Longitudinal evaluation of the use of interprofessional, interdisciplinary simulation training surrounding intellectual disabilities across the lifespan

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Executive Summary

Background
People with intellectual disabilities (ID) experience poorer health outcomes than the general population, with barriers to accessing healthcare services, including mental health. High quality training and education may begin to address these barriers but there is limited evidence available to inform strategic workforce development. Various training methods are available, although there is a significant lack of research on simulation training to support working with people with ID.

Interprofessional simulation training has been emerging recently as a powerful educational tool (Attoe, et al., 2016). Billon and colleagues (2016) designed a simulation training course to support professionals based on the physical and mental health needs of people with ID. This training addressed issues commonly faced in training interventions which neglects mental health needs and primarily focuses on physical health needs (Attoe et al., 2017).

However, there is no literature investigating the longitudinal effects of simulation training, although initial research findings have been promising. Identifying key components of simulation training which aid learning, and understanding how training can impact workplace practice may be of significant value to developing the ID workforce.

Aims
This project aims to:
1. Review the current availability and evidence on longitudinal effectiveness of simulation training for staff working with people with ID
2. Longitudinally evaluate the impact of simulation training on staff and their clinical work
3. Determine next steps to support workforce development in ID through simulation training

Methods
Nine healthcare professionals were interviewed about their experience, learning and workplace practice following completion of a one-day simulation training course based on working with individuals with ID between July and December 2017. Each participant had taken part in simulated scenarios which employed trained actors with ID to represent common and challenging aspects of healthcare provision. Face to face
semi-structured interviews lasting 30-60 minutes collected data on participants’ memories of the training, experience of simulation, what was learnt, how it has impacted their clinical practice in the workplace, and how they have observed any impact in practice.

Findings
Thematic analysis (Braun & Clark, 2006) was conducted by two researchers triangulating the data to ensure rigor in determining the four major themes: communication, patient-centered care, reflection, and multidisciplinary team (MDT) working. The findings suggest core features of simulation training such as debriefing, the use of actors, scenario design, and facilitators have an impact on participants learning.

Notable changes occurred post training including the way professionals communicate with patients and increasingly make reasonable adjustments to suit patients’ needs. Following training professionals were more likely to consider the patient journey and how interactions in different clinical environments and healthcare professionals can impact care. Furthermore, the importance of considering the patient’s preferences and managing support network involvement in care was highlighted in regard to inequalities currently experienced in healthcare. Additionally, improvements in communication between MDTs in supporting patients were highlighted. Four valuable but less prominent themes were also highlighted through thematic analyses: skills of GPs; training dissemination; experience of simulation training; and feedback from actors with ID.

Implications
Overall, the finding suggest that simulation training is an effective training tool which has a sustainable impact on the participants, their workplace practice, and the patients and carers that they support. The evidence outlined in this report bolsters the literature on the effectiveness of interprofessional simulation training in ID. Furthermore, this growing evidence presents justification for renewed efforts to disseminate simulation training for ID in a more strategic and systematic manner, to achieve workforce change. Future, research examining the role of simulation training in blended and continued learning approaches would be valuable.
Recommendations

*Simulation training – Intellectual Disabilities course*

1. Continued delivery of interprofessional simulation training for ID workforce at a greater scale than is currently available
2. Faculty development and capacity building is required to meet workforce scale and demand
3. Simulation training could be targeted at key individuals and professions within the ID workforce, to complement other existing training opportunities
4. Up-scaled delivery should be accompanied by additional longitudinal evaluation, collecting more data from a larger number of participants across the workforce
5. A wider research programme could be developed to support this and other work, including understanding learning outcomes for different professions

*Stakeholder engagement*

6. Dissemination of this report and simulation training course through the HEE ID Programme network, including the Programme Board
7. Review of this report and simulation training by clinical and educational experts, and people with ID involved in the wider programme

*Strategic workforce planning*

8. Mapping role of simulation training in delivering core competencies for the ID workforce
9. Full mapping of available workforce training opportunities, and appropriate position determined for simulation training
10. Strategic alignment of training availability to ensure blended and continued learning at a national level
Highlights

- This was the first study aiming to assess the longitudinal impact in the workplace of an interprofessional simulation training course on the health needs of people with ID.

- Study participants had completed of the world’s first high-fidelity interprofessional simulation training course for the mental, physical health and social needs of people with ID.

- Nine multi-professional health and social care workers completed semi-structured interviews 6-12 months after their completion of the one day training course.

- Valuable learning and subsequent changes to practice were reported by participants, relating to communication, patient-centered care, reflective practice, and multidisciplinary working.

- Specific examples included: understanding why double appointments should be offered and implementing this in practice; enhanced ability to consider legal issues at work; and increased appreciation and adoption of reasonable adjustments in clinical work.

- Participants highlighted that the safe, non-judgemental ethos of the simulation training was essential to their learning, as was the focus on patient journeys rather than symptomatology.

- The opportunity to train interprofessional and across health and social care disciplines to appropriately support people with ID was valued by all stakeholders.

- Co-producing and delivering the training with actors with ID was crucial, as demonstrated by the study findings and feedback from the actors themselves.

- The need to expand delivery of simulation training in ID and build the capacity to achieve this was highlighted.
Disseminating this work and strategically aligning the simulation training to the range of training opportunities available to the ID workforce would be highly valuable.

**Project background**

**Intellectual Disabilities at Health Education England: Workforce development for and with people with Intellectual Disabilities**

This programme to create a sustainable and secure workforce supply so that people can live a good life. Mencap wrote a report called ‘Death by indifference’ in 2007. The report was about 6 people with learning disabilities who should not have died. Health Education England want to make sure that staff that work people that have Intellectual Disabilities have the rights skills and values, in the right place at the right time. HEE runs as a single organisation, across four regional hubs across 12 local offices. The Intellectual Disabilities programme is a regional programme working across the south of England.

The programme aims to create a sustainable and secure workforce supply, for people that have Intellectual Disabilities and/ or Autism, who require support from and/ or access to services. All activities focus on how the workforce can support people with an Intellectual Disability to lead healthy and fulfilling lives.

The programme began in Kent, Surrey & Sussex during 2013 and remains a trail-blazer within HEE as it is the only programme of this type. In September 2017 it expanded to include London for a year, in April 2018 it further expanded to include the whole of the South.

To stay in touch, click here to view HEE’s online blog that we use to keep everyone updated with news, updated, opportunities. If you would rather receive a single weekly email that summarises news, updates and opportunities you can sign up here. The programme email address is SouthID@hee.nhs.uk, and you can connect with us on twitter @HEE_SouthID and use the hash tag #SouthID when you want to share with us.

The project described in this document aims to support the goals of the Intellectual Disabilities programme, creating an evidence base for workforce development initiatives relating to improving care and reducing health inequalities.

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South London & Maudsley NHS Foundation Trust

SLaM is one of the UK’s largest mental health service providers, in close partnership with the Institute of Psychiatry, Psychology and Neuroscience (IoPPN) at King’s College London, Europe’s largest centre of research and education in psychiatry, psychology and neuroscience. This partnership provides centuries of experience in bringing together mental health services, scientific research, and education. As part of King’s Health Partners Academic Health Science Centre, the tripartite mission of aligning clinical services, research, and education has received renewed focus. Our organisation’s core mission is to prevent mental illness, promote mental health and improve the lives of the populations and staff we work with locally and nationally.

Maudsley Simulation

Maudsley Simulation is the UK’s first simulation training centre focusing on mental health, aiming to improve services for all who are affected by mental health issues, click here to see our work explained. Since 2014, working as part of South London and Maudsley NHS Foundation Trust, we have successfully developed a portfolio of simulation training courses and delivered them to a wide range of health and social care professionals including: GPs, psychiatrists, nurses, occupational therapists, clinical support workers, healthcare assistants, social workers, foundation doctors, psychologists, emergency services such as police and ambulance social workers, and many more. Maudsley Simulation was recently named the British Medical Journal’s Education Team of the Year 2018, off the back of their impressive evaluations of the impact of their training in a range of healthcare settings. This award was followed up with a commendation from the Health Services Journal Awards, and first prize at the Kate Grainger Awards for Compassionate Care 2018.
Meeting the Health Needs of People with Learning Disabilities

This is the first simulation training designed for a range of health and social care professionals with regular patient contact who want to explore how to improve healthcare for people with Intellectual Disabilities. The course uses actors with ID who have been trained and supported to portray their experiences of accessing support in a range of healthcare settings. This course was specifically designed with subject matter experts and service users to provide high qualification educational mental health training. The personal impact of ID, consequent health inequalities, barriers to accessing effective healthcare, and ways that health staff can help overcome these with the application of reasonable adjustments are explored. The training supports different professionals to work together to further their understanding of the challenges faced in these situations and build confidence in dealing with them.

Estia Centre

The Estia Centre is a market leader in training and research in mental health and intellectual disabilities, working as part of SLaM’s Behavioural and Developmental Psychiatry Clinical Academic Group. In close collaboration with clinical services, Estia trainers aim to improve the care of people with learning disabilities through evidence-based practice supported by high quality education. Working with a range of professions and settings across health and social care workforces is essential to our mission of reducing health inequalities.
Introduction

Health Needs of People with Intellectual Disabilities

Individuals with Intellectual disabilities (ID) experience a wide range of physical and mental health needs, however there is significant disparity in healthcare outcomes (Krahn & Fox, 2013), due to barriers and inequalities in accessing healthcare facilities (Ali et al., 2013; Royal College of Psychiatrists (RCP), 2015). Additionally, people with ID are at increased risk of comorbidity of physical and mental illness (Cooper et al, 2015). There are substantial cost implications of approximately £8-13 billion to the NHS for comorbid mental and physical health issues each year (Naylor et al., 2012).

Mental and physical health comorbidities in people with ID lead to reduced quality of life and life expectancy (Ilyas, Chesney & Patel, 2017). People with ID have a shorter life expectancy of up to 20 years in comparison to the general population which is avoidable and preventable with good quality health provision (Heslop et al, 2014; Hosking et al, 2016; NHS England, 2014; Trollor et al, 2017). The NHS Long Term Plan (2019) highlights a commitment to tackling preventable deaths by improving health checks, reducing overmedication, increasing staff awareness and understanding of ID, and enhancing access to specialist services including mental health by reducing waiting times for people with ID. Between 25-40% of people with ID experience mental illness (National Institute for Health and Care Excellence, 2016). The NHS and other public sector organisations have a statutory duty under the Equality Act 2010 to ensure that everyone has access to physical and mental health services. However, many individuals with ID experience difficulty accessing mental health services or experience disproportionately longer wait times for services (Ali et al., 2013), including difficult in booking appointments and not being listened to (Mencap, 2018b). People with ID can have negative experiences with healthcare staff, with reports of poor communication, lack of knowledge around ID (RCP, 2015), and being unprepared to provide support and reasonable adjustments at times (Morrison, George & Mosqueda, 2008).

Healthcare professionals commonly report a lack of awareness of comorbidity and mental illness in individuals with ID (Werner & Stawski, 2012). A lack of knowledge of ID attributed to the lack of training for healthcare professionals (Rose, Rose & Kent., 2012) can have wide range of negative consequences including having negative attitudes towards ID (Ali et al, 2013; Ward, Nichols & Freedman, 2010; Webber, Bowers & Bigby, 2010). Furthermore, healthcare staff reported significant levels of burnout and work-
related stress when working with those with ID (Noone & Hastings, 2009; Hastings, Horne & Mithell, 2004; Søndenaal et al, 2015). Job related stress, poor well-being and high levels of burnout can result in the loss of compassion for patients, increases risk of practice error, unfavourable quality of care, negative service user experience and patient safety (Hall et al, 2016; Teng, Hsiao & Chou, 2010). There is a lack of education and training specifically around ID (Salvador-Carulla et al., 2015) for clinical and healthcare staff leading to inadequate delivery of equal treatment (RCP, 2015) which could be linked to the high mortality rates for those with ID (Mencap, 2018a). Given the evidence, there is a need for better training and education about ID (Shakespeare, lezoni & Groce, 2009; Salvador-Carulla et al., 2015; Wilkinson et al, 2012; Tuffrey, hollins & Curfs, 2005; lezoni & Long-Bellil, 2012).

**Current Training Provision**

Availability of education programmes for healthcare professionals relating to ID have increased, generally focusing on improving knowledge and clinical service delivery (Kirschner & Curry, 2009). However, these have been criticised as inadequate, for not appropriately addressing issues around working with patients with ID (Razza et al., 2014; Shakespeare lezoni & Groce, 2009) and are often insufficient in changing negative attitudes commonly experienced by healthcare professionals (Richard et al, 2005).

Within healthcare, there are a variety of training methods such as conventional lectures, teaching involving people with ID and their families, community placements, clinical experiences, simulation exercises, and online learning (Shakespeare & Kleine, 2015). A commonly used, cost effective form of medical training is online learning (Skills for health, 2016). Currently there are many studies that highlight the benefits of e-learning (Ari et al., 2017), however a recent systematic review questions if online learning improves or reduces healthcare professionals skills, patient outcomes, and makes little or no difference to professionals knowledge (Vaona et al., 2018). Furthermore research suggests that whilst online learning can be beneficial and effective, it cannot replace face to face learning, and that a combination of online learning and traditional teaching is a more effective approach (Ewan et al., 2018).

Traditional lectures when delivered by a tutor with ID can improve attitudes and understanding of experiences of those with ID (Tracy & Lacono, 2008). Although traditional lectures can be useful when providing background information on specific topics, these are often criticized as an ineffective method.
of training (Meguid & Collins, 2017), lacking experiential and reflective elements. These methods remain primarily focused on knowledge acquisition.

Placements and clinical experience are valuable learning opportunities affording the potential to develop skills and gain better understanding of service users’ needs (McCarthy et al., 2018; D’Souza et al., 2015). This observation and exposure to clinical practice, and both people with ID and professionals’ experiences, can provide valuable learning beyond simply knowledge. However, students have reported negative experiences during clinical placements (O’Mara et al., 2014), including feeling being discriminated against and not feeling a sense of belonging the workplace (Borrott et al., 2016). Understandably these can be barriers to learning and obstruct learners developing positive attitudes and clinical and interpersonal skills required for working with people with ID. While current training methods have both strengths and weaknesses, there remains a lack of clarity around the most effective training modalities to deliver effective learning that improves clinical practice and the experiences of service users.

Simulation Training

There are a wide variety of simulation training formats including simulating the experience of service users to improve empathy and attitudes, for example by using wearing glasses which stimulate sight loss (Amosun, Volmink & Rosin, 2005). Whilst other simulation training can include the use of actors or virtual patients (Washburn, Parrish & Bordnick, 2017), video technology (Eeckhout et al., 2016), peer to peer role play (Boose et al., 2015), and high-fidelity mannequins (Hawkins & Tredgett, 2016). Notably, using patient or human actors in simulation training can improve learning outcomes compared to using manikins or other simulation methods (Crofts et al., 2008). These methods aim to give staff the opportunity to practice and learn in situations that replicate clinical practice, without the potential consequences attached to real life care delivery.

Simulation training can enable staff to practice in a safe and non-threatening environment, with research suggesting the use of this training method improves clinical skills, competencies, confidence and decision-making skills (Bliss & Aitken, 2018; Stirling, Smith & Hogg, 2012; Wolf et al., 2011; Aggarwal et al., 2010) and can improve patient safety (Copper, 2013). Commonly within simulation training, a feedback and debrief process is a crucial part of the training providing an opportunity to reflect on practices both individually and as a team allowing an opportunity to explore skills and learning in a safe environment.
(Abbelson & Bisholt, 2017). All methods of simulation training described above have been applied to the field of intellectual disabilities to varying degrees. However, high-fidelity, interprofessional simulation training focusing on mental health and its interface with other disciplines and areas has been emerging recently as a powerful educational tool (Attoe, Kowalski, Fernando & Cross, 2016). Billion and colleagues (2016) harnessed this method, specifically designing a simulation training course to support professionals working with people with ID’s mental and physical health needs. This training employed trained actors with ID to co-produce and co-delivering the simulation training, and has been described in the literature (Billon et al., 2016). This training appropriately incorporated both physical and mental health needs of people with ID, addressing issues commonly faced in training interventions which primarily focuses on physical health needs and neglects mental health needs (Attoe et al., 2017).

This course has been evaluated and found promising initial results relating to the impact on professionals involved (Billon et al., 2016). Healthcare professionals perceived their attitudes, communication skills, inter-professional and multidisciplinary working, reasonable adjustments and knowledge of key issues of ID improved after the training, taking this learning back to clinical practice. A further study highlighted that through co-production, this training could address a number of issues commonly experienced by patients with ID such as experience of healthcare, negative attitudes, and challenging biases (Attoe et al., 2017). Significantly, the actors with ID involved in the training reported the value of contributing positively to the healthcare systems, demonstrating their strengths and interests to professionals, and being able to take a positive role in developing and training healthcare teams, all of which are at odds to their typical experiences (Attoe et al., 2017). However, these effects of the training are derived from data collected around the time of training, rather than subsequent evaluations to understand how this training has been used in practice.

**People with ID in simulation training**

Research findings from Attoe and colleagues (2017) highlighted the importance of including service users in the co-production and delivery of simulation training around ID. Four actors with ID provided feedback on their experience as a simulated patient, with four key themes emerging. *Treat me right* - actors expressed the importance for healthcare professionals to know and understand how to treat people with ID, as they felt that sometimes professionals are not fully aware which often impacts their overall...
experience of care. *I’m ok, you’re ok* - actors expressed that most importantly, healthcare professionals should remember that those with ID are ordinary people, who should be treated with respect, expected to live a good life, considered to be able and should be thought of in a positive light. *A whole new world* - the actors expressed that being involved in healthcare education was an empowering, enjoyable experience that fosters self-worth. *Our future* - actors felt they were making a positive contribution to improving healthcare for those with ID as well as supporting healthcare professionals which has potential positive and long term impact, investing in the future of healthcare delivery.

**Long Term Impact**

The health sector spends approximately £5 billion on training and development of staff each year (Health Education England, 2018). However, Saks and Belcourt (2006) suggest that only 62% of information provided during training is retained immediately after the training and only 34% of knowledge is retained after one year. Furthermore, many organisations fail to implement evaluation pre and post training and when it is implemented, it rarely evaluates the outcomes of the training adequately (Saks & Burke, 2012). The failure to adequately evaluate training has substantially financial implications particularly for an organisation like the NHS and therefore, the need for robust longitudinal evidence to support the effectiveness and usefulness of simulation training interventions is imperative. Furthermore, identifying key components of simulation training which aids learning and developing an understanding on how the training impacts has on a person’s behaviour in the workplace is an important evaluation process that helps guide and develop sustainable and robust training in the future.

Systematic reviews and meta-analysis highlight that simulation training can be more effective that other modalities of training and has significantly more successful outcomes in comparison to control groups with no intervention (Cook et al., 2011; Edwards et al., 2015; McGaghie et al., 2011). These outcomes include having a positive impact on patient safety and improving skills and clinical practice, demonstrating that learning gained is taken back to the workplace to improve care (Bliss & Aitken, 2018; Stirling, Smith & Hogg, 2012; Wolf et al., 2011; Aggarwal et al., 2010; Copper, 2013). Whilst there are many benefits to simulation training there is currently a lack of research in specific areas of healthcare (Stocker et al., 2012). This is true of Intellectual Disabilities. While there is initial evidence suggesting that interprofessional simulation training on ID is effective (Attoe et al., 2017; Billon et al., 2016), there is an imminent need for
longitudinal research in this area. There are currently no robust investigations of the longitudinal effects of interprofessional simulation training for the mental and physical health needs of people with ID, highlighting a significant gap in the literature.

**Project Aims**

This project sought to investigate the longitudinal effectiveness of simulation training for healthcare workers to improve their practice with people with ID. The project aimed to:

1. Review the current availability and evidence on effectiveness of simulation training for staff working with people with ID
2. Longitudinally evaluate the impact of simulation training on staff and their clinical work
3. Determine important next steps to support workforce development in ID through evidence-based simulation training
Methods

Design
A literature search assessed current availability of interprofessional simulation training in ID, followed by a cross-sectional approach to collecting additional data to evaluate training interventions when participants have returned to the workplace.

Literature review
As outlined in the introduction section, there are multiple education and training methods aimed at ID. Notably these include involving people with ID and their families at various stages, from basic involvement through to full co-production and co-delivery. Regarding simulation training, while there are examples of interactive, role play scenarios to improve clinical practice, there were few evaluations of interprofessional simulation training identified in the literature (Attoe et al., 2017; Billon et al., 2016). There were no longitudinal evaluations of simulation training for professionals working with people with ID in the literature, involving participants providing data at multiple time points including having returned to the workplace following training.

Cross-sectional data collection
This project sought to continue and develop previous data collection that had been undertaken for existing evaluations of interprofessional simulation training. Primary data collection was undertaken in the form of semi-structured interviews with training participants up to 12 months after participation in their simulation training day.

Procedure
All participants completed a one-day simulation training course between July and December 2017 based on working with individuals with ID. Prior to the course, participants were encouraged to watch videos to explain mental health simulation training and the Maudsley Simulation centre. The course itself accommodated up to 12 participants with each taking part in one of the six scenarios throughout the day (described in table 1), after some introductory teaching on ID, health inequalities and reasonable adjustments. Participants entered a 10-15 minute scenario relevant to their clinical setting, e.g. GP surgery, 2 minutes prior to the arrival of the actor to allow for planning. Participants’ involvement in particular
scenarios was chosen strategically by the course facilitators. After each scenario, participants were debriefed using the diamond debrief model (Jaye, Thomas & Reedy, 2015) allowing for a description, analysis and application of skills to be discussed. Debriefs were facilitated by skilled debriefers, lasting around 30-40 minutes and aiming to develop reflective discussions that culminate in clear ‘take home messages’ or learning points.

**Table 1: Scenario description**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Brief description</th>
<th>Setting (based on participants)</th>
<th>Participants</th>
<th>Learning Objectives</th>
</tr>
</thead>
</table>
| 1        | Initial assessment of a difficult to engage service user | Dentist clinic / GP surgery / other outpatient clinic | RGN, GP, Dentist, OT | - Optimise communication and rapport skills  
- Effective assessment in the context of learning disability  
- Ensure delivery of person-centered care  
- Develop awareness of the role of carers, families and other agencies  
- Implement reasonable adjustments |
| 2        | Psychiatric assessment of a service user with “challenging behaviour” | A side room in the A&E department | RMN, psychiatric doctor, clinical psychologist, care coordinator, mental health social worker | - Develop awareness of diagnostic overshadowing and its consequences  
- Gain understanding of the impact of the working environment  
- Recognise complexity of ‘challenging behavior’ as a social construct  
- Recognise when to escalate to specialist services  
- Develop awareness of the role of carers, families and other agencies  
- Gain understanding of prejudice and discrimination |
| 3        | A patient presenting with depression | Hospital ward / single bedroom | RMN, clinical psychologist, psychiatrist, care coordinator, mental health social worker | - Optimise communication and rapport skills  
- Effective assessment of mental state with communication difficulties  
- Understand atypical presentation of physical and mental health  
- Recognise need for additional enquiry and careful examination to elicit symptoms  
- Recognise the challenges of accessing healthcare  
- Anticipate needs and make reasonable adjustments  
- Gain understanding of how and when to escalate to specialist care pathways |
| 4        | A patient refusing IV treatment in general hospital | General hospital ward | RGN, HCA, GP, RMN | - Provide care with dignity and respect, valuing individual strengths  
- Gain awareness of prejudice and discrimination  
- Use a capacity and consent framework  
- Identify systemic obstacles and limitations in services |
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| 5 | Discharge planning with the same patient with a challenging carer | General hospital ward | RGN, HCA, GP, ward Social Worker | - Recognise how physical / mental disorder can have atypical presentation
|   |   |   |   | - Develop awareness of the role of carers, families and other agencies
|   |   |   |   | - Consider appropriate treatment plans
|   |   |   |   | - Deliver patient-centred approach when communicating with carers & families
|   |   |   |   | - Manage triangular communication with anxious relatives and patients
|   |   |   |   | - Recognise the health care worker’s role in maintaining patient’s right to make choices

| 6 | Safeguarding concerns during a consultation for STI of a vulnerable patient | Sexual Health clinic / GP surgery | GP, nurse, social worker, other healthcare as ‘Chaperone’ | - Assessment of risk from others
|   |   |   |   | - Managing challenging conversations around sexual health and safe sex
|   |   |   |   | - Balancing patient’s right to a choice and potential risks
|   |   |   |   | - Working with capacity and consent
|   |   |   |   | - Knowledge of safeguarding pathways

**Participants**

Thirty-nine health and social care professionals who worked in various settings across London completed the training, in a variety of professions demonstrated in Table 2 (further breakdown by role in appendices).

*Table 2. Breakdown of simulation training participants by profession*

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Practitioner (including trainees)</td>
<td>7</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>6</td>
</tr>
<tr>
<td>Registered General Nurse</td>
<td>5</td>
</tr>
<tr>
<td>Registered Mental Health Nurse</td>
<td>5</td>
</tr>
<tr>
<td>Healthcare Assistant/Clinical Support Worker</td>
<td>5</td>
</tr>
<tr>
<td>Administrator</td>
<td>3</td>
</tr>
<tr>
<td>Registered Learning Disabilities Nurse</td>
<td>3</td>
</tr>
<tr>
<td>Employment Support Worker</td>
<td>2</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>1</td>
</tr>
<tr>
<td>Psychologist</td>
<td>1</td>
</tr>
<tr>
<td>Emergency Medicine Physician</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>
Participants who consented to be contacted and had completed the full-day training course and were emailed six to twelve months’ post training in August 2018 to arrange a semi-structured interview in a location convenient to them, lasting approximately 30-60 minutes (see Appendix 1). Subsequently, 9 female healthcare workers consented to completing semi-structured interviews 12-18 months after completing the initial simulation training. Initially 12 people had consented and expressed interest in completing an interview, but 3 subsequently withdrew from the study.

The age range of participants was 31 to 58 years old (m=47.5, SD=8.90), with between 6 months and 30 years’ experience working within various healthcare settings. All participants had varying levels of experience working with individuals with ID, while 4 had previous experience doing a form of simulation training. Participants’ job roles included working as: a core trainee doctor, healthcare training officer, engagement officer, occupational therapist (2), General practitioner (2), senior nurse and emergency nurse practitioner.

Table 3. Breakdown of semi-structured interview participants by profession

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number of interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Practitioner</td>
<td>2</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>2</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>1</td>
</tr>
<tr>
<td>Healthcare Training Officer</td>
<td>1</td>
</tr>
<tr>
<td>Engagement Officer</td>
<td>1</td>
</tr>
<tr>
<td>Senior Mental Health Nurse</td>
<td>1</td>
</tr>
<tr>
<td>Emergency Nurse Practitioner</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Participants were informed that the interview would be handled in a professional and confidential manner complying with ethical guidelines. The interview schedule (Appendix 2) was developed using open ended questions to discuss participants’ memory of the training, experience of simulation, what was learnt, how it has impacted their clinical practice in the workplace, and how they have observed any impact in practice.
Interviews were recorded digitally using a medical transcription mobile application called Dict8 and were transcribed verbatim. All digital data was encrypted, and identification numbers were used as labels to anonymise participants. Any identifiable data was changed using pseudonyms to maintain anonymity. Once data had been transcribed, the data was downloaded and stored on a secure computer only accessible to researchers.

**Qualitative Data Analysis**

Thematic analysis uses systematic approach to identifying patterns within data as well as exploring phenomena from individual perspectives to meet the aims of the project (Braun & Clark, 2006). All transcripts were thoroughly read to become familiar with the data, whilst keeping the research questions in mind. Initial codes were highlighted and subsequently group into prominent and recurring codes before being categorised into themes. Data saturation was reached when coding the final few interview transcripts, with no new codes emerging from the data. Two researchers separately reviewed and discussed codes and themes (see Appendix 5), triangulating the data to ensure rigor in determining the four major themes: *communication, patient-centred care, reflection, multidisciplinary team working*. Further important data was identified relating to the key and mechanisms for learning, which is referenced throughout the findings.

**Reflexivity**

A reflexive approach to the role and interactions of the researchers and participants were undertaken to provide a credible and plausible explanation of participants' experiences and avoid assumptions and bias (Smith, Flowers & Larkin, 2009). The researcher conducting interviews had no prior knowledge of the simulation training course including content, structure, scenarios and debrief models, and thus reduced influence on the responses given by participants during interview (Della Porta & Keating., 2008). It is important for researchers to take into consideration that personal opinions, experience and beliefs on training, evaluation and the health needs of those with ID may influence the results of the study. Using the structured process of thematic analysis and more than one researcher minimizes bias however the researcher’s personal experiences and opinions cannot be eliminated completely.
Findings

The literature search found no longitudinal evaluations of interprofessional simulation training courses aimed at staff working with people with ID. Promising findings relating to important skills for working with people with ID were identified as pre-post evaluations of this type of simulation training (Attoe et al., 2017; Billon et al., 2016).

Thematic analyses of semi-structured interview data highlighted four major themes: communication; patient-centred care; reflection; and multidisciplinary team working. Within each theme a variety of subthemes were also identified which are highlighted in bold, with the key mechanisms of learning commented on throughout. Four valuable but less prominent themes were also highlighted through thematic analyses and are consequently presented in less detail following the main themes: skills of GPs; training dissemination; experience of simulation training; and feedback from actors with ID.

Communication

What was learned?
Communication was the most significant emerging theme from the data. Participants suggested that a wide variety of communications skills were learnt during SIM training. For instance, participants expressed the importance of communicating clearly using short simple sentences as well as adjusting their communication style to meet the individual’s unique communication style. Patients vary significantly
whether they have ID or not and participants developed an understanding that communication style can vary from patient to patient as well as depending on the severity of their disabilities.

“to involve them in the consultation, to use pictures, to use all of this sort of thing”

Participant 8

“making sure it's kind of tailored towards the individual so talking slowly, clearly short sentences and not using kind of jargon and making sure that any information that is given to them is kind of in accessible form”

Participant 1

Knowing how to communicate with a patient in the right way should be tailored to each person and has a significant impact on their experience, their health outcomes, their understanding of the situation as well as the urgency of it. Participants also learnt the important of good communication which can reduce frustration experienced by patients and their support network as well as the importance of it in developing a rapport with the patient and gaining the trust.

**How was it learned? Actors & fidelity**

Participants highlighted that the use of real actors who had ID where pivotal to their learning of communication due to the interaction with them during the simulated scenarios. Using real life actors that were highly trained and also had ID themselves made the simulated scenario realistic and participants felt completely immersed it. Many compared the scenarios to experiences similar to a clinical environment and increasing fidelity as skills learnt were directly transferable to the workplace.

“simulations quite hard because ... you have got a mannequin and it is just an inanimate object, I find it really hard to kind of pretend to interact with something because it is not really real, but actually having real actors there made it seem like as if you were in a clinical practice, which was really, really helpful”

Participant 6

Because the scenario felt so realistic it mad the participants forget their concerns of being filmed and it being recorded as they become focused on that patient that was in front of them, Participants also expressed that the use of real life actors is a key component of the training that links knowledge and skill
and puts them into practice in a safe learning environment that does not negatively impact a patient. Interacting with real life actors elicits emotions within those who are participating in the simulated scenario and participants highlighted that this impacted their learning as it was emotive. The interaction between both the participant and actors is a vital part of the training where participants can put their knowledge into action particularly around non-verbal communication which is a key component when interacting with patients.

Changes to practice
Since doing the course participants explained they had made a number of changes to the way they communicate with patients with ID and now ensure they have “easy read” material available, they will use communication books and visual cues such as picture cards to help them communicate with patients. Participants also explained they reflect the communication back to the patient to ensure that they have understood what has been said to them.

“the importance of listening to people has been highlighted so I am more conscious of that, and to sort of reflect back when I have had conversations with people, to you know, kind of reflect back and think, you know, could I have learnt from that kind of thing”

Participant 2

Moreover, participants explained that they now use organization resources more such as getting an interpreter to help with communication, as well as using sign language or Makaton. Furthermore,
participants explained that they have improved their note taking practices and will detail information about the patient’s background including their communication style to aid future consultations.

**Patient-centered care**

Another major theme emerging from the data was the importance of patient-centred care, consisting of understanding and empathising with the journeys through healthcare, as well as the care and support networks for individuals.

**What was learned? Patient Journey**

Participants detailed they developed an understanding of how a patient with ID might journey through various healthcare settings, how this changes the dynamic of the situation and how patients might interact with professionals differently. Environmental factors were a pivotal component learnt during the training with participants explaining they are much more aware of the environment can impact a patient’s behaviour. Particularly noise or the clinical environment can be over stimulating for someone with ID and can cause distress or negative effects on behaviour. Another environmental factor that was learned to be considered was the room dynamics and how this might affect the patient who may have mobility issues and the importance of checking their notes prior to meeting them.

“it enabled everyone to learn from the whole patient journey from the beginning to the end and especially in the bits that we know that people get a bit stuck”

*Participant 3*

**How was it learned?**

The scenarios are specifically designed to show common occurrences in a patient journey throughout various healthcare settings. Participants highlighted that a key feature of the scenario was entering as their own role and not imitating another healthcare professional. This made the scenario similar to their workplace and also participants highlight the interactions with the actors were familiar.
“people in role play we get people to be a Doctor or be a Nurse or be a patient, whereas in the simulation what I really liked and what was really powerful was the fact that I would go in there as you know as the Nurse or the person who is a GP will go in there as a GP”

Participant 2

Changes to practice

Considering environmental factors, participants have made a number of changes to their workplace. For example, participants explained that this will try to reserve early morning or late evening appointments or will try to seem patients quicker so that they are not waiting in a busy waiting room where they could become over stimulated and distressed quite quickly.

“I did put quite a lot of time and effort into that and arranging them extra appointments and trying to, yes, hopefully, give them a bit more time that they needed, arranged a double appointment for a health check and things like that in advance. So I at least knew that is what they were coming for, which is what my experience in the past had been like, I didn’t even know they were coming for a health check, so you can at least prepare a bit more by looking at their notes and stuff. So I think yes, a few things, but still a bit dissatisfied by the level of care that I am able to give because of the amount of time it will take to do it really well, like to involve them in the consultation, to use pictures”

Participant 8
For some professionals, to manage this effectively other staff professionals such as receptionist need to be involved to ensure that the patient gets appropriate appointments and can offer suitable alternatives where appropriate. Participants highlighted a change in their working environment with the sharing of resources and knowledge more widely to increase awareness and ensure equality of care of those with ID. Most importantly, all participants explained that they now allow extra time for patients with ID and will often book double appointments. This is to ensure that they have enough time to communicate with them about their concerns, ask for their health passport and conduct any relevant/required health checks. Furthermore, participants also explained since training, they proactively arrange meetings with other healthcare departments to discuss the background of the patient and make a sufficient treatment plan.

**What was learned? Equality in care and support networks**

The health inequalities in those with ID compared to the general population are unjust and participants highlighted the need to treat everyone equally making the patient the focus of their care. Participants highlighted a change in attitude towards the physical and mental health needs of those with ID, in that this is now their main focus seeing passed the ID.

> “it kind of reminds you what the course was about, which was about looking about the health as well and not becoming so fixated that this patient has a learning disability, how am I going to communicate with them but you also think about why are they here, what do they need and make sure that they get the best care that they need and just like making sure that they are seen quickly”

*Participant 6*

Furthermore, patients explained they consider the patients’ rights particularly around confidentiality, vulnerability, privacy and other ethical situations. Whilst it is important to make the patient the focus of care it is also important to include the wider support network as they have a key role in assisting the patient achieve the best health outcome.

**How it was learned? Scenarios**

The scenario design again played a key role in how this was learnt as some participants were involved in challenging situations such as managing family/carers expectations and role in care for patients. Each scenario was designed to portray common experiences of individuals with learning disabilities and
challenging situations which can occur and need to be managed affecting. Many participants highlight that SIM training is the perfect safe learning environment to explore the management of challenging situations or exploring legal considers as there is no direct impact to themselves or the patient.

“It brought up some very, very sensitive issues and if you are ever in that situation obviously it is better to have seen it in a safe simulation environment rather than actually in clinical practice”

 Participant 6

Changes to practice
Participants highlighted have changes their focus from relying on family members or a career and focus on the wants and needs of the patients. Participants make a conscious effort to take the patients preference into consideration more and removing the agenda of themselves or that of the family member/carer. Participants explained that their active listening skills have improved and as a result they ensure they reflect the discussion back to the patient to ensure that was is being discussed have been understood. Many expressed that if a patient does not understand they will use various communication techniques (as detailed above) until the patient completely understands the situation. Often careers or family members might come with a specific a gender and whilst it is important to address those concerns it is also important to engage with the patient hear the concerns from them. They expressed that they hope that these leads to better health outcomes for the patient and encourages them to engage with the healthcare system more often.

Reflection
The third significant emergent theme from data analysis was reflection primarily in regard to self-awareness and personal development, and reflection on practice in the clinical setting.

What was learned? Self-awareness & personal development
Self-awareness & Personal development was a prominent theme amongst participants as they have reflected on different areas of their life. Some participants highlighted that they have become more aware of their own bias, assumptions and preconceptions around ID and have reflected on how this might impact the care they give to patients as well as in the workplaces.
“So it was just really nice having that kind of safe space to be able to kind of dissect and reflect about how you behaved. I also think as well about how what you say and how you behave may be interpreted by the patient, by their carer, by everyone around you, so it made me much more self-aware I guess.”

Participant 6

Participants also described being more self-aware of their body language, expressing emotion and facial expressions and how this may be interpreted and impact a patient with ID. In addition, participants have become more aware in how their speech in terms of rate, rhythm, tone and pitch could be interpreted by patients and how this may impact the care given and received by patients.

“How do we tell the importance of everyday interactions with people and during the training I could see how I could really take that back to use that in practice”

Participant 2

How it was learned? Debriefing

It appears that debriefing within SIM training had a significant impact in how participants reflected on their self-awareness and personal develop. The diamond debrief model is a group reflective approach which actively engages everyone on the training course whether just participated in the scenario or not. Participants have the opportunity to reflect to others how it felt in the scenario without focusing on performance which is then facilitated by a conversation identifying particular skills, developing these skills and how to implement these skills in the workplace. Whilst many participants highlighted that they could remember much of the debrief sessions, it has had a direct impact on their learning in terms of being able to reflect on their behaviour, bias and on their practice.

“It was a really invigorating sort of learning process”

Participant 4
Changes to practice
Since the SIM training, participants have reflected on self-awareness and personal development and have made a number of changes to their practice. Some participants described they have actively sought out additional training courses and been to conferences. Many described how they are mindful and aware of how their behaviour, speak and non-verbal communication can impact interactions with the patients and adjust this accordingly when dealing with an individual with ID.

What was learned? Reflection on Practice
Participants explained that SIM training gave them a unique opportunity to reflect on their practice and behaviour. Due to organisational factors such as time pressure and high workloads participants often do not have opportunities to reflect on their practice. More so, there are even fewer occasions to reflect on individual interactions with patients.

“it made you really reflective and evaluate what you said and how you said it, even though you went in knowing that it was a training session”  
Participant 4

“the whole thing was reflection wasn’t it, it was kind of reflecting on the case, on the patient, on the professional, and you know I think that’s a really important part of learning and discussing and getting a
kind of understanding from different points of view, you know, so from the patient’s point of view, from the professionals’ point of view all reflection is pretty key, really important to learning... it's powerful”

Participant 9

Prior to the training course participants recalled feeling untrained and thinking there must be a specific solution when treating patients with ID. Since training, participants highlighted an increase in their self-confidence particularly in relation to trusting their own ability and knowledge in providing care to patients with ID. This was followed by an increase in confidence in ability to treat patients in a more effective way.

“I had the confidence after the course just to say, actually, this patient X, he’s got these needs”

Participant 9

“I think it gave me more confidence in my own ability, because I think previously I thought maybe I need to have this like special arsenal of skills, like up my sleeve to be able to deal with this patient group, but actually it made me realise that I had probably have those skills within me anyway because you treat every patient differently”

Participant 6

How this was learnt?
Again, the debriefing component of training impacted how this was learnt as it enabled participants to reflect on their practice, identify skills require to manage situations, discuss how they are relevant and how they can be implemented into the workplace. Furthermore, as SIM involved MDT it provides an opportunity to share experiences, perspectives and knowledge in managing patients with ID.

Changes to practice
Participants highlighted numerous changes made to the practice having participated on course and reflecting on themselves. For example, one participant described how they have become an advocate in building awareness in the need to improve health outcomes and care for patients with ID. Many participants indicated that since reflecting on themselves and their practice they have now changed the way they interact with patients with ID and proactively consider what might impact a patient with ID to minimize challenging behaviour and make reasonable adjustments to help meet their needs more
Multidisciplinary team working

What was learned?
A major theme which emerged from all interviews was value of training in a MDT environment. Participants highlighted that having the opportunity to share experiences and knowledge with other healthcare professionals was invaluable. It provided an understanding of differences within practices and procedures depending on the role of the health care professional particular around patient care for those with ID. It also allowed provided an opportunity to gain an understanding of how other healthcare professionals work as well as how interacts with patients may change depending on the role of the healthcare professionals.

“so often our training is with people who are in the same position as us and it is actually quite rare to do multidisciplinary training like that clinical training”

Participant 1

“it was a nice mixture of different people, so there were GP’s, there were hospital Doctors, there were nurses, I think also physio, speech and language, a real like properly like mixed multidisciplinary team, community and acute, which was really nice”

Participant 6

It provided an opportunity to explore different perspectives when working with patients with ID and how this might change throughout a patient’s journey and within different clinical settings and situations.

“I enjoyed having the mixed professionals I think that was the main thing that I took away, was like how useful that was just hearing from other people and what their experiences”

Participant 1

“So we all had different perspectives and different experiences to give, so we learnt from each other as much as the actual scenario, so it was really good”

Participant 6
Furthermore, sharing experiences also allowed participants to explore challenging situations when working with patients with ID in various clinical settings and could problem solve and explore solutions jointly in managing situations better.

“I think having a mixture of people was really quite powerful... I think that made the learning really good ... people were sharing experiences... challenges and the difficulties.”

**Participant 2**

**How it was learned? Facilitators**

Participants highlighted that the facilitators played a key role in ensuring the psychological safety of participants. Facilitators were key in providing support and reassurance about the experience of simulation, stressing that it was a safe learning environment where participants were not being assessed or being judged on their performance and it was an inclusive environment. This had a positive impact on how participants felt going into the scenario as they often reported feeling anxious, nervous, fearful and did not like the idea of being filmed or being in front on the camera.

“It was just a revelation really in training techniques and the people that were facilitating the course were unbelievably helpful. They were just on hand all the time. They were on top of their game.”

**Participant 3**

Additionally, the facilitators played a key role in ensuring that during debrief sessions that personal remarks were suppressed, and the focus was on the details of what happened and exploring the situational outcomes. Many participants expressed that this was a new way of learning and that it played a key role in building their confidence and stimulating conversations across the room.

**Changes to practice**

Communication with other healthcare professionals who may be involved in the treatment and care of patients with ID were described by participants to have increased, be more effective and resulted in better working relationships across departments. Participants are more likely to work closer with other professionals to communicate the patient’s needs, their communication style and provide background knowledge so that a solution of treatment or care is jointly made.
**Additional themes**

**Feedback from actors with ID**

Many participants expressed that they would benefit from further discussions with the actors with ID, as well as receiving feedback from them on their experience of the simulated scenarios and generally how to improve care to those with ID. This was an encouraging finding as it highlights the care and passion of the participants to improve the quality of care and health inequalities that those with ID currently experience. Receiving feedback from actors could have a significant positive impact as they hear firsthand from a service user with ID perspective those of their experience within the health care system and the impact that healthcare professionals have. Furthermore, having the opportunity to receive feedback from the actors may positively reinforce the skills they have developed during the training, and impact their future practice when delivering care to those with ID. This opportunity to provide feedback to participants from the actors is now utilised in the training where possible.

**Experience of simulation training**

Various participants reported that simulation was an engaging and unique learning experience that they had not experienced before, particularly due to the use of actors with ID. Some had done role play with fellow colleagues, however they criticised the realism and consequent limits to potential learning. Participants highlighted that one of most unique factors of the training was that it was not didactic, instructor led, or prescriptive with content. Rather the simulation training was largely participant led, with facilitators supporting discussions to ensure that all participants were involved and that discussions remained reflective and constructive. This factor reported had a positive impact on the learning experience and was reasonably novel. Many participants initially expressed concerns about being video recorded during the training, but retrospectively reflected that they did not feel uncomfortable during the training due to engagement with the actors, well-constructed scenarios, subtle cameras, and a safe learning environment created by the facilitators. Finally, participants reported that the training was a high quality compared to other ‘free’ or centrally funded training, and emphasised that being able to attend without paying was key to their attendance.

**Training dissemination**

Longitudinal evaluation – simulation training for the ID workforce
All participants expressed that there is a great need for training like this across the whole of the health and social care system. Furthermore, many participants expressed that this form of training would be beneficial to both clinical and non-clinical staff as they believe that the training is such a powerful way of learning it will have a significant positive impact on the lives of those with ID. It was reported that interest in the course had spread by word of mouth, and that certain participants had encouraged their team members and colleagues to access this training subsequently.

**Skills of GPs**

Many of the GPs that participated in the study expressed that the use of simulation training is a great tool to teach and improve care for those with ID. However, some GPs specifically stated that the scenarios they participated could have been more challenging. The GPs explained that in their training they have to pass a clinical skills examination involving a simulation that is more complex than certain scenarios on this training. Whilst they could see the significant benefit of Maudsley simulation’s training for other healthcare professional’s they expressed that it could be harder to improve their learning.
Discussion

The literature search provided no evidence of long-term evaluations of interprofessional simulation training relating to ID, although promising initial findings around learning outcomes were identified. Thematic analyses following primary qualitative data collection via semi-structured interviews with simulation training participants 12-18 months after the training, highlighted key areas of benefit: \textit{communication, patient-centered care, reflection, and multidisciplinary team working}. The key mechanisms behind this learning and subsequent changes to practice were explored and outlined.

The findings form this study suggest core features of simulation training such as debriefings, the use of actors, scenario design, and facilitators have an impact on participants learning. Significant changes have occurred since training including the way professionals communicate with patients and making reasonable adjustments to suit their needs. Professionals are more likely to consider the patient journey and how interactions in different clinical environments and healthcare professionals can impact care and treatment. Furthermore, the importance of considering the patient’s preferences and managing support network involvement in the treatment and care of patients with ID was highlighted in regard to inequalities currently experienced in healthcare. The finding also suggests an improvement in communication between MDT in managing patients care and treatment. Lastly, the findings suggest that the reflective nature of SIM training increased participant’s confidence levels and improved their practice. Overall, these finding suggest that SIM training is an effective training tool which has a sustainable impact on the participants, their workplace and the patients they are involved with.

Billion and colleagues (2016) suggests the need for longitudinal evaluation of simulation training and its effects on improving the physical and mental health needs of those with ID. The current study supports existing research that suggested that interprofessional simulation training can increase confidence levels in participants (Billion et al., 2016). The study’s findings support results from evaluations of simulation training in different fields of healthcare, as well as suggestions that simulation training creates a safe learning environment and improves competencies (Bliss & Aitken, 2018; Stirling, Smith & Hogg, 2012; Wolf et al., 2011; Aggarwal et al., 2010).
The training course discussed has the potential to facilitate learning and professional development to a range of health and social care professionals involved in working with people with ID. It would be particularly valuable in the education and training of healthcare professionals as well as those working in third sector organisations enabling them to work effectively with individuals with ID with the hope of improving engagement in healthcare services and patient outcomes. Furthermore, the use and adhered to co-production principles through the engagement of actors with ID was a notable strength of this training’s approach. Positive benefits of this approach have been described for this course and more widely in the field (Attoe et al., 2017).

The evidence garnered and outlined in this report provides an important boost to the background literature presenting findings on the use of interprofessional simulation training in ID. The growing evidence base hopefully provides motivation to continue developing our understanding of experiential training methods and their role in developing the ID workforce, in connection with ongoing work at Health Education England. Furthermore, this growing evidence presents justification for renewed efforts to develop, deliver, and evaluate simulation training for ID in a more strategic and systematic manner, to achieve workforce change.

Whilst this study supports existing literature, more research is most certainly needed. Future research could consider measuring patient outcomes, linking either positive or negative outcomes to healthcare professionals with who has participated in specific simulation training for ID. Research to examine the role of simulation training in blended and continued learning approaches would be highly valuable to this field and workforce efforts.
Recommendations

Based on the findings of this project, the following recommendations for the future of training delivery and workforce development relating to ID have been highlighted in collaboration with the HEE Intellectual Disabilities Programme.

**Simulation training – Intellectual Disabilities course**

1. Continued delivery of interprofessional simulation training for ID workforce at a greater scale than is currently available
2. Faculty development and capacity building is required to meet workforce scale and demand
3. Simulation training could be targeted at key individuals and professions within the ID workforce, to complement other existing training opportunities
4. Up-scaled delivery should be accompanied by additional longitudinal evaluation, collecting more data from a larger number of participants across the workforce
5. A wider research programme could be developed to support this and other work, including understanding learning outcomes for different professions

**Stakeholder engagement**

6. Dissemination of this report and simulation training course through the HEE ID Programme network, including the Programme Board
7. Review of this report and simulation training by clinical and educational experts, and people with ID involved in the wider programme

**Strategic workforce planning**

8. Mapping role of simulation training in delivering core competencies for the ID workforce
9. Full mapping of available workforce training opportunities, and appropriate position determined for simulation training
10. Strategic alignment of training availability to ensure blended and continued learning at a national level
Conclusion

To conclude, this is the first study investigating the longitudinal effects of simulation training using actors with ID which has promising findings. The interactive and unique nature of the simulation described has a significant positive impact on communication between service users as well as other healthcare staff, promoting patient-centered care. Notable changes to practice for health and social care workers were reported, relating to interactions with patients with ID and their carers, as well as multidisciplinary team working, interprofessional collaboration, and reflective practice. Additional themes outlined the subtleties of different professions’ learning needs, the novel and engaging nature of simulation training, and the powerful role of employing actors with intellectual disabilities.

The findings highlighted demonstrate direct impact on both learners and service users in terms of improving health inequalities and care for individuals with ID. While this research supports and develops existing literature, there is a need for further research on a greater scale using both qualitative and quantitative methods to measure the impact of simulation training on clinical practice and service user experience. This, along with the recommendations posited, will help drive change and improve the care and health inequalities which are currently experienced by individuals with ID.
References


Longitudinal evaluation – simulation training for the ID workforce


Longitudinal evaluation – simulation training for the ID workforce


Longitudinal evaluation – simulation training for the ID workforce


Longitudinal evaluation – simulation training for the ID workforce

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Appendices

Appendix 1 – Invitation to participate

Dear (name)

Many thanks for participating in our simulation course ‘Meeting the health needs of people with learning disabilities’ at Lambeth Hospital on (date of course)

We are currently evaluating the impact of this training on the people who attended, and as such would like to request a few minutes of your time for a short interview. The individual interview would last no longer than 30 minutes at a time and location convenient for you, and it would be a huge help to our team and our work if you are able to participate.

If you would be happy to participate or have any further questions, please do get in touch with your availability or how we can contact you to discuss this.

We look forward to hearing from you.
Best wishes,
Chris

Chris Attoe
Research Lead | Maudsley Simulation | South London & Maudsley NHS Foundation Trust
www.maudsleysimulation.com
Appendix 2 – Interview Schedule

1. INTRODUCTION
   • Aims: engagement, information, setting the scene
   • Us, them, the study, ground rules (recorded/not, confidentiality and so on)
   • Check time you have, Any questions?

Keep record of:
   • Professional role
   • Professional background?
   • years of experience in health and social care
   • Age
   • Gender
   • Ethnicity

2. WHAT DO YOU REMEMBER FROM THE COURSE? (grounding people’s memory)
   Aims: grounding in the memory of the course
   Questions:
   What do you remember about the course?
   How do you remember it went?

3. LET’S EXPLORE THESE MEMORIES (what was learnt)?
   Aims: What was learnt
   Experience of debrief
   Experience of the simulation set up
   Why have they learnt this: presenter, content, training method, scenarios
   Questions:
   • Casting your mind back to the course, what sticks out for you?
   • Why do you think you have remembered this [mentioned previously]?
   • what do you remember about the simulation session?
   • what do you remember about the debrief session?
4. RELEVANT EXPERIENCES SINCE THE COURSE (how have you used this learning)

Aims:
- explore work experience since the course in relation to what the course changed
- Explore beliefs about impact of the course on practice

Questions: Thinking about these things (discussed before) ...
- How do you think you have applied them on your workplace?
- Have you encountered similar scenarios in your workplace?
- Describe a typical scenario in your workplace which you would have liked to practice in the course?
- How do you think this [mentioned previously] had an impact on your practice/ workplace?
  - What consequences do you think the impact of [mentioned previously] has had?
    (including in practice and those you work with?)

5. ANY OTHER IMPACTS ON THE COURSE (final ideas)

* Aim: last open question to screen for unexplored themes

* Questions:
- Is there any other area you think the course had an impact on?
- How has this training differed from other training that you done previously?
- Lastly, are there any other things you can think of that you learnt from the course or that you know you do differently since the course
### Appendix 3 – Breakdown of training participants based on role

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Therapist</td>
<td>6</td>
</tr>
<tr>
<td>GP</td>
<td>4</td>
</tr>
<tr>
<td>RGN – General Nurse</td>
<td>3</td>
</tr>
<tr>
<td>Employment Support Worker</td>
<td>2</td>
</tr>
<tr>
<td>RMN - Deputy Team leader</td>
<td>2</td>
</tr>
<tr>
<td>GP Trainee</td>
<td>2</td>
</tr>
<tr>
<td>Administrator</td>
<td>2</td>
</tr>
<tr>
<td>RMN – Mental Health Nurse</td>
<td>2</td>
</tr>
<tr>
<td>Core Psychiatry Trainee</td>
<td>2</td>
</tr>
<tr>
<td>Care Support Worker - Specials Team</td>
<td>2</td>
</tr>
<tr>
<td>Clinic Coordinator</td>
<td>1</td>
</tr>
<tr>
<td>Practice Development Nurse - Learning Disabilities</td>
<td>1</td>
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<tr>
<td>Senior Sexual Health Technician</td>
<td>1</td>
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<tr>
<td>Nursing Student</td>
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</tr>
<tr>
<td>Deputy Day Service Manager</td>
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<tr>
<td>Senior House Officer - Emergency Medicine</td>
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<tr>
<td>Senior Support Worker</td>
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</tr>
<tr>
<td>Senior Training Officer</td>
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<tr>
<td>Forensic Psychologist</td>
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</tr>
<tr>
<td>Engagement Officer (Right for Everyone Learning Disability Project)</td>
<td>1</td>
</tr>
<tr>
<td>Health Care Assistant</td>
<td>1</td>
</tr>
<tr>
<td>Emergency Department Staff Nurse</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>
Appendix 4 – Challenges and lessons learned

There are several challenges that were experienced during this project, particularly during the data collection stage. These include:

**Time period for follow-up**

- We found that response rate was low potentially due to us contacting participants 6-12 months after they had participated in the training.
- It would be interesting in future to follow up with participants on a more regular basis such as 3, 6, 9, and 12 months after the training. This could highlight more significant changes that were made to practice and also measure if they increase/decline over time, alongside keeping participants involved and engaged with the research.

**Type of data collection**

- Initially this project set out to collect quantitative as well as qualitative data at follow-up (6-12 months after training completion). However, response rates for quantitative data collection were too low to merit inclusion in the project.
- It was notable that participants were more interested in participating in qualitative data collection, possibly as face to face interviews were amenable to healthcare workers, and felt like a more engaging opportunity that online surveys. This will influence our future research activities.

**Methods of communication**

- We primarily used email to follow up with participants as this was a quick and convenient method. However, it may have been beneficial to also contact participants via telephone.

**Linking education programs to outcomes**

- One challenge of educational programs is directly linking them to clinical outcomes. Having access to healthcare databases which detail patient records could aid this so that it is possible to measure improvements over time.
- Additionally, within healthcare it would be important to train a whole team together so that outcomes could be measured accurately and highlight direct effects onto patients involved.

**Appendix 5 – Table of key themes, subthemes and codes from thematic analysis**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub theme</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong></td>
<td>Methods of communication</td>
<td>Makaton, Sign language, Visual cues, Pictorial cards, Verbal cues, Interpreter, Short sentences, communicating with patient, organizational resources</td>
</tr>
<tr>
<td></td>
<td>Adjusting communication style</td>
<td>Patients individual needs, Unique communication style, Non-verbal patients, Effective communication, Ensuring the patient understands</td>
</tr>
<tr>
<td><strong>Patient focused care</strong></td>
<td>Patient journey</td>
<td>Experience in clinical environment, Experience with different healthcare professionals, Environmental factors – noise, busyness of environment (A&amp;E), distractions</td>
</tr>
<tr>
<td></td>
<td>Equality in care</td>
<td>Patients preferences, patient being center of care, patient centered care, ethical concerns, privacy, confidentiality, safeguarding, patients rights, patients feelings</td>
</tr>
<tr>
<td></td>
<td>Including the wider support network</td>
<td>Input from carers/family members, including the wider support network, support networks own agenda, patient’s best outcome, managing conversations</td>
</tr>
<tr>
<td><strong>Reflection</strong></td>
<td><strong>Self-awareness</strong></td>
<td>Non-verbal communication, interpreting behaviour, using jargon, own bias and assumptions, equality, treating everyone equal, use of language, facial expressions, exploring emotions, impacting the patient</td>
</tr>
<tr>
<td><strong>Reflection of practice</strong></td>
<td></td>
<td>Making reasonable adjustment, changing behaviour, building awareness, further training, organisation factors: work pressure, workloads, time constraints, time management opportunities to reflect</td>
</tr>
<tr>
<td><strong>Multidisciplinary team working</strong></td>
<td><strong>Better working relationships</strong></td>
<td>gain an understanding of how other healthcare professionals work, more communication, discussing patient background, bridging the gap between services, understanding of differences within practices</td>
</tr>
<tr>
<td><strong>Similarities across settings</strong></td>
<td></td>
<td>share experiences, patient journey, similar perspectives, understanding of others, understanding roles within healthcare</td>
</tr>
<tr>
<td><strong>Problem solving</strong></td>
<td></td>
<td>explore challenging situations, explore different perspectives, no one solution</td>
</tr>
</tbody>
</table>
Appendix 6 – Summary of two key recent studies into simulation training for ID

Actors with intellectual disabilities in mental health simulation training
This study reports on the co-production and co-delivery with actors with intellectual disabilities, for a simulation training course to support healthcare professionals to provide care for people with intellectual disabilities, with a particular focus on their mental health needs. People with intellectual disabilities experience poorer health outcomes than the general population, and a significantly increased risk of mental health comorbidity. Their access to healthcare has been consistently shown as inadequate, and their access to mental health support is still largely wanting. Adequate training and education should improve these shortcomings but there is limited evidence available as to the best way to achieve this. The study focusses on the positive experiences of the simulated patients, reporting on and interpreting their direct feedback on their experience of contributing to the development and delivery of the course and being involved as co-educator.

Simulation training to support healthcare professionals to meet the health needs of people with intellectual disabilities
The study investigated the role of education and training in addressing health inequalities in intellectual disabilities, before examining innovative approaches to healthcare education. A self-report confidence measure and Healthcare Skills Questionnaire was used to collected quantitative data. Qualitative data was collected using post-course survey with free text responses to open questions. The results suggest, healthcare skills and confidence skills statistical improved from pre-to post-course. Qualitative analyses demonstrated that participants perceived improvements to: attitudes, communication skills, reasonable adjustments, interprofessional and multi-disciplinary working, knowledge of key issues in working with people with intellectual disabilities. These encouraging findings imply that simulation training to address health inequalities in intellectual disabilities is a valuable resource that merits further development. This training should be rolled out more widely, along with ongoing longitudinal evaluation via robust methods to gauge the impact on participants, their workplaces, and people with intellectual disabilities.
Appendix 7 – Background to the Baked Bean Company

The Baked Bean Company was founded by Jade and Nikko Hardrade-Grosz in 1997 with the express purpose of providing outstanding services for people with learning disabilities.

The baked bean company mission is to provide outstanding services for people with learning disabilities. We will provide them with projects and groups based around theatre, drama and the arts to promote social inclusion, build confidence and gain new skills, helping them to integrate into society.

The Beans In Education (B.I.E) project is a touring drama group made up of adults with learning disabilities, who travel around the country performing short plays designed to educate the audience about what living with a learning disability is really like. B.I.E regularly collaborates with different NHS trusts, universities and local councils to deliver a performance or workshop centered on current issues.

The Baked Bean Company has a history of collaborating the South London and Maudsley NHS Foundation Trust, and has consequently developed a strong working relationship with Maudsley Simulation through their innovative training course.
Longitudinal evaluation – simulation training for the ID workforce