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Using the Double Diamond model to co-produce resources with adults with learning disabilities: lessons for inclusive social care research

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Method Article

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Abstract

Background

Individual service funds were introduced in England in the UK Care Act 2014, as a means for adults with learning disabilities to exercise greater control over the use of funding allocated for their social care support. Individual Service Funds allow social care support providers to hold and manage funds and use these to plan and procure individualised support packages with adults who would otherwise be restricted to council managed support. Individual Service Funds have been shown to improve quality of life for adults with learning disabilities, however, under 30% of local authorities in England currently offer them. This paper outlines the methods we used to co-produce relevant and accessible resources to support the development, delivery and use of individual service funds for adults with learning disabilities.

Methods

We used the Design Council's Double Diamond model to guide co-production activities with 58 partners including local authority staff, social care support providers, adults with learning disabilities and family carers. We developed prototype resources which were user tested in three local authorities in England over a period of four months. Formative evaluation used interviews and focus groups with 34 participants. Deductive qualitative analysis was used to identify refinements to improve accessibility, relevance and use of the resources.

Results

Co-production partners emphasised the importance of accessible and person-centred resources that promote flexibility, creativity, autonomy and choice in support. Six resources were co-produced including an evaluation framework and progress pathway tool to monitor progress, and a video, Easy Read fact sheet, "I statements" and "Questions to ask" document to provide information about ISFs. Formative evaluation guided refinements to the content, language and images used, and led to an additional guidance document about how to use the resources. Two toolkits containing these resources are freely available to download.

Conclusion

Our agile and iterative approach combined with creative and inclusive methods, allowed us to engage meaningfully with adults with learning disabilities and time-pressured local authority and social care staff managing competing priorities. We present our approach to contribute to the discussion about what it means to carry out rigorous, ethical and genuinely co-produced adult social care research.

Plain English summary

In England, some adults with learning disabilities are eligible to funding from their local council to pay for social care support. Individual service funds are a way for people to have more say over how this money is spent. Instead of the council arranging everything, a social care support provider holds the money and works with the person to plan support that suits their needs, goals and preferences. Individual service funds can improve quality of life, but fewer than a third of local councils currently offer them.

We worked with 58 people, including council staff, social care support providers, adults with learning disabilities and family carers, to co-produce practical tools to help councils and support providers plan and offer individual service funds, and to help people understand and use them.

We tested the tools across three local councils over four months, then used interviews and group discussions with 34 people to find out what needed improving. We made some final changes and two toolkits made up of seven resources are now available to download free.

This project showed that doing good social care research with adults with learning disabilities means being creative and flexible as well as being willing to make changes where needed, rather than sticking rigidly to a plan. By working closely with adults with learning disabilities and others, we made clear and usable tools to help people offer and use individual service funds.

Introduction

In the United Kingdom, approximately 1.5 million people have learning disabilities (1). In the fiscal year 2024/25, gross expenditure on adult social care by local authorities in England was £29.4 billion, (2) with a significant portion directed towards supporting adults with learning disabilities (3).

The English Care Act (4) mandates that all adults with learning disabilities who receive statutory social care are allocated a personal budget. This budget represents the amount of money a local authority determines is necessary to fund an individual's support following a care needs assessment. Personal budgets were introduced to provide adults with learning disabilities with greater choice and control over the services they receive (5). However, concerns have been raised that local authorities may not always offer genuine choice and control within personal budgets (6, 7). The majority of personal budgets are managed by councils (8), often resulting in individuals being unaware of their budget allocations or lacking autonomy over how this is spent.

Direct payments, introduced in England as part of the personalisation agenda (9), offer the option to receive the allocated personal budget directly from the local authority. This approach allows individuals to control how their money is spent, allowing them to broaden their choice of support. Despite the increased autonomy that direct payments offer (10), they may not always be feasible or accessible for adults with learning disabilities (11), as managing finances and assuming the legal responsibilities of employing care staff can present significant challenges (12) (13) (14). Consequently, adults with learning

disabilities receiving direct payments often rely heavily on informal carers to manage their budgets (15) (16). Additionally, some local authorities perceive direct payments as unsuitable for adults with learning disabilities because of concerns about their capacity to manage the budget, leading to restricted offerings (17).

Individual Service Funds (ISFs) were first introduced in Scotland in the late 1990s (18) forming the basis of their self-directed support 'Option 2'(19) and have since been adopted in England. They are outlined in the English Care Act (4), as an alternative way for individuals to receive all or part of their personal budget in order to exercise greater flexibility and control over their support, without the burden of managing a direct payment. In an ISF arrangement, a provider organisation holds and manages the individual's budget on their behalf and works with the individual to plan and procure support as needed (20-22). ISFs allow individuals to pay for support from providers other than the provider holding and manging their ISF. This enables access to non-traditional support, including that available in their neighbourhoods and communities, often at a lower cost than specialist learning disability services (21, 22).

Where implemented, there is some, limited, evidence ISFs have led to reductions in the cost of support and improvements in efficiencies (23) (24) Furthermore, adults with learning disabilities who receive an ISF have reported significant improvements in their quality of life and progress towards their desired outcomes (23).

Despite these promising outcomes and the policy imperative for local authorities to develop ISFs as an option for managing personal budgets in accordance with the ENGLISH Care Act (4), they are still not widely available to adults with learning disabilities. In 2025, only 38 Local Authorities reported offering an ISF as an alternative way to manage a personal budget to fund adult social care (25). Therefore, there is a need for guidance and resources to support both those working in or with local authorities to offer ISFs, and for individuals with learning disabilities and their families to understand ISFs and make informed choices.

Given the complexity of implementing ISFs within the adult social care system, it is essential to adopt approaches that centre the voices and experiences of all stakeholders involved (26), particularly adults with learning disabilities and their families. ISFs operate within a multi-layered system involving local authority learning disability service commissioners, legal and procurement teams, social workers, social care support providers, and carers, each bringing different priorities, knowledge, and expertise. To navigate this landscape effectively and develop meaningful tools for practice, co-production offers a valuable approach. Co-production challenges the traditional distinction between researchers and participants and seeks to share power over knowledge creation in recognition of the value of different forms of expertise (27). It is defined as a shared process built on principles of equity, power sharing and trust (28-30). Co-production challenges long-standing research cultures that have historically ignored adults with learning disabilities altogether or reduced their involvement to superficial, tokenistic engagement (31, 32). Instead, co-production enables stakeholders, including adults with learning

disabilities, to contribute to the process of knowledge production, ensuring the knowledge of people with relevant lived experience is recognised and integrated throughout the process (33) (34). Furthermore, it is increasingly recognised as a process through which knowledge exchange occurs, thereby increasing the use of evidence in public services through the collaborative development of outputs that are more relevant, acceptable, and feasible to implement across complex social care settings (26, 30, 35, 36).

Given the complexity of ISF implementation, the importance of centring lived experience, and the research aim to produce actionable resources to support the implementation of ISFs in practice, co-production was chosen as both the philosophical foundation and the practical framework for the work. Specifically, this research aimed to co-produce two actionable toolkits (37), one to support development and delivery of ISFs and one to support uptake and use of an ISF.

Objectives

1. To co-produce two actionable toolkits: to support development, delivery, and sustained provision of ISFs; and to support uptake and optimal use of ISFs by recipients.
2. To carry out a formative evaluation to inform further development of these toolkits by using them in three local authorities not yet offering ISFs.

Overarching methods

Study design

The research reported in this paper comprised the final stages of a 28-month project which took a realist approach (38)to explore what needs to be in place for ISFs to be successful. The entire project was co-produced with adults with learning disabilities. We partnered with a self-advocacy group (n=13) and their supporters (n=4) throughout, and one member of this group was a co-applicant and sat on the project management team which met regularly to guide project decisions. The self-advocacy group developed accessible terms of reference which were used in all project meetings. We also convened a bespoke group of local authority learning disability service commissioners (n=2), social workers (n=2), a family carer(n=1) and ISF service providers (n=2). This group met bimonthly and, together with the self-advocacy group, formed an advisory network which played a key role in offering practice and lived experience perspectives to shape the entire 28 month project, including the co-production and evaluation stages.

This paper reports the co-production and formative evaluation of actionable toolkits to support the implementation of ISFs. Earlier stages of the work included a participatory realist review and a realist evaluation of the use of ISFs for adults with learning disabilities, both of which are reported in detail elsewhere (21) Croot et al forthcoming).

Co-production of the toolkits was structured around the Design Council's Double Diamond model: Discover, Define, Develop and Deliver, (39). See Figure 1. Findings from the earlier participatory realist

review and evaluation informed the Discover phase. The Define and Develop phases involved co-production activities with a range of partners to generate prototype resources. In the Deliver phase, the prototypes were user-tested in three local authorities, and a formative evaluation was carried out using qualitative interviews and focus groups. The toolkits were then finalised and made freely available.

INSERT FIGURE 1 HERE

Design Council's Double Diamond model showing EQUALD phases of activity

Ethics

Ethical approval was granted by the University of Sheffield, School of Health and Related Research ethics committee (Date: 23/04/2024; REF: 059545). Research with adults with a learning disability identified through their local authority was approved by the Health Research Authority (Date: 18/12/2024; REF 34255).

Co-producing Actionable toolkits

Methods

The actionable toolkits were co-produced with three distinct cohorts of partners which each met separately: a bespoke national co-production working group, two additional self-advocacy groups, and staff from two local authorities. Partners included adults with learning disabilities, family carers, local authority staff, support providers, social workers, and advocates, with experience of adult social care and knowledge or interest in ISFs (see Table 1.).

Within each cycle, work was conducted iteratively across all three cohorts, with insights and outputs from each meeting continuously informing the next. All activities and discussions were tailored to the specific context.

Recruitment

Recruitment was purposive to ensure there was a spread of people with diverse experiences and perspectives on ISFs across the three cohorts. All partners received accessible study information and provided informed consent. Consent processes were tailored to include a group consent process for self-advocates with verbal explanations to supplement easy-read materials, to support accessibility, understanding and voluntary participation for adults with learning disabilities. On recruitment, all partners received an easy-read booklet outlining the overarching project terms of reference for meetings originally developed with the advisory network, findings from the earlier stages of the project and the purpose of the co-production work.

Recruitment to the national co-production working group drew on multiple sources including our Advisory Network members and their contacts, participants from the earlier stages of the research who expressed interest in further involvement, and by advertising at webinars and ISF specific forums.

Partners were encouraged to attend all three sessions where possible, to maintain continuity of input throughout the development process.

Local authority recruitment drew on the knowledge and networks of our project management team and advisory network, through which we identified three candidate local authorities that were actively developing or relaunching their ISF offer for people with learning disabilities. We approached these local authorities in the hope that the potential for mutual benefit would facilitate engagement and outweigh concerns about the time commitment needed. All three local authorities agreed to join as co-production partners. Two of the three local authorities hosted in-house co-production activities with the research team, whilst staff from the third local authority joined the national co-production working group workshops.

Similarly, with the guidance of our project management team and advisory network, we identified self-advocacy groups from across England with diverse membership covering a range of experiences of receiving and using personal budgets or statutory social care support. We made our initial approach to the named group contact asking for permission to attend a meeting to explain the project and ask members whether they were interested in taking part as a group. We followed a group consent process in line with our ethics application. This meant explaining that participation was voluntary, no personal data would be collected and that all findings, including quotations, would be reported at group rather than individual level. After discussion, the group collectively decided whether they wanted to take part, and the group contact signed a consent form confirming we had followed the approved consent process.

Table 1: Co production Activities

Co-production cohorts	Partners
National Workshops (n=16)	Adults with learning disabilities, family carer, Local authority staff, support providers, social worker, advocate, commissioners
Local Authorities (n=17)	Local authority staff, commissioners, support providers
Self-Advocacy Groups (n=25)	Adults with learning disabilities, support workers

Settings

Co-production activities took place between April and July 2024.

We led three online national co-production workshops during this period.

Local authority co-production activities were carried out during workshops which were convened by the local authorities to plan their ISF pilot with partnering providers or adults with a learning disability. We

carried out co-production activities in four workshops at two local authorities during this period.

Co-production activities with self-advocacy organisations were conducted within their existing meetings. These workshops were adapted to the groups' usual ways of working, with one organisation meeting online and the other in person. The primary focus of these sessions was the co-production of the toolkit specifically intended for use by adults with a learning disability and their families or carers. We carried out six workshops with two self-advocacy groups during this period

Define phase

This phase aimed to identify, prioritise and select challenges amenable to change using a toolkit resource, while also considering change mechanisms, resource formats, and the practical benefits or challenges of using a toolkit resource.

Activities

Activities in this phase included a workshop with the national co-production group, two workshops with local authorities and two workshops with self-advocacy groups.

During these workshops, partners were asked about challenges they faced in developing, delivering or using ISFs. Methods were adapted for specific workshops, for example, in workshops with self-advocates we used a creative 'story telling' approach where we introduced a fictional persona and encouraged the group to name and provide background to their persona before considering what information they might need to make an informed choice about whether to take up an ISF. This led to further discussion about preferences for types of information as well as for accessing and using information.

Data collection

Data collection methods were adapted to each workshop, for example online meetings used tools including Miro board mapping to provide a live visual of the data being collected. Face to face workshops used flip charts and extensive note taking to collect data.

Data Analysis

Data were synthesised and analysed between each workshop so that subsequent workshops built on earlier work. In addition to data collected during workshops, researchers synthesised emerging ideas in a co-production diary. These informed the drafting of prototype resources and plans for the second round of workshops which were then presented and refined in subsequent sessions based on feedback from partners.

Findings

In the define phase, challenges identified included: the difficulty of evaluating success, the need for better understanding of ISFs, risk-averse individuals or organisations, 'time and task' commissioning models, poor relationships between providers and commissioners and social care sector staff shortages. Self-advocates emphasised the need for information to be available in multiple formats, stating, *"Listening to things is better than looking at things"*, and suggesting that a combination of video, easy-read text, and face-to-face explanation would be most helpful. They also identified the importance of preparing for review meetings and having a clear set of questions to ask, *"he [character in the story] struggles to know what to say, what to expect, and how to say it"*. They expressed dislike for oversimple or childish content, "*If you want to talk to me like I'm five, then I'll talk to you like I'm five"*.

By the end of the Define phase, we identified the two challenges deemed to be the highest priority and amenable to change using an online tool. These were the difficulty of evaluating success, particularly combining the need for financial accountability with the assessment of personal outcomes, and the need for better understanding about flexibility within an ISF and how to support individual choice without compromising safety and quality. In addition, partners told us that the resources should be trustworthy, respectful and relatable, use real people, be written in plain English, and where possible, use subtle animations or symbols.

Develop

The aim of this phase was to present and refine prototype toolkit resources aimed at addressing these challenges in practical ways, to consider implementation and to determine how their utility could be assessed in the formative evaluation.

Activities

Activities in this phase included two workshops with the national co-production group, two workshops with local authorities and four workshops with self-advocacy groups.

In earlier workshops during this phase, we discussed draft content for initial prototype resources. We tailored activities to the specific group, for example we used Miro boards during workshops with the national co-production group. We asked for suggestions about items to include in the evaluation framework and any comments about the suitability of these. We used an interactive Miro board to record the discussion. All members had access and could add, move or amend data and they could also see all the data generated. Partners who were less confident using the software could make suggestions using the meeting chat function or by email at any stage during or shortly after the workshop. Face to face meetings used a variety of discussion and activity-based methods for data collection, for example we asked self-advocates about the information that should go into the informational video. From their suggestions, we created a series of Easy Read headings which were printed on sheets of paper which subsequent groups organised to determine the order in which the video content would be delivered.

Findings were incorporated into later iterations which were further refined in subsequent workshops. Later workshops focused on finalising the wording of individual resources, identifying any 'red flags' that might limit their acceptability or utility, adding real world examples to bring the resources to life and discussing the implementation and formative evaluation of the resources in the next phase.

Data collection

Data were collected in a variety of ways, for example, Miro boards were saved and video story boards were photographed to record the order in which the content would be delivered. A detailed co-production diary was maintained to record all comments and suggestions and all changes made, or not made, as a result.

Data Analysis

Data analysis took place contemporaneously and continually to update prototypes, identify further knowledge gaps and plan the next rounds of data collection.

Findings

By the end of the Develop phase we co-produced and refined two toolkits ready for user testing. The co-production resulted two comprehensive toolkits:

Toolkit 1**:** This toolkit was designed to support Local Authorities and ISF provider organisations in the development, provision, and governance of ISFs and included two resources:

1. An Evaluation Framework to identify and measure outcomes associated with successful ISFs, including relevant, credible and important indicators of success that balanced the wellbeing and progress of the individual with local authority priorities.
2. A 'Progress Pathway' Tool to capture the lived experience of ISF use, drawing on photos and video evidence to create a personalised record of progress towards outcomes, to complement existing local authority review and audit processes.

Toolkit 2: This toolkit was designed to support adults with a learning disability and their allies in making informed decisions about taking up an ISF offer and maximizing its benefits and included four resources:

1. A video, featuring adults with learning disabilities explaining ISFs in plain terms.
2. An easy read fact sheet to go alongside the video to support understanding and sharing of information.
3. A 'Questions to Ask' tool, to help individuals prepare for meetings and understand their choices and rights in relation to ISFs.
4. A set of 'I statements'. These are statements that individuals can say when their ISF is working well, for example, 'I choose what having a good life means for me'. These help individuals and their families understand what they should expect from an ISF.

Summary of co-production

In total, 58 partners took part in co-production activities (see Table 2.) culminating in the development of two toolkits ready for user testing.

Table 2. Co-production partner demographics

Demographic	**Partners** *(n=58)*
Co-production cohorts	
National workshops	16
Local authorities	17
Self-advocacy groups	25
Partner roles	
Commissioner	6
Local authority (other related staff including- direct payments manager, business development manager)	6
Support provider	9
Social worker	1
Advocate	1
Carer	1
Adult with learning disabilities	34
Gender	
Male	30
Female	28
Ethnicity	
White British	48
White Other	1
Black or Black British African	4
Black or Black British Caribbean	3
Black or Black Caribbean	1
Mixed White Black Caribbean	1

Feedback from partners suggested they found the co-production process constructive and useful, *"I found the co production process really beneficial. The individuals who attended all actively participated in discussion and we were able to give our thoughts and suggestions in an environment which was inclusive. It is important to remember a big part of co-production is being valued by others in the process which I absolutely felt. Reciprocity is equally important to me, and I felt that I was able to learn from others involved and also be able to confidently put my views forward. We all worked in a way that channelled the essence of true co-production"* (Support provider).

Deliver phase and Formative evaluation

Formative evaluation of the toolkits was carried out in three local authorities between September 2024 and March 2025. All three sites were involved in the earlier co-production work: two participated as local authorities, whilst staff from the third joined the national co-production group. Given the complexity of implementing new approaches in adult social care, the pace of ISF delivery varied across the three sites: one local authority was actively piloting ISFs, while the other two remained in the planning and preparation stages.

During this phase, the research team shared the prototype toolkits with the named commissioner at each local authority. Researchers met each commissioner to explain the toolkits intended use and provide initial implementation support, after which commissioners were responsible for local dissemination to social care teams, support providers, and adults with learning disabilities, and for coordinating their use within ongoing ISF development work. The research team provided ongoing support through check-in meetings and email contact as needed.

The toolkits were user tested over a four-month period after which the research team re-engaged with the sites to carry out semi structured interviews and focus groups to explore experiences of using the toolkits.

Participants

Evaluation participants were local authority staff, support providers and adults with learning disabilities who had used some, or all, of the resources in the toolkits.

Recruitment

Participants were recruited locally by each of the three participating authorities. The commissioner at each site shared information about the study with relevant colleagues, support providers and adults with learning disabilities. Those who expressed an interest in taking part shared their contact details with the commissioner, who passed these to the research team. The researcher then made contact to provide further information about the study and to obtain informed consent prior to the interviews taking place. Recruitment sought to reflect a diverse range of participants from varied practice contexts across the participating sites.

Data collection

Interview and focus group topic guides were informed by the evaluation aims and shaped through feedback from the Advisory Network. They covered the accessibility, relevance, and feasibility of the resources, as well as suggestions for improvement. Semi-structured interviews were conducted with local authority staff and support providers, and four focus groups took place: three with adults with learning disabilities (one per local authority) and one with a mixed group of staff involved in ISF development and delivery at one local authority. Data collection took place both online and in person, depending on participant needs, preferences and local arrangements. All interviews were audio-recorded and transcribed verbatim; for focus groups, detailed field notes were taken capturing key points and direct quotations where possible.

Analysis

Analysis followed a deductive thematic approach aligned with the study's evaluation objectives. Transcripts and focus group notes were read in full before being coded thematically according to each specific tool or broader ISF implementation points. The research team then met to synthesise emerging findings, with particular attention to areas where improvements were recommended or where feedback differed across participant groups. Divergent opinions were discussed with the Advisory Network to ensure the final refinements reflected a balance of lived and professional experience.

This iterative process of review and revision led to the refinement of both toolkits and the creation of an additional guidance document about how to use the toolkits. This broader guidance was requested by participants and summarised practical learning from the EQUALD project about supporting the successful implementation of ISFs.

Findings

Three local authorities user tested the toolkits and thirty-four participants took part in the formative evaluation (see Table 4).

Table 4. Demographics of participants in the formative evaluation

Demographic	**Number of participants** *(n= 34)*
Local Authority	
LA1	16
LA2	8
LA3	10
Gender	
Male	16
Female	18
Ethnicity	
White	33
Mixed Black African and White British	1
Role	
Commissioner/ Local Authority staff	7
Social worker	2
Support Provider	11
Adults with learning disabilities	14

Quotations are reproduced verbatim to illustrate the points made. Feedback on the ISF toolkits was positive with participants describing them as *"clear, presentable and very usable"* (Commissioner). One participant with learning disabilities reflected on the value of the toolkits, *"We could have done with these when we first knew about ISFs, we didn't know about ISFs and I kept getting upset because it was all jumbled. We didn't even get anything. I kept getting in a mess, there wasn't any information for us"* (Adult with learning disabilities).

Use of the toolkits

Participants found the easy-read materials particularly helpful and suggested they would use these in staff induction and training sessions to address the knowledge gap around ISFs for practitioners as well as service users, '*I thought actually, the easy read information is better for everybody. Because that's a really good overview of how this works*' (Support provider).

Support providers noted they had used the resources to explain ISFs to staff and social workers whereas other said they used the resources to introduce conversations about the level of creativity an ISF should enable, with commissioners and social workers, *'I don't think there's anything out there as good as the video for people we support. It only just a really good resource, but it's also, it opens up conversations. […]*

Sometimes some tensions in terms of what social workers believe an ISF is for, that level of kind of creativity. So, it was really, it's really interesting when the video that's been shared with people is so clear in terms of, it [ISF] could be used for this.' (Support provider).

The toolkits were incorporated into practice with some participants describing how they were building and aligning their processes with the resources, *"I think it's more about incorporating the toolkit into what we use because it's just a clearer guide […] So, if you were doing somebody's person-centred review then when you reflect on the last year, you use the progress [pathway tool] but you're also reflect back on the 'I' statements. And then you're also kind of do that review of, 'well, what does the video say? Shall we go back to the video?' (Support provider)*

Final refinements

Interview data highlighted specific areas where the structure, content and accessibility of the toolkits could be further refined to improve clarity and utility.

For example, a support provider using the progress pathway tool noted that phrasing aimed at the individual with learning disabilities was confusing because they would usually complete the tool with the person to support their yearly progress review described: *"It has to involve conversations […] and we would support that individual to fill those questions in. But then, just the first sentence is […] It's almost like it's directed for the […] individual, not, not the mixture between the provider and the [individual] …..that's where the confusion would be"* (Support provider). This highlighted the need to change the wording to make it clear the support provider and adult with a learning disability should use the tool together.

The video included an example of the use of an ISF to fund a holiday which met with conflicting opinions. Although the video explicitly said that anything purchased using an ISF must meet the Care Act eligibility criteria, some participants felt this was contentious and open to individual interpretation, *'the driver in terms of the feedback that I've got on the video is about removing interpretation.' (Commissioner)*. Others wanted to retain this example to show the possibilities within an ISF. Following discussion with our advisory network, we retained the example of a holiday with stronger emphasis on the need for spending only within Care Act eligibility.

In addition, there were further changes to pictures or words that participants felt should be replaced to improve the accessibility and understandability. Participants also suggested additions to the resources, including additional questions, the need for a glossary to explain terms and a guidance document to explain how to use the toolkits.

The final toolkits

Final refinements were made to the toolkits and a guidance document was written. These are outlined in Table 3 and the toolkits are freely available to download from: https://sites.google.com/sheffield.ac.uk/equald/toolkits?authuser=0.

Table 3: Toolkits

Toolkit	Resources	Purpose
Toolkit 1 (For local authorities and ISF provider organisations)	Evaluation Framework	Defines and measures successful ISFs, outlines key outcomes and measurement mechanisms, maps to ASCOF, guides co production of local ISF offer.
	Progress Pathway	Monitors ISF impact over time, builds case studies of individual journeys, tracks spending, supports recording and reflection of progress with accessible formats.
Toolkit 2 (For adults with learning disabilities and their allies)	ISF “I Statements” Easy Read	Helps individuals and families understand what they can expect from a good ISF, supports informed decision making, and allows assessment of current experience.
	ISF Video	Features adults with learning disabilities providing accessible and clear information about ISFs, answering key questions in an understandable format.
	Easy Read Factsheets	Accessible written information about ISFs to support the use of the video
	“Questions to Ask” Easy Read	Accessible written information suggesting questions to ask during ISF discussions to help people understand their ISF offer and compare it with alternative options.

Discussion

Co-production is increasingly being used to develop services, resources and research in social care, yet there remains a need for detailed accounts of how co-production principles are enacted in practice. This paper adds to that growing evidence base by describing how we applied the Design Council's Double Diamond model (39) to co-produce two toolkits to support the development, delivery and use of ISFs by adults with learning disabilities. Fifty-eight co-production partners took part in activities that resulted in two toolkits which were subsequently tested and evaluated by 34 participants in three local authorities. We demonstrate how we used accessible, flexible and inclusive methods to sustain engagement of a large and diverse group of stakeholders across multiple levels of the social care system, including adults with learning disabilities, their advocates and family carers.

A number of authors have identified important principles to guide co-production in social care and applied health research. Greig et al (26) highlight the importance of including all perspectives, particularly those of people who are often underrepresented in research, and of resourcing co-production activities appropriately. Hallam-Bowles et al (40) identify flexibility and reciprocity as key facilitators of inclusive co-production in care settings. Drawing on transferable lessons from applied health research, Masterson et al. (28) and the PARTNERS2 Collective (41) emphasise the importance of continual

relationship building and attending to power differentials between researchers and people with lived experience and Smith et al. (42) suggest that co-production is strengthened when different opinions are openly discussed rather than treated as a threat to the process. Taken together, these contributions point towards a model of co-production that is inclusive, relational, transparent and appropriately resourced. Our study sought to enact these principles across each phase of the Double Diamond model.

A particular strength of this work was our ability to include and sustain engagement with a large and diverse range of people across England. Our flexible and accessible approach allowed us to work with people at multiple levels of the social care system and with a range of experiences and backgrounds, through a combination of our advisory network and our co-production partners, who included social care providers, social workers, local authority commissioners, adults with learning disabilities, advocates and family carers. Including adults with learning disabilities, who are often underrepresented in research, was central to ensuring the relevance, applicability and accessibility of both the process and the resulting resources (43), and reflects the inclusive principles identified by Greig et al. (26). Working within existing self-advocacy groups was particularly effective because group members already knew one another and were meeting in familiar spaces to discuss specific contexts which were presented in ways that were relevant to their experiences. Allowing people to contribute within what was a safe space for them, and alongside others in their peer network, helped to balance the power differential inherent within research partnerships between researchers and people with lived experience (41) (28). Rather than requiring adults with learning disabilities to adapt to an unfamiliar research environment, as is often expected, we took on the work of adapting to the settings, group norms and ways of working.

Our iterative approach and the combination of online and in person groups allowed us to use creative methods to gather in-depth information face to face whilst also achieving national coverage through online sessions. This flexibility allowed us to respond to opportunities to gather lived experience as and when they arose, resonating with Hallam-Bowles et al.'s (40) finding that flexibility facilitates inclusive co-production. The content and format of each co-production activity were tailored to the specific group, which was labour intensive and required timely analysis and synthesis of data from earlier groups before planning subsequent groups. This underlines the importance of funding and resourcing co-production appropriately, which is increasingly recognised by researchers (26), and, crucially, by research funders (44).

Building and maintaining relationships with local authorities was equally important to the success of the work. We initially planned to user test the resources with local authorities who had not been involved in co-production activities, however, those who engaged with us, did so specifically because they were planning their own ISF pilots. Local authorities faced multiple, competing pressures, making it difficult to plan and sustain research activities over time. However, because we built a good rapport and worked closely with key individuals involved in ISF planning to co-produce resources that addressed their needs, they felt a sense of reciprocity and agreed to participate in the formative evaluation and help us gather the information we needed, despite delays to their ISF pilots and significant workload pressures. This resonates with Hallam- Bowles et al’s (40) findings that providing support, learning opportunities and

managing expectation facilitated reciprocal co-production relationships, and with the PARTNERS2 Research collective's (41) emphasis on continual relationship building which benefits all parties.

Managing contradictory opinions was an ongoing and necessary part of the process and we did this so openly and transparently by acknowledging disagreement and explaining our attempt to find a middle ground through discussions with our advisory network. For example, our video referred to the use of ISFs to pay for holidays. Advocates, and self-advocates co-producing the toolkits felt this was an important point and should be included, however social workers were concerned that this might be misinterpreted or inconsistently applied across local authorities. Following discussion with our advisory network, we amended the video script to clarify that ISFs can be used to fund support to go on holiday where this meets UK Care Act eligible outcomes, but not to cover the cost of the holiday itself. This approach reflects Smith et al's (42) recommendation that different opinions should be encouraged and discussed rather than seen as a threat to the co-production process. In the later phases, when we shared the prototypes, we emphasised that we wanted to hear what people did not like, to give people permission to offer their honest and critical opinions. This approach proved to be effective as we were able to surface genuine uncertainties and reservations about the resources, which led directly to the development of an additional guidance document on how to use the resources.

In line with Nind (45), we suggest that the quality of our co-production process and the subsequent outputs is best understood through its inclusive ethos rather than conventional research quality criteria alone. Therefore our claim to rigour is supported by the relevance of the work to adults with learning disabilities and its ability to make their lives better, our use of plain and accessible language, materials and methods, the quality of the research relationships, and the study's contribution beyond the research itself towards a wider goal - in this case, improving access to individual service funds for adults with learning disabilities.

An unanticipated benefit of the resources was that ISF support providers and adults with learning disabilities reported using the prototype resources to support their negotiations with local authorities. They used the resources as evidence to show that they were entitled to use their personal budget in UK Care Act (4) eligible ways, where this was being questioned by the authority. This evidences the real-world utility and value of the co-produced resources for adults with learning disabilities and others, and the urgent need for national guidance and quality assurance of ISF provision by local authorities.

There were several limitations of the work. The first relates to the diversity within the population of adults with learning disabilities. While we included people from a variety of ethnic backgrounds and support providers and family carers who worked with adults with more complex support needs, the adults with learning disabilities who took part had lower support needs and the capacity to give consent. This was a consequence of working through self-advocacy groups and means that the perspectives of adults with higher support needs and those who lack capacity to consent were less well represented. Future work should explore ways of more meaningfully including adults with higher support needs, for example using creative participatory methods adapted to a wider range of communication needs.

A second limitation was that not all local authorities involved proceeded to a full roll out of their ISF offer during the user testing period which limited the extent to which the resources could be evaluated in a real-world setting. However, two of the three local authorities did proceed to a full roll-out albeit with a small number of individuals, and all three provided feedback on the resources to the best of their ability.

Finally, user testing the resources with local authorities that had been involved in their co-production may be viewed as a limitation, since these authorities might be more likely to find the resources acceptable and useful given their involvement in co-producing them. However, the majority of participants in the formative evaluation had not taken part in the co-production groups and the final resources were a product of the combined co-production work rather than any single group. Also, we emphasised the value of critical feedback, and we did elicit this, giving us confidence that responses were genuinely aimed at critiquing and improving the resources. Furthermore, we may have failed to recruit or to maintain such good engagement from entirely separate local authorities, however this is a potential limitation of the work.

Recommendations

Based on the experiences reported in this study, we offer the following recommendations for researchers looking to carry out inclusive co-production within adult social care with adults with learning disabilities.

1. Design protocols that frame flexibility and adaptability as methodological strengths recognising the need to anticipate delays, unforeseen opportunities, changing priorities and workforce pressures.
2. Allow time and resources for relationship building as a core research activity necessary to develop trust and reciprocity which are essential for sustained engagement.
3. Consider working through existing self-advocacy groups when co-producing research with people with learning disabilities. Conducting research within established safe spaces and alongside peers in familiar settings was an effective way to build confidence and enable meaningful participation.
4. Explore ways of more meaningfully including adults with higher support needs, for example using creative participatory methods adapted to a wider range of communication needs.
5. Encourage critical feedback by framing disagreement as valuable to move beyond superficial agreement. This is particularly important when working with groups who may have had negative experiences of disagreement or who are used to being overlooked.
6. Acknowledge tensions and be open about how these are managed, be prepared to justify decisions made in light of conflicting views or preferences.

Conclusion

This study demonstrates the application of the Double Diamond model in an inclusive, co-produced national study carried out within the context of adult social care for people with learning disabilities in England. Our agile and responsive approach, combined with creative methods tailored to suit specific

groups, enabled co-production and evaluation of two toolkits of resources to support the implementation and use of individual service funds (ISFs). These toolkits are a freely available resource for commissioners, social workers, support providers and people with learning disabilities seeking to implement and use ISFs in ways that are genuinely person-centred.

Declarations

Ethics approval and consent to participate

Ethical approval was granted by the University of Sheffield, School of Health and Related Research ethics committee (Date: 23/04/2024; REF: 059545). Research with adults with a learning disability identified through their local authority was approved by the Health Research Authority (Date: 18/12/2024; REF 34255).

Consent for publication

Not applicable

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Author Contribution

LC: Conceptualization, Funding Acquisition, Methodology, Project Administration, Resources, Supervision, Validation, Writing – Original Draft Preparation, Review & EditingAD: Conceptualization, Methodology, Project Administration, Resources, Validation, Visualization, Writing – Original Draft Preparation, Review & EditingCT: Conceptualization, Funding Acquisition, Methodology, Project Administration, Resources, Validation, Draft Review & Editing

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Data Availability

The data generated by this study are not publicly available. The study employed a range of data collection methods producing data in multiple formats, including audio recordings, transcripts, visual materials and field notes, many of which were generated with participants with learning disabilities using accessible and creative methods. The diversity and nature of these data formats make them unsuitable for deposit in a standard research repository. Furthermore, the data contain personally identifiable information shared by participants in confidence, and full anonymisation cannot be guaranteed. Requests for further information about the data may be directed to the corresponding author.

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Figures

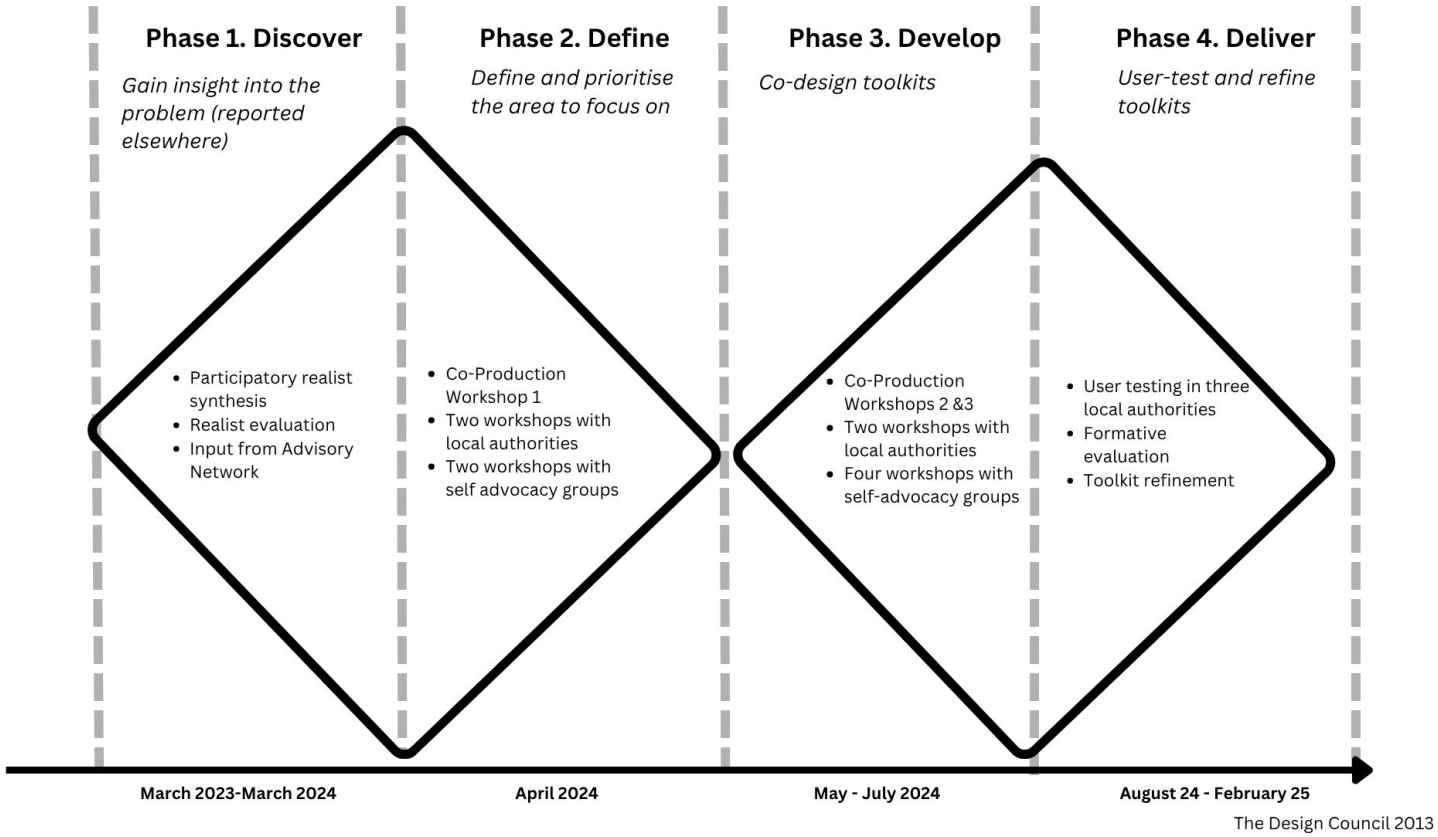


Figure 1

Design Council’s Double Diamond model showing EQUALD phases of activity