with an organisation, often as a result of care provided for a particular condition or long-term health need. Furthermore, these groups are often professionally led and thus reflect a model more in line with engagement activities as outlined earlier. In contrast, we were keen to engage and consult with children and young people who may have less experience of health care organisations and health conditions. In doing so it was important to move our practice away from consultation and engagement, towards a model of co-production. Our rationale was that by doing so we would develop more authentic relationships and therefore established a health research group on the basis of co-production principles.

#### **How we did it**

We established connections with a local high school, through a teacher who recognised the potential for the link to provide opportunities for her students. She invited interested students to come along to meet us. Our first session involved introductions and activities to provide an overview of what research was and the important role of consultation (PPIE) within health research. The young people were engaged and interested and were keen to 'sign up' to the endeavour. We were committed to equip these young people with appropriate skills and research training before we asked them to become involved in acting as advisors and being involved in shaping research. However, from the outset it became apparent that we would need to build relationships with members of the group to support the development of confidence, both within the group and for individuals.

The group is held within the school environment as an extra-curricular activity and has been attended by 10–15 young

people aged 11–15 years on each occasion. Over the course of the school year, we used group activities to cover topics including research questions, qualitative and quantitative designs, choosing different data collection methods and different ways to share research findings. In designing these activities, we asked the group to relate their learning to issues that affected them, such as accessing technology. Following each of the research training activities, we asked the young people to apply their learning to a particular project or task that we were involved with and that would benefit from young peoples' input and review. The young people have advised on a range of health-related research including; the design of a proposed pragmatic trial to evaluate a digital intervention for children coming to hospital, the development of animation resources based on research data from children and young about what to expect when coming to hospital and the development of creative data collection methods.

The sessions have been facilitated by two academics (LB and EH), who are experienced in working with children and young people. All of the group sessions use creative activities, which encouraged movement, interaction and young people to share their views both verbally and in writing. The design of the activities and consultation are mindful of young people having different preferences for how they engage and share their views. We have noticed over time how an atmosphere of trust and openness has developed, with the young people sharing their views willingly and with confidence and increasingly challenging our ideas and plans. We have learnt through these experiences 'what works well' and how the young people engage and respond in different ways to the activities. Our engagement has begun to shift from engagement to young people defining what matters to them and identifying topics of importance to them.

#### **What it may lead to**

After a year we held a session to review and evaluate the group with the young people and we used a tree of growth to explore what had been achieved within the last year. The young people reported that being involved in the group had helped them 'learn about research', 'feel part of a research team', 'feel more confident', and they felt a sense of achievement in having helped 'make children's research better' by 'having a voice' in how it was designed and shared. The review raised that the young people felt it was important to formalise the group by agreeing the aims and aspirations for our ongoing engagement and creating a name and identity. We held a prioritisation session to name the group following a collection of nominations, with the young people voting for 'Young Peoples' Health Research Group' and from this we have co-created terms of reference for the group.

Whilst the original aim was to develop meaningful research engagement with young people, we have realised that in doing so there is an opportunity to positively support the development and achievements of a group of young people. We are keen to develop the group further by supporting the young

people to lead on their own projects. Establishing this group has not been easy but the rewards have exceeded any of our hopes and expectations, so we finish with some learning points.

### Learning points

1. Developing meaningful and valued relationships requires patience, time and openness.
2. Investing in developing relationships promotes honest and open working and fosters co-production.
3. Working creatively and flexibly is important to ensure that the work of the group addresses the interests and needs of the group members and not just the agendas of the researchers/professionals.
4. Whilst researchers, professionals and group members may have different roles and expertise, there must be a common agreed aim to embrace these differences and develop shared knowledge.
5. Celebrate the development and achievements of the group and group members.

### Conclusion

This paper has outlined some of the challenges of engaging in the co-production of health care. We have articulated a set of pragmatic principles that should guide managers when embarking on co-producing their services and provided an illustration from health care research about how consultation with young people can develop into a co-production effort. Whilst

the barriers to genuinely co-producing care are considerable, the effort should match our ambition as expressed in current NHS policy to involve patients and service users in creating services that affect them.

### Ethical considerations

The Young People's Health Research involved working with young people as part of Patient and Public Involvement and Engagement activity. The HRA and INVOLVE joint statement highlights that 'you do not need to apply for ethical approval to involve the public in the planning or the design stage of research' (<https://www.invo.org.uk/wp-content/uploads/2016/05/HRA-INVOLVE-updated-statement-2016.pdf>, page 2). However, our ways of working with the group are underpinned by ethical practices and behaviours in line with ethically conscious standards for working with public relating to health and social care research. The young people who attended the Young Peoples' Health Research Group had permission to be part of the endeavour from their parent or carer.

### Data availability

#### Underlying data

All data underlying the results are available as part of the article and no additional source data are required.

### Acknowledgement

We thank all the members of the Young Peoples' Health Research Group and their fantastic Pastoral Mentor, Mrs H.M. Coggins at Ormskirk School in Lancashire.

### References

- Arnstein SR: **A Ladder Of Citizen Participation.** *J Am Planners.* 1969; **35**(4): 216–224.  
[Publisher Full Text](#)
- Batalden M, Batalden P, Margolis P, *et al.*: **Coproduction of healthcare service.** *BMJ Qual Saf.* 2016; **25**(7): 509–517.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
- Bovaird T: **Beyond Engagement and Participation: User and Community Coproduction of Public Services.** *Public Admin Rev.* 2007; **67**(5): 846–860.  
[Publisher Full Text](#)
- Boxall K, Ralph S: **Research ethics committees and the benefits of involving people with profound and multiple learning disabilities in research.** *Br J Learn Disabil.* 2011; **39**(3): 173–180.  
[Publisher Full Text](#)
- Daviter F: **Policy analysis in the face of complexity: What kind of knowledge to tackle wicked problems?** *Public Policy Admin.* 2017; **34**(1): 62–83.  
[Publisher Full Text](#)
- Dickinson H: **Making a reality of integration: less science, more craft and graft.** *J Integr Care.* 2014; **22**(5/6): 189–196.  
[Publisher Full Text](#)
- Ferlie E, Montgomery K, Pedersen AR: **The Oxford Handbook of Health Care Management.** Oxford: Oxford University Press, 2016.  
[Publisher Full Text](#)
- Gibson A, Britten N, Lynch J: **Theoretical directions for an emancipatory concept of patient and public involvement.** *Health (London).* 2012; **16**(5): 531–547.  
[PubMed Abstract](#) | [Publisher Full Text](#)
- Horrocks J, Lyons C, Hopley P: **Does strategic involvement of mental health service users and carers in the planning, design and commissioning of mental health services lead to better outcomes?** *Int J Consum Stud.* 2010; **34**(5): 562–569.  
[Publisher Full Text](#)
- Hudson B: **Public and Patient Engagement in Commissioning in the English NHS: An idea whose time has come?** *Public Manag Rev.* 2014; **17**(1): 1–16.  
[Publisher Full Text](#)
- Kaehne A: **Complexity in programme evaluations and integration studies: What can it tell us?** *J Integr Care.* 2016; **24**(5–6): 313–320.  
[Publisher Full Text](#)
- Kaehne A, Beacham A, Feather J: **Co-production in integrated health and social care programmes: a pragmatic model.** *J Integr Care.* 2018; **26**(1): 87–96.  
[Publisher Full Text](#)
- Kaehne A, Catherall C: **User involvement in service integration and carers' views of co-locating children's services.** *J Health Organ Manag.* 2013; **27**(5): 601–617.  
[PubMed Abstract](#) | [Publisher Full Text](#)
- Kaehne A, Taylor H: **Do public consultations work? The case of the Social Services and Well-being (Wales) Bill.** *Public Policy Admin.* 2016; **31**(1): 80–99.  
[Publisher Full Text](#)
- Keulemans S, Van de Walle S: **Understanding street-level bureaucrats' attitude towards clients: Towards a measurement instrument.** *Public Policy Adm.* 2020; **35**(1): 847–113.  
[Publisher Full Text](#)
- Lipsky M: **Street-Level Bureaucracy. The Dilemmas of the Individual in Public Services.** New York: Russell Sage Foundation, 1980.  
[Reference Source](#)

Lwembe S, Green SA, Chigwende J, *et al.*: **Co-production as an approach to developing stakeholder partnerships to reduce mental health inequalities: an evaluation of a pilot service.** *Prim Health Care Res Dev.* 2017; **18**(1): 14–23.  
[PubMed Abstract](#) | [Publisher Full Text](#)

Ocloo J, Matthews R: **From tokenism to empowerment: progressing patient and public involvement in healthcare improvement.** *BMJ Qual Saf.* 2016; **25**(8): 626–632.  
[PubMed Abstract](#) | [Publisher Full Text](#)

Oliver K, Kothari A, Mays N: **The dark side of coproduction: do the costs outweigh the benefits for health research?** *Health Res Policy Syst.* 2019; **17**(1): 33.  
[PubMed Abstract](#) | [Publisher Full Text](#)

Public Health England - Trust Development Authority. NHS England Care Quality Commission Health Education England Monitor: **Five Year Forward View.** London, 2014.

[Reference Source](#)

Purvis A, Small L, Lowrey J, *et al.*: **Project SEARCH Evaluation: Final Report.** London: Centre for Economic and Social Inclusion, 2012.

[Reference Source](#)

Realpe A, Wallace LM: **What is co-production?** *The Health Foundation.* London, 2010.

[Reference Source](#)

Slay J, Stephens L: **Co-production in mental health: A literature review.** London: New Economics Foundation, 2013.

[Reference Source](#)

Tuffrey-Wijne I, Butler G: **Co-researching with people with learning disabilities: an experience of involvement in qualitative data analysis.** *Health Expect.* 2010; **13**: 174–184.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Van Damme J, Brans M: **Managing Public Consultation: A Conceptual framework and empirical findings from Belgian Case Studies.** *Public Admin.* 2012; **90**(4): 1047–1066.

[Publisher Full Text](#)

Walmsley J, Johnson K: **Inclusive research with people with learning disabilities. Past, present and futures.** London and Philadelphia: Jessica Kingsley, 2003.

[Reference Source](#)