

# A realist evaluation of an enhanced court-based liaison and diversion service for defendants with neurodevelopmental disorders

Eddie Chaplin<sup>1</sup>  | Jane McCarthy<sup>2,3</sup>  | Karina Marshall-Tate<sup>4</sup> |  
Salma Ali<sup>5</sup> | Denise Harvey<sup>1</sup>  | Jessica Childs<sup>6</sup> | Kiriakos Xenitidis<sup>7</sup> |  
Samir Srivastava<sup>4</sup> | Iain McKinnon<sup>8</sup>  | Louise Robinson<sup>9,10</sup> |  
Clare S. Allely<sup>11</sup>  | Sally Hardy<sup>12</sup>  | Andrew Forrester<sup>13</sup> 

<sup>1</sup>Institute of Health and Social Care, London South Bank University, London, UK

<sup>2</sup>University of Auckland, Auckland, New Zealand

<sup>3</sup>King's College London, London, UK

<sup>4</sup>South London and Maudsley NHS Foundation Trust, London, UK

<sup>5</sup>West London NHS Trust, London, UK

<sup>6</sup>HMP Whitemoor, March, UK

<sup>7</sup>Medical Member, HM Courts and Tribunals Service, London, UK

<sup>8</sup>Newcastle University, Newcastle upon Tyne, UK

<sup>9</sup>Lancashire and South Cumbria NHS Foundation Trust, Preston, UK

<sup>10</sup>University of Manchester, Manchester, UK

<sup>11</sup>University of Salford, Manchester, UK

<sup>12</sup>NICHE Anchor Institute, University of East Anglia, East Anglia, UK

<sup>13</sup>Cardiff University, Cardiff, UK

## Correspondence

Eddie Chaplin, 103 Borough Rd, London SE10AA, UK.

Email: [chapline@lsbu.ac.uk](mailto:chapline@lsbu.ac.uk)

## Abstract

**Background:** In England, court-based mental health liaison and diversion (L&D) services work across courts and police stations to support those with severe mental illness and other vulnerabilities. However, the evidence around how such services support those with neurodevelopmental disorders (NDs) is limited.

**Aims:** This study aimed to evaluate, through the lens of court and clinical staff, the introduction of a L&D service for defendants with NDs, designed to complement the existing L&D service.

**Methods:** A realist evaluation was undertaken involving multiple agencies based within an inner-city Magistrates' Court in London, England. We developed a logic model based on the initial programme theory focusing on component parts of the new enhanced service, specifically training, screening, signposting and interventions. We conducted semi-structured interviews with the court staff, judiciary and clinicians from the L&D service.

**Results:** The L&D service for defendants with NDs was successful in identifying and supporting the needs of those

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2023 The Authors. Criminal Behaviour and Mental Health published by John Wiley & Sons Ltd.



**Funding information**

Guy's and St Thomas' Charity, Grant/Award Number: MAJ150703

defendants. Benefits of this service included knowledge sharing, awareness raising and promoting good practice such as making reasonable adjustments. However, there were challenges for the court practitioners and clinicians in finding and accessing local specialist community services.

**Conclusion:** A L&D service developed for defendants with NDs is feasible and beneficial to staff and clinicians who worked in the court setting leading to good practice being in place for the defendants. Going forward, a local care pathway would need to be agreed between commissioners and stakeholders including the judiciary to ensure timely and equitable access to local services by both defendants and practitioners working across diversion services for individuals with NDs.

**KEYWORDS**

alcohol and substance use, court liaison and diversion, criminal justice, mental disorder, neurodevelopmental disorders, service evaluation

## 1 | INTRODUCTION

This paper presents a realist evaluation (RE) of the introduction of a specialist neurodevelopmental disorders (NDs) liaison and diversion (L&D) service to complement an existing L&D service. In England, L&D services work across courts and police stations to identify and support those with severe mental disorder and other vulnerabilities. They focus on identification, assessment, prioritisation of need and screening; additionally, they may provide advice, referral, short-term interventions, outcome follow-ups, monitoring and safeguarding (NHS England, 2019). NDs is an umbrella term for different developmental conditions typically characterised by impaired cognitive, social or motor function (McCarthy et al., 2023). Examples include intellectual disability (ID), autism spectrum conditions (ASC) and attention deficit hyperactive disorder (ADHD). These conditions are more vulnerable to mental, physical and other neurodevelopmental comorbidities (Hughes-McCormack et al., 2017) and present differently between individuals and within and across each disorder.

The inherent difficulties and vulnerabilities that are a feature of NDs can make the criminal justice (CJ) system challenging to navigate. For example, people with NDs are more likely to have difficulties with working memory, maintaining attention in social situations, understanding abstract information such as timelines and dates and difficulties with comprehension and retention of information (written and verbal). They will have health comorbidities that mask or take away focus from NDs (Fleming et al., 2020). The current system without support can unintentionally make people with NDs more vulnerable in court which can lead to, for example, poor understanding of systems and rights such as how to access a solicitor, appeals and request reasonable adjustments. These difficulties and vulnerabilities in following court proceedings may mean that defendants with NDs are excluded from active and informed participation and experience poorer outcomes than other defendants (Forrester et al., 2023). An example may be that an individual with an ID does not fully understand their sentence and expectations in terms of meeting licence (bail) conditions and the consequences of non-compliance (Chester et al., 2023). In the absence of expertise to identify individuals with NDs within courts, there is an increased possibility that they will be sent to prison rather than be diverted to hospital or community care (McCarthy et al., 2016). In prison, these difficulties often continue

where individuals may not have access to treatment programmes or they are referred to programmes that they are unable to understand or engage in (Wakeling & Ramsay, 2020), thereby minimising their opportunity for rehabilitation and parole (*R (Gill) v Secretary of State for Justice [2010] EWHC 364 (Admin)* cited in Straw & Lomri, 2010).

## 2 | METHOD

### 2.1 | Realist evaluation

RE (Pawson & Tilley, 1997) was developed due to the limitations associated with traditional empirical research where human factors acted as confounders in the different contexts in which we operate—that is, what might work for one team in one service may not work for another team in a different service (Pawson et al., 2004). RE focuses on the mechanisms that operate in settings that drive the outcomes in a given context.

### 2.2 | Enhancing the court mental health liaison and diversion service

The specialist ND L&D service comprised one full-time Forensic Mental Health Practitioner (FMHP), a part-time consultant psychiatrist, a forensic psychologist and a registered nurse. This team aimed to build upon the expertise of the current mental health L&D service by increasing the recognition of NDs among defendants through screening and clinical assessment and to assist decision-making on sentencing and disposal. Examples include advice on offender risk management and community-based sentences, in line with national policy to reduce admission of people with ID or autism into hospitals (NHS England, 2015) and to help establish agreed care pathways to improve the health and engagement of offenders with NDs.

### 2.3 | The initial programme theory

The initial programme theory asserts that the existing L&D service will acquire expertise in NDs by training a practitioner to screen and provide access to specialist psychiatric, psychological and nursing inputs for NDs. A logic model was developed based upon the initial programme theory and identified the teams' inputs, expected outputs and short-, medium- and long-term outcomes expected of the ND part of the service (see Figure 1). The ND service's main functions were:

- awareness raising and a programme of training across the local CJ system
- screening/signposting for offenders with ND
- to develop a community group for defendants
- to influence the development of local pathways for this population.

A hypothesis using the context–mechanism–outcome (CMO) configuration to evaluate the new model was generated as follows:

The Judiciary and gaolers (C) attend training about detecting and meeting the needs of defendants with ND (M) and make more referrals to the ND service (O).

Defendants with suspected NDs (C) are screened and assessed by FMHP and ND practitioners (M) and they get equitable access to L&D (O).

Defendants who self-identify and/or positively screen for NDs (C) can be referred to a ND specialist psychiatrist and registered nurse in learning disability or a psychologist (M) who can diagnose and assess their needs and

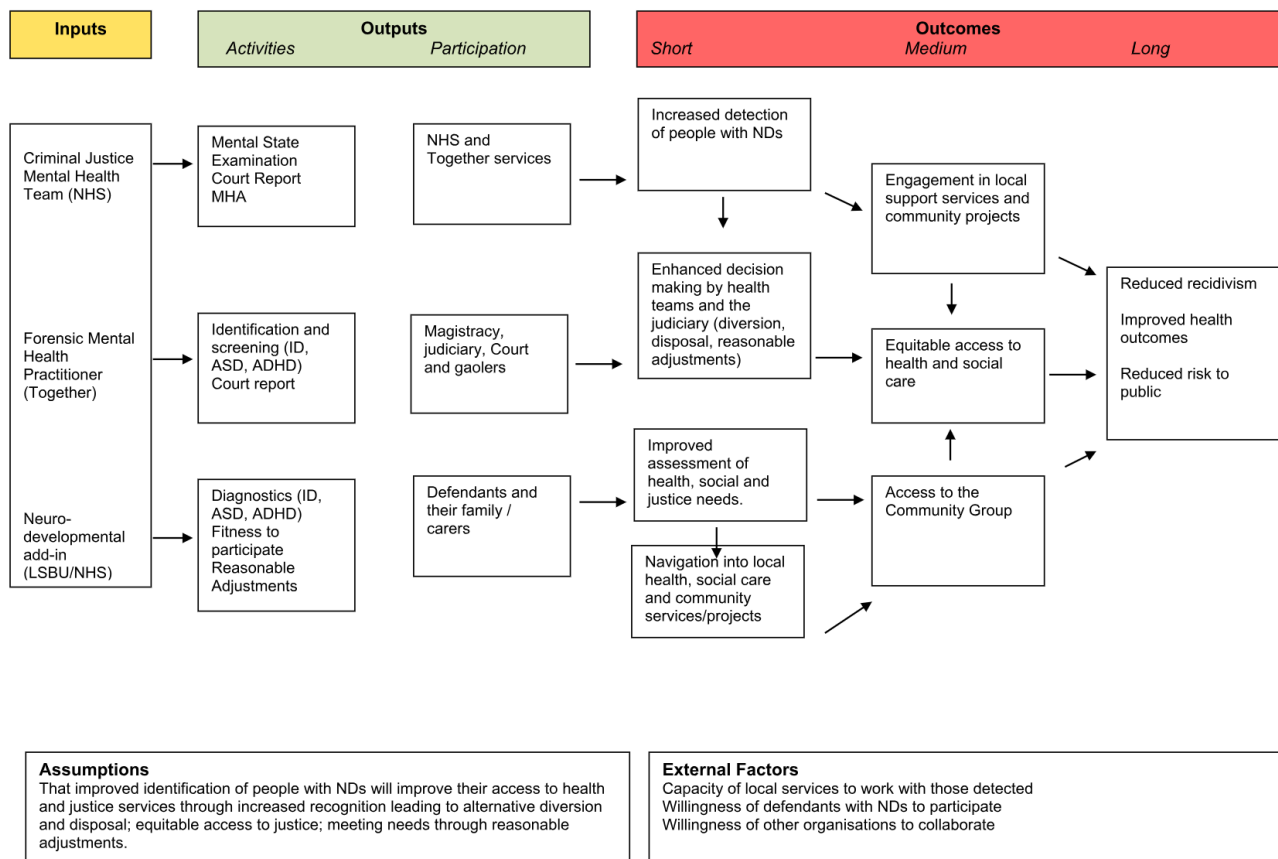


FIGURE 1 Logic model ND service. ND, neurodevelopmental disorder.

make recommendations to the Court about diversion, disposal and reasonable adjustments (O) in line with good practice.

Defendants with NDs are invited to attend a Community Group (C) to provide care navigation and psycho-social support (M) to increase engagement with services, provide peer support and reduce recidivism (O).

The existing L&D service assessed 452 cases in the 18 months before the start of the new specialist ND service and 829 cases from the start of the service in the following 18 months.

## 2.4 | Evaluation questions, objectives and focus

This evaluation focused on the effectiveness of the component parts of the enhanced service; (i) training and awareness raising; (ii) screening and (iii) signposting and interventions. Specifically, which of these component parts worked for whom, in which context and why?

## 3 | DATA COLLECTION

Data were collected using semi-structured interviews, secondary analysis of existing data and field notes/reflective practice sessions from the clinical team, researchers and steering group meetings.

The interviews were conducted over 10 months between March and December 2019. Interviewees were purposively selected and invited to voluntarily attend an interview at their place of work. Verbal consent to participate in the interviews and for subsequent data to be used to inform the evaluation and publication was given by participants. The interviewees were staff members from both the L&D team and the wider court and included representatives

from the judiciary, solicitors and probation. Recruitment was via meetings and followed up by email. The interviewing of defendants and members of the community group was abandoned due to poor levels of attendance which would have meant the researcher was unable to guarantee anonymity even with the removal of all personal data.

Demographic and clinical data are routinely collected by the L&D service as part of the National Minimum Mental Health Data Set (NMHDS) in England. This was used to conduct a secondary analysis of clinical characteristics, rates of referrals and the number of defendants with NDs using the service before and during the new service. The assessments consisted of valid and reliable clinical assessment tools and clinician-rated outcome measures. These ranged from brief screening questionnaires, such as the Rapid Assessment of Potential Intellectual Disability (RAPID) (Ali & Galloway, 2016) to screen for ID, the Autism Quotient-10 (AQ-10) to screen for autism spectrum disorder (see Booth et al., 2013) and the Adult ADHD Self-Report Scale (ASRS) to screen for ADHD (Adler et al., 2006), to full diagnostic assessments (Chaplin et al., 2021).

The clinicians and researchers met approximately every 6 weeks to discuss cases, the rollout of the programme and troubleshoot any issues as they arose. Additionally, steering group meetings were held quarterly to advise on the rollout of the enhanced service. Action notes from these meetings were used in this evaluation. A topic guide for the semi-structured interviews was devised by the project team and content and face validity were tested on colleagues. Within the interview candidates were questioned on the following areas, their role, their current assessment regime, knowledge of assessment and screening and areas and ideas for improvement of the service for defendants with NDs.

### 3.1 | Data analysis

All seven interviews were recorded, transcribed and analysed in NVivo 12 using Thematic Analysis. A coding framework was developed and used to check for a coherent pattern and revised to ensure an accurate representation of the interviews and emergent themes. KMT did the primary analysis and coding with EC cross-checking these before defining and naming themes.

### 3.2 | Reflexivity

The interviewers were KMT and SA. EC examined all transcripts that had been coded. Analysis was regularly shared for comment and advice from the wider research team and steering group giving a broader perspective of the study. In completing the analysis, IMc and SH who were experienced qualitative researchers completed a final check on codes and key themes.

### 3.3 | Awareness of social setting and the social 'distance' between the researcher and the researched

Prior assumptions and experience of the researchers can shape the data collected. The specialist ND service contained members of the research team, with the two interviewers (KMT and SA) employed as academics but also providing clinical input into the court. The interviews were conducted in court face to face. Although providing clinical input, the researchers were still guests, which was respected.

### 3.4 | Fair dealing

The study was designed to involve participants from a wide range of stakeholders in the court. All interviews were regarded the same as to their potential contribution in identifying the views and experiences of participants. Our strategy was to get participants who represented the different court agencies and include key roles within the specialist ND service.

### 3.5 | Awareness of wider social and political context

The research team comprised specialist ND clinicians from psychiatry, nursing and psychology working or who have worked in the CJ system and/or forensic services. Within the court environment, participants engaged in the research process. The community group, however, had a different outcome with no interviews completed. Our reflections on this as a group led us to revisit and seek new opinions of and from individuals with ND who had had experience appearing in court and the wider CJ system.

### 3.6 | The role of the research team as collaborators in knowledge production

During the research process, the roles of the research team varied. Besides meetings between interviewers, there were clinical meetings and regular steering group contact. The steering group formed the basis of the research group with specialists in qualitative research, the CJ system, mental health and NDs.

### 3.7 | Potential for psychological harm

Members of the research team involved with the community group were sensitive to inadvertently causing anxiety along with potential issues of risk and disclosure of unknown criminal activity. At the end of the group sessions, a debriefing took place; given the brief window of operation and participants declining to be interviewed, this was not an issue.

## 4 | RESULTS

Seven staff representing the Court pathway, who were part of the new service or existing key stakeholders exposed to the project were interviewed. These included the FMHP, three clinical specialists employed to support the enhanced service, a member of the probation service, the lead District Judge from the court and the project lead. There were no representatives from the custody suite as they declined to be interviewed.

### 4.1 | Characteristics of the defendants

The rate of defendants with NDs remained stable during both time frames at 9.5%. However, a comorbid diagnosis of more than one ND decreased with defendants seen in the new service receiving a single primary diagnosis of a ND. The defendants with NDs in the specialist service were found to have multiple health, social and financial needs that required further intervention as detailed in Table 1. This included high needs understandably around social and communication difficulties, but also needs around substance misuse, alcohol misuse and accommodation. Some of the defendants with NDs were in contact with health and social care services before attending Court but at a lower level than would be expected against their identified needs such as access to speech and language services (see Table 1).

Those without ND were more likely to have had previous contact with L&D services 33.8% ( $n = 187$ ) compared to those with ND 20.9% ( $n = 14$ ).

**TABLE 1** Neurodevelopmental disorder defendants' support needs and service use.

Needs	Total
Related to ID	10.3% (n = 8)
Social and communication difficulties	38.5% (n = 30)
Alcohol misuse	22.1% (n = 17)
Substance misuse	35.9% (n = 28)
Physical health	8% (n = 7)
Accommodation	18.2% (n = 14)
Financial need	6.4% (n = 5)
Service use	
Autism services	23.2% (n = 16)
Speech and language services	7.5% (n = 5)
Social services	11.6% (n = 8)

Abbreviation: ID, Intellectual Disability.

## 4.2 | Findings from the semi-structured interviews with clinicians, judiciary and court staff

### 4.2.1 | Training

Clinicians from the specialist ND service were expected to be able to deliver training to staff at the court including the judiciary, gaolers and FMHPs. This was done using short presentations about the needs of this population with slots allocated within existing staff meetings in turn making it impossible to quantify numbers. The gaolers could not commit to receiving the training and withdrew from the programme.

At the interview, many participants reported that they did not consider themselves to be knowledgeable about NDs and relied on the expertise of the practitioners and clinicians from the enhanced service to discuss defendants' CJ and neurodevelopmental needs; they said that training was important but that it was rarely given. For those staff who did not specialise in NDs, there was a fear of the unknown and a sense of knowing that things needed to be done differently for this population but not knowing what to do.

### 4.2.2 | Screening

There were benefits and challenges in using the screening tools to identify individuals with NDs as part of the ND service. Practitioners reported the screening tools' benefit as a quantitative measure to boost recommendations to the court. However, they also reported difficulties administering them in a frenetic environment. Within the court, there was a feeling that serious mental illness such as psychosis, or risks such as suicide, often took priority over other needs such as ND or the screening process.

There was a sense that the specialist service model helped staff to think more about identifying people with a ND and recognising that they could fall through the gaps in services. To assist in identifying those suspected of ND, the FMHP of the ND service had a relevant degree including team supervision and joint working with specialist ND clinicians.

The challenges faced by implementing screening were identified in the reflective practice meetings and discussed further with the project steering group. This enabled a new iteration of practice to evolve, whereby FMHPs received additional training on how people may present with ND to discern the most appropriate screening to undertake if they suspected the presence of ND and to offer further assessment to those who self-identify with a ND.

### 4.2.3 | Signposting and intervention/outcomes

Participants spoke of how they thought they had influenced outcomes for defendants through sentencing and determining probation following the implementation of the specialist service. There was a belief from some that they had prevented inappropriate prison sentences. Participants spoke about the benefits of the service in raising awareness about the needs of defendants with ND and recognising that many staff do not have the requisite knowledge or skills to meet their needs. The specialist ND service was said to have bridged that gap allowing staff to think about those needs and get guidance about ways to approach this vulnerable group. They spoke about the key advantages of the enhanced service to Court and legal professionals to think about their first communications and additional challenges that this population face. The specialist ND Service was reported to add value to existing services through additional knowledge of local resources, support through case discussions and thinking about how to adapt information for the defendants. Another advantage identified was related to opportunities for defendants with NDs to be considered for alternatives to prison and increased liaison with community services.

### 4.2.4 | Community services and findings from the community group

Court practitioners found that there was little community support for defendants with ND. They highlighted difficulties in finding and securing community teams to support defendants. Despite needing support, most failed to meet the eligibility criteria, which was often cited as a reason to not provide a service. This on occasion left the court practitioners trying to coordinate care or getting into lengthy 'battles' to secure a service.

Changes to and the loss of community services were also seen as contributing to developing and maintaining criminogenic behaviours in people with mental health difficulties and with ND. By not being eligible for mental health or other support services, those with a mental health and neurodevelopmental dual diagnosis are often only seen in crisis where behaviours linked to crime have increased as the person reaches crisis. Often, at this point, although eligible for services, there are often arguments and/or disagreement as to which community service should provide this support, which often causes further delay.

The recognition of the lack of available community services, coupled with an understanding that the needs of this population had to be met led to the setup of the community group open to all defendants with ND. The community group was set up by a registered learning disability nurse with support from specialists within the ND service. Meetings were held weekly, and referrals were accepted by self-referral and from court staff including solicitors, probation and L&D service. Attendance was voluntary and recruitment was an issue with only two referrals received by the community group. Member 1 attended two sessions and then stopped. The second member enjoyed the 'group' and wanted to stay on; however, as no other referrals were made, the community group stopped and member 2 was transferred to an alternative mental health promotion group that they still attend. Both community group members dissented from their data being used for evaluation and this was destroyed.

## 4.3 | Findings from data using evaluation of context—mechanism—outcomes (CMOs)

Table 2 summarises the evaluation findings based on the data collected against the initial programme theory and CMOs. The initial programme theory did not work for all stakeholders within the Court environment and adjustments were made. The subsequent iterations have been used to refine the programme theory and a new set of CMOs have been used to describe a service model that can be implemented.

The lack of uptake of training meant that new strategies were adopted including 'live advice to other agencies in the court'. Screening was also another area that required adapting following implementation with decisions made on



TABLE 2 CMO evaluation.

CMO configurations	What worked for whom	Where did it work?	Why did it work?	Iteration	Evaluation
The Judiciary and gaolers (C) attend training and/or presentation and information sharing events about identifying defendants with ND (M) and make more referrals to the L&D service (O).	The CMO did not work for the Judiciary or the trainers.	Training cannot be given without approval from the Judicial College. The time frames for approval fell outside of the project timelines for the initial planned training. The gaolers declined to participate citing acuity, resource implications and being part of an externally contracted organisation to the court.	The context did not allow the training to go ahead as planned. Therefore, the mechanism could not be enacted to lead to the desired outcome. The context and mechanism can be changed.	The training was adapted: Alternative presentation was given to the Judiciary and other court staff about the needs of people with NDs. The Judiciary and CJS staff integrated the ND team into existing meetings. Cases were then discussed and advice sought. This afforded opportunities for referrals to be made, ND 'teachable moments' to be given and active signposting to specialist services in the community made.	The ND practitioners (C) attend existing court meetings with Judiciary, gaolers, L&D (C) to provide 'live' advice and information about NDs (M) so that improvements are made in identifying, referring, sharing information and making more referrals to the L&D (O).

(Continues)

TABLE 2 (Continued)

CMO configurations	What worked for whom	Where did it work?	Why did it work?	Iteration	Evaluation
Defendants with suspected NDs (C) are screened and assessed by specialist ND practitioners (M) and they get equitable access to L&D (O).	The context and mechanism did not work for defendants or specialist practitioners. Identifying defendants with NDs improved access to L&D.	Carrying out three ND screens in addition to the existing assessment was not possible because it took too long; defendants found them difficult to understand; the court was too busy; defendants were not fit to complete it that is, aggressive, violent; suicide. The court is busy and often defendants would be called up mid-way through assessment. Defendants found the questions difficult to understand (AQ10) or could not see the point in answering them (all). Acuity—violence, suicide. Mental and physical health acuity tool priority was replaced by a process of referral and identification by the FMHP.	The frenetic nature of the court meant that blanket screening all defendants for three neurodevelopmental disorders did not work for the FMHPs. The mechanism was not operational within the court environment.	We cannot change the court setting but we can change the screening process (M). FMHPs were trained to detect possible signs of each neurodevelopmental disorder to then discern the most appropriate screening tool to use.	FMHPs had knowledge, skills, and clinical autonomy to determine the most appropriate screening tool to use. Practitioners liked the notion of a score as it held power of persuasion within the court and with the Judiciary. Judiciary had confidence to apply changes and make reasonable adjustments to improve access to L&D. Defendants with suspected NDs (C) are screened and assessed by specialist ND practitioners using the most appropriate screening tool (M) and they get equitable access to L&D (O).

TABLE 2 (Continued)

CMO configurations	What worked for whom	Where did it work?	Why did it work?	Iteration	Evaluation
Defendants who self-identify and/or positively screen for NDs (C) can be referred to a specialist psychiatrist and registered nurse or psychologist (M) who can diagnose and assess their needs and make recommendations to the court about diversion, disposal, and reasonable adjustments (O) in line with good practice.	This worked sometimes for some defendants and specialist clinicians. Some defendants did not want to receive a diagnosis. Clinicians could not do full diagnostic assessment due to environmental and time constraints; poor engagement and not attending assessment(s). Judiciary requires clinical information to inform due process.	Full diagnostic assessment not possible within the busy and confined environment of the court. Defendants wanted to get out as quickly as possible—Not a therapeutic environment.	The mechanism did not work in the court environment.	The mechanism was tweaked to take account of confines of Court setting and defendants' preferred options. Making a clinical diagnosis was not possible; however, clinical impressions could be made based on clinical interview and collateral evidence gathered from local health and social care services. Recommendations were made to the court based on these findings and in line with good practice.	Practical recommendations and advice were given about communication needs, comprehension, mental capacity and reasonable adjustments required to support due process in the court. Defendants who self-identify and/or positively screen for NDs (C) can be referred to a specialist psychiatrist and registered nurse or psychologist (M) who assess their needs and make recommendations to the court about fitness to participate; diversion; disposal and reasonable adjustments (O) in line with good practice.

(Continues)

TABLE 2 (Continued)

CMO configurations	What worked for whom	Where did it work?	Why did it work?	Iteration	Evaluation
Defendants with NDs are invited to attend a Community Group (C) to provide care navigation and psycho-social support (M) to increase engagement with services, provide peer support and reduce recidivism (O).	The Community Group did not work as intended.	It worked outside of the court in a neutral area (local outpatients department). One attendee enjoyed the sessions and found them useful, however, declined for their data to be used in the research evaluation.	Neither the context nor the mechanism worked. Defendants were given information leaflets about the Community Group and could decide to follow this up by themselves or not. Only two defendants asked to be referred to the Community Group. One declined to return after two sessions. The second enjoyed the sessions and was integrated into a mainstream group as an alternative.	The research team need to establish why the Community Group was not successful and what experts by experience would like.	Focus group held with experts by experience from national charity. This will be reported upon separately.

Abbreviations: CJS, criminal justice service; CMO, context–mechanism–outcome; FMHPs, Forensic Mental Health Practitioners; L&D, liaison and diversion; ND, neurodevelopmental disorder.

undertaking screening for a ND from accompanying information or presentation that might suggest the presence of a ND. Those who self-identified as having a ND were signposted for further assessment. Although a full diagnostic assessment was problematic within the court environment, signposting to specialists did mean needs could be identified and support put in place.

## 5 | DISCUSSION

This RE has shown the potential benefits of the specialist service for defendants with NDs in raising awareness and promoting good practice across the court by a range of personnel including the FMHP, Judiciary and Court staff about the needs of defendants with ND. Special measures were put in place to support these defendants, including reasonable adjustments and adjustments to communication during court proceedings that have enhanced the service. In some cases, this has been thought by participants to have directly influenced the defendant's outcome by diverting them from prison. There have been a plethora of reports and studies about defendants with NDs that have highlighted the risks of not identifying this population (Bradley, 2009; Talbot & Jacobson, 2010). Expert consensus recommends going a step further to ensure that once identified, this population then has access to specialist practitioners to provide ongoing advice and recommendations to the courts about health and social care needs and risk management (Chaplin et al., 2017). This RE indicates that enhancing existing L&D services with ND expertise can achieve this.

Screening tools were an integral part of the work of the specialist ND service. However, implementation was challenging given the frenetic environment of a court and levels of acuity. Other barriers included the length of time to complete, perceived oversensitivity, cultural misunderstanding and item phraseology. This is an issue, particularly for those with ID who may have limited vocabulary and cognitive impairments. Aside from the RAPID ID screen, both the AQ-10 and ASRS versions used were not validated on ID populations. Hayes' studies on the development, standardisation and validation of an ID screening tool for the CJ system first demonstrated that screening is viable (Hayes, 2002). Following Hayes, new screens have been developed in the CJ system for those people with ID. These include the Learning Disability Screening Questionnaire (McKenzie et al., 2012) in prison and ID screening within the Metropolitan Police Services' custody suites in the HELP-PC study (McKinnon & Finch, 2018). That said, this model relied on practitioners screening for multiple NDs including ID with each defendant contact. It is therefore possible to see how that would take more time to complete and be less tolerable to defendants and practitioners. The approach to screening was to only screen where there was previous evidence of a ND or was suspected from the individual's presentation. Future iterations could consider this approach further and offer increased training for practitioners to be able to decide which screening tool may be most appropriate for each defendant rather than a blanket approach of all three screens. This will allow FMHPs to complete basic screening and be more precise when referring for a full assessment. The screening tools did provide authoritative scores that were influential when requesting reasonable adjustments to the court process or sentencing recommendations to solicitors and judges.

Training and guidance were considered by those involved to be essential to assist mainstream staff in understanding how ND can affect individuals across their daily lives and specifically how that can impact processes and procedures within the court. Procedural barriers made delivering formal face-to-face training a challenge; however, benefit was found in having specialists present in key operational meetings of the court. This enabled specialist practitioners and general health and court staff to discuss individual cases and/or provide guidance on adapting communication and making reasonable adjustments. This advisory role has been described as paramount to supporting those with specific NDs through the CJ system (Dickie et al., 2018; King & Murphy, 2014; Talbot & Jacobson, 2010; Young et al., 2013).

A key theme to emerge from the analysis was the difficulty the L&D team had identifying NDs and accessing specialist ND services before the introduction of the specialist ND service. For court practitioners who do not work in the field of ID or autism and where neurodevelopmental pathways have not been established, it can be a

challenge to find and refer to specific services (statutory or third sector). If a referral is made it may be rejected as the teams may lack one of the specialist skills in either forensic or neurodevelopmental care. The specialist ND Service sought to support court and criminal justice service (CJS) practitioners and defendants with NDs accessing statutory community health services that met their needs. Commissioning health and social care services to meet the needs of offenders with NDs through specialist teams or shared pathways is paramount to ensure that needs are met and that individuals do not fall through gaps in services (NICE, 2018), although evidence of the development of such services is limited.

Although it was expressed by participants that there was a lack of perceived community services for the ND group, the community group set up failed to attract referrals. This may have been for several reasons including attendance being voluntary. Meetings post the research study with an ID offender user groups, talking about this specific issue suggested that in their experience, more groundwork needs to be done to gain the trust of local communities who may not understand this type of support network. The thematic analysis also identified that many community services were no longer available. A systematic review of the impact of austerity on people with an ID found evidence of cuts to services and that funding was no longer aligned with individuals' needs. This affected their health and well-being with increased social isolation and decreased support (Malli et al., 2018).

## 6 | STRENGTHS, LIMITATIONS AND FUTURE DIRECTIONS

The strengths of this evaluation lie in its approach of working within the local context and seeking to understand how elements of the programme theory worked at individual and service levels. A diverse range of professionals spanning different organisations were involved in the interviews capturing a broad perspective from across court-based CJSs. However, we were not able to capture a full picture of the service users experience of the new service, thereby limiting the view on the success of the service to the staff perspective. One of the main limitations is that we did not also collect data on the detail of the existing service to make a before and after comparison of what was happening previously in terms of identification and reasonable adjustments but the feedback from those working in the court was that this new ND service led to improvements in awareness of those defendants with a ND alongside better adjustments, for example, around communication. There are limitations to the study given the single location, sample size and that key members of the sample population were not interviewed, for example, the defendants from the community group, making a full evaluation not possible. The research team have since sought to establish further viewpoints from these findings (Chaplin et al., 2022). Based on the findings of this RE, a refined programme theory was developed with recommendations for consideration as below in future planning of specialist ND services being based on existing L&D services or could be provided in a 'Hub and Spoke' model scaled up and reaching numerous L&D services in one geographical area.

1. Local commissioners and specialist health services (C) agree on a pathway between neurodevelopmental and forensic health services for defendants, to include a neurodevelopmental FMHP (M) to enable timely and effective identification, interventions and signposting across the CJS (O).
2. Staff from the court (health, judicial, probation, gaolers and others) (C) attend regular presentation and information-sharing events about identifying defendants with NDs and making reasonable adjustments (M) and make referrals to the enhanced service (O).
3. Forensic neurodevelopmental practitioners (C) attend local CJS meetings to provide advice, signposting and recommendations about meeting the health and justice needs of defendants with NDs and offer supervision to the neurodevelopmental FMHP (M) to move toward equitable access (O).
4. Defendants suspected of showing signs of NDs (C) are screened and assessed by L&D neurodevelopmental practitioners (M) to improve equitable access to L&D services (O).

5. Defendants who self-identify and/or positively screen for NDs (C) are referred to a specialist psychiatrist, registered nurse or psychologist who can assess their needs (M) and make recommendations to the court about diversion, disposal and reasonable adjustments (O) in line with good practice.

## 7 | CONCLUSION AND RECOMMENDATIONS

This RE set out to determine whether the introduction of an enhanced service to meet the needs of defendants with NDs was effective at (i) awareness raising; (ii) screening and (iii) signposting and interventions. It has demonstrated that the presence of staff with expertise in NDs in the court and with the L&D team has raised awareness about the needs of this population and their inherent vulnerability in navigating CJ service processes and procedures. This has improved the CJ staff's confidence to work with this population and provide interventions to meet their needs and maintain public safety. CJ staff have also reported benefits through instruction on adjustments to communication and an improved understanding of how these disorders may present themselves. It is felt that these benefits are transferable to other Magistrate courts, although some adjustment to how it is implemented may be required given variations in resources across the country.

Screening for ND occurred in the court but was not always acceptable to those completing them. To this end, future screening would benefit from a more streamlined approach with targeted screening for a disorder rather than blanket screening for all NDs. The benefits of having a tangible score to present to judges/members of the CJ staff was viewed as positive in requesting and getting reasonable adjustments for defendants with ND. Signposting and interventions have been partially successful but highlighted difficulties in accessing statutory and voluntary services. The scope of this evaluation has meant that the reasons for this have not been evaluated; however, the thematic analysis and literature review imply that barriers stem from eligibility criteria, team skills and the possible effects of austerity on the availability of social care and community services for individuals with NDs. The implementation of such a specialist service in other court settings would require further evaluation involving multiple courts across different geographical locations to ascertain if the development of such a specialist service impacts the experience and outcomes for individuals with NDs.

### ACKNOWLEDGEMENTS

This study 'Early Intervention and Assessment of Intellectual Disabilities and Autism in Court' was funded by Guy's & St. Thomas' Charity, Guy's Hospital, London Principal Investigator (PI) Awarded April 2017, Reference No. MAJ150703.

### CONFLICT OF INTEREST STATEMENT

The authors declared no potential conflicts of interest concerning the research, authorship and/or publication of this article.

### DATA AVAILABILITY STATEMENT

The data is owned by NHSE and Together and was only available to us for the duration of the study. Qualitative data was not approved by interviewees for sharing.

### ETHICS STATEMENT

Ethical approval was not indicated. This is a service evaluation, using existing data, routinely collected as a component of service delivery at South London and Maudsley and Central and Northwest London NHS Foundation Trusts.

### PATIENT CONSENT STATEMENT

Not applicable.

## CLINICAL TRIAL REGISTRATION

Not applicable.

## ORCID

Eddie Chaplin  <https://orcid.org/0000-0002-2865-1070>

Jane McCarthy  <https://orcid.org/0000-0002-4702-1939>

Denise Harvey  <https://orcid.org/0000-0003-1933-2622>

Iain McKinnon  <https://orcid.org/0000-0002-5760-9824>

Clare S. Allely  <https://orcid.org/0000-0001-7640-9505>

Sally Hardy  <https://orcid.org/0000-0002-7752-9602>

Andrew Forrester  <https://orcid.org/0000-0003-2510-1249>

## REFERENCES

- Adler, L. A., Spencer, T., Faraone, S. V., Kessler, R. C., Howes, M. J., Biederman, J., & Secnik, K. (2006). Validity of pilot Adult ADHD Self-Report Scale (ASRS) to rate adult ADHD symptoms. *Annals of Clinical Psychiatry*, 18(3), 145–148. <https://doi.org/10.1080/10401230600801077>
- Ali, S., & Galloway, S. (2016). Developing a screening tool for offenders with intellectual disabilities—The RAPID. *Journal of Intellectual Disabilities and Offending Behaviour*, 7(3), 161–170. <https://doi.org/10.1108/JIDOB-01-2015-0001>
- Booth, T., Murray, A. L., McKenzie, K., Kuenssberg, R., O'Donnell, M., & Burnett, H. (2013). Brief report: An evaluation of the AQ-10 as a brief screening instrument for ASD in adults. *Journal of Autism and Developmental Disorders*, 43(12), 2997–3000. <https://doi.org/10.1007/s10803-013-1844-5>
- Bradley, K. J. C. B. (2009). *The Bradley report: Lord Bradley's review of people with mental health problems or learning disabilities in the criminal justice system*. Department of Health London.
- Chaplin, E., Lord Keith Bradley, T. R. H., McCarthy, J., & Forrester, A. (2022). Court liaison and diversion services for people with neurodevelopmental conditions: A House of Lords consensus meeting. *Medicine, Science and the Law*, 62(4), 252–253. <https://doi.org/10.1177/00258024221121620>
- Chaplin, E., McCarthy, J., & Forrester, A. (2017). Defendants with autism spectrum disorders: What is the role of court liaison and diversion? *Advances in Autism*, 3(4), 220–228. <https://doi.org/10.1108/aia-08-2017-0018>
- Chaplin, E., McCarthy, J., Marshall-Tate, K., Ali, S., Xenitidis, K., Childs, J., Harvey, D., McKinnon, I., Robinson, L., Hardy, S., Srivastava, S., Allely, C. S., Tolchard, B., & Forrester, A. (2021). Evaluation of a liaison and diversion Court Mental Health Service for defendants with neurodevelopmental disorders. *Research in Developmental Disabilities*, 119, 104103. <https://doi.org/10.1016/j.ridd.2021.104103>
- Chester, V., Tharian, P., Slinger, M., Varughese, A., & Alexander, R. T. (2023). Overview of offenders with intellectual disability. In J. M. McCarthy, R. T. Alexander, & E. Chaplin (Eds.), *Forensic aspects of neurodevelopmental disorders: A clinician's guide*. Cambridge University Press.
- Dickie, I., Reveley, S., & Dorrity, A. (2018). The criminal justice system and people on the autism spectrum: Perspectives on awareness and identification. *Journal of Applied Psychology and Social Science*, 4(1), 1–21.
- Fleming, M., Salim, E. E., Mackay, D. F., Henderson, A., Kinnear, D., Clark, D., King, A., McLay, J. S., Cooper, S. A., & Pell, J. P. (2020). Neurodevelopmental multimorbidity and educational outcomes of Scottish schoolchildren: A population-based record linkage cohort study. *PLoS Medicine*, 17(10), e1003290. PMID: 33048945; PMCID: PMC7553326. <https://doi.org/10.1371/journal.pmed.1003290>
- Forrester, A., McKinnon, I., & Srivastava, S. (2023). Criminal justice pathways and neurodevelopmental disorders. In J. M. McCarthy, R. T. Alexander, & E. Chaplin (Eds.), *Forensic aspects of neurodevelopmental disorders: A clinician's guide*. Cambridge University Press.
- Hayes, S. C. (2002). Early intervention or early incarceration? Using a screening test for intellectual disability in the criminal justice system. *Journal of Applied Research in Intellectual Disabilities*, 15(2), 120–128. <https://doi.org/10.1046/j.1468-3148.2002.00113.x>
- Hughes-McCormack, L. A., Ryzewska, E., Henderson, A., MacIntyre, C., Rintoul, J., & Cooper, S. (2017). Prevalence of mental health conditions and relationship with general health in a whole-country population of people with intellectual disabilities compared with the general population. *BJPsych Open*, 3(5), 243–248. <https://doi.org/10.1192/bjpo.bp.117.005462>
- King, C., & Murphy, G. H. (2014). A systematic review of people with autism spectrum disorder and the criminal justice system. *Journal of Autism and Developmental Disorders*, 44(11), 2717–2733. <https://doi.org/10.1007/s10803-014-2046-5>



- Malli, M. A., Sams, L., Forrester-Jones, R., Murphy, G., & Henwood, M. (2018). Austerity and the lives of people with learning disabilities. A thematic synthesis of current literature. *Disability and Society*, 33(9), 1412–1435. <https://doi.org/10.1080/09687599.2018.1497950>
- McCarthy, J., Chaplin, E., Underwood, L., Forrester, A., Hayward, H., Sabet, J., Young, S., Asherson, P., Mills, R., & Murphy, D. (2016). Characteristics of prisoners with neurodevelopmental disorders and difficulties. *Journal of Intellectual Disability Research*, 60(3), 201–206. <https://doi.org/10.1111/jir.12237>
- McCarthy, J. M., Alexander, R. T., & Chaplin, E. (2023). Introduction. In J. M. McCarthy, R. T. Alexander, & E. Chaplin (Eds.), *Forensic aspects of neurodevelopmental disorders: A clinician's guide*. Cambridge University Press.
- McKenzie, K., Michie, A., Murray, A. L., & Hales, C. (2012). Screening for offenders with an intellectual disability: The validity of the Learning Disability Screening Questionnaire. *Research in Developmental Disabilities*, 33(3), 791–795. ISSN 08914222. <https://doi.org/10.1016/j.ridd.2011.12.006>
- McKinnon, I., & Finch, T. (2018). Contextualising health screening risk assessments in police custody suites: A qualitative evaluation from the HELP-PC study in London, UK. *BMC Public Health*, 18(1), 393. <https://doi.org/10.1186/s12889-018-5271-6>
- NHS England. (2015). Building the right support: A national plan to develop community services and close inpatient facilities for people with a learning disability and/or autism who display behaviour that challenges, including those with a mental health condition. <https://www.england.nhs.uk/wp-content/uploads/2015/10/ld-nat-imp-plan-oct15.pdf>
- NHS England. (2019). Liaison and diversion standard service specification. <https://www.england.nhs.uk/wp-content/uploads/2019/12/national-liaison-and-diversion-service-specification-2019.pdf>
- NICE. (2018). Learning disabilities and behaviour that challenges: Service design and delivery. NICE guideline 93. NICE. <https://www.nice.org.uk/guidance/ng93>
- Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2004). Realist synthesis: An introduction. *ESRC Research Methods Program*, 2, 55.
- Pawson, R., & Tilley, N. (1997). An introduction to scientific realist evaluation. In E. Chelmsky & W. R. Shadish (Eds.), *Evaluation for the 21st century: A handbook* (pp. 405–418). Sage.
- Straw, A., & Lomri, S. (2010). Public law update: Failing prisoners with learning disabilities. *Criminal Law and Justice Weekly*, 174, 292–293.
- Talbot, J., & Jacobson, J. (2010). Adult defendants with learning disabilities and the criminal courts. *Journal of Learning Disabilities and Offending Behaviour*, 1(2), 16–26. <https://doi.org/10.5042/jldob.2010.0416>
- Wakeling, H., & Ramsay, L. (2020). Learning disability and challenges in male prisons: Programme screening evaluation. *Journal of Intellectual Disabilities and Offending Behaviour*, 11(1), 49–59. <https://doi.org/10.1108/jldob-09-2019-0017>
- Young, S., Goodwin, E. J., Sedgwick, O., & Gudjonsson, G. H. (2013). The effectiveness of police custody assessments in identifying suspects with intellectual disabilities and attention deficit hyperactivity disorder. *BMC Medicine*, 11(1), 248. <https://doi.org/10.1186/1741-7015-11-248>

**How to cite this article:** Chaplin, E., McCarthy, J., Marshall-Tate, K., Ali, S., Harvey, D., Childs, J., Xenitidis, K., Srivastava, S., McKinnon, I., Robinson, L., Allely, C. S., Hardy, S., & Forrester, A. (2023). A realist evaluation of an enhanced court-based liaison and diversion service for defendants with neurodevelopmental disorders. *Criminal Behaviour & Mental Health*, 1–17. <https://doi.org/10.1002/cbm.2315>