

# Discharge Pathway Protocol Model of Care for Forensic Intellectual Disability Inpatients

\*Dr. Anand Trivedi<sup>1</sup> and Dr. Abhishek Kumar Gupta<sup>2</sup>

<sup>1</sup>Assistant Professor, Kalinga University, Naya Raipur, Chhattisgarh, India. E-mail: ku.anandtrivedi@kalingauniversity.ac.in, Orcid: <https://orcid.org/0009-0007-8240-391X>

<sup>2</sup>Assistant Professor, Kalinga University, Naya Raipur, Chhattisgarh, India. E-mail: ku.abhishekkumargupta@kalingauniversity.ac.in, Orcid: <https://orcid.org/0009-0001-5653-9932>

#### Article History:

Received: 10.09.2025;  
Revised: 21.10.2025;  
Accepted: 14.11.2025;  
Published: 30.12.2025

#### Abstract

*Delays in discharge and long stays in an inpatient setting continue to be thorns in the flesh of forensic intellectual disability services. The issues of fragmented transition planning, complexity of risk management, and insufficient community coordination often lead to the unreasonable length of stay and discharge inefficiency. This research paper suggests and experiments a structured Discharge Pathway Protocol (DPP) model of care to combine admission-based discharge planning, dynamic risk stratification, a milestone-based rehabilitation objective and a multi-agency transition governance. The outcome of a 12 months service evaluation was compared to that before and after applying the DPP to a low security forensic inpatient unit dealing with intellectual disability within an inpatient unit (n=40 discharges). Findings at the post-implementation showed a decrease in median length of stay (26.5 to 19.0 months), inpatient incident rate (4.2 to 2.9 incidents per 30 days), and mean placement delay (118 to 74 days). The proportion of milestone achievement before discharge rose to 84% and 12-month readmission fell to 15%. The analysis of % change showed that the direction of change was positive and steady on the key service indicators. The evidence indicates that planned, progressive discharge governance could be effective in promoting the efficiency of transitions and rehabilitation congruency within forensic intellectual disability facilities. The offered DPP model provides an adaptable model on how to integrate discharge planning at point of admission and reinforce multi-agency coordination. Additional multi-site confirmation and longitudinal analysis is justified in order to determine reproducibility and long-term effect.*

**Keywords:** Forensic Intellectual Disability, Discharge Pathways, Secure Inpatient Services, Transition Governance, Length of Stay, Rehabilitation Milestones, Service Evaluation.

## Introduction

The provision of forensic inpatient services to people with intellectual disability is plagued with constant problems of long-term hospitalization, delayed discharge, and poor transition procedures. In spite of person-centered and recovery-based models of good inpatient care, discharge planning is not consistent across the services [1]. Specialist rehabilitation services evidence suggests variations in discharge outcomes with a long length of stay frequently correlated with risk complexity and system-wide coordination obstacles [2]. Secure service models serving people with intellectual and developmental disabilities are gradually oriented to systematic rehabilitation forms; the regulations aimed at regular discharge are not yet fully developed [7]. The length of stay has become an important service performance measure, and the risk severity, placement availability, and commissioning delays have been found to be the key predictors of long stay [8][9]. Extended forensic psychiatry literature signifies the significance of systematic promotion systems to lessen idle waiting in safe systems [10]. Although these systemic difficulties are acknowledged, there are no scheduled discharge pathway protocols that target forensic inpatients of intellectual disability that is properly operationalized. Current models of service explain care delivery and rehabilitation principles but offer scanty operational directions on gradual discharge control, quantifiable readiness standards and community mobilization.

The present study adds value to the field in four major aspects: It suggests an institutionalized, gradual Discharge Pathway Protocol (DPP) that is based on admission-linked discharge planning, risk stratification which is dynamically determined, milestone-based rehabilitation mapping and multi-agency transition governance. It also focuses on discharge preparedness by applying measurable service-level metrics in place of the clinical judgement alone. It offers pilot application information of the pre- and post-implementation service results, such as length of stay, frequency of incidents, delay during placement, milestone achievement, and readmission. It provides a scaled governance framework that is flexible throughout the forensic intellectual disability inpatient services. The proposed model will transform discharge planning to an integrated care pathway by seeking to mitigate structural discharge barriers and quantifiable transition outcomes.

The rest of the paper summarizes the literature on the discharge pathways in section 2, secure models of service, determinants of risk, and governance of transition in section 3 then introduces the proposed protocol and its components. Section 4 reports the result with tables and figures, section 5 discuss results of the DPP model and its limitations and section 6 conclude with the summary of key outcomes and future research directions.

## Literature Review

The care pathway models in people with intellectual disability who present with behaviors that challenge are focused on the multi-agency service alignment across the inpatient and community services [12]. The transitional pathway research in forensic service seeks discontinuities in the system during discharge especially when gating a secure unit to community placement [11]. Housing availability, commissioning procedures, and lack of cohesion between inpatient and community teams are the barriers to discharge that are common [16]. Complexity of risk in inpatient populations of forensic intellectual disability has been linked both to long inpatient stay and slow discharge decisions [4][5]. Systemic governance has been shown to be significant in stabilizing secure settings before discharge progression through protocol-driven approaches to reducing inpatient instability, e.g., structured ward-level interventions [6].

Generalized approaches to forensic intellectual disability care focus on equity, recovery agenda, and formal rehabilitation pathways, but do not commonly include specific discharging operationalization structures [13]. The national surveys of community forensic intellectual disability services indicate that there is diversity in the capacity of providing after-discharge support and coordination systems which supports the development of organized discharge governance [14]. Individualized documentation systems and models of communication have also been demonstrated to improve service boundaries continuity of care, especially in secure learning disability units [15]. A study on admission and discharge requirements in mental health facilities indicates that clearly set thresholds and gradual transition planning are necessary to avoiding unwarranted and extended admissions [17]. The role of organizational and systemic variables in clinical presentation in forensic psychiatry is further emphasized by determinants of clinical outcome and length of stay [18]. Most current surveys of the validated outcome measures in intellectual disability groups have underlined the need to have quantifiable functional and behavioral indices in assessing the effectiveness of the services [19]. The importance of easy-to-track milestones of

progress can be shown by structured treatment documentation programs within forensic learning disability units [20].

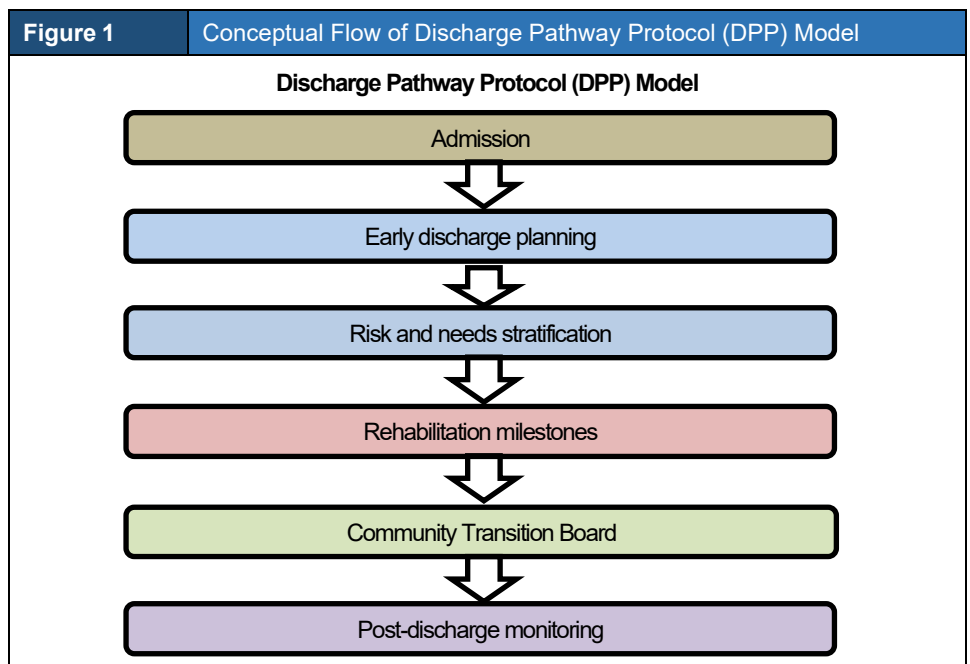
The literature, in general, refers to three enduring problems, namely, an extended inpatient hospitalization, incomplete transition governance, and a lack of formalized discharging procedures specific to the forensic intellectual disability services. Although rehabilitation and secure care models are well explicated, the integrated discharge pathway frameworks in which the staged governance, readiness criteria, and community activation processes are combined are not well developed. This gap is filled by the current research by developing and testing a structured Discharge Pathway Protocol model of care.

## Proposed Discharge Pathway Protocol (DPP) Model

### Model Overview

Discharge Planning Protocol (DPP) is a platform-based, progressive framework aimed at organizing the discharge planning of the forensic inpatients of intellectual disability. The protocol incorporates discharge planning since the point of admission and dynamic risk stratification, rehabilitation milestones, which are measurable, and coordinated multi-agency review as well as the structured post-discharge monitoring. Instead of discharge being a final decision, the model views transition as an ongoing process that is consistent with the objectives of inpatient rehabilitation and community readiness.

It is structured into six stages that are connected by the fact that they are all admission-linked discharge planning, risk and needs stratification, milestone-based rehabilitation planning, transition review governance, community activation, and post-discharge monitoring. The stages work in this order, although one can overlap with another based on the clinical progression and system preparedness. The general layout of the Discharge Pathway Protocol looks like in Figure 1.



### Operational Structure of the Protocol

The planning of discharge starts at the point of admission with an identification of a provisional discharge trajectory, a type of placement and anticipated level of support. Early trajectory mapping is an assurance that inpatient interventions are at par with community capacity and commissioning expectations. Risk stratification is done in a structured manner based on clinical, behavioral and forensic indicators to determine the level of supervision and the intensity of service. Risk classification educates the targets of the rehabilitation and expected discharge conditions. The rehabilitation planning is milestone based where behavioral and functional goals are measured and assessed in frequent multidisciplinary meetings. The milestones evolution is the basis of evidence of transition preparedness

decisions. Formal Transition Review Board assesses readiness to discharge by relying on predetermined criteria. This multi-agency forum consists of inpatient clinicians, community forensic teams, commissioners and housing representatives. The decisions are put down as progression approval, conditional delay or revised milestone planning. When the discharge readiness is established, community activation procedures are put into action, such as confirmation of placement, support package finalization and institutionalized documentation transfer. Monitoring in the post discharge is done at specified intervals of reviews to determine the stability, risk signs and sustainability of placements.

### Governance Framework

DPP is a shared governance model that focuses on accountability both in inpatient and community services. The decision thresholds, reviewing schedules, documentation requirements are well established so as to limit the variability in discharge decisions. The framework will make sure that discharge is made on the basis of proved behavioral stability and functional progress and environmental readiness and not just on the availability of bed or external pressure.

### Results

#### Sample and Evaluation Period

The results of service outcomes were contrasted between two 12-month periods, before (Pre-Dismissal of the Discharge Pathway Protocol, Pre-DDP; n = 20 discharges) and after (Post-Dismissal of the Discharge Pathway Protocol, Post-DDP; n = 20 discharges) implementation of the Discharge Pathway Protocol. All participants were adults who had intellectual disability and were discharged out of a low security forensic inpatient unit. The readmission was determined as re-admission to any forensic intellectual disability inpatient service within 12 months of discharge.

#### Service-Level Outcome Comparison

Comparative outcomes before and after implementation of the DPP are presented in Table 1.

Table 1 Outcome Indicator	Service Outcomes Pre- and Post-DPP Implementation		
	Pre-DPP (n = 20)	Post-DPP (n = 20)	% Change
Median Length of Stay (months)	26.5	19.0	↓ 28.3%
Incidents per 30 inpatient days	4.2	2.9	↓ 31.0%
Milestone Completion Prior to Discharge (%)	62%	84%	↑ 35.5%
Mean Days from Readiness Decision to Placement	118	74	↓ 37.3%
12-Month Readmission Rate	30%	15%	↓ 50.0%

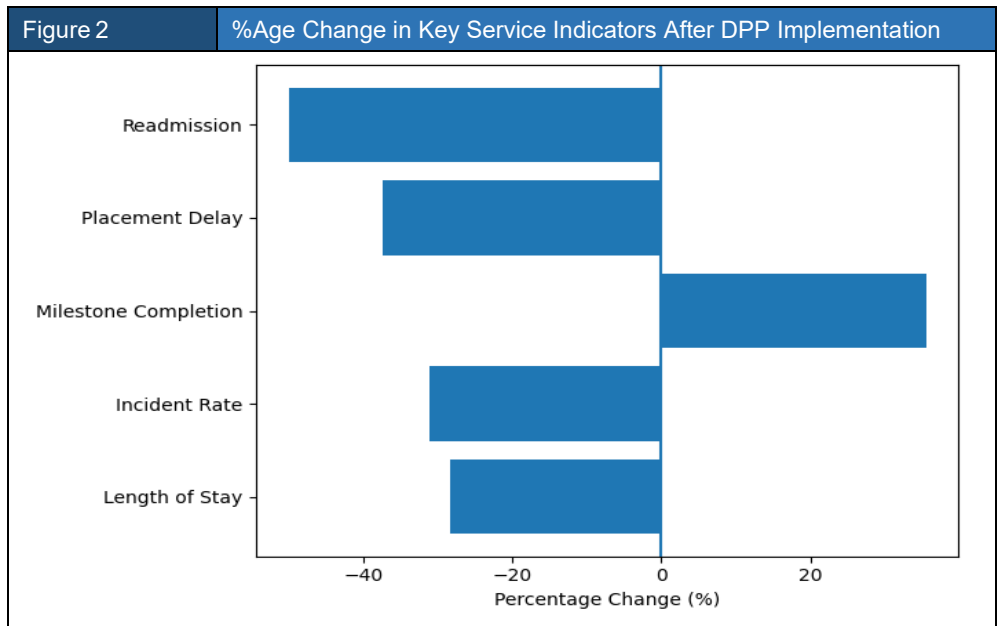
The upward (↑) and downward (↓) arrows indicate the direction of change from pre-implementation to post-implementation and do not represent statistical significance.

Table 1 also indicates that median length of stay was reduced to 19.0 months after implementation as compared to 26.5 months before implementation. The frequency of incidence decreased by 4.2 to 2.9 per 30 inpatient days. The %age of rehabilitation milestones achieved before the discharge improved by 62 to 84. The average post-discharge readiness decision to confirmed placement reduced to 74 days as opposed to 118 days. The post implementation period saw the 12-month readmission rates decrease by 30 % to 15 %.

#### %age Change Across Indicators

The magnitude and direction of change across key service indicators are illustrated in Figure 2.

Figure 2 illustrates %age change in the outcome domains in the post-implementation of the protocol. The greatest proportional decrease was in 12-month readmission (-50.0%), then placement delay (-37.3%), and incident rate (-31.0%). The median stay of the time reduced by 28.3%. There was an improvement of 35.5% in the milestone completion in the post implementation period.



### Post-Implementation Discharge Stage Durations

The duration of pathways stages was analyzed as a mean to analyse the efficiency of discharge pathways during the post-implementation period.

Pathway Stage	Mean Duration (Days)
Admission to Initial Discharge Plan	14
Risk Stratification Review Cycle	30
Milestone Progression to Readiness	120
Transition Board Decision to Placement Confirmation	52
Placement Confirmation to Physical Discharge	22

Table 2 shows the mean time spent in each stage of discharge pathway during the post-implementation period. Rehabilitation milestone progression phase recorded the highest period of time (120 days). The mean duration between confirmation of the decision of the transition board and the confirmation of the placement was 52 days. The average time spent on administrative processing and final discharge preparation was 22 days in the post-implementation.

### Discussion

The results reveal that the implementation of the Discharge Pathway Protocol (DPP) results in some significant improvements in several indicators at the service level. Decreased length of stay, inpatient incidence, placement delay and also readmission indicate that the organized discharge planning can be used in increasing the transition effectiveness and pathway continuity in the process of forensic intellectual disability services. The identified decrease in the time of placement is consistent with the previous evidence that indicated discharge bottlenecks in terms of service fragmentation and commissioning constraints [16]. Incorporating discharge trajectory planning at admission and codifying multi-agency review systems, the DPP model would seem to overcome the coordination barriers that are commonly reported in forensic and intellectual disability inpatient facilities [12][14].

The structured transition governance element has the potential to minimize ambiguity in the decision-making process of discharge preparedness that is linked to extended inpatient hospitalization in forensic settings [8][9]. There is enhanced completion of milestone before discharge and this poses a strong association between rehabilitation goals and transition readiness. This result aligns with rehabilitation-oriented secure service models that put special weight on the structured progression frameworks [3][7]. In the same way, the lower readmission rate can be a sign of increased preparation of the discharge and better communication channels that have been suggested as essential determinants of post-discharge stability [11]. The simulated architecture of the DPP model is aligned to the wider

forensic psychiatry models of practice that focus on the ordered advancement and responsibility [10], and the operationalization of discharge-specific governance in the intellectual disability offers.

The protocol provides a systematic alternative to discharge processes whose main drivers are bed pressure or crisis management through risk stratification, measurable milestones, and community activation processes. There are a number of limitations that should be considered. The test was also only done on one service with a fairly small sample of discharges, which made the results difficult to generalize. There was no inferential statistical testing of the results. Also, readmission period was limited to 12 months, and long-term stability was not analyzed. Causal attribution is not absolute since it is a service-level pilot assessment.

## Conclusion

This paper introduced and tested a model of care Discharge Pathway Protocol (DPP) of forensic inpatient intellectual disability. Service-level analysis of comparative results showed a decrease in median length of stay (26.5 to 19.0 months), inpatient incident rate (4.2 to 2.9 incidents per 30 inpatient days), and average placement delay (118 to 74 days) after the implementation. The %age of milestone achievement before discharge rose to 84 % and 12-month readmission reduced to 15 %. All these results suggest that there are quantifiable changes in discharge efficiency, alignment in rehabilitation, and stability in short-term transition. The DPP model conceptualizes discharge planning as a governance-based process with phases starting at admission up to the post-discharge period of monitoring.

The protocol includes the use of early trajectory mapping, structured risk stratification, rehabilitation targets based on milestones, and multi-agency transition review to offer a scalable framework of discharge delays reduction in the forensic intellectual disability service. Despite the results being based on a one-service pilot model with descriptive assessment, the results in the key performance indicators reductions can be used to further justify multi-sites. Further studies need to include an inferential analysis, extended follow-up time, and comparative application at different levels of security to measure the reproducibility and the long-term effects.

## References

1. Burrows, Lisa, Georgia Page, Elena Plugaru, Bridie Kent, Mahesh Odiyoor, Sujeet Jaydeokar, Jonathan Williams, Kevin Elliot, Richard Laugharne, and Rohit Shankar. "Ideal models of good inpatient care for adults with intellectual disability: Lessons from England." *International Journal of Social Psychiatry* 69, no. 4 (2023): 814-822. <https://doi.org/10.1177/00207640221140290>
2. Devapriam, J., H. Fosker, V. Chester, S. Gangadharan, A. Hiremath, and R. T. Alexander. "Characteristics and outcomes of patients with intellectual disability admitted to a specialist inpatient rehabilitation service." *Journal of Intellectual Disabilities* 24, no. 1 (2020): 21-34. <https://doi.org/10.1177/1744629518756698>
3. Williams, Jonathan, Saman Shahzad, Mizla Manandhar-Richardson, Sujeet Jaydeokar, Vicky Bramwell, Adam Garland, Christine Hutchinson, and Mahesh Odiyoor. "Rehabilitation for adults with an intellectual disability and mental health and behavioural complexities: A scoping review." *British Journal of Learning Disabilities* 52, no. 4 (2024): 589-610. <https://doi.org/10.1111/bld.12581>
4. Clarke, Sadie, Andy Smith, Verity Chester, Elizabeth Patteril, and Regi Alexander. "Implementing the what I need (WIN) plan in a community forensic intellectual disability team." *Advances in Mental Health and Intellectual Disabilities* 19, no. 2 (2025): 87-97. <https://doi.org/10.1108/AMHID-08-2024-0024>
5. Quinn, Sam, Sarah Rhynas, Susan Gowland, Lois Cameron, Nicola Braid, and Siobhán O' Connor. "Risk for intellectual disability populations in inpatient forensic settings in the United Kingdom: A literature review." *Journal of Applied Research in Intellectual Disabilities* 35, no. 6 (2022): 1267-1280. <https://doi.org/10.1111/jar.13030>
6. de Villiers, Jana, and Lorraine Johnstone. "When the ward is the patient: Using the PRISM protocol to understand and reduce violence in an inpatient intellectual disability setting." *Criminal behaviour and mental health* 34, no. 2 (2024): 134-143. <https://doi.org/10.1002/cbm.2318>
7. McKinnon, Iain, Arman Iranpour, Anne Charlton, Ellen Green, Faye Groom, Oliver Watts, Danielle McKenna, and Simon Hackett. "Models of care in secure services for people with

intellectual and developmental disability: Implementing the Walkway to Wellness." *Criminal Behaviour and Mental Health* 34, no. 2 (2024): 144-162. <https://doi.org/10.1002/cbm.2328>

8. Jaydeokar, Sujeet, Kevin Hochard, Esra Bakiler, Claire Swithenbank, Christine Hutchinson, and Mahesh Odiyoor. "Factors associated with the length of inpatient stay of individuals with intellectual disability and autistic individuals across North of England." *Advances in Mental Health and Intellectual Disabilities* 19, no. 2 (2025): 73-86. <https://doi.org/10.1108/AMHID-11-2023-0041>
9. McKenna, Penelope, Rosie England, Carmen Fadzelmulla-Moreno, Paul A. Thompson, Harm Boer, and Peter E. Langdon. "Factors associated with length of hospital stay for forensic psychiatric inpatients with intellectual disabilities." *Journal of Applied Research in Intellectual Disabilities* 38, no. 3 (2025): e70065. <https://doi.org/10.1111/jar.70065>
10. Kennedy, Harry G. "Models of care in forensic psychiatry." *BJPsych advances* 28, no. 1 (2022): 46-59. <https://doi.org/10.1192/bja.2021.34>
11. Livanou, Maria, Swaran P. Singh, Fani Liapi, and Vivek Furtado. "Mapping transitional care pathways among young people discharged from adolescent forensic medium secure units in England." *Medicine, Science and the Law* 60, no. 1 (2020): 45-53. <https://doi.org/10.1177/0025802419887287>
12. Roy, Ashok, Peter Baker, and Sue Carmichael. "Care pathways for people with intellectual disabilities who present with behaviours that challenge." *Tizard Learning Disability Review* 25, no. 3 (2020): 99-107. <https://doi.org/10.1108/TLDR-07-2020-0016>
13. Duff, M., W. Paki, (Waikato, Te Arawa, Ngaaruahine), R. Butler, C. McSweeney, and B. McKenna. "The development of a forensic intellectual disability model of care: Synergy to achieve equity." *International Journal of Forensic Mental Health* 22, no. 4 (2023): 302-313. <https://doi.org/10.1080/14999013.2023.2178555>
14. McKinnon, Iain, Ellen Whitehouse, Melissa Harris, Vlad Ciausiu, Jane McCarthy, and Rory Sheehan. "A UK-wide survey of community forensic services for adults with intellectual disability and/or autism." *BJPsych Open* 10, no. 5 (2024): e148. <https://doi.org/10.1192/bjo.2024.734>
15. Potgieter, Francois, Aimee Daly, Sian Jackett, and Sandy Vale. "Improving communication and person-centred care: a combined personal passport in a low secure learning disability service." *Tizard Learning Disability Review* 30, no. 4 (2025): 234-263. <https://doi.org/10.1108/TLDR-07-2025-0024>
16. Glasby, Jon, Robin Miller, Anne-Marie Glasby, Rebecca Ince, and Frederick Konteh. "'Why are we stuck in hospital?' Barriers to people with learning disabilities/autistic people leaving 'long-stay' hospital: a mixed methods study." *Health and Social Care Delivery Research* 12, no. 3 (2024): 1-119.
17. Evans, Nicola, Deborah Edwards, and Judith Carrier. "Admission and discharge criteria for adolescents requiring inpatient or residential mental health care: a scoping review." *JBI Evidence Synthesis* 18, no. 2 (2020): 275-308. <https://doi.org/10.11124/JBISRIR-2017-004020>
18. D'Orta, Isabella, Kerstin Weber, François R. Herrmann, and Panteleimon Giannakopoulos. "Determinants of clinical outcome and length of stay in acute care forensic psychiatry units." *BMC psychiatry* 23, no. 1 (2023): 264. <https://doi.org/10.1186/s12888-023-04748-2>
19. Kumar, Mrityunjai, Indermeet Sawhney, Verity Chester, Regi Alexander, James Mitchell, and Rohit Shankar. "Outcome Measures in intellectual disability: A Review and narrative synthesis of validated instruments." *International Journal of Social Psychiatry* 71, no. 2 (2025): 239-253. <https://doi.org/10.1177/00207640241291517>
20. Amiola, Ayomipo, Holly Anna Marler, Carly Weeks, Vanessa Barnes, and Regi Alexander. "The Ten-Point Treatment Programme: Design and Evaluation of an Easy Read Document in a Forensic Learning Disability Unit." *BJPsych Open* 10, no. S1 (2024): S9-S10.