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Eligibility Assessment for Learning Disability Services: A Multi-Disciplinary, Stepped-Care Approach

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Summary

Eligibility assessments for learning disability services have far-reaching consequences for individuals and services. Clinical Psychology has, typically, been responsible for this role, leading to significant workloads and potential delays in outcome. NHS Lanarkshire Adult Learning Disability Service has developed a multidisciplinary protocol to ensure comprehensive and rapid assessment.

Keywords

learning disability, diagnosis, assessment, multidisciplinary

Introduction

Recent decades have seen the introduction of policies to facilitate ease of access to mainstream health services for individuals with learning disabilities (Scottish Executive, 2000; Department of Health, 2009). Nonetheless, these policies do acknowledge that, for some individuals, specialist, tertiary-level services may provide the optimum standard of care, particularly for those with more complex physical and mental health issues. Access to specialist learning disability services is governed by clear criteria, all of which will specifically include the basic requirement that the person does, in fact, have a learning disability. This process is intended to ensure that specialist resources are directed toward those individuals who would be most likely to require these resource-intensive services.

Historically, the NHS Lanarkshire Adult Learning Disability service received a high volume of referrals where the diagnosis of learning disability was unclear. In many cases the referral information provided failed to rule out borderline intellectual functioning, specific learning difficulties (such as dyslexia), or brain injuries acquired during adulthood. Explicit information on intellectual functioning, adaptive functioning, and age of onset of difficulties was rarely provided by referral sources. Hence, our Clinical Psychology Department was called upon to provide diagnostic assessment of learning disability, putting additional demands on a limited service.

The Need for a Differential Diagnostic Evaluation

To address this concern, our service initially instituted an assessment protocol, governed by an Integrated Care Pathway (ICP). This protocol involved Community Learning Disability Nurses (CLDNs) gathering information on a client's developmental history, current functioning, and past and present circumstances. This evaluation is supplemented, where there is any ambiguity over whether the person had a learning disability, with the administration of a psychometric screening device, the Hayes Ability Screening Index (HASI; Hayes, 2000). The HASI is a brief (around five minutes to ten minutes administration time) assessment that is considered to have good sensitivity and specificity for identifying a possible learning disability, correctly identifying individuals with a learning disability in 82% of a sample, and correctly excluding 72% of people without learning disabilities (Hayes, 2000). It comprises a number of elements including background questions relating to learning disability alongside the use of direct, standardised assessments. However, within our protocol, the HASI is not considered to be a diagnostic instrument, instead its intention is to provide supplementary information as part of Community Nurses' initial clinical assessments.

This initial assessment procedure appeared, in many cases, to result in a clear, timely decision about whether a client was eligible for our services. There remained instances, however, where the results of this screening procedure were ambiguous. Moreover, for some individuals, where the person was not admitted into our service, the referral source

would not accede to our decision, and requested more substantive evidence that the person they had referred did not have an learning disability.

Composition of the Evaluation Team

In order to address the diagnostic ambiguity that sometimes remained after initial assessment by Community Nursing, the disciplines of Community Nursing, Occupational Therapy and Clinical Psychology initiated an extension of the existing protocol, termed the Differential Diagnostic Assessment (DDx) service. Community Learning Disability Nurses (CLDNs) continue to gather and synthesise social, educational, developmental and medical history into a preliminary formulation, with emphasis on whether deficits were evident during the developmental period. Information to determine whether the client is amenable to evaluation, or whether the interpretation of results will be complicated by non-intellective factors (such as substance abuse, poor motivation, or a possibly reversible deterioration in physical or mental health).

Occupational Therapists' (OT) role in this process is to address the diagnostic criterion of whether the person referred has impairments in at least two areas of adaptive functioning using the Adaptive Behaviour Assessment System, Second Edition (ABAS-II; Harrison & Oakland, 2003). Where there are discrepancies between the third-party reports on the ABAS-II and background information, other direct-observation measures, such as the Assessment of Motor and Processing Skills (AMPS; Fisher, 2006) are used to resolve such inconsistency.

Clinical Psychologists (CP) address the criterion of whether the person has significantly sub-average intellectual functioning, using the WAIS-IV-UK (Wechsler, 2010) to assess intellect, although its predecessor, the Wechsler Adult Intelligence Scale – 3rd UK Edition (WAIS-III-UK; Wechsler, 1999) was used prior to this, and with the cases described in this audit. Other instruments, such as the Test of Non-verbal Intelligence, 3rd Edition (TONI-3; Brown, Sherbenous & Johnsen, 1997) are used where motor or sensory difficulties may make the WAIS-IV an inappropriate assessment. It should be noted, however, that Clinical Psychology continued to provide assessment, using formal psychometric measures, for clients who were already open to the Service, and where this was a necessary part of assessment or on-going treatment.

In addition to administering an intellectual assesment, the CP assigned to the assessment also acts as the evaluation coordinator. The evaluation coordinator ensures that an evaluation team is assembled, communicates critical information to team members, reviews the assessment report, and ensures that the results are communicated to the client, the referral source, and the Community Learning Disability Health Team (CLDHT). Other members of the CLDHT contribute to the evaluation as required. as required.

The entire multidisciplinary CLDHT is fully involved in the decision making process. The decision to refer to the diagnostic protocol is made, collectively, by the CLDHT. Results of the evaluation are fed back to the CLDHT, who make the ultimate decision as

to whether or not we will provide a service to the individual. In instances where we decide the latter, the team provides consultation regarding referral to other resources. The full evaluation pathway is illustrated in Figure 1 below.

FIGURE 1 HERE

Audit of Outcomes

Rationale

One of the primary aims of the initial screening protocol was to reduce the level of referrals for unnecessary assessments of intellectual and adaptive skills by Clinical Psychology (where functioning was clearly far above or below and IQ of 70). Hence, it was assumed that referrals of individuals with IQs either substantially above or below 70 would no longer reach Clinical Psychology. Instead, formal psychological evaluation would be reserved for the more ambiguous cases, where background history and a screening assessment of intellectual ability were not sufficient to make a diagnostic judgement. In order to determine whether this was indeed the case, an audit of referrals for intellectual evaluations (prior to, and following the implementation of the DDx protocol) was undertaken.

Hypotheses

- (i) There would be a reduction in the number of referrals to the Clinical Psychology Department for an assessment of learning disability.
- (ii) There would be evidence of a reduction in the number of referrals where formal intellectual evaluation was not warranted (i.e., where the person fell either far above or below the criterion level for a learning disability)

Methodology

Ethical Considerations

The audit was registered with the NHS Lanarkshire Clinical Governance Committee, and approval was given by the NHS Lanarkshire Caldicott Guardian. All relevant Data Protection requirements were met.

Design

A retrospective case review examined the difference between the number of referrals to Clinical Psychology requesting a diagnostic assessment for learning disability, pre- and post- the implementation of the DDx protocol. The study also examined the appropriateness of referrals (cases where there was greatest ambiguity) by calculating the differences in IQ scores of those referred pre- and post-implementation of protocol.

Sample

We attempted to include all individuals referred to the Clinical Psychology Department, for a diagnostic assessment of learning disability, between 1 July 2004 and 30 June 2010 (N=87). Of those 87 identified, eleven cases were excluded for the following reasons: failure to attend (2); assessment not completed due to patient distress (1); assessment not completed due to communication difficulties (2). Assessment results were not available in six patients' files, and hence these individuals were also excluded. Of the remaining cases, six files were archived and it was not possible to access these. Consequently, 70 cases were included in our final analysis (n=26 prior to implementation; n=44 post-implementation).

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Cases were divided into pre-implementation of DDx protocol (1 July 2004 – 30 June 2007) and post-implementation (1 July 2007- 30 June 2010). Data on the total number of referrals to the Community Learning Disability Service was also collected from the service database; however, this data could only be reliably identified for the years 2005 and 2008.

Procedure

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Information gathered from each casefile consisted of date-of-referral and WAIS-III Full Scale IQ scores¹.

Statistical Analysis

Descriptive and inferential statistics were performed on the data. The distribution of WAIS-III scores indicated a non-normal distribution, hence non-parametric statistics were employed.

¹ The WAIS-IV was adopted within our Service subsequent to the period audited.

Results

Referrals

The total number of individuals referred for a diagnostic assessment of learning disability in the three year period prior to July 2007 was 43; in the three year period following this, the total was 44. Hence, Hypothesis One was not supported through a reduction in the total number of referrals for diagnostic assessment (chi-square < 0.01, $p > 0.05$).

However, when the number of referrals for diagnostic assessment was considered in relation to the total number of referrals received by the CLDHT in years 2005 and 2008, the percentage of referrals for diagnostic assessment fell, as a proportion of total referrals, from 4% in 2005 to 2.5% in 2008. During this period, the total number of referrals to the service increased by 37.2%; however, this was not reflected in a proportionally greater number of requests for a full diagnostic assessment.

Of particular note was the finding that, of those 43 referrals prior to implementation, only 74% of assessments were completed, due to reasons previously detailed (see *Sample* above). However, in comparison, assessments on all referrals following implementation were completed.

Appropriateness of Requests for Diagnostic Assessment

WAIS-III scores obtained, pre- and post-implementation, are reported in Table 1. The median IQ score of clients referred prior to implementation was 63, but rose to 68 following implementation.

TABLE 1 HERE

Each IQ score was then converted to a score of distance from 70 (i.e., a score of 63 would be seven points from 70, whilst a score of 82 would be twelve points from 70). This provided an indication of the ‘deviation’ of scores from 70 (see Table 1). The average ‘distance score’ from 70, in the post implementation group, was significantly smaller than the average ‘distance score’ in the pre-implementation group (Mann-Whitney U (68) = 415, $z = -1.9$, $p < 0.05$, one-tailed test). Hence, it appeared that there were fewer requests for full assessments that were most probably unnecessary. Thus, support for Hypothesis Two was provided.

Conclusion

The impetus behind the development of the DDx protocol was manifold. Firstly, it was intended to provide an assessment of learning disability, with a high degree of both

sensitivity and specificity, that could be provided within a relatively short time-frame.

Sharing the tasks, and utilising specific expertise, across disciplines prevents the “bottleneck” associated with Clinical Psychology being the single responsible discipline. Involvement of a broader array of disciplines also increases the entire service’s ownership of eligibility decisions reached.

The results of the audit suggests that our aim, of reducing inappropriate referrals, has been met. The initial stage of structured screening by the CLDNs appears to increase the probability that only the most uncertain of referrals (i.e., those whose IQs are around 70) will be referred for further assessment. This process saves resources within our Service, but, more importantly, it ensures that the client receives a rapid assessment (as the time is limited, through our Integrated Care Pathway, to six weeks) and is not asked to undertake a lengthy formal evaluation unnecessarily.

Challenges of Implementation

Implementing the protocol has not been without its difficulties. A recent survey of clinicians involved in the project suggested that a whilst the multidisciplinary nature of the evaluation increased team ‘ownership’ of the outcome of evaluation, the narrative for the evaluation protocol was less than clear, and co-ordinated communication between various professionals was, at times, problematic.

In order to meet some of these challenges, we locate the evaluation documentation (including the report, client and referrer letters and guidance on the protocol) on a shared, secure server that all members of the evaluation team can access. This has reduced some of the difficulties that having members of a team located in disparate bases can create.

As noted previously, there was no significant increase in total referral numbers (43 v 44) in the audit periods prior-to and post-implementation. Indeed, data suggest that there was a decline in eligibility assessments when these were considered as a proportion of total referrals to the CLDHT (4% v 2.5%). Nonetheless, there was an increase in requests for this procedure within the post-implementation audit period (from nine in the twelve months post-implementation to eighteen and seventeen in subsequent twelve-month periods, respectively), suggesting that the CLDHT increasingly opted to direct referrals to the DDx protocol.

However, there is no evidence to suggest that these referrals were becoming increasingly 'inappropriate', hence they may simply reflect the nature of individuals being referred to the CLDHT. It is also notable that in the two twelve-month periods following the audit period, referrals for the DDx evaluation appear to have stabilised at fifteen and ten referrals, respectively.

We accept that, in some quarters, there may be concerns (of an ideological and ethical nature) about the use of diagnostic categorization that this protocol seeks to establish. For example, there may be concern about the potentially stigmatising nature of diagnosis

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and the use of a diagnostic category in the service of 'gate-keeping' for accessing a specialist health service. However, we suggest that resources within the healthcare system are not infinite and therefore we should preserve these for those most in need. Hence, the difficult decision regarding allocation of these resources should be made on a rational basis. It is hoped that our protocol provides this clear rationale and, in itself, increases the accuracy and fairness of the process.

We would be pleased to share further details of this protocol and copies of supporting documentation to interested parties. To obtain this information, please contact the corresponding author.

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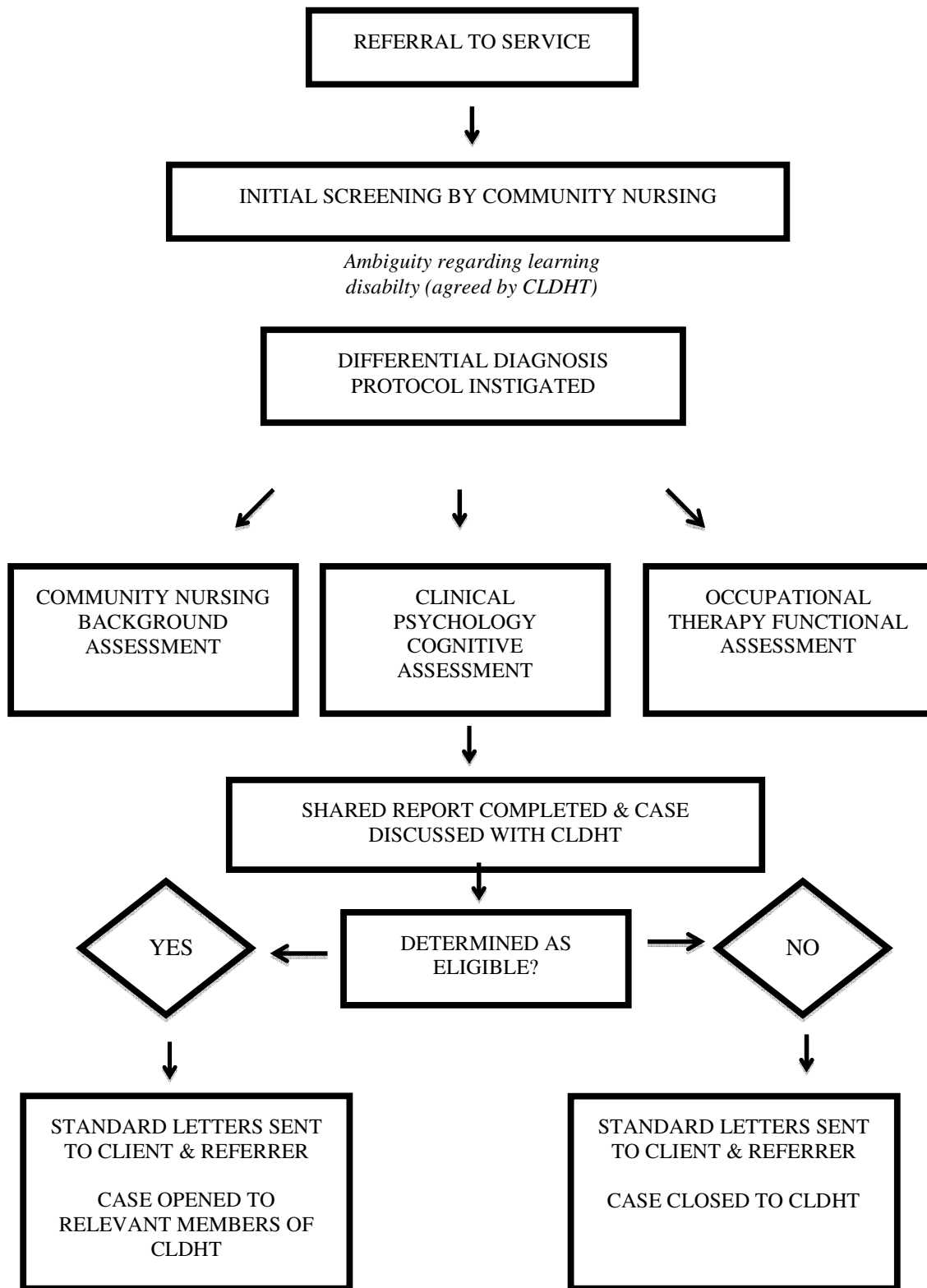


Figure 1. Eligibility Assessment/ Differential Diagnosis Pathway

	N	Range	Median	Percentiles		
				25	50	75
Pre	26	45-84	63	59	63	72
Post	44	57-99	68	64	68	75

Table 1. Distribution of WAIS-III scores, pre- and post-implementation of the eligibility assessment pathway

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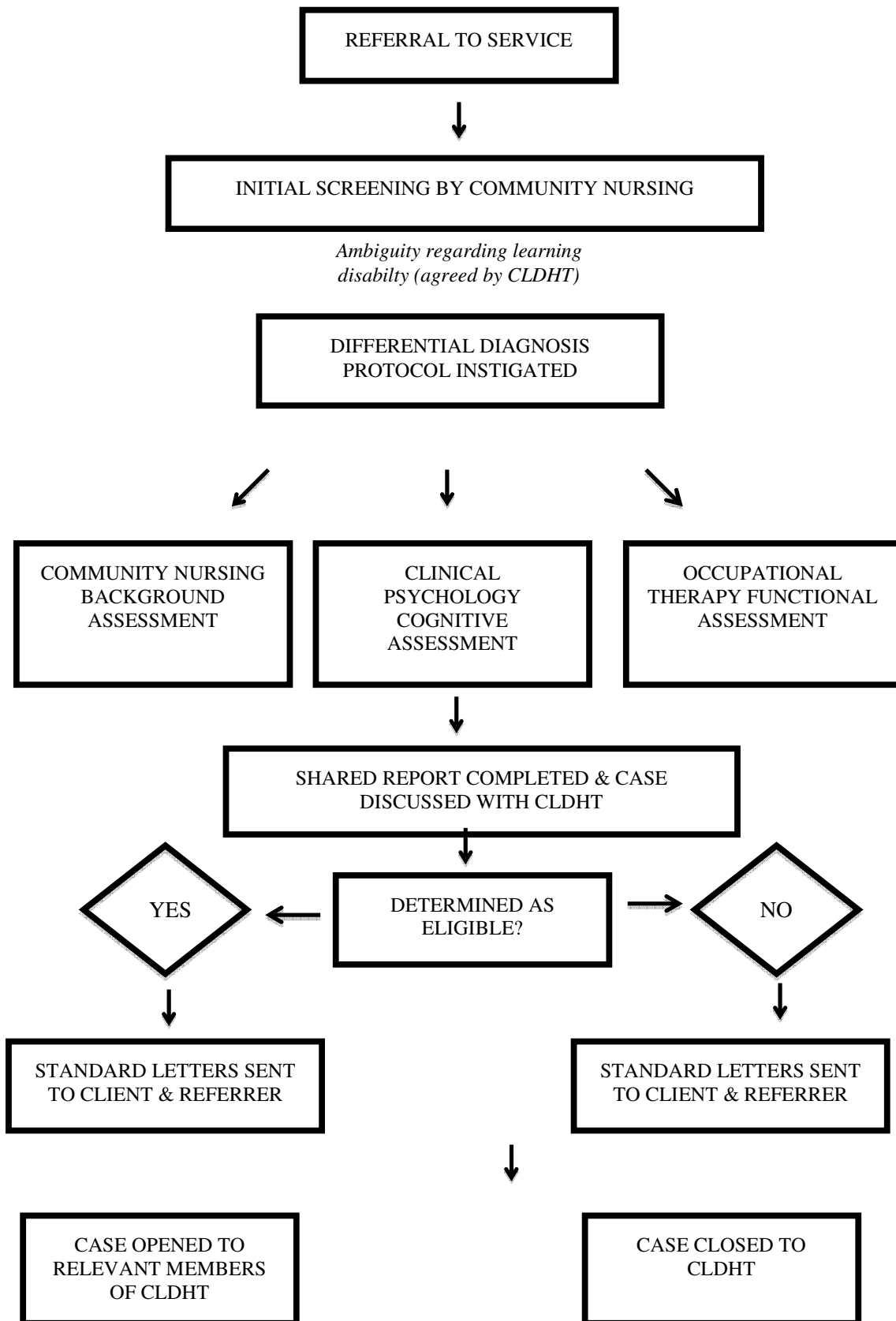


Figure 1. Eligibility Assessment/ Differential Diagnosis Pathway