Co-producing evidence-informed criminal legal re-entry policy with the community: an application of policy codesign

Mandy D. Owens, mandyo@uw.edu
Sally Ngo, sngo28@uw.edu
University of Washington, USA

Sue Grinnell, sue.grinnell@phi.org
Public Health Institute, USA

Dana Pearlman, danapearlman@gmail.com
Santa Rosa, USA

Betty Bekemeier, bettybek@uw.edu
Sarah Cusworth Walker, secwalkr@uw.edu
University of Washington, USA

Background: Not attending to local political climate negatively impacts the implementation and sustainability of evidence-informed models of health service. Policy codesign aims to align policy, systems, and community from the ‘ground up’, with structured information gathering, synthesis and creative design methods that incorporate relevant scientific evidence.

Aims and objectives: This paper provides an example of policy codesign to develop a jail-based re-entry programme for adults with opioid use disorder in a rural county in the US.

Methods: The design process adapted Theory U, a systems planning framework to include a rapid evidence review. The process included five sessions from July-September 2020. Mixed methods were used to collect data from the design team (n=5), community at large (n=10), and potential consumers (n=14). Qualitative and descriptive analyses assessed satisfaction with the design process, and the acceptability and perceived feasibility of programme implementation.

Findings: Satisfaction with the design process was high among design team members. Acceptability and perceived feasibility of the designed programme were ‘very high’ across all respondents. The community implemented the designed programme, which aligned with the extant evidence base, although design team members did not explicitly acknowledge research as a source of design. This suggests that the process achieved creative control, and qualitative findings support the teams’ sense of shared ownership.
Discussion and conclusions: Policy codesign is a promising strategy for integrating the evidence base with community creativity in policy and systems-level planning. Further research is needed to understand which elements optimised design members’ absorption of the evidence base, shared sense making, and creative control.

Key words policy codesign • participatory design • medication for opioid use disorder • re-entry planning

Key messages
• Policy codesign aims to align policy, systems, and community from the ‘ground up’.
• Policy codesign was used to develop a jail-based programme for people with substance use disorder.
• The designed jail-based re-entry programme was rated as highly acceptable and feasible.
• The programme was consistent with evidence-based approaches and was successfully implemented.

To cite this article: Owens, M., Ngo, S., Grinnell, S., Pearlman, D., Bekemeier, B. and Cusworth Walker, S. (2022) Co-producing evidence-informed criminal legal re-entry policy with the community: an application of policy codesign, Evidence & Policy, 18(2): 356–375, DOI: 10.1332/174426421X16445109542161

Background

The revolving door of the criminal legal system and intersection with substance use is an ongoing problem within the United States. In the most recent report of people incarcerated in jails and prisons, more than half met criteria for a substance use disorder (Bronson et al, 2017). Individuals with a substance use disorder are at an increased risk of legal involvement due to the illicit nature of many drugs (for example, heroin), crimes committed under the influence (for example, assault), and crimes to obtain money for drugs (for example, theft; Dorsey et al, 2010). The continued use of the criminal-legal system as a de facto treatment system can be attributed to the low use of evidence-informed substance policies and programmes within community social services. A legal mapping study in the US found that only 20% of counties have substance-use policies that reflect the extant evidence (Ennett et al, 2003; Strang et al, 2012). The generally low use of evidence in behavioural health policy is recognised as a crisis by influential scholarly and policy institutes in the US, including the National Academy of Science and Engineering (National Academies of Sciences Engineering and Medicine, 2019), and the US Surgeon General (nd). At the same time, legal mandates that compel the use of evidence-based practice are counter-recommended, as they lead to unintended downstream effects including poor implementation and negative perceptions of ‘evidence-based’ practice (Raghavan et al, 2008; McDavitt et al, 2016; Hoagwood et al, 2020). Top-down mandates for evidence use also problematically enact a type of ‘intellectual colonialism’, in which the expertise of system leads, policymakers, and community members are weighted less than those of researchers (Walker et al, 2015).

Federal agencies are key distributors of evidence-based information about strategies to prevent opioid overdose. Since 2017, the Bureau of Justice Assistance has released
over $300 million in funds to develop best-practice guides written for criminal justice, public health, and policy audiences, and to provide training and coaching support to sites for implementing the principles outlined in the guides (Bureau of Justice Assistance, 2019). Similarly, the Substance Abuse and Mental Health Administration (SAMHSA) has produced several toolkits and fact sheets and supports a limited number of state technical assistance projects a year (SAMHSA, 2020). Information from federally-funded dissemination efforts is distributed to health-related systems and communities (Hale et al., 2016), with local health departments playing a key role in community implementation (Feuerstein-Simon et al., 2020).

Local health departments often act as conveners of multi-sector partners and may also act as a service safety net when healthcare services are not available, particularly in rural communities. For example, in the US, opioids are involved in nearly 50,000 drug overdoses a year (Centers for Disease Control and Prevention, 2019). In response, local public health departments have coordinated efforts to distribute evidence-based services to address opioid overdose. A recent, national survey of local health departments found that nearly all health departments responding to the survey (30% response rate) had access to naloxone, and over 50% of them had implemented programmes for medications for opioid use disorder (MOUD) (Feuerstein-Simon et al., 2020). However, these efforts have not extended consistently into the criminal legal system. Only 30% of county-level agencies were distributing naloxone in jails (Feuerstein-Simon et al., 2020), despite the high risk of overdose after release from prison (Binswanger et al., 2007; Binswanger et al., 2013).

The field currently has little information on the specific strategies used by federal technical assistance efforts to support the implementation of jail-based MOUD programmes. There is no consensus about what constitutes effective technical assistance, including how to assess local needs and how to facilitate local implementation (Anderson et al., 2021). Recommended strategies can include local needs or service gaps assessments, peer-learning collaboratives, and tailored planning. These are often presented as linear processes, utilising logic models, decision support tools, and emphasising evaluation at multiple points (formative, developmental, outcome). For example, Theory of Change (ToC) is increasingly cited in the scholarly literature as part of system-planning efforts, particularly in global health (Hernandez and Hodges, 2006). ToC is explicitly focused on causal pathways, and engages participants in outlining short-, medium-, and long-term activities for achieving impact. Information is gathered from scientific literature reviews or the expert knowledge of the planning facilitators to provide a rationale for each step in the causal process. The linear and causal framework also facilitates evaluation activities, with each hypothesised step lending itself to causal investigation. The process is participatory and is intended to engage diverse members in planning to facilitate the developing of well-fitting plans and support for sustainability. The approach demonstrates the feasibility of developing a consensus-driven plan among diverse stakeholders; however, research on satisfaction and success of planned efforts following the exit of research facilitators is still ongoing.

At the same time, the scholarly literature on research evidence use increasingly suggests that relationships, creativity, and a sense of ownership over locally-developed solutions facilitate the implementation and sustainability of planning efforts (Brown and Wyatt, 2010; Donetto et al., 2015; Greenhalgh and Papoutsi, 2019). Planning processes that emphasise linear thinking may unintentionally miss
the reality of how research-based information acquires credibility in policy contexts. Policymakers at the legislative and system levels tend to turn to a relatively small number of trusted advisors and associates when determining the credibility of research findings (Boswell and Smith, 2017). Similarly, community members often view research findings with scepticism unless information is shared by and within trusted social networks (Jacobs and Buizer, 2016). Existing frameworks for policy and system planning that do not explicitly acknowledge the embeddedness of knowledge within social and relational networks are likely missing opportunities to engage stakeholders who hold diverse perspectives. Further, linear approaches to planning may alienate or disenfranchise community members and result in a limited number of stakeholders willing to engage in planning, limited sense of community or policy ownership, and a reliance on top-down expertise and support in implementation.

Community-held values of ownership and creativity in fostering local buy-in and fit can be addressed by using participatory design (Björgvinsson et al, 2010) and cocreative methods (Greenhalgh et al, 2016). Participatory design methodologies are used in the field of both intervention design and research, and describe methods that centre the insight and creative ownership of the intended beneficiaries of the planning efforts. This can include system actors like treatment staff, consumers of treatment, or both. We note that terms such as ‘codesign’ and ‘design’ have a more precise meaning in the field of design than in health services research, where ‘cocreation’ and ‘codesign’ may be used more informally in this literature to denote a stakeholder-engaged process (Moll et al, 2020). Consequently, some definition of terms is useful. We use the term ‘participatory design’ in the sense proposed by Spinuzzi (2005), in which the intended users of a creative process are involved in designing ‘for themselves’ with the aid of researchers who bridge user insight with systematic methods of discovery. This approach additionally views knowledge as constructed and local, rather than amenable to formalisation outside of local interactions. Codesign is a shifting term in and outside of the formal design field (Moll et al, 2020). In this project, we use it to signal the focus on having users participate directly in design by teaching skills for interpreting and synthesising research-based information (Slattery et al, 2020). Accordingly, by using the term policy codesign, we are indicating a process that bridges insights generated by academic science with community expertise in a policy formation process. The ‘co’ in policy codesign emphasises the importance of collaborative active stakeholder synthesis or coproduction of efforts (Franklin, 2022) when developing policy. The approach uses design activities to facilitate local ownership as well as the integration of multiple sources of knowledge (community, evidence base, policy). This approach to policy formation differs from other tailored technical assistance efforts by engaging community stakeholders in designing programmes from the ‘ground up’, with structured information-gathering and design methods that also incorporate the relevant scientific evidence base. This case study provides an example of policy codesign used in a project aimed at developing a jail-based re-entry programme for adults with opioid use disorder in a rural county in Washington State, to assess how well policy codesign worked to achieve four aims: (a) satisfaction with the policy codesign process and policy product across levels of policy stakeholders (policy, system, consumer); (b) alignment of the designed policy with the relevant evidence base; (c) feasibility of the resulting policy; and (d) implementation of the resulting policy.
Co-producing evidence-informed criminal legal re-entry policy with the community

Project overview

This project was precipitated by the receipt of a US federal grant to the rural county public health department. The funds were provided to broadly address substance use and mental health needs within the community, and leadership from the local health department identified a university collaborator to assist with policy and programme development (SCW). This led to the decision to use the policy codesign process (Theory U + evidence synthesis; described below) to address policy aimed at the incarceration of adults with substance use disorders, particularly opioid use disorder. After consultation with the Institutional Review Board at the University of Washington, it was determined that this project did not constitute research; only feedback about the policy codesign process and developed policy plan was gathered. There was no intent to study the outcome of the policy plan using a controlled or experimental design. Given the focus on the policy codesign process and developed policy plan, not outcomes of the policy, this project did not meet the definitions of ‘research’, and thus did not require human subjects review. However, our team used the same procedures (consent statements, protection of anonymity) to conduct the case study as if the method met the criteria for research. This included describing the goals of the project and scope of activities prior to eliciting feedback (for example, individual versus group feedback gathering), obtaining verbal assent, and taking steps to protect interviewees’ information and confidentiality.

Setting and community stakeholders

The project took place in a rural county in southwest Washington State with a population of 75,000 residents. Implementing evidence-based substance use policies is particularly challenging in rural areas where the resources for multi-component services are scarce (Pullen and Oser, 2014). The 82-bed adult jail had previously attempted to provide MOUD programming but was unable to sustain the programme successfully. Jail-based staff shared with the project members that the previous failure was due to a lack of organisation, planning, and buy-in at the jail. The local health department felt that a community-engaged process would potentially reinvigorate interest in a jail-based re-entry programme and provide support for a more thoughtful approach within existing resources. Local community stakeholders were identified by health department leadership and included two staff from the local health department; a lieutenant from the jail; four representatives from three community agencies that worked with the jail population (a behavioural health agency, re-entry programme, probation department), one of whom was a person with previous incarceration at the jail; and a second person with lived experience of incarceration at the jail and substance use disorder. In addition to community and system members, the design team also included the Theory U design facilitators, and two researchers from the partnering university (MDO and SCW) who observed the process and provided evidence-based information as described below.

Design process

The design process used for this project adapted an existing systems design model, Theory U, to include the incorporation of evidence synthesis (Figure 1). Theory
U was chosen because it includes a number of already-developed design activities that are participatory in nature and can be applied ‘off the shelf’ in policy-planning activities. Theory U was developed to support real-world systems thinking and planning with an emphasis on public health (Scharmer, 2009). It aims to encourage participants to adopt a deeper systemic perspective encompassing more than their own area of work to achieve a broader sense of awareness and action. It does so by focusing on building rapport among the team members, revealing blind spots in the greater system, introducing frameworks and concepts, and incorporating participatory design exercises to develop programme components. The use of research evidence is not unusual in Theory U applications, but tends to be informally structured with design team members bringing in research evidence as it seems to relate to content. In this project, we were interested in formalising the delivery of research evidence to enhance transparency and a sense of community ownership. We presumed that successfully achieving these goals would facilitate the use of research evidence by the design team members.

**Design sessions**

The design process took place across five sessions every other week from July to September 2020, exclusively over videoconference calls as the design effort was conducted during the lockdown phase of the COVID-19 pandemic in the US. The sessions included abbreviated stages of Theory U, as described below. Evidence syntheses were conducted and integrated in the information-gathering stage of the process. The session objectives and exercises are summarised in Table 1. The design activities used in each session and stage of the process were largely discussion and reflection-based with individual, small-group, and whole-group activities.

---

**Figure 1: Conceptual model of policy co-design**

<table>
<thead>
<tr>
<th>Participatory Design</th>
<th>Participants</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Empathy and perspective-taking</td>
<td><strong>County policymakers.</strong> Diverse political participation on design team to align political aims. Involvement in design to align with local values and increase motivation to fund and sustain.</td>
<td>Policy proposal that aligns with local values, evidence-based intervention, and population impact.</td>
</tr>
<tr>
<td>2. Activities to facilitate creative innovation</td>
<td><strong>County health departments and social services.</strong> Involvement in design to increase motivation and fit Implementation plans and roles to support behavioral capacity to implement.</td>
<td>Policymaker motivation to fund and support.</td>
</tr>
<tr>
<td>3. Consumer and community-centered</td>
<td><strong>Community members/consumers.</strong> Involvement in design to increase buy-in and fit Implementation plans and roles to support consumer-level engagement.</td>
<td>Social service provider motivation to implement.</td>
</tr>
<tr>
<td>Evidence Synthesis</td>
<td><strong>Deliberate action to fund developed plans.</strong></td>
<td>Implementation of intervention</td>
</tr>
<tr>
<td>1. Evidence topics “pulled” from community questions</td>
<td><strong>Impact (engagement by people in jail, lower opioid overdoses post-release)</strong></td>
<td></td>
</tr>
<tr>
<td>2. Transparent review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Digestible summaries in multiple formats</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Unauthenticated | Downloaded 09/14/23 05:35 PM UTC
Table 1: Policy codesign session agendas

<table>
<thead>
<tr>
<th>Session 1: Shared intent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall goal: Build rapport among design team</td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>Exercises</td>
</tr>
<tr>
<td>1. Overview of approach to address complex systemic challenges and opportunities</td>
<td>Four levels of listening and talking</td>
</tr>
<tr>
<td>2. Introductions and build relationships across the team</td>
<td>Iceberg image + dialogue</td>
</tr>
<tr>
<td>3. Identify gaps and refine the shared intent for the work</td>
<td>Homework: develop design challenge question</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 2: Sensing the greater system</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall goal: Develop and refine the design challenge question</td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>Exercises</td>
</tr>
<tr>
<td>1. What emerged from doing homework (do we have a new design challenge question?) and next steps as we learn more about the system we are operating in</td>
<td>Review four levels of listening + three enemies to innovation/listening</td>
</tr>
<tr>
<td>2. Practice deep listening to each other and prepare for system learning conversations in upcoming homework</td>
<td>Discussion questions:</td>
</tr>
<tr>
<td></td>
<td>▪ What is the current context? Gaps?</td>
</tr>
<tr>
<td></td>
<td>▪ How would you solve the problem?</td>
</tr>
<tr>
<td></td>
<td>Homework: pair learning conversations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 3: Sense making</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall goal: Consider design challenge question within the larger context</td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>Exercises</td>
</tr>
<tr>
<td>1. Share learning conversations and persona cards (demographics, quotes from stakeholders)</td>
<td>Persona cards</td>
</tr>
<tr>
<td>3. Provide next steps to support meaning making</td>
<td>Collective brainstorming</td>
</tr>
<tr>
<td></td>
<td>Homework: meet with group members to develop a prototype – build a continuum of care</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 4: Prototyping</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall goal: Identify potential solutions</td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>Exercises</td>
</tr>
<tr>
<td>1. Explore additional opportunities from evidence from the field of other locales</td>
<td>Evidence synthesis discussion</td>
</tr>
<tr>
<td>2. Explore potential experiments, prototypes, and recommendations for a continuum of care</td>
<td>Group prototype presentations</td>
</tr>
<tr>
<td>3. Identify and prioritise 1–3 potential experiments to prototype and learn</td>
<td>Homework: build out prototypes and talk to others about feasibility</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 5: Scaling</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall goal: Establish a plan to sustain efforts within the community</td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>Exercises</td>
</tr>
<tr>
<td>1. Learn the progress of the experiments, prototypes and logistically discussions</td>
<td>How to keep momentum?</td>
</tr>
</tbody>
</table>

(Continued)
Visualisations, tables, and figures were used to summarise participants’ ideas and facilitate reflection on common insights.

Session 1: Shared intent
The first session focused on rapport-building, framing, and setting the flow for the overall process. Facilitators introduced themselves and the local public health leader provided context and background for the project. The facilitators introduced two exercises to facilitate conversation among the team members. The first exercise involved team members in asking questions of each other, using a listening strategy to challenge their own current perspectives, and preparing them to have a bigger understanding of the system at play. The second exercise walked the team members through the concept of the iceberg model, a systems thinking framework and tool, to facilitate a discussion of current beliefs and values within the system that keeps the current challenges as status quo. The session then ended with small breakout groups to further encourage discussion of:

Why are jail-based treatment and re-entry services important? What gaps are you seeing in jail-based treatment and re-entry services?

After sharing breakout group key discussion points, homework was assigned. Design team members were encouraged to engage in learning conversations with other stakeholders in the greater system about supports for incarcerated individuals with substance use disorders.

Session 2: Sensing the greater system
The second session focused on discussing perceptions of jail-based services among the team members, using strategies to facilitate honest and open sharing and discuss barriers to systemic change. In this session, a repeated theme of discussion was the importance of continuity of care across re-entry into the community (Figure 2). Team members also identified barriers to care after release, including suspension of federally- and state-subsidised insurance while incarcerated and the need to complete an extensive substance use disorder treatment assessment in order to receive post-release services. They talked about how any barrier to care presents a challenge, noting, “it only takes eight minutes to get heroin”.

Next, facilitators structured a conversation to begin to break down biases and barriers to systemic change. Facilitators discussed the importance of deep listening/empathic listening, including offering a personal story of how deep listening had shifted the conversation in county-led efforts to address homelessness. Group discussion questions followed with: When have you had a meaningful conversation?

What supported it evolving and you feeling listened to empathically and really learning from each other? To foster further conversation, small breakout groups then explored: What might we observe in the jail system with regard to arrest, intake process, re-entry, continuum of care? What does the current continuum of care look like? What gaps do we want to continue to explore and learn about? These breakout sessions revealed that the team members from different parts of the greater system did not have a full understanding of what the

<table>
<thead>
<tr>
<th>2. Identify draft or finalise recommendations</th>
<th>◦ Prototype presentation learnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Plan next steps to keep momentum moving forward</td>
<td>◦ Overall recommendations and implementation plan</td>
</tr>
<tr>
<td></td>
<td>◦ Check-out celebration and reflection</td>
</tr>
</tbody>
</table>
Co-producing evidence-informed criminal legal re-entry policy with the community

364

others were doing, and had not previously understood the efforts each were making to support substance-use disorder recovery. One aspect of this work is to take people out of their current silos to see the bigger system at play. The design team members were then assigned homework to hold additional listening sessions with stakeholders and begin to develop ‘persona’ cards to describe various scenarios for the experiences of individuals within the jail.

Evidence synthesis
During the small breakout groups in session 2, team members asked questions about existing models that describe the process from arrest to incarceration to release, brief
screening tools for substance-use disorder, and incorporating peers into the re-entry process. The Theory U facilitators translated these questions into a request for evidence synthesis: *What are the components of best practice continuum of care models related to behavioral health and the justice system?* To meet this request, the research partners conducted a rapid review of the evidence, with a focus on finding meta-analyses and systematic reviews using umbrella review methods. This resulted in identifying five review papers, (Jordan et al, 2013; Brolin et al, 2015; Pedneault et al, 2017; Bonfine et al, 2018; Brinkley-Rubinstein et al, 2018). The research partners produced a brief overview of the papers and findings and highlighted the Sequential Intercept Model as an established framework for implementing a continuum of care in the criminal legal system (Griffin et al, 2015; Bonfine et al, 2018).

The research evidence product included a three-page summary of the search strategy and findings. The addendum included all of the scientific papers. The research team also developed a 10-minute video providing an overview of the evidence synthesis. This was recorded by one of the research partners speaking into the video and advancing through a slide deck of findings.

**Session 3: Sense making**
The third session focused on consolidating knowledge from the design team session discussions and external stakeholder conversations. In this session, design team members discussed the difficulty of listening to individuals from other systems. For example, the lieutenant from the jail noted, “I am learning how little I actually know”. Multiple team members reported a common theme that many people in their community wanted things to improve for people releasing from the jail, but there continued to be stalls in making changes. Team members shared examples of their persona cards created from conversations from people in the community (for example, “Transportation from Point A to Point B is sometimes impossible no matter how close”).

Facilitators introduced an exercise, ‘What? So What? Now What?’, to begin to identify next steps. This exercise shares logic and goals with the more linear approaches of a ToC, for example, as the exercise encourages participants to identify some actions that build from the information and learnings identified by the design team members. For example, questions included: *What meaning are you making from the findings? So what… does all this mean? What do these patterns mean to our collective work? What are some actions we can make from what we are learning now?* The design team members identified two areas of action: jail-based processes, and community supports. Homework for the next session focused on fleshing out activities within these action areas, as well as reading and watching evidence synthesis materials prepared by the research team that responded to questions raised by the group in the second session.

**Session 4: Prototyping**
Session four focused on brainstorming components of a local programme that reflected the areas of action identified in the previous design meeting (jail-based, and community-based). The findings of the evidence synthesis were briefly reviewed and discussed by the team members. As a group, team members then filled in current and potential future solutions and community resources using the Sequential Intercept Model framework. Current community resources included: self-referral to treatment
Co-producing evidence-informed criminal legal re-entry policy with the community

Team members offered potential future solutions and community resources based on group discussions and talking to other local stakeholders. Multiple members suggested the need for standardised screening for substance use disorder at initial detention (Intercept 2), induction and continuation on MOUD (Intercept 3), and a re-entry coordinator to assist with release planning (Intercept 4).

Facilitators then offered a guide for active action review that asked team members to reflect on the: relevance of the framework; potential for revolution (allowing for new ways of doing things); rapid (can it speed up learning); rough (can it be done on a low budget); and right (it is addressing the root causes). The homework for the last session was to meet in their small groups to identify the next steps to test their prototypes on screening for substance use disorder, MOUD programming, and re-entry coordination.

Session 5: Scaling
For the final session, facilitators led a discussion to establish a plan to embed and sustain the efforts into the community. The team members identified various resources and roles needed to sustain momentum. These included “decision makers”, “built-in across the systems (jail, court, community)”, and “common goals”. Team members offered what they could commit to, such as, “stay involved”, “continue to come to the table and share information/data/resources”, and “commit to work with other parts of the continuum of care as a care coordination provider”. Discussions then transitioned into prototype presentation learnings from small groups to inform the final programme policy plan, including implementation supports.

Developed jail-based MOUD and re-entry policy
The final policy plan developed through the policy codesign (Theory U + evidence synthesis) process included three components: (a) jail-based screening for opioid use disorder (Texas Christian University Drug Screen [TCU] 5); (b) continuing or starting eligible individuals on MOUD; and (c) connecting individuals in the MOUD programme with a peer navigator to assist with re-entry planning and community support post-release. The policy reflected the integration of information arising from the conversations among multi-sector partners, as well as external information shared through the extant evidence base. The final designed re-entry programme policy is consistent with existing empirical evidence. The TCU Drug screen has been used and validated to identify substance use disorder among people in the criminal legal system (Knight et al, 2002; Knight et al, 2018). Additionally, the administration of MOUD during incarceration has been highlighted as an integral part of treatment planning among people with opioid use disorder in jail (Winkelman and Silva, 2021), and is effective in improving post-release outcomes, including treatment engagement, reductions in opioid use, and criminal recidivism (Malta et al, 2019; Moore et al, 2019).

Data collection and measures
Upon completion of the design process, interviews were conducted with the design team, community at large, and potential consumers of the re-entry programme
to assess feedback of the design process (design team only), and acceptability and feasibility of the policy design. All interviews began with an informed consent process and participants provided verbal assent. Interviews with the design team (n=5) and potential consumers (n=14) were one-on-one, and a group survey conducted with the community at large via a quarterly Community Partner Coalition meeting of local agencies (n=10 responses). Individual interviews with the design team included scaled and open-ended questions about the design process and feedback on the re-entry programme. Open-ended questions included: a) What surprised you about the process? b) What information shared in the process were you already very familiar with? c) What information in the process was new? d) Anything else?

Surveys distributed to the community members and potential consumers (individuals incarcerated at the jail who self-identified as having a problem with opioids) included five quantitative questions that assessed acceptability and feasibility of the programme design on a 1–10 Likert-type scale of agreement. Items were developed for this study and were informed by validated measures of implementability that measure innovation, acceptability, feasibility, and appropriateness (Weiner et al, 2017). Acceptability items included the following: a) The re-entry plan seems like a good fit for our community, and b) The re-entry plan seems like a good match for what our community needs. Feasibility items included the following: a) The re-entry plan seems reasonable, b) The re-entry plan seems possible to implement, and c) The re-entry plan seems doable. At the end of individual interviews (design team and potential consumers in jail), participants were offered a $30 gift card. Potential consumers were given a gift card either in their inmate property or mailed.

Analytic approach

The analytic approach involved content coding of narrative data, and descriptive analysis of quantitative data with the qualitative data used as the primary source of data to examine the acceptance of the design process (QUAL), and then used to supplement the quantitative findings to examine the acceptability of the developed policy, and perceived feasibility (QUANT + qual (Hsieh and Shannon, 2005; Creswell, 2014). A single researcher (SCW) single-coded the narrative data using an inductive approach (Hsieh and Shannon, 2005). The narrative was visually examined across respondents within questions. Common themes and divergent perspectives were identified by visually reviewing the participant responses side by side, creating codes for common responses, and collapsing these codes into broader themes. The researcher then discussed these codes and themes with a second researcher (MDO) who confirmed interpretation. Due to the small sample, we examined quantitative data with descriptive tools, comparing means and the ranges of responses within respondent groups.

Results

Design team experience

Upon completion of the design process, individual interviews were conducted with five of the eight community stakeholder design team members, including the lieutenant from the jail, two public health department staff, one stakeholder
Motivation to participate in design processes

We asked design team members about their motivation to participate in order to assess whether participating team members had preconceived ideas about what they wanted to accomplish. Responses revealed that team members were motivated to join for four reasons. Two of the team members had been involved in trying to establish a jail-based re-entry programme, previously: “I’ve been trying to advocate for a re-entry plan in our community for five years”; two team members were broadly interested in improving the services offered to incarcerated individuals: “just knowing that we could possibly get some help for people in our jails because they desperately need it”; and one team member who joined primarily as a favour to the local health department: “where it was coming from [the invitation to participation] and that it was even happening”. One of the team members also expressed that they were interested in participating in planning with a diverse group: “the opportunity to work with so many people, the whole collaboration, work with different people and get different input”.

Expectations and the experience of design

We asked design team members what their hopes for the design process were when joining and what, if anything, surprised them about the process. Two team members expressed surprise at how much was accomplished in a short period of time: “it was just super organised, they had pretty much a map of how much we needed to accomplish”; “the rapid speed… where a lot of other conversations have been generic and noncommitted”. For this latter comment, the team member expressed surprise that this was the case, as they went in expecting: “a continuation of conversation that’s been going on for a long time and I was jaded and not very hopeful”. Two other team members expressed surprise at how valuable it was to learn from others’ perspectives: “if I was told to sit down and plan this myself, I don’t know that I would have arrived at everything the team arrived at”; “when [name] talked about what the jail looked like from the offenders inside”.

Helpfulness of evidence synthesis

In general, individuals expressed knowledge of statistics (for example, overdose statistics). Only one team member expressed learning something entirely new from the presented evidence regarding the use of Vivitrol as a MOUD tool: “just the Vivitrol piece of it, we’ve been doing Suboxone for a while”. Rather than learning new information, the evidence presented was viewed as confirming what the members thought was needed. In contrast, the team members pointed to information they learned from other team members as being novel, saying, for example: “the jail reported they had tried some pilot project with the MAT [medication assisted treatment] programme and had zero percent success and I hadn’t heard about anything like that”, and “I knew how the services worked. I just wasn’t sure how to get the jail on board”.

from a community agency, and one person with lived experience. Our analytic approach identified common and divergent themes within responses to each open-ended question.
with it”. The representative from the jail reflected on prior failures as information that influenced his own thinking about what was needed, programmatically: “we had 82 unsuccessful attempts to help people and we realised the missing piece was the re-entry and community partnership”. As re-entry and community services were core pieces of the presented evidence, this statement and the previous statements suggests that the presented evidence may have strengthened previous ideas or given shape to those ideas.

**Overall impressions**

We asked team members to share an overall impression of the project to capture experiences possibly not expressed in the structured interview. Responses to this question largely confirmed previous responses. Four of the five team members proactively expressed that it was a good experience, with one expressing that they were “thankful”. As noted by one team member, the involvement of the external, university-based team was a key element in heightening urgency and motivation to act:

‘I think the way the meetings were designed with the support from outside our community ([university] and some of that) was key in this happening to make sure the follow-through was happening. The folks in [county] are a bit jaded, don’t know if it’s because it’s always gray outside, people here have a tendency to accept miserable conditions… It’s important to have an outside perspective.’

**Community and potential consumer acceptability and perceived feasibility**

All the design team members (n=5), as well as 10 community members and 14 incarcerated adults who self-identified as having a problem with opioids, completed the five survey questions on acceptability and perceived feasibility of the jail-based re-entry MOUD programme. Acceptability of the programme and perceived feasibility was high in all respondent groups, exceeding a mean score of 8 for both measures (acceptability and feasibility) with 10 indicating ‘agree entirely’. Mean acceptability scores were 9.1 (SD=1.1) among the design team, 8.2 (SD=2.3) among the community, and 9.3 (SD=1.1) among people in jail. Mean feasibility scores were 8.2 (SD=2.3) among the design team, 8.4 (SD=1.6) among the community, and 9.1 (SD=1.0) among people in jail.

**Re-entry programme policy implementation**

The programme and jail-based policies based on the policy codesign process were successfully implemented within eight months of the start of the design process. The rapidity of implementation stands in stark contrast with the difficulty the jail and community experienced with their previous effort to develop and implement a MOUD programme. By ten months after the end of the design session, the county had hired a peer Substance Use Disorder Professional to assist with screening within the jail and services navigation after re-entry, and began initial induction of people on MOUD while incarcerated at the jail. Funding for the community re-entry position came from federal funds, and the county has committed to seeking funds for sustainability
Co-producing evidence-informed criminal legal re-entry policy with the community

Once the federal grant ends. Although not all downstream decisions came from the policy codesign process explicitly (for example, hiring of new staff, coordination of peer recovery coaches in the jail), they were made by policy codesign team member collaborations (for example, the lieutenant from the jail and behavioural health agency staff).

Discussion

Primary themes from the design team interviews suggest perspective-taking and structured knowledge integration are key processes in developing local policy that reflect all the components needed for successful implementation. The design team members noted that they learned critical information from each other about the jail and community context. This information may build both empathy and the willingness to collaborate across systems, and informed design elements (for example, the need for re-entry support). Cross-system perspective taking has been identified as a critical need for local policy development and implementation (Greenhalgh and Papoutsi, 2018). Past failures with public health policy implementation suggest that misaligned priorities and siloed interests directly impede efforts to move policy implementation forward (Feuerstein-Simon et al., 2020). Team members on this project also reflected how the design process contrasted with previous experiences of malaise and difficulty moving beyond the conversation stage.

With one exception, another common theme from design team interviews was the value of having a structured, organised process for moving team members from knowledge gathering, to integration and, finally, prototyping. In contrast to previous experiences, this process felt organised and moved the process through development to decision making while centering local values. Further, this process of moving towards resolution did not appear to disenfranchise minority perspectives or cause dissatisfaction among the team members, suggesting that the process successfully moved members towards consensus. This suggests that the design process is a promising strategy for overcoming the risk of policy alienation (Tummers, 2012) common to many policy development efforts. Policy alienation is a term used to describe the disconnect between policies developed without sufficient buy-in from system stakeholders and intended consumers or end users. Policies suffering from this lack of system and consumer input are unlikely to be implemented as intended or achieve their intended benefits. That codesign is a method that can yield acceptable and feasible policy products was further supported by survey scores across multiple informant types (design team, community, potential consumers).

A surprising result was the limited novelty ascribed to the evidence synthesis presentation by the team members. Team members largely responded that they were aware of the information presented in this summary (for example, Sequential Intercept Model, MOUD, re-entry services), and that new information about the conditions of the jail or individuals experiencing opioid use disorder was more novel. One exception was the acknowledgement from a team member that they had not heard about Vivitrol as a MOUD option. At the same time, the resulting policy almost exactly replicated the phases of evidence-based, jail-based re-entry models, but without any team member noting or acknowledging this connection. Rather, the team members reflected feeling that the model developed reflected their local needs and the input of lived experience. Interviews occurred a few months...
after the completion of the design process, and this may have made recall of specific pieces of information attributable to the evidence presentation difficult. At the same time, the lack of a conscious connection between evidence-based information and use in policy formation reflects the type of research use identified by Weiss (Weiss, 1977; 1979; Weiss et al, 1980) and subsequent evidence and policy scholars in observational descriptions of policymaking. Conceptual research use describes how research evidence informs the way policymakers think about a topic area, possibly changing their perspective or confirming previously held beliefs (Weiss, 1977; 1979; Weiss et al, 1980). In this type of research use, policymakers are unlikely to draw a line directly from research evidence to a concrete policy; rather, the policymaker is likely to describe a way of thinking about a topic area that is consistent with the extant evidence base. This appears to be the type of research use observed in this design process, with the justification of the resulting policy tied to the wisdom of local experience or to previously known information, but with a product that clearly reflects insights from the evidence base.

We also note that case-study methods can provide in-depth knowledge of one site but have limited generalisability. As a local process, engagement and buy-in may have been influenced by characteristics of the participants selected to attend. As this process also took place during the COVID pandemic, and all meetings were held virtually, it is possible that feedback on satisfaction with design processes could shift with a different meeting venue.

Conclusions

The policy codesign method used in this study led to the development of a jail-based re-entry programme for adults with opioid use disorder that was rated as highly acceptable and feasible by design team members, the community, and potential consumers. The developed programme policy was also consistent with the extant literature, but without design team members noting this connection. Rather, it may be that stakeholders felt more ownership of the co-developed policy because it came from a collaborative process across the community (jail, local health department, behavioural health agencies, people with lived experience) rather than a top-down policy requirement. Further research should explore this phenomenon to assess whether this is common to other participatory design-oriented projects, as well as additional explorations of scalability and sustainability where needed.

Funding

This study was funded by the Department of Psychiatry and Behavioral Sciences at the University of Washington and Anthem/Amerigroup.

Acknowledgements

The authors would like to thank Lawrence Wissow for his input on this manuscript. Thank you to the design team and facilitators, community, and individuals in jail for their participation in the interviews.

Research ethics statement

The authors of this paper have declared that research ethics approval was determined to be unnecessary by a University Institutional Review Board as the scope of the investigation
Co-producing evidence-informed criminal legal re-entry policy with the community

did not meet the definition of research; however, the authors followed procedures required by human subjects research when obtaining the data reported in this paper.

Contributor statement
MDO and SWC wrote the first and subsequent drafts of the manuscript, with comments and edits from SN, SG, DP, and BB. BB and SWC conceptualised the project. SG and DP developed the session content for the project. MDO, SG, and SWC collected, analysed, and interpreted data.

Conflict of interest
The authors declare that there is no conflict of interest.

References


