

# Interprofessional Collaboration in Reintegration After Prison for Prisoners with Substance Abuse Issues: A Scoping Review

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#### **Abstract**

For decades, reintegration after prison for prisoners with interlinked welfare needs has presented one of the greatest challenges in the criminal justice system. The World Health Organization and the United Nations have highlighted the demand for well-functioning collaboration between professionals and welfare agencies handling these challenges. However, interprofessional collaboration has been an underdeveloped field of research and theory, especially concerning prisoners with substance abuse issues. The present study undertakes a scoping review of research on interprofessional collaboration in reintegration after prison for prisoners with substance abuse issues, particularly identifying factors that influence collaboration. Nineteen included studies from the USA, the UK, Australia, and Norway show that relational and structural factors influence collaboration and innovative projects are perceived as improving collaboration. A tentative conceptual model of factors that influence collaboration is presented, which may serve as a basis for reflection and further development of a theoretical framework within the field of research.

### **Keywords**

Interprofessional collaboration; prisoners; prison; reintegration; scoping review.

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### Introduction

Prisons are predominantly populated by prisoners with substance abuse issues who will face interrelated, complex issues upon their release from prison (Binswanger et al. 2012; Blas 2007; Cepeda et al. 2015; Chikadzi 2017; Fazel and Wolf 2015; Friestad and Kjelsberg 2009; Revold 2015; Schinkel 2014; United Nations 2019). For instance, a recent systematic review and meta-analysis found that at least a quarter of newly incarcerated prisoners had a substance abuse disorder (Fazel, Yoon and Hayes 2017). Further, in a country such as Norway, known for its robust welfare system, 60 percent of prisoners are reported to be dependent on substances (Friestad and Hansen 2004; Revold 2015). For at least three decades, there has been growing recognition of the importance of collaboration between professions and welfare services, in both the private and public sectors, that handle complex interlinked problems (Kurland and Zeder 2001; Willumsen and Ødegård 2016; Woodlock and Narayan 2000). The United Nations has highlighted the importance of collaboration among external stakeholders to meet the challenges involved in reintegration processes, stating that "promising practices are achieved in collaboration with external stakeholders, such as non-governmental organizations [NGOs], volunteers, families, national service providers, communities or external employers" (Gisler, Pruin and Hostettler 2018: 4).

This statement is also supported by the World Health Organization (WHO) (Enggist et al. 2014). However, welfare services and criminal justice services often operate in organizational and professional silos, and some may even view interprofessional collaboration as a threat to traditional professional autonomy (Bond and Gittell 2010; Pihl 2009). Dysfunctional collaboration implicitly influences welfare services provided to prisoners negatively. This may result in repeated crime and reincarceration; further, recent research has revealed that prisoners released from prison have a substantially higher risk of overdose and death than the general public (Borschmann et al. 2020; Fazel and Wolf 2015).

Although the number of empirical studies on interprofessional collaboration has increased in recent years, collaboration between different professions and services is still viewed as an underdeveloped field of research (Helgesen 2019; Reeves and Hean 2013). Identifying the key factors that influence interprofessional collaboration is critical because it has consequences for service quality for a vulnerable and stigmatized group such as prisoners with substance abuse issues (Palamar, Halkitis and Kiang 2013; Sattler et al. 2017).

Research on interprofessional collaboration in contexts other than prison has demonstrated the severe consequences of ineffective collaboration. For instance, in a hospital context, the Verspuy and Van Bogaert (2018) study revealed that two of three severe adverse events were linked to a lack of collaboration between health care workers.

### **Aim and Research Questions**

This review aimed to provide an overview of research on interprofessional collaboration in reintegration after prison, especially concerning prisoners with substance abuse issues. To achieve this, the following research questions were formulated:

- 1. What are the perceived challenges influencing collaboration between professionals in the transition from prison to community for male adult prisoners with substance abuse issues?
- 2. What types of approaches can be identified in the research literature to improve the collaboration in transition from prison to community for this group?

Internationally, female and male prisoners are incarcerated in separate prisons. This may explain why prison research is often gender specific. Due to the delimitations of this current scoping review, adult male prisoners were the targeted group.

### Method

### Design

A scoping review was conducted to map the research done within prison services systematically (Tricco et al. 2018). The Canadian Institutes of Health Research define scoping reviews as "exploratory projects that systematically map the literature available on a topic, identifying key concepts, theories, sources of evidence and gaps in the research" (Grimshaw 2020: 34). The number of scoping reviews doubled from 2014 to 2017, which may demonstrate the relevance of this method in the literature. The nature of scoping reviews is exploratory and descriptive compared to systematic reviews or meta-analyses, which are explanatory or analytical in nature.

This scoping review followed the description of Arksey and O'Malley's (2005) five-step model (see Table 1). Arksey and O'Malley provided the first methodological guide for scoping reviews (Peters et al. 2020). They noted a lack of uniformity in such reviews and proposed a seminal framework for their conduct. They also noted the necessity for others to develop their work further to improve guidance for authors regarding conducting scoping reviews (Peters et al. 2020). Levac, Colquhoun and O'Brien (2010) later developed the framework of Arksey and O'Malley. Our design also included Arksey and O'Malley's (2005) optional sixth step: a consultant exercise.

Using the PICo form (Population, Interest, Context), a systematic literature search was conducted. The search aimed to describe population (inmate\*, convict\*, offender\*, prisoner\*, incarcerat\*, substance abuse\*, drug abuse\*, drug addict\*, substance misuse\*, addiction disorder\*, comorbidity), interest (interprofessional collaboration, collaboration, interagency, cross agency, health care services, post-release programs, case management, welfare services), and context (reintegration, resettlement, rehabilitation, reentry, post-release) using the following databases: Ovid, Oria, ProQuest and Science Direct. These databases cover a broad range of publishers and journals and were perceived as the most relevant according to the chief librarian assisting the literature search. Different combinations of search terms were used to limit the chance of missing essential literature.

One key source of confusion in the approach to interprofessional collaboration is inconsistent use of terms such as *interdisciplinary*, *cross professional*, *cross agency*, *interagency*, and *joint working*, among others (Reeves et al. 2010; Willumsen and Ødegård 2016). In our scoping review, we use the term *interprofessional collaboration*. This term covers collaboration between different professions and different welfare agencies in both the private and public sectors.

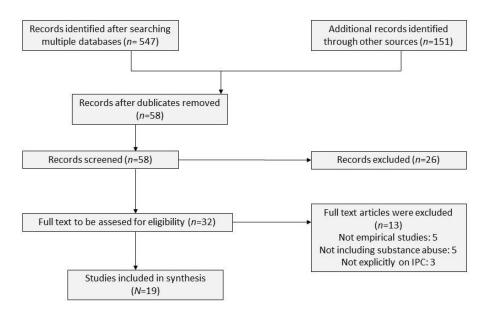
# Stepwise Search Procedure

The process of a scoping review is not linear; rather, it is iterative. When necessary, the steps were repeated to ensure that the literature was covered comprehensively. This is particularly crucial due to contextual differences between countries and the need to avoid preconceptions about issues.

Table 1. Stepwise search procedure

Step – purpose	Action - (decision-making strategies)	Responsibility
Step 1: Identify the research question	Two research questions were developed by presenting various suggestions to research groups in relevant fields	All three authors and research groups
Step 2: Identify relevant studies in a literature search	The systematic search was conducted by first author and chief librarian on February 25, 2021, using the following electronic databases: Ovid, Oria, ProQuest and Science Direct	First author and chief librarian
Step 3: Select relevant studies	Separate screening of 58 abstracts according to the following criteria: Inclusion:  - Collaboration between different professions - Peer-reviewed empirical research studies - Prisoners with substance abuse issues as targeted group - Studies in English Exclusion: - Research published earlier than 2009 - Working papers, reports - Literature reviews.  Hand searches in reference lists from June 2020 to February 2021	All three authors
Charted the data from 32 articles into a charting form. Based on inclusion and exclusion criteria, articles were individually picked for final inclusion. The individually chosen articles were presented at a meeting between authors on March 2, 2021. Final selection of 19 empirical studies was by consensus between authors. The 19 studies were charted in a second form (see Table 2).		All three authors
Step 5:  Summarizing results and categorization  The search process was summarized in a Prisma Flow Diagram (Tricco et al. 2016; Tricco et al. 2018) (see Figure 1).  Consensus was reached on categorization of results.		All three authors
Step 6: Consultant exercise	A practitioner read through the manuscript on March 15, 2021.	Employee in the Norwegian Correctional Service

Figure 1. Study flow and selection of studies (Tricco et al. 2016; Tricco et al. 2018)



### **Results**

Nineteen empirical studies were included (see <u>Appendix A</u>). Eight of these had quantitative designs (Bond and Gittell 2010; Fletcher et al. 2009; Friestad and Kjelsberg 2009; Hean, Ødegård and Willumsen 2017; Lehman et al. 2009; Orrick et al. 2011; Shavit et al. 2017; Wooditch, Sloas and Taxman 2017) and 11 had qualitative designs (Denton 2014; Friedmann et al. 2012; Gunnison and Helfgott 2017; Hannaa et al. 2020; Hansen 2015; Hean, Willumsen and Ødegård 2017a; Hean, Willumsen and Ødegård 2017b; Kras 2012; Moore and Hamilton 2016; Samele et al. 2016; Yamatani and Spjeldnes 2011). The samples originated in Norway (Friestad and Kjelsberg 2009; Hansen 2015; Hean, Ødegård and Willumsen 2017; Hean, Willumsen and Ødegård 2017a, 2017b), the USA (Bond and Gittell 2010; Fletcher et al. 2009; Friedmann et al. 2012; Gunnison and Helfgott 2017; Hannaa et al. 2020; Kras 2012; Lehman et al. 2009; Orrick et al. 2011; Shavit et al. 2017; Wooditch, Sloas and Taxman 2017; Yamatani and Spjeldnes 2011), Australia (Denton 2014), and the UK (Moore and Hamilton 2016; Samele et al. 2016). In total, the studies included 51,660 participants.

Based on thematic clustering of aims and findings from the 19 included studies, we agreed upon the following three statements that were highlighted in the studies: (1) Interprofessional collaboration is a prerequisite to meet complex welfare needs, (2) relational and structural factors influence interprofessional collaboration, and (3) innovative models and projects show promising results.

# Interprofessional Collaboration is a Prerequisite to Meet Complex Welfare Needs

All 19 included studies highlighted the importance of collaboration in meeting the welfare needs of prisoners when they are released from prison (Bond and Gittell 2010; Denton 2014; Fletcher et al. 2009; Friedmann et al. 2012; Friestad and Kjelsberg 2009; Gunnison and Helfgott 2017; Hannaa et al. 2020; Hansen 2015; Hean, Ødegård and Willumsen 2017; Hean, Willumsen and Ødegård 2017a, 2017b; Kras 2012; Lehman et al. 2009; Moore and Hamilton 2016; Orrick et al. 2011; Samele et al. 2016; Shavit et al. 2017; Wooditch, Sloas and Taxman 2017; Yamatani and Spjeldnes 2011). Denton (2014) concluded that providing services from the mental health department alone was highly insufficient in meeting the complex needs of the targeted group and identified a need for integrated support and treatment during the transition phase from prison to community. Friestad and Kjelsberg (2009) stated that health promotion is a multidisciplinary task requiring close interprofessional collaboration within and between systems of care. The studies of Friedmann et al. (2012) and Wooditch, Sloas and Taxman (2017) revealed that collaboration between welfare services resulted in a reduction of substance use among prisoners, especially among lower-risk prisoners and "non hard" substance-using prisoners. Based on their qualitative study, Samele et al. (2016) stated that collaborative work between health care professionals and prison staff is required to enable best care for prisoners. Further, the results of Gunnison and Helfgott's (2017) study indicated that lack of access to treatment providers or quality treatment to assist prisoners were key hindrances to reintegration after prison.

Although research findings highlighted the importance of collaboration, two of the included studies (Hansen 2015; Kras 2012) emphasized the need for welfare services to understand the complexities of treatment motivations and sanctioning and avoid adressing prisoners' complex welfare needs as tame problems that can be solved sequentially and separately. Hansen (2015) asserted that welfare agencies and professions must view these welfare needs as "wicked problems.": problems that, by their very nature, require a continuous, strenuous, dynamic, and innovative approach to solve. Further, Yamatani and Spjeldnes (2011) claimed that collaborative practice requires an understanding of the complex environmental factors that influence criminal behavior. Finally, Moore and Hamilton (2016) suggested that a "silo mentality" exists among professions and agencies in collaborative contexts.

# Interprofessional Collaboration is Mediated by Relational and Structural factors

In two articles based on the same data set, Hean, Willumsen and Ødegård (2017a, 2017b) explored collaboration between mental health agencies and the correctional service in a Norwegian context. The first article emphasized the importance of shared responsibility in the transition phase. However,

according to the results of their study, the distribution of responsibility can be challenging. Further, the Hean, Willumsen and Ødegård study (2017a) showed that expected collaborative practice and the complexity of external organizational structures created tensions and an unclear distribution of responsibility among welfare agencies and within the correctional service. Legal restrictions on information-sharing about prisoners also influenced collaboration. The authors recommended that involved agencies need more knowledge about their roles and domain in collaborative practice. In addition, they claimed that collaboration between professionals is unpredictable and resists standardization. Bond and Gittell (2010) revealed similar findings in their study—respondents reported that agencies needed to be on the same page and work together but tended to keep to themselves. Samele et al. (2016) suggested that limited space and time challenge collaboration. However, Hannaa et al. (2020) found that, despite the differences, stakeholders across welfare systems had a common goal of providing treatment to help individuals with their reentry into the community and to remain outside the criminal justice system.

Hean, Ødegård and Willumsen's article (2017) included in this scoping review used the theory of relational coordination (RC) to explore collaboration between prison officers and mental health providers. RC combines two dimensions of collaboration: structural and relational. The study showed low levels of RC between prison officers and prison doctors. However, the RC levels were high with prison nurses, social workers, and other prison officers. The authors recommended that future research investigate the background for these different RC levels and ways of improving them. Bond and Gittell (2010) argued that RC is a growing theory in understanding interprofessional collaboration. They defined RC as "coordinating work through relationships of shared goals, shared knowledge, and mutual respect" (Bond and Gittell 2010: 123). They used the model to develop hypotheses regarding the impact of cross-agency coordination in the transition from prison to community and to test those hypotheses. They found that, even in an innovative environment where key agencies made a respectable effort to collaborate, there were challenges in interprofessional collaboration. Bond and Gittell (2010) reported weak ties, particularly between prison and employment agencies. They had an expectation that strong RC would result in lower recidivism rates; however, they found the opposite effect in some cases. Therefore, they encouraged researchers to investigate whether quality in collaboration varies between organizational levels.

Orrick et al. (2011) found that the level of support different agencies received affected their interactions with other participating agencies. When support from one agency was high, support from another agency became stronger; when support from one agency was low, support from the other became weaker. Further, Orrick et al. (2011) proposed that a combination of non-governmental and governmental social support may reduce reoffending among substance-abusing individuals.

Fletcher et al. (2009) identified two levels of collaboration in their study: 1) a less structured, informal networking and coordination level and 2) a more structured and formalized level of collaboration. Further, Lehman et al.'s (2009) study revealed that more structured or formalized integration and collaboration was related to the following factors: facility size of the prison, resource network, access to treatment services, and the number of services provided to prisoners.

Based on findings in his study, Hansen (2015) suggested that welfare agencies lacked incentives to develop integrated services. Kras (2012) proposed an expansion of the professional role of probation and parole officers in treatment settings to enable the criminal justice system to use community treatment interventions more effectively.

# Innovation Projects Anchored in Interprofessional Collaboration Have a Noticeable Impact on the Quality of Services

Shavit et al. (2017) conducted a study on the Transitions Clinic Network (TCN). The TCN project started as a pilot in the San Francisco Department of Public Health's safety net health care system. The department collaborated with the local community-based advocacy organization, Legal Services for Prisoners with Children, and City College of San Francisco. TCNs have spread to other areas in the USA including California, Maryland, Connecticut, and New York. The innovative project aimed to "improve care coordination

through direct referrals from correctional agencies and engage patients in primary care within one month of prison release" (Shavit et al. 2017: 1007). In their prospective study, Shavit and colleagues found that strong ties between health care and correctional services resulted in fewer emergency department visits for prisoners after their release from prison.

Hean, Willumsen and Ødegård (2017b) suggested the Change Laboratory Model (CLM) as a model for collaboration between mental health and correctional services. The CLM has been successful internationally in other contexts such as hospitals and schools. The authors argued that the model should be tested as an alternative to current practice, which faces challenges such as limited resources, logistical issues, and differences in professional judgments about referral and confidentiality.

Bond and Gittell (2010) argued that the RC model is suitable as an innovative model for testing collaboration in the transition phase, in addition to other fields of practice such as the airline business, health care, and long-term care. These industries are similar to reintegration because multiple service providers perform tasks that must be integrated to achieve satisfying outcomes.

Yamatani and Spjeldnes (2011) investigated the effects of a collaboration-based, in-jail, and post-release transitional service project (Allegheny County Jail Collaborative), finding that the participating prisoners had 50 percent lower recidivism than the control group.

#### Discussion

The objective of this scoping review was to provide an overview of empirical studies on interprofessional collaboration in the transition of male prisoners with substance abuse issues from prison to community. A small number of studies was found, of which three are from the same research group. These studies exhibit differences in methods, aims, and foci; further, not all of them appear to contribute significantly to the research questions.

### Interprofessional Collaboration is a Prerequisite for Meeting the Complex Welfare Needs of Prisoners

Although the included studies briefly delve into and analyze interprofessional collaboration in practice, they are primarily concerned with asserting the necessity of collaboration. Grimshaw, Pegg and King (2002: 52) formulate this lack of theory in the following way: "it is evidently inadequate to simply throw agencies together and expect individually tailored services to emerge by some chemical process of interaction." To meet the complex welfare needs of prisoners, a first step may be to bring different professions together; however, a crucial second step should address *how* to integrate these resources in a way that is advantageous for the offender who is in urgent need of welfare services.

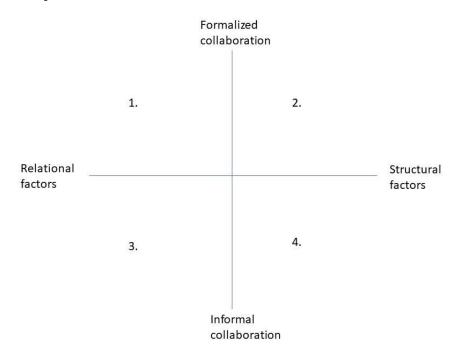
### Interprofessional Collaboration is Mediated by Relational and Structural Factors

Bond and Gittell (2010) found that, in some cases, strong RC and shared goals among professions were associated with increased recidivism. This rather notable finding may indicate the degree of complexity involved when welfare services try to meet the needs of prisoners.

On a structural level, the included studies by Hean, Willumsen and Ødegård (2017a, 2017b) and Hean, Ødegård and Willumsen (2017) detected factors—such as distribution of responsibility, organizational complexity, and legally binding limitations on sharing information—that negatively affect interprofessional collaboration. On a relational level, their studies uncovered weak links between medical doctors and prison officers. The ties were stronger between prison officers and nurses, social workers, and other prison officers. Based on Konrad's (1996) hierarchal model of collaboration, Fletcher et al. (2009) identified two levels of collaboration: (1) less structured, informal networking and (2) coordination and more structured and formalized levels of collaboration. According to the findings of this study, the informal aspect of collaboration is perceived as the most influential. However, is it possible to draw a clear line between the formal and informal, personal and work role aspects of collaboration (see Figure 2)? Complex

psychological dynamics are at play between individuals that may be hard to identify and measure. Lehman et al.'s (2009) study revealed that more structured or formalized integration and collaboration was related to the size of the prison facility and resource network.

Figure 2. Tentative conceptual model of factors that influence collaboration



To grasp the influential structural and relational factors, a tentative conceptual model (see Figure 2) may serve as a tool for reflection and create a potential theoretical framework. Quadrant 1 illustrates formal relational factors such as professions. For instance, nurses collaborate with other nurses because they have the same profession, and Kras (2012) proposed an expansion of the professional role of probation and parole officers to achieve flexibility in offender rehabilitation and interprofessional collaborative settings. Samele et al. (2016) highlighted a lack of collaboration between health care staff and prison staff. Quadrant 2 illustrates formal structural factors such as judicial collaboration agreements—collaboration occurs because agencies are legally bound to do so. Hansen (2015) claimed that welfare services lacked incentives to collaborate. Assumedly, legally required collaboration is not a sufficient incentive, as laws that require agencies to collaborate have existed for at least two decades in Norway (Law of Execution of Sentences 2001, §4; Law of Labor and Welfare Administration 2006, §8). Formal structural factors, of which Samele et al. (2016) claimed there is a lack, may also provide time and space for collaboration. Quadrant 3 illustrates informal relational factors (Fletcher et al. 2009). For instance, factors such as personal chemistry and shared values can contribute to strong social relations across professions. Quadrant 4 illustrates informal structural factors that can form strong networks across agencies that are not legally bound to collaborate but choose to do so for other reasons, such as geographically proximity.

# Innovation Projects Anchored in Interprofessional Collaboration Have a Noticeable Impact on the Quality of Services

The studies included in this current scoping review suggest that innovative models based on collaboration have an impact on the welfare services provided to prisoners (Bond and Gittell 2010; Hean, Willumsen and Ødegård 2017a, 2017b; Shavit et al. 2017). However, the effect is rather unpredictable and unclear; therefore, models should, optimally, be scrutinized in a prison context. CLM and RC show promising results in fields other than the prison system, such as airline business, hospitals, and schools (Gittell et al. 2000; Gittell et al. 2008a; Gittell et al. 2008b). The question is this: can the reintegration of prisoners after prison be compared to other businesses, or is the nature of work in this field unique? Improving the transition phase for our targeted group may require a more dynamic form of problem-solving than those used in

other businesses, as suggested by Hansen (2015) and Kras (2012). The vulnerable nature of prisoners and the security environment may mean that these types of interventions are difficult to implement in a prison context.

# Relational and Structural Factors Facing Wicked Problems

Improving the life situations of prisoners with substance-abusive behaviors who are facing release from prison may be viewed as a wicked problem, characterized by interconnected, unclear definitions and solutions (Binswanger et al. 2012; Cepeda et al. 2015; Chikadzi 2017; Conklin 2006; Fazel and Wolf 2015; Hansen 2015; Revold 2015; Rittel and Webber 1973; Schinkel 2014; Ulfrstad 2011). These challenges may be viewed as unique and incomparable to other businesses. Professions interact individually (relational) within their own organizations and at a system level (structural) when approaching these complex problems. Individually, different professions may have different definitions of a problem and conflicting opinions about how and when a problem is best solved. For instance, is a problem solved when an offender stops using substances or when substance abuse is reduced? What is the main problem: substance abuse or mental health? Professions may be bound by legislation and principles attached to their profession that create dissent regarding the definition of a problem and at what point a problem is solved (see Figure 2. Quadrant 1). Weber and Khademian (2008) highlighted the importance of collaboration in handling wicked problems. Head and Alford (2015) also linked wicked problems to the need for collaboration. However, Noordegraaf et al. (2019) claimed that collaboration can easily develop into quasi-collaboration where professionals do the minimum required, which is not sufficient to make organizations and professionals "equal partners" on the drawing board (see Figure 2, Quadrants 1 and 2). They emphasized that inter-human relations are just as important as collaboration (see Figure 2, Quadrant 3). At a structural level, the transition phase represents the meeting point of several agencies in the welfare service, who may have different organizational cultures and budgets (see Figure 2, Quadrant 2).

# **Conclusion and Future Implications**

This scoping review has revealed and discussed the following issues. First, there is a clear lack of research on interprofessional collaboration in the transition phase from prison to community regarding prisoners with substance abuse issues. The few studies that exist have highlighted the importance of collaboration in the transition phase; however, to a lesser extent do they build an empirical foundation for what kind of collaborative practices improve or challenge interprofessional collaboration. Second, interprofessional collaboration is a prerequisite to meeting complex welfare needs that can be understood through theories of wicked problems. Third, structural and relational factors influence interprofessional collaboration. These are general factors that may both challenge and improve collaboration. Fourth, innovative collaborative models can bring professions and agencies closer; however, the effect of these models remains uncertain. Finally, a conceptual model of factors that influence collaboration was presented, which may serve as a basis for reflection and further development of a theoretical framework within the field of research (see Figure 2).

### **Methodological Issues and Limitations**

Authors' preconceptions regarding a subject can influence the search results and the charting process in general. The first author has 10 years of experience as a practitioner in the Norwegian correctional service, four of which were as a project manager for a housing project to resettle prisoners with substance abuse issues after prison. This experience may have created bias issues for the first author. To adress this, there was continuous dialogue with the second and third authors, the review was presented to teams of researchers during the writing process, and a peer review was conducted in March 2021.

Despite a thorough search process, it is unrealistic to expect that all available material has been included in this review. Some important material most likely escaped our "radar" due to contextual differences between countries, different and inconsistent use of key terms, and the complexity of the field. Our advantage is the limited number of articles relating to our research questions, which increases the chance

of a worthwhile presentation of the most important findings from the existing articles. The scoping review focused on professionals and discluded NGOs due to the review's limitations. However, we are aware of the importance of NGOs within this field.

The findings of this scoping review cannot be generalized any more than can the studies included in it. However, the review may serve as a point of departure for further studies and hopefully present a gap to be filled in a vital field of research.

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### References

- Arksey H and O'Malley L (2005) Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology* 8(1): 19–32. https://doi.org/10.1080/1364557032000119616
- Binswanger I, Nowels C, Corsi KF, Glanz J, Long J, Booth RE and Steiner JF (2012) Return to substance use and overdose after release from prison: A qualitative study of risk and protective factors. *Addiction Science and Clinical Practice* 7(3). https://doi.org/10.1186/1940-0640-7-3
- Blas N-N (2007) Offender reentry: Correctional statistics, reintegration into the community and recidivism. *CRS Report for Congress*. Domestic Social Policy Division.
  - $\underline{https://www.everycrsreport.com/files/20071217\ RL34287\ eefe8dda447aedc21253079b93d9ce1e64efcbc0.pdf}$
- Bond BJ and Gittell JH (2010) Cross agency coordination of offender reentry: Testing collaboration outcomes. *Journal of Criminal Justice* 385: 118–129. <a href="https://psycnet.apa.org/doi/10.1016/j.jcrimjus.2010.02.003">https://psycnet.apa.org/doi/10.1016/j.jcrimjus.2010.02.003</a>
- Borschmann R, Tibble H, Spittal MJ, Preen D, Pirkis J, Larney S, Rosen D L, et al. (2020) The mortality after release from incarceration consortium (MARIC): Protocol for a multi-national, individual participant data meta-analysis. *International Journal of Population Data Science* 5(1). <a href="https://doi.org/10.23889/ijpds.v5i1.1145">https://doi.org/10.23889/ijpds.v5i1.1145</a>
- Cepeda JA, Vetrova MV, Lyubimova AI, Levina OS, Heimer R and Niccolai LM (2015) Community reentry challenges after release from prison among people who inject substances in St. Petersburg, Russia. *International Journal of Prisoner Health* 11(3): 183–192. <a href="https://doi.org/10.1108/ijph-03-2015-0007">https://doi.org/10.1108/ijph-03-2015-0007</a>
- Chikadzi V (2017) Challenges facing ex-offenders when reintegrating into mainstream society in Gauteng, South Africa. *Social Work (Stellenbosch Online)* 53(2): 288–300. <a href="http://dx.doi.org/10.15270/52-2-569">http://dx.doi.org/10.15270/52-2-569</a>
- Conklin J (2006) *Dialogue mapping: Building shared understanding of wicked problems* (1st ed.). West Sussex: John Wiley and Sons Ltd.
- Denton M (2014) Hoping against hope: The prison-to-community transition experience of men with co-occurring severe mental illness and substance use disorder. PhD Thesis, University of Queensland, Australia.
- Enggist S, Møller L, Galea G and Udesen C (2014) *Prison and health*. WHO Regional Office for Europe. <a href="https://www.euro.who.int/">https://www.euro.who.int/</a> data/assets/pdf file/0005/249188/Prisons-and-Health.pdf
- Fazel S and Wolf A (2015) A systematic review of criminal recidivism rates worldwide: Current difficulties and recommendations for best practice. *PLoS ONE* 10(6): e0130390. <a href="https://doi.org/10.1371/journal.pone.0130390">https://doi.org/10.1371/journal.pone.0130390</a>
- Fazel S, Yoon IA and Hayes AJ (2017) Substance use disorders in prisoners: An updated systematic review and meta-regression analysis in recently incarcerated men and women. *Addiction*. <a href="https://doi.org/10.1111/add.13877">https://doi.org/10.1111/add.13877</a>
- Fletcher BW, Lehman WEK, Wexler HK, Melnick G, Taxman FS and Young DW (2009) Measuring collaboration and integration activities in criminal justice and substance abuse treatment agencies. *Drug and Alcohol Dependence* 103: S54–S64. <a href="https://doi.org/10.1016/j.drugalcdep.2009.01.001">https://doi.org/10.1016/j.drugalcdep.2009.01.001</a>
- Friedmann PD, Green TC, Taxman FS, Harrington M, Rhodes AG, Katz E, O'Connell D, Martin SS, Frisman LK, Litt M, Burdon W, Clarke JG and Fletcher BW (2012) Collaborative behavioral management among parolees: Drug use, crime and re-arrest in Step'n Out randomizied trial. *Addiction* 107(6): 1099–1108. https://doi.org/10.1111/j.1360-0443.2011.03769.x
- Friestad C and Hansen ILS (2004) Levekår blant innsatte [Living conditions among inmates]. *Fafo-rapport 429*. Oslo, Norway: Forskningsstiftelsen FAFO.
- Friestad C and Kjelsberg E (2009) Drug use and mental health problems among prison inmates—Results from a nation-wide prison population study. *Nordic Journal of Psychiatry* 63(3): 237–245. <a href="https://doi.org/10.1080/08039480802571044">https://doi.org/10.1080/08039480802571044</a>
- Gisler C, Pruin I and Hostettler U (2018) Experiences with welfare, rehabilitation and reintegration of prisoners. *Working paper 2018-5*. Geneva: United Nations Research Institute for Social Development.
- Gittell JH, Weinberg D, Bennett A and Miller JA (2008a) Is the doctor in? A relational approach to job design and the coordination of work. *Human Resource Management Journal* 47(4): 729–755. <a href="https://doi.org/10.1002/hrm.20242">https://doi.org/10.1002/hrm.20242</a>
- Gittell JH, Weinberg D, Pfefferle S and Bishop C (2008b) Impact of relational coordination on job satisfaction and quality outcomes: A study of nursing homes. *Human Resource Management Journal* 18(2): 154–170. <a href="https://doi.org/10.1111/j.1748-8583.2007.00063.x">https://doi.org/10.1111/j.1748-8583.2007.00063.x</a>
- Gittell JH, Fairfield KM, Bierbaum B, Head W Jackson R, Kelly M, Laskin R, Lipson S, Siliski J, Thornhill T and Zuckerman J (2000) Impact of relational coordination on quality of care, post-operative pain and functioning, and length of stay: A nine-hospital study of surgical patients. *Medical Care* 38(8): 807–819. https://doi.org/10.1097/00005650-200008000-00005
- Grimshaw J (2020) *A guide to knowledge synthesis: A knowledge synthesis chapter*. <a href="https://cihrirsc.gc.ca/e/41382.html">https://cihrirsc.gc.ca/e/41382.html</a>

- Grimshaw R, Pegg G and King J (2002) *Accommodation and offending What works? An international literature review.* London, UK: The Center for Crime and Justice Studies, School of Law.
  - https://www.crimeandjustice.org.uk/sites/crimeandjustice.org.uk/files/Accommodation\_and\_offending.pdf
- Gunnison E and Helfgott JB (2017) Critical keys to successful offender reentry: Getting a handle on substance abuse and mental health problems. *The Qualitative Report* 22(8), Article 5: 2152–2172. https://doi.org/10.46743/2160-3715/2017.3260
- Hannaa J, Kubiakb S, Pasmana E, Gabac A, Andrec M, Smelsonc D and Pinalsd DA (2020) Evaluating the implementation of a prisoner re-entry initiative for individuals with opioid use and mental health disorders: Application of the consolidated framework for implementation research in a cross-system initiative. *Journal of Substance Abuse Treatment* 108: 104–114. https://doi.org/10.1016/j.jsat.2019.06.012
- Hansen GV (2015) Can collaboration provide integrated services for prisoners in Norway? *International Journal for Crime, Justice and Social Democracy* 4(4): 136–149. https://doi.org/10.5204/ijcjsd.v4i4.242
- Head BW and Alford J (2015) Wicked problems: Implications for public policy and management. *Administration and Society* 47(6): 711–739. <a href="https://doi.org/10.1177/0095399713481601">https://doi.org/10.1177/0095399713481601</a>
- Hean S, Ødegård A and Willumsen E (2017) Improving collaboration between professionals supporting mentally ill offenders. *International Journal of Prisoner Health* 13(2): 91–104. https://doi.org/10.1108/IJPH-12-2016-0072
- Hean S, Willumsen E and Ødegård A (2017a) Collaborative practices between correctional and mental health services in Norway: Expanding the roles and responsibility competence domain. *Journal of Interprofessional Care* 31(1): 18–27. <a href="https://doi.org/10.1080/13561820.2016.1233392">https://doi.org/10.1080/13561820.2016.1233392</a>
- Hean S, Willumsen E and Ødegård A (2017b) Making sense of interactions between mental health and criminal justice services: The utility of cultural historical activity systems theory. *International Journal of Prisoner Health* 13(2): 91–104. <a href="https://doi.org/10.1108/ijph-01-2017-0006">https://doi.org/10.1108/ijph-01-2017-0006</a>
- Helgesen JHI (2019) Straff og velferd i fangebehandling av rusmiddelbrukere. En kvalitativ analyse av empowerment og samarbeid i norske rusmestringsenheter (Punishment and welfare in treatment of prisoners with substance abuse issues: A qualitative study of empowerment and collaboration in Norwegian prisons). PhD Thesis, UiO (University of Oslo).
- Konrad EL (1996) A multidimensional framework for conceptualizing human services integration initiatives. *New Direction Evaluation* 69: 5–19. <a href="https://doi.org/10.1002/ev.1024">https://doi.org/10.1002/ev.1024</a>
- Kras KR (2012) Offender perceptions of mandated substance abuse treatment: An exploratory analysis of offender experiences in a community-based treatment program. *Journal of Drug Issues* 43(2): 124–143. <a href="https://doi.org/10.1177%2F0022042612462219">https://doi.org/10.1177%2F0022042612462219</a>
- Kurland J and Zeder J (2001) Coalition building: The promise of government. *The American Journal of Community Psychology* 29: 285–291. https://doi.org/10.1023/A:1010386915400
- Lehman WEK, Fletcher BW, Wexler HK and Melnick G (2009) Organizational factors and collaboration and integration activities in criminal justice and drug abuse treatment agencies. *Drug and Alcohol Dependence* 103: S65–S72. <a href="http://dx.doi.org/10.1016/j.drugalcdep.2009.01.004">http://dx.doi.org/10.1016/j.drugalcdep.2009.01.004</a>
- Levac D, Colquhoun H and O'Brien KK (2010) Scoping studies: Advancing the methodology. *Implementation Science* 5(1): 69. https://doi.org/10.1186/1748-5908-5-69
- Moore R and Hamilton P (2016) "Silo mentalities" and their impact on service delivery in prison-community transitions: A case study of resettlement provision at a male open prison. *The Howard Journal* 55(1–2): 111–130. https://doi.org/10.1111/hojo.12159
- Noordegraaf M, Douglas S, Geuijen K and Van Der Steen M (2019) Weaknesses of wickedness: A critical perspective on wickedness theory. *Policy and Society* 27: 278–297. <a href="https://doi.org/10.1080/14494035.2019.1617970">https://doi.org/10.1080/14494035.2019.1617970</a>
- Orrick EA, Worrall JI, Morris RG, Piquero AR, Bales WD and Wang X (2011) Testing social support theory: A multilevel analysis of recidivism. *Journal of Criminal Justice* 39: 499–508. https://doi.org/10.1016/j.jcrimjus.2011.09.005
- Palamar JJ, Halkitis PN and Kiang MV (2013) Perceived public stigma and stigmatization in explaining lifetime illicit drug use among emerging adults. *Addiction Research and Theory* 21(6): 516–525. <a href="https://doi.org/10.3109/16066359.2012.762508">https://doi.org/10.3109/16066359.2012.762508</a>
- Peters MDJ, Marnie C, Tricco AC, Pollock D, Munn Z, Alexander L, McInerney P, Godfrey CM and Khalil H (2020) Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis* 18(10): 2119–2126. https://doi.org/10.11124/JBIES-20-00167
- Pihl J (2009) Interprofessional cooperation between teachers and librarians: Analysing theoretical and professional arguments for cooperation in an era of globalization. In Holmarsdottir HB and O'Dowd M (eds) *Nordic voices: Teaching and researching comparative and international education in the Nordic countries*: 39–57. Rotterdam, Netherlands: Sense.

- Reeves S and Hean S (2013) Why we need theory to help us better understand the nature of interprofessional education, practice and care. *Journal of Interprofessional Care* Jan 27(1): 1–3. <a href="https://doi.org/10.3109/13561820.2013.751293">https://doi.org/10.3109/13561820.2013.751293</a>
- Reeves S, Lewin S, Espin S and Zwarenstein M (2010) *Interprofessional teamwork for health and social care*. UK: Blackwell Publishing.
- Revold MK (2015) Levekårsundersøkelse blant innsatte 2014- før, under og etter soning (Living conditions among inmates in Norway 2014: Before, under and after prison). *Report 2015/47*. Statistics Norway.
- Rittel H and Webber M (1973) Dilemmas in a general theory of planning. *Policy Sciences* 4: 155–169. https://doi.org/10.1007/BF01405730
- Samele C, Forrester A, Urquía N and Hopkin G (2016) Key successes and challenges in providing mental health care in an urban male remand prison: A qualitative study. *Social Psychiatry and Psychiatric Epidemiology* 51(4): 589–596. https://dx.doi.org/10.1007%2Fs00127-016-1170-2
- Sattler S, Escande A, Racine E and Göritz A S (2017) Public stigma toward people with drug addiction: A factorial survey. *Journal of Studies on Alcohol and Drugs* 78(3): 415–425. <a href="https://doi.org/10.15288/jsad.2017.78.415">https://doi.org/10.15288/jsad.2017.78.415</a>
- Schinkel M (2014) Being imprisoned: Punishment, adaptation and desistance. Glasgow, UK: Palgrave Macmillan.
- Shavit S, Aminawung JA, Birnbaum N, Greenberg S, Berthold T, Fishman A, Busch SH and Wang EA (2017) Transitions clinic network: Challenges and lessons in primary care for people released from prison. *Health Affairs* 36(6): 1006–1015. https://doi.org/10.1377/hlthaff.2017.0089
- Tricco AC, Lillie E, Zarin W, O'Brien K, Colquhoun H, Kastner M, Levac D, Ng C, Sharpe JP, Wilson K, Kenny M, Warren R, Wilson C, Stelfox HT and Straus SE (2016) A scoping review on the conduct and reporting of scoping reviews. *BMC Medical Research Methodology* 16(15). https://doi.org/10.1186/s12874-016-0116-4
- Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, Moher D, et al. (2018) PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine* (October 2). <a href="https://doi.org/10.7326/M18-0850">https://doi.org/10.7326/M18-0850</a>
- Ulfrstad L-M (2011) *Velferd og bolig- Om boligsosial (sam)-arbeid (Welfare and housing- About housing and collaboration*). Oslo, Norway: Kommuneforlaget AS.
- United Nations (2019) World Drug Report.
  - https://wdr.unodc.org/wdr2019/prelaunch/WDR19 Booklet 1 EXECUTIVE SUMMARY.pdf
- Verspuy M and Van Bogaert P (2018) Interprofessional collaboration and communication. In Van Bogaert P and Clarke C (eds) *The organizational context of nursing practice*: 259–278. New York, USA: Springer.
- Weber EP and Khademian AM (2008) Wicked problems, knowledge challenges and collaborative capacity builders in network settings. *Public Administration Review* 68(2): 334–349. https://doi.org/10.1111/j.1540-6210.2007.00866.x
- Willumsen E and Ødegård A (2016) *Tverrprofesjonelt samarbeid- et samfunnsoppdrag 2. utgave* (Interprofessional Collaboration, 2nd ed.). Oslo, Norway: Universitetsforlaget (University Press).
- Wooditch A, Sloas LB and Taxman FS (2017) A multisite randomized block experiment on the seamless system of care model for drug involved probationers. *Journal of Drug Issues* 1: 50–73. https://doi.org/10.1177%2F0022042616678606
- Woodlock M and Narayan D (2000) Social capital: Implications for development theory, research and policy. *The World Bank Research Observer* 15: 225–249. <a href="https://doi.org/10.1093/wbro/15.2.225">https://doi.org/10.1093/wbro/15.2.225</a>
- Yamatani H and Spjeldnes S (2011) Saving our criminal justice system: The efficacy of a collaborative social service. Social Work 56: 53–61. https://doi.org/10.1093/sw/56.1.53

# **Legislation Cited**

Law of Execution of Sentences 2001 (NO). <a href="https://lovdata.no/dokument/NLE/lov/2001-05-18-21">https://lovdata.no/dokument/NLE/lov/2001-05-18-21</a> Law of Labour and Welfare Administration 2006 (NO). <a href="https://lovdata.no/lov/2006-06-16-20">https://lovdata.no/lov/2006-06-16-20</a>

Appendix A
Charting form of included studies

	Authors, year, and geographical origin	Method	Aims	Results
1.	Bond and Gittell (2010) USA	Quantitative self-administrated survey (N = 45)	Explore patterns of relational coordination (RC) among agencies involved in inmate reentry in Massachusetts, using RC as theory	Collaborative approach had not yet been fully achieved in reentry hot spot communities. Serious Violent Offender Reentry Initiative implementation had not produced stronger relationship ties between other social service and criminal justice agencies.
2.	Denton (2014) Australia	Qualitative interviews (N = 18)	Explore the experience of men with co-occurring severe mental illness and substance use disorder leaving prison in Queensland	Need for a review of parole practices. A focus on the provision of comprehensive interventions during prison-to-community transition.
3.	Fletcher et al. (2009) USA	Quantitative exploratory factor analysis ( <i>N</i> = 430) based on Konrad's (1996) framework of interagency activity measure	Develop a better understanding of the types and levels of inter-organizational relationships that exist between drug abuse treatment providers and criminal justice agencies, including prisons, community corrections, and the judiciary	Two levels of collaboration were identified: 1) less structured, informal networking and 2) coordination and more structured and formalized levels of cooperation and collaboration.
4.	Friedmann et al. (2012) USA	Qualitative randomized behavioral trial of collaborative behavioral management (CBM) versus standard parole during 2004–2008: drug use and crime in a given month from calendar interviews 3 and 9 months after parole initiation, and re-arrests from criminal justice administrative data	Determine whether CBM reduces substance use, crime and re-arrest among drug-involved parolees	CBM may reduce substance use among primary marijuana or other "non hard" drug-using parolees without increasing revocations.
5.	Friestad and Kjelsberg (2009) Norway	Quantitative structured personal interviews (computer-assisted) ( <i>N</i> = 225)	Explore psychosocial problems among offenders	80% of those convicted of drug-related crimes were drug users themselves; 63% has been imprisoned before. Collaboration and coordination were important to reach goals. Discharge planning was a central common task that was often neglected.

	Authors, year, and geographical origin	Method	Aims	Results
6.	Gunnison and Helfgott (2017) USA	Qualitative interviews of (N = 40) ex-offenders and community corrections officers were conducted in Washington State to pinpoint what is needed to assist ex-offenders as they reenter society—particularly as it relates to substance abuse and mental health treatment	Identify critical factors that influence reentry of offenders with substance abuse and health problems	Ex-offenders need assistance to address substance abuse and mental health issues while incarcerated and in the community. Results indicated that lack of access to treatment providers to assist ex-offenders are key hindrances identified by ex-offenders in the reintegration process.
7.	Hannaa et al. (2020) USA	Qualitative collection of observational field notes and notes from 28 structured meetings, four focus groups with provider staff, facility staff, and policymakers, and conducted two focus groups with current participants and 10 individual interviews with program graduates	To assess the fit of the Consolidated Framework for Implementation Research (CFIR) to a cross-system initiative, and further to identify key barriers and facilitators to implementation	Despite the differences between stakeholders across both systems there is a common goal of providing treatment to help individuals with their reentry into the community, to maintain sobriety, and to remain out of the criminal justice system.
8.	Hansen (2015) Norway	Qualitative group interview with seven participants, nine individual interviews (offenders), and seven from the correctional service and three from the municipality	Evaluate a program designed to provide integrated services to offenders with drug abuse issues	Incentives are lacking for the development of integrated services. Both the correctional service and the municipalities report on their activities in relation to delimited areas. Inmates' problems are regarded too often as tame problems. People assume to a much too great extent that it is possible to solve the different problems separately.
9.	Hean, Willumsen and Ødegård (2017a) Norway	Qualitative semi-structured interviews ( $N = 12$ )	Explore the characteristics of collaborative practices between mental health and correctional services in a Norwegian context	Services do not engage as expected. Collaborations are unpredictable and resist standardization.
10.	Hean, Willumsen and Ødegård (2017b) Norway	Qualitative semi-structured interviews ( $N$ = 12) (same sample as Hean, Willumsen and Ødegård 2017a)	Propose Change Laboratory Model (CLM) as a tool to support interagency collaborative practice regarding reentry of offenders	The CLM has the potential to affect the integration of services in the interest of the mentally ill offender. Challenges limiting collaboration are logistical issues, limited resources, and differences in professional judgments on referral and confidentiality. CLM needs further testing.
11.	Hean, Ødegård and Willumsen (2017) Norway	Quantitative study using Gittell's RC scale (Bond and Gittell 2010) ( <i>N</i> = 160)	Explore prison officers' perceptions of current and desirable levels of interprofessional collaboration (RC) to understand how collaboration can be improved	Most communication occurs between nurses, social workers, and other prison officers; the least occurs with psychiatrists in mental health and drug services. There is a gap between actual and desirable collaboration.

	Authors, year, and geographical origin	Method	Aims	Results
12.	Kras (2012) USA	Qualitative in-depth interviews with male probationers and parolees ( <i>N</i> = 36)	Explore offenders' perceptions of mandated substance abuse treatment in a community-based treatment program	Parolees clearly demonstrated a lack of agreement with having to participate in aftercare, indicating some important therapeutic connections may be missing for offenders. Understanding the complexities of treatment motivations, sanctioning, and the ever-expanding role of probation and parole officers in the treatment setting will better enable the criminal justice system to use community treatment interventions effectively.
13.	Lehman et al. (2009) USA	Quantitative analysis, ANCOVA (N = 289)	Used systems integration measure developed by Fletcher et al. (2009) to examine its relationship with organizational characteristics and service delivery of adult correctional agencies, from the perspective of correctional administrators	Different correctional settings differed in terms of their collaborative activities with substance abuse treatment agencies. Organizational characteristics that were associated with different levels of collaboration and integration differed across the correctional settings.
14.	Moore and Hamilton (2016) UK	Qualitative semi-structured interviews, eight with prison staff and 23 with prisoners ( $N = 31$ )	Investigate experiences from prisoners and staff working in the resettlement team regarding resettlement	A "silo mentality" was identified within the prison organizational framework among agencies despite a seamless sentence focus.
15.	Orrick et al. (2011) USA	Quantitative study using the Offender-Based Information System from the Florida Department of Corrections ( $N = 49, 420$ )	Explore the connection between social support and recidivism	Mixed support if social support is associated with reoffending. When one form of support is high, another form of support becomes stronger; when one form of support is low, another becomes weaker. Private support is most influential when there is public support as well.
16.	Samele et al. (2016) UK	Qualitative in-depth interviews of prisoners and health care professionals ( <i>N</i> = 28)	Describe an urban male remand prison mental health service and exploring the key challenges and successes, levels of integration and collaboration with other services	The results indicate it was challenging to achieve an integrated system of healthcare because of the numerous internal and external services operating across the prison, a highly transient population, limited time and space to deliver services and difficulties with providing inpatient care (e.g., establishing the criteria for admission and managing patient flow). Collaboration between prison and health care staff was required to enable best care for prisoners.
17.	Shavit et al. (2017) USA	Quantitative baseline data ( <i>N</i> = 750)	Assess the impact of early engagement in primary care and referral from correctional systems to TCN (Transitions Clinic Network) on the use of acute care and recidivism	Results show no significant connection between TCN and recidivism; however, they had fewer acute care visits.

	Authors, year, and geographical origin	Method	Aims	Results
18.	Yamatani and Spjeldnes (2011) USA	Qualitative three-year study, comprising 636 face-to-face interviews of inmates 30 days before release and 30 days after release.	Investigate effects of collaboration-based in-jail services and post-release transitional services provided by Allegheny County Jail Collaborative (ACJC)	Participants of ACJC had 50% lower recidivism than control group. Reintegration after prison requires understanding the complex environmental factors that influence criminal behavior.
19.	Wooditch, Sloas and Taxman (2017) USA	Quantitative study, with sample comprising drug- involved probationers (N = 251) randomized into probation with referral to community treatment or the seamless system of care; key outcomes are examined over a one-year period by recidivism risk level; control group ( $N = 157$ )	Measure the effect of seamless system of care model when it comes to substance and alcohol use	Those in the seamless system of care group had fewer drug use days overall. Model was most effective for those with lower risk offenders.