

# BMJ Open Quality Improving access to Hackney Integrated Learning Disability Service

Osama Omrani ,<sup>1</sup> Jessica Spiers,<sup>1</sup> David Prior,<sup>1</sup> Kirsty Haberland,<sup>1</sup> Anwar Kabir,<sup>1</sup> Candace Sinclair,<sup>2</sup> Tom Woods,<sup>3</sup> Ian Hall,<sup>1</sup> Laura Checkley<sup>1</sup>

**To cite:** Omrani O, Spiers J, Prior D, *et al.* Improving access to Hackney Integrated Learning Disability Service. *BMJ Open Quality* 2022;**11**:e001728. doi:10.1136/bmjopen-2021-001728

► Additional supplemental material is published online only. To view, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2021-001728>).

Received 8 November 2021  
Accepted 24 July 2022



© Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

<sup>1</sup>City and Hackney Integrated Learning Disability Service, East London NHS Foundation Trust, London, UK

<sup>2</sup>City and Hackney Adult Mental Health Directorates, East London NHS Foundation Trust, London, UK

<sup>3</sup>City and Hackney Integrated Learning Disability Service, London Borough of Hackney, London, UK

## Correspondence to

Dr Osama Omrani;  
osamao17@gmail.com

## ABSTRACT

**Aims** Improving access to Hackney Integrated Learning Disability Service (ILDS) using quality improvement (QI) methodology by reducing the time taken to complete eligibility assessment by 50% by April 2021, while improving service user and staff experience.

**Background** Referrals to ILDS require assessment of eligibility. It was noted that there was significant waiting time between referral and eligibility assessment, exacerbated by the COVID-19 pandemic. Quality Network for Community Learning Disability Services guidelines suggest waiting times for those accessing adult learning disability (LD) community services be locally agreed, although there is limited literature on this topic.

**Methods** All staff members across the multidisciplinary team were invited to participate in the QI project. We defined outcome measures as days from referral to allocation of eligibility assessment to staff member and to completion of eligibility assessment, comparing referrals received before and after start of the project. The key change ideas tested using Plan-Do-Study-Act cycles were: (1) eligibility screening checklist, (2) eligibility assessments drop-in sessions for staff, (3) formal training for ILDS staff, (4) eligibility screening allocation system, (5) template letters for eligibility decisions, (6) new ILDS referral form, (7) workshops for local general practitioners.

**Results** Time taken to eligibility assessment allocation decreased from median of 184 (mean=183.5±109.8) to 13 days (mean=19.9±26.4) (93% reduction). Time to completion of eligibility assessment decreased from a median of 271 (mean=296.0±133.8) to 63 days (mean=75.7±34.8) (77% reduction). We received positive feedback from staff and service users regarding the new eligibility process.

**Conclusions** We report waiting times for accessing our community adult LD services and effective strategies for reducing this. We recommend similar services use a QI methodology to reduce waiting times and improve the experience of staff and service users.

## PROBLEM

Approximately 1.5 million people in the UK have a learning disability, of which around 23% have a severe learning disability.<sup>1</sup> Learning disability is defined by three core criteria: impaired intellectual ability (often defined as an IQ of <70), significant impairment of social and adaptive functioning and onset in childhood.<sup>2</sup> Referrals to the Hackney Integrated Learning Disability Service (ILDS)

## WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ There are no formal guidelines for waiting times to access community adult learning disability services, with almost no literature surrounding this topic or how to reduce these waiting times.

## WHAT THIS STUDY ADDS

⇒ Formal quality improvement methodology can have a profound impact on waiting times, with high yield change ideas including eligibility screening checklists, improvements to referral forms, staff training and primary care workshops.

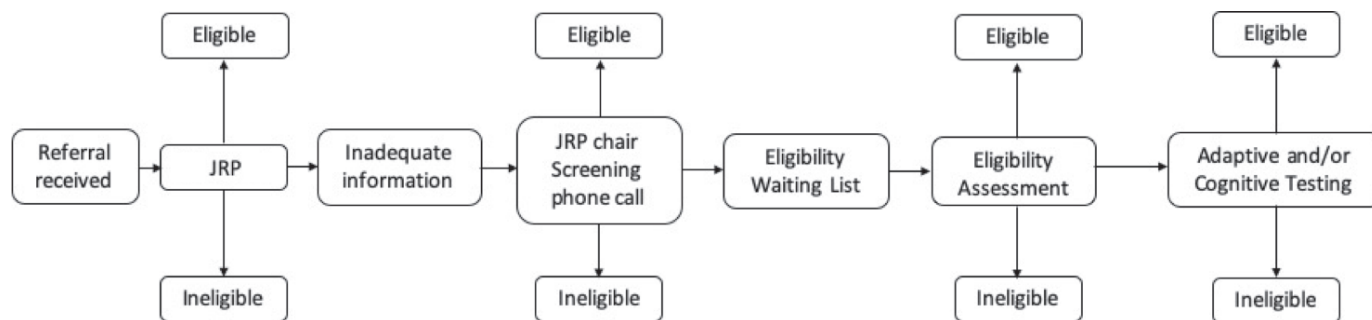
## HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ As the first study to report on UK community adult learning disability services waiting times, we hope that our work can prove useful to other similar services aiming to reduce waiting times and report their findings.

⇒ We hope our findings can contribute to the production of national guidelines for appropriate waiting times for such services.

require assessment of eligibility (figure 1). Eligibility assessment assesses the aforementioned criteria via a video-conference or face-to-face consultation with a trained member of staff lasting approximately 1 hour with the prospective service users and their next-of-kin. This consultation does not constitute a Care Act Assessment and the findings are presented at a weekly multidisciplinary team (MDT) meeting. For cases where additional information is required, prospective service users may go on to have formal cognitive and/or adaptive testing in the form of Wechsler Adult Intelligence Scale or adaptive/cognitive testing in the form of Assessment of Motor and Process Skills.<sup>3,4</sup>

It was noted in October 2020 that there was a significant amount of time between the referral being received and allocation for the eligibility assessment and final decision. This impacted both service user and staff satisfaction, with delayed access to support available through the service. These issues were exacerbated by both the COVID-19 pandemic and



**Figure 1** Illustration of Integrated Learning Disability Service referral pathway. JRP, joint referral panel. Adaptive/Cognitive testing in the form of Assessment of Motor and Process Skills or Wechsler Adult Intelligence Scale.<sup>3,4</sup>

a cyber attack targeting the local authority which affected database access.<sup>5</sup> We report results of a project to improve access to our services using a quality improvement (QI) methodology. We aimed to reduce the time taken to complete eligibility assessments for new service users by 50% by April 2021, while improving service user and staff experience over the same time frame.

This project was undertaken with involvement of all service stakeholders including: psychiatrists, psychologists, occupational therapists, physiotherapists, community nurses, speech and language therapists, social workers, dietitians and administrators.

## BACKGROUND

It has been well established that those with learning disabilities have difficulty accessing health services, with people with learning disability having a higher risk of morbidity and over three times greater risk of all-cause mortality.<sup>6,7</sup> Some of the barriers identified by a review included difficulties with communication, inadequate facilities or rigid procedures.<sup>8</sup> There is limited literature describing waiting times experienced by those awaiting assessment for learning disabilities.

A rigorous systematic review conducted by the University of Queensland, Australia, identified three overarching themes that affect waiting times in the community setting, such as resource alignment which suggests strategies such as limiting referrals to specialist services, auditing wait lists and triage by healthcare professionals.<sup>9</sup> An adult community learning disability service in Bedfordshire and Luton achieved a decrease in waiting time to access occupational therapy services from 27 weeks to 15.5 weeks using QI methodology to develop; a screening checklist, telephone triage, triage clinics and a caseload weighting tool.<sup>10</sup>

As described by the Quality Network for Community Learning Disability Services (QNLD) in conjunction with the Royal College of Psychiatrists (RCPsych), people with learning disabilities require comprehensive evidence-based assessment and management of many aspects of their lives. This includes their psychosocial, psychological and mental health, which are time sensitive.<sup>11</sup> As our service is an integrated service, it acts as the gatekeeper for prospective service users to access the range of

support they need, including social care, mental health services and community engagement. The guidelines produced by QNLD do not specify appropriate waiting times and instead suggest that these should be agreed locally. Therefore, there is a need for improved reporting of waiting times when accessing community learning disability services and demonstration of effective strategies for reducing this that are congruent with the needs of the community we serve.

## BASELINE MEASUREMENT

To ascertain baseline waiting times, we retrospectively reviewed the 11 new referrals to Hackney ILDS immediately prior to the start of the QI project who had completed eligibility assessments up to December 2020. For each referral, we collected data on the time (days) taken between referral and completion of eligibility assessment. We also collected data on the time taken between referral and allocation to a staff member for eligibility assessment, as this was subjectively felt to be a critical bottleneck within the eligibility process. These data were then continuously collected for all new referrals after the start of the project using a spreadsheet that was updated on a weekly basis by the project lead. The platform identifies 'special cause' variations and their relationship with Plan-Do-Study-Act (PDSA) cycles.<sup>12</sup> A 'shift' is defined as a 'run of eight points in a row above or below the centreline' while a 'trend' is defined as 'six consecutive points decreasing or increasing'.

Staff feedback prior (number of responses=37) to the project demonstrated that staff were generally unsatisfied with current eligibility process (mean Likert score=2.48±0.85), the established eligibility allocation system (mean Likert score=2.52±0.89) and did not feel that it was currently working well for service users (mean Likert score=2.04±0.81).

Baseline measurements for time from referral to allocation of eligibility assessment showed a median of 154 days, ranging from 12 days to 357 days (mean=162.4±87.5). Across the same baseline cases, the median time from referral to completion of eligibility assessment was 254 days with a range from 63 to 378 days (mean=235.6±96.4). These measurements suggested that time to allocation represented a key component of the total time to

completion of eligibility assessment, representing a median of 80.1% of this time (online supplemental material S1).

## OUTCOME MEASUREMENT

For each referral from October 2019 to July 2021, we collected data on time from receipt of referral to allocation of eligibility assessment and overall time to completion of eligibility assessment. To establish the impact of the QI project, we compared results from referrals received before and after the start of the project in December 2020 and produced I Charts to relate changes observed with change ideas (CI) and associated PDSA cycles.<sup>12</sup>

Cases were excluded from analysis of time from referral to completion if assessment was not complete by the end of the project (August 2021), required urgent psychiatric treatment, withdrew consent for assessment or their referral was withdrawn by the referrer. Those requiring urgent treatment were either seen by our service acutely or referred to an appropriate mental health team.

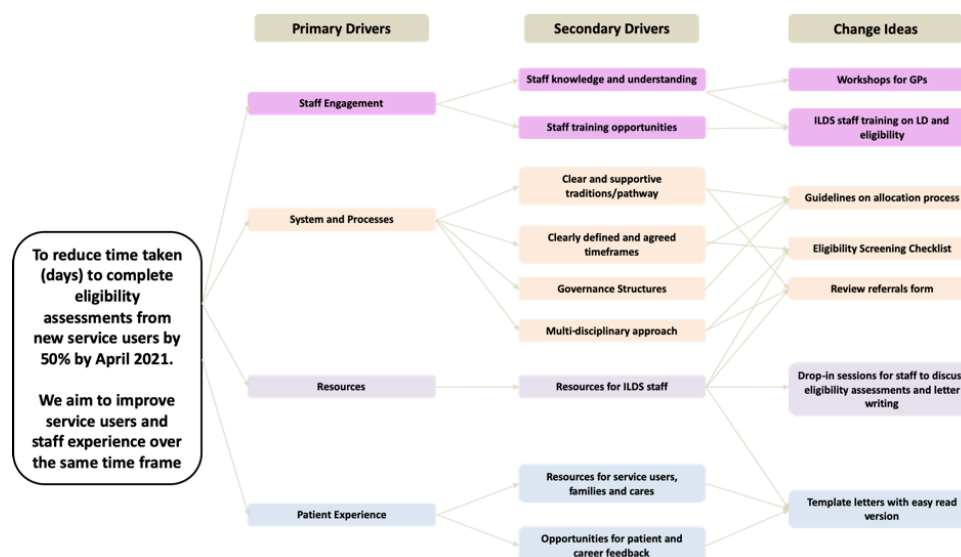
We collected qualitative and quantitative feedback from staff members at the end of the project in the form of Likert scale questionnaires and free-text responses. We collected feedback from service users and their next-of-kin (randomly selected, eligible or ineligible) via telephone calls and completion of standardised forms. These included with a Likert scale question of “how happy were you with the time taken to complete the eligibility assessment?”, binary questions of “did you understand what the purpose of the assessment was?” and “did you understand the letter we sent you at the end of the assessment?”, as well as a free-text response.

## DESIGN

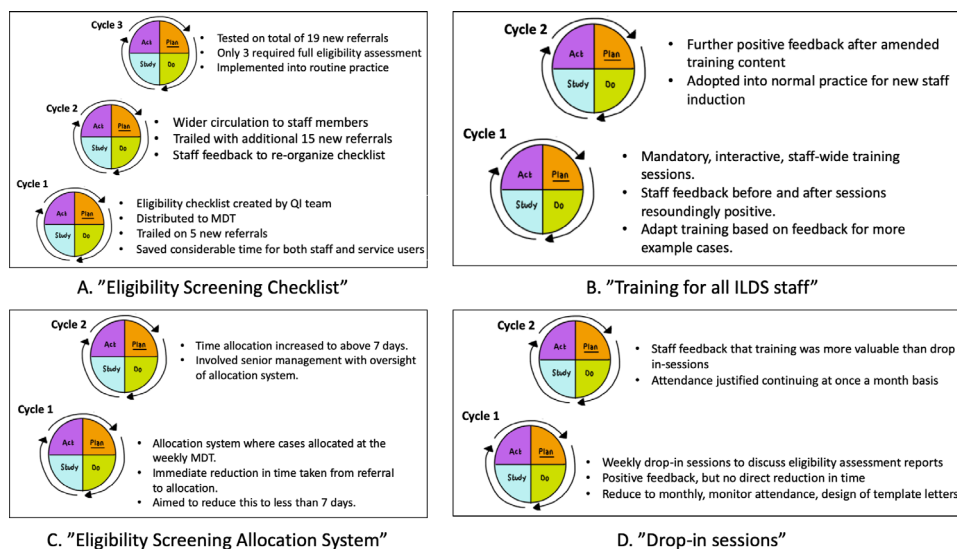
All staff members were invited to participate in the QI project, including psychiatrists, psychologists, community nurses, occupational therapists, physiotherapists,

speech and language therapists, dieticians, social workers, managers and administrators. We used a Model for Improvement QI approach, which was developed by Associated in Process Improvement, which is standard practice in our institution.<sup>13</sup> Meetings took place on a weekly basis and all took place online using video conferencing software (Google Meet). The Nominal Group Technique was used via JamBoard, a collaborative digital whiteboard by Google to agree ground rules, agenda items and identify barriers and frustrations among staff with regard to eligibility assessment.<sup>14</sup> These JamBoards evolved into a driver diagram where primary drivers identified included staff engagement, resources, patient experience and systems and processes (figure 2). These were used to form secondary drivers and led to the identification of CI. Important barriers identified as targets for CI include opaque eligibility assessment allocation systems, insufficient understanding and resources for staff completing assessments and communicating decisions to prospective service users, lengthy standardised eligibility assessments in cases where less information would be sufficient.

Priority CIs were then selected using a relative attribution system, where each team member allocated a value for both ‘relative value impact’ and ‘relative low cost’ to each CI. The CIs with the highest summated score were then selected to take forward and test using PDSA cycles. These included an eligibility screening checklist, creation of a centralised eligibility allocation system to be completed during the weekly MDT meeting, providing drop-in sessions for staff to discuss eligibility assessment reports and letters, design of a new ILDS external referral form, provision of workshops for general practitioners (GPs) within our catchment area and in-house training by members of the psychiatry, psychology and occupational therapy teams for ILDS staff regarding eligibility assessment. Due to the COVID-19 pandemic and the transition to a more remote service, we were not able to involve service users during the design and selection of CI.



**Figure 2** Driver diagram. ILDS, Integrated Learning Disability Service; LD, learning disability.



**Figure 3** Plan-Do-Study-Act ramps for change ideas. (A) 'Eligibility screening checklist', (B) 'training for all ILDS staff', (C) 'eligibility screening allocation system', (D) 'drop-in sessions for staff to discuss eligibility assessment reports and letters'. ILDS, Integrated Learning Disability Service (ILDS); MDT, multidisciplinary team; QI, quality improvement.

## STRATEGY

### Change idea: eligibility screening checklist

PDSA cycle 1 (December 2020): an eligibility screening checklist was developed with input from the QI team and distributed during MDT meetings in December 2020. All staff were informed of the screening checklist as the first step required for all new referrals where additional information was required. The checklist was designed to be completed via telephone or video conference, with the aim of improving the quality and consistency of information acquired, as well as reducing the need for a full eligibility initial assessment in many cases. A member of the QI project completed five screenings immediately after introduction using the prototypal checklist and reviewed the outcome and staff feedback. Of these, two referrals were found to be eligible based on information acquired by the screening checklist alone and therefore did not require full eligibility assessment. This both prevented further unnecessary addition to the eligibility waiting list and saved considerable time for both staff and service users. An allocation system was designed to equally distribute screening checklists for new referrals between disciplines that make up our service. We also planned to collate feedback from staff members to guide further improvements to its format and collation of time taken to complete the checklist (figure 3A).

PDSA cycle 2 (February 2021): wider staff members from each discipline completed a total of 15 additional screening checklists immediately following the above referrals. In this cycle, we found that 3 of these 15 required allocations for full eligibility assessment. The remainder were either deemed not eligible or definitely eligible based on information collated by the screening checklist. Staff feedback aided reorganisation of the screening checklist and additional sections, namely (1) summary (2) decision and (3) recommendations. This also allowed

for the screening checklist to be sent to service users and carers and avoid duplication of work.

PDSA cycle 3 (May 2021): the screening checklist was tested a total of 19 times, with 3 of the 19 requiring full eligibility assessment. The positive results led to implementation of the checklist into routine practice.

### Change idea: drop-in sessions for staff to discuss eligibility assessment reports and letters

PDSA cycle 1 (February 2021): we offered once weekly drop-in sessions to discuss eligibility assessment reports with the prediction that this would improve the quality of assessment reports and therefore reduce time taken before report finalisation. Although subjective feedback was positive, we found no reduction in the time taken to complete assessments. We planned to continue the sessions on a monthly basis, recording attendance and types of queries raised to feedback, along with template letters for those waiting for eligibility assessment decisions (figure 3D).

PDSA cycle 2 (March 2021): staff feedback suggested that training was more valuable compared with drop-in sessions, with the reduced attendance to these sessions justifying the decreased frequency to once a month. We planned to continue drop-in sessions until August 2021 and subsequently review their ongoing need.

### Change idea: training for all ILDS staff on learning disability and eligibility assessments

PDSA cycle 1 (March 2021): we aimed to improve staff knowledge and understanding of learning disability and increase confidence in carrying out eligibility assessments by developing mandatory, interactive, staff-wide training sessions. We planned to collate additional information of staff knowledge and confidence in completing these assessments before and after completion of the training



session. Staff feedback was resoundingly positive, both qualitatively and quantitatively, with increased confidence in understanding of the ILDS eligibility process and increased confidence in ability to complete the assessment report. We planned to adapt training based on feedback that sessions required more time for discussion about example cases and offer training as part of induction for all new ILDS staff. We also planned to create a recorded session that would be viewable by all staff at any time (figure 3B).

PDSA cycle 2 (March 21): we amended the training content to reflect staff feedback and increased the number of example case studies with positive staff feedback. Therefore, eligibility training was adopted into normal practice for new staff induction.

#### Change idea: eligibility screening allocation system

PDSA cycle 1 (March 2021): a system of allocation was created by which full eligibility assessments were allocated on the day of being added to the eligibility waiting list. We predicted that this would create a more transparent system and reduce time taken for eligibility assessments to be completed from the day of referral. Cases were allocated on a weekly basis at the weekly MDT meeting. We found an immediate reduction in the time taken from referral to allocation, enabling completion of all assessments of those in the waiting list and allowing sustainable allocation on a weekly basis. We aimed to continue to use the allocation system and reduce waiting time from referral to allocation to <7 days (figure 3C).

PDSA cycle 2 (March 2021): time to allocation increased beyond our aim for <7 days, although all <25 days, which was determined to be due to limited involvement of senior management in the allocation process. We planned to involve management to provide oversight of the allocation system. This has now been agreed, with a senior manager allocating new cases weekly.

#### Change idea: template letters for eligibility decisions

PDSA cycle (April 2021): in order to support staff members completing eligibility screening and full assessments, the QI team developed template letters for communicating outcomes of these assessments to potential service users, their families and other relevant parties. We predicted that this would both improve staff experience and reduce the time taken to communicate effectively. Due to positive feedback from staff members at the weekly eligibility meeting, this was made available to all staff members.

#### Change idea: introduction of new ILDS referral form

PDSA cycle (May 2021): the ILDS referral form was updated with input from the QI group and comparing referral forms for neighbouring London boroughs. This was done with the aim of increasing the information gathered at this stage and hence reducing this number of potential service users requiring screening calls and seeking further details.

#### Change idea: GP workshop

PDSA cycle (May 2021): we designed a workshop for local GP surgeries on topics relating to learning disabilities to improve awareness of appropriate referrals and the associated processes. Due to overwhelming positive feedback received regarding this, we plan to continue to organise annual workshops.

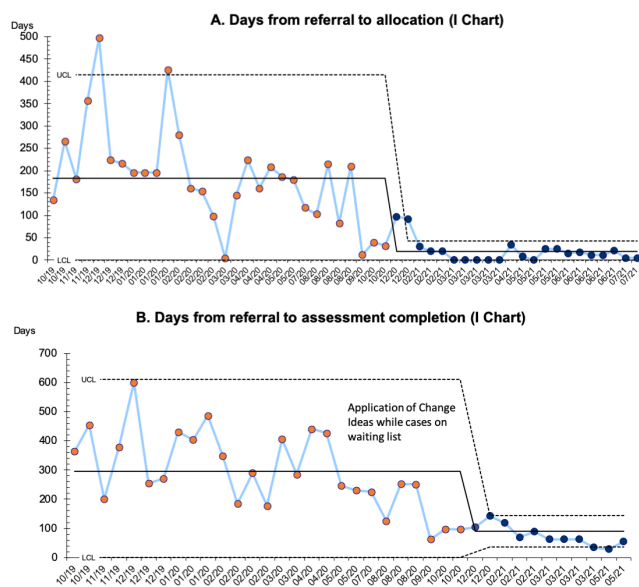
## RESULTS

A total of 52 potential service users were referred to us between 1 October 2019 and 1 July 2021, of whom all were allocated by the end of the project (August 2021). A total of 13 cases were excluded from analysis for the outcome time from referral to completion, of which 8 did not have a complete assessment by the end of the project, 2 required urgent psychiatric treatment and could not complete assessment, 2 withdrew consent before assessment completion and 1 had the referral withdrawn by the referrer. Therefore, a total of 39 were included for analysis of time from referral to completion.

There was an extensive reduction in the waiting times for both time to allocation and time to completion of eligibility assessment after introduction of the project (online supplemental material S2). Time from referral to allocation decreased from a median 184 (IQR=121–217) (mean=183.5±109.8) to 13 days (IQR=1–24) (mean=19.9±26.4), representing a 92.9% reduction. Similarly, time from referral to completion of eligibility assessment decreased from 271 (IQR=213–405) (mean=296.0±133.8) to 63 days (IQR=59–97) (mean=75.7±34.8), representing a 76.8% reduction.

An immediate shift in the days to allocation was observed after the start of the project and roll-out of the eligibility screening CI (figure 4). Prior to the project start, the I Chart demonstrates an unstable system with high variation, with data points outside of the control limits. Further CI and PDSA cycles likely contributed to the formation of a stable and sustainable system with upper control limit of 43 days, most notably the introduction of a formal allocation system which resulted in a run of referrals with 0 days to allocation.

Days to completion of eligibility assessment showed a similarly unstable system prior to the introduction of the project (figure 4). Notably, a shift can first be described from cases referred from May 2020, which we believe is due to the impact of CI on those on the waiting list at the start of the project. Those referred after the start of the project demonstrated a shift with a new upper control limit of 143 days with low variation, after the introduction of the eligibility screening checklist. Importantly, as of February 2021, 7 data points on or below the centreline (89 days). Therefore, any further data points below this level would represent a second shift, which occurred approximately after the introduction of key CI such as drop-in sessions and the eligibility screening allocation system.



**Figure 4** I Chart of (A) days to allocation from receipt of referral and (B) days to completion of eligibility assessment from receipt of referral.

Staff surveys before and after completion of the learning disability and eligibility training sessions (where 1 represents ‘not confident at all’ and 5 represents ‘very confident’) demonstrated the subjective improvement in confidence defining learning disability, understanding of the eligibility process and completion of assessment reports (online supplemental material S3).

Staff feedback was collated from all members of the MDT via a 5-point Likert scale (where 1 represents not satisfied at all and 5 represents very satisfied) after the completion of the project, which suggested improved satisfaction with the eligibility process and satisfaction with the eligibility allocation process as well as their perception on how well the eligibility process worked for service users (figure 5). The experience with project was positive, with feedback including ‘It has been brilliant to see more staff engagement, and a team approach...’ Importantly, staff members noted ongoing space for further improvement: ‘although there has been substantial improvement



**Figure 5** Staff Likert questionnaire responses before and after the start and completion of the project, respectively.

in timescales, these could be improved further to deliver services to clients quicker’.

Service user and next-of-kin feedback was collected via telephone for six referrals after completion of eligibility assessment. Of these, five reported understanding the purpose of the assessment (83%) and an average Likert score of 3.8 for response to the question ‘how happy were you with the time taken to complete the eligibility’. We noted that three of these cases had yet to receive the formal outcome letter after assessment. Comments regarding the assessment were positive: ‘it seemed It was alright, I thought the lady was really nice’, ‘It seemed fairly straightforward, [redacted] was happy with the assessment., felt she could be honest and open’.

## LESSONS AND LIMITATIONS

We observed a reduction in the time taken from receiving a new referral to completing eligibility assessment (77%), exceeding our initial aim of reducing this by 50%. The key limiting step appeared to be allocation of eligibility assessment, which made up over 80% of the overall time to completion in our baseline measurements, and was reduced during this project by 93% to a median of 13 days. This improvement appeared to be primarily caused by structural changes. Namely, consistent and guided information gathering in the form of eligibility screening checklists and a transparent and accountable system for allocation of full eligibility screenings. Structured teaching sessions and open drop-in sessions likely indirectly also contributed to this observed improvement, enhancing staff engagement and understanding of both the principles and processes by which eligibility assessments take place. The overall effect is that of improved access to our services as potential service users are more fluidly assessed and formally taken into our care, or signposted to other services. These gains were observed in a challenging context, with disruptions to accessing historical records and the ongoing COVID-19 pandemic. Importantly, these gains continue to be sustained to date and will continue to be monitored as quality control measure with an implantation plan in place.

This QI project benefited immensely from collaboration between all disciplines that make up our service. This took place from the ground up, integrating technology to facilitate discussion and project design. The use of a relative attribution system to identify priority CI was also essential, as it focused our efforts on high value changes that targeted where delays were predicted to originate from. We also benefited from real-time data collation of all referred cases and regular meetings with established ground rules and leadership structure, which allowed for multiple PDSA cycles across a number of interventions. The success of this project has led to the adoption of QI methodology throughout the team by which to perceive and adopt change of all sizes, including improvements in other aspects of the assessment pathway. Notably, we did not have any PDSA cycles targeting cognitive and adaptive

testing, which takes place for a number of potential service users that are not deemed eligible after screening and may represent an avenue by which further improvements in both service user experience and access to our services can be achieved.

In future, further involvement of service users as part of the QI process would be highly valuable. The project, and in fact the service, faced difficulty with service user engagement as many aspects transitioned into a remote service, with digital poverty acting as an additional barrier. With the creation of a People Participation Lead post at our Trust, we hope to improve service user involvement in QI projects in future. Areas for consideration include understanding of the eligibility process and the rationale behind eligibility decision making via rich feedback from both service users and their families regarding their experience of the process. This could highlight where communication falls short and aid in improving the quality and satisfaction of service users who undergo a process that can be somewhat sensitive and potentially highly impactful.

## CONCLUSIONS

This report on waiting times to access adult learning disabilities services in a community setting could be useful as a concrete example for other similar services aiming to set time frames for eligibility assessments to meet guidelines set out by the RCPsych and improve their services. We also suggest important considerations that could lead to vast improvements, namely the use of a QI framework with input from all stakeholders.

**Contributors** LC, acting as the guarantor, led the inception of the project and provided senior supervision along with IH. All authors contributed to the design of the project and its evolution, along with data acquisition. DP contributed substantially with the design and delivery of local GP workshops and acquisition of associated feedback. KH, AK and TW contributed substantially to the design of the screening checklist and letter templates. OO and JS performed data collation, analysis and interpretation with the assistance of CS, with OO producing the initial manuscript. All authors reviewed, revised and provided final approval of the manuscript for submission.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

**Patient consent for publication** Not applicable.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** Data are available on reasonable request. Anonymised data can be provided where possible on reasonable request to the lead author.

**Supplemental material** This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

## ORCID iD

Osama Omrani <http://orcid.org/0000-0002-3752-0240>

## REFERENCES

- 1 National Health Service. *Learning disabilities*. NHS online, 2018.
- 2 National Institute for Health and Care Excellence. *Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges*. NG11, 2015.
- 3 Fisher A. *The assessment of motor and process skills (AMPS)*. Three Star Press, 1995.
- 4 Wechsler D. *WAIS-III*. Pearson Assessment, 2008.
- 5 British Broadcasting Corporation. London's Hackney Borough Council hit by hack attack. *BBC News*, 2020. Available: <https://www.bbc.co.uk/news/technology-54522439> [Accessed 02 Sep 2021].
- 6 Heslop P, Blair PS, Fleming P, et al. The Confidential inquiry into premature deaths of people with intellectual disabilities in the UK: a population-based study. *Lancet* 2014;383:889–95.
- 7 Glover G, Williams R, Heslop P, et al. Mortality in people with intellectual disabilities in England. *J Intellect Disabil Res* 2017;61:62–74.
- 8 Alborz A, McNally R, Glendinning C. Access to health care for people with learning disabilities in the UK: mapping the issues and reviewing the evidence. *J Health Serv Res Policy* 2005;10:173–82.
- 9 Naiker U, FitzGerald G, Dulhunty JM, et al. Time to wait: a systematic review of strategies that affect out-patient waiting times. *Aust Health Rev* 2018;42:286–93.
- 10 Wilson Aet al. *Improving access to learning disability services in beds and Luton*. East London Foundation Trust, 2017.
- 11 Colwill A, Golparvar L, Clarke H. *Standards for adult community learning disability services*, 2019.
- 12 LifeQI. *Interpreting an SPC chart*. Help Centre, 2004.
- 13 Langley G, Moen R, Nolan KM, et al. *The improvement guide: a practical approach to enhancing organizational performance*. 2nd edn. Jossey-Bass Publishers, 2009.
- 14 Gallagher M, Hares T, Spencer J, et al. The nominal group technique: a research tool for general practice? *Fam Pract* 1993;10:76–81.