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Report of a mixed methods systematic review of literature to inform the development of *'sustainable safe staffing'* improvement resource in learning disability (LD) services for NHS Improvement

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Executive Summary

Purpose

The purpose of this mixed methods systematic review of literature is to summarise the best evidence available on sustainable safe staffing levels for multi-disciplinary learning disability teams in order to inform the development of setting-specific sustainable safe staffing guidance for the NHS Improvement National Safe Sustainable Staffing Guidance Programme Board for England. Firstly, the systematic literature review sought to uncover and synthesise any evidence on, sustainable safe staffing levels in learning disability services. Secondly, the review sought to identify themes of relevance to learning disability teams, and the delivery of sustainable, safe, and effective care for people with learning disabilities could be surfaced from national and international literature. Finally, the review sought to assess if any of the emerging evidence affirm or negate the context of care tool as an MDT model of care.

Methods

The Joanna Briggs Institute's (JBI) systematic review protocols were used to appraise studies. The PRISMA process was used to select the literature for review. Empirical (quantitative, qualitative, mixed methods) studies, synthesised evidence (literature reviews) and opinion papers, (n = 37) were included in the review. A mixed methods approach to the review and synthesis was used due to the heterogeneous nature of the evidence. Quantitative data was converted into themes and presented with qualitative data through meta-aggregation using a narrative approach. JBI tools were used to pool findings and rate them for quality. Meta-synthesis was used to produce the synthesised findings. Foundational coding families of cause, context and process were used as a framework (Glasser 1978) for presenting the findings.

Findings

No empirical evidence was located that directly relate to sustainable safe staffing. Three core themes emerged from the review. The first theme; *service models*, is underpinned by three categories (service design and implementation strategies; clarity of professional roles and service collaboration / integration mechanisms; stakeholder and service user engagement). Four categories underpin the second theme; *standards of care* (understanding of the context of care; delivering effective care; ensuring effective communication; ensuring high standards of care). The third theme; *resources*, is made up of three categories (processes for managing resources; developing professional competence; values-based recruitment and retention practices).

Conclusions

The conclusions from this review leave a number of questions unanswered. The concept of sustainable safe staffing in LD services must be clearly understood from the very complex nature of the models of care, the extent of the number professionals and healthcare agencies involved in meeting the healthcare needs of people with LD.

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Implications for practice

Without an appropriate *service model* of healthcare provision, clear *standards of care*, and adequate processes for deploying *resources* sustainable, safe, effective and efficient staffing may be challenging or unachievable.

Implications for research

The lack of robust empirical evidence regarding sustainable safe staffing in LD services mean the need for robustly designed research in this area cannot be overemphasised. Research needs to focus on the context of care, the relationships between sustainability, safety, effectiveness, efficiency and staffing levels, the *hub and spoke model* of healthcare service provision, and *hospital communication passports*.

Recommendations

Although the level and quality of evidence from all the literature included in this review is low, we have made appropriate recommendations given the significance and rationale of the topic under consideration.

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Background

Compassion in practice: Nursing, midwifery and care staff – our vision and strategy (DH 2012) has emphasised the need for a significant refocusing of how nursing care is provided in England. The Francis Report (2013), which highlighted poor leadership and systems failure that resulted in inadequate standards of care at Staffordshire NHS Foundation Trust, and the subsequent government response (DH 2014) gave significant impetus to the need for change and resulted in the need for fundamental changes in how decisions on ensuring sustainable safe staffing levels within the NHS provider services are made.

In 2014, NICE published guidance on safe staffing for nursing in adult inpatient wards in acute hospitals. Publication of the *Five year forward view* NHS (2014) and Lord Carter's review of efficiency in hospitals which show how large savings can be made by the NHS (DH 2015) have further emphasised the need for the efficient use of resources to ensure sustainability of safe staffing decisions. In addition, the Carter report has advocated for the adoption of integrated IT processes in order to; use work loading tools to calculate care hours per patient day (CHPPD), manage staff deployment, manage patient transfers, measurement of quality and efficiency that is essential for effective care delivery, establishment of cooperative arrangements in order to deliver sustainable, safe, effective and efficient staffing that improve healthcare outcomes for patients (Carter 2016).

In 2015 NICE announced that it was suspending research on safe staffing levels until a wider programme of review of sustainable safe staffing led by NHS England and NHS Improvement has been completed. Later in 2015, Monitor, TDA, CQC, NHS England and NICE published a letter to all NHS provider trusts, to address the concerns that recent messages to the system on the need to intensify efforts to meet the financial challenges were seen as contradictory to the messages on safe staffing. Their letter outlined how work was needed to support trusts to secure both safe staffing, and greater efficiency. It was stated that Lord Carter would deliver this through two programmes that needed further work in order to further develop safe staffing guidance.

In 2016, the National Quality Board published guidance, and a template for the development of patient group specific improvement resources for supporting NHS providers to deliver high quality and efficient care by having processes in place to ensure that the right staff with the right skills are in the right place at the right time. The guidance recommends that provider organisations have systems in place to report and measure patient outcomes, people productivity and financial sustainability, incidents and carer and staff feedback. In addition, it recommends the implementation of CHPPD and the development of local electronic quality dashboard for ensuring and monitoring safe and sustainable staffing. Furthermore, expected specific processes have been made for ensuring that the right staff are in the right place at the right time.

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A recent systematic literature review by Mafuba et al (2014) failed to locate any empirical studies that addressed safe staffing levels in learning disability services, nationally or internationally. However, they identified numerous studies that sought to explore a range of factors that directly or indirectly impact on the delivery of safe and compassionate learning disability care. These factors were organised into eight themes that included; level of client need, staff attributes, staff perception of challenging behaviour, job satisfaction, working as a team, stress, burnout and work overload, and organisational support that includes staff feedback, and finally working in the community. The literature review recommended that further work be undertaken to validate the context of care conclusions and further develop the context of care tool.

Gates et al (2014) reported the development and testing of a tool for measuring the context of care that was described by Mafuba et al (2014). Context is a relatively new concept in the field of learning disabilities, and it relates to; *'a concept that integrates the totality of circumstances that comprise the milieu of human life and human functioning. Context can be viewed as an independent and intervening variable. As an independent variable, context includes personal and environment al characteristics that are not usually manipulated such as age, language, culture and ethnicity, gender and family. As an intervening variable, context includes organisations, systems and societal policies and practices that can be manipulated to enhance functioning'* (Shogren et al 2014, p.110). The context of care tool has 7 statements for each of the 8 themes identified by Mafuba et al (2014) as underpinning the context of care. The authors reported the reliability Cronbach's Alpha coefficient for the [The TCOC-LDS: Version1] of the context of care tool as .921 following a pilot survey of individuals and organisations (n = 8), representing a 36% response rate. The authors recommended that further work to develop the tool was required.

Within the learning disability context, determining safe workforce requirements for settings where professionals work is problematic. This is partly because of the disparate nature of where they work, and this issue should not be ignored. The multiplicity of practice contexts for learning disability professionals make the adoption of a particular set of guidance difficult. It is difficult to envisage how universal guidance could be operationalised because of the complex interaction and interfaces between the public, private, voluntary and, or, independent sectors, acute general and mental health hospital settings, learning disability specialist acute services, generic community services and specialist community learning disability services.

In order to inform the development of the sustainable safe staffing guidance for learning disability services, further systematic review of evidence is essential. Such a review is important in order to identify themes pertinent to sustainable safe staffing. This would provide a direction for further research to ensure delivery of sustainable safe staffing for people with LD in a wide range of care settings.

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Objectives

In addition to the review already undertaken on learning disability staffing levels, and their relationship to safety, quality and delivery of compassionate nursing care by UWL (Mafuba et al 2014); a further review was commissioned by the Sustainable Safe Staffing subgroup for learning disabilities. The current literature review is more broadly based, regarding the interdisciplinary range of staff working in learning disability services, and needed to consider the sustainability of these staff within a framework of compassionate, safe, effective and efficient care. It was stated that work would need to; identify and review best available evidence on safe, sustainable staffing models; to be multi-disciplinary in approach to staffing; be outcome focused; to complete an economic impact assessment on proposed staffing models and guidance; to test methodology for staffing tools and staffing models with the appropriate experts / focus groups.

The purpose of this mixed methods systematic review of literature is;

To summarise the best evidence available on sustainable safe staffing levels for multi-disciplinary learning disability teams in order to inform the development of setting-specific sustainable safe staffing improvement resources for the National Safe Sustainable Staffing Guidance Programme Board.

Questions

This mixed methods systematic literature review sought to answer the following questions;

1. Is there any evidence on, sustainable safe staffing levels in learning disability services?
2. What themes of relevance to learning disability teams, and the delivery of safe, compassionate care can be surfaced from national and international literature?
3. Does any of the emerging evidence affirm or negate the context of care tool as an MDT model of care?

Criteria for Considering Studies for this Review

Types of studies

The review in particular includes qualitative, quantitative, and multiple method studies published in peer-reviewed journals. However, because of the dearth of empirical studies that specifically addressed the objectives of the current review, opinion papers (published in peer reviewed journals and unpublished) were included. Furthermore, because of the lack of appropriate studies, systematic literature reviews were also included.

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Types of participants

We included empirical studies with adult participants (aged 18 years or older) working with adults in learning disabilities in acute and community healthcare settings. Participants were primarily healthcare professionals. However, there are managers of healthcare professionals who make decisions on the delivery of healthcare to people with learning disabilities who are not necessarily healthcare professionals themselves. Consequently, we included studies where relevant non-healthcare professionals were participants.

We included opinion papers which had no participants but which addressed themes pertinent to the objectives of the review. We included systematic reviews that included studies which involved adult health care professionals and relevant others as participants, and which synthesised evidence pertinent to the current review.

Types of interventions

The review considered the following interventions; maintenance of patient safety, maintenance of quality, delivery of compassionate care, facilitation of effective communication, stress management, use of work loading and staffing tools, recruitment of healthcare professionals, sustaining staffing levels, measuring healthcare outcomes, defining professional roles (psychiatrist, psychologist, nurse, occupational therapist, speech and language therapist, physiotherapist, behavioural therapist, nutritionist, pharmacist), workforce planning, effective team working, quality assurance, staff development, patient and carer involvement, ensuring productivity and efficiency, and management of staff deployment.

Types of outcome measures

a. Primary outcomes

The following primary outcomes were considered; patient safety, healthcare quality, quality of life, compassionate care, effective communication, staff work loading tools, staff recruitment, sustainable safe staffing levels, healthcare outcomes, community, staff workload, inter-professional working, workforce planning, effective team-working, staff education and training, patient and carer involvement, productivity, efficiency and e-rostering.

b. Secondary outcomes

The following secondary outcomes were considered; use of resources, Care Hours per Patient Day (CHPPD), peer review of services, reducing use of agency staff, flexible staff deployment and size of caseload.

Search Strategy

Inclusion criteria

The search strategy was limited to studies undertaken and published at the completion of literature search for this review (June 2016), but no earlier than 2000. We set a time parameter of 16 years as we believed studies earlier than this were unlikely to have

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pursued empirical scrutiny into sustainable safe staffing levels; this is because the issue of safe and sustainable interdisciplinary numbers of staff is a relatively contemporary phenomenon in learning disability services. The search terms identified for group *'A'* were combined with those in group *'B'*; these terms originate from the proposals developed by NHS Improvement for safe and sustainable staffing.

Studies and papers were included if they were originally published in English; any papers subsequently translated into English following original publication were also included. Published (for example - peer reviewed journal articles), and unpublished studies (for example - theses) were considered for review if their focus relates to safe and sustainable staffing in learning disability services.

Search terms

Group A: Learning disability / intellectual disability / mental retardation / mental handicap / developmental disability.

Group B: Safety / quality / compassion / communication / stress / staffing tools / recruitment/ staffing levels / sustainable / outcomes / community / staff workload / multi - professional/ inter - professional / sustainable staffing/workforce planning / effective working / peer review / training / education / patient / carer / carer involvement / productivity / efficiency / rostering / agency / incidents / care hours patient days / carter.

Electronic searches

We adopted the search strategy for Boolean logic in order to search in all databases. We searched the JBI Reports (Wiley Online Library) (2003 to date); MEDLINE (2000 to date); EMBASE (2000 to date); PsycINFO (2000 to date); CINAHL (EBSCOhost) (2000 to date); ScienceDirect (2000 to date), Google Scholar (2000 to date), Academic Search Elite (2000 to date),Index to Theses (UK only) (2000 to date) ; ETHOS (2000 to date), Theses.com (2000 to date) and Dissertations Abstracts (2000 to date).

Searching other sources

We also searched the reference and citation lists of the review papers for additional sources and adjusted search terms where it was found to be necessary. We also asked members of the task and finish group to provide us with any reports and literature they were aware of which was not publicly available.

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Methods of the Review

Assessment of methodological quality

Selection of studies

One review author checked titles and abstracts of retrieved studies to exclude obviously irrelevant papers. A small (n = 6), random sample was double-checked by a second author. Where the title and abstract indicated that a paper had the potential to fit the review criteria, copies of the paper was independently assessed for inclusion by two authors for methodological validity, and relevance to the overall objective of the review prior to inclusion in the final review. Critical appraisal of quantitative studies was undertaken using the JBI Critical Appraisal of Evidence of Effectiveness (see Appendix A). The JBI Critical Appraisal Checklist for Qualitative Research was used to select qualitative studies (see Appendix B). The JBI Critical Appraisal Checklist for Systematic and Research Syntheses Reviews was used to appraise systematic literature review papers (see Appendix C). We appraised text and opinion papers using the JBI Critical Appraisal Checklist for Text and Opinion Papers (see Appendix D). All literature was graded using the JBI's Levels of Evidence for Effectiveness (see Appendix F). Any disagreement between the reviewers was resolved through discussion with the review panel, which comprised members of the sustainable safe staffing subgroup for learning disabilities.

Data extraction and management

Two review authors independently carried out data extraction using a data extraction form (see Appendix E). We developed the data extraction table based on Timmins and McCabe (2005), JBI Qualitative Data Extraction Instrument and JBI Data Extraction Form (Quantitative Data). In addition, the critical appraisal outcomes were incorporated into the table using the JBI Critical Appraisal of Evidence of Effectiveness (see Appendix A), the JBI Critical Appraisal Checklist for Qualitative Research (see Appendix B), the JBI Critical Appraisal Checklist for Systematic and Research Syntheses Reviews (see Appendix C) and the JBI Critical Appraisal Checklist for Text and Opinion Papers (see Appendix D). We resolved any disagreement by discussing the matter with the third author. We extracted the following data; authorship (author(s), year, country of origin), study objectives, methods (type of paper, study design, setting (where applicable) participants (where applicable), number of studies (where applicable), data collection methods (where applicable), data analysis methods (where applicable) and findings / conclusions.

Data synthesis

A mixed methods approach to the review and synthesis was deemed more appropriate because of the heterogeneous nature of the evidence. This was also important in order to maximise the synthesised findings. We are cognisant of the emergent nature of mixed methods reviews. The inclusion of diverse forms of evidence was important for broadening the evidence base to inform the proposed sustainable safe staffing guidance (Sandelowski et al 2012). While we acknowledge the limitations of the credibility of mixed methods studies, systematic reviews and opinion papers included in this review, we are of the view that the careful inclusion of

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a wide range of literature into this review in the absence of robust randomised controlled trials for inclusion in the systematic review was important in strengthening the findings and conclusions.

Sandelowski et al (2013) have argued that the type of data being analysed need to dictate the mixed methods synthesis adopted. They also advocate for three approaches to mixed methods synthesis, segregated, contingent and integrated. We opted for this method because it allows data to be assimilated into one synthesis. According to Sandelowski et al (2013), integration can be undertaken either by converting quantitative data into themes and presented with qualitative data through meta-aggregation, or by converting qualitative data into numerical format before combining with quantitative data for statistical analysis. Because of the heterogeneous nature of the evidence, meta-aggregation was the most appropriate method for this review. A narrative approach was therefore used to present quantitative findings. We used JBI-QARI and JBI-NOTARI to pool findings (Level 1 findings, see Appendix G), rate them for quality, assemble, synthesise the findings and generate statements that represent the aggregation. We then categorised these findings on the basis of similarity in meaning and generated Level 2 findings (see Appendix G). We then subjected the Level 2 findings to a meta-synthesis and produced the synthesised findings (Level 3 findings, see Appendix G). For presentation in the discussion, foundational coding families of cause, context and process were used as a framework (Glasser 1978). We selected these three out of twelve foundational coding families because they appeared to be more relevant in theoretically explaining the emerging evidence.

Review Results

Description of studies

We retrieved 89 papers. 17 papers were excluded because they focussed on general issues of disability rather than learning disability and nine papers had adults with LD as participants. Six papers were excluded because they focused on medical treatment, and a further 7 papers were excluded because they focused on community care. Three papers were excluded because they focussed on children. Finally, 10 papers were excluded because they focussed on staffing issues not relevant to the current review. In total 37 papers were included in this review.

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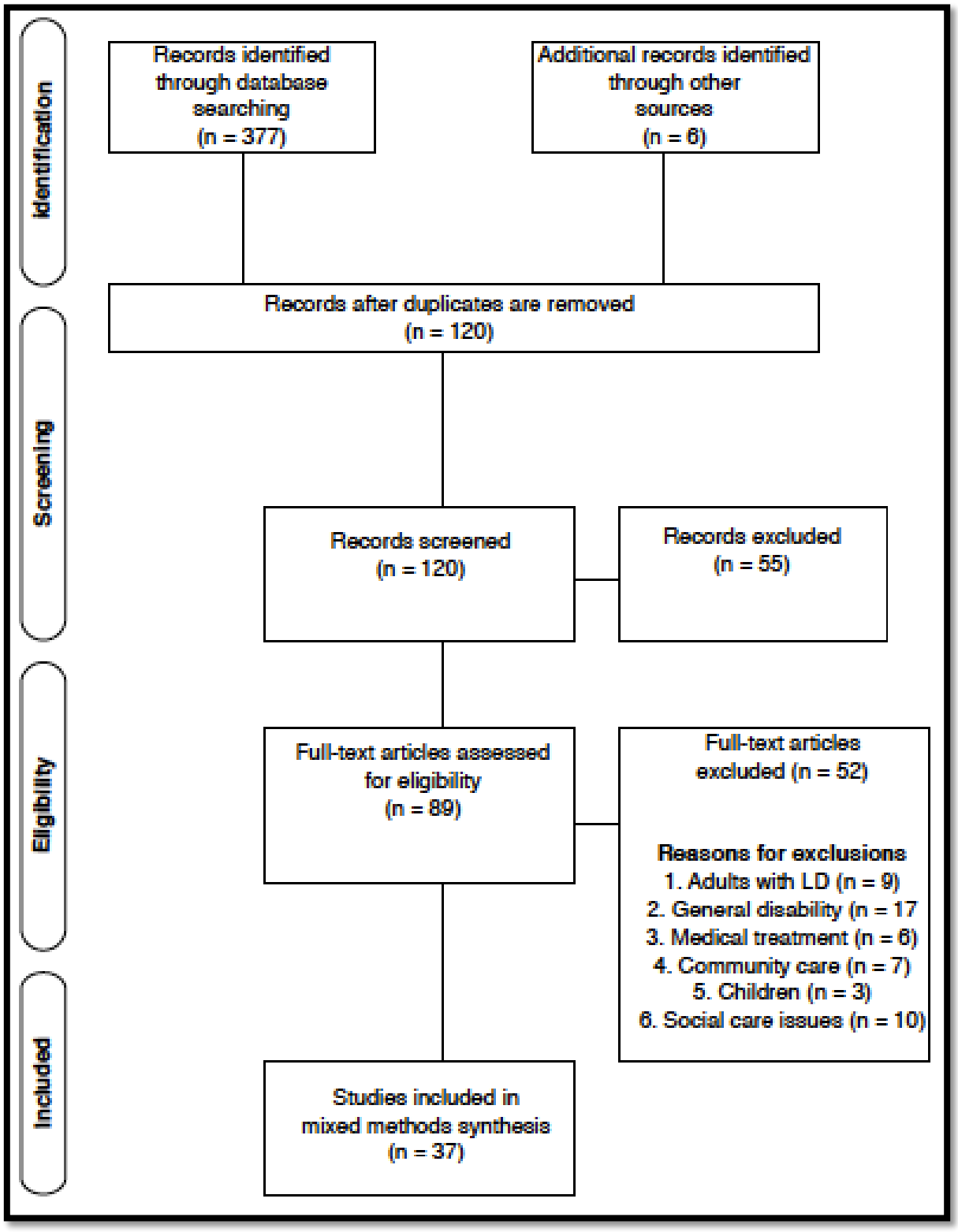
Figure 1: PRISMA flow diagram of selection of studies



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Methodological quality

We used the JBI's Levels of Evidence for Effectiveness to determine the level of quality of evidence (JBI Levels of Evidence and Grades of Recommendation Working Party 2014). JBI categorises evidence of effectiveness into 5 levels, with subcategories within each level. Level 1 is the highest level and is for evidence of studies of an experimental design. Level 2 is for evidence from quasi-experiments; level 3 is for evidence from observational - analytic designs; level 4 is for evidence from observational – descriptive studies; and level 5 is the lowest and is for evidence from expert opinion and bench / desk research.

At JBI evidence level of effectiveness 4a, the 6 systematic reviews of descriptive studies provided the best evidence available for this review. We however need to emphasise that other than the review by Mafuba et al (2014), all the other reviews were not specifically on safe staffing in LD services.

The majority of the empirical studies were mixed or multiple method studies with varying degrees of methodological quality. The multiple / mixed methods designs included documentary, surveys, focus groups, Grounded theory and phenomenology. The main methodological weaknesses within the studies related to participant sampling methods, sample size and data analysis methods. All studies were cross-sectional and they met the JBI level of evidence 4b. Four of the empirical studies were qualitative, with one of each of focus group, Grounded theory, documentary analysis, and phenomenological methodology. The main methodological weaknesses related to participant sampling methods, sample size, data handling and management, and data analysis methods. As with the multiple methods studies, all studies were cross-sectional and they met the JBI level of evidence 4b. Of the 4 quantitative studies, 3 were surveys, 1 was documentary analysis, and 1 was an evaluation (repeated measures). The methodological limitations were similar to those of mixed method studies. All studies were cross-sectional and they met the JBI level of evidence of effectiveness 4b.

Using the JBI Evidence Level of Effectiveness criteria, we graded expert opinion papers between 5b and 5c, with JBI Evidence Level of Effectiveness 5c being the lowest that could be considered. All reports and briefing papers, which involved contributions from more than one expert met the criteria for JBI evidence level 5b for expert consensus opinion evidence. Although 3 papers in this category were peer reviewed publications they met JBI evidence level 5c criteria.

Results

In this results section, findings from this mixed methods systematic review have been grouped according to the type and JBI level of evidence of effectiveness, rather than the thematic approach used in the discussion. Literature reviews are presented first, followed by empirical studies (quantitative, qualitative and mixed methods), and then finally opinion papers. Because of the complexity of the evidence, citations are presented chronologically from the most recent to the oldest. We adopted a standardised nomenclature for reporting; name, year, country of origin, aims of the

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paper, methods (where appropriate), participants (where appropriate), findings, conclusions and limitations (where appropriate) (see Appendix G).

Literature reviews

A systematic literature review by Kernohan (2016) in the UK explored research into the factors that may influence a nurse's decision to use seclusion when supporting a person with a dual diagnosis of learning disability and mental illness. The systematic literature review included 12 heterogeneous empirical studies. CASP (2014) appraisal tools were used to appraise the studies and integrative synthesis was used to synthesise the evidence. The review identified factors that influenced decisions to seclude as; patient factors (e.g. aggression), staff factors (e.g. less variability in a team's work experience), and environmental and organisational factors (e.g. positive correlation between use of seclusion and availability of seclusion room). The study concluded that people with a dual diagnosis of learning disabilities and mental illness needed to be involved in their care. The study also concluded that organisational change is required to reduce use of restrictive measures. Furthermore, the study concluded that alternative models to seclusion were required.

In the Republic of Ireland, O'Dwyer et al (2015) undertook a systematic literature review to explore what type of pharmaceutical care interventions were being undertaken for people with LD, and also how pharmacists contributed to the care of people with LD as part of a multi-disciplinary team. The systematic review included 8 empirical studies of different designs and methodologies. A narrative approach to synthesis was used. The study concluded that pharmacists could make positive interventions in relation to the quality of the medication use process, in collaboration with other healthcare professionals, carers and people with LD.

In Australia, Iacono et al (2014) undertook a systematic literature review that synthesised evidence in order to understand the experiences of adults with LD when using hospitals, and also synthesised evidence on the views of their families and paid carers. The review also sought to understand the experiences of hospital staff who cared for people with LD and how the hospital system responded to adults with LD. The systematic review included 16 quantitative and qualitative studies. Downs and Black evaluation tools and qualitative thematic analysis were used to synthesise evidence. The authors concluded that people with LD were fearful of their hospital encounters. The review also concluded that there was a failure by hospital staff to provide care to people with learning disabilities and that there was poor or negative attitudes by hospital staff towards them. In addition, the review observed that hospital staff lacked knowledge and skills to care for people with LD. Furthermore, the review concluded that there was a staff and service failure to make reasonable adjustments necessary to meet the needs of people with learning disabilities. Additionally, the authors observed an over-reliance by hospitals on family and carers to provide care when people with LD were admitted to hospital. Finally, the review also concluded that the presence of a hospital liaison healthcare professional enhanced hospital care for people with LD.

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Mafuba et al (2014) / UK sought to summarise the best evidence available on safe staffing levels for qualified learning disability nurses in order to inform the implementation of the national *Compassion into Practice Programme* in England. The review included 31 papers, which included empirical studies, synthesised evidence and opinion literature. Integrated thematic synthesis was used. The review concluded that the context of care needed to be the basis for staffing levels. The authors identified 8 context of care themes; staff attributes (age, gender, working experience, training, and perception of challenging behaviour), level of client need (level of disability, challenging behaviour), staff perception of challenging behaviour (attitudes towards challenging behaviour, exposure to physical violence, support and supervision, role clarity), job satisfaction (satisfaction with life, job security/insecurity, low job status, role ambiguity, influence over decisions), stress burnout and work overload (perceived stress, emotional exhaustion, expressed emotion, workplace social support, work overload, exposure to stress, working as a team ('the team', support strategies, training, supervision), organisational support including feedback (organisational variables, performance feedback, organisational support, personal support from supervisors), and community working (role clarity, size of caseload, autonomy, administrative work, travelling to see patients, level of contact, specialist practice, legal support, demographic ignorance, communication with primary care).

In Israel, Werner and Stawski (2012) summarised the available literature that examined the knowledge, attitudes and training of psychiatrists, and other professional caregivers who cared for people with dual diagnosis of LD and psychiatric disorder. The systematic literature review included 28 heterogeneous empirical studies. The review concluded that there was a need to improve the knowledge, competence and attitudes of practitioners through training and practice opportunities. The review also concluded that it was important to examine effectiveness of training in terms of its impact on knowledge, skills and attitudes of healthcare professionals.

A literature review by Slevin et al (2008) described the main functions, common functions, composition, challenges, and identified good practice of CTLDs in the UK. The review concluded that the CTLD is an appropriate model of inter-professional and inter-agency working. The review identified the composition of CTLDs as CNLDs, consultant psychiatrists (LD), clinical psychologists, occupational therapists, physiotherapists, and speech and language therapists. The authors identified more efficient use of staff resources, more effective service provision, and a more satisfying work environment as some of the advantages of the CTLD model of service provision. The review concluded that barriers to effectiveness of CTLDs included; insufficient staff to meet existing caseloads, excessive CNLDs caseloads, tension between healthcare and social care, inadequate training and skills among staff, and organisational boundaries.

Empirical studies

A study by Sheehan et al (2016) contacted in the UK focussed on auditing general hospital patient records of people with learning disabilities in order to evaluate the

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performance of acute general and mental health services in delivering inpatient care to people with LD. The study also explored the influence of organisational factors on the quality of care delivered to people with learning disabilities. This involved case notes audits of 176 patients (acute general hospital, n = 109, and mental health services, n = 67) (n = 91 males and n = 85 females), mean age = 43 (SD = 16.9 years), (mild-moderate learning disabilities n = 79; severe-profound learning disabilities was 21% and the remainder was unknown). The case notes records were drawn from 9 acute general hospitals and 6 acute mental health services. Data collection involved measures on seven key indicators of high-quality care. Logistic regression was used for data analysis. Among other findings, the study concluded that; inpatient care for people with learning disabilities needed to be improved, epilepsy risk assessments were more likely to be undertaken where learning disability liaison nurses (LDLNs) were employed, there was some support for the role of a LDLN in acute general and acute mental health services, the presence of an electronic system of patient identification within the acute hospital setting did not improve outcomes, and that hospital communication passports were likely to be used where LDLNs were employed.

The study by Hassiotis et al (2015) aimed to summarise the evidence on community service models for adults with LD and mental ill-health, behaviour or forensic problems in the UK. The study involved a literature review (not defined) and a questionnaire survey of LD psychiatrists (n = 65). Despite the methodological limitations of the study, some relevant findings emerged. The study concluded that; services for people with LD work better when delivered around individual needs in a person-centred approach, people with severe mental illness and borderline LD benefit from intensive community-based care in terms of reduced length of time in hospital, positive behaviour support works well in community-based settings, a multi-agency approach to meeting the needs of people with LD reduces at-risk behaviours, there was little evidence of routine collection of outcome data by community services, outcome measures were not routinely used, there was a need for a strategic approach to workforce development in LD services, and that staff in generic acute mental health services and community forensic teams lacked the knowledge and skills essential in meeting the complex needs of people with LD.

In the USA, Friese and Ailey (2015) described the introduction of care plans for people with LD at a medical centre. In addition, the study described the introduction of an online programme to train nurses in the use of the care plans. Phase 1 involved the review of literature pertinent to the study. Phase 2 of the study involved a staff survey (n = 292). Phase 3 involved a survey of nurses who specialised in nursing people with LD (n = 63). Finally, phase 4 of the study involved analysis of training evaluation (n = 75). The study concluded that; care plans for patients with LD needed to enhance communication, there was a need to make reasonable adjustments to the environment in order to enhance patient participation in their own care, there was a need for interventions that aimed to improve patients with LD's cooperation with their own care, there was a need for carer involvement and support for carers, there was a need for

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training to increase hospital nurses' confidence in caring for people with LD, there was a need to introduce minimum standards of care for people with LD, there was a need for methods of facilitating effective communication, and finally that it was imperative to evaluate the impact of new interventions.

Hutchison and Kroese (2015) examined front-line staff experiences of working in residential care for people with LD in the UK. The study used phenomenology and interpretive phenomenological analysis of data. Semi-structured interviews were conducted with frontline staff (n = 6; 4 females and 2 males, age range = 28 – 52 years, staff experience = 5 – 24 years). The study identified factors that impacted on standards of care for people with LD. These included; positive interpersonal relationships, individual motivational characteristics, environmental and organisational characteristics, staff feeling valued and empowered, and collaborative team working.

In the UK, the population based confidential inquiry by Heslop et al (2014) investigated the contributory factors to avoidable and premature deaths of people with LD in England. The study reviewed the death records of people with LD (n = 247). The study reported that 54(22%) death records were for people below the age of 50 years (median age = 64 years; males = 65 years - 13 years below average, and females = 63 years - 20 years below average). The study also found that avoidable deaths related to care quality were more common in people with LD (37%, 90/244) as compared to a national average of 13%. In addition, the inquiry identified the contributory factors to the variation of life expectancy between people with LD and those without LD in England. These factors included; problems with advanced care planning, adherence to the Mental Capacity Act, living in inappropriate accommodation, failure to adjust care as needs change, and carers not feeling listened to.

The study by Campbell (2014) sought to measure nurses' knowledge about Adult Support and Protection (Scotland) Act 2007 before and after a one-day training course using participants' favoured methods of training activities (n = 18 community LD nurses). Repeated measures were used to evaluate the impact of the one-day adult support and protection training for community LD nurses across one NHS area. The study reported statistically significant increase in scores post-training (Wilcoxon's signed-ranks test). The study concluded that to be effective, training need to be transferred into the practice setting.

Clark et al (2014) reported on a study to assess the level of autism knowledge of community LD staff in an area of the UK. Secondly, the study sought to update and enhance the level of knowledge of autism of staff. Finally, the study aimed to promote autism friendly changes in healthcare services. Participants included 56 community LD staff (n = 46 clinicians and n = 13 administration staff – 2 participants had LD). Data was collected using an online survey questionnaire, which was followed by training on *introduction to autism*. This was then followed by a focus group with administration staff (n = 8). The study reported that before the training, front line administration staff

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were more limited in their understanding of autism as compared to clinicians. The study also reported that administration staff who participated in the study had limited autism awareness training. The study concluded that autism awareness training had positive outcomes for administration staff and for patients. The study also concluded that on-going evaluation of staff training was essential.

In the UK, Tuffrey-Wijne et al (2013) undertook a 3-stage study that aimed to describe the cross-organisational, organisational and individual factors in NHS hospitals that promoted or compromised a safe environment for patients with LD. The study also sought to develop guidance for improving practice. The study used a mixed methods approach that involved 6 NHS hospitals in England. Stage 1 involved a survey (with follow up telephone interviews for clarification) of strategic hospital managers (n = 6). Stage 2 involved; (1) a questionnaire survey of clinical staff (n = 990), (2) face-to-face semi-structured interviews with hospital staff (HCAs to senior managers) (n = 68), (3) interviews with adults with LD who had attended the hospitals (n = 33), (4) face-to-face or telephone semi structured interviews (n = 37) and questionnaire survey (n = 88) of carers, (5) participant observations and interviews of inpatients (n = 8), and (6) analysis of records of adverse events. Stage 3 of the study involved consultation with expert panels of senior managers and senior clinicians (n = 42). Qualitative analysis was undertaken with the aid of Nvivo 9 and descriptive quantitative analysis was undertaken using SPSS 19.0. The study concluded that barriers to better and safer hospital care for people with LD included their invisibility, lack of hospital staff understanding of the support needs of people with LD, lack of consistent and effective carer involvement in decision making, and lack of clear lines of responsibility and accountability for making reasonable adjustments. In addition, the study identified enablers for translation of policies into practice as; the presence of LDLNs within the hospital setting, the degree of congruence between staff's own values, priorities and positive care principles, clear leadership and guidance, and integration of services.

The UK study by Lewer and Harding (2013) analysed some of the factors, which affected the implementation, and outcomes of indirect intervention for people with LD in residential homes and day centres. Semi-structured interviews were used, guided by Grounded theory and involved carers / support workers (n = 4) and speech and language therapists (SALT) (n = 3). The study highlighted the importance of clarifying the roles of SALTs. In addition, the study concluded that direct care staff training is fundamental to successful SALT interventions. Furthermore, the study concluded that holistic approach to care needed to go beyond the needs of the individual receiving care to include the needs of the organisation providing care.

Brown et al (2011) have examined the impact and outcomes of four LDLN services in SE Scotland on the health experiences of people with LD attending for general hospital care. The study involved documentary analysis of referral records (n = 323) and focus groups involving participants from 85 key stakeholders organisations (community learning disability nurses (CLDNs) (n = 61), paid carers (n = 55), hospital nurses (n = 52). Quantitative data was analysed using SPSS 17.0, and qualitative data

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was analysed thematically and managed with NVivo 8. The study identified the role of the LDLN as; facilitation of communication, promotion and facilitation of effective co-ordination of care, supporting and enabling education and practice development, leading on the development of policies / procedures and care pathways, advocating for people with learning disabilities, building bridges between services, and assessment of care needs and provision of advice.

The study by Chaplin et al (2011) undertaken in the UK used a case example methodology to describe how a specialist mental health assessment and treatment inpatient service for people with LD put in place a process of improving and re-providing the service in partnership with local stakeholders following a series of audits. The study concluded that; audit has a role in monitoring the quality and effectiveness of services, services needed to be needs-led rather than bed-led, projects for implementing change needed to be evidence-based, there was a need for transparent and honest relationships with stakeholders in the process of re-providing a service, and that a collaborative approach to addressing problems with stakeholder involvement.

A multi-phase UK study by Lillywhite and Haines (2010) explored and documented the nature of occupational therapy with people with learning disabilities across all four countries of the UK, from the perspectives of OTs and those paid to support people with LD using a multiple methods approach. Phase 1 involved a questionnaire audit of occupational therapists' (OTs) roles (n = 69 (46% response)). The authors claim that random sampling was used but this is unclear and the method of data analysis was not described. Phase 2 involved 8 focus groups purposively sampled OTs (n = 49). Data was analysed thematically with the aid of NVivo 8. Phase 3 involved telephone semi-structured interviews with purposively sampled support workers (n = 5). Data was analysed thematically with the aid of NVivo 8. The study concluded that; OTs have a unique role in promoting independence for people with LD, OTs could make significant contributions to people with LD who have a wide range of complex needs, OTs needed to be part of the multi-disciplinary team (MDT) and that OTs could support access to mainstream services by people with learning disabilities.

The study by Windley and Chapman (2010) undertaken in the UK investigated how community learning disability teams (CLDTs) could best carry out their role of providing support to support workers for adults with LD by understanding how support workers perceived their role, training and support needs. The study used a phenomenological approach and involved a focus group (n = 3), and semi-structured interviews (n = 5; 5 females and 3 males). Thematic analysis was used. The study concluded that; there was a need for training, which develops personal skills of support workers, and that service providers needed to develop the best means of imparting the most essential skills. The study also concluded that poor communication and assertiveness skills were factors, which could prevent joint working. Furthermore, participants reported that supervision structures were remote and ineffective.

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Gates (2009) undertook a strategic review of the educational commissioning process of workforce planning issues in SW England. The review used a multi-method methodology, which included; a postal survey questionnaire, semi-structured interviews, reference groups, documentary analysis of policy documents, and focus groups. In addition, the reviewinvolved a steering group that included; LD student nurses, commissioners of LD services, parents and family carers, managers of services, higher education institutions academic staff, practitioners, self-advocates and representatives of local partnership boards. Details of methodological processes, sample sizes and data analysis methods were not provided. The study concluded that there was a need to; increase pre-registration nursing commissions, establish an evidence base for registered LD nurses requirements for the future, create new learning disability practitioner role, develop a flexible model of learning, and provide 'visible' clinical leadership in the practice setting.

A study by Gibbs et al (2008) described the experiences of people with LD in general hospital settings in the UK. Data was collected using a focus group consisting of; adults with LD; 6 females and 5 males, 18-62 years, diagnosis of mild to moderate LD (n = 11), parents (n = 9), and paid carers (n = 5). Data was analysed using Grounded theory analysis (Glasser and Strauss 1967) with the aid of NUDIST. The study concluded that communication was essential between hospital staff and people with LD, between hospital staff and carers, and between healthcare professionals. The study also reported that carers spent up to 24 hours in hospital to provide physical care and facilitate communication when people with LD are admitted into hospital care.

McMurray and Beebee (2007) reported on a UK study that sought to evaluate the provision of LD awareness training to A&E, acute wards and other acute hospital departments' staff. A survey questionnaire was used to collect data (n = 92 – pre-training; n = 46 – post training). Training included the definitions of LD, service user perspectives, communication, emotional needs, accessibility, consent, and physical health needs of people with LD. The study concluded that service user involvement in awareness training was important. The study also reported that staff who participated valued the awareness training and identified usefulness when caring for people with LD. Furthermore, the study reported that staff felt that the awareness training needed to be mandatory.

Young and Chesson (2006) sought to discover the views of commissioners of services for people with LD in Scotland regarding approaches to service evaluation and healthcare outcome measurements. The study involved a postal questionnaire survey of NHS, Local Authority and non-statutory stakeholders (n = 73). Data was analysed for descriptive statistics. The study found that staff appraisal was the most common form of service evaluation. The study also reported strong support for goal-setting and reviewing (83%) and strong support for the use of individualised outcome measures (75%). Furthermore, the study identified the need for user involvement in service planning and staff training and selection. In addition, the study reported that managers of services recognised the need for the use of outcome measurement but were

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uncertain of how it could be undertaken, and also saw outcome measures as subjective, impractical and complex within LD services. The study concluded that there was a need for joint health and social care approach to outcome measurement for people with learning disabilities.

In the UK, Sowney and Barr (2004) explored the experiences of nurses working in A&E caring for people with LD. Focus groups were used with A&E nurses from 5 acute hospitals in Northern Ireland (n = 27). The study concluded that there was a lack of knowledge of the nature of LD among A&E nurses. The authors also reported that there was a dependence on carers for the provision of care when people with LD were admitted to acute hospitals. It was also reported that nurses were fearful of people with LD due to lack of knowledge of the condition. The study concluded that there was a need to increase LD needs awareness of A&E staff through training.

Lindsey and Flynn (2003) investigated the nature of employment, catchment areas, patterns of work, areas of expertise, and positive and negative aspects of the services of LD psychiatrists in the UK. A Likert scale based survey questionnaire was used for data collection from consultant psychiatrists of LD (n = 136). Data was thematically analysed. The study reported that participants had a wide range of clinical, academic and management skills, and that 72 of the participants had additional registrations in other specialties. Of the 136 participants, 123 expressed concerns about services, including; insufficient staffing (46), staff shortages and recruitment (26), relationships with social services (14). 85% of participants reported insufficient in-patient provision and problems with admitting and discharging patients. The study also reported that concerns were raised about management, commissioning and planning of services for people with LD.

A study by Kumar and Parkinson (2001) investigated the structure and function of various multidisciplinary teams at a medium secure unit for people with learning disabilities in the UK. The study involved a documentary analysis of MDT membership terms of reference, staffing structure (medical services and services allied to the unit, nursing and psychology), referral and admission procedure, and the profile of the service. In addition, the study involved interviews with the chief executive, assistant chief executive, chairpersons of various MDTs and health professionals (service managers, clinical nurse managers, charge nurses, consultants and associate specialists, psychologist, psychotherapist, nurse therapists, behaviour nurse therapist, SALTs, and OTs) (n = 59). Non-parametric analysis was undertaken and the mean rating of effectiveness of inter-professional working between different professional groups was 2.6 (SD = 0.8). Highly effective working was observed between managers / nursing staff and behaviour nurse therapists, between medical and nursing staff, and between specialist staff and behaviour nurse therapists. Less effective working was observed between OTs and medical staff, between OTs and specialist staff, between OTs and SALTs, and between SALTs and medical staff. The study concluded that difficulties in inter-professional working were related to communication difficulties among professionals, lack of integration of professionals, lack of resources, personal

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characteristics of professionals, bureaucracy, rigid policies, and deficient management of staff.

Text and opinion papers

Carter (2016) has investigated and reviewed what could be done to improve efficiency in hospitals in England. The report concluded that there was a need to improve people policies and practices in order to understand the wellbeing of staff in NHS organisations. The report also highlighted the need for achieving timely patient transfers and the development of policies to manage enhanced care demands. The report recommended; the use of electronic staff record (ESR) to manage staff deployment, use of e-rostering systems, use of Care Hours Per Patient Day (CHPPD) (CHPPD = Hours of registered nurses + Hours of healthcare support workers ÷ Total number of inpatients), capturing data for measuring quality and efficiency across care pathways, enablement of digital technology and information systems to compile data in one place, and formation of collaborative and cooperative arrangements across the local health economy.

The report by the UK's Royal College of Nursing (RCN) (2016) provided an update on learning disability services in England. The report emphasised the need for ensuring that quality community services are commissioned to support the appropriate transition of people with LD from inpatient care to living more independently in the community. The report also recommended the establishment of long-term commissioning arrangements of community services to protect children and adults with LD who rely on vital services in the community. In addition, the report highlighted the need for newly commissioned services in the community to provide support to those who care for people with LD, to help prevent crises and not just be available at crisis points. The report recommended that positive behaviour support need to be embedded across organisations and that training needed to be provided to those who may be caring for someone who presents behaviours that may challenge. The report highlighted that 1, 700 LD nursing posts have been cut since May 2010 and that there has been a 40% reduction in band 7/8 nurses, and a 30% reduction in pre-registration training places in the past 10 years. The report recommended an increase in the number of learning disability student nurse training places in order to develop an appropriately skilled workforce. In addition, the report recommended that every acute hospital should employ at least one LDLN and that by 2020/21 all acute hospitals should have 24-hour LDLN cover. Furthermore, the report recommended the development of a long-term workforce strategy that connects workforce planning to the transformation and delivery of services for people with LD. Finally, the report recommended the up-skilling of all general hospital nursing staff to care for those with LD and or autism, or those who may display behaviours that challenge.

In his peer-reviewed paper, Blair (2016) described what more could be done by GPs and hospital services to reduce the risk for people with learning disabilities attending acute general hospitals in England. The paper concluded that comprehensive annual health checks are important. The paper also concluded that there was a need to

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assume capacity to consent to treatment by people with LD unless assessed otherwise. Finally, the paper concluded that hospital communication passports could change how care is delivered and experienced by people with LD when attending acute hospitals.

The briefing paper by the UK National LD Professional Senate (2015) provides service specifications and best practice for professionals, NHS commissioners, CQC, and providers of community learning disabilities health teams. Firstly, the paper identifies 5 key elements of learning disability services and these are; sufficient specialist LD capacity as part of an integrated community service, adequate skilled community support and provider capacity, access to expert and LD informed care management capacity, joint funding capacity and panels to enable delivery of flexible support, and appropriate models of integration of health and social care. Secondly, the paper outlines a comprehensive community model, which is characterised by effective care management and resource allocation processes, use of early intervention models, a flagging system in acute settings to ensure reasonable adjustments, a skilled and resourced CTPLD, access to specialist assessment services and professionals, a skilled and competent workforce in all settings, short break services, transition services, a 24-hour crises response, policies and protocols to prevent placement breakdowns, and effective integration and leadership. The paper recommended that community LD health teams need to support wider local multi-agency and multi-professional training programmes. In addition, the paper emphasised the need for community LD health teams to engage in strategic development work, a clear co-ordination framework, and operate as fully inter-disciplinary teams. Lastly, the paper highlighted the need for community LD health teams to play an active operational / micro-commissioning role in strategic planning, care package contract oversight and policy development in support of commissioners.

The Bubb (2014) report aimed to make recommendations for a national commissioning framework under which local commissioners would secure community-based support for people with learning disabilities and or autism. The conclusions of the report emerged from a steering group of representatives from the voluntary sector, NHS, local government, people with LD, family members, commissioners, academics and service providers. The report recommended that community-based service providers should be given a 'right to propose alternatives' to inpatient care to individuals, their families, commissioners and responsible clinicians. Secondly, the report recommended the closure of inappropriate institutional inpatient facilities. The report also recommended that funding arrangements were needed to facilitate transitions out of inpatient settings and build capacity in community-based services. Finally, the report highlighted the need to build workforce capacity in the community and the development of a national workforce *'Academy'* for LD.

In a peer-reviewed paper, Blair (2013) provided an explanation of what clinicians need to do in order to adapt services to ensure that reasonable adjustments are made to enable more positive outcomes and experiences for people with LD attending general

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acute hospitals in England. The paper uses case examples of a hospital communication passport used to assess mental capacity and reduce clinical risk in a hospital setting. The paper identifies core reasonable adjustments for reducing risk as; having no fixed visiting times for family, carers and friends, provision of food and drink for carers / family, always offering first or last clinic appointment, double time appointments, and the provision of a bed or chair for carer / family. The paper concluded that a hospital communication passport enhances care and ensures safety for people with LD. Furthermore, the paper emphasised the need for assessment of a person's capacity to consent to treatment. Lastly, the paper highlights the need to involve people with LD in improving services and patient safety.

The UK Royal College of Psychiatrists report by Maynors-Wallis (2012) provided guidance for the provision of safe and high quality services for patients with LD and mental disorders and their families. The report identified key information required to support job descriptions and job plans for psychiatrists working with people with LD and this includes; patient factors (complex health needs - 30 minutes appointments / 90 minutes for new cases), geographical and demographic factors, local configuration of services. The report also made recommendations for adult LD workloads (1 whole time equivalent (wte) consultant psychiatrist per 150,000 population, with a caseload of 150-200 patients (2-4 contacts per patient per year) and 30-40 new referrals per year.1 wte specialty doctor per 75, 000 population, 1 wte experienced CT3 per 30, 000, 1 wte senior specialist trainee per 50, 000 population, 1 wte consultant psychiatrist per 20 acute beds or 15-17 high secure beds or 12-15 medium secure beds as well as regional assessment duties or 15-20 long-term rehabilitation,1 wte forensic consultant psychiatrist per 300, 000 with 40 new referrals per year and 80 out patients follow up with 72 indirect contacts). In addition, the report recommended 90-minutes appointments for new patients, 120+ minutes for new patients with complex cases, 240 minutes for new patients with pervasive developmental disorders, 30 minutes for routine follow up appointments, 60 minutes for CPA reviews, 2 hours for tribunals, 4 hours for tribunal report writing, and 120 minutes for mental health legislation with assessments. Lastly, the report recommended that trainees should not be included in staffing numbers.

Blair (2011) described how ensuring staff have immediate access to patient information had improved treatment for people with LD in an acute general hospital in England. The paper concluded that hospital communication passports could improve safety for people when attending acute hospitals. The peer-reviewed paper also concluded that hospital communication passports can improve healthcare outcomes and experiences of people with LD and their families. Furthermore, the paper concluded that hospital communication passports could ensure that people with LD are involved in their care. Finally, the paper also concluded that hospital communication passports may lead to direct changes in the way that care is delivered.

The report by Gates (2011) / UK sought to; provide expert opinion on key issues and potential solutions concerning the diminishing numbers of LD nurses in England,

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identify key issues and potential solutions, identify the national supply and demand for LD nurses including the number of student places commissioned and geographical spread of education and training courses and the key issues associated with clinical placements, and identify the typical service models in which LD nurses practise to ensure efficient use is made of their knowledge and skills. The report was based on expert opinions from clinicians, higher education institutions, managers, and representatives of leading organisations. The report made wide ranging conclusions, of which a significant number are relevant to the current review. The report concluded that there was irrefutable evidence of a reduction in the numbers of LD nurses being employed by the National Health Service (NHS). The report recommended engagement with the third sector to better understand future workforce requirements. In addition, the report recommended that education commissioning for pre- and post-qualifying levels use a regional commissioning model, and that the delivery of education for this field of practice is provided through a limited number of regional academic centres, backed by an effective national recruitment campaign. Additionally, the report recommended the identification and articulation of new and emerging areas of practice for LD nursing and promotion of roles within 'mainstream' services that may contribute to the health and well-being of people with LD. Finally, the report identified the need for evidence based guidelines for future commissioning in the LD workforce.

The Centre for Workforce Intelligence (2011) in England sought to make recommendations relating to medical training numbers in psychiatry of LD in England (ST4-6). The report was based on contributions from unspecified stakeholders. The report was also based on the 2010 IC (Information Centre) census. The report concluded that there was a significant number of consultant psychiatrists approaching or working beyond typical retirement age and that the mental health officer (MHO) status may lead to more early retirements. The report also concluded that there were low levels of recruitment to training posts and that more trainee psychiatrists for LD were moving to the private sector. Lastly, the report noted that workforce data was incomplete because it focused only on the NHS and that no data for the private sector was collected.

In Canada, Bradley and Lofchy (2005) described a framework for the initial assessment, management and disposition of patients with LD presenting to A&E departments. The paper concluded that carers were sources of valuable information about patients with LD. Secondly, the paper concluded that treatment decisions made in acute hospitals should be communicated more effectively to GPs, psychiatrists, and care providers in the community. Thirdly, the paper concluded that carers should have written confirmation of patient diagnosis from GPs or psychiatrists when attending A&E. Finally, the paper highlighted that mental capacity should be assumed and assessed appropriately if needed.

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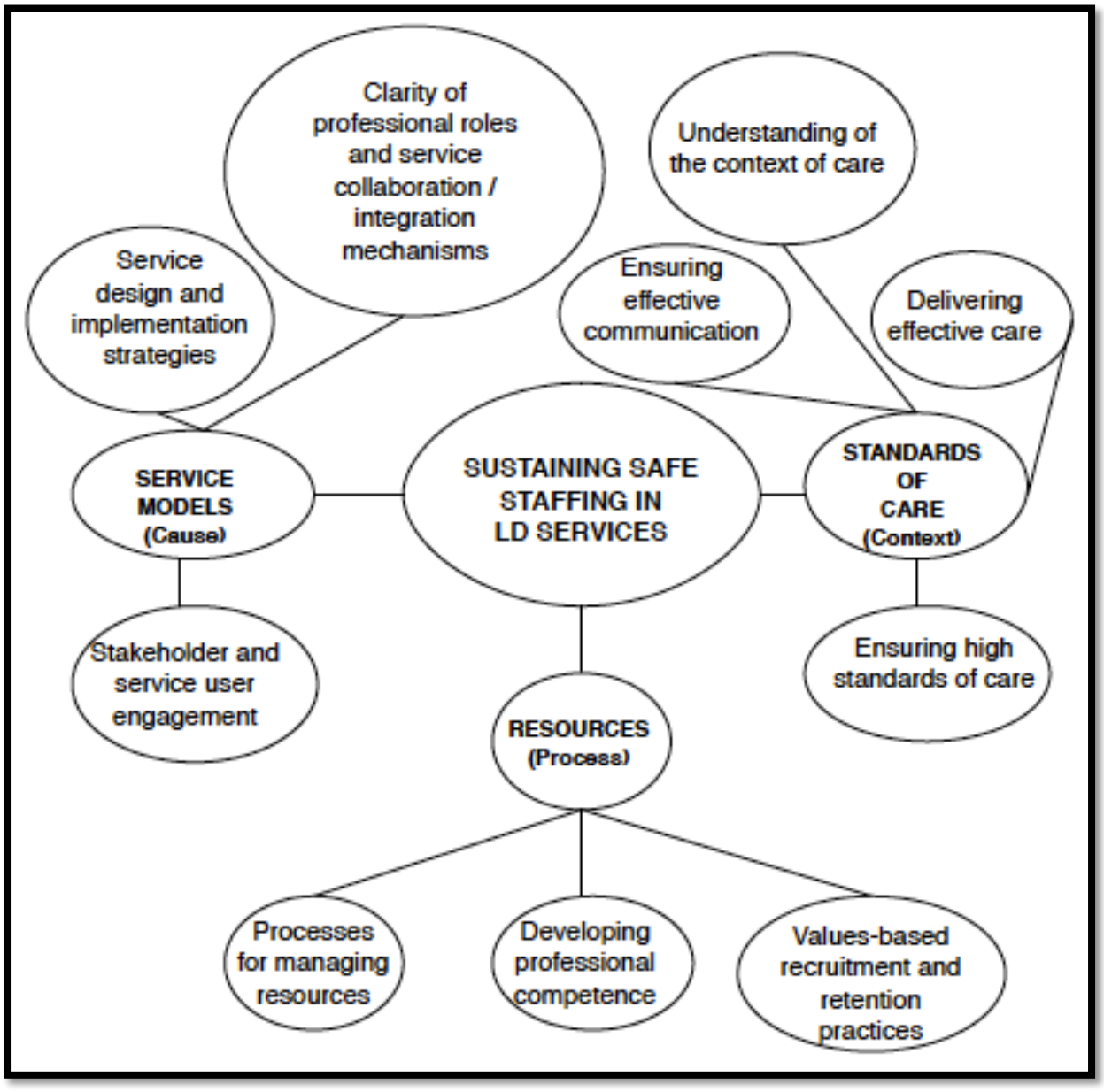
Emerging themes

Themes identified in each qualitative study/component of the 37 papers were grouped into three coding families (Galser, 1978) of cause (service models), context (standards of care) and process (resources) (see Figure 1).

Figure 2: Emerging themes



Discussion

As noted earlier, the discussion is organised into themes based on foundational coding families of cause, context and process, which we used as a framework (Glaser 1978). We elected to use foundational coding families because they appeared more appropriate in systematically organising the wide range of empirical, synthesised and opinion evidence. Also, because we used a narrative approach to presenting our findings, using foundational coding families was appropriate in organising our findings coherently.

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Theme 1: Service models (Cause)

This theme has three categories; service design and implementation strategies, clarity of professional roles and service collaboration / integration mechanisms, and stakeholder and service user engagement. Evidence from empirical, synthesised, and opinion literature suggest that the model of service provision may underlie sustainable, safe, efficient and effective staffing in LD services.

Service design and implementation strategies.

What emerged from empirical, synthesised evidence and opinion literature is the wide range of models through which healthcare services are organised in order to meet the health and health care needs of people with learning disabilities. What has clearly emerged from this review is the lack of empirical evidence to demonstrate the effectiveness of these models in ensuring sustainable safe staffing need to meet the complex healthcare needs of people with LD.

In order to deliver sustainable, safe and effective services for people with LD provider organisations need to ensure that the design and models of service provision take account of community based non-NHS service providers (Bubb 2014). This is important because community non-NHS service providers contribute significantly to the delivery of healthcare to people with LD, and particularly to those with long-term conditions. Conclusions from a case study of a specialist mental health assessment and treatment unit for people with LD suggest that effective models of service provision for people with LD need to be evidence-based, needs-led and collaborative (Chaplin et al 2011). A model of service provision that emerged from a study by Lewer and Harding (2013) require community services for people with LD to focus on supporting transition from inpatient care into the community, and be pro-active. Furthermore, positive behaviour support has to be seen as integral to models of service provision in order to prevent crises and or admission into acute hospital care (RCN 2016). For many people with LD who may present behaviours that challenge, positive behaviour support knowledge and competence of staff would be considered essential. From a study by Hassiotis et al (2015) we observed that services for people with LD who have mental ill health need to adopt multi-professional and multi-agency models that are community service based or assessment and treatment service based. This suggests the need for a *hub and spoke model* (see *Figures* 3 and 4) of service provision for people with LD. Community healthcare teams adopting such a model, like any other service need to focus on, adopt and use outcome measures that demonstrate improved health and healthcare experiences for people with LD.

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Figure 3: Hub and spoke model (assessment and treatment - led)

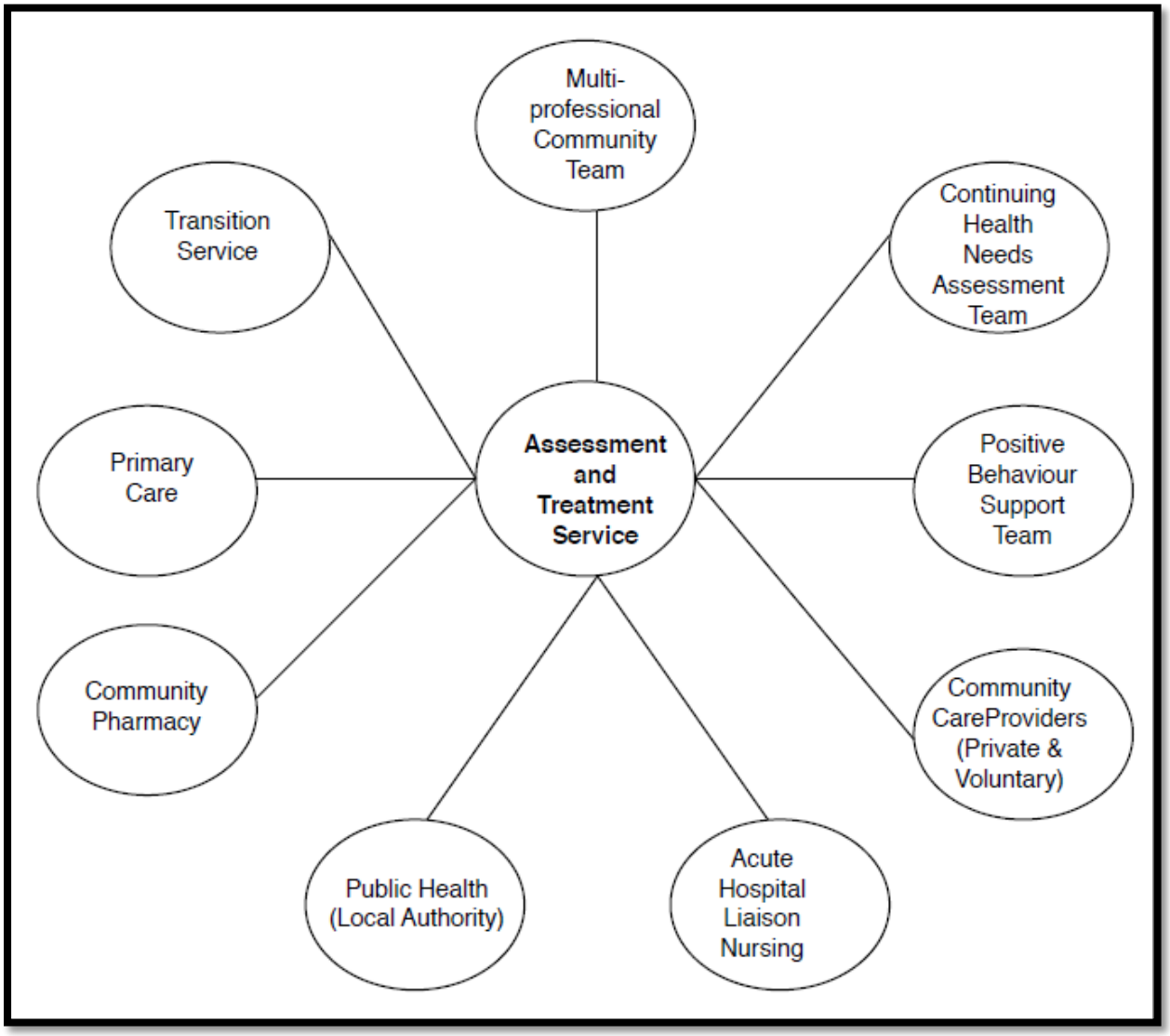

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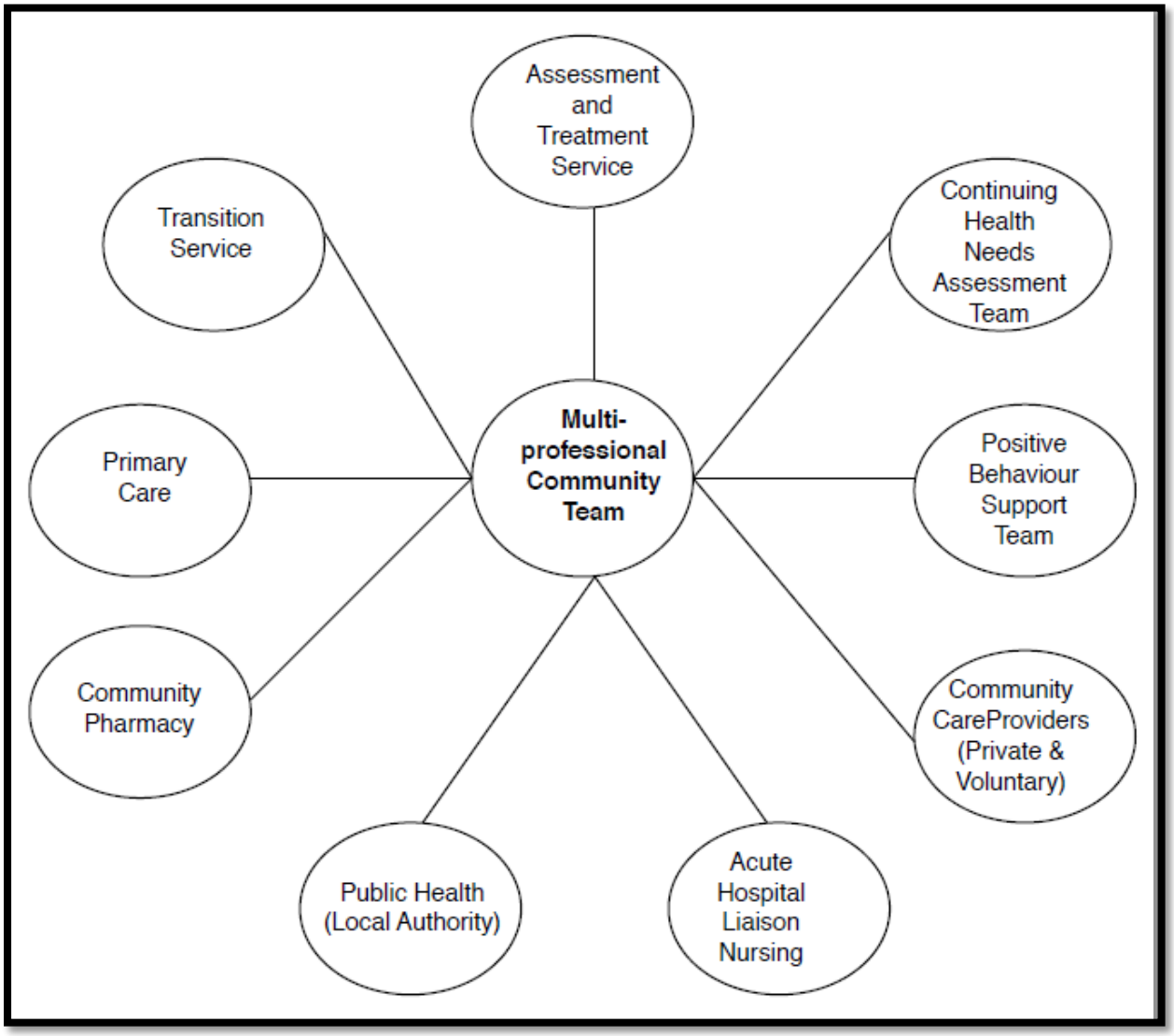
Figure 4: Hub and spoke model (community team - led)



We concluded from the literature review undertaken by Slevin et al (2008) that an integrated community health and social care team using a *hub and spoke model* of service provision which include multi-field nurses, CNLDs, consultant psychiatrist (LD), clinical psychologists, occupational therapists, physiotherapists, speech and language therapists and social workers is more likely to provide a more effective and efficient model of care delivery for people with LD that is safe and sustainable. It needs to be recognised that even when using such a model, inadequate health professional staff capacity may result in excessive caseloads. Excessive caseloads are likely to result in inter-professional tensions that may impact on quality of care and outcomes for people with LD.

It could also be argued that for any service model adopted to be effective, there is a need to develop strategic workforce plans that focus on developing the knowledge, skills, and attitudes required by all health care and social care professionals in order to effectively and sustainably meet the healthcare needs of people with learning disabilities (Hassiotis et al 2015). Within the *hub and spoke model*, the presence of

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inadequate skills and training on the part of individual professionals, and the existence of professional and organisational boundaries may contribute to ineffective, unsustainable and unsafe service delivery for people with LD (Slevin et al 2008).

What also needs to be noted is the need to ensure that in the process of implementing models of service provision for delivering healthcare services to people with LD, service improvement models of implementation that are used, if at all, need be evidence based (Chaplin et al 2011).

Clarity of professional roles and service collaboration / integration mechanisms

Another emerging theme from the empirical, systematic review and opinion literature reviewed is the need for clearly defined professional roles within services. Because of the multiplicity of professionals, services and organisations involved in delivering healthcare to people with LD, it is imperative that collaboration and or integration mechanisms be clearly defined, and understood by all involved.

The need for adequate LD specialist professional capacity across all specialties indicated above in the models of service provision cannot be over-emphasised in ensuring sustainable, safe, and effective staffing (National LD Professional Senate 2015). In addition, it is important for commissioners and service providers to ensure that there is adequate funding to meet the changing healthcare demands of people with LD.

In addition, clear funding arrangements for healthcare delivery, sustainable, safe and effective practice will require a national workforce development strategy that focuses on developing professional capacity in the community and across all sectors where people with learning disabilities will receive healthcare (Bubb 2014). It is important to note that staff can only perform their professional roles if they have the relevant professional skills required to engage in evidence-based practice (National LD Professional Senate 2015).

Clarity of professional roles need to be in the context of an appropriate model of service delivery which adopts a pro-active and or early intervention approach and take account of the contributions that could be made by other professionals who may not necessarily be part of a traditional specialist LD team. For example, it is important that community healthcare teams build collaborative arrangements with local pharmacists to ensure safe use of medicines in residential homes (O'Dwyer et al 2015). Another example is the need for service providers to ensure that OT services can be accessed, or are integral to MDTs in order to improve access to services by people with LD for the assessment of occupational needs (Lillywhite and Haines 2010). We have concluded that an appropriate model such as the *hub and spoke model* suggested earlier with a clear system of tracking and identifying patients between professionals, within services, and between healthcare service organisations is indispensable. We concluded that such an approach, coupled with clear and accessible policies and

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procedures, is likely to contribute to effective team integration that is essential to the delivery of sustainable, safe, and effective healthcare delivery for people with LD. We also concluded that such an approach is an essential foundation for effective co-ordination and collaboration arrangements between LD healthcare teams and commissioners. This is important in ensuring service flexibility in meeting the changing healthcare needs of people with learning disabilities.

Stakeholder and service user engagement.

Another emerging theme from the empirical literature is the need for clear strategies for involving commissioners, service users, carers and other key stakeholders in developing appropriate service models. Although evidence is limited, from the evidence available, we concluded that effective healthcare models of care delivery for people with LD will need to involve all stakeholders and service users in the decision making process on an ongoing basis (Chaplin et al 2011).

Theme 2: Standards of care (Context)

This theme has four categories; understanding the context of care, delivering effective care, ensuring effective communication, and ensuring high standards of care. Evidence from empirical, synthesised, and opinion literature suggests that understanding essential standards of effective healthcare is integral to sustainable, safe, efficient and effective staffing in LD services.

Understanding the context of care

What emerged from empirical, synthesised evidence and opinion literature is the wide range of contexts in which healthcare is delivered in meeting the needs of people with LD. Fundamentally, these contexts need to be understood, accounted for and measured in order for sustainable, safe, effective and efficient staffing levels to be realised.

One of the important contexts of care for people with LD is the demographic ignorance of the population, which currently exists in the UK. We have concluded that the lack of systems for identifying people with LD when they attend hospitals and other services beyond specialist LD services significantly impact on healthcare services' ability to realise the delivery of appropriate care for people with LD (Tuffrey-Wijne et al 2013). An important context is the hitherto lack of understanding of the complex support needs of people with LD by acute hospital staff which perpetuates significant barriers to the delivery of safe care for people with LD (Tuffrey-Wijne et al 2013).

Another important context that could be concluded from the limited evidence available is the lack of meaningful engagement of people with LD in important decisions about the services they receive and about their care. From Kernohan's study (Kernohan 2016) we concluded that this could only be addressed when healthcare service providers involve people with learning disabilities in decision making about their care. Involving people with LD in decisions about their care is likely to minimise or reduce

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practices that are unsafe, unsustainable and ineffective restrictive ptactices like seclusion.

The cognitive impairments associated with learning disabilities provide an important context in which healthcare for people with LD in both community and acute hospital settings. Conclusions that could be made from a study by Bradley and Lofchy (2005) are that mental capacity is not always assumed. This means that in some cases assessment of capacity to consent to treatment is not necessarily undertaken in a timely or informed manner. The consequence of this is that the essential flexible reasonable adjustments that need to be made in acute hospital settings are not always done (Blair 2013). Another consequence of this is that people with LD, their family members and carers may need to make significant contributions to the delivery of effective care in acute settings.

We have concluded that there are a range of factors that directly or indirectly impact on the delivery of safe and compassionate care for people with LD that could be measured in order to develop actions aimed at mitigating against these factors (Mafuba et al 2014). These factors include; level of client need, staff attributes, staff perception of challenging behaviour, job satisfaction, working as a team, stress, burnout and work overload, and organisational support that includes staff feedback, and finally working in the community (Mafuba et al 2014). In addition, evidence from the study by Hutchison and Kroese (2015) indicated that clear leadership structures and strategies are important in ensuring positive experiences and health care outcomes for people with learning disabilities. We also concluded that healthcare services need to regularly audit and review the *context of care* using tools such as the *context of care cool* (Mafuba et al 2014) in order to ensure the delivery of safe care.

Delivering effective care

The empirical, systematic review and opinion literature highlights the complexity of delivering sustainable, safe and effective care to people with LD. From the limited evidence available, we have concluded that it is essential for healthcare service providers to recognise the complexity and variation of the reasons why people with LD are referred to acute care much more often than people without LD (Brown et al 2011). Often, when people with LD are referred to acute hospital care, acute hospital staff's attitudes and lack of knowledge regarding people with LD's health and healthcare needs contribute to failure in the delivery of appropriate care (Iacono et al 2014). This needs to be addressed. Also, a lack of consistent and effective carer involvement in decision making, and a lack of clear lines of responsibility and accountability for making reasonable adjustments negatively impact on the delivery of safe and effective care for people with LD attending general hospitals (Tuffrey-Wijne et al 2013. From the available evidence we have concluded that acute hospital LDLNs play an important role in ensuring the delivery of sustainable, safe and effective care for people with LD by facilitating reasonable adjustments. In addition, we have also concluded that high levels of avoidable and pre-mature deaths of people with LD are partly related to

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improper mental capacity policy implementation and lack of carer involvement by healthcare professionals in decision-making (Heslop et al 2014).

From our synthesised findings we have concluded that accessible care plans, patient participation, carer involvement, developing staff competence and implementation of evidence-based interventions may contribute to the achievement of high standards of care (Friese and Ailey 2015). We have also concluded that it is imperative that methods of communication, and assessment of mental capacity and consent to treatment of people with LD are put in place (Blair 2013). This could improve the safety of people with LD when they attend acute healthcare services. We have noted that poor quality care results in poor healthcare outcomes and significantly contributes to the high levels of avoidable and premature deaths of adults with learning disabilities as compared to that of the general population (Heslop et al 2014).

What we have also inducted from the available evidence is the need for a multi-professional and coordinated approach to delivering sustainable, safe and effective care. This is important because highly effective inter-professional working within multi-disciplinary teams enhance the delivery of sustainable, safe and effective care (Kumar and Parkinson 2001). Also, this is significant in the delivery of effective care because less effective inter-professional working within multi-disciplinary teams may negatively impact on the delivery of sustainable, safe and effective care (Kumar and Parkinson 2001).

Ensuring effective communication

From our synthesis of the available evidence we have concluded that the use of hospital communication passports is essential for improving the safety and healthcare outcomes, and facilitation of the involvement by people with LD in their care (Blair 2011; Gibbs et al 2008). It has been argued that hospital communication passports improve communication between healthcare professionals, and between healthcare service providers. In addition, there is some opinion evidence for us to conclude that hospital communication passports are essential for ensuring that appropriate assessment of capacity and annual health checks are undertaken (Blair 2016). It could also be argued that hospital communication passports are therefore facilitatory in the receipt of effective health care by people with LD. Furthermore, it could also be argued that hospital communication passports could be indispensable in the formal communication of diagnostic and treatment decisions between carers, GPs, community services, healthcare providers and acute hospitals (Bradley and Lofchy 2005).

What emerges from the limited available evidence is that the role of the LDLN is important in facilitating inter-agency and inter-professional communication and access to acute healthcare services by people with LD (Sheehan et al 2016). This role is also important in ensuring that appropriate assessments for people with learning disabilities are undertaken when they attend acute hospital services. We also concluded that this

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role is an important interface between professionals and between hospital departments. This is important in order to ensure that effective person centred care is delivered to people with learning disabilities safely, sustainably and effectively (Brown et al 2011).

From a study by Kumar and Parkinson (2001) we have concluded that there are significant factors that may impact on effective communication within and between healthcare organisations that deliver care to people with LD. For example, political considerations and organisational cultures (Bradley and Lofchy 2005). It is our considered conclusion that LDLNs, family members and carers contribute to the delivery of effective care in acute settings by improving communication between people with LD and healthcare professionals.

Ensuring high standards of care

Although very limited, the available empirical literature highlights the complexity and importance of service user engagement in ensuring the delivery of sustainable, safe and effective care to people with LD. There is need for a cultural shift in how service users with LD are perceived by healthcare providers and healthcare professionals. We have concluded that to have long term and lasting change and achieve high standards of care, there is need for meaningful and comprehensive pre-qualifying and post-qualifying service user involvement in staff development and training for all healthcare professionals (Young and Chesson 2006).

There is also a need to implement evidence-based processes for measuring person centred health outcomes as important elements of service evaluation (Young and Chesson 2006).

Theme 3: Resources (Process)

This theme has three categories; processes for managing resources, developing professional competence, and values-based recruitment and retention practices. Evidence from empirical, synthesised, and opinion literature suggests that efficient deployment of financial and human resources is integral to sustainable, safe, efficient and effective staffing in LD services.

Processes for managing resources

The empirical, systematic review and opinion literature reviewed highlights the importance of having robust and adequate processes for managing resources that are essential in delivering sustainable, safe, effective and efficient care to people with LD.

Lindsey and Flynn (2003) have provided evidence for us to conclude that service providers need to work with commissioners to ensure that there is sufficient capacity in all healthcare settings to meet the needs of people with LD. In addition, from the report by Gates (2011) we have concluded that collaborative arrangements between all

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stakeholders are essential in order to develop a sustainable and inter-professional workforce strategy in order to have sustainable, safe and effective staffing.

Improvements in computing technology have potential to enhance the effective and efficient management of resources to ensure sustainable and safe staffing. Adopting integrated information technology processes for managing staff deployment (including the use of appropriate evidence-based work loading tools for effective management of staff deployment), and processes for capturing data is essential in measuring quality and efficiency, which is necessary for sustainable, safe, efficient and effective care delivery (Carter 2016).

We have concluded that methods of calculating workloads need to take account of population geographical and demographic factors that impact on healthcare demand placed on healthcare services by people with LD across all settings (Maynors-Wallis 2012). Efficient management of healthcare demand needs to be integral to the process of ensuring sustainable, safe and efficient staffing. It is therefore imperative that healthcare organisations develop processes for facilitating timely patient discharge and transfers from acute hospital care settings back into the community (Carter 2016). In addition, it is also important that healthcare service providers develop cooperative arrangements with other health and social care agencies in order to deliver sustainable, safe and effective care to people with LD.

Developing professional competence

The empirical, synthesised and opinion literature in this theme highlights the importance of having robust, systematic, strategic and inter-professional training strategies for the training and development of staff at both pre-qualifying and post-qualifying levels that is essential for delivering sustainable, safe and effective care to people with LD.

Historically, healthcare professional development tended to be policy and service led. From the limited evidence available we have concluded that training and skills development for all healthcare professionals at all levels need to be outcome focussed, needs-led, and be easily transferable to everyday practice (Clark et al 2014; Cambell 2014). This is important in order to ensure that all healthcare professionals have a wide range of knowledge and expertise to meet the complex health care needs of people with LD (Lindsey and Flynn 2003).

In addition, it is also of importance that healthcare professionals, clinicians and service users contribute to professional development of staff across all settings where healthcare is delivered (McMurray and Beebee 2007; Lindsey and Flynn 2003). We have concluded that this requires visible clinical leadership that focuses on delivering flexible learning, and development of new roles that reflect the changing needs of the population of people with learning disabilities (Gates 2009). LD healthcare professionals need to engage in inter-professional learning with acute care services

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and take a lead on the development of values, knowledge and skills of acute care staff so that they can deliver safe and effective care to people with LD who often have complex needs (Clark et al 2014; Werner and Stawski 2012; Sowney and Barr 2004). We have also concluded that it is essential that LD awareness training needs to be mandatory for all acute care and other healthcare staff who are likely to come into contact with people with LD in the course of delivering care. To ensure that there is easy of access to such training, it needs to be flexible, inter-professional, and focused on enhancing inter-professional communication, as well as being integral in staff supervision and performance management (Windley and Chapman 2010). Additionally, we have also concluded that there is need for the adoption of strategic and long-term values-based recruitment and retention strategies (RCN 2016). Furthermore, systems need to be in place to evaluate the impact of training on health care outcomes for people with LD (Werner and Stawski 2012).

Values-based recruitment and retention practices

The empirical and opinion literature in this theme is limited but relevant conclusions can be made that demonstrate the need for values-based recruitment and retention practices that would be essential to achieving sustainable safe staffing in LD services.

Firstly we have concluded that a coordinated population based approach to long-term strategic workforce planning is essential at local, regional and national levels rather than the current acute NHS care focussed approach (RCN 2016; Centre for Workforce Intelligence 2011; Gates 2009). Secondly, we have concluded that such an approach need to be focused on values-based recruitment and retention (Gates 2011). This will enable healthcare service providers to have a constant supply of appropriately trained healthcare professionals. It is also important that job descriptions for healthcare professionals are; current, have clarity, are regularly reviewed and aligned with government policy, and take account of the needs of people who use services, population demographics and local service models (Maynors-Wallis 2012).

Conclusions

At the conclusion of the literature search for this review there was no empirical, synthesised or opinion literature that could be located that specifically related to sustainable safe staffing in LD services. We have however identified three themes and ten categories that we believe help make sense of the evidence we have synthesised from the literature we have reviewed. We have discussed the relevance of the synthesised findings to sustainable safe staffing to the delivery of effective and efficient care to people with LD. Not surprisingly, this review leaves a number of questions unanswered. For example, as in our previous review, of critical importance is the need for a universal understanding of exactly what sustainable safe staffing means, and to whom. Sustainable safe levels of staffing imply that the focus of healthcare is on simply keeping people safe, rather than promote recovery and maintain healthy lives. Because of the absence of empirical studies that sought to address the topic under consideration in this review, we

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would need to know to what extent healthcare professionals working in all settings agree with our synthesised findings. The context of healthcare delivery to people with LD is reliant upon inter-professional and inter-agency working. The inter-professional and inter-agency interfaces are complex. It therefore has to be understood that events beyond a healthcare provider could have significant implications on the effectiveness of healthcare provision by the provider.

The concept of sustainable safe staffing in LD services must be clearly understood from the very complex nature of the extent of the number of healthcare professionals and agencies involved in meeting the healthcare needs of people with LD. It is also important to acknowledge that the sustainability of the national pool from which healthcare agencies source their staff from is beyond their remit. This responsibility is of national concern. Furthermore, healthcare providers work within constrained budgets and it is conceivable that healthcare providers will face increasing dilemmas between maintaining sustainability and maintaining safe staffing levels.

Implications for practice

Without an appropriate *service model* of healthcare provision that includes clear healthcare policy implementation strategies, clearly defined professional roles, clearly defined collaboration or integration arrangements and meaningful stakeholder and service user engagement processes; sustainable, safe and effective care may very well be difficult to achieve. It is also imperative that healthcare providers have clear *standards of care* that incorporate processes for understanding of the context of care, delivery of effective care, facilitation of effective communication, and care evaluation to ensure high standards of care. The importance of how healthcare providers deploy *resources* cannot be emphasised. Healthcare providers need to ensure that processes for managing resources, systems for developing professional competence, and implementation of values-based recruitment and retention strategies are in place for sustainable, safe, effective and efficient staffing to be achievable.

Implications for research

The lack of empirical evidence regarding sustainable safe staffing in LD services means that the need for robustly designed research in this area cannot be overemphasised. The context of care has been shown to be crucial in the delivery of sustainable and safe care, and therefore there is a need for research that focuses on how the context of care can be effectively audited and monitored. The relationships between sustainability, safety, effectiveness, efficiency and staffing levels are likely to be complex and they have not been investigated. There is a need to develop the evidence base for this. The *hub and spoke model* of healthcare service provision has potential for ensuring delivery of effective care for people with LD. The lack of an evidence base for such models needs to be addressed. *Hospital communication passports* are widely but inconsistently used in facilitating inter-professional and interagency healthcare communication. Robust empirical research evidence is required to verify their positive contributions to healthcare outcomes for people with LD.

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Recommendations

The level and quality of evidence from all the literature included in this review is low. However, given the significance and rationale of the topic under consideration, we are of the view that the following recommendations are appropriate.

1. Healthcare providers need to consult and collaborate with commissioners for consideration of the implementation of the *hub and spoke model* of service provision. This will need to include clearly defined lists of professionals and their roles.

2. Where inter-professional and inter-agency working arrangements are in place, such as joint community teams, collaboration and integration mechanisms need to be made clear.

3. We are cognisant of the fact that tracking patients with LD through various services lie beyond individual healthcare providers' responsibilities. However, we have concluded that this is important and we recommend that service providers make proposals to commissioners and acute hospitals for the development of local patient tracking systems.

4. While we are aware of the limited evidence available to support the effectiveness of work loading tools, we recommend that healthcare organisations use evidence based processes for managing staff deployment.

5. Reasonable adjustments, mental capacity assessment and consent to treatment are important elements in the delivery of safe and effective care for people with LD. We therefore recommend that healthcare providers collaborate with commissioners and acute hospitals for the implementation of hospital communication passport and learning disability liaison nursing to ensure that appropriate reasonable adjustments are made.

6. The context of care underlie sustainable, safe, effective and compassionate care. We therefore recommend that healthcare providers measure the context of care as an integral part of their quality assurance processes.

7. We recommend that healthcare providers collaborate at local, regional and national level in the development of pre-qualifying, post-qualifying and mandatory inter-professional training across the healthcare sector.

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References

Blair, J. (2011) Care adjustments for people with learning disabilities in hospitals. *Nursing Management*. 18(8), p.21-24. http://dx.doi.org/10.7748/nm2011.12.18.8.21.c8841.

Blair, J. (2013) Everybody's life has worth – Getting it right in hospital for people with an intellectual disability and reducing clinical risks. *Clinical Risk Management,* 19, p.58-63. DOI: 10.1177/1356262213497681.

Blair, J. (2016) The health needs of people with learning disabilities: issues and solutions. *British Journal of Family Medicine*. (Online). Available at: https://www.bjfm.co.uk/the_health_needs_of_people_with_learning_disabilities_issues_and_solutions_25769832825.aspx. (Accessed: 13th August 2016).

Bradley, E. and Lofchy, J. (2005) Learning disability in the accident and emergency department. *Advances in Psychiatric Treatment,*11(1), p.45-57; DOI:10.1192/apt.11.1.45.

Brown, M., Duff, H., Karatzias, T., and Horsburgh, D. (2011) A review of the literature relating to psychological interventions and people with intellectual disabilities: Issues for research, policy, education and clinical practice. *Journal of Intellectual Disabilities,* 15(1), p.31-45 doi: 10.1177/1744629511401166

Bubb, S. (2014) Winterbourne View – Time for change: Transforming the commissioning of services for people with learning disabilities and/or autism. (Online). Available at: https://www.england.nhs.uk/wp-content/uploads/2014/11/transforming-commissioning-services.pdf (Accessed: 13th August 2016).

Campbell, M.(2014) Adult protection training for community nurses: evaluating knowledge following delivery using participant-favoured training methods. *The Journal of Adult Protection,* 16(1), p.17-28. DOI: http://dx.doi.org/10.1108/JAP-04-2013-0016

Carter, P. R. (Lord) (2016) *Operational productivity and performance in English NHS acute hospitals: Unwarranted variations - An independent report for the Department of Health by Lord Carter of Coles.* London: Department of Health.

Centre for Workforce Intelligence (2011) *Psychiatry of Learning Disability.* (Online). Available at: http://www.cfwi.org.uk/publications/psychiatry-of-learning-disability-cfwi-medical-fact-sheet-and-summary-sheet-august-2011. (Accessed: 13th August 2016).

Chaplin, E., Lockett, J., Kennedy, L., Hardy, S., Seaburne-May, L. and Sayer, J. (2011) Improving services through partnership and consultation: a case example. *Advances in Mental Health and Intellectual Disabilities*, 5(2), p.3-8. DOI: 10.5042/amhid.2011.0106

©UWL / NHS Improvement August 2016

Clark, A., Browne, S., Boardman, L., Hewitt, L. and Light, S. (2014) Implementing UK Autism policy & national institute for health and care excellence guidance- assessing the impact of Autism training for frontline staff in community. *British Journal of Learning Disabilities*, 44, p.103–110.

DH (2012) *Compassion in practice: Nursing, midwifery and care staff – our vision and strategy.* (Online). Available at: https://www.england.nhs.uk/wp-content/uploads/2012/12/compassion-in-practice.pdf. (Accessed: 13th August 2016).

DH (2014) *Hard truths - The tourney to jutting patients first.* (Online). Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/270368/34658_Cm_8777_Vol_1_accessible.pdf. (Accessed: 13th August 2016).

DH (2015) *Productivity in NHS hospitals - Lord Carter's review of efficiency in hospitals shows how large savings can be made by the NHS.* (Online). Available at: https://www.gov.uk/government/publications/productivity-in-nhs-hospitals. (Accessed: 13th August 2016).

Francis (2013) *The Mid Staffordshire NHS Foundation Trust Public Inquiry.* (Online). Available at: http://webarchive.nationalarchives.gov.uk/20150407084003/http://www.midstaffspublicinquiry.com/report. (Accessed: 13th August 2016).

Friese, T. and Ailey, S. (2015) Specific standards of care for adults with intellectual disabilities. *Nursing Management,* 22(1), p. 32-37.

Gates, B. (2011) *Learning Disability Nursing: Task and finish Group: Report for the Professional and Advisory Board for Nursing and Midwifery - Department of Health, England.* Hatfield: University of Hertfordshire.

Gates, B., Mafuba, K., Roberts, S., Sauer, C., and Matoorianpour, N. (2014). *Report on the development of a prototype tool for measuring the context of care delivery in learning disability inpatient settings and; a business case and high level technical specification for an online secure platform for future local, regional and national review (The TCOC-LDS: Version 1).* London: University of West London.

Gates, B. (2009) *The Valued People Project: Report of a strategic review of educational commissioning and workforce planning in learning disabilities.* Bracknell: South Central Strategic Health Authority.

Gibbs, S., Brown, M. and Muir, W. (2008) The experiences of adults with intellectual disabilities and their carers in general hospitals: A focus group study. *Journal of Intellectual Disability Research,* 52(12), p.1061-1077.

Glaser, B. G. (1978) *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, VA: Sociology Press.

©UWL / NHS Improvement August 2016

Hassiotis, A., Guinn, A., Tanzarella, M., McCarthy, J., and Roy, A. (2015) *Community-based services for people with intellectual disability and mental health problems: Literature review and survey results.* London: Faculty of Psychiatry of Intellectual Disability.

Heslop, P., Blair, P.S., Fleming, P., Hoghton, M., Marriott, A. and Russ, L. (2014) *The Confidential Inquiry into premature deaths of people with intellectual disabilities in the UK: a population-based study.* Lancet, 383, p.889–95. http://dx.doi.org/10.1016/S0140-6736(13)62026-7.

Hutchison, A. and Kroese, B.S. (2015) Making sense of varying standards of care: the experiences of staff working in residential care environments for adults with learning disabilities. *British Journal of Learning Disabilities.* doi:10.1111/bld.12136

Iacono, T., Bigby, C., Unsworth, C., Douglas, J. and Fitzpatrick, P. (2014) A systematic review of hospital experiences of people with intellectual disability. *BMC Health Services Research,* 14(505). http://www.biomedcentral.com/1472-6963/14/505. (Accessed: 13th August 2016).

JBI Levels of Evidence and Grades of Recommendation Working Party (2014) *Supporting document for the Joanna Briggs Institute levels of evidence and grades of recommendation.* Adelaide: JBI.

Kernohan, J. (2016) Factors that influence nurses' decisions about secluding people with learning disabilities. *Learning Disability Practice,* 19(5), p.24-30.

Kumar, A. and Parkinson, G.M. (2001) Relationship between team structure and interprofessional working at a medium secure unit for people with learning disabilities in the United Kingdom. *Journal of Learning Disabilities,* 5(4), p. 319-329.

Lewer, A. and Harding, C. (2013) Communication is the key: improving outcomes for people with learning disabilities. *Tizard Learning Disability Review*, 18(3), p. 132-140.

Lillywhite, A. and Haines, D. (2010) *Occupational therapy and people with learning disabilities: Findings from a research study.* London: College of Occupational Therapists.

Lindsey, M. and Flynn, A. (2003) A survey of consultants in the psychiatry of learning disability. *Psychiatric Bulletin,* 27, p.342-345.

Mafuba, K., Gates, B. and Shanley, O. (2014) Report *of a systematic review of literature on learning disability nursing staffing levels, and its relation to the safety, quality and the delivery of compassionate nursing care.* London: University of West London.

©UWL / NHS Improvement August 2016

Maynors-Wallis (2012) *Safe patients and high-quality services: a guide to job descriptions and job plans for consultant psychiatrists.* London: Royal College of Psychiatrists. Report No: CR174.

McMurray, A. and Beebee, J. (2007) Learning disability awareness. *Learning Disability Practice,* 10(3), p.10-14.

National LD Professional Senate (2015) *Delivering effective specialist community learning disabilities health team support to people with learning disabilities and their families or carers.* (Online). Available at: http://acppld.csp.org.uk/documents/national-ld-professional-senate-briefing-paper. (Accessed: 13th August 2016).

National Quality Board (2016) *Supporting NHS providers to deliver the right staff, with the right skills, in the right place at the right time.* (Online). Available at: https://www.england.nhs.uk/wp-content/uploads/2013/04/nqb-guidance.pdf. (Accessed: 13th August 2016).

NHS (2014) *Five year forward view.* (Online). Available at: https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf. (Accessed: 13th August 2016).

NHS (2016) *Leading change, adding value.* (Online). Available at: https://www.england.nhs.uk/wp-content/uploads/2016/05/nursing-framework.pdf. (Accessed: 13th August 2016).

NICE (2014). *Safe staffing for nursing in adult inpatient wards in acute hospitals.* (Online). Available at: https://www.nice.org.uk/guidance/sg1. (Accessed: 13th August 2016).

O'Dwyer, M., Meštrović, A. and Henman, M. (2015) Pharmacists' medicines-related interventions for people with intellectual disabilities: a narrative review. *International Journal of Clinical Pharmacy*, 37(4), p.566-578.

Royal College of Nursing (2016) *Connect for Change: an update on learning disability services in England.* London: RCN.

Sandelowski M, Leeman J, Knafl K, Crandell JL. (2013) Text-in-context: a method for extracting findings in mixed-methods mixed research synthesis studies. *Journal of Advanced Nursing,* 69(6), p.1428-37.

Sheehan, R., Gandesha, A., Hassiotis, A., Gallagher, P., Burnell, M., Jones, G., Kerr, K., Hall, I., Chaplin, R., and Crawford, M.J. (2016). An audit of the quality of inpatient care for adults with learning disability in the UK. *British Medical Journal* Open 2016;6: e010480. doi:10.1136/bmjopen-2015-010480.

©UWL / NHS Improvement August 2016

Shogren, K. A., Luckasson, R. and Schalock, R. L. (2014) The definition of 'context' and its application in the field of intellectual disability. *Journal of Policy and Practice in Intellectual Disability,* 11(2), p.109-116.

Slevin, E., Truesdale-Kennedy, M., McConkey, R., Barr, O., and Taggart, L. (2008) Community learning disability teams: developments, composition and good practice: A review of the literature. *Journal of Intellectual Disabilities,* 12(1), p. 59-79.

Sowney, M. and Barr, O. (2004) Equity of access to healthcare for people with learning disabilities: A concept analysis. *Journal of Learning Disabilities,* 8 (3), p.247-265.

Timmins, F and McCabe, C. (2005) How to conduct an effective literature search. *Nursing Standard,* 20(11), p.41-47.

Tuffrey-Wijne, I., Giatras, N., Goulding, L., Abraham, E., Fenwick, L., Edwards, C. and Hollins, S. (2013). *Identifying the factors affecting the implementation of strategies to promote a safer environment for patients with learning disabilities in NHS hospitals: a mixed-methods study.* NHS National Institute for Health Research. DOI: 10.3310/hsdr01130

Werner, S. and Stawski, M. (2012) Knowledge, attitudes and training of professionals on dual diagnosis of intellectual disability and psychiatric disorder. *Journal of Intellectual Disability Research,* 56(3), p. 291-304. doi: 10.1111/j.1365-2788.2011.01429.x.

Windley, D. and Chapman, M. (2010) Support workers within learning / intellectual disability services perception of their role, training and support needs. *British Journal of Learning Disabilities,* 38, p.310-318. doi:10.1111/j.1468-3156.2010.00610.x

Young, A. and Chesson, R. A. (2006) Stakeholders' views on measuring outcomes for people with learning disabilities. *Health and Social Care in the Community,* 14 (1), p.17–25. doi: 10.1111/j.1365-2524.2005.00593.x.

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Appendices

Appendix A: JBI Critical Appraisal of Evidence of Effectiveness

Reviewer…….Date:…….

Author:…….Year:…….Record Number:……

1. Was the assignment to treatment groups truly random?
   Yes No Not clear N/A
2. Were participants blinded to treatment allocations?
   Yes No Not clear N/A
3. Was allocation to treatment groups concealed from the allocator?
   Yes No Not clear N/A
4. Were the outcomes of people of people who withdrew described and included in the analysis?
   Yes No Not clear N/A
5. Was the assignment to treatment groups truly random?
   Yes No Not clear N/A
6. Were control and treatment groups comparable at entry?
   Yes No Not clear N/A
7. Were groups treated identically other than for the named interventions?
   Yes No Not clear N/A
8. Were outcomes measured in the same way for all groups?
   Yes No Not clear N/A
9. Were outcomes measured in a reliable way?
   Yes No Not clear N/A
10. Was appropriate statistical analysis used?
    Yes No Not clear N/A

Overall appraisal:		
Include	Exclude	Seek further information
Comments (including reasons for exclusion):		

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Appendix B: JBI Critical Appraisal Checklist for Qualitative Research

Reviewer_____ Date_____

Author _____ Year_____ Record Number _____

		Yes	No	Unclear	Not applicable
1.	Is there congruity between the stated philosophical perspective and the research methodology?	☐	☐	☐	☐
2.	Is there congruity between the research methodology and the research question or objectives?	☐	☐	☐	☐
3.	Is there congruity between the research methodology and the methods used to collect data?	☐	☐	☐	☐
4.	Is there congruity between the research methodology and the representation and analysis of data?	☐	☐	☐	☐
5.	Is there congruity between the research methodology and the interpretation of results?	☐	☐	☐	☐
6.	Is there a statement locating the researcher culturally or theoretically?	☐	☐	☐	☐
7.	Is the influence of the researcher on the research, and vice- versa, addressed?	☐	☐	☐	☐
8.	Are participants, and their voices, adequately represented?	☐	☐	☐	☐
9.	Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	☐	☐	☐	☐
10.	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

_____

_____

_____

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Appendix C: JBI Critical Appraisal Checklist for Systematic Reviews and Research Syntheses

Reviewer_____Date_____

Author _____Year_____Record Number _____

	Yes	No	Unclear	Not applicable
11. Is the review question clearly and explicitly stated?	☐	☐	☐	☐
12. Were the inclusion criteria appropriate for the review question?	☐	☐	☐	☐
13. Was the search strategy appropriate?	☐	☐	☐	☐
14. Were the sources and resources used to search for studies adequate?	☐	☐	☐	☐
15. Were the criteria for appraising studies appropriate?	☐	☐	☐	☐
16. Was critical appraisal conducted by two or more reviewers independently?	☐	☐	☐	☐
17. Were there methods to minimize errors in data extraction?	☐	☐	☐	☐
18. Were the methods used to combine studies appropriate?	☐	☐	☐	☐
19. Was the likelihood of publication bias assessed?	☐	☐	☐	☐
20. Were recommendations for policy and/or practice supported by the reported data?	☐	☐	☐	☐
21. Were the specific directives for new research appropriate?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

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Appendix D: JBI Critical Appraisal Checklist for Text and Opinion Papers

Reviewer_____Date_____

Author_____Year_____Record Number _____

	Yes	No	Unclear	Not applicable
22. Is the source of the opinion clearly identified?	☐	☐	☐	☐
23. Does the source of opinion have standing in the field of expertise?	☐	☐	☐	☐
24. Are the interests of the relevant population the central focus of the opinion?	☐	☐	☐	☐
25. Is the stated position the result of an analytical process, and is there logic in the opinion expressed?	☐	☐	☐	☐
26. Is there reference to the extant literature?	☐	☐	☐	☐
27. Is any incongruence with the literature/sources logically defended?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

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Appendix E: Data form

Authors / Year /Country	Critical Appraisal Outcome	Aims / Purpose	Methods / Participants	Findings / Conclusions	Category	Synthesised Finding

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Appendix F: JBI Levels of evidence for effectiveness

Level 1 – Experimental Designs

Level 1.a – Systematic review of Randomized Controlled Trials (RCTs)

Level 1.b – Systematic review of RCTs and other study designs

Level 1.c – RCT

Level 1.d – Pseudo-RCTs

Level 2 – Quasi-experimental Designs

Level 2.a – Systematic review of quasi-experimental studies

Level 2.b – Systematic review of quasi-experimental and other lower study designs

Level 2.c – Quasi-experimental prospectively controlled study

Level 2.d – Pre-test – post-test or historic/retrospective control group study

Level 3 – Observational – Analytic Designs

Level 3.a – Systematic review of comparable cohort studies

Level 3.b – Systematic review of comparable cohort and other lower study designs

Level 3.c – Cohort study with control group

Level 3.d – Case – controlled study

Level 3.e – Observational study without a control group

Level 4 – Observational –Descriptive Studies

Level 4.a – Systematic review of descriptive studies

Level 4.b – Cross-sectional study

Level 4.c – Case series

Level 4.d – Case study

Level 5 – Expert Opinion and Bench Research

Level 5.a – Systematic review of expert opinion

Level 5.b – Expert consensus

Level 5.c – Bench research/ single expert opinion

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Key: Opinion paper (grey literature) Synthesised evidence (literature review) Empirical (original) study

Appendix G: Data table

Theme 1: **Service models (Cause)**

Authors / Country	Critical Appraisal + JBI Level of Evidence	Aims / Purpose	Methods / Participants	Findings / Conclusions (Level 1)	Category (Level 3)	Synthesised Finding / Conclusion (Level 2)
National LD Professional Senate (2015) / UK	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5c (low) **Decision** - Include	Provides service specifications and best practice for professionals, NHS commissioners, CQC, and providers of community learning disabilities health teams.	Opinion paper. Briefing paper.	1. 5 key elements a. Sufficient specialist LD capacity as part of an integrated community service. b. Adequate skilled community support and provider capacity. c. Access to expert and LD informed care management capacity. d. Joint funding capacity and panels to enable delivery of flexible support. e. Appropriate models of integration of health and social care. 2. Comprehensive community model a. Effective care management and resource allocation processes. b. Early intervention models. c. Flagging system in acute settings to ensure reasonable adjustments. d. Skilled and resourced CTPLD. e. Access to specialist assessment services and professionals. f. Skilled and competent workforce in all settings. g. Short break services.	Clarity of professional roles and service collaboration / integration mechanisms Clarity of professional roles and service collaboration / integration mechanisms	1. Adequate LD specialist professional capacity, adequate funding, professional staff skills and evidence-based practice, and adoption of an appropriate model of team integration integral to safe, sustainable and effective care delivery. 2. An appropriate model of service delivery need to adopt a pro-active / early intervention approach with a clear system of tracking and identifying patients between and within all local services.

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				h. Transition services. i. 24-hour crises response. j. Policies and protocols to prevent placement breakdowns. k. Effective integration and leadership. 3. Community LD health teams support for wider local multi-agency and multi-professional training programmes. 4. Community LD health teams need to engage in strategic development work. 5. Community LD health teams to operate as fully inter-disciplinary teams. 6. Community LD health teams need to play an active operational / micro-commissioning role in strategic planning, care package contract oversight and policy development in support of commissioners. 7. Need for a clear co-ordination framework.	Clarity of professional roles and service collaboration / integration mechanisms Clarity of professional roles and service collaboration / integration mechanisms	3. Clear and accessible policies and procedures contribute to effective team integration. 4. Clear co-ordination and collaboration arrangements between community LD health teams and commissioners important in ensuring flexibility in meeting changing health needs of people with learning disabilities.
O'Dwyer et al (2015) / Ireland	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **JBI evidence level** – 4a (low) **Decision** - Include	To explore what type of pharmaceutical care interventions were being undertaken for people with LD and how pharmacists contributed to the care of people with LD as part of a multi-disciplinary team.	Systematic literature review. 8 empirical studies. Narrative synthesis.	1. Pharmacists can make positive interventions in relation to the quality of the medication use process, in collaboration with other healthcare professionals, carers and people with LD. 2.	Clarity of professional roles and service collaboration / integration mechanisms	1. Community healthcare teams need to build collaborative arrangements with local pharmacists to ensure safe use of medicines.

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Chaplin et al (2011) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Findings / conclusions** – clear **JBI evidence level** – 4d (low) **Decision** - Include	To describe how a specialist mental health assessment and treatment inpatient service for people with LD put in place a process to improve and re-provide the service in partnership with local stakeholders following a series of audits.	Case example.	1. Audit has a role in monitoring the quality and effectiveness of services. 2. Services need to be needs-led rather than bed-led. 3. Projects for implementing change needs to be evidence-based. 4. Need for transparent and honest relationships with stakeholders in the process of re-providing a service. 5. A collaborative approach to addressing problems mean stakeholder involvement is evidence-based.	Service design and implementation strategies Stakeholder and service user engagement	1. Effective models of service provision must be evidence-based, needs-led and service improvement models of implementation need be evidence based. 2. Effective models of care delivery involve all stakeholders and service users with learning disabilities in the decision making process.
Slevin et al (2008) / UK	**Aim(s) / Purpose** – clear **Methods** – unclear **Analysis** – unclear **Findings / conclusions** – clear **JBI evidence level** – 4a (low) **Decision** - Include	Describes the main functions, common functions, composition, challenges and identify good practice of CTLDs.	Literature review.	1. CTLD is a model of inter-professional and inter-agency working. 2. Composition (CNLDs, consultant psychiatrist (LD), clinical psychologists, occupational therapist, physiotherapist, speech and language therapist). 3. Advantages; a. More efficient use of staff resources. b. More effective service provision. 4. More satisfying work environment.	Service design and implementation strategies	1. Integrated community health and social care teams which include CNLDs, consultant psychiatrist (LD), clinical psychologists, occupational therapists, physiotherapists, speech and language therapists and social workers are more likely to provide a more effective and efficient model of care delivery for people with learning disabilities.

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				5. Barriers to effectiveness of CTLDs; a. Insufficient staff to meet existing caseloads. b. Excessive CNLDs caseloads. c. Tension between healthcare and social care. d. Inadequate training / skills among staff. e. Organizational boundaries.	Service design and implementation strategies	2. Inadequate professional staff capacity will result in excessive caseloads and inter-professional tension, which could impact on quality of care. 3. Inadequate skills and training, and organisational boundaries within the team may contribute to ineffectiveness.
Hassiotis et al (2015) / UK	**Aim(s) / Purpose** – clear **Methods** – unclear **Analysis** – unclear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To summarize the current evidence on existing community service models for adults with LD and mental health, behaviour or forensic problems.	Literature review Survey (n = 65 LD psychiatrists).	1. Services work better when delivered around individual needs in a person-centred approach. 2. People with severe mental illness and borderline LD benefit from intensive community-based care in terms of reduced length of time in hospital. 3. Positive behavioural support works well in community-based settings. 4. A multi-agency approach reduces at-risk behaviours 5. There is little evidence of routine collection of outcome data by community services. 6. Outcome measures are not routinely used. 7. There is need for a strategic approach to workforce development.	Service design and implementation strategies	1. Services for people with learning disabilities with mental ill health need to adopt multi-professional and multi-agency models that are community based and, or assessment and treatment based (hub and spoke model). 2. Community healthcare teams need to adopt and use outcome measures. 3. There is a need to develop strategic workforce plans, and develop the knowledge, skills, and

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				8. Staff in generic mental health services and community forensic teams lack the knowledge and skills to patients with LD.	Service design and implementation strategies	attitudes required by acute care staff to meet the needs of people with learning disabilities.
Lewer and Harding (2013) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To analyse some of the factors which affect the implementation and outcomes of indirect intervention for people with LD in residential homes and day centres.	4 carers / support workers 3 speech and language therapists. Grounded theory / semi-structured interviews.	1. Importance of clarifying the roles of SLTs. 2. Direct care staff training is fundamental to successful SLT interventions. 3. Holistic approach needs to go beyond the needs of the individual to the needs of the organisation providing care.	Clarity of professional roles and service collaboration / integration mechanisms	1. Clarity of professional and organisational roles is integral to an effective model of service provision.
Royal College of Nursing (2016) / UK*	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5b (low) **Decision** - Include	Provides an update on learning disability services in England.	Opinion paper. Briefing paper.	1. Ensure that quality community services are commissioned to support the appropriate transition of people from inpatient care to living more independently in the community. 2. Establish long-term commissioning arrangements of community services to protect children and adults who rely on vital services in the community. 3. Newly commissioned services in the community must provide support to children and adults, and those who care for them, to help prevent crises, and not just be available at crisis point.	Service design and implementation strategies	1. Community services need to support transition from inpatient care into the community, and be pro-active in providing Positive Behaviour Support to prevent further crises and, or admission into acute care.

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				4. Positive behaviour support to be embedded across organisations and training to be provided to those who may be caring for someone who presents behaviour that challenges.	Service design and implementation strategies	2. Positive behaviour support is essential for all staff supporting people presenting with challenging behaviour.
Bubb (2014) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5b (low) **Decision** - Include	To make recommendations for a national commissioning framework under which local commissioners would secure community-based support for people with learning disabilities and or autism.	Steering group of representatives from the voluntary sector, NHS, local government, pwld, family members, commissioners, academics and service providers. Report	1. Community-based service providers should be given a 'right to propose alternatives' to inpatient care to individuals, their families, commissioners and responsible clinicians. 2. Closure of inappropriate institutional inpatient facilities. 3. Funding arrangements needed to facilitate transitions out of inpatient settings and build capacity in community-based services. 4. Need to build capacity (workforce) in the community. 5. Need to develop a national workforce 'Academy' for LD.	Service design and implementation strategies Clarity of professional roles and service collaboration / integration mechanisms	1. Design and models of service provision need to take account of community based non-NHS service providers. 2. A national workforce development strategy is needed to develop capacity in the community and across all sectors.

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Lillywhite and Haines (2010) / UK	**Aim(s) / Purpose** – clear **Methods** – unclear **Analysis** – unclear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b(low) **Decision** - Include	To explore and document the nature of occupational therapy with people with learning disabilities across all four countries of the UK, from the perspectives of OTs and those paid to support people with LD,	Sequential multiple methods. Phase 1: Questionnaire audit. OTs, n = 69 (46% response). Random sampling. Method of analysis not described. Phase 2. 8 Focus groups (n = 49). OTs. Purposive sampling. Thematic analysis using NVivo 8. Phase 3. Telephone semi-structured interviews. Support workers (n = 5). Purposive sampling. Thematic analysis using NVivo 8.	1. OTs have unique role in promoting independence. 2. OTs need to be involved in occupational needs assessments. 3. OTs can make significant contributions to people with LD with a wide range of complex needs. 4. OTs need to be part of the MDT. 6. OTs can support access to mainstream services.	Clarity of professional roles and service collaboration / integration mechanisms	1. Service providers need to ensure OTs are integral to MDTs in order to improve access to services by people with learning disabilities and assessment of occupational needs.

* Report also appears under theme 3.

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Theme 2: Standards of care (Context)

Authors / Country	Critical Appraisal + JBI Level of Evidence	Aims / Purpose	Methods / Participants	Findings / Conclusions (Level 1)	Category (Level 3)	Synthesised Finding / Conclusion (Level 2)
Sheehan et al (2016) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - unclear **JBI evidence level** – 4b (low) **Decision** - Include	To audit patient general hospital records to evaluate the performance of acute general and mental health services in delivering inpatient care to people with learning disability and explore the influence of organisational factors on the quality of care they deliver.	Case notes audits of 176 patients (109 – acute general + 67 from mental health services) (91 males + 85 females) Mean age = 43 (SD = 16.9 years) (Mild-moderate 79; severe-profound 21%, remainder unknown) from 9 acute general hospitals and 6 mental health services. Data on seven key indicators of high-quality care. Logistic regression analysis.	1. Inpatient care for people with learning disability needs to be improved. 2. Epilepsy risk assessment was more likely where LDLNs were employed. 3. Support for the role of a learning disability liaison (LDLN) nurse in acute general and mental health services. 4. Presence of an electronic system of patient identification did not improve outcomes. 5. Hospital likely to be used where LDLNs were employed.	Ensuring effective communication	1. The role of the LDLN is important in facilitating inter-agency communication and access to mainstream services, and ensuring that appropriate assessments for people with learning disabilities are undertaken.
Blair (2016) / UK	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5c (low) **Decision** - Include	Describes what more could be done by GPs and hospital services to reduce risk for people with learning disabilities attending acute general hospitals.	Opinion paper – peer reviewed	1. Comprehensive annual health checks are important. 2. There is need to assume capacity to consent unless assessed otherwise. 3. Hospital passports can change how care is delivered and experienced.	Ensuring effective communication	1. Hospital communication passports are essential for ensuring that appropriate assessment of capacity and annual health checks for people with LD receive effective health care.

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Brown et al (2011) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – unclear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To examine the impact and outcomes of four LDLN Services in SE Scotland on the health experiences of people with LD attending for general hospital care.	323 referral records (documentary analysis) and n=85 key stakeholders (focus groups) (n=61 CLDNs, n=55 paid carers, n=52 hospital nurses. Mixed methods. Activity data analysed with SPSS 17.0. Thematic analysis managed with NVivo 8.	1. Role of LDLN include; a. Facilitation of communication b. Promotion and facilitation of effective co-ordination of care. c. Supporting and enabling education and practice development. d. Lead on the development of policies, procedures and care pathways. e. Advocating for people with learning disabilities. f. Building bridges between services. g. Assessment of care needs and provision of advice. 2. Variations in reasons for referral. 3. Strong association between health needs and referrals.	Ensuring effective communication Delivering effective care	1. The role of the LDLN is an important interface in mainstream services to ensure effective person centred care delivery for people with learning disabilities. 2. The reasons for referral to acute care people with LD are varied and complex.
Iacono et al (2014) / Australia	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4a (low) **Decision** - Include	To understand the experiences of adults with LD using hospitals and the views of their families and paid carers. To understand the experiences of hospital staff who care for people with LD.	Systematic review of 16 quantitative and qualitative studies on how the hospital system responds to adults with learning disabilities. Downs and Black evaluation tools. Qualitative thematic analysis.	1. Fear of hospital encounter by people with LD. 2. Failure of hospital staff to provide care. 3. Hospital staff lack knowledge and skills to care for people with LD. 4. Poor / negative attitudes by hospital towards people with LD. 5. Staff / service failure to make reasonable adjustments.	Delivering effective care	1. Mainstream hospital staff's attitudes and lack of knowledge regarding people with learning disabilities and their health needs contribute to failure in the delivery of appropriate care.

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				6. Over-reliance by hospitals on family and carers to provide care. 7. Presence of hospital liaison person enhances hospital care.	Delivering effective care	2. LDLNs, family and carers contribute to the delivery of effective care in acute settings.
Gibbs et al (2008) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To describe the experiences of people with LD in general hospital settings.	Focus group. 11 adults with LD (6 females + 5 males) (18-62 years) (mild to moderate LD) / 9 parents / 5 paid carers. Ground theory analysis (Glasser & Strauss 1967) using NUDIST.	1. Essential communication a. Between hospital staff and people with LD. b. Between hospital staff and carers. c. Between health professionals. 2. Carers spent up to 24 hours in hospital to provide physical care and facilitate communication. 3. Concerns over admission and discharge procedures and processes.	Ensuring effective communication Delivering effective care	1. Multi-disciplinary and inter-agency communication is essential in meeting the healthcare needs of people with learning disabilities in acute hospital settings. 2. Admission and discharge procedures and processes contribute to how people with LD experience healthcare.
Blair (2011) / UK	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5c (low) **Decision** - Include	Describes how ensuring staff have immediate access to patient information has improved treatment for people with LD.	Opinion paper – peer reviewed.	1. Hospital passports can improve safety. 2. Hospital passports can improve health outcomes and experiences of people with LD and their families. 3. Hospital passports ensure that people with LD are involved in their care. 4. Hospital passports lead to direct changes in the way that care is delivered.	Ensuring effective communication	1. Hospital communication passports are essential for improving the safety and health outcomes, and facilitate involvement by people with LD in their care.

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Bradley and Lofchy (2005) / Canada	**Aim(s) / Purpose** – clear **Source standing** – unclear **Relevance** – clear **JBI evidence level** – 5c (low) **Decision** - Include	Describes a framework for the initial assessment, management and disposition of patients with LD presenting to A&E departments.	Opinion paper.	1. Carers are sources of valuable information about patients with LD. 2. Treatment decisions should be communicated to the GP / psychiatrist / care providers in the community. 3. Carers should have written confirmation of patient diagnosis from the GP / psychiatrist when attending A&E. 4. Capacity should be assumed and assessed if needed.	Ensuring effective communication Understanding the context of care	1. Diagnostic and treatment decisions need to be formally communicated between carers, GPs, psychiatry, healthcare providers and A&E. 2. Mental capacity should be assumed but if assessment to consent is needed this to be undertaken in timely manner.
Friese and Ailey (2015) / USA	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – unclear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	Description of the introduction of care plans for people with LD at a medical centre in and an online programme to tutor nurses in their use.	Survey 1 (n = 292 staff) Survey 2 (n= 63 nurses) who specialise in LD. Literature review. Training evaluation (n = 75).	1. Care plans need to enhance communication. 2. Need to modify the environment to enhance patient participation in their own care. 3. Need for interventions to improve patients' cooperation with care. 4. Carer involvement and support for carers. 5. Education increases hospital nurses' confidence in caring for people with LD. 6. Introduction of standards of care. a. Effective communication. b. Cultural competence. c. Patient and family centred care. 7. Implementation of new interventions require evaluation.	Delivering effective care	1. Accessible care plans, patient participation, carer involvement, staff competence and evidence based interventions contribute to high standards of care.

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Blair (2013) / UK	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5c (low) **Decision** - Include	Explanation of what clinicians must do to adapt services to ensure that reasonable adjustments are made to enable more positive outcomes and experiences.	Opinion paper. Uses case examples of a hospital passport used to assess mental capacity and reduce clinical risk in a hospital setting.	1. Core reasonable adjustments for reducing risk; a. No fixed visiting times for family, carers and friends. b. Food and drink provided. c. First / last clinic appointment always offered. d. Double time appointments to provide more time. e. Bed or chair for carer / family. 2. Hospital passport enhances care and ensures safety. 3. Assessment of a person's capacity to consent to treatment. 4. Need to involve people with LD in improving services and patient safety.	Understanding the context of care Delivering effective care	1. Acute healthcare need to make flexible reasonable adjustments for people with learning disabilities. 2. Methods of communication, assessment of capacity and involving people with LD in their care could improve patient safety and services.
Young and Chesson (2006) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - unclear **JBI evidence level** – 4b (low) **Decision** - Include	To discover views of commissioners of services for people with LD in Scotland regarding approaches to service evaluation and healthcare outcome measurements.	73 NHS / Local Authority / Non-statutory stakeholders. Postal questionnaire survey. Descriptive statistics.	1. Staff appraisal was the most common form of service evaluation. 2. Strong support for goal-setting and reviewing (83%). 3. Strong support for individualised outcome measures (75%). 4. Need for user involvement in service planning and staff training and selection. 5. Management recognition of the need for outcome measurement – uncertainty of how it is undertaken. 6. Outcome measures seen as impractical.	Ensuring high standards of care	1. Service user involvement in staff development and person centred health outcome measures need to be important elements of service evaluation.

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				7. Outcome measures seen as complex within LD services. 8. Need for joint health / social care approach to outcome measurement. 9. Differences of opinion as to what constitutes outcome measures.	Ensuring high standards of care	2. Person centred outcomes are difficult to implement consistently across services.
Mafuba et al (2014) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4a (low) **Decision** - Include	To summarise the best evidence available on safe staffing levels for qualified learning disability nurses to inform the implementation of the national Compassion into Practice Programme sub group for learning disability nursing; task area 5 'Ensuring we have the right staff with the right skills in the right place: Learning Disabilities'	Systematic literature review 31 papers (empirical studies, reports and opinion papers). Integrated thematic synthesis.	1. The context of care needs to be the basis for staffing levels. 2. Context of care themes a. Staff attributes (age, gender, working experience, training, and perception of challenging behaviour). b. Level of client need (level of disability, challenging behaviour). c. Staff perception of challenging behaviour (attitudes towards challenging behaviour, exposure to physical violence, support and supervision, role clarity). d. Job satisfaction (satisfaction with life, job security/insecurity, low job status, role ambiguity, influence over decisions). e. Stress burnout and work overload (perceived stress, emotional exhaustion, expressed emotion, workplace social support, work overload, exposure to stress.	Understanding the context of care	1. There are a range of factors that directly or indirectly impact on the delivery of safe and compassionate learning disability nursing care. These include; level of client need, staff attributes, staff perception of challenging behaviour, job satisfaction, working as a team, stress, burnout and work overload, and organisational support that includes staff feedback, and finally working in the community.

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				f. Working as a team ('the team', support strategies, training, supervision). g. Organisational support including feedback (organisational variables, performance feedback, organisational support, personal support from supervisors). h. Community working (role clarity, size of caseload, autonomy, administrative work, travelling to see patients, level of contact, specialist practice, legal support, demographic ignorance, communication with primary care).	Understanding the context of care	
Kumar and Parkinson (2001) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	The study investigated the structure and function of various multidisciplinary teams at a medium secure unit for people with learning disabilities.	Documentary analysis of MDT membership terms of reference, staffing structure (medical services and services allied to the unit), staffing structure (nursing), staffing structure (psychology), referral and admission procedure, and service profile. Interviews (chief executive, assistant chief executive, chairpersons of various MDTs). Interviews with 59 health professionals (service managers, clinical nurse	1. Mean rating of effectiveness of inter-professional working between different professional groups was 2.6 +- 0.8 (SD). 2. High effective working a. Managers / nursing staff behaviour nurse therapists b. Medical / nursing staff c. Specialist staff and behaviour nurse therapists. 3. Less effective working a. OTs and medical staff b. OTs and specialist staff c. OTs and SALTs d. SALTs and medical staff.	Delivering effective care	1. Highly effective inter-professional working within multi-disciplinary teams enhances the delivery of effective care. 2. Less effective inter-professional working within multi-disciplinary teams may negatively impact on the delivery of effective care.

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			managers, charge nurses, consultants and associate specialists, psychologist, psychotherapist, nurse therapists, behaviour nurse therapist, SALTs, and OTs. Non-parametric analysis.	4. Difficulties in inter-professional working a. Communication difficulties among professionals. b. Lack of integration. c. Lack of resources. d. Personal characteristics of professionals. e. Bureaucracy f. Rigid policies g. Deficient management of staff.	Ensuring effective communication	3. Factors that negatively impact on effective inter-professional working are individual professional attributes, professional silo mentality of individuals, political considerations and organisational cultures.
Kernohan (2016) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4a (low) **Decision** - Include	To explore research into the factors that may influence a nurse's decision to use seclusion when supporting a person with a learning disability.	Systematic literature review method 12 articles. CASP 2014 appraisal tools. Integrative synthesis.	1. Factors that influence decision to seclude; a. Patient factors (e.g. aggression). b. Staff factors (e.g. less variability in a team's work experience). c. Environmental and organisational factors (e.g. positive correlation between use of seclusion and availability of seclusion room). 2. People with learning disabilities need to be involved in their care. 3. Organisational change is required to reduce use of restrictive measures. 4. Alternatives models to seclusion are required.	Delivering effective care Understanding the context of care	1. Staff with long experience of working with people with challenging are more likely to use restrictive measures when caring for people with LD. 2. Service providers need to involve people with learning disabilities in decision making about their care in order to reduce the use of restrictive models of intervention such as seclusion.

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Heslop et al (2014) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – unclear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	Investigated the contributory factors to avoidable and premature deaths of people with LD in England.	Population-based confidential inquiry. Reviewed deaths of people with LD. 247 death records.	1. 54(22%) were below 50 years. 2. Median age 64 yrs (IQR 52-72). 3. Median for males = 65 years (13 years below average). 4. Median for females = 63 years (20 years below average). 5. Avoidable deaths related to care quality were more common in people with LD (37% 90/244) against 13% (national average). 6. Contributory factors comparison between LD and non-LD; a. Problems with advanced care planning (p=0.0003). b. Adherence to the mental capacity act (p=0.0008). c. Living in inappropriate accommodation (p<0.0001). d. Failure to adjust care as needs change (p=0.009). e. Carers not feeling listened to (p=0.006).	Delivering effective care Delivering effective care	1. Poor quality care significantly contributes to the high levels of avoidable and premature deaths of adults with learning disabilities as compared to that of the general population in England and Wales. 2. Factors that contribute to the high levels of avoidable and pre-mature deaths of people with learning disabilities relate to improper mental capacity policy implementation and lack of carer involvement by healthcare professionals in decision making.
Hutchison and Kroese (2015) / UK	**Aim(s) / Purpose** – clear **Methods** – unclear **Analysis** – unclear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To examine front-line staff experiences of working in residential care for people with LD.	Phenomenology / interpretive phenomenological analysis. 6 frontline staff (4 females + 2 males) (28 – 52 years) (5 – 24 years' experience). Semi-structured interviews	1. Factors that impact on standards of care; a. Positive interpersonal relationships. b. Individual motivational characteristics. c. Environmental /organisational characteristics. d. Staff feeling valued and empowered.	Understanding the context of care	1. Staff individual characteristics, team and interpersonal characteristics, organisational factors such as clear leadership structures and strategies for intrinsic motivation, and models of service provision are important in ensuring positive experiences and health care

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				e. Collaborative team working. f. Degree of congruence between staff's own values, priorities and positive care principles. g. Clear leadership and guidance. h. Integration of services. i. Motivation.	Understanding the context of care	outcomes for people with learning disabilities.
Tuffrey-Wijne et al (2013) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To describe the cross-organisational, organisational and individual factors in NHS hospitals that promote or compromise a safe environment for patients with LD, and develop guidance for improving practice.	Mixed methods involving 6 NHS hospitals in England. Stage 1. Strategic hospital managers (n = 6). Survey + follow up telephone interviews for clarification. Stage 2. Questionnaire survey. Clinical staff (n = 990). Face-to-face semi structured interviews. Hospital staff (HCAs to senior managers (n = 68). Interviews. Adults with LD who had attended hospital (n = 33). Face-to-face or telephone semi structured interviews (n = 37) + questionnaire survey (n = 88) – carers. Participant observations + interviews. Inpatients (n = 8). Numbers of patients with LD attending hospital + records of incidents analysis. Qualitative analysis – Nvivo 9. Quantitative – descriptive starts – SPSS 19.0. Stage 3. Expert panels. Senior managers / clinicians (n = 42).	1. Barriers to better and safer hospital care. a. Invisibilty of patients with LD. b. Lack of staff understanding of the support needs of people with LD. c. Lack of consistent and effective carer involvement in decision making. d. Lack of clear lines of responsibility and accountability for making reasonable adjustments. 2. Enablers for translation of policies into practice. a. Presence of LDLNs within the hospital setting. b. Ward mangers.	Understanding the context of care Delivering effective care	1. Lack of systems for identifying people with LD when they attend hospital, and acute hospital staff's lack of understanding of the complex support needs of people with LD are significant barriers to the delivery of safe care. 2. Lack of consistent and effective carer involvement in decision making and lack of clear lines of responsibility and accountability for making reasonable adjustments negatively impact on the delivery of effective care for people with LD attending general hospitals. 3. Acute hospital LD liaison nurses play an important role in ensuring the delivery of effective care by facilitating reasonable adjustments.

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Theme 3: **Resources (process)**

Authors / Country	Critical Appraisal + JBI Level of Evidence	Aims / Purpose	Methods / Participants	Findings / Conclusions (Level 1)	Category (Level 3)	Synthesised Finding / Conclusion (Level 2)
Campbell (2014) / UK	**Aim(s) / Purpose** – clear **Methods** – unclear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To measure nurses' knowledge about Adult Support and Protection (Scotland) Act 2007 before and after a one-day training course using participants' favoured methods of training activities.	Repeated measures used to evaluate the impact of a one-day Adult Support and Protection training for community nurses across one NHS area. 18 community nurses.	1. Statistically significant increase in scores post-training (Wilcoxon's signed-ranks test). 2. Training needs to be transferred into practice.	Developing professional competence	1. Staff skills development important and strategies should be needs-led and transferable to everyday practice.
Carter (2016) / UK	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5b (low) **Decision** - Include	To investigate and review what could be done to improve efficiency in hospitals in England.	Opinion paper. Independent report for the Department of Health (England).	1. Need to improve people policies and practices in order to understand the wellbeing of staff. 2. Electronic staff record (ESR) to manage staff deployment. 3. Use of e-rostering systems. 4. Care Hours Per Patient Day (CHPPD) **=** Hours of registered nurses **+** Hours of healthcare support workers **÷** Total number of inpatients. Variation of 144% (6.3 CHPPD to 15.48 CHPPD). 5. Need for policy to manage enhanced care demands. 6. Capturing data for measuring quality and efficiency across care pathways.	Processes for managing resources	1. There is need to adopt integrated IT processes to manage staff deployment and patient transfers. 2. Processes for capturing data for measuring quality and efficiency are essential for effective care delivery. 3. Organisations need to adopt appropriate work loading tools for effective management of staff deployment. 4. Organisations need processes to facilitate timely patient discharge and transfers. 5. Cooperative arrangements with other

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				7. Enabling digital technology and information systems to compile data in one place. 8. Achieving timely patient transfers. 9. Collaboration and cooperation across the local health economy.	Processes for managing resources	health and social care agencies is essential in meeting the complex needs of people with learning disabilities.
Werner and Stawski (2012) / Israel	**Aim(s) / Purpose** – clear **Methods** – unclear **Analysis** – unclear **Findings / conclusions** – clear **Limitations** - unclear **JBI evidence level** – 4a (low) **Decision** - Include	To summarise the available literature examining the knowledge, attitudes and training of psychiatrists and other professional care givers in regard to serving people with dual diagnosis of LD and psychiatric disorder.	Systematic literature review. 28 empirical studies.	1. Need to improve the knowledge, competence and attitudes of practitioners through training and practice opportunities. 2. It is important to examine effectiveness of training in terms of its impact on knowledge, skills and attitudes.	Developing professional competence	1. Staff training across professions and services need to enhance knowledge, skills, attitudes and professional values. 2. Systems need to be in place to evaluate impact of training on health care outcomes for people with LD.
Royal College of Nursing (2016) / UK*	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5b (low) **Decision** - Include	Provides an update on learning disability services in England.	Opinion paper. Report	1. 1, 700 LD nursing posts have been cut since May 2010. 2. 40% reduction in band 7/8 nurses. 3. 30% reduction in pre-registration training places in the past 10 years. 4. An increase in the number of learning disability student nurse training places to grow an appropriately skilled workforce. 5. Every acute hospital should employ at least one Learning Disability Liaison Nurse. By 2020/21 all acute hospitals should	Values-based recruitment and retention practices.	1. Long-term strategic planning is essential to ensure sustainable LD professionals at all levels. 2. Acute hospitals need to include nurses with learning disability nursing knowledge and expertise. 3. LD awareness training is required for all staff in acute services who

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				have 24-hour Learning Disability Liaison Nurse cover. 6. A long-term workforce strategy that connects workforce planning to the transformation and delivery of services for children and adults with learning disabilities. 7. Up-skill all general nursing staff to care for those with learning disabilities and/or autism, or those who display behaviour that challenges.	Developing professional competence	come into contact with people with LD.
Lindsey and Flynn (2003) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To investigate the nature of employment, catchment areas, patterns of work, areas of expertise, and positive and negative aspects of the services of LD psychiatrists.	136 consultant psychiatrists – LD. Questionnaire survey. Likert scale. Thematic analysis.	1. A wide range of clinical, academic and management skills – 72 had registrations in other specialties. 2. 123 expressed concerns about services; insufficient staffing (46), staff shortages and recruitment (26), relationships with social services (14). 3. 85% reported insufficient in-patient provision. 4. A wide range of disparity in the provision of mental health services for children and adolescents – 12 reported no services at all. 5. Concerns about management, commissioning and planning of services. 6. 85% had problems with admitting and discharging patients.	Developing professional competence Processes for managing resources	1. Clinicians need to have a wide range of knowledge and expertise to meet the complex health care needs of people with LD. In addition, clinicians need to contribute to professional development and management of resources. 2. Service providers need to work with commissioners to ensure that there is sufficient capacity to meet the needs of people with learning disabilities.

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Gates (2011) / UK	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5b (low) **Decision** - Include	To provide expert opinion on key issues, and potential solutions concerning the diminishing numbers of learning disability nurses in England. Identifying key issues and potential solutions concerning the diminishing numbers of learning disability nurses. Identifying the national supply and demand for learning disability nurses, including the number of student places commissioned the number and geographical spread of education and training courses and the key issues associated with clinical placements. Identifying the typical service models in which learning disability nurses practise to ensure efficient use is made of their knowledge and skills.	Expert opinion report (clinicians, HEIs, managers, leading organisations)	1. Irrefutable evidence of a reduction in the numbers of learning disability nurses being employed by the National Health Service, it is not reliably known how many of these nurses have moved into the third sector. 2. Engagement with the third sector to better understand future workforce requirements. 3. Early retirement of learning disability nurses. 4. Education commissioning for this specialist field of nursing at both pre and post qualifying level moves to a regional commissioning model, and that the delivery of education for this field of practice is provided through a limited number of regional academic centres. 5. Inform and direct nursing interventions to improve the health and well-being of people with learning disabilities. 6. Identify the specialist learning disability nursing contribution to a reduction in preventable deaths.	Processes for managing resources Processes for managing resources Developing professional competence	1. Collaborative arrangements between all stakeholders to develop a sustainable and inter-professional workforce strategy. 2. Professionals, healthcare commissioners and healthcare providers need to be at the forefront of developing and adopting new roles that enhance healthcare outcomes for people with learning disabilities.

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				7. Identify and articulate new and emerging areas of practice for learning disability nursing that contribute to the health and well-being of this group of people. 8. Articulation and promotion of nursing roles within 'mainstream' services that might benefit from learning disability nurse appointments. 9. Re-establish the unique contribution of learning disability nursing from a United Kingdom perspective. 10. Effective national recruitment campaign is needed. 11. Evidence based guidelines for future commissioning in learning disability, and in particular the type of workforce needed to support some individuals with learning disabilities - particularly those with profound learning disabilities and complex needs.	Developing professional competence Values-based recruitment and retention practices.	3. There needs to be strategic and long-term values-based recruitment and retention strategies.

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Maynors-Wallis (2012) / UK	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5b (low) **Decision** - Include	Guidance for the provision of safe and high quality services for patients with mental disorders and their families.	Opinion paper. Report (Royal College of Psychiatrists).	1. Information required to support job descriptions and job plans; a. Patient factors (complex health needs; 30 minutes appointments / 90 minutes for new cases). b. Geographical and demographic factors. c. Local configuration of services. 2. General adult LD workloads a. 1 wte consultant = 150,000 population. b. 1 wte specialty doctor = 75, 000 population. c. Trainees should not be included in staffing numbers. d. Experienced CT3 can support 30, 000 and senior specialist trainee 50, 000 population. e. New patient 90 minutes / complex cases 120+ minutes; pervasive developmental disorder with assessment 240 minutes, routine follow up 30 minutes. f. Caseload 150-200 (2-4 contacts / year) with 30-40 new referrals / year. g. CPA review 60 minutes. h. Mental health legislation with assessments (120 minutes). i. Tribunal 2 hours / report	Values-based recruitment and retention practices. Processes for managing resources Processes for managing resources	1. Job descriptions for healthcare professionals need to be current, have clarity and take account of the needs of people who use services, population demographics and local service models. 2. Methods of calculating workloads need to take account of population geographical and demographic factors that impact on healthcare demand.

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				writing 4 hours. j. 1 wte for 20 acute beds / 15-17 high secure beds / 12-15 medium secure beds as well as regional assessment duties. k. 15-20 long-term rehab. l. 1 wte for 300, 000 (forensic) (40 new referrals / 80 out patients follow up / 72 indirect contacts).	Processes for managing resources	
Centre for Workforce Intelligence (2011) / UK	**Aim(s) / Purpose** – clear **Source standing** – clear **Relevance** – clear **JBI evidence level** – 5b (low) **Decision** - Include	To make recommendations relating to medical training numbers in psychiatry of LD in England (ST4-6)	Opinion paper. Report. Contributions from stakeholders (not specified). 2010 IC (Information Centre) census	1. Significant numbers of consultants are approaching or working beyond typical retirement age. 2. MHO status may lead to more early retirements. 3. More trainees moving to the private sector. Uneven geographical distribution of the workforce. 4. Low levels of recruitment to training posts. 5. Data focused on NHS and no data for the private sector.	Values-based recruitment and retention practices.	1. Strategic workforce planning needs to be population based rather than acute NHS care focussed and take account of government policy on the future direction of health and social care.
Gates (2009) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – unclear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To undertake a strategic review of the educational commissioning process of, and attend to workforce planning issues.	Report. Multi-method (postal survey questionnaire, semi-structured interviews, reference groups, documentary analysis of policy documents, focus groups, steering group). LD students, Commissioners of LD services, parents and	1. Need to increase pre-registration nursing commissions. 2. Mapping of services and service providers. 3. Establish evidence base for registered nurses requirements for the future.	Values-based recruitment and retention practices.	1. Strategic workforce planning needs to be population based rather than acute NHS care focussed and take account of government policy on the future direction of health and social care.

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			family carers, managers of services, HEI academic staff, practitioners, self-advocates, local partnership boards.	4. New learning disability practitioner role. 5. Need to develop a flexible model of learning. 6. Provide 'visible' clinical leadership.	Developing professional competence	2. There is need for visible clinical leadership that focuses on delivering flexible learning, and development of new roles that reflect the changing needs of the population of people with learning disabilities.
Clark et al (2014) / UK.	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To assess the level of autism knowledge of community LD staff. To update and enhance the level of knowledge of autism of staff. To promote autism friendly changes in services.	56 community LD staff (46 clinicians + 13 administration staff – 2 had LD). Online survey questionnaire. Introduction to autism training. Focus group with 8 admin staff after training.	1. Front line admin staff were more limited in their understanding of autism as compared to clinicians. 2. Admin staff had limited to autism awareness training. 3. Awareness training had positive outcomes for administration staff. 4. On-going evaluation of staff training is essential.	Developing professional competence	1. LD services and professionals need to engage in inter-professional learning with acute care services to ensure acute care staff can deliver care to people with complex needs. 2. Training needs to be outcome focussed.
Windley and Chapman (2010) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To investigate how CLDTs can best carry out their role of providing support to support workers for adults with LD by understanding how support workers perceive their role, training and support needs.	Phenomenology, focus group (n=3), semi-structured interviews (n=5). 5 = female + 3 = male. Thematic analysis.	1. Need for training, which develops personal skills. 2. Service providers need to develop the best means of imparting the most essential skills. 3. Poor communication and assertiveness skills were factors, which could prevent joint working. 4. Supervision structure was remote and ineffective.	Developing professional competence	1. LD services and professionals need to engage in flexible inter-professional learning which enhance inter-professional communication. In addition, training need to be integral in staff supervision and performance.

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McMurray and Beebee (2007) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To provide LD awareness training days for A&E, acute wards and other acute hospital departments.	Survey questionnaire (n=92 – pre-training; n=46 – post training). Training and training evaluation (definitions of LD, service user perspectives, communication, emotional needs, accessibility, consent, physical health needs)	1. Service user involvement in awareness training is important. 2. Staff valued the awareness training and identified usefulness when caring for people with LD. 3. Staff felt training needed to be mandatory.	Developing professional competence	1. Evidence suggests the need to involve service users in staff training and development.
Sowney and Barr (2004) / UK	**Aim(s) / Purpose** – clear **Methods** – clear **Analysis** – clear **Findings / conclusions** – clear **Limitations** - clear **JBI evidence level** – 4b (low) **Decision** - Include	To explore the experiences of nurses in A&E caring for people with LD.	Focus groups. (n=27 A&E nurses) from 5 acute hospitals.	1. There was a lack of knowledge of the nature of LD. 2. Dependence on carers for the provision of care. 3. Nurses were fearful due to lack of knowledge. 4. Need to increase LD needs awareness of A&E staff.	Developing professional competence	1. LD services need to collaborate with acute care services to facilitate awareness training in A&E and other services.

* Report also appears under theme 1.

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