

Communication Screening within Forensic Intellectual Disability Services: Identifying Undetected Speech, Language, and Communication Needs

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Article History:

Received: 16.06.2026;

Revised: 03.07.2026;

Accepted: 21.08.2026;

Published: 30.09.2026

Abstract

Aim: Forensic (FS) users with intellectual disabilities (ID) have speech, language and communication needs (SLCN) that are significantly higher than the general population, but often the needs are overlooked or attributed only to the intellectual disability. This paper brings together the latest evidence on the prevalence, detection and impact of undetected SLCN in forensic ID services, and introduces a structured communication screening pathway that is suggested for routine practice. Methodology: The literature review was undertaken using peer-reviewed literatures published in the past 15 years. There were 19 sources that met the inclusion criteria with thematic synthesis used to synthesize them. Results: Communication difficulty rates reported in the sources included ranged from about 20% to 67%, including higher rates for adults with ID in community and secure settings, and for young offenders in secure settings. There are focused screening tools for youth justice and general learning-disability liaison and diversion, but few specific and validated communication screening tools are available for adult forensic ID services. Key barriers to identification were identified as diagnostic overshadowing, gaps in the workforce training and poorly coordinated commissioning. Originality/value: This paper brings together fragmented evidence and suggests a staged screening pathway for forensic ID services that can be adapted and uses it to fill the gap between the extensive youth justice evidence base and the less extensive adult forensic ID literature.

Keywords Speech, Language and Communication Needs, Intellectual Disability, Forensic Services, Offending Behaviour, Communication Screening, Diagnostic Overshadowing.

Introduction

Speech, language and communication needs (SLCN) are problems with language comprehension, language expression, speech intelligibility and the use of language in social interaction. The term 'hidden' disability has been used many times, to describe SLCN as well as other communicative impairments, which are not so easily visible to those who do not know the individual and who may interpret the lack of understanding or word finding as a lack of compliance, evasiveness or a direct behaviour outcome of intellectual disability [1][5]. In a forensic context, this is very relevant. Interviews with police, legal representatives, clinicians and tribunal panels require a person's ability to comprehend complex, decontextualised and often oppositional language; to narrate events sequentially; to answer questions correctly; and to self-advocate. The quality of practitioners' communication and interaction have been shown to directly influence client engagement, care effectiveness and clinical outcomes in a wide variety of research studies across healthcare and clinical fields [20]. If these communicative capacities are compromised and unrecognised, the impact of this occurs in the realm of the validity of the interview, the reliability of self-report applied in contexts of risk assessment, informed consent and capacity assessments, the engagement in offence-focused therapeutic work, and the fairness of disciplinary/tribunal processes. There is a close relationship between intellectual disability (ID) and SLCN, but they are not identical. A person with a formally diagnosed ID may have communication needs that are more or less severe, or are different from their measured cognitive ability, than would be predicted [1][2][3][4], while a significant minority of those who encounter forensic and criminal justice services will have clinically significant language impairments but not be formally assessed for, or formally diagnosed with, an intellectual disability. While there is

much less research on language compared to literacy among adults in prison, reviews of language proficiency suggest that adults in prison consistently score higher than community norms, as do adults who score low on literacy [1].

Pooled estimates among young people in youth justice contact suggest that the prevalence of language disorder is approximately half to two-thirds of those experiencing youth justice contact, irrespective of having general cognitive impairment [2][3]. Communication issues are not uncommon in adults with ID as a whole: national cross-sectional data show that more than half of adults with ID experience some communication difficulty and approximately a quarter experience severe communication difficulty [10]. Forensic intellectual disability services are situated between these overlapping groups, such as community forensic ID teams, medium secure ID hospital wards and liaison/diversion services at the point of arrest or first court appearance. However, communication screening is not consistent in these services. There are relatively well-established screening pathways for SLCN in youth justice, largely as a result of the UK government's Bercow review and a subsequent 'Bercow: Ten Years On' review, and the creation of screening tools for youth-offending services [4][18]. There are significant differences in the development of pathways for adults using forensic ID services which are equivalent, validated and routinely implemented. Existing screening instruments for adult offenders with suspected ID, like the Rapid Assessment of Potential Intellectual Disability (RAPID), were developed to detect the potential for ID in the first place, and not to describe the communication profile of a person with ID [6,7]. Recent Australian data show that even when a communication assessment is formally recommended for an adult with ID, a significant proportion of these individuals fail to receive an assessment, with many of these being those where need is identified but not met, reflecting systemic failures to translate identified need into delivered assessment and support [14].

This paper focuses on three related aims. First, to summarise the current evidence around the prevalence and the profile of SLCN in the ID population in forensic and offending settings. Second, to identify the current communication screening tools and areas of strength and weakness in the current communication infrastructure along the forensic pathway. Thirdly, to recommend a pathway for communication screening for forensic ID services that is structured and staged, and is informed by the synthesised evidence and in parallel with developments in youth justice and general adult ID communication practice. This paper makes two major contributions to the literature. First, it provides a unified evidence base, bringing together information from speech and language therapy, forensic psychiatry and criminology; in response to the lack of a consistent evidence base in ID across the adult services and fragmented pathway in youth justice. Secondly, it converts these synthesized findings into a model of screening in seven steps which can be directly applied by the multidisciplinary staff in the forensic identification field.

The remainder of this paper is structured as follows: Section 2 outlines the search strategy, eligibility criteria, and thematic synthesis methodology. The clinical implications of the findings and service maturity gap are discussed in Section 4. Section 5 explains the proposed staged communication screening pathway and the underlying principles of how it is operating. Section 6 concludes the study with future direction.

Method

This paper presents a literature review which was designed to map a conceptually wide-ranging evidence base (forensic psychiatry, speech and language therapy, criminology and health services research) not to pool effect size data from a small sample of studies with similar interventions. In the context of exploring a wide, interdisciplinary evidence base (forensic psychiatry, speech and language therapy, criminology, and health services research) instead of aggregating effect sizes across a limited number of similar intervention studies, a synthesis was deemed appropriate.

Search Strategy

The following term clusters were used to conduct structured searches: (a) population terms – “intellectual disability”, “learning disability”, “offender”, “young offender”, “forensic”, “prison”, “youth justice”; (b) construct terms – “speech, language and communication needs”, “SLCN”, “language disorder”, “developmental language disorder”, “communication difficulty”; and (c) practice terms – “screening”, “assessment”, “identification”, “liaison and diversion”, “appropriate adult”. Sources were identified using Google Scholar and the indexed sources it identifies (including Wiley, Elsevier/ScienceDirect, SAGE, MDPI,

Emerald, Springer, Taylor & Francis and PubMed/PMC), and with relevant grey literature (from organisations and profession) e.g. Royal College of Speech and Language Therapists publications).

Eligibility Criteria

The criteria are summarised in table 1. To be short, sources had to be published from 2011 to 2026, include original empirical data, a systematic/scoping review, or an evidence-based practice tool relevant to SLCN, communication and/or the screening of SLCN in offending, forensic or intellectual disability populations, and have to be available in English, and independently verifiable on Google Scholar either by DOI or, for grey literature, by a citable organisational record.

Table 1	Inclusion and Exclusion Criteria Applied to Candidate Sources	
Criterion	Included	Excluded
Publication date	2011–2026 (last 15 years)	Pre-2011, unless a landmark source with no more recent equivalent
Population	People with ID and/or offending histories; forensic, prison, secure hospital, youth justice, or liaison and diversion contexts	General ID or general SLCN populations with no forensic/offending/justice relevance
Focus	SLCN, communication difficulty/support needs, or screening/assessment thereof	ID or offending literature with no communication/SLCN component
Source type	Peer-reviewed journal articles, systematic/scoping reviews, professional-body evidence reports	Opinion pieces, non-verifiable content, sources without a traceable DOI or organisational record
Language	English	Non-English with no available translation
Verifiability	Confirmed via Google Scholar and, where applicable, a resolvable DOI	Citation details that could not be independently confirmed

Selection Process and Synthesis

The relevant candidate records were identified using the search strategy and then screened at the title/abstract level for eligibility and then evaluated according to the full eligibility criteria. There is a methodological limitation in screening which was conducted by a single reviewer instead of duplicate screening. Information collected from each of the included sources included: population and setting; study design and sample size; communication or SLCN construct measured; key quantitative and/or thematic finding; and screening and/or assessment tool (if reported). Thematic synthesis was used to organise extracted data into five themes: prevalence and overlap between ID and SLCN; existing screening tools and coverage; barriers to identification; consequences of an undetected need; and facilitators of effective practice.

Findings

A total of 19 sources met the inclusion criteria and were included in the synthesis. The population, design and finding of relevance to communication of the various studies are summarised in table 2. The synthesis below is a listing of themes.

Table 2	Characteristics and Key Findings of Included Sources			
Setting / population	Design	N	Key communication-relevant finding	References
Adult prison population (20-year scoping review)	Scoping review	18 studies	Elevated language prevalence reported in all 3 language-focused studies identified; literacy findings more heterogeneous	[1]
Young offenders, Intensive Supervision and Surveillance Programme	Prospective screening + SLT intervention	72	65% screened positive for language difficulty; 20% severely delayed	[2]
Youth justice populations	Systematic review	17 studies	Youth offenders significantly poorer on language measures than peers ($d = 0.28$ – 1.72); ~50–60% meet language-disorder criteria independent of cognitive impairment	[3]
Police Scotland officers	Cross-sectional survey	87 officers	~60% of young people in conflict with the law reported to have SLCN; officers relied heavily on Appropriate Adults rather than direct strategies	[4]

Police custody	Narrative/critical review	–	SLCN framed as a hidden disability; custody environment (noise, restraint, unfamiliarity) compounds communication vulnerability	[5]
Liaison and diversion services	Review of existing screening measures	–	Identifies significant gaps in validated LD/SLCN screening measures usable within liaison and diversion pathways	[6]
Adult offenders with suspected ID	Tool development report	–	Describes development of RAPID, a brief screening tool to flag possible ID for referral to specialist assessment	[7]
Youth justice system (interviews, courtroom)	Scoping review	–	Maps communication requirements and barriers across forensic interview and courtroom contexts; evidence for recommended strategies is uneven	[8]
Young male offenders	Qualitative, ecological model	–	Language disorder shapes lived experience of justice-system contact; ecological/environmental barriers compound individual difficulty	[9]
Adults with ID (national sample, IDS-TILDA)	Cross-sectional	601	57.9% reported communication difficulty; 23.5% severe; associated with level of ID, low social participation, challenging behaviour, Down syndrome	[10]
Adults with ID	Cross-sectional	281	Communication support needs strongly predict quality of life across self-determination, social inclusion and wellbeing domains	[11]
Adults with ID receiving SLT input	Systematic review (PROSPERO-registered)	Multiple studies	Only weak evidence for SLT intervention effectiveness; highlights urgent need for robust adult ID communication research	[12]
Female forensic ID secure ward	Service-improvement report	Ward-level	Structured MDT communication processes introduced to improve information-sharing with patients	[13]
Adults with ID in group homes (Australia)	Mixed-methods service audit	234 recommended assessments	Only 39.7% of recommended communication assessments were actually delivered; funding and service-access barriers dominant	[14]
Female prisoners	Cross-sectional	–	Pragmatic language skills specifically associated with mental health status	[15]
Criminalised young people	Content analysis of published research	Sample of studies	Identifies gendered framing of pragmatic language impairment in existing literature, risking under-recognition in girls	[16]
Youth offending cohort	Longitudinal/cohort analysis	–	Higher-order language skills act as both risk and protective factors for offending trajectories	[17]
Youth Offending Service stakeholders	Realist evaluation, qualitative interviews	15	SLCN provision estimated relevant to up to ~90% of young people who offend; service-delivery conditions for embedding SLT identified	[18]
Youth justice and wider criminal justice system	Professional-body evidence synthesis	–	Only 28% of screened young people required no further SLT input; YOI audit found 67% in developmental-language-disorder range	[19]

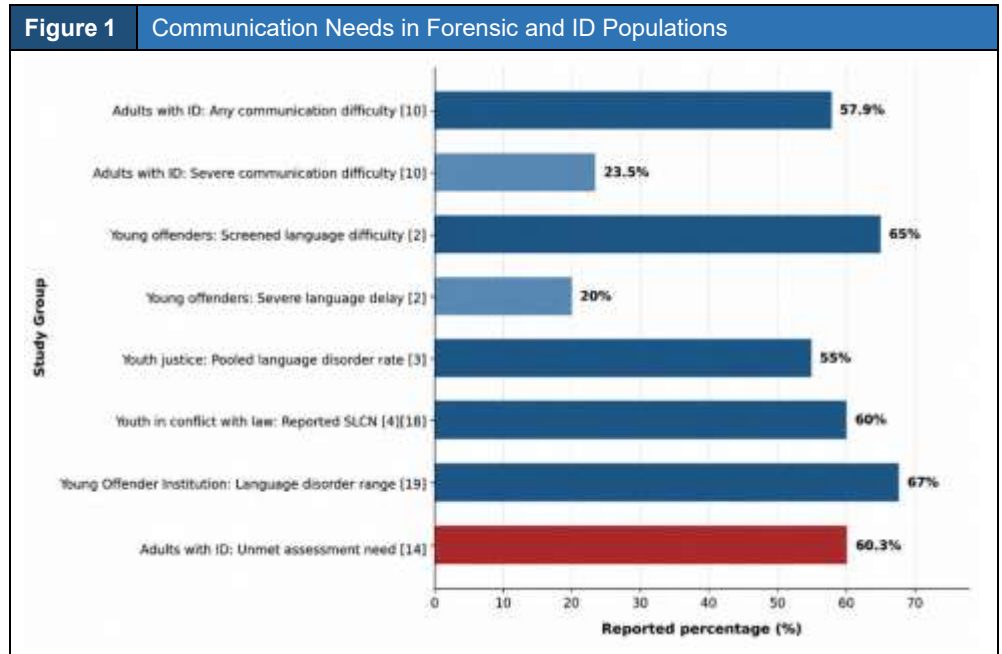
Note: The 19 primary synthesis studies are included only if they meet the criteria in table 1. General non-forensic background literature that is cited and used only for general framing of the healthcare and educational literature are cited in sources [20] – [23]

Prevalence of Undetected Communication Difficulty and its Overlap with ID

Speech, language and communication needs (SLCN) are universal and systematically under-recognised all along the forensic continuum. These findings are summarized across eight key data points for the adult intellectual disability (ID) population, youth justice settings, and gaps in service delivery. The ID adult population data by country indicates that 57.9% of ID adults have communication problems, and 23.5% have communication difficulties that are severe. These population level baseline figures are likely underestimates for the burden of forensic ID, which are associated with higher clinical complexity, complex support needs and increased behavioral challenges.

The reported prevalence of SLCN is high in all youth justice settings, in which screening infrastructure is more robust. The rates of language disorder in young offenders are as high as 65% for those in intensive supervision, 60% for those in conflict with the law, to as high as 67% in Young Offender Institution audits and a pooled systematic reviews rate of 55% overall. The standardized test also shows that 20% of youth offenders are in a severely delayed range.

A third point made in figure 1 is that adult services have a significant operational failure, with 60.3% of adults with ID having received a formal recommendation for a speech and language assessment, but not receiving one. Most importantly, an ID diagnosis does not take the place of a special communication screen. Measured IQ is not a good predictor of functional communication skills, pragmatic use of language, or an individual's ability to interact in court or in therapeutic or legal situations. Communication screening needs to therefore be a separate clinical function within forensic ID services and should not be a part of a general cognitive appraisal.



Existing Screening Tools and Coverage Gaps

The evidence bases to support communication and SLCN screening tools is very uneven throughout the forensic pathway. Youth justice settings are well resourced, largely as a result of the youth offending service screening tool developed by RCSLT and built into statutory assessment tools [19]. There are a variety of tailored, locally produced screening checklists in use by youth offending teams, but the level of validation for these checklists is inconsistent and they are not consistently available in youth justice services [8][18].

It's a different story for adults. Adult offenders are rarely screened, and when they are, the screen is usually directed at detecting a potential intellectual disability, not the communication profile of a person with a known intellectual disability, for instance the RAPID tool, which aims to provide practitioners without specialist skills a rapid indicator to flag individuals who may require full assessment for ID [7]. A specific review of screening measures that can be used in liaison and diversion identified many important limitations in the number and types of validated screening instruments available for use in this setting and concluded that the evidence for the need for screening is significantly outnumbered by the lack of fit-for-purpose screening instruments [6]. In adult forensic ID inpatient contexts, literature searches revealed that communication-focused initiatives were mainly service improvement projects involving the integration of structured MD communication processes (e.g., changing how decisions are communicated to patients at the ward level), and not standardised and validated screening instruments that are completed at admission[13].

This gap has practical consequences. Even if there is a formal recommendation for a communication assessment, there is no assumption that this will be translated into a delivered assessment: In an Australian study of adults with ID living in supported group

housing, it was found that only 39.7% of communication assessments were delivered, with funding issues, competing clinical priorities, and access to services identified as the main obstacles [14]. Where forensic ID services operate under a higher risk-management and resource burden, the lack of evidential basis to assume that they operate better is underscored if recommended assessments in general community ID services are delivered at this rate.

Barriers to Identification

The following barriers to identification were found to be recurring in the synthesised sources. The first and most frequently mentioned is diagnostic overshadowing; that is, the tendency for symptoms, behaviours and/or functional impairments to be attributed to the person's intellectual disability as a whole, rather than being recognized for being a separate and potentially treatable need. While diagnostic overshadowing is frequently mentioned with regards to psychiatric symptoms in adults with ID, the same principle also applies to communication difficulties: either problems with expression or word-finding or poor narrative, may be interpreted as 'part of the person's ID' and prevent referral for specialist communication assessment.

The second barrier is awareness and training of the workforce. Evidence from surveys carried out in policing contexts indicated that most officers had had contact with young people they felt they had SLCN and were reasonably confident in recognising these needs, but not confident in adapting their own communication practice (with the most common response being "involve an external Appropriate Adult" [4]). Communication vulnerability is also exacerbated by the context of the custody itself: noise, restraint, comfort and unfamiliarity, and time pressure, all of which are not anticipated by normal custody circumstances [5].

Fragmentation and commissioning of services is a third barrier. Speech and language therapy provision in criminal justice and forensic services has traditionally been sparse and poorly commissioned compared to the need, with realist evaluation work identifying specific service delivery conditions that are necessary (but not singly sufficient) for the effective identification and support of SLCN in youth offending services: dedicated funding, embedded SLT provision rather than sessional, and common outcomes measures across agencies [18]. This is the first study to identify service-delivery conditions in adult forensic ID services, for which there are no similarly well-developed evidence bases.

Consequences of Undetected Communication Need

Undetected SLCN in a forensic setting does not only have implications for communication. Qualitative research that placed language difficulty in the context of an ecological model of the lived experience of young male offenders revealed that language difficulty had an impact on the lived experience of young people and how they were experienced in justice-system processes more broadly, from police contact to programme engagement [9]. Improved recognition of reduced pragmatic language skill — such as ability to construct a story, take turns, and manage the topic — could be seen as potentially being subject to a gendered bias in how researchers and practitioners' approach and consider it; the evidence base so far is developed around male samples and behaviours, and could be potentially gendered [15][16][17].

Unmet communication support needs is a direct correlate of poorer quality of life for adults with ID in relation to self-determination, social inclusion, interpersonal relationships and emotional wellbeing domains [11]. An undetected communication need can be misinterpreted in a forensic setting as low engagement, lack of motivation, and high risk and can have significant implications for length of detention and progression in the forensic pathway.

Facilitators of Effective Identification and Practice

Where communication needs are well identified, there are several common facilitators, which are present in many of the sources included: Embedded, as opposed to consultative, speech and language therapy input in the multidisciplinary team; Structured, low-burden screening tools, which do not always require third party input (such as an appropriate adult) in the initial screening stage; Explicit workforce training to build the confidence and skill to adapt communication directly rather than relying on a third party; Systematic whole workforce communication processes at key decision points, such as the structured

multidisciplinary communication approach introduced on one female forensic ID ward [4][13][18][19]. In addition to existing team processes, new, cross-sectoral research has been conducted to examine possible improvements to communication in the forensic ID environment through the use of technology adaptations. Developed in the field of diagnostic medicine, accessible visual terminology can provide a model for the reduction of complicated legal, custody and procedural terminology for people with cognitive limitations [21]. In the same way, interactive digital systems and targeted assistive tools developed for neurodivergent populations can be adapted in the forensic setting to prepare for court, to assist in legal capacity assessments, and to enhance involvement by neurodivergent individuals in therapeutic interventions focused on offences [22][23]. In addition to this, the evidence from these external studies to inform the effectiveness of speech and language therapy (SALT) intervention for adults with ID is weak, with only a few studies using strong methodological approaches [12] highlighting the need for more robust studies on communication intervention in adults with ID and the need for better screening.

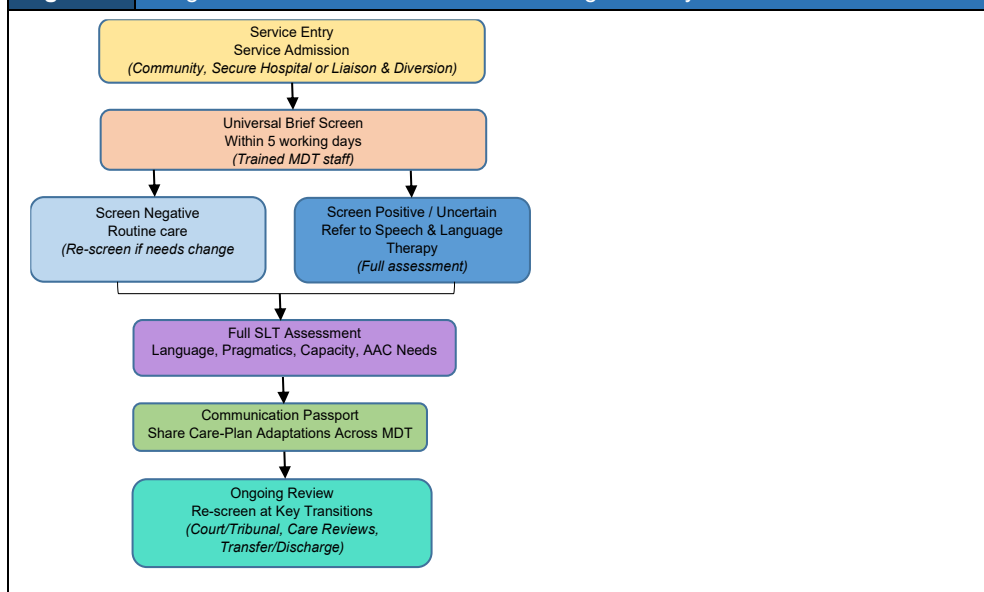
Discussion

The aim of this review was to bring together the most up to date evidence on undetected SLCN in the forensic setting, to outline the current screening provision and to think about how this screening process might be structured. Three points are important to emphasise. A first point to make is that the prevalence data collected here suggest that there is little space to make communication difficulty a marginal or exceptional consideration in forensic ID caseloads. Reported rates are found in the range between about one-fifth and two-thirds, depending on population, setting, and construct being measured; none of the included sources reported a low or negligible rate. The mismatch between the communicative demands placed on the forensic ID service user and typical communicative skills in this population is stark, as the users of forensic ID services are, by definition, expected to communicate effectively in some of the most linguistically demanding contexts a person could encounter: police interview, court or tribunal proceedings, capacity assessment, and offence-focused therapeutic work.

Secondly, the level of maturity of youth justice and adult forensic ID provision is significant. The youth justice evidence base is characterised by an established policy and advocacy infrastructure which has taken research outputs into statute, and into embedded posts of SLT across local areas, including through the Bercow review, its ten year follow up and RCSLT's justice focused evidence synthesis [4][18][19]. The adult forensic ID services provided were not found in any similar infrastructure. Tools like RAPID answer an important but different question (possible undiagnosed ID) than the question of the communication profile of an individual whose ID is known and the experience with liaison and diversion screening provision explicitly mentions the lack of validated measures for this population [6][7]. It is a viable argument to suggest that this is a likely reason why an audit of a general (non-forensic) adult ID service concluded that a majority of the recommended communication assessments were not being delivered [14]; this is unlikely to be the case in an adult forensic ID service, as there are additional pressures on ID service quality and resourcing, and the pattern observed in general adult ID services is not necessarily replicated in adult forensic ID services. Third, the barriers identified (diagnostic overshadowing, workforce confidence, service fragmentation) suggest intervention points that don't necessarily involve significant new tools development to help address them. Non-specialist administered brief screening of the type currently used in youth justice settings could potentially be used as a first-line screening process for adult forensic ID services, but with clear indication that this is not a screen for diagnosis but to alert interest to require specialist speech and language therapy assessment. This is akin to the approach recommended (although not necessarily implemented in practice) in reviewed liaison and diversion and youth justice tools [6][19].

Toward a Structured Communication Screening Pathway for Forensic ID Services

The synthesised evidence has been presented in the form of a proposed staged pathway in figure 2. It is intended as a practice model and not as a definitive diagnostic tool and should be used in conjunction with the limitations outlined in the Conclusion.

Figure 2 Staged Clinical Communication Screening Pathway

The four principles that emerged from the synthesis are the foundation of the pathway. First, screening should happen at entry to the service, rather than if it is suspected by the staff, as there is evidence that recognition without structured screening under-detects need, and is likely to be affected by diagnostic overshadowing [5][10]. Second, whilst an initial screen should be completed by trained multidisciplinary staff and not require SLT administration on first pass, this is reflecting the practicality of the level of SLT staffing in youth-offending-services screening as the reviewed sources document [7][19]. Third, a positive or indeterminate screen should prompt a comprehensive specialist evaluation of the client's expressive and receptive language, pragmatics, capacity-relevant communication skills and augmentative and alternative communication (AAC) requirements, based on the scope of evaluation outlined in the adult ID communication literature [10][11][12]. Fourth, findings should be communicated via a shared communication passport or care-plan adaptation that is visible to the MDT; and re-screening should not be a one-off, but should be planned into care-plan review points and at admission, tribunal/court appearances and discharge/transfer, building on evidence that communication needs and the functional impact of these needs vary with placement, mental state and life stage [13][15].

Conclusion

Speech, language, and communication needs (SLCN) are prevalent, often a serious and disproportionate and frequently unidentified among individuals with intellectual disability who come into contact with the forensic system. The literature reviewed suggests that there is a wide range of reported communication difficulties (20-67%) within youth justice and adult intellectual disability populations, with a screening and assessment system that is more established and more developed for youth justice than for adults in forensic ID services. There are recurrent barriers to timely identification, such as diagnostic overshadowing, and inequities in training the workforce and commissioning, that may be addressed. This can be achieved through a structured, staged screening pathway that is universal at the entry point, brief and based on non-specialist screening at first contact, detailed speech and language screening at key transition points and further screening at the full speech and language assessment stage. There are some methodological weaknesses to be discussed when examining the recommendations: the evidence base is more heavily weighted towards youth justice settings than adult forensic ID services and the search strategy was conducted with single-reviewer screening of the indexed databases. In addition, although the suggested screening pathway is guided by evidence and is a practice model, it is not yet a clinically validated instrument, which is an operational constraint that needs further primary testing. Future Scope Primary research should focus on the empirical validation and clinical piloting of short screening tools for SLCN specifically designed for the forensic ID setting which are used with adults. The diagnostic characteristics (sensitivity, specificity and inter-rater reliability) of multi-stage screening pathways should be assessed in future studies, when implemented through multidisciplinary teams in secure wards, community teams and liaison and diversion services. Further, implementation research is required to explore how the early communication identification process affects a range of

forensic outcomes such as interview reliability, therapeutic engagement, legal decision making, length of stay and reoffending trajectories over time. This gap is a pressing need for service delivery and for multidisciplinary research.

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