

REVIEW OPEN ACCESS

Using Virtual Care to Assess the Health Needs of People With Intellectual Disabilities: A Scoping Review

Alison Devitt^{1,2}  | Melissa Nott³  | Stephanie Nelson³  | Julia Sgarlata^{1,4}  | Michelle Gray¹  | Srilaxmi Balachandran⁵  | Asma Taskin⁶

¹Specialised Intellectual Disability Health Team, Western New South Wales Local Health District, Orange, Australia | ²School of Nursing, Paramedicine, and Healthcare Sciences, Charles Sturt University, Orange, Australia | ³Three Rivers Department of Rural Health, Charles Sturt University, Wagga, Australia | ⁴School of Rural Health, University of Sydney, Orange, Australia | ⁵Child and Adolescent Mental Health Service, Hunter New England Local Health District, Orange, Australia | ⁶Specialised Intellectual Disability Health Team, South Eastern Sydney Local Health District, Orange, Australia

Correspondence: Melissa Nott (mnott@csu.edu.au)

Received: 14 March 2024 | **Revised:** 9 October 2024 | **Accepted:** 10 November 2024

Funding: This work was supported by the Australian Government's Rural Health Multidisciplinary Training (RHMT) Scheme.

Keywords: health assessment | health care access | intellectual developmental disorder | telehealth | virtual care

ABSTRACT

Background: The COVID-19 pandemic precipitated a rapid roll-out of virtual health care services to people with intellectual disabilities. Limited evidence is available for clinicians to guide virtual care delivery.

Method: Twenty-three studies were identified through systematic searching of 16 databases. Extracted data were mapped to the NSW Virtual Health Strategy.

Results: Evidence exists to support the use of virtual care for screening, diagnosis, assessment, and review of people with intellectual disabilities, with benefits for clients, carers, and clinicians. Evidence mapped well to the priority areas of the NSW Virtual Health Strategy, highlighting the need for clinician training and specific supports and adaptations to ensure accessibility for people with intellectual disabilities.

Conclusions: The use of virtual care to assess the health needs of people with intellectual disabilities across the lifespan is nascent. An opportunity exists for co-design with people with intellectual disabilities to reduce barriers to accessing and engaging in virtual care.

1 | Introduction

The Australian Disability Royal Commission into Violence, Abuse, Neglect, and Exploitation of People with Disability (Royal Commission 2023a) highlighted the ongoing inequity in health care access experienced by people with disabilities and a lack of consumer consultation in the design of health services. The rapid uptake of virtual care during the COVID-19 pandemic prompted questions regarding equity of access to virtual care and about the quality and safety of virtual care for people with intellectual disabilities (Selick et al. 2021). As using virtual care to assess the health needs of people with intellectual disabilities is relatively new, a unique opportunity exists to co-design this

mode of care with people with intellectual disabilities and their carers, and to improve access to virtual care by providing necessary supports and adjustments to enable engagement (Royal Commission 2023a). Research, evaluation, and the development of policy and resources are essential to ensure virtual care services meet the needs of people with intellectual disabilities and provide clinicians with evidence-informed tools and guidelines to support their use of virtual care with this population (Intellectual Disability Health Network 2017).

This scoping review was undertaken by Specialised Intellectual Disability clinicians,¹ who experienced a rapid shift from in-person to virtual service delivery during the pandemic, with

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2024 The Author(s). *Journal of Applied Research in Intellectual Disabilities* published by John Wiley & Sons Ltd.

little clinical guidance. A small number of systematic scoping reviews (Selick et al. 2021; Oudshoorn et al. 2021; Chadwick et al. 2022) published during and following the COVID-19 pandemic, collectively endorse the feasibility and acceptability of using virtual care to complement in-person services for people with intellectual and developmental disabilities. All three reviews highlight the need for the inclusion of supports and adjustments for people with intellectual disabilities to support full engagement in virtual care. Experiences of parents, carers, and staff of a specialist paediatric service in Australia support the acceptability of hybrid service delivery models, including online assessment, and highlight benefits to families including reduced health care costs, increased flexibility, and the ability to accommodate family needs (Esther et al. 2022). Furthermore, the firsthand experiences of Specialist Intellectual Disability Community Teams in the United Kingdom have highlighted the successful delivery of remote consultations via video and telephone (Nicholson et al. 2023), whilst also supporting the preferences of some clients for a hybrid online and in-person service delivery model.

We were interested in exploring what is known about using virtual care to assess the health needs of people of all ages with intellectual disabilities. The findings from this scoping review were mapped to the NSW Health Virtual Care Strategy (NSW Health 2022) to understand if it meets the needs of people with intellectual disabilities and intellectual disabilities health services, with a particular focus on identifying barriers to digital inclusion for people with intellectual disabilities.

This review was undertaken prior to the release of the Australian Disability Royal Commission Report (Royal Commission 2023a). Its recommendations reinforce key considerations for virtual care strategy development.

2 | Methods

2.1 | Study Design

A systematic scoping review was undertaken, informed by Arksey and O'Malley's (2005) five-stage methodological framework.

2.1.1 | Stage 1: Identifying the Research Question

The research questions were identified with reference to current clinical practice, existing literature, and identified gaps:

- What is the evidence for using virtual care services to assess the health needs of people with intellectual disabilities?
- What is the experience of using virtual care services from the perspective of clients with intellectual disabilities and their carers?

2.1.2 | Stage 2: Identifying Relevant Studies

Studies relevant to the research question were identified through systematic searching of university library databases. Key search terms were identified, and synonyms were used to create a search strategy with assistance from a university librarian. The synonyms were combined with the Boolean operators 'OR' for parallel concepts, and then 'AND' to link concepts. Truncation characters were used. Search terms are outlined in Table 1.

The following databases were searched individually in June 2022: CINAHL, Scopus, MEDLINE via OVID, Academic Search Complete, Health Source: Nursing/Academic Edition, Psychology and Behavioural Sciences Collection, Health Business Elite, SocINDEX with Full Text, Health Source—Consumer Edition, Consumer Health database, Health and Medical Collection, Healthcare Administration Database, ProQuest Nursing & Allied Health database, Psychology Database, ProQuest Dissertations and Theses Global: Health & Medicine, Public Health database via the ProQuest Health and Medicine platform. The search was limited to English-language publications. No time limits were set as virtual care services for people with intellectual disabilities are likely to be recent initiatives. The search was re-run in December 2022 prior to charting and summarising the data.

2.1.3 | Stage 3: Study Selection

All authors participated in the third stage. Inclusion and exclusion criteria were determined by the authors to identify studies relevant to the research questions (see Table 2). Studies were

TABLE 1 | Search terms.

Concept term	Intellectual disability	Virtual care
Concept terms in each list were combined with OR	'Intellectual dis*'	'Virtual care'
The concepts were combined with AND	'Intellectual dev*'	'Virtual health care'
	'Disorder of intellectual development'	Telehealth
	'Developmental delay'	Telecare
	'Developmental dis*'	Teleconsultation
	'Learning dis*'	Telemedicine
	'Mental retardation'	Telepsychiatry
		e-health
		e-health
		'On-line health'

Note: *denotes wildcard symbol to broaden search by finding all works with the same root e.g., dis* will search disability, disabilities, disabled.

TABLE 2 | Inclusion and exclusion criteria.

Inclusion	Exclusion
<ul style="list-style-type: none"> • Delivery of virtual care services using any platform or software • Delivered to people with ID and/or their care/s • For the primary purpose of health assessment or review • Conducted by a health professional • Delivery of virtual care services, including hybrid model • Peer-reviewed publications • Most article types are included (including reviews and individual studies, descriptive/outcome studies) • All countries of origin are included 	<ul style="list-style-type: none"> • Population not adults or children with ID • Health care not delivered virtually • Primary focus on provision of ongoing health interventions/therapy to people with ID (i.e., not assessment or review) • Telemonitoring • Not a full paper (abstract or conference proceeding) • Systematic review protocol or RCT protocol • Papers written in languages other than English

Abbreviations: ID = intellectual disability; RCT = randomised control trial.

selected via f: title and abstract screening followed by full-text review. Each abstract and title was reviewed independently by two authors to identify studies for exclusion.

Multiple studies were found that focused on the use of virtual care for the remote monitoring of individuals (telemonitoring), thus the exclusion criteria were adjusted to exclude these studies. Forty-five studies were included for full-text review and were thoroughly reviewed independently by two authors using the inclusion/exclusion criteria. Any conflicts were resolved by the decision of a third author.

2.1.4 | Stage 4: Charting the Data/Data Extraction

All authors were involved in charting the data. Studies were divided amongst the team for data extraction which was completed using Covidence and Microsoft Excel. The following information was collected: author, country, study design, number of participants, referral source, participant age, primary diagnosis, study aims, context of virtual care delivery, location of clinicians and participants, format and duration of delivery, pre-consultation activities, discipline of clinicians involved in virtual care delivery. Extracted data were mapped to the key areas and implementation goals of the NSW Health Virtual Care Strategy (NSW Health 2022). No quality assessment of the studies was done, as this was not the intention of the scoping review.

2.1.5 | Stage 5: Collating, Summarising, and Reporting Results

The authors worked in pairs to synthesise the findings and map them to the three key areas of the NSW Virtual Care Strategy (NSW Health 2022). Areas of alignment were noted, as were findings that did not closely align with the three key areas of the strategy. Gaps not addressed by the included studies were also identified.

3 | Results

The systematic search identified 173 studies for screening following the removal of 11 duplicates. Forty-five full texts were

reviewed against the inclusion and exclusion criteria. Twenty-two were excluded. Data were extracted from the final 23 studies (see Figure 1).

3.1 | Description of the Literature

Of the 23 included studies, most were from the United States ($n = 12$, 52%), then Australia ($n = 5$, 22%), Canada ($n = 3$, 13%), and single studies from the United Kingdom, Italy, and The Netherlands. Half the studies ($n = 12$, 53%) were published from 2020 to 2022 (inclusive), representing a significant increase in virtual care research in response to the COVID-19 pandemic.

Most studies were retrospective or prospective cohort studies ($n = 9$), descriptive studies ($n = 6$), non-randomised experimental studies ($n = 5$), two literature reviews, and one RCT. Studies reported data collected from one or more participant groups including clients ($n = 19$), carers ($n = 7$), and/or clinicians ($n = 4$). The age ranges and diagnoses of clients are reported in Table 3.

3.2 | Description of Virtual Care Delivery

Included studies delivered a range of virtual assessments including specialist assessments ($n = 5$), comprehensive/multidisciplinary team assessments ($n = 5$), telepsychiatry assessments ($n = 3$), diagnostic assessments ($n = 2$), brief assessments or screening ($n = 2$), and one study reported primary care assessment via virtual care. Not all studies reported assessment type (see Table 4).

Clinicians conducted virtual care assessments from a range of locations, including specialist services (children's hospitals $n = 5$, university or specialised health care facilities $n = 3$), outpatient clinics ($n = 4$), community health services or primary care ($n = 3$), and school-based ($n = 1$). Not all studies provided adequate information to determine the location of service provision.

Clients receiving virtual care services were primarily located in their own home or a group home ($n = 9$), at another health care facility (emergency department, rural hospital, outreach clinic, rehabilitation hospital, and community health service;

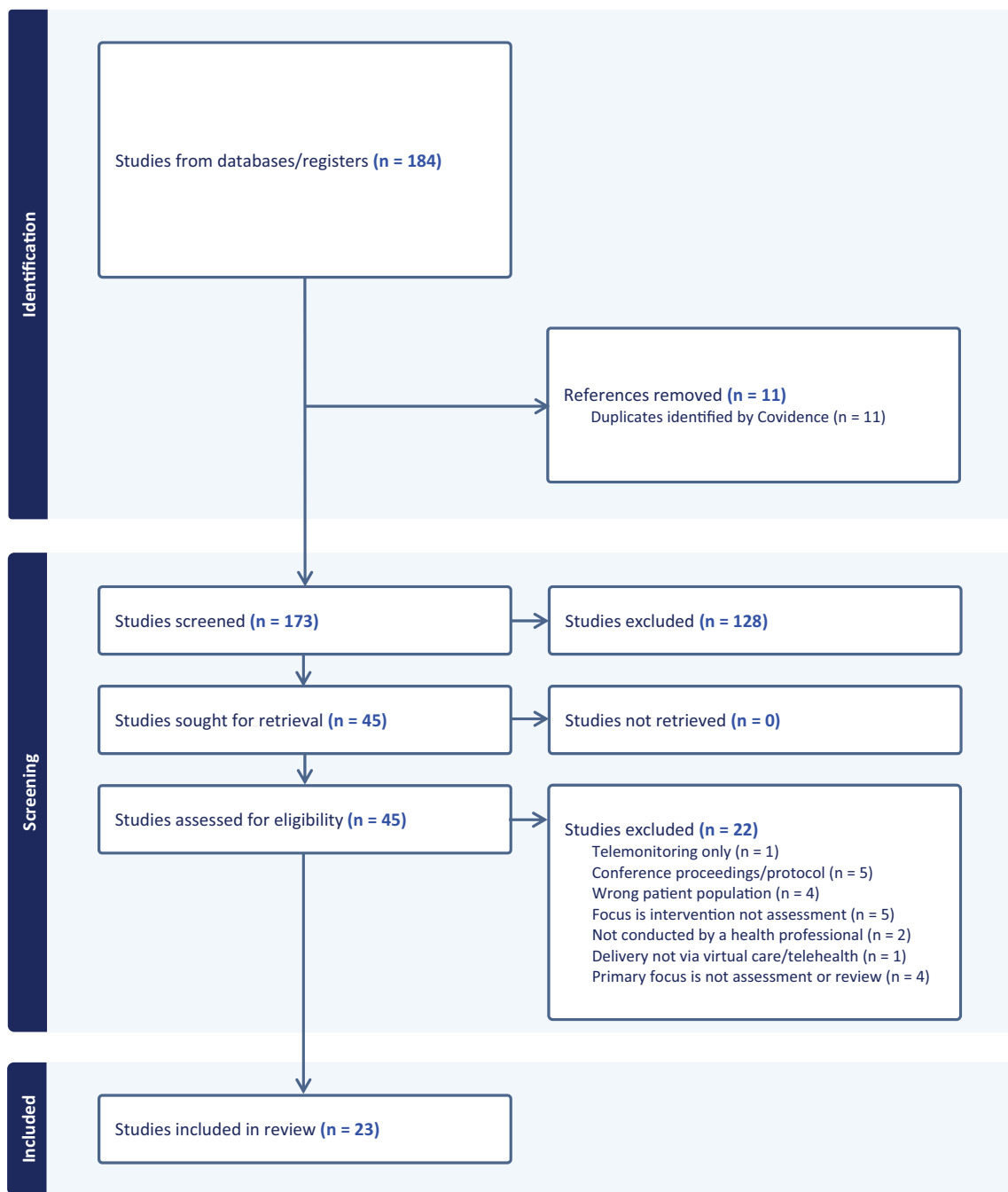


FIGURE 1 | PRISMA flow chart of study selection.

$n = 5$), or at school ($n = 3$). Not all studies provided adequate information to determine the location of clients participating in virtual care appointments. Some studies reported multiple locations.

Both audio-only (via telephone) and audio-video (via a videoconferencing platform) were used. Commercially available software such as Skype and Zoom were used, in addition to software designed specifically for health service delivery (e.g., PEXIP). Email and text messaging were reported in two studies, and an additional study used asynchronous store-and-forward technology to share resources. The reporting of assessment duration and frequency was variable and

influenced by whether it was a single assessment or an assessment with follow-up.

Prior consultation with the client or carer occurred in seven studies to screen for client communication needs and required supports, conduct risk assessments, technology training, and testing. One study reported conducting initial assessments in person, then subsequently via virtual care. Carer support during the appointment was described in many studies ($n = 10$) whilst technical support was less common ($n = 4$).

A range of individual discipline and multidisciplinary approaches were reported. Single discipline service provision

TABLE 3 | Characteristics of 23 included studies (In alphabetical order).

Lead Author (year)	Country	Study design	Number of participants	Participants	Participant age group	Primary diagnosis of client participants
Bullard, Harvey, and Abbeduto (2021)	US	Cohort	40 participants	Clients and carers	Children	Fragile-X syndrome
(Delves et al. 2022)	Australia	Cohort	191 participants	Clients and carers	Adults	Mental health conditions with ID
(Eapen, Hiscock, and Williams 2021)	Australia	Descriptive	—	Clients	—	DD, ASD, ID
(Gentile et al. 2018)	US	Descriptive	Over 900 participants	Clients	—	Mental health condition and ID
(Hodge et al. 2019)	Australia	Non-randomised experimental	39 participants	Clients and clinicians	Children	Specific learning disorder with ADHD, ID
(Hopper, Buckman, and Edwards 2011)	Australia	Non-randomised experimental	10 participants	Clients	Children	DD, ID
(Langkamp, McManus, and Blakemore 2015)	US	Cohort	295 participants	Clients and carers	Children and young people	DD, ASD, CP, ADHD, Down syndrome
(Letourneau et al. 2003)	Canada	Descriptive	208 participants	Clients	Children	Epilepsy, DD, headache
(Madhavan 2019)	US	Literature review	5 studies		Adults and children	Mental health care patients with ID
(McNally et al. 2022)	US	Cohort	382 participants	Clients, carers, and clinicians	Children	ASD, DD, ID, LD
(Merrill, Cowan, and Gentile 2017)	US	Descriptive	Over 1000 participants	Clients	—	Mental health condition and ID
(Nicholson et al. 2023)	UK	Cohort	61 participants	Clinicians	—	ID Clinicians
(Pearl et al. 2014)	US, UAE	Descriptive	Not given	Clients	Adults and children	CP, ASD, DD, epilepsy, neurogenetic disorders, congenital abnormalities
(Prelack et al. 2022)	US	Descriptive	7130 participants	Clients	Children	Epilepsy, migraine, DD
(Reese et al. 2013)	US	RCT	47 participants	Clients, carers, and clinicians	Children	ASD, DD
(Rosen et al. 2022)	US	Cohort	640 participants	Carers	Adults and children	ID

(Continues)

TABLE 3 | (Continued)

Lead Author (year)	Country	Study design	Number of participants	Participants	Participant age group	Primary diagnosis of client participants
(Rowell et al. 2014)	Australia	Cohort	126 participants	Clients	Children	CP, ID, DD, Down syndrome, Noonan Syndrome, mitochondrial disorders
(Shawler et al. 2021)	US	Non-randomised experimental	1 participant	Client	Adult	ASD, ID, Down syndrome
(Spaan, Verzaal, and Kaal 2021)	The Netherlands	Non-randomised experimental	89 participants	Client	Adults	Suspected mild to borderline ID
(Temple et al. 2010)	Canada	Non-randomised experimental	19 participants	Clients	Adults	ID, ASD, Down syndrome, Mixed expressive-receptive disorder
(Trivisano et al. 2020)	Italy	Cohort	3321 participants	Clients and carers	Adults and child(ren)	Epilepsy
(Verma et al. (2022)	US	Cohort	5 clinics	Clients	Children	ASD, DD
(Whittingham and Coons-Harding 2021)	Canada	Literature review	3 studies		Children	Foetal Alcohol Spectrum Disorders

Abbreviations: ADHD = attention deficit hyperactivity disorder; ASD = autism spectrum disorder; CP = cerebral palsy; DD = developmental delay; ID = intellectual disability; LD = learning disorder/disability; UAE = United Arab Emirates; UK = United Kingdom; US = United States.

was most often provided by a psychologist ($n = 2$), psychiatrist ($n = 2$) or neurologist ($n = 1$). Multidisciplinary approaches were more frequently reported ($n = 14$) involving a wide range of clinicians such as nurses, social workers, occupational therapists, physiotherapists, speech and language therapists, counsellors (including genetics counsellors), behaviour analysts/specialists, case workers, program coordinators, psychologists, psychiatrists, paediatricians, rehabilitation specialists, and neurologists.

3.3 | Mapping to the NSW Health Virtual Care Strategy

The reported experiences and evidence for using virtual care with people with intellectual disabilities were mapped to the NSW Health Virtual Care Strategy (NSW Health 2022), with a specific focus on aligning evidence from the literature with the strategic implementation goals of ‘Investing in People’, ‘Designing Processes’, and ‘Building Technology’. An overview of literature relevant to each goal is provided in Tables 5–5, together with the number of studies providing supporting evidence (for additional detail see Supplementary Information). Each table is followed by a synthesis of relevant evidence.

3.3.1 | Focus Area 1: Investing in People

Much of the emerging literature identified in this scoping review mapped to the strategic focus area of ‘Investing in People’ (see Table 5). The greatest number of studies focused on promoting the benefits of virtual care to clinicians and health staff ($n = 15$), raising awareness and promoting the benefits of virtual care to clients and carers ($n = 13$), and supporting equitable access to health care ($n = 11$). We were unable to locate evidence aligning with the implementation goals of involving people with intellectual disabilities and carers in the co-design of virtual care services and resources or supporting Aboriginal populations in using virtual care. To reduce overlap in reporting, evidence related to internet connectivity is presented with implementation goal 3.1 Drive the technology roll-out.

3.3.1.1 | Experiences of Virtual Care. Several studies reported the benefits of virtual care from the perspectives of clients, carers, and clinicians. Authors reported that people with intellectual disabilities and their carers were more comfortable using virtual care and less anxious, engaged in greater levels of eye contact, and that video technology was effective for building positive rapport and engagement (Delves et al. 2022; Gentile et al. 2018; Hodge et al. 2019; Merrill, Cowan, and Gentile 2017;

TABLE 4 | Characteristics of virtual care delivery in 23 included studies.

Author (year)	Type of VC assessment	Location of client receiving VC	Format of delivery including duration/frequency of VC	Supports provide pre- or during appointment	Health professionals involved
Bullard et al. (2021)	Behavioural and psychological assessment	Home	Skype—interfacing with various devices/platforms 5–6 sessions	Technology consultation and parent training. Carer support	Not reported
Delves et al. (2022)	Specialist assessment	Home, group home, community health service, ED	PEXIP + various video platforms – interfacing with smartphone or laptop 4 appointments (average)	Pre-consultation re: client communication, client VC preference, and tolerance. Carer support	Psychiatrist
Eapen et al. (2021)	Not reported	Not reported	Not reported	Not reported	Not reported
Gentile et al. (2018)	Specialist assessment and intervention	Home, school	Phone with webcam	Not reported	Psychiatric, Nurse, SW, Counsellors, Behavioural specialists, Case managers
Hodge et al. (2019)	Cognitive assessment	Specialist education clinic	Video 1 appointment; 1 h duration	Parent present but not directly involved in the assessment	Psychologist
Hopper et al. (2011)	Specialist assessment	Outreach clinic	Video 1 appointment. Duration not reported	Pre-assessment with the paediatrician. Technical support. Carer support	Geneticist and genetic counsellor
Langkamp et al. (2015)	Primary care assessment	School	Asynchronous store-and-forward, video camera and telephonic stethoscope 1 h appointment	Pre-survey re: telemedicine knowledge. Technical support and support from the school nurse	Primary care physician, Nurse
Letourneau et al. (2003)	Brief assessment	Not reported	Telephone calls	Not reported	Neurologist, Nurse
Madhavan (2019)	Telepsychiatry assessment and FU	Not reported	Various formats	Not reported	Nurse, Psychiatrist
McNally et al. (2022)	Diagnostic assessment	Home	Secure email and Zoom. Telephone IT hotline 2 h diagnostic evaluation + behavioural observations	Pre-appointment email with written instructions via email and IT hotline. Carer support	Psychologist, Developmental-behavioural paediatrician
Merrill et al. (2017)	Telepsychiatry	Home	Video	In-person for first appointment. Carer support.	Psychiatrist and interdisciplinary team

(Continues)

TABLE 4 | (Continued)

Author (year)	Type of VC assessment	Location of client receiving VC	Format of delivery including duration/frequency of VC	Supports provide pre- or during appointment	Health professionals involved
Nicholson et al. (2023)	Screening, comprehensive assessments, and FU.	Not reported	Telephone or video	Carer support	Psychiatrist, OT, PT, SLT
Pearl et al. (2014)	Comprehensive assessment	Rehabilitation Centre	Video 1-h weekly clinic	Carer support	Paediatric neurologist, Geneticist, PT, OT, SLT, Rehabilitation specialist, Psychologist
Prelack et al. (2022)	Specialist assessment	Not reported	Audio–video or telephone	Not reported	Paediatric neurologist
Reese et al. (2013)	Comprehensive assessment	University Healthcare Facility	Video Single assessment	Carer support	Not reported
Rosen et al. (2022)	Specialist assessment	Home.	Video	Carer support	Psychologist and psychiatrist
Rowell et al. (2014)	Comprehensive assessment	Rural hospital	Video 2-h, 3 monthly clinics	Not reported	Paediatrician, allied health, nurse
Shawler et al. (2021)	Comprehensive assessment	Home	Zoom via iPhone, email, phone Talk Go button Assessment = naturalistic observation 10 min Intervention support = 5 h/day	Pre-appointment screening and, risk assessment via telehealth. Carer support × 2	Psychologist, Behaviour analyst, Graduate psychology student
Spaan et al. (2021)	Research assessment	Not reported	Skype video conferencing	Technical assistance	Not reported
Temple et al. (2010)	Research assessment	Not reported	Video with two screens	Agency staff present	Psychologist
Trivisano et al. (2020)	Not reported	Not reported	Telephone, video call, email, text message	Not reported	MDT
Verma et al. (2022)	Telepsychiatry assessment	Home	Video	Not reported	Psychiatrist
Whittingham and Coons-Harding (2021)	Diagnostic assessment and FU interventions	Not reported	Not reported	Pre-appointment IT testing. Technical support	Nurse, Clinical Psychologist, Program Coordinator

Abbreviations: ED = emergency department; FU = follow-up; IT = information technology; MDT = multidisciplinary team; OT = occupational therapist; PT = physiotherapist; SLT = speech and language therapist; SW = social worker; VC = virtual care.

Pearl et al. 2014; Rosen et al. 2022; Shawler et al. 2021). One study highlighted that online therapy was more responsive than in-person (McNally et al. 2022). Other reported benefits included greater flexibility and ease of scheduling appointments (Rosen et al. 2022; Langkamp, McManus, and Blakemore 2015), reduced cost, reduced travel, reduced waiting times, and reduced carer stress (Gentile et al. 2018; Merrill, Cowan, and Gentile 2017; Shawler et al. 2021; McNally et al. 2022; Langkamp, McManus,

and Blakemore 2015; Rowell et al. 2014; Trivisano et al. 2020; Whittingham and Coons-Harding 2021). Carers of children with intellectual disabilities reported reduced sensory overload and reduced distress caused by travel and unfamiliar environments (Rosen et al. 2022; Langkamp, McManus, and Blakemore 2015; Madhavan 2019; Verma et al. 2022). Early indicators of positive health outcomes included reduced hospitalisation and emergency department visits of people with intellectual

TABLE 5 | (A) Mapping of evidence to the NSW Health (2022) Focus Area 1: Investing in people.

	Implementation goal	Number of studies
1.1	Develop a virtual capability framework for staff	3
1.2	Support consumer involvement in virtual care service design and delivery [note: health consumer and carers]	5
1.3	Build and strengthen partnerships with education providers	1
1.4	Raise awareness, address misconceptions, and promote benefits with clients, carers, families, and communities	13
1.5	Promote the benefits and build acceptance amongst clinicians and health staff, understand challenges, and support resolutions	15
1.6	Design the role of ‘moderators or concierge’	6
1.7	Support equitable access	11
1.8	Support Aboriginal populations to use virtual care	0
1.9	Design and support delivery of education and training	2
1.10	Engage and strengthen the skills of local champions to support local staff	3
1.11	Internet connectivity (see implementation goal 3.1 Technology roll-out)	—

disabilities accessing telepsychiatry services (Merrill, Cowan, and Gentile 2017).

Whilst satisfied with virtual care, some people with intellectual disabilities and carers would prefer in-person consultation, seeking greater personal connection with the clinician (Merrill, Cowan, and Gentile 2017; Whittingham and Coons-Harding 2021). Authors reported that engagement and communication became increasingly difficult when working with people with more severe intellectual disabilities (Nicholson et al. 2023; Merrill, Cowan, and Gentile 2017; Pearl et al. 2014; Trivisano et al. 2020; Hopper, Buckman, and Edwards 2011; Reese et al. 2013). In these cases, clinicians preferred to decide whether virtual care or in-person assessment was most appropriate (Nicholson et al. 2023; Prelack et al. 2022).

A small number of studies reported negative client and carer experiences. Where reported, these included confidentiality

TABLE 5 | (B) Mapping of evidence to the NSW Health (2022) Focus Area 2: Designing Processes.

	Implementation goal	Number of studies
2.1	Re-orientate funding models	7
2.2	Embed virtual care into clinical governance frameworks	3
2.3	Support decision-making to use virtual care	4
2.4	Prioritise the roll-out of virtual care across the system based on the highest value for clients and clinicians	5
2.5	Enable system scaling	3
2.6	Enable effective change management	0
2.7	Initiate monitoring and evaluation	5
2.8	Consolidate patient-reported measures	0
2.9	Facilitate safety intelligence for virtual care	0
2.10	Integrate virtual care into local planning contexts	3
2.11	Shared care management	9
2.12	Collaborate with stakeholders on initiatives that support virtual care delivery	4

TABLE 5 | (C) Mapping of evidence to the NSW Health (2022) Focus Area 3: Building Technology.

	Implementation goal	Number of studies
3.1	Drive the technology roll-out to meet the needs of the system, patients, and virtual care clinicians	14
3.2	Manage health care record integration	1
3.3	Address data privacy and device security	4
3.4	Ensure devices are suitable, integrated, and simple to use	3
3.5	Leverage innovation	4
3.6	Build a central portal to coordinate existing and new virtual care apps	0
3.7	Create a virtual care simulation unit	0

concerns, technology difficulties, difficulty keeping clients engaged and compliant, particularly children, and the resultant burden and stress placed on the carer to facilitate the virtual assessment (Hodge et al. 2019; Rosen et al. 2022; Whittingham and Coons-Harding 2021; Bullard, Harvey, and Abbeduto 2021). Two studies highlighted the additional challenges experienced by people from non-English speaking backgrounds (Verma et al. 2022), suggesting the use of an interpreter during virtual care consultations adds complexity (Nicholson et al. 2023).

3.3.1.2 | Access to Health Care. Improved access to health care services through the utilisation of virtual care was reported in many studies, with greater access enabled by eliminating barriers such as geographical remoteness, lack of specialised transport, and poor mobility (Merrill, Cowan, and Gentile 2017; Whittingham and Coons-Harding 2021; Madhavan 2019; Verma et al. 2022). Access to virtual care decreased time to diagnosis for families (Whittingham and Coons-Harding 2021), enabled earlier provision of treatment (Pearl et al. 2014), addressed health care gaps in rural communities (Whittingham and Coons-Harding 2021), and supported links with non-health care settings such as schools (Langkamp, McManus, and Blakemore 2015). Access to telepsychiatry assessment was found to be convenient and expedited the assessment process (Delves et al. 2022).

3.3.1.3 | Skill Development. Many studies indicated the need to rapidly increase the skills, confidence, and competence of clinicians through training and education (Hodge et al. 2019; Pearl et al. 2014; Rosen et al. 2022; Whittingham and Coons-Harding 2021; Hopper, Buckman, and Edwards 2011). In addition, the need for client and carer supports are also required to reduce barriers such as low levels of digital literacy, lack of experience, and lack of familiarity with technology (Nicholson et al. 2023; McNally et al. 2022; Whittingham and Coons-Harding 2021; Verma et al. 2022). Supports provided *before and during* the virtual care appointment may be effectively provided in the form of written instructions and telephone technical assistance (McNally et al. 2022). Some studies provided ‘concierge’ administration support and troubleshooting (Gentile et al. 2018; Merrill, Cowan, and Gentile 2017; Langkamp, McManus, and Blakemore 2015; Rowell et al. 2014; Whittingham and Coons-Harding 2021).

3.3.2 | Focus Area 2: Designing Processes

Table 5 outlines the literature that mapped to the strategic focus area of ‘Designing Processes’ supporting delivery of virtual care to clients with intellectual disabilities (see Table 5). Several studies mapped to the implementation goals of shared care ($n=9$), funding models ($n=7$), supporting the roll-out of virtual care to priority populations ($n=5$), and monitoring and evaluation ($n=5$). We were unable to locate evidence aligning with three implementation goals in this key area including: enabling effective change management, consolidating patient-reported measures, or facilitating safety intelligence for virtual care.

3.3.2.1 | Shared Care. The opportunity for virtual care to enhance shared care, improve access to multidisciplinary teams,

and improve stakeholder coordination was reported in several studies (Whittingham and Coons-Harding 2021; Verma et al. 2022). Virtual care increased patient and family-oriented care via telenursing (Letourneau et al. 2003), multidisciplinary service provision, and meetings (Nicholson et al. 2023; Letourneau et al. 2003), and enabled the participation of health providers at non-health sites such as schools (Langkamp, McManus, and Blakemore 2015). Shared virtual care was not without challenges such as attempting to complete a multidisciplinary assessment in a single session (Trivisano et al. 2020), logistical and resource challenges, and inadequate health policies or frameworks to guide delivery (Whittingham and Coons-Harding 2021; Prelack et al. 2022).

3.3.2.2 | Priority Populations. Delivery of virtual care to people with intellectual disabilities living in rural and remote locations was identified as a priority in two studies (Delves et al. 2022; Gentile et al. 2018), however, limited access to technology and low patient numbers in rural areas were identified as challenges (Hodge et al. 2019; Rowell et al. 2014). Further research is required to identify priority populations and areas for the roll-out of virtual care including consideration of existing services, service gaps, and clinical scenarios where virtual care is appropriate (Pearl et al. 2014; Trivisano et al. 2020).

3.3.2.3 | Deciding When to Use (or Not to Use) Virtual Care. Some studies identified that virtual care was not always suitable, for example conducting physical examinations, assessing clients with unstable medical conditions (Trivisano et al. 2020; Prelack et al. 2022), and using psychological assessments not validated for use via virtual care (Verma et al. 2022). The need to modify the virtual assessment of people with intellectual disabilities to include screening for communication difficulties was also identified (Delves et al. 2022). Notwithstanding the above-identified challenges, studies reported successful adaptation of assessment practices for administration via virtual care (Hodge et al. 2019; Trivisano et al. 2020; Hopper, Buckman, and Edwards 2011).

3.3.2.4 | Clinical Governance. There is an urgent need to develop policies and procedures to address standards of care (Whittingham and Coons-Harding 2021) and management of acute health issues or risks such as behavioural dysregulation or suicidality (Verma et al. 2022). Clinical governance considerations should include assessing different models of care to determine which services are appropriate to be delivered via virtual care and should consider the location of clients in relation to the health care providers (Trivisano et al. 2020). Other studies highlighted the need to assess the appropriateness of virtual or hybrid models (Trivisano et al. 2020; Whittingham and Coons-Harding 2021). Models of virtual care services need flexibility to accommodate delivery in both clinical settings and clients’ homes (Delves et al. 2022; Merrill, Cowan, and Gentile 2017; Hopper, Buckman, and Edwards 2011). One study highlighted that the physical environment in which virtual care is *received* also needs consideration as part of future governance frameworks (Whittingham and Coons-Harding 2021).

3.3.2.5 | Funding Implications. The financial benefits and efficiencies for clinicians included reduced travel and travel-related expenses, and reduced health care delivery

costs (Pearl et al. 2014; Madhavan 2019). However, the significant establishment costs of setting up virtual care services need to be managed in order to support broad health service-wide implementation (Hodge et al. 2019). One study also highlighted that achieving the required economies of scale may be a specific challenge in rural areas for services with low patient numbers (Rowell et al. 2014). System scaling will be supported by the planned use of technology that is financially practical and readily available (Hodge et al. 2019).

3.3.3 | Focus Area 3: Building Technology

With the exception of driving the technology roll-out, few studies were identified that focused on building technology to support virtual care for clients with intellectual disabilities (see Table 5). A total of 14 studies were identified that focused on one or more aspects of technology roll-out. No studies were located that focused on the implementation goals of developing new virtual care applications or the creation of a virtual care simulator.

3.3.3.1 | Technology Roll-Out. Several studies highlighted that the technology roll-out must consider appropriate equipment with suitable internet connectivity to enable quality images and audio, routine maintenance, and software updates as virtual models of care evolve (Merrill, Cowan, and Gentile 2017; Rowell et al. 2014; Trivisano et al. 2020; Whittingham and Coons-Harding 2021; Madhavan 2019; Bullard, Harvey, and Abbeduto 2021). To enable equitable access to virtual care, several studies endorsed the need to allow flexibility of device and software (Delves et al. 2022; Hodge et al. 2019; Bullard, Harvey, and Abbeduto 2021) such as the choice to use the client's device or have one provided (Bullard, Harvey, and Abbeduto 2021) and the ability to use commercially available and portable devices (Hodge et al. 2019). These considerations can mitigate foreseeable technical challenges experienced by clients with intellectual disabilities and/or clinicians (Prelack et al. 2022).

Technology that supports the combination of video and audio was considered superior to audio alone (Nicholson et al. 2023; Pearl et al. 2014). Technology can be used to enhance engagement of clients including via sharing videos, visual aids, and games during appointments (Merrill, Cowan, and Gentile 2017; Whittingham and Coons-Harding 2021; Verma et al. 2022).

3.3.3.2 | Data Sharing and Privacy. Virtual care presents some risks to data privacy. People with intellectual disabilities and carers may have concerns regarding data privacy (Gentile et al. 2018), however, these concerns can be well managed. Technology and devices need to be secure to meet confidentiality standards (Pearl et al. 2014; Verma et al. 2022). In one study, clients and carers agreed their virtual care appointment was private (McNally et al. 2022). One study conducted across multiple health care sites reported difficulties with health record integration when different sites used different software (Langkamp, McManus, and Blakemore 2015).

4 | Discussion

This scoping review included 23 studies each reporting on the successful delivery of virtual care assessments involving people with intellectual disabilities across the lifespan. Virtual care was typically delivered by clinicians located in hospital-based, outpatient, or community-based services, to clients and carers located in their own home or group home, at another health service, or at school. A range of assessments, including specialist, multidisciplinary, psychiatry, diagnostic, and screening assessments, was delivered via virtual care. People with neurodevelopmental disorders including intellectual developmental disorder, mental health conditions, and neurological conditions engaged with virtual care assessment. Most evidence collated and synthesised in this review mapped well to the NSW Virtual Care Strategy (NSW Health 2022). Key findings are discussed below with evidence gaps then highlighted.

The rapid acceleration of virtual care since the COVID-19 pandemic has generally occurred without consideration of clinician education and training (Palesy, Forrest, and Crowley 2023a). The need for sustained investment in building the confidence, competence, and capacity of the clinical workforce to deliver virtual care for people with intellectual disabilities is recommended in the NSW Virtual Care Strategy, reinforced throughout this review. Recently published educational frameworks (Health Education and Training Institute 2022) reiterate the need for evidence-informed curriculum and pedagogical approaches to prepare current and future clinicians to deliver virtual care encompassing the seven domains of compliance, professional practice, patient safety, communication, interprofessional collaboration, patient assessment, and care planning, delivery, and coordination. Recently published reviews (Palesy, Forrest, and Crowley 2023a, 2023b) highlight key educational strategies and supports for clinicians to build confidence in using virtual care, including virtual care checklists, clinical champions, and models that are co-designed with clinicians, content experts, and care recipients. Delves et al. (Delves et al. 2022) demonstrated that technology issues during the delivery of virtual care are minimised when it is delivered by experienced clinicians who have received virtual care training.

This review was unable to find evidence of consultation with people with intellectual disabilities or carers in the design or delivery of virtual care services which is an identified implementation goal of the NSW Virtual Care Strategy (NSW Health 2022). The value of a national plan for co-designing health care in partnership with people who have lived experience of disability is explicitly highlighted in the findings of the Royal Commission (Royal Commission 2023a), enabling people with intellectual disabilities and those who support them to exercise greater choice and control over their health care (Recommendation 6.1, p. 213).

Enabling people with intellectual disabilities and their carers to access virtual health care requires consideration of specific supports and accommodations. Lack of experience with digital technologies, low levels of digital literacy, and fewer opportunities to build technology skills are known barriers for people with

intellectual disabilities (Khanlou et al. 2021). Pre-appointment assessment of communication needs and familiarisation with the client and family (Delves et al. 2022; Whittingham and Coons-Harding 2021) were identified in this scoping review as enabling strategies that could support client autonomy and promote greater inclusion in the virtual appointment. Services that offered pre-appointment IT support and screening for technical issues reported fewer barriers to accessing virtual care. Virtual care concierge services reported in other areas of health care service delivery (Rariy et al. 2021) report high levels of client and clinician satisfaction. Other service models (e.g., in telepsychiatry) include a virtual care navigator (Johnston and Yellowlees 2016), a non-clinical liaison role, collecting clinical and administrative information prior to appointments, and providing education and training to clients and carers to facilitate access. In line with these findings, the Royal Commission (Royal Commission 2023b) also recommends the introduction of disability health navigators to support people with disabilities access health services (Recommendation 6.34, p. 402).

People with intellectual disabilities often have multiple specialists and health professionals involved in their care. Lack of coordination between health professionals can be a barrier to receiving continuity of health care and create clinical risk. The findings of this review suggest that virtual care supports clinicians, disability workers, and educational support staff to be involved simultaneously (Langkamp, McManus, and Blakemore 2015) to provide time-sensitive input to client discussions. The Royal Commission has highlighted the benefits of effective communication and the need for coordination between health professionals to achieve continuity of care (p. 348, 35). Greater integration of virtual care into health services may be one strategy to enhance multidisciplinary care for people with intellectual disabilities who have complex care and support needs.

People with intellectual disabilities living in regional and remote areas typically face significant challenges accessing specialist services that are often concentrated in large metropolitan centres (NSW Health 2023). This scoping review noted the clear benefit of improved access to specialists when the person with intellectual disabilities is geographically remote (Verma et al. 2022), and for those with transport and mobility challenges. Article 25 of the Convention on the Rights of Persons with Disabilities (United Nations 2008) outlines the obligation to provide 'health services as close as possible to people's own communities, including in rural areas.' Enabling virtual access to specialist intellectual disability services may create an opportunity to meet national obligations under the United Nations Convention whilst simultaneously improving health service access and health outcomes for people living in regional, rural, and remote communities (NSW Health 2023).

As in other areas of managing chronic health conditions (Brody et al. 2020), virtual care for people with intellectual disabilities can offer opportunities to strengthen person-centred and family-centred care. Receiving virtual care at or close to home allowed people with intellectual disabilities to be more comfortable during their appointments, reduced sensory distress caused by unfamiliar clinical environments, and also reduced travel distress (Delves et al. 2022; Merrill, Cowan, and Gentile 2017; Rosen et al. 2022;

Rowell et al. 2014; Trivisano et al. 2020; Verma et al. 2022). Virtual care may be one strategy to bring health care services closer to home as recommended by state (NSW Health 2023) and national (Royal Commission 2023b) health care directives. This scoping review highlights a generally positive experience of virtual care reported by clients and carers with overall high levels of acceptability. Additional benefits to people with intellectual disabilities and carers included several pragmatic benefits such as convenience, ease of scheduling appointments, flexibility of appointments, cost, and time savings (Delves et al. 2022; Shawler et al. 2021; Trivisano et al. 2020; Verma et al. 2022; Bullard, Harvey, and Abbeduto 2021).

Access to virtual care is enabled by socioeconomic advantages such as higher income and education levels (Bullard, Harvey, and Abbeduto 2021). Health inequities in accessing digital health solutions have been broadly identified (Yao et al. 2022). To achieve broad system scaling of virtual health care, the systems and software required by clients, need to be commercially available at no or low cost, accessible by portable devices and a range of web platforms (Hodge et al. 2019; Bullard, Harvey, and Abbeduto 2021). While the NSW Virtual Care Strategy (NSW Health 2022) incorporates several implementation goals to build technology that supports virtual care access, the digital exclusion of people with intellectual disabilities has been highlighted during the COVID-19 pandemic, exacerbated by sociopolitical, structural, individual, and support-related barriers (Chadwick et al. 2022). Digital poverty, literacy, and exclusion remain significant issues for people with intellectual disabilities internationally (Chadwick et al. 2022). Several studies in this scoping review advocated for consideration of people with intellectual disabilities when building technology and digital infrastructure, however, this goal remains elusive. No studies were identified that described or evaluated patient-reported measures being used with or by people with intellectual disabilities to give feedback on their experiences of virtual care. People with intellectual disabilities are often excluded from participation in surveys of patient experience due to the format, nature, and distribution methods by which patient experience surveys are implemented (Shogren et al. 2021).

The Royal Commission explicitly highlighted that people with disabilities can only access environments, facilities, services, and information if they are able to use and interact with them in a way that responds to their needs (Royal Commission 2023a). This is inclusive of the online environment. This review found limited evidence for consideration of the needs of people with intellectual disabilities in building the technology to support the virtual care roll-out. It is critical that future health technologies consider accessibility for people with intellectual and communication disabilities.

4.1 | Limitations

This review focused on the use of virtual care to assess the health needs of people with intellectual disabilities. It did not extend to the use of virtual care for other digital health innovations including remote health monitoring or therapeutic interventions such as positive behaviour supports. An evaluation of the methodological quality of each included study was not conducted. This review was limited to studies published in English. Studies from

all countries were included, however, the findings are considered in an Australian context, with reference to the NSW Virtual Care Strategy (NSW Health 2022) and the recently published findings of the Royal Commission (Royal Commission 2023a). These frameworks and recommendations may not generalise to all health and disability service models beyond the Australian context. The authors also note the limitation that arises from the conflation of viewpoints of individuals with intellectual disabilities and their carers. Studies included in this review predominantly expressed views and perspectives from both viewpoints, without differentiation between these. As such, the authors were not able to separate the voices of people with intellectual disabilities from the voices of carers in the included studies, however, we recognise that people with intellectual disabilities may have conflicting preferences from their carers in terms of health care service delivery.

4.2 | Future Research and Policy Implications

Following the authors' mapping of current literature to the NSW Virtual Care Strategy (NSW Health 2022), several critical gaps were identified that warrant further research. Most importantly, there was a lack of studies that involved people with intellectual disabilities and carers in the co-design, co-delivery, and co-evaluation of virtual care services or supports. When considering specific population groups, future research should consider the use of virtual care by people with intellectual disabilities who are from an Aboriginal or Torres Strait Islander background and other ethnically and linguistically diverse groups.

4.3 | Conclusion

This scoping review supports the safe and effective use of virtual care to assess the health needs of people across the lifespan with intellectual disabilities. It provides supporting evidence for the use of multidisciplinary assessment and specialist individual disciplinary assessment for the purposes of screening, diagnosis, comprehensive assessment, and review. Clients with intellectual disabilities and carers generally reported positive experiences with virtual care, and greater access to services was a highlighted benefit, particularly for priority populations such as regional, rural, and remote communities. The existing literature mapped well to the NSW Virtual Care Strategy (NSW Health 2022) and highlighted policy and practice implications for clinician training and education, client and carer supports, and considerations for people with intellectual disabilities during the roll-out of virtual care technologies.

Ethics Statement

The authors have nothing to report.

Consent

The authors have nothing to report.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

Endnotes

¹ Specialised Intellectual Disability clinicians include medical, nursing, and allied health professionals employed by the specialised Intellectual Disability Health Service <https://www.health.nsw.gov.au/disability/Pages/statewide-intellectual-disability-health-service.aspx>.

References

- Arksey, H., and L. O'Malley. 2005. "Scoping Studies: Towards a Methodological Framework." *International Journal of Social Research Methodology* 8, no. 1: 19–32.
- Brody, A. A., T. Sadarangani, T. M. Jones, et al. 2020. "Family- and Person-Centered Interdisciplinary Telehealth: Policy and Practice Implications Following Onset of the COVID-19 Pandemic." *Journal of Gerontological Nursing* 46, no. 9: 9–13.
- Bullard, L., D. Harvey, and L. Abbeduto. 2021. "Exploring the Feasibility of Collecting Multimodal Multiperson Assessment Data via Distance in Families Affected by Fragile X Syndrome." *Journal of Telemedicine and Telecare* 29: 1–599.
- Chadwick, D., K. A. Ågren, S. Caton, et al. 2022. "Digital Inclusion and Participation of People With Intellectual Disabilities During COVID-19: A Rapid Review and International Bricolage." *Journal of Policy and Practice in Intellectual Disabilities* 19, no. 3: 242–256.
- Delves, M., G. M. Luscombe, R. Juratowitch, et al. 2022. "'Say Hi to the Lady on the Television': A Review of Clinic Presentations and Comparison of Telepsychiatry and In-Person Mental Health Assessments for People With Intellectual Disability in Rural New South Wales." *Journal of Policy & Practice in Intellectual Disabilities* 20: 177–191.
- Eapen, V., H. Hiscock, and K. Williams. 2021. "Adaptive Innovations to Provide Services to Children With Developmental Disabilities During the COVID-19 Pandemic." *Journal of Paediatrics and Child Health* 57, no. 1: 9–11.
- Esther, C., O. Natalie, B. Diana, et al. 2022. "Telehealth in a Paediatric Developmental Metropolitan Assessment Clinic: Perspectives and Experiences of Families and Clinicians." *Health Expectations* 25, no. 5: 2557–2569.
- Gentile, J. P., A. E. Cowan, B. Harper, R. Mast, and B. Merrill. 2018. "Reaching Rural Ohio With Intellectual Disability Psychiatry." *Journal of Telemedicine and Telecare* 24, no. 6: 434–439.
- Health Education and Training Institute. 2022. "NSW Health Virtual Care Education Framework."
- Hodge, M. A., R. Sutherland, K. Jeng, et al. 2019. "Agreement Between Telehealth and Face-To-Face Assessment of Intellectual Ability in Children With Specific Learning Disorder." *Journal of Telemedicine and Telecare* 25, no. 7: 431–437.
- Hopper, B., M. Buckman, and M. Edwards. 2011. "Evaluation of Satisfaction of Parents With the Use of Videoconferencing for a Pediatric Genetic Consultation." *Twin Research and Human Genetics* 14, no. 4: 343–346.
- Intellectual Disability Health Network. 2017. "Building Capability in NSW Health Services for People With Intellectual Disability: The Essentials." In *Innovation AfC*. Sydney, Australia: Agency for Clinical Innovation.
- Johnston, B., and P. Yellowlees. 2016. "Telepsychiatry Consultations in Primary Care Coordinated by Virtual Care Navigators." *Psychiatric Services* 67, no. 1: 142.

- Khanlou, N., A. Khan, L. M. Vazquez, and M. Zangeneh. 2021. "Digital Literacy, Access to Technology and Inclusion for Young Adults with Developmental Disabilities." *Journal of Developmental and Physical Disabilities* 33, no. 1: 1–25.
- Langkamp, D. L., M. D. McManus, and S. D. Blakemore. 2015. "Telemedicine for Children With Developmental Disabilities: A More Effective Clinical Process Than Office-Based Care." *Telemedicine and e-Health* 21, no. 2: 110–114.
- Letourneau, M. A., D. L. MacGregor, P. T. Dick, et al. 2003. "Use of a Telephone Nursing Line in a Pediatric Neurology Clinic: One Approach to the Shortage of Subspecialists." *Pediatrics* 112, no. 5: 1083–1087.
- Madhavan, G. 2019. "Telepsychiatry in Intellectual Disability Psychiatry: Literature Review." *BJPsych Bulletin* 43, no. 4: 167–173.
- McNally, K. R., B. Enneking, C. James, et al. 2022. "Telehealth Evaluation of Pediatric Neurodevelopmental Disabilities During the COVID-19 Pandemic: Clinician and Caregiver Perspectives." *Journal of Developmental and Behavioral Pediatrics* 43, no. 5: 262–272.
- Merrill, B., A. E. Cowan, and J. P. Gentile. 2017. "House Calls: Telepsychiatry With Patients With Intellectual Disability." *Annals of Medical and Health Sciences Research* 7, no. 6: 463–465.
- Nicholson, L., S. Sharma, S. Andrews, A. Farquharson, and H. Welsh. 2023. "A Survey on the Use of Remote Consultation for People With Intellectual Disability: The Experience of Community Intellectual Disability Teams." *Journal of Intellectual & Developmental Disability* 48, no. 1: 85–90.
- NSW Health. 2022. *NSW Virtual Care Strategy 2021–2026: Connecting Patients to Care*. St Leonards: NSW Ministry of Health.
- NSW Health. 2023. *NSW Regional Health Strategic Plan 2022–2032*. Australia: NSW Ministry of Health.
- Oudshoorn, C. E. M., N. Frielink, S. L. P. Nijs, and P. J. C. M. Embregts. 2021. "Psychological eHealth Interventions for People With Intellectual Disabilities: A Scoping Review." *Journal of Applied Research in Intellectual Disabilities* 34, no. 4: 950–972.
- Palesy, D., G. Forrest, and M. E. Crowley. 2023a. "Education Guidelines, Frameworks and Resources for Building Virtual Care Capacity: An Integrative Review." *Journal of Telemedicine and Telecare* 29, no. 3: 222–243.
- Palesy, D., G. Forrest, and M. E. Crowley. 2023b. "Curriculum Interventions and Pedagogical Approaches for Virtual Care Delivery: A Scoping Review." *Home Health Care Management and Practice* 35, no. 1: 40–47.
- Pearl, P. L., C. Sable, S. Evans, et al. 2014. "International Telemedicine Consultations for Neurodevelopmental Disabilities." *Telemedicine and e-Health* 20, no. 6: 559–562.
- Prelack, M., S. Fridinger, A. K. Gonzalez, et al. 2022. "Visits of Concern in Child Neurology Telemedicine." *Developmental Medicine and Child Neurology* 64: 1351–1358.
- Rariy, C., L. Truesdale, J. Greenman, and J. C. Schink. 2021. "Key Features to Ensure Sustainability of a Tele-Oncology Program at a National Cancer Center." *Journal of Clinical Oncology* 39: e13613–e–e13613.
- Reese, R. M., R. Jamison, M. Wendland, et al. 2013. "Evaluating Interactive Videoconferencing for Assessing Symptoms of Autism." *Telemedicine and e-Health* 19, no. 9: 671–677.
- Rosen, V., E. Blank, E. Lampert, et al. 2022. "Brief Report: Telehealth Satisfaction Among Caregivers of Pediatric and Adult Psychology and Psychiatry Patients With Intellectual and Developmental Disability in the Wake of Covid-19." *Journal of Autism and Developmental Disorders* 52, no. 12: 5253–5265.
- Rowell, P. D., P. Pincus, M. White, and A. C. Smith. 2014. "Telehealth in Paediatric Orthopaedic Surgery in Queensland: A 10-Year Review." *ANZ Journal of Surgery* 84, no. 12: 955–959.
- Royal Commission. 2023a. "Final Report—Executive Summary, Our Vision for an Inclusive Australia and Recommendations." In *Australia co*. Australia: Commonwealth of Australia.
- Royal Commission. 2023b. "Enabling Autonomy and Access." In *Australia co*. Canberra, Australia: Commonwealth of Australia.
- Selick, A., N. Bobbette, Y. Lunsy, Y. Hamdani, J. Rayner, and J. Durbin. 2021. "Virtual Health Care for Adult Patients With Intellectual and Developmental Disabilities: A Scoping Review." *Disability and Health Journal* 14, no. 4: 101132.
- Shawler, L. A., J. C. Clayborne, B. Nasca, and J. T. O'Connor. 2021. "An Intensive Telehealth Assessment and Treatment Model for an Adult With Developmental Disabilities." *Research in Developmental Disabilities* 111: 103876.
- Shogren, K. A., A. Bonardi, C. Cobranchi, et al. 2021. "State of the Field: The Need for Self-Report Measures of Health and Quality of Life for People With Intellectual and Developmental Disabilities." *Journal of Policy and Practice in Intellectual Disabilities* 18, no. 4: 286–295.
- Spaan, N. A., M. Verzaal, and H. L. Kaal. 2021. "Feasibility and Reliability of Screening on Mild to Borderline Intellectual Disabilities Using SCIL Through Video-Administration." *Journal of Intellectual Disabilities & Offending Behaviour* 12, no. 1: 12–22.
- Temple, V., C. Drummond, S. Valiquette, and E. Jozsvai. 2010. "A Comparison of Intellectual Assessments Over Video Conferencing and In-Person for Individuals With ID: Preliminary Data." *Journal of Intellectual Disability Research* 54, no. 6: 573–577.
- Trivisano, M., N. Specchio, N. Pietrafusa, et al. 2020. "Impact of COVID-19 Pandemic on Pediatric Patients With Epilepsy—The Caregiver Perspective." *Epilepsy & Behavior* 113: 107527.
- United Nations. 2008. *Convention on the Rights of Persons With Disabilities*. New York: United Nations. <https://social.desa.un.org/issues/disability/crpd/convention-on-the-rights-of-persons-with-disabilities-crpd?page=2>.
- Verma, S., P. Vandana, T. Soda, et al. 2022. "Incorporation of Telepsychiatry for Patients With Developmental Disorders Into Routine Clinical Practice—A Survey of Specialty Clinics Adapting to Telepsychiatry During the COVID-19 Pandemic." *Journal of Autism and Developmental Disorders* 52: 5280–5284.
- Whittingham, L. M., and K. D. Coons-Harding. 2021. "Connecting People With People: Diagnosing Persons With Fetal Alcohol Spectrum Disorder Using Telehealth." *Journal of Autism and Developmental Disorders* 51, no. 4: 1067–1080.
- Yao, R., W. Zhang, R. Evans, G. Cao, T. Rui, and L. Shen. 2022. "Inequities in Health Care Services Caused by the Adoption of Digital Health Technologies: Scoping Review." *Journal of Medical Internet Research* 24, no. 3: e34144.

Supporting Information

Additional supporting information can be found online in the Supporting Information section.